NURSE-PATIENT COMMUNICATION IN ELDERLY CARE

An observation study into verbal and nonverbal communication in nursing practice

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NURSE-PATIENT COMMUNICATION IN ELDERLY CARE
An observation study into verbal and nonverbal communication in nursing practice

Verplegende-cliënt communicatie in de ouderenzorg
Een observatiestudie naar verbale en non-verbale communicatie
in de verpleging
(met een samenvatting in het Nederlands)

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Chapter 1

GENERAL INTRODUCTION

General Introduction

Communication plays a key-role in health care processes, where patient-centredness is increasingly emphasized. This is certainly true of nursing[1], because major nursing tasks, such as assessing the specific needs of patients, delivering physical care, providing socio-emotional support, negotiating and exchanging information, all have to do with communication and are subject to the rules of interaction. In this light, communication is recognized as an important aspect of high quality nursing care. As a consequence, nurses need to have skills to create good interpersonal relationships in which there is room for socializing and for showing affection and empathy. This is even more important in nursing elderly people. Elderly people experience several changes in life, such as a declining physical function and a decreasing circle of relatives and friends. Moreover, a youth-oriented, fast paced-society may not provide an atmosphere conducive to active social involvement (Eliopoulos 1993). Consequently, the ability to interact socially diminishes. The elderly, depending on care, may come to rely almost entirely on their nurses (Staab & Hodges 1996). So, nurses who pay attention to patients' emotional and social needs can contribute to a better quality of life.

This thesis aims to provide more insight into how nurses communicate with elderly people and what determinants affect the quantity and quality of communication. The results will have significance for quality assurance and improvement of quality of life for elderly people, and will therefore be of use to providers in nursing and elderly care, trainers, supervisors and policy makers.

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[1]In the study described in this thesis, Registered Nurses and Auxiliary Nurses were involved. For practical reasons, we use the term nurse for both types of nursing professionals, without distinguishing the level of education or the type of institution in which the care is provided. In many cases, the term 'nursing' can also refer to: district nursing, a person nursing the sick, care for the elderly, etc. Correspondingly, the term 'nursing' embraces all activities within the domain of the person specified. The user of care is called the 'patient' in most cases, one could also say: client, resident, consumer, etc.

Demographic trends: implications for policy

As a result of improvements in health care and a higher standard of living, people in western countries are growing older. Both the absolute numbers of older people and the proportions of total populations which they constitute are increasing and these increases are expected to continue for the next decades (Glendinning 1998). Currently, people over the age of 65, make up 13,1% of the population of the Netherlands, but by the year 2015, elderly people are expected to represent 17,3% of the population (RIVM 1997). Although this can be considered as positive, this development also entails a mission. Society has to take care of the older generation and provide optimal living conditions, such that older people can participate as full members of the community (Ministry of Health, Welfare and Sports 1995).

This demographic trend has its impact on services for elderly people. There is a growing demand for care facilities, which in turn lead to an expansion of public expenditure. To meet the increasing changes and demands for health care, the Dutch Government formulated a policy to redesign long term care for elderly people (Ministry of Health, Welfare and Sports 1994). Basic elements in this redesign were: improving autonomy in self care, exploring the options for elderly people to live independently as long as possible and restraining the expansion of residential care. This policy has meant that we see a part of the elderly population living in the community, supported by community-based services such as home nursing, home help and social assistance. Another part of this population, which is in need of comprehensive care packages, lives in homes for the elderly or nursing homes (Coolen & Weekers 1998).

A specific part of the redesign of elderly care is directed at improving the quality of care. According to the 'Care Institutions Quality Act' (Staatsblad 1996) good quality care requires patient-oriented care that is tailored to the needs of the individual. Good communication between nurse and patient is implicit in these requirements. Nurses must identify the various needs elderly people have to understand them and to provide individually tailored care. In the account of 'Elderly Policy 1995-1998' providers expertise is considered as the base for quality of care. As a result of a perceived deprivation in care for the elderly, national policy recommends improving quality of care and empowering providers' proficiency. Priorities are set for nurses and caregivers. (Ministry of Health, Welfare and Sports 1995).

Communication in nursing care

The perception of the central role of communication in nursing practice is not only acknowledged in governmental documents, but can also be observed in theoretical nursing models and consequently in educational programmes for nurses. Nearly every educational programme and every textbook contains sections in which effective communication is promoted. One of the remarkable characteristics of the approach to interaction and discussion of communication is the general flatness of the concepts in focus. A great deal of this literature is restricted to verbal communication and refers to general concepts like 'openness', 'rapport building', 'being a good listener', 'empathy', 'fostering feelings of security and trust' (Seiler 1990, Eliopoulos 1993, Pagano & Ragan 1992, Ley 1988, Staab & Hodges 1996). However, there is hardly any nursing literature that explains these important attitudes in operational terms. So, what is meant by these conditions and behaviours and how to achieve them remains unclear. This is probably one of the reasons for various studies reporting that the quality of nurse-elderly patient interaction was still being questioned. It seems that nurse-patient interactions are limited, of short duration, treatment oriented and characterized by a routine working style, partly due to the increasing pressure of work in elderly care (Nolan et al. 1995, Salmon 1993, Armstrong-Esther et al. 1989, 1994, Pursey & Luker 1995). Nurses often disregard the social and emotional aspects of patient care. In addition, the language used is usually dominant in tone, thereby inhibiting the patient's response (Nolan et al. 1995, Hewison 1995).

Since nurses and nurse-teachers began to notice that nurses' communication skills were in need of improvement, several training programmes in communication have been developed. Some of these training programmes were directed at extending knowledge of interaction with elderly people (Kihlgren et al. 1993), whereas others aimed at improving attitudes (Huber et al. 1992, Salmon 1993) or enhancing empathy (LaMonica et al. 1987). There were also interventions that aspired to arrange formal interaction periods to increase the amount of social nurse-patient interaction (Turner 1993, Salmon 1993). Interventions directed at concrete communication behaviour were less frequently used. This was about to change until the advent of the video for educational purposes in the 80's. Within several educational methods like role playing, feedback, discussion and video feedback, the latter appeared to be the most beneficial, because video is a favourite means for bringing about changes in

communication behaviour (Heaven & Maguire 1996). One of the advantages of using video is that concrete behaviour can be viewed. Instead of promoting general caregiver behaviours such as an 'open attitude', 'showing understanding' and 'being a good listener', by using video recordings one can point to actual behaviour and pay attention to both verbal and nonverbal communication. Using video feedback also encourages trainees to be an active audience, instead of passively consuming lectures about effective communication. Despite these advantages, it is interesting to note that video feedback is widely used in medical and general practitioners training, but still rather infrequent in nursing training (Heaven & Maguire 1996, Parathian & Taylor 1993, Wilkinson 1991).
Recently, in the Netherlands, a special kind of training called Video Interaction Analysis was applied in nursing care for elderly people. In this type of training programme, trainees are guided by their trainer with whom they watch and discuss videotapes of their own actual performance during nursing encounters (see appendix 1).
Video Interaction Analysis was mainly developed in practice, in the field of youth health care. Thus far it has been a rather uncommon method in educational programmes for nurses. Consequently, there is a need to study its effectiveness.

Research in nurse-patient communication

Changes in educational methodology increase the need for research. After all, research in nurse-patient communication can contribute to knowledge and theory in nursing, which in turn can be used in the curriculum for students of nursing and in continuing nursing education (Fawcett 1995). The last 20 years have revealed an increase in research into nurse-patient interaction (Jarret & Payne 1995). Despite the fact that research into nurse-patient communication is expanding, existing research has several limitations. The majority of the studies have been carried out in institutional care and no attention has been paid to nurse-patient communication in primary care settings. In addition, most studies are directed at separate aspects of communication, such as the length of the interaction, who initiated it, whether it was task-related or social interaction. Studies using systematic observations of communication are scarce and no observation instruments are available. Moreover, although nonverbal communication is known to be important, especially when elderly people are involved, much of the research in the field has been confined to verbal communication.

Aim of the study

In the light of the above, the aim of this study is twofold. Firstly, to examine how nurses communicate with their elderly patients. Secondly, to measure the effects of a training programme using Video Interaction Analysis.

Four research questions guided this study:

1. How do nurses communicate with elderly patients, i.e. what kind of verbal and nonverbal strategies do they use in communicating with elderly people?
2. What factors are related to nurses' communication with elderly people?
3. How do elderly patients and nurses assess quality aspects related to communication?
4. What are the effects of a communication training programme, based on Video Interaction Analysis, on the communicative behaviour of nurses in elderly care?

Study context and methods

The study took place in two different care settings, namely home care and a home for elderly. To answer the research questions several methods of data collection were used. Firstly, videotaped data of nurse-patient interaction was collected for the two care settings. The nurses were accompanied for part of a day in their nursing encounters by a researcher, to record the video data. After the nursing encounter, a written questionnaire was administered to the nurses and, orally, to the patients. These questionnaires were to assess the quality of care, as perceived by the patients and the nurses.

At the start of the project, all participating nurses were also asked to complete questionnaires on provider characteristics, such as education, nursing experience and demographic characteristics, attitude towards elderly people and job satisfaction.

The main part of this thesis is based on observation studies of the videotaped real life nursing encounters.

Overview of the chapters

The research questions have been addressed in six chapters. In each chapter a part of the whole is discussed.

In *Chapter 2* a review of the literature is presented in which the role attributed to communication in theoretical nursing models is described. Additionally, a

summary is given of how research on nurse-patient communication in elderly care has developed over the last ten years.
Chapter 3 reports the investigation of verbal communication between nurses and elderly patients in the two different care settings. The video recordings were observed using an adapted version of the Roter Interaction Analysis System.
The occurrence of nonverbal communication in nurse-elderly patient interaction is explored in *Chapter 4*. Five nonverbal behaviours were observed: patient-directed eyegaze, affirmative head nodding, smiling, leaning forward and touch. The relationship between nonverbal and verbal communication is also analysed.
Chapter 5 explores variables that possibly influence nurses' communication with elderly patients. Three groups of variables are considered that might affect the quality or quantity of nurse-patient communication: variables related to nurses, to patients, and to the setting in which nursing care takes place. Relevant variables related to patients, nurses and situation were gathered by questionnaires and this dataset was combined with the results of video observations as reported in the Chapters 3 and 4.
In *Chapter 6* the measurement of quality of care is presented, both from the vantage points of patients and nurses. The study is directed at process aspects relating to communication.
Chapter 7 describes the empirical evaluation of a communication skills training. The training was based on Video Interaction Analysis and aimed to improve nurses' communication skills such that they would pay attention to patient needs and facilitate selfcare in elderly people. The effects of the training were measured using a non-randomized experimental control group design. Nurses' verbal and nonverbal communication was measured by independent observers, comparing videotapes of nursing encounters before and after training.
Finally, an overall discussion of the research findings is presented in *Chapter 8*. The discussion focuses on observational methodology, its advantages and limitations. Furthermore the potential of the communication training based on Video Interaction Analysis is considered.
Most of the chapters in this dissertation are based on articles published or accepted for publication in scientific journals. This has the advantage that chapters can be read separately, but a certain amount of overlap is inevitable.

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Chapter 2

THE ROLE OF COMMUNICATION IN NURSING CARE FOR THE ELDERLY

a review of the literature

Caris-Verhallen W.M.C.M., Kerkstra A., Bensing J.M. (1997)
The role of communication in nursing care for the elderly:
a review of the literature. *Journal of Advanced Nursing; 25: 915-933.*

Abstract

Communication in nursing care is an important topic assessing the specific needs of elderly patients and providing nursing care that is tailored to the individual patient's needs. In this review of the literature, we describe the role attributed to communication in theoretical nursing models and we report how research in communication in nursing elderly patients has taken place over the last ten years. It appears that since the eighties there has been an increase in observation studies into nurse-patient communication. There still is, however, a lack of observation instruments to do justice to the interactive nature of nurse-patient communication. Special attention should be paid to reliability and validity.

Introduction

Western countries are being confronted with a steady increase of the percentage of the elderly in their populations (OECD 1994). The increase in dependency and disability with age means that increasing numbers of elderly people require for care (OECD 1994, Scenariocommissie 1992). The elderly group is confronted with various problems, such as physical and psychological deterioration necessitating adjustments in life patterns; losses due to retirement; loneliness caused by children living away from home and by partners and friends dying (Wright 1988). At this time of their lives people have fewer prospects. Nursing care for elderly people, who are faced with these problems requires communicative abilities, empathy and concern. Apart from that, the elderly population is a very heterogeneous group. In addition to the characteristics of diverse cultures and backgrounds, there is variety with respect to age, limitations, and views on aging. Some elderly people camouflage the effects of aging, while others stereotype themselves and take on the characteristics they believe to be typical of the aging group (Giles & Coupland 1991). Some view aging negatively as a decline, while others associate it with development which is a functional part of the living system (King et al. 1986). These different views and backgrounds lead to different coping styles, standards and values, and therefore to different needs, which nursing professionals have to deal with. They have to support the elderly in coping with problems related to their stage of life and to recognize and assess their demands, so that they can offer nursing care that is tailored to the individual needs. Communication is an essential prerequisite in this process.

Nurse-patient communication

Communication is a concept used in many ways. In this article communication is defined as 'the exchange of information for some purposes' (Cherry 1978). This broad definition encompasses enormous diversity with respect to participants, settings and type of exchanges. The scope of this article is the communicative behaviour in the nurse-elderly patient relationship. Within the concept of communication, a distinction can be made between verbal and nonverbal communication. Verbal communication is all behaviour conveying messages with language. Nonverbal communication refers to all behaviour which conveys messages without the use of verbal language. Within the latter

kind of communication there is a distinction in vocal nonverbal communication (such as pitch, intonation, speech rate and fluency) and nonvocal nonverbal communication (facial expressions, eye contact, posture, gesture, physical appearance and touch) (LeMay & Redfern 1987). A major goal of effective communication is interpreting the messages and responding in an appropriate manner (Pagano & Ragan 1992). As mentioned before, nurses have to communicate with a variety of people. Furthermore, nurses have different communication goals, such as building up a good personal relationship, assessing the nature of the perceived problem, negotiating and decision making about nursing goals, exchanging information, giving explanations, providing physical care, showing empathy etc. These different goals require different communicative behaviour. Communicative behaviour in health care has instrumental and affective aspects. This distinction is often made in the literature on doctor-patient communication (Bensing 1991). Instrumental or task-related behaviour refers to those aspects necessary in assessing and solving problems. This kind of behaviour is mainly verbal in nature. Affective or socio-emotional behaviour refers to those aspects that are needed to establish a good relationship with the patient, such as showing respect, giving comfort and trust. This kind of behaviour is transferred both verbally and nonverbally (Strecher 1983). In nurse-patient communication, a comparable distinction can be made; although to some authors this distinction is artificial because, in nursing practice, caring has a central role (Kitson 1987, Benner 1984). But, even in caring there are instrumental and affective aspects. In their need for care, patients have two distinct goals (Engel 1988). Firstly, patients want information, clarification and physical care - all instrumental in nature - for health-related problems. In addition, patients have emotional needs, such as reassurance, concern and understanding, which are affective in nature. In this connection, Bottorff and Morse (1994) categorize four different behaviours in four contexts of care:

1. 'Doing tasks', focused on tasks excluding the patient. The object of these tasks is to get the job done. There is rarely any communication with the patient or very brief task related communication.
2. 'Doing with', these tasks are focused equally on the patient and the task. The object is to involve the patient and there is a two-way discussion about care, patient needs and instruction.
3. 'Doing for' refers to tasks focused on the patient, where the patient is given the opportunity to direct his/her own care. There is communication

about care or social talk.

4. 'Doing more' refers to establishing a relation and is focused on the patient as a person. The nurse wants to understand patient experience of illness and treatment. The dialogue is intensive, with emotionally supportive statements by the nurse.

This categorization shows aspects of instrumental and affective behaviour. 'Doing tasks' and 'doing with' exclusively comprises elements of instrumental behaviour; while 'doing more' is restricted to aspects of affective behaviour. 'Doing for' contains a mixture of both.

Communication with elderly patients

In providing nursing care tailored to the individual needs of people, effective communication is an essential prerequisite (Grypdonck 1993, Armstrong-Esther et al. 1989). This is especially the case in communicating with elderly patients because this kind of communication has some specific characteristics. Firstly, there may be barriers to communication due to sensory deficits (Greene et al. 1994). Secondly, elderly patients and nurses may have different agendas. The patient who is deprived of social contact, wants to continue the interaction with social talk, while the nurse wants to hurry up because she has work to do. Thirdly, the generation gap makes effective communication between them difficult, for elderly people have different values and different expectations from the young (LeMay & Redfern 1987). The elderly are, for instance, less likely to challenge the authority of health care providers, become involved in decision making and discuss psychosocial issues (Greene et al. 1994). These factors may all influence communication dynamics in nursing the older patients, which demands particular communication skills.

Aim of the study

The recognition of the central role of communication in nursing practice has led to an increase in research into interaction between nurses and patients (May 1990). The aim of this article is to give an overview of the research into nurse-patient communication. The point of departure is theories on nursing. Since nursing is growing as a profession many theoretical models have been developed. In this article, a selective review is made of these models and the role attributed to communication in them. A review of the research on nurse-patient communication follows with special attention to elderly patients. The

object is to outline communication research in this field and to highlight the areas in which more research is needed. More specifically, this review seeks to address the following questions:

1. What is the role attributed to communication in various theoretical nursing models?
2. How do nurses communicate with elderly patients, i.e. what kind of verbal and nonverbal strategies are used in communicating with the elderly?
3. What are the determinants of the quality or quantity of nurse-patient communication?

Methods

In order to obtain the international literature, a search was made of three databases: Medline (1986-1995), Nursing and Allied Health Literature (1986-1995) and the Catalogue of the Netherlands Institute of Primary Health Care (up to and including 1995). The key words used in these searches were: nursing theories, patient-nurse relationship, patient-nurse communication and patient-nurse interaction. A combination of keywords was also used: nursing care-communication, communication-elderly, nursing theories-communication, nursing care-communication skills, nursing care-observation study. Because of overlap with Medline, in Nursing and Allied Health fewer keywords were used: communication skills, observation study and a combination of keywords: communication-elderly. Furthermore, the bibliographies of the selected articles revealed some relevant literature. A total of 289 articles were sampled in this way. 46 articles described observation studies. The following inclusion criteria were used for the review:

- the study was directed at the interaction of nurses and elderly patients
- the study used observation techniques
- the study was published in English or Dutch

In the survey of observation studies, all those which met these criteria were included, regardless of their quality (reliability and validity) and sample size. Studies assessing communicative behaviours using indirect methods such as questionnaires or interviews were excluded. Twenty three articles describing 21 studies met the inclusion criteria.

Results

The role of communication in theoretical nursing models

As nursing grew into a profession in the twentieth century, theoretical models were developed. Theories were borrowed from other disciplines to develop these models and they were adapted to suit the nursing context. In this way a great diversity of theories and models originated, which can be categorized as interaction, need-oriented, system-oriented, simultaneity and developmental theories (Kiikkala & Munnukka 1994). Communication is a central aspect in the so called interaction theories. Examples of this kind of theories are from Peplau, Orlando and King.

Peplau's theory of interpersonal relations

Peplau can be considered as a pioneer. In the beginning of the fifties, she paid attention to the types of process in nursing and the characteristics of nurse-patient interaction. Before that time, the view of Florence Nightingale was predominant, in which attention was directed at optimizing patient condition and environment, so that nature could take its course (Evers 1991). Peplau (1952) constructed a theoretical model of nursing as a developing therapeutic relationship, in which she described several phases:

1. Orientation: a working relationship is established.
2. Identification: the nurse helps the patient to identify his needs.
3. Exploitation: the patient makes use of the interpersonal relationship with the nurse to derive full value from what is offered, while at the same time identifying and working towards new goals.
4. Resolution: old goals are reached and new goals are adopted. The patient becomes independent of the nurse.

These phases can be recognized during the nursing process, but are also reflected in each interaction between nurse and patient. During these phases the nurse fulfils several roles: stranger, resource person, teacher, leader, surrogate and counsellor. The nurse's communication will be more instrumental or more affective in nature, depending on the role it reflects.

There are also authors (Rhiel & Roy 1980), who describe Peplau's theory as developmental, arguing that Peplau considers human growth and development essential in nursing.

Although Peplau's operational definitions are considered as empirically

precise (Marriner 1986), little empirical research has been directed at the theoretical testing of the concept of the nurse-client relationship (Forchuk & Brown 1989).

Orlando's interaction theory

Orlando's theory is more or less based on Peplau's work and, in her view, nursing means assisting patients in meeting their needs 'through a process of deliberative interaction in which the nurse recognizes the verbal and nonverbal behaviour indicative of unmet needs, validates those needs with the patient, and acts to meet the patient's needs' (Orlando 1961). To achieve these goals it is required that:

1. What the nurse says to the individual must match (be consistent with) any or all of the items contained in the immediate reaction.
2. What the nurse does nonverbally must be verbally expressed and the expression must match one or all of the items contained in the immediate reaction.
3. The nurse must clearly communicate to the individual that the item being expressed comes from herself.
4. The nurse must ask the individual about the item expressed in order to obtain correction or verification (Meleis 1985).

In these requirements the concept of communication is pivotal. Although not explicitly elaborated, nursing in this view asks for both instrumental and affective behaviour. The nurse needs instrumental skills to find out and to meet the patient's need for help. Affective behaviour is a prerequisite for establishing a good relationship with the patient, so that the patient can be fully involved in all aspects of the nursing process.

King's interacting systems framework

The roots of King's theoretical model appear to be in the work of Peplau and Orlando (Parse 1987). The model contains four concepts: social systems, perceptions, interpersonal relations and health. King defines nursing as a process of human interaction between nurse and patient, whereby each perceives the other in the situation and, through communication, they set goals and explore means to achieve these goals (King 1981). In this view communication is significant for mutual goal setting and in turn, mutual goal setting contributes to goal attainment. King defines communication as: 'a process whereby information is given from one person to another, either

directly in face-to-face meetings or indirectly through telephone, television or the written word. Communication is the information element in the interaction' (King 1981). The opinion that nursing is a goal-oriented process, implies communication that is instrumental in nature, including aspects such as gathering information, making a nursing diagnosis, listing goals and planning (King 1981). Mutual goal setting and shared decisions on the means of achieving these goals, requires communication that is both instrumental and affective in nature.

King's theoretical model is useful to guide research (Hanucharurnkul 1989). Most studies are not directed at communication *per se* but test hypotheses on the theory of goal attainment (Parse 1987).

Currently used theoretical nursing models

The currently used theoretical nursing models tend to focus on the individual rather than on the dyadic relationship. Orem's Self-Care theory (1991), for instance, is an example of a need oriented theory. Orem distinguishes six nursing methods: acting or doing for, advising, giving physical support, providing psychological support, creating an environment to promote personal growth and instruction or education (Evers 1991). In all six methods communication has a more or less implicit role. Nevertheless there is no explication of this concept. Orem only gives a prescription 'to communicate' which is interpreted as making information - the intangible - the common property of all involved (Orem 1991). The theory of Orem is widely used in practice and education of nurses (Fawcett 1995, Evers 1991, Berbiglia 1991). This theory has also been used a great deal in research (Grypdonck 1990).

Neuman's system theory represents the system oriented theories, in which man is viewed as an open system interacting with internal and external factors from the environment (Neuman 1990). Nursing aims 'to facilitate optimal 'wellness' for the client through retention, attainment or maintenance of client system stability' (Neuman 1989). Neuman describes a nursing process, that is made up of three steps: nursing diagnosis, nursing goals and nursing outcomes. Although the model is based on interacting systems, the concept of communication is not elaborated.

Research based on the Neuman System Model is rapidly increasing (Fawcett 1995).

Research into nurse-patient communication

In 1985 Macleod Clark presented an overview of research into nurse-patient communication. The earliest studies, though not specifically directed at nurse-patient communication, reveal data about the subject. For instance, in the sixties, survey research of patients' satisfaction with hospital care showed that patients were frequently more critical about communication with staff than about any other aspects of hospital care. The dissatisfaction with the communication was generally directed at nursing staff. From the seventies onwards, researchers have moved towards more specific studies of nurse-patient interaction. With new technology like video recorders and wire-free tape recorders, more sophisticated data collection became possible and a growing number of observation studies was carried out in a variety of nursing settings. The emphasis in this review is upon nurse-patient communication in nursing care for the elderly, from 1985 onwards.

Verbal communication in the nursing process

Over the last 10 years, several studies have been undertaken which examine verbal communication in geriatric nursing. Table 1 gives an overview.

The first part of the table shows five studies which focused on the patients' interaction level, but also represented findings about the amount and frequency of nurse-initiated communication. (Armstrong-Esther & Browne 1986, Armstrong-Esther et al. 1989, Armstrong-Esther et al. 1994, Allen & Turner 1991, Nolan et al. 1995). The main conclusion of these studies was that interaction between nurses and patients is low. Yet nurses reported that interacting with patients was an important and enjoyable aspect in their work. (Armstrong-Esther et al. 1989, 1994; Nolan et al. 1995). In the studies of Allen and Turner (1991) and Nolan (1995), the samples were rather small. In the three studies of Armstrong-Esther et al, sample sizes were bigger but these concerned the respondents filling out a questionnaire on nursing attitudes. It is unclear how much nurses were involved in the observation study. Only one study (Allen & Turner 1991) gave figures on inter-observer reliability (> .95).

Table 1 Summary of research into nurse-patient interaction: verbal communication

Source	Setting and sample	What was being studied	Methods and instruments
Armstrong-Esther & Browne (1986)	7 geriatric wards 4 psychogeriatric wards 23 patients 118 nurses (different grades)	The influence of elderly patients' mental impairment on nurse-patient interaction	Patient assessment with Clifton Assessment procedures for Elderly Non participant observation, directed at patients
Armstrong-Esther et al. (1989)	5 wards in an acute hospital care setting 90 patients 105 nursing staff (different grades)	Nurses' attitudes towards elderly people The amount and quality of nurse-patient interaction	Non participant observation sampling behaviour of each patient during 10 minutes; each minute predominant patient behaviour was coded
Armstrong-Esther et al. (1994)	Acute medical geriatric ward, acute psychiatric ward 24 patients 306 nurses (different grades)	Activity and interaction level of elderly patients in a geriatric and psychiatric unit	.Patient assessment with CAPE. Non participant observation directed at the patients, using a micro-computer
Allen & Turner (1991)	Ward for continuing care 19 patients 15 nurses (different grades)	The effect of an intervention programme on staff-resident interaction levels	Interaction levels of patients were observed using Allen's observation schedule (cited in Allen & Turner 1991).
Nolan et al. (1995)	Two continuing care units 24 patients 24 staff	Interaction level of elderly patients in continuing care wards	Two observers in field observation based on time sampling; Nolan's molar coding system (extended version cited in Nolan et al. 1995)
De Wilde & De Bot (1989)	3 wards in a psychogeriatric nursing home 10 patients 6 auxiliary nurses	Use of secondary babytalk in communication with elderly people	Taperecorded interactions of communication with alert, non alert and control group were analyzed using Ashburn & Gordon scheme (1981)
Edwards & Noller (1993)	Viewing sessions with: 40 elderly women 40 nursing students 40 psychology students rating 18 different video-vignets	Perception of communication aspects by elderly people, future nurses and uninvolved observers	Video-vignettes were developed with different communication strategies; participants rated the interaction between a nurse and a elderly woman on three dimensions: patronizing, status and solidarity

Variables	Reliability Validity	Findings
Patient focused observation, of three behaviour categories: postures, activities, interactions	No figures	Interaction between nurses and patients is low. Nurses interact significantly less with confused than with lucid patients. Nursing staff, regarded their care priority as physical care rather than psycho-social interaction.
Patient focused observation; 16 categories were coded, such as postures, non interactive activities, interactive activities, interaction initiation	No figures	Interaction between nurses and patients is low. In 52,2% of the cases no interaction by nurses was engaged during the observation period. Staff initiated the most interaction with elderly who were slightly confused.
Patient focused observation, 16 categories were coded, such as interactions with others, postures, non interactive behaviour	No figures	Level of staff patient-interaction is very low outside expected routines of patient care. Nurses reported that social interaction with patients was important, but in practice they did not engage patients in social interaction.
Patient focused observation categories, such as activity, social setting, interaction initiation, type of response, content of interaction	Inter observer reliability >.95 Validity: no figures	There were no significant differences pre-intervention and post-intervention. It seems that nurses were less likely to interact with physically depended patients.
Patient focused observation, categories, such as informal activity, organized activity, eat, drink, asleep, verbal interaction	Observers were trained to ensure validity and reliability; no figures	Nurses report commitment of communicating with patients, but in practice it has little priority. Socially skilled patients attract more interaction both from other patients and from staff. During care-related interaction staff was more likely to engage in social conversation with socially adept patients.
Characteristics of babytalk, such as imperative, substitutions of pronouns, repetitions	No figures	Verbal utterances to alert and less alert elderly have more characteristics of babytalk than adult speech. In talking with less alert patients more simplified talk is used.
Accomodation of speech such as: altered pitch, touch, verbal expression	Reliability: no figures; Validity questioned (no natural communi-cation)	Strategies of overaccomodation were evaluated as more or less patronizing. The elderly rated all strategies as significantly less dominant and more respectful than the other raters did. Not all the elderly object to overaccomodation. Dependent elderly will not respond negatively to it.

Table 1 (continued) Summary of research into nurse-patient interaction: verbal communication

Source	Setting and sample	What was being studied	Methods and instruments
Gibb & O'Brien (1990)	2 nursing homes 10 registered nurses each attending 3 or 4 residents	Style of speech used by nurses in carrying out routine nursing procedures of morning care	Conversation-analysis of taperecorded interactions during routine nursing procedures; analysis of transcripts following the steps of Glaser & Strauss (1967)
Davies (1992)	Ward for elderly people, small sample of staff; representive sample of residents 24 2-hour tapes of patient care	The extent to which qualified and unqualified nurses use different verbal strategies in nurse-patient interaction.	Content analysis of tape-recorded interactions; 3 raters coded the incidence of 15 types of verbal behaviour
Salmon (1993)	Two geriatric wards in a psychiatric unit 47 patients and 27 nurses (different grades)	Interaction of nursing-staff with elderly people; does interaction improve by changing attitudes or in formal activity periods?	2 observers coded nurse's behaviour following a time-sampling procedure, during routine care and formal activity periods; special observation-scheme
Waters (1994)	2 rehabilitation wards in geriatric hospital, 32 patients.	Styles of staff-patient interaction on rehabilitation ward	Participant observation with Godlove's schedule (cited in Waters 1994)
Thomas (1994)	9 hospital elderly care wards, with each 4 Qualified Nurses (QN) and 4 Nursing Auxiliaries (NA); each had a 3 hour observation	A comparison of the verbal interactions of QNs and NAs in primary-team and functional nursing wards	Non participation observation using a computerized event recorder
Liukkonen (1992)	4 wards in institutional care 52 nurses (different grades) 95 hours of observation	Characteristic behaviour of dementia patients and activities of nurses during basic care	Non participant observation of basic care situations; analysis following the Grounded steps of Glaser & Strauss (1967)

Variables		Reliability validity	Findings
Definition of 42 speech acts instrumental e.g.: explanation, instruction, signals of co-operation	 affective e.g.: comment, inquiries, confirmation approval	No figures	Patterns of speech-style varied in relation to the physical procedure being carried out. Patterns of speech-style have also a psychological function and reflected a particular way of relating.
15 verbal behaviour categories instrumental e.g.: orienting to reality, explanations offering choice	 affective: e.g.: praise jokes and puns reassurance	Inter-observers agreement .90 Validity: no figures	Trained and untrained staff use the same range of verbal strategies. Trained staff use proportionally more strategies promoting dignity, self-respect, choice and independence.
16 behavioural categories instrumental: informing questioning	 affective: general conversation	Inter-observer reliability: .74 - .82 Validity: no figures	A larger proportion of nurses' time was spent in interaction with patients than has been reported in other studies, but interaction is largely restricted to physical care. Nurses' attitudes failed to predict the level or quality of the interaction with the elderly. Nurses' behaviour was improving in formal activity periods.
Alone instrumental variables were measured such as: physical activity, verbal guidance, appropriateness of work style		Intra-reliability .92 - .95 Validity: no figures	Attention should be focused on the educational preparation for rehabilitative nursing. There is a need for research to identify how to maximize the skills of team members to optimum benefit of patients.
Categories of verbal interaction Instrumental: questions, commands, explanation	 affective: reassurance, social conversation	Inter-observer agreement >.95 Validity: no figures	Nursing staff in primary wards spent the most time communicating with patients and those in functional wards the least time. NA's spent larger time in verbal interactions than QN's.
Four categories of nursing activities: instrumental: e.g. obligatory daily activities and related activities	 affective: e.g. voluntary activities taking patient's characteristics into account	Triangulation to improve reliability and validity. No figures	Five models of nursing activity were identified, such as rejective, routinized, robot-like, cassette-like and skilful

Table 1 (continued) Summary of research into nurse-patient interaction: verbal communication

Source	Setting and sample	What was being studied	Methods and instruments
Kihlgren et al. 1993	2 long term wards in different nursing homes: 10 patients; 10 nurses; 99 video recorded morning care sessions	The effect of training promoting integrity care on behaviour of caregivers towards demented patients during morning care	Field experiment with an intervention and controlgroup; videotaped interactions before and after training were analysed with a 39 item coding scheme
Hewison (1995)	Hospital ward; 24 patients; 175 observed interactions	Nurses' power in interactions with patients; use of nurses' language and effect of language on patients	Participant observation; recorded verbatims and handwritten notes; analysis following principles of the grounded theory (Glaser & Strauss, 1967)

The next two studies highlight the ways that speakers modify their speech in communicating with elderly people. De Wilde and De Bot (1989) studied the use of simplified speech, more specifically 'secondary babytalk', which is defined as a set of accommodations including simplification and high and variable pitch, usually addressed to children, but also used in talking with elderly (Coupland et al. 1991). In this research, the speech of auxiliary nurses was analysed on six characteristics of babytalk: length, complexity, imperatives, question-sentences, repetition and substitutions of pronouns (Ashburn & Gordon 1981). The results showed that auxiliary nurses used features of babytalk in communication with geriatric patients. When asked, the nurses reported that expressive motives were determinants for their way of communicating. Still, using babytalk may be perceived as patronizing and is likely to have negative side effects such as a decrease in well-being and a decline of physical and psychological functioning (De Wilde & De Bot 1989, Ryan et al. 1986). Although only six auxiliary nurses participated in this study the results were comparable with the findings of other research (Ashburn & Gordon 1981). The Edwards and Noller (1993) study also focused on speech modifications in communicating with elderly people. (In this study both verbal and nonverbal characteristics are investigated, but as the nonverbal aspects were related to speech, this research is discussed in this section.) Edwards and Noller used a quasi-experimental design. Special video-vignettes were developed on which interactions between a nurse and an elderly woman, in which three strategies of over-accomodation were used: altered pitch, touch

Variables		Reliability Validity	Findings
Instrumental categories e.g. upper body care, orientating the patient	Affective categories e.g. giving appraisals eye contact	Inter-observers agreement .83 Validity: no figures	Following the intervention, nurses offered patients more opportunities to take part in decisions and activities, patients showed more co-operation and there was more verbal interaction between nurses and patients.
Merely instrumental variables: Power of language, persuasion, controlling the agenda		Reliability: no Figures Validity: no figures	Nurses use language to exert power over patients. This is considered as a normal situation and is accepted by both staff and patients. The existing power-relationship constrains open communication.

and a verbal expression: 'that's a good girl'. Three respondent groups, elderly women, nursing students and psychology students, rated the video-vignettes with the three different interaction strategies and their combinations. All these strategies were perceived as somewhat patronizing, but the elderly rated them significantly less patronizing than the nursing and psychology students. The interaction with the combined strategy of 'that's a good girl' and altered pitch was rated as the most patronizing of all, but in addition, the elderly also rated it as respectful and non-dominant. As no natural communication was studied in this research its validity was questioned.

In the next five studies (Gibb & O'Brien 1990, Davies 1992, Salmon 1993, Waters 1994, Thomas 1994) nurses were the focus of the observation. Both instrumental and affective variables were measured. Gibb and O'Brien (1990) used a qualitative method, by which they defined 42 speech act categories, in which a distinction can be made in instrumental communication, such as explanation, instruction, checking out, and affective communication such as encouragement and reassurance. The speech style of nurses seemed to vary in relation to the way morning care procedures were carried out. During the so called 'journey' in which a fixed sequence of activities from getting up, toiletting, showering, dressing, grooming was carried out, more affective behaviour was observed. During the 'dissection' in which parts of care were interrupted and the accent was on efficient use of time, a more task-related communication style was observed. The sample size in this study was rather small; nor were figures about reliability or validity reported. In other studies it

was also found that the way a ward organized nursing labour could be related to the amount and quality of communication. Salmon (1993) reported that arrangement of formal interaction periods increased the amount of social nurse-patient interaction. Thomas (1994) concluded that the influence of ward organization was clearer than staff grade. Regardless of staff grade, nurses on wards practising primary nursing used more affective communication, than nurses practising team- or functional nursing. They offered patients more choice and spent more time seeking verbal feedback. As regards instrumental communication, nurses on primary wards gave more information about the care provided. The Thomas study reported a rather large sample (72 nurses) and a high inter-observer agreement (>.95) on the observations.
Davies (1992) examined whether trained and untrained staff used different communication strategies. She identified 15 verbal behaviour categories, which included task-related categories like orienting to reality, explanations and more affective categories, such as personal recognition and reassurance. It was found that trained and untrained staff used broadly the same range of verbal strategies, but that registered and enrolled nurses used proportionately more of those strategies which were in harmony with the professions' recognized philosophy of promoting dignity, self respect, choice and independence, than nursing auxiliaries did. In this way, a division of labour in which nursing auxiliaries provided most of the direct patient care, could have effects on the quality of nurse-patient communication. The sample size in this study was small and the inter-observer reliability was .90.
Waters (1994) reported the findings of an investigation into styles of nurse-patient interaction during morning routines and the effects on elderly patients in rehabilitation care. This research only concerned instrumental communication. It was found that about 60% of the workstyles used during morning care routine were, to a greater or lesser degree, inappropriate. Often there was too little nurse-patient communication. The patients were left to go on with morning care, while they were unable to do so. In other cases, the style of interaction was wholly compensatory or dependency-creating. The inter-rater reliability in this study was high .95 and .92 for interaction categories and verbal communication respectively.
The next two studies (Liukkonen 1992, Kihlgren et al. 1993) focus on communication with patients suffering from dementia. Liukkonen found that nurses concentrated more on obligatory daily activities than on the individual needs of the patients or the special characteristics of dementia. They paid

less attention to voluntary activities such as going outside the ward, going to the canteen, touching and playful teasing. Interaction was therefore rather superficial, which made the days for patients in the institution rather boring and monotonous. Liukkonen used a qualitative method. The observational data was completed with interviews about nurses' observations to achieve better validity and reliability. Basically the results were consistent. Kihlgren et al. (1993) described how caregivers behaved towards patients with dementia during morning care before and after a training programme of integrity-promoting care. They used an experimental control group design. A specially developed 93-item coding scheme was applied, which noted whether an action occurred or not. After the training course, the nurses offered patients more opportunities to co-operate and there was an increase in verbal contact. Finally, table 1 describes Hewison's study (1995) into power in the nurse-patient communication. He followed the principles of the grounded theory (Glaser & Strauss 1967). The findings confirmed much previous research that most of nurse behaviour is instrumental, routinized and superficial. It was found that nurses exert a lot of control over interactions and the language they use is a major factor in it. The use of power is considered a normal situation and is generally accepted by both patients and nursing staff.

Nonverbal communication in the nursing process

Table 2 summarizes research into nonverbal communication. Five studies are directed at touch and the sixth concerns interaction during mealtimes. (This study considers both verbal and nonverbal characteristics. Because the emphasis is on nonverbal aspects it is discussed in this section).

Hollinger (1986) investigated the relationship between nurses' use of touch and the frequency and duration of verbal responses by elderly hospitalized people. She used an experimental design with five treatment conditions, varying from no touch and touch at different time intervals. Findings showed that nurses' touch increased the duration of verbal responses in the patients during the time period when touch was applied.

LeMay and Redfern (1987), Oliver and Redfern (1991) and McCann and McKenna (1993) used an observation schedule developed by Porter et al. (1986). In all three investigations, following Watson (1975), a distinction was made between instrumental and expressive touch.

Table 2 Summary of research into nurse-patient interaction: Nonverbal communication

Source	Setting and sample	What was being studied	Methods and instruments
Hollinger (1986)	150 bed chronic rehabilitative care facility 12 patients	The relation between nurses' touch and the duration and frequencies of patient's verbal responses	Experimental design with 4 treatment conditions: no touch and touch in different phases of the interaction; countings of number of seconds of verbalizations and silences, countings of words
Le May & Redfern (1987)	4 continuing care wards for elderly people 30 patients 318 interactions	The amount and type of nurses' touch to elderly patients on long term care wards	Participant observation using the touch observation schedule of Porter (1986)
Oliver & Redfern (1991)	Acute/rehabilitation care of the elderly ward. 5 patients 18 nurses 137 interactions	Touch-interaction between nurses and elderly patients in an acute rehabilitation care setting; Refinement of an observation schedule.	Patient-focused observation using time sampling; observation schedule (LeMay & Redfern 1987); events recorded on portable computer and tape-recorded conversations
McCann & McKenna (1993)	Continuing care ward 4 patients and 37 interactions were observed during 16 hours of observation	The amount and type of touch received by elderly patients from nurses. Elderly patients' perception of touch	Patient-focused non-participant observation; observation-schedule Porter (1986) refined by Le May & Redfern (1987)
Moore & Gilbert (1995)	3 nursing homes 25 patients, who rated videotapes.	Possibility to communicate immediacy and affection by touch	23 patients rated versions of videotapes on which nurses were interacting with patients. 2 nurses used touch and 2 did not; rating scale Burgoon (cited in Moore & Gilbert 1995)
Van Ort & Philips (1992)	Psycho-geriatric ward 10 patients 11 nurses and caregivers (different grades)	The nature of interactions between nurses and Alzheimer patients during feeding activities	Exploratory, descriptive design; systematic observations of videotaped interactions; analysis on principles of the grounded theory of Glaser & Strauss (1967)

Variables	Reliability validity	Findings
Affective touch (hand-over-hand)	Environmental variables were controlled; no figures	The duration and frequency of verbal responses appeared to increase when touch was applied in the interaction
Task related touch affective touch	Inter-observer reliability: 7 aspects acceptable 3 unreliable Validity: no figures	Nurses touch is predominantly instrumental. The finding that expressive touch is scarcely used in nursing is supported.
Instrumental touch expressive touch	Inter-observer reliability: all aspects acceptable; Validity: questioned	Nurses touch is predominantly instrumental. The new schedule facilitated the recordings. No benefits were obtained by using a computer.
Instrumental touch expressive touch	Validity: triangulation using semi-structured interviews; No figures	Most touch (95%) was instrumental in nature. Expressive touch is given predominantly at body extremities. Nurses' gender and the part of the body that is touched are of influence on perception of touch by patients.
Immediacy affection	Internal consistency affection scale ***a***.86 immediacy scale ***a***.84 Validity questioned	The elderly patients perceived greater immediacy and affection from nurse's use of comforting touch.
10 feeder behaviours were defined: instrumental e.g.: fixing/mixing food role modelling adjusting; affective e.g.: maintaining privacy, connecting, touch	No figures	Environment was not arranged to elicit or support self feeding attempts. The continuity, pattern and synchronization of nurse's and resident's behaviour were poorly represented. Nursing interventions to modify the environment and to alter the behavioural context by patterning the feeding interactions could enhance mealtime for both resident and feeder.

Instrumental touch is defined as deliberative physical contact necessary to perform a task. Expressive touch is relatively spontaneous and affective, and not necessary for the completion of a task. The Observation Schedule from Porter (1986) was in 1987 refined and tested by LeMay and Redfern, to improve the reliability. After another refinement (Oliver & Redfern 1991) the reliability of this instrument was acceptable, still validity is questioned. All three studies reveal that touch in the nurse-patient interaction is predominantly instrumental. Expressive touch, on the contrary, is scarcely used. McCann and McKenna report that the nurse's gender and the part of the body being touched determined how touch was perceived. Instrumental touching of the arm and shoulder by a female nurse is perceived as comfortable by all respondents.

In 1995 another study in touch was carried out by Moore and Gilbert. They investigated whether affection and immediacy could be communicated to elderly nursing home residents by means of touch, using a quasi-experimental design. For that purpose, videotaped interactions were developed, in which four nurses utilized comforting touch or not. The residents rated the tapes on a 30-item scale, developed by Burgoon and Hale (1987). Elderly patients appeared to perceive greater immediacy and affection from nurse's use of comforting touch. Although the reliability of the rating scale was acceptable, validity in this study was questioned, because the sample might not be representive and the videotapes did not reflect natural communication.

Finally, Van Ort and Philips (1992) identified and categorized nursing behaviours that elicit or sustain functional behaviour in Alzheimer patients or decrease non functional behaviour, during eating activities. Using videotape recordings and a systematic observation of the events, they noted that the environment in which the eating activities took place were rather chaotic and not arranged to support self-feeding attempts. Further, nurses did not give appropriate cues to elicit functional feeding behaviour in the residents; neither did they react appropriately to patient's signals, because they did not recognize them.

Determinants of the quality or quantity of nurse-patient communication

Three groups of variables arise from the literature, that seem to determine the quality or quantity of nurse-patient communication. Variables related to nurses (that will be referred to in this article as provider variables), variables related to patients and variables related to the situation, particularly ward

characteristics (see Table 3).
Provider variables that were shown to be related were attitude, education, job satisfaction and gender. Nurses with a favourable attitude towards elderly people thought it more important to have social interaction with patients than to provide hygienic care (Armstrong-Esther et al. 1989). On the other hand, Salmon (1993) could not demonstrate a relation between nurses' attitude towards the elderly and their communicative behaviour. Actually, he found that establishing formal interaction periods, lead to a greater increase of interactions than targeting nurses' attitudes. A positive factor relating to communication might be the amount of job satisfaction. Kramer and Kerkstra (1991) showed that nurses with high levels of job satisfaction were more sensitive to patients' needs than nurses with lower levels. With regard to training and education, Davies (1992) found that although trained and untrained staff used broadly the same range of verbal strategies, trained staff used proportionately more of those strategies which promoted dignity, self-respect, choice and independence. These results compete with the conclusions from studies in other fields of nursing care. Macleod Clark (1985), for instance, did not find a difference in frequency of communication between trained and untrained staff. Wilkinson (1991) found that nurses in cancer care, who had a post basic training in communication skills, were no more effective in communicating than nurses who had not. On the contrary, nurses who had completed an oncology course showed more facilitative communication, than nurses who had not. It might therefore be concluded that training should not only focus on communication skills, but also on knowledge of the specific area in which nursing is carried out. (The studies from Macleod Clark and Wilkinson are not included in Table 3 because they are not directed at communication with elderly patients).

Patient characteristics that seem to be related to nurse-patient communication are level of mental alertness and level of physical ability. Armstrong-Esther et al. (1986, 1989) showed that nurses interact significantly less with confused patients than those who are lucid. De Wilde and De Bot (1989) showed that nurses used more babytalk when the elderly were more dependent. Referring to Armstrong-Esther and Browne (1986), Allen and Turner (1991) suggested that nurses would also be less likely to interact with physically dependent patients as compared with those who were more physically able.

Table 3 Summary of studies into determinants of the quality or quantity of communication

Source	Setting and sample	What was being studied	Methods
Armstrong-Esther et al. (1989)	5 wards in an acute hospital care setting 90 patients 105 nursing staff	Nurses' attitudes towards elderly people The amount and quality of nurse-patient-interaction	MMA to assess mental alertness; KOP to assess nurses attitudes participant observation
Salmon (1993)	2 geriatric wards 47 patients 27 nurses	Interaction of nurses with elderly patients: relationship to nurses attitudes and to establishing formal activity periods	Observations following time-sampling procedures
Davies (1992)	Ward for elderly people 24 tape recorded two-hour-periods of patient care.	The extend to which qualified and unqualified nurses use different verbal strategies	Content analysis of tape recorded interactions; 3 raters
Kramer & Kerkstra (1991)	167 residents 37 nursing auxiliaries	Loneliness of residents in an elderly home	Residents: interviews nurses: questionnaires
McCann & McKenna (1993)	Ward for continuing care 4 patients 37 interactions	The amount and type of touch received by elderly patients from nurses	Patient focused non participant observation, added with interviews

Source	Setting and sample	What was being studied	Methods
De Wilde & De Bot (1989)	3 wards in psycho-geriatric nursing home 10 patients 6 auxiliaries	Use of secondary babytalk in communication with elderly	Analysis of tape recorded interactions
Armstrong-Esther & Browne (1986)	Geriatric ward 23 patients 118 nurses	Influence of patient's mental impairment on nurse-patient interaction	Patient assessment with CAPE, Questionnaire to assess nurses attitudes; patient focused observation
Armstrong-Esther et al. (1989)	5 wards in an acute hospital care setting 90 patients 105 nursing staff	Nurses' attitudes towards elderly people The amount and quality of nurse-patient-interaction	MMA to assess mental alertness KOP to assess nurses attitudes participant observation
Allen & Turner (1991)	Ward for continuing care 19 patients 15 nurses	The effect of an intervention programme on staff resident interaction levels	Non participant observation

Provider variables shown to be related	Reliability Validity	Findings
Attitude	MMA .66 - .82 KOP no figures	Nurses with a favourable attitude towards the elderly thought it rather important to have social interaction with the elderly than to provide hygienic care, while nurses with al less favourable attitude thought that providing hygienic care was the most important task.
Attitude	Inter observer reliability: .74 - .82	No relationship was found between nurses attitudes towards the elderly and their behaviour.
Education/training	Inter-observers agreement .90	Unqualified nurses provide most of the direct patient care. Unqualified nurses use different verbal strategies than qualified nurses do. This might have implications for the quality of care.
Job satisfaction	Job satisfaction scale: *a*.66 - .88	Nurses with a higher level of job satisfaction showed to be more sensitive to feelings of loneliness in their elderly patients, than nurses with a lower level of job satisfaction.
Gender	No figures	Nurses' gender and the part of the body that is touched are of influence on perception of touch by patients.

Patient variables shown to be related	Reliability validity	Findings
Level of mental alertness	No figures	Nurses' talking to less alert elderly use over-accomodative speech such as characteristics of babytalk.
Level of mental impairment	CAPE reliable no figures	Nurses interact significantly less with confused than with lucid patients.
Level of mental alertness	MMA .66 - .82 KOP no figures	Nursing staff initiated most interaction with patients they rated as slightly confused and alert. The least interaction took place with confused patients.
Level of physical ability	Inter-observer reliability >.95	It may be that nurses were less likely to interact with physically dependent patients when compared with those more physically ill.

Table 3 (continued) Summary of studies into determinants of the quality or quantity of communication

Source	Setting and sample	What was being studied	Methods
Gibb & O'Brien (1990)	2 nursing homes 10 registered nurses each attending 3 or 4 residents	Style of speech used by nurses in carrying out routine nursing procedures	Conversation analysis of tape recorded interactions
Davies (1992)	Ward for elderly people 24 tape recorded two-hour-periods of patient care.	The extent to which qualified and unqualified nurses use different verbal strategies	Content analysis of tape recorded interactions 3 raters
Allen & Turner (1991)	Ward for continuing care 19 patients 15 nurses	The effect of an intervention programme on staff-resident interaction level	Observation using schedule Allen (cited in Allen & Turner 1991)
Turner (1993)	2 wards 52 patients 19 nurses	Activity nursing and changes in quality of life from patients	Communication Scale to measure cognitive functioning of the patients; interviews with patients
Salmon (1993)	2 geriatric wards 47 patients 27 nurses	Interaction of nurses with elderly patients: relationship to nurses attitudes and to establishing formal activity periods	Observations following time-sampling procedures
Thomas (1994)	9 wards for elderly care 36 Qualified Nurses 36 Nursing Auxiliaries	A comparison of verbal interactions of QN's and NA's in primary-, team- and functional nursing	Non participant observation

Gibb and O'Brien (1990) showed that nurses who were responsible for the ward (so they could be interrupted by questions from other patients or staff, during the provision of morning care), were brief and task-related in interaction with their patients. The arrangement of special activity programmes seemed to have a positive influence on the amount of nurse-patient interaction (Turner 1993, Salmon 1993).

Ward variables shown to be related	Reliability Validity	Findings
Time pressure organisation of nursing labour	No figures	Time pressure and responsibility for the ward leads to short and interrupted communication between nurses and patients. Some morning care activities 'the journey' are associated with more personally engaging social interaction than 'dissection' of morning care.
Ward organisation and division of labour between qualified and unqualified staff	Inter-observers agreement .90	Unqualified nurses provide most of the direct patient care. Unqualified nurses use different verbal strategies than qualified nurses do. This might have implications for the quality of care.
Activity programme	Inter-observer agreement >.95	Providing an activity programme on the ward opens the way for better communication between staff and patients.
Activity programme	No figures	Activity nursing opens the way for better communication between staff and elderly patients
Attitude	Inter observer reliability .74 - .82	Formal reality orientation periods can improve the amount of nurse's positive behaviour in the nurse-patient interaction
Organisation of nursing labour	Inter-observer reliability >.95	Nurses on wards practising primary nursing gave patients more choice, general explanations about care, spent more time seeking verbal feedback from patients, than nurses on wards practising team- or functional nursing.

Thomas (1994) compared the differential contribution to patient care made by qualified nurses and auxiliaries on wards practising primary nursing, team- and functional nursing. In practising primary nursing, nurses showed more patient centred communication than nurses on wards with functional- or team nursing, regardless of staff grade.

Discussion

This review of the literature has dealt with communication in nurse-patient interaction, with special reference to the communication of nurses with elderly people. Firstly, attention was drawn to the role of communication in theoretical nursing models. Secondly, a review of the research on nurse-patient communication was given.

Relations between nursing theories and research
The importance of communication is emphasized particularly in theories which have nurse-patient interaction as the dominant theme (Peplau 1952, Orlando 1961, King 1981). The early theorists Peplau and Orlando and more recently King describe nursing as a process of interaction, in which communication is a central concept. None of the theories described, distinguishes explicitly between instrumental and affective behaviour, although they do pay attention to building up a relationship and to task-related behaviour.
When Peplau and Orlando developed their theories, there was little research on nurse-patient communication. Over the past 10 years, many more studies have been published, nevertheless we have found that in the currently used theoretical models (Neuman 1990, Orem 1980) the role of communication tends to be implicit. This gives rise to the question of the relationship between theory and research.
Theories give directions to research (Fawcett 1995) and in this way research can generate or modify an existing theory or test hypotheses derived from a developed theory. None of the studies reviewed however, modified or tested existing theoretical nursing models. This is consistent with the findings of Jaarsma and Dassen (1993) who concluded that nursing theories were scarcely used in research to test a theory, although sometimes a research problem was fitted into a theoretical model, retrospectively. Grypdonck (1990) made the same conclusion in analysis of research in relation to Orem's theory: a theory is often used as a frame of reference, which contributes little to the research itself. Although none of the studies in this review used a nursing theory, some studies did have an identifiable link with theory from allied fields such as linguistics, communication science and social psychology.

Observed quality of nurse-patient communication

In theories as well as in practice, it is widely accepted that communication is essential in nurse-patient interaction. Nurses view their relationships with patients as an important aspect of nursing care (May 1990, Sundeen et al. 1989, Kitson 1987, Macleod Clark 1983, Hockey 1976). Nevertheless, social interaction is scarce in nursing. (Nolan et al. 1995, Salmon 1993, Armstrong-Esther et al. 1993, 1989, Macleod Clark 1983;). Further, the quality of nurse-patient interaction is questioned. Waters (1994) showed that two thirds of the workstyles observed in morning care were inappropriate and dependency creating. Wilkinson (1991) reported that nurses had overall a poor level of communication. They used more blocking than facilitating communication. Hewison's study (1995) showed that nurses exerted power in communication with their patients.

It seems that although research on nurse-patient communication is increasing, only little change has occurred in practice. Further, patient surveys show that dissatisfaction, if it exists, is usually directed at poor communication. (Davis & Fallowfield 1991, Macleod Clark 1985). Hence, nurse-patient communication still deserves attention.

Limitations and methodological shortcomings of research into nurse-patient communication

As mentioned above, research in nurse-patient communication can contribute to knowledge and theory in nursing. Apart from that, research findings can be used in curricula for nursing students and continuing nursing education. In this way research can contribute to effective communication in nursing care. Good research is needed to achieve these goals. But, though observation research is growing, there are serious gaps and limitations, which will be discussed in this section.

All the observation studies presented here, were carried out in institutional care. In none of the studies was attention paid to the nurse-patient communication in home care or the possible generalizations to primary care settings. In addition, generalization is questioned because of the small sample sizes that were used in several studies. Besides, some studies revealed no figures about observer reliability and the validity was questioned in nearly all studies. These findings make the quality of several of the studies doubtful.

A second limitation is that in several studies patient-focused observation was used. Those studies revealed data about the amount of patient interaction but

did not provide specific information about the communication process. Other studies recorded the amount of communication, and studied individual aspects of communication, such as the length of the interaction, who initiated it, whether it was task-related or social interaction. Studies doing justice to the interactive nature of communication are scarce and, no instruments are available using systematic observations. Although there is a lot of research literature about nurse-patient interaction, only few studies focus on the development of observation instruments. The most commonly applied instruments count frequencies of various types of communicative behaviours. No instrument was found that investigated interaction patterns or paid attention to sequences of behaviour.

Another issue in research was patient contributions to communication. Although we found that some of the observation studies were patient-focused these studies did not show how patients contributed to interactions. Jarrett and Payne (1995) in their review article concluded that the contribution of the patients had been neglected. Frequently, it is indicated in research that nurses deal with psychological issues at a very superficial level (Faulkner 1992). This is usually attributed to a reluctance of the nurse, but it might well be that patients consider these subjects as private or difficult to talk about to nurses (Jarrett & Payne 1995). Systematic research should be carried out which analyses how patients contribute to the amount and quality of the nurse-patient interaction. A related subject is the measurement of patient outcomes. The effectiveness of nursing care is usually measured intuitively by nurses and based on a belief that what they do is good for the patient. A fundamental question is: what do nurses contribute to the welfare and well-being of patients (Armstrong-Esther et al. 1994). It can be argued that communicative behaviour influences patient outcomes, but the outcome of effective nurse-patient communication has received little attention. Research on the physician-patient relation has shown that physicians' behaviour during a medical encounter is directly related to patient outcomes such as satisfaction, recall of information and compliance (Bertakis et al. 1991). We expect to find a comparable relation in nurse-patient interaction. Although little research was found investigating patient outcomes, the relationship between nurse-patient communication and patient outcomes has been mentioned in the literature. Fosbinder (1994) states for instance that nurse-patient interaction is critical in determining the quality of care from the patient's point of view. LeMay and Redfern (1987) and Copstead (1980) concluded that

touch can enhance a patient's self esteem and reduce anxiety. If we believe that the patient will benefit from more effective communication we should focus on research into patient outcomes, such as patient satisfaction, psychosocial adjustment, compliance, patient autonomy and well-being, and quality of life.
All in all, the following conclusions can be drawn. Future research will require efforts to develop observation instruments and analysis systems which do justice to nurse-patient communication as an interactive activity, taking place in a variety of settings. Special attention should be paid to reliability and validity. Future research should also take patients' contributions into account and focus on patient outcomes.

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Chapter 3

NURSE-ELDERLY PATIENT COMMUNICATION IN HOME CARE AND INSTITUTIONAL CARE

Caris-Verhallen W.M.C.M., Kerkstra A., van der Heijden P.G.M., Bensing J.M. (1998) Nurse-elderly patient communication in home care and institutional care. *International Journal of Nursing Studies; 35: 95-108.*

Abstract

This study explores verbal communication patterns between nurses and elderly patients in two different care settings. In a sample of 181 videotaped nursing encounters, involving 47 nurses and 109 patients, a study was made of nurse-patient communication. The video recordings were observed using an adapted version of Roter's Interaction Analysis System, which yields frequencies of 23 types of verbal behaviours. Data was analysed using correspondence analysis, to reduce them to a smaller number of verbal categories, in which two socio-emotional categories and three categories with task-related communication, could be distinguished. For each encounter five summary statistics corresponding to these categories were calculated.

Using analysis of variance, it was shown that the amount of socio-emotional interaction in both settings appeared to be higher than was reported in previous studies into nurse-patient communication. Compared with the home for the elderly, communication was more task-related in home care.

Introduction

Communication is a central theme in nursing. Nurses depend upon their communicative skills to be able to understand and meet the needs of their patients. For elderly patients, effective communication is essential for their feelings of satisfaction, independence and well-being. If communication fails, patients' needs may remain unmet, their socialization process could be disturbed and compliance may decrease, which may increase the stress on nurses (Staab & Hodges 1996).

In nurse-patient communication different communication goals have to be met. In answer to health related problems, patients want to get information, advice and physical care, which require task-related or instrumental communication. On the other hand, patients have a need for support, recognition and understanding, which demands affective communication (Bensing 1991, Moore & Gilbert 1995). The latter kind of communication is especially important for the establishment of an equal and reciprocal relationship between nurse and patient in which information exchange, negotiation and decision making as regards nursing goals can take place.

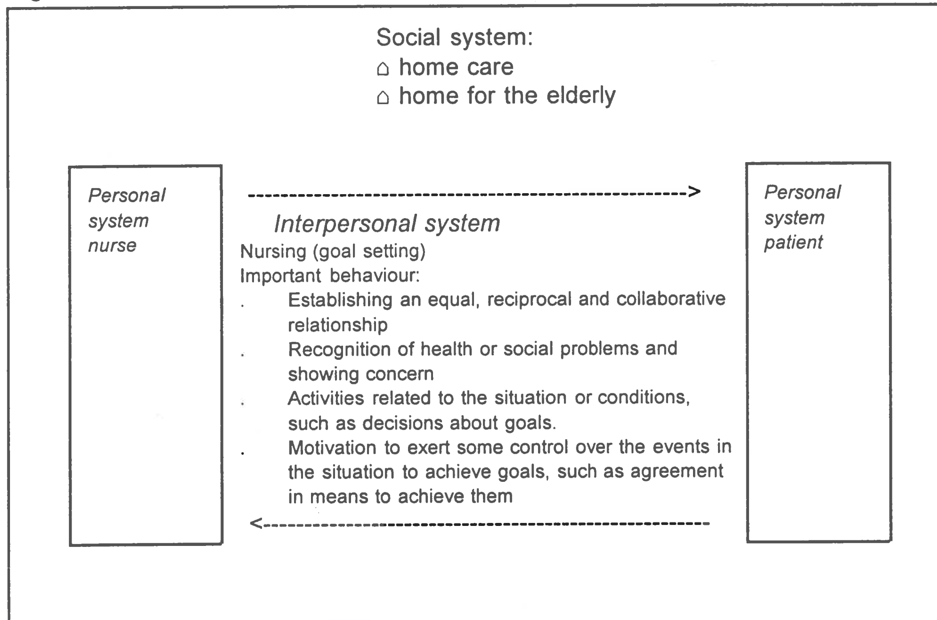
Although it is widely accepted that communication is essential in nurse-patient interaction, previous research has shown that interpersonal communication between nurses and elderly patients is often inadequate (Oliver & Redfern 1991, Hollinger & Buschmann 1993). Studies have demonstrated that most of the nurse-patient interactions seem to be superficial and task-related and that the amount of social interaction is limited (Nolan et al. 1995, Armstrong-Esther et al. 1994, 1989, Avis 1994, Salmon 1993, Kihlgren et al. 1993, Liukkonen 1992, May 1990). Other studies show that nurses exert power in communication (Hewison 1995) or show a tendency to take over care and responsibility (Waters 1994, Kenny 1990). In this way, nursing care for the elderly is dependency creating and can give rise to iatrogenic effects, such as feelings of passivity, incompetence and depression (Miller 1984). These considerations make nurse-elderly patient communication an important topic for research. This study focuses on communication, as an essential prerequisite for mutual goal setting and individually tailored care.

Theoretical context

The theoretical model of King (1981) has been the point of departure for a better grasp of the complex and broad issue of nurse-patient communication.

In an earlier review of the literature (Caris-Verhallen et al. 1997a), we noted that communication was a vital concept in this framework. Furthermore, the King model is especially suitable for geriatric nursing, because the focus is on patient's active involvement in health care, which does not foster the growing dependency of the elderly (Kenny 1990).
In her General Systems Framework, King discerns three dynamic interacting systems: the 'personal system' (the individual), the 'interpersonal system', comprising at least two interacting individuals and the 'social system' of which the other two systems are part, such as families and health care settings. Nursing takes place in what King defines as the interpersonal system, to which this article will restrict itself (see Figure 1). King elaborates the nursing process using the "theory of goal attainment", in which nursing is defined as a "process of human interaction between nurse and patient whereby each perceives the other and the situation; and through communication, they set goals, explore means and agree on means to achieve these goals". Because there is some kind of goal setting in each nursing situation (King 1981), the model can be applied in a diversity of nursing settings.

Figure 1. Conceptual framework with dynamic interacting systems



King (1981, p.146) defines communication as the information component of interactions. The way communication takes place is determined by the goals of the communication. According to these goals different communication behaviours can be identified (King 1981):

- Affective or socio-emotional communication, which is needed to establish an collaborative relationship with the patient.
- Exchanging and interpreting information to recognize presenting conditions such as a health problem, a social problem or a human concern.
- Operations related to the situation or conditions, such as decisions about goals. Mutual tuning (Bensing et al. 1995) is important for this type of behaviour, so that negotiating about goals can take place.
- Motivating the patient to exert some control over the events in the situation to achieve goals. Counselling behaviour is important within these interactions.

Communication with elderly patients in different settings

This research has been carried out in home care and in a home for the elderly. It specifically investigates whether these different care settings are related to the type of communicative behaviour employed by nurses, because the way a person communicates is influenced by the setting.

The populations of patients in these settings differ. Due to national policy in the Netherlands, by which through extension and differentiation of care facilities in the community, institutionalized care for the elderly is postponed, the residents in a home for the elderly are on average 10 years older than patients in home care (Coolen 1993). As a result there are more female residents in a home for the elderly.

In institutional care, daily activities are more tightly scheduled than in home care. The elderly in residential care live on a ward, and experience the cultural effects, the organization and regulation of the ward, which, most of the time, imposes rigid routine on both staff and residents (Waters 1994). In home care patients live independently, there is no ward organization or routine to influence nurse-patient communication, although the nurse's visit can be determining for the patient's daily routine. Institutional nursing care carries on all day, while in the community there is an explicit start and finish to the nursing encounter. Nurses in the community work more independently compared with nurses in a home for the elderly, who are a member of a team. The latter may also have a different attitude towards their patients.

Since the expectation is that their patients will remain institutionalized, nurses foresee that they will deteriorate and so less effort is expended to teach them to help themselves (Dijkstra et al. 1995, Ingham & Fielding 1985). Actually the nurses tend to take over care and responsibilities and take control over patients in the care giving process (Lancely 1995, Hewison 1995). In the community, nurses show more often a nursing model in which patient's self care is a central concept (Dijkstra et al. 1995). These nurses consider care as temporary and they encourage selfcare (Poole & Rowat 1994).
Another important characteristic of institutional care is a nurse-patient relation, which is strongly reciprocal and familiar. Because the care is longlasting and often intimate, the relationship between caregiver and resident mimics a family bond (Nyström & Segesten 1996, Sumaya-Smith 1995). In an earlier study (Caris-Verhallen et al. 1997b) these relationships seemed to be less strong in home care.

The aim of the study

Using King's theoretical model this study has been undertaken to examine the extent to which nurses manifest the communicative ability essential for nursing. The research question addressed in this paper is:
Is there a general difference in nurse-patient communication in community or in institutional care, as regards socio-emotional behaviour, information exchange, mutual tuning and motivating patients to take control of their situation?
In view of the previously confirmed contrast between the different care settings, mentioned above, (De Gruyter & Schirm 1995; Caris-Verhallen et al. 1997b) it may be expected that communication in institutional care contains more behaviour directed at establishing a relationship. In particular, communication in institutional care will contain more social conversation. Communication in home care is expected to involve more negotiation about goals, mutual tuning and decision making. Moreover nurses' talk will more often concern nursing activities, medical or therapeutical topics than the communication in the elderly home. Consequently, communication in home care is likely to be more task-related and communication in the home for the elderly will probably have more socio-emotional aspects. As nurses in home care consider their nursing care as temporary, it is expected that they will more often motivate their patients to take control of their situation than nurses in institutional care.

Methods

Data collection

Videotaped data of nurse-patient interaction has been collected, mostly during morning care and sometimes during the evening. In the latter cases the type of care was comparable with morning care. Each interaction was videotaped entirely using a manned camera, with the exception of nursing activities whereby the patient was undressed. In these cases the video camera was on the nurse, or where that was impossible only verbal communication has been recorded.

In a pilot study (De Gruyter & Schirm 1995), the collection and observation of videotaped interactions was shown to be a feasible method for analysing nurse-patient communication.

Nurses recruited the patients for this study. A few days, prior to the data collection, nurses informed their patients about the research, and they asked them to give informed written consent to participation. Very sick patients, patients suffering from dementia and terminally ill patients were excluded from participation.

In home care very few patients refused permission to participate. However, because patients were asked by their nurses some kind of selection had already taken place. In the home for the elderly residents were more hesitant about co-operating. Of the sixty residents who were asked to participate half did. Nurses did not systematically inform us about those patients who did not want to co-operate, but they reported that there was no clear difference between participant and non participant residents.

Nurses

Forty seven nurses took part in this study. They all were participants in a larger project, in which training in communication skills was given and evaluated, using a pre-test post-test design. We report about the pre-test in this article. Twenty-four nurses worked in a home care organization and provided nursing care in the community. Twenty-three nurses provided care in a home for the elderly. For each nurse, three or four encounters with patients were recorded. The two groups did not differ significantly with respect to age, gender, education and years of experience (see Table 1).

Table 1. Distribution of age, sex, education and amount of years of nursing experience of nurses participating in the study.

	Nurses in the community n=24	Nurses in a home for the elderly n=23	Total participating nurses n=47
women[b]	24	21	45
men	0	2	2
mean age[a]	37,4	40,9	39,1
(sd).	(9,3)	(8,7)	(9,1)
education[b]			
nurse)[1]	11	8	19
auxiliary nurse	13	15	28
years of employment as a nurse[a]			
mean	16,5	15,9	16,2
(sd)	(8,8)	(7,2)	(8,0)

)[1]nurses = Dutch higher professional education level, HBO or 3,5 years of in-service training

auxiliary nurses = Dutch secondary professional education level, MBO or 2,5 years of in-service training

[a]Differences in age and amount of experience were tested by means of t-tests.

[b]Differences in gender and education level were tested by means of a chi-square tests.

Patients

One hundred and nine patients, agreed to participate in the study. Together they participated in 181 recorded nursing encounters. Eighty one patients lived in the community, their mean age was 77.5 years. Most of the patients in home care received nursing care for a long period (mean 37 months).

Twenty-eight patients were residents of a home for the elderly. As expected, these patients were older than the patients in the community. Their mean age was 86.7 years. On average, they lived about five and a half years in the home for the elderly. Table 2 gives an overview.

These two groups of patients formed representative samples of the populations of patients in the community and in homes for the elderly, as regards age and gender (Delnoij et al. 1996, CBS 1995).

Table 2. Distribution of age, sex and duration of receiving nursing care of patients, who took part in the study

	Patients in the community n=81	Patients in home for the elderly n=28	Total participating patients n=109
women	53	25	78
men	28	3	31
mean age (sd)	77,5 (8,7)	86,7 (4,4)	79,9 (8,8)
mean duration of received nursing care in months (sd)	37 (43,6)	70 (77,2)	45 (55,8)

Observation scheme

In order to gain more insight into nurse-patient communication the videotaped interactions were observed using Roter's Interaction Analysis System (RIAS) (Roter 1989). This scheme, which was originally designed to code doctor-patient communication, uses verbal utterances as a unit of analysis. An utterance is defined as the smallest distinguishable speech segment to which a coder can assign a classification. This may be a word, a clause or a complete sentence. All utterances are assigned to mutual exclusive categories. RIAS provides the option of coding directly from a videotape. The system is widely used and has been shown to be reliable (Van Dulmen et al. 1996, Van den Brink 1996, De Gruyter & Schirm 1995, Bensing 1991) and was relatively favourable judged in a comparative study (Inui et al. 1982). RIAS seemed suitable for our study, because it pays attention to socio-emotional and instrumental communication which are both important for goal

setting; however, it had to be adapted for nurse-patient communication. A pilot study was carried out for that purpose (De Gruyter & Schirm 1995). The original 34 categories were reduced to 24 verbal categories. Medical and therapeutic items were conflated to 'nursing' items, because these topics seemed to be intertwined in the nursing situation. The same happened with items relating to lifestyle and feelings. In the adapted version, the following groups of variables can be distinguished as indicators for important communication behaviours, according to King (see theoretical context):

- communication that is directed at establishing a relationship, which will be referred to as socio-emotional communication. It includes social conversation, empathic behaviour, showing concern, warmth and interest.
- communication directed at mutual tuning and seeking agreement, such as asking for understanding and clarification, asking for an opinion. These behaviours are considered to be important in making decisions about goals.
- communication directed at recognizing problems and providing information in order to set goals for their solution. This includes information exchange on nursing and therapeutical items or lifestyle and emotional topics.
- counselling behaviour to teach the patient to take control over events, to achieve goals.

Because communication during nursing encounters is characterized by the kind of procedures that are carried out, nursing care was also coded. We used Kerkstra and Vorst-Thijssen (1991), who categorized three types of nursing care, as a point of departure. Consequently, we discerned encounters dominated by hygienic care, encounters principally involving technical nursing procedures and encounters which were dominated by psycho-social care. Table 3 gives an overview of the observation categories.

Reliability of the observations

The video records were systematically observed with RIAS by two observers using the CAMERA computer system (Iec ProGAMMA 1994), which is especially designed for coding behavioural interactions from video recordings. The reliability of the observation frequencies proved to be high, with inter-observer correlations varying between .69 and 1.00 (Pearson's r) for the RIAS categories and between .80 and 1.00 (Pearson's r) for nursing activities (Table 3, column 2). Preliminary observations, with observation periods of 5 and 10 minutes, were carried out on 48 encounters based on findings of Henbest and Fehrsen (1992), who noted that scoring only a part of the

consultation could be as reliable as scoring an entire consultation. As 10 minute observation periods proved to be the most reliable (correlations between .65 and .98, Table 3 column 3), observation time was standardized and the first 10 minutes were observed of each nursing encounter.

Table 3 Overview of reliability coefficients

Variables	(abbreviations)	Interrater reliability two observers for RIAS categories and nursing activities (Pearson's r)	Reliability coefficients comparing the first ten minutes-scores with scores of the entire nursing encounter (Pearson's r)
Verbal Behaviour			
personal remarks/social conversation	(pers)	0.79	0.92
jokes laughter	(joke)	0.97	0.94
compliments/approval	(cmpl)	0.69	0.94
shows concern/worry	(conc)	0.87	0.97
reassurance/encouragement/optimism	(reas)	0.99	0.97
empathy/legitimize	(empa)	0.96	0.95
shows partnership and support	(part)	1.00	0.94
shows agreement/understanding	(agre)	0.88	0.95
paraphrase/interpretation	(para)	0.72	0.94
asks for reassurances	(area)	1.00	0.96
disagreement/misunderstanding/criticism	(disa)	1.00	0.72
orientations/instructions	(orie)	0.98	0.92
requests for clarification	(bids)	1.00	0.78
asks for understanding	(aund)	0.95	0.93
asks for an opinion	(aopi)	1.00	0.98
closed questions: nursing/ therapeutic items	(gnur)	0.98	0.91
open questions: nursing/ therapeutic items	(onur)	1.00	0.96
information about nursing/therapeutic items	(inur)	0.95	0.92
closed questions: lifestyle/feelings	(glif)	0.98	0.91
open questions: lifestyle/feelings	(olif)	1.00	0.90
information about lifestyle/feelings	(ilif)	0.98	0.90
counsels nursing/ therapeutic behaviour	(cnur)	0.81	0.65
counsels lifestyle behaviour and feelings	(clif)	1.00	0.92
not categorizable utterances	(othe)	0.99	0.92
Nursing activities			
hygienic care		1.00	
technical nursing procedures		0.80	
psycho-social care		0.90	

* p < 0.05, ** p < 0.01

Analysis

Observations using the CAMERA system provide a detailed description of 181 nursing encounters, in which each encounter is characterized by counts of 23 verbal RIAS categories (the category 'non-categorizable utterances' was excluded from analysis). Actually the dataset could be described as a table with 181 rows (encounters) and 23 columns with counts of RIAS categories. Each row presents a specific frequency pattern derived from the number of times each of the RIAS categories is scored. As an example, the 23 counts for one of the encounters are 45, 4, 0, 1, 1, 4, 0, 29, 3, 2, 0, 10, 0, 9, 0, 16, 0, 1, 0, 26, 0, 4, 0.

The data analysis was intended to provide a more detailed picture of nurses' communicative behaviour. Firstly, we determined whether a clustering was feasible in RIAS-variables by means of Correspondence Analysis (CA): a method used to analyse data as described above. The aim of CA in the analysis presented in this paper is similar to the aim one would have with Factor Analysis (FA), namely clustering the RIAS-variables (columns of the table) into a lower number of grouped activities, but because of methodological reasons FA was not suitable for this dataset (see Appendix).

CA was applied using ANACOR (SPSS module). ANACOR provides two types of plots: plots on which row profiles are plotted and plots with plotted column profiles. (see figures 2 & 3). The interpretation of these plots is fairly simple. On plots of column profiles, points that are close together are more alike than points that are far apart. This allows clustering of the RIAS categories, meaning that there is a similarity in RIAS-categories that were plotted near to each other, in the sense that they are used often in the same kind of encounters. RIAS-categories plotted far apart differ from each other, meaning that they are used often in different encounters.

With the other type of plots, ANACOR allows the clustering of different encounters. These plots can be interpreted in a comparable way, i.e. encounters that are close together refer to encounters with a similarity in patterns of RIAS categories, while encounters that are far apart have a very different pattern. Combining the two plots (encounters and RIAS-categories) enables to see whether specific encounters are characterized by special communication patterns. On the basis of such combinations it is possible, for instance, to show that communication in institutional care is different from communication in home care. The latter way of interpreting CA will not be applied in this study, because the only aim we had here was clustering RIAS

variables.
After the RIAS categories had been clustered the communication in the two different care settings was analysed in more detail. For each cluster representing a type of verbal behaviour summary statistics were calculated. Than an analysis of variance was used. In addition to the (independent) variable 'setting' the variable 'type of nursing care' was involved, indicating whether hygienic, technical or psycho-social care was provided. We investigated whether setting and type of nursing care affected nurse-patient communication.

Results

Clustering the RIAS categories using correspondence analysis

Our adapted version of RIAS consists of 23 verbal communication categories. Using CA we investigated whether these 23 categories could be reduced to meaningful clusters. The underlying assumption of RIAS is that in provider-patient communication two types of behaviours can be discerned, namely task-focused/instrumental and socio-emotional/affective exchange. Both types of behaviour are recognized as important in health communication (Roter 1989). Using a preliminary CA, this classification in two main clusters was confirmed and it could be concluded that socio-emotional variables and instrumental variables were two different dimensions which are not strongly related. The socio-emotional variables dominated dimension one, and the task-related categories were mainly represented by dimension 2.
To find a clustering within these two main groups we carried out CA on affective and instrumental variables separately.
An analysis of the 181 encounters by 11 socio-emotional RIAS categories showed at first five eigenvalues (with proportions of explained total distance) .32 (41%), .08 (11%), .07 (9%), .07 (9%) and .06 (7%). As the second eigenvalue was not clearly separated from the later ones, we decided to use the first dimension (compare the scree test for Factor Analysis).
Figure 2a shows personal remarks and joke/laughs on the right versus the other socio-emotional categories on the left. Figure 2b shows the 181 encounters, where each encounter is labelled by either home care or institutional care. Figure 2b is related to figure 2a as follows: in the

encounters on the right personal remarks take up a relatively large part of the communication, whereas in encounters on the left, communication comprises a relatively large degree: giving and asking for reassurance, empathy, showing concern, paraphrasing, agreement, disagreement, giving compliments and approval. Because we find more institutional care encounters on the right we conclude that in the home for the elderly especially, the encounters are characterized by personal 'chat' and jokes (see figure 2b).

As a result we distinguish two socio-emotional clusters in this study. The cluster on the right can be considered as social behaviour, which provides information about the degree to which the nurse uses social conversation that has no particular function in nursing activities such as personal statements, jokes and small talk. The cluster on the left can be considered as an affective cluster, which provides information about the extent the nurse shows verbal attentiveness (Bensing 1991), concern and empathy with emotional aspects of the patient.

In further analysis, we will cluster the 11 RIAS-categories into these two groups by adding up the counts in each of the encounters [1]

The CA relating to the 12 instrumental RIAS categories at first shows five eigenvalues of .29 (35%), .14 (17%), .07 (9%), .07 (8%) and .06 (.07). Because the third eigenvalue was not clearly separated from the later ones, we decided to use the first and the second dimensions.

The plot of column points shows a clustering of three groups of variables. Bottom right of figure 3a there is a cluster with utterances that indicate guidance and direction such as orienting and instructing, requests for clarification, asking for understanding and asking for opinion. We call this cluster 'Behaviour that structures the communication'.

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[1] Since "jokes" is in between two clusters, we also investigated what the effect would have been on the other analyses, reported in this paper, when jokes would have been included in the cluster "affective communication". The effect is minimal, mainly because the frequency of "jokes" is low. Since in other research (Bensing 1991; Van Dulmen *et al.* 1996) jokes were included in a cluster 'social behaviour' we have decided to include it in this cluster.

Figure 2a Profiles of 11 socio-emotional RIAS-categories depicted on one dimension

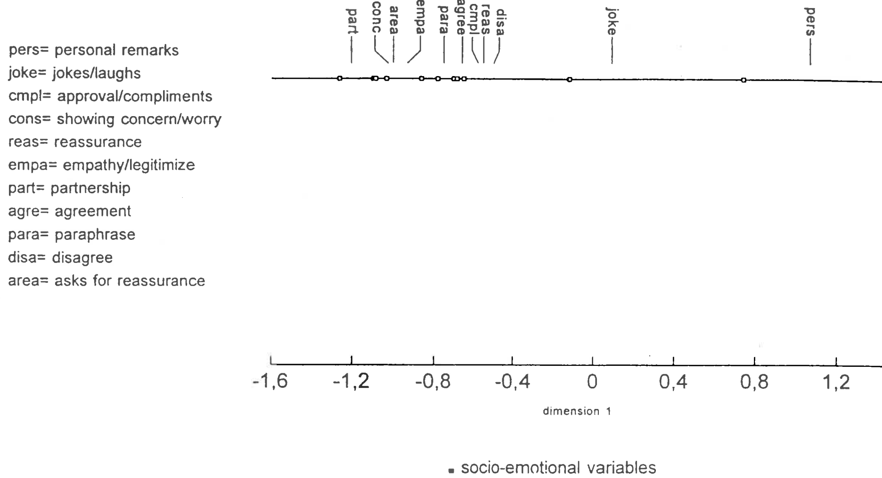


Figure 2b Profiles of encounters (n=181) involving affective RIAS-categories depicted on one dimension

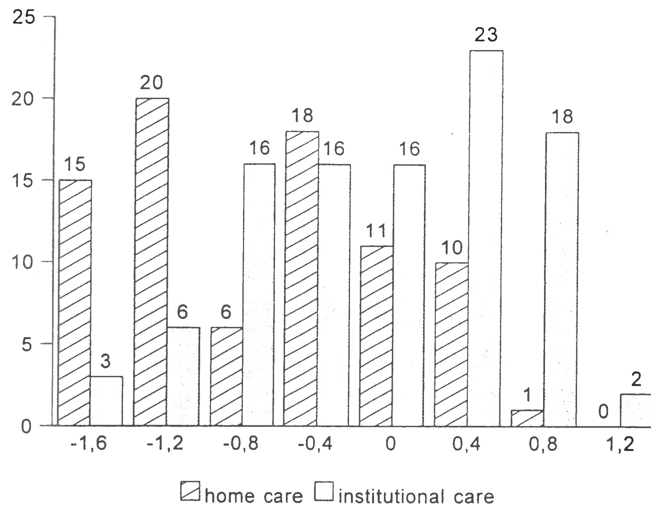


Figure 3a Profiles of 12 instrumental RIAS-categories depicted in a two dimensional plot

orie= orientations/instructions
bids= requests for clarification
aund= asks for understanding
aopi= asks for opinion
gnur= closed questions nursing/ therapeutic items
glif= closed questions: lifestyle/feelings
onur= open questions: nursing/ therapeutic items
olif= open questions: lifestyle/feelings
inur= information about nursing/therapeutic items
ilif= information about lifestyle/feelings
cnur= counsels nursing/ therapeutic behaviour
clif= counsels lifestyle behaviour and feelings

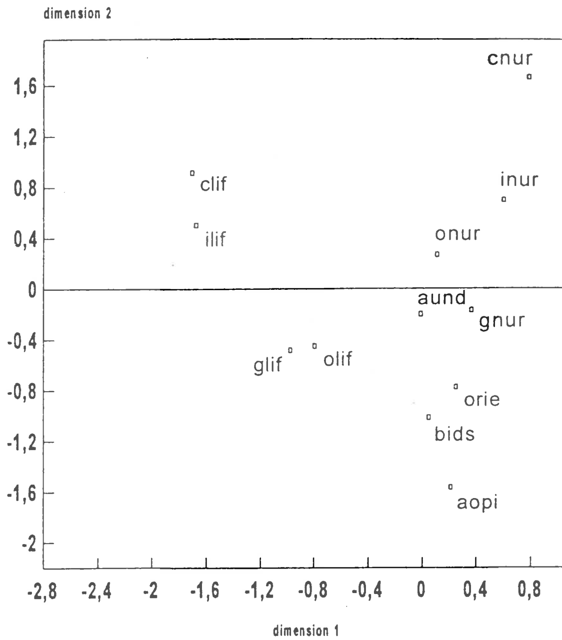
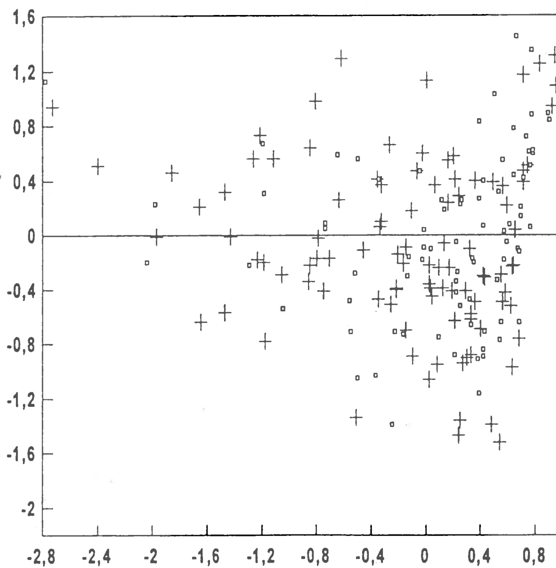


Figure 3b Profiles of encounters (n=181) involving instrumental RIAS-categories depicted in a two dimensional plot



Top right a second cluster is found, that contains all items with respect to nursing, health care or therapeutical topics[2]. We call this cluster 'communication on nursing and health topics'. On the left a third cluster contains all items with respect to lifestyle and feelings. This cluster is called 'communication lifestyle and emotional topics'.
When we compare figure 3a with the plot on which the different encounters are depicted (figure 3b), it can be concluded that there are nursing encounters which are dominated by items relating to lifestyle and feelings and other encounters which are dominated by communication relating to nursing and health topics. These latter topics are more often represented in home care.In conclusion, as a result of the CA, two socio-emotional clusters are formed: 'social behaviour' and 'affective behaviour'. Three instrumental clusters are formed: 'behaviour that structures the communication', 'information exchange concerning nursing and health topics' and 'information exchange involving lifestyle and emotional topics'.

Differences in nurses verbal behaviour in two different care settings

From figure 2b we concluded that nurse-patient communication in the home for the elderly includes more social behaviour than in home care. Apart from that, according to Figure 3b, it seems that in home care the nursing encounters are more often about nursing or health topics, while communication in institutional care involves more lifestyle and emotional topics.
To analyse the communication of nurses in the two different care settings more specifically, a two way analysis of variance was carried out on five clusters of verbal behaviour as observed with RIAS and clustered with CA.
The independent variables were 'setting' and 'type of nursing care'. The latter was included because it was plausible to think that nurse-patient communication varies during different kinds of nursing activities. The dependent variables are defined as the proportion of total amount of utterances nurses spent within one of the five types of verbal behaviour. The results of the ANOVA are shown in table 4.

[2]Including 'gnur' in this cluster is based on both analysis of figure 3a and content analysis.

In general it seems that the communication between nurses and elderly patients is characterized by socio-emotional conversation to a large extent. Between 44% and 72% (summing up the proportional frequencies of the first two rows) of the verbal utterances in home care and institutional care are social or affective in nature. As expected, in institutional care, there is much more social behaviour (row 1 in column 4,5,6) than in home care (column 1,2,3).
The other affective categories (row 2) were relatively more often shown in home care than in the home for the elderly. It seems that although communication in institutional care contains more socio-emotional aspects, nurses in home care show more variety in the way they display socio-emotional behaviour. In a more detailed analysis (not in table 4) nurses in home care show significantly more concern, agreement and paraphrases.

As regards social behaviour (row 1) there is no effect from the type of nursing care that is provided. On the contrary, affective behaviour (row 2) is influenced by the type of care that is given. Still, the effect of setting is stronger than the effect from the type of nursing care, in the sense that nurses in home care show more affective behaviour (row 2).
In home care nurses more often show verbal behaviour that structures the communication (row 3), like 'asking for an opinion', 'asking for understanding' and statements that guide the patient through the nursing encounter, like 'orienting and instructional remarks'. There is an even stronger effect from the different nursing activities, in the sense that communication in hygienic and technical nursing care involves more statements that structure the encounter than communication in psycho-social care. This is not too surprising a finding, because this cluster includes utterances that indicate direction and instructing, which are quite common in hygienic and technical care ('Turn around please' 'here is your dress').
The information exchange in home care is more often directed at topics relating the nursing activity and health or therapeutic items (row 4), than in institutional care. This is especially the case in encounters that are dominated by technical nursing. It is not surprising, because this kind of information exchange is more or less inherent in technical nursing procedures. The effect of the setting is more strongly present than the effect of type of nursing care.

Table 4 Results two-way analysis of variance. Independent variables: setting and different types of nursing care. Dependent variables: proportion of total amount of utterances nurses spent within one of the five types verbal behaviour.

	Home care			Institutional care					
	1. hygienic care	2. technical nursing care	3. psycho-social care	4. hygienic care	5. technical nursing care	6. psycho-social care	7. F-value main effect setting	8. F-value main effect type	9. F-value interaction effect
	n= 52	n= 14	n=15	n= 75	n=8	n= 17			
1. social behaviour and jokes	.20	.15	.21	.37	.41	.46	34.06**	1.07	.74
2. affective behaviour	.24	.30	.35	.19	.21	.26	11.67**	7.49**	.68
3. behaviour that structures communication	.24	.22	.10	.19	.13	.07	10.93**	23.66**	.72
4. communication nursing and health topics	.25	.29	.20	.17	.17	.08	22.66**	6.04*	.73
5. communication lifestyle and emotional topics	.07	.04	.14	.08	.08	.13	.36	6.88**	.53
	1.00	1.00	1.00	1.00	1.00	1.00			

** significance level of F ≤ 0.001
* significance level of F ≤ 0.01

The information exchange involving lifestyle and emotions (row 5) is affected more by type of care than by setting. It is not surprising that talking about lifestyle and emotional topics coincides with psycho-social care because these are part and parcel of it. A more detailed analysis (not in table 4) revealed that home care nurses display more counselling behaviour, especially counselling in nursing, medical and therapeutical topics, than nurses in the home for the elderly. The latter confirms expectations about counselling behaviour.
For none of the communication clusters was there an interaction effect with the setting and type of care, meaning that a particular combination of the independent variables (setting and type of care) does not reveal unexpected communication strategies. In other words, the difference between settings in communication is the same in the three different types of care.

Discussion

In this study we investigated the extent to which nurses show behaviour that is essential for nursing and goal setting in their communication with elderly patients. Special attention was paid at two different care settings.
Results demonstrated that nurses in the home for the elderly showed more social behaviour than nurses in home care. Even when different nursing activities were involved in the analysis, nurses in institutional care showed relatively more social behaviour than nurses in the community. These results are in line with our expectations.
Affective behaviour through which support, concern and empathy was expressed, was more often shown by nurses in home care than by nurses in institutional care. It was also anticipated that nurses in home care would talk more frequently about nursing and therapeutical topics than nurses in institutional care. This was found to be true. On the other hand, there was no difference between the two settings in communication about lifestyle and emotional topics. There was only a slight difference in counselling behaviour of nurses in institutional and home care. Nurses in home care more often showed counselling behaviour that was related to the nursing and health condition. As regards lifestyle and emotional topics, there was no difference in counselling behaviour. As the nurses home care and the home for the elderly

were comparable in terms of age, education and years of experience, this difference can be attributed to the different care settings.
One remarkable finding in this study was the amount of socio-emotional communication the nurses showed. About half of the verbal utterances used in this study were directed at the establishment of a relationship between nurse and patient and concerned personal talk, jokes and other affective behaviour. This result was inconsistent with findings from previous studies in nursing the elderly, which showed most of the nurse-patient interactions to be task-related and that the amount of social interaction was limited (May 1990, Liukkonen 1992, Kihlgren et al. 1993, Salmon 1993, Armstrong-Esther et al. 1993, 1989, Nolan et al. 1995). These results could not be attributed to specific patient samples. In terms of age and gender, the two groups of patients under study were comparable to the populations of patients in the community and elderly homes. This result may perhaps be attributed to the fact that two thirds of the patients had received nursing care for a year or longer. Possibly therefore communication patterns reflect a daily routine in nursing by which there is less need for task related communication like explication and information exchange. Because the results are based on two samples in specialized settings the results must be interpreted with caution and can not be generalized to other health care settings.
Some methodological issues are worth mentioning. In an earlier study of the literature (Caris-Verhallen et al. 1997a) we stated that theory based studies of the nurse-patient communication were scarce. Consequently there were hardly any observation instruments, which were suitable for nurse-patient communication and appropriate to test a theoretical nursing model. In this explorative study we took the model of King (1981) as point of departure, because communication is a central theme in this framework and because it was judged particularly suitable for nursing elderly people (Kenny 1990). We made an effort to adapt RIAS, which was originally designed to code doctor-patient communication, for our study. This adapted version of RIAS has proven to be suitable for analysing nurse patient communication. RIAS was able to discern different types of verbal behaviour which were considered to be essential in nursing. With the application of CA, five different clusters of verbal behaviour could be distinguished. These clusters corresponded partly with the important nursing behaviours, which King (1981) discerned, such as socio-emotional communication, which is needed to establish a relationship with the patient; exchanging and interpreting information to recognize

presenting conditions, and mutual tuning. Unfortunately using CA, counselling behaviour was not noted as a separate cluster. This kind of behaviour is directed at motivating patients to take control of their situation. Apparently in communicating with elderly patients this kind of behaviour is inherent in questioning and sharing information. Despite this shortcoming, the RIAS appeared to be sensitive to communication differences in home care and institutional care and to different communication patterns during different types of nursing encounters.

In this study it was shown that videotaping is a feasible method in nursing research. However this method has some limitations. Firstly, the nurses were not a random sample, but nurses who were going to receive training in communication skills were participants in the study. Because patients were recruited by the nurses themselves, in the patient group as well some selectivity could have appeared. This could provide a limited bias in the data and accordingly no conclusions can be drawn about nurse-elderly patient communication in general. Secondly, there is some concern as to whether nurses may have been subject of performance bias (Levinson & Roter 1993), meaning that nurses, being aware of being videotaped, possibly behaved differently from normal. We think that this type of bias was limited because the study was part of a larger project in which video feedback was used as a training method, so the nurses were more or less used to being recorded. Moreover the videotaping continued for half-a-day and it is described in literature that persons concerned tend to resume their natural behaviour in a fairly short time (Verhaak 1988, Schepers 1991). Apart from that, most of the nurses and patients reported afterwards in a questionnaire that the videotaped encounter was comparable to the normal situation.

Although a major benefit of videotapes is that research in both verbal and nonverbal behaviour is possible, this study was only directed at verbal communication. As socio-emotional communication in particular is transferred in a nonverbal way, analysing nonvocal behaviour would be an interesting matter.

In conclusion, the results of this study show that nurses both in the home for the elderly and in the community more often used socio-emotional communication than was reported in previous studies. Socio-emotional communication is frequently recommended in nursing care for the elderly. Because the elderly have a diminishing social network they may be dependent on the nurse-patient relationship for their social contacts. In this

way social-emotional communication in the nurse-patient relationship may contribute to a better quality of life of patients.
To understand more of the nature of nurse-patient communication, in future research more emphasis should given to nonverbal communication. To gain insight into the effect of communication patient outcomes should be taken into account.

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Appendix

Observational data collected with the RIAS have the following form. In this study there are 23 verbal activities, and for each encounter the number of times of each of these activities is displayed is denoted. This information is then collected in data matrix of 181 encounters in the rows and 23 activities in the columns. In the cells of this matrix the number of times is found that during a specific encounter a specific activity is displayed.
In the statistical literature data like these are called 'compositional data', because the counts of each row of the matrix describe the composition of the encounter. For statistical analysis compositional data have the property that they are not well suited for correlational techniques, such as principal component analysis or factor analysis. The reason is that for each row the total number of the count is fixed, and therefore the counts are not free to vary. More specifically: when one count is higher, there have to be other counts that are smaller. For this reason it can be proved that, if a correlation matrix would be calculated between the columns, then there would be at least one negative correlation in each row of the correlation matrix. This makes it difficult to use the zero-correlation as a point of reference to judge dependence from independence. For more details, see Aitchison (1986).
Therefore other tools for analysis are called for. We use correspondence analysis (CA; Greenacre 1984; see also Van der Heijden and Van den Brakel 1993). The aim of CA in the analysis presented in this paper is similar to the aim one would have with factor analysis, namely we used it to cluster the columns of the matrix (verbal activities) into a number of grouped activities. CA represents large and complicated data matrices by graphical displays that are easy to interpret and that can be used for clustering the rows or the columns of the matrix.
CA makes use of the specific properties of the observational data. We denote the count for encounter (row) and activity j as n_{ij}. We can rescale these counts to observed proportions by dividing n_{ij} by the row total n_{i+}.

$$p_{j|i} = n_{j|i}/n_{i+}$$

where $n_{i+} = \Sigma_j n_{ij}$. Here $P_{j|i}$ is the proportion of times of activity j is used in encounter i. CA aims to represent the observed data matrix graphically in a

low dimensional space. We will discuss CA without many technical details here, but we refer for such details to Greenacre (1984) and Van der Heijden (1987).
Starting point is the matrix with conditional proportions $p_{j|i}$, where i indexes the row elements and j the verbal activities. Each of the 181 encounters has proportions for 23 RIAS activities adding up to 1. So called chi-squared distances $\boldsymbol{\delta}_{ij}$ between the encounter i en i' of this matrix can be calculated as

$$\boldsymbol{\delta}_{ii}{}^2 = \boldsymbol{\Sigma}_j\,(1/p_{+j})\;(p_{j|i}-p_{j|i'})^2$$

where $p_{+j} = n_{+j}/n_{++}$, $n_{+j}= \boldsymbol{\Sigma}_i n_{ij}$, $n_{++} = \boldsymbol{\Sigma}_i\boldsymbol{\Sigma}_j n_{ij.}$ This shows that the chi-squared distance $\boldsymbol{\delta}_{ij'}$, between encounter i and i' will be small when the conditional proportions $p_{j|i}$ and $p_{j|i'}$ are very similar, and the chi-squared distance $\boldsymbol{\delta}_{ij'}$ will be large when there are activities j for which $p_{j|i}$ is very different from $p_{j|i'}$. The term $(1/p_{+j})$ is used to downplay the influence from the activities that are performed more often. So if two encounters spend their time in a similar way, their distance is small, and if two encounters spend their time in very different ways, their distance is large.
By CA a graphical representation is obtained. This representation has the property that Euclidian distances between the points in the representation approximate the chi-squared distances as well as possible. In principle for our matrix of 181 encounters by 23 RIAS categories, 22 dimensions are needed to display the data perfectly. However comparable to the principle component analysis, CA provides a low dimensional space that reflects the distances between the points in full-dimensional space as good as possible. The sum of all eigenvalues equals the total of the squared distances to the origin that is displayed in the full dimensional space. Therefore the importance of a specific dimension can be assessed by dividing the eigenvalue of this dimension by the sum of all eigenvalues. A choice for a specific number of dimensions is done by studying the decline of eigenvalues: if an eigenvalue is not well separated from the remaining eigenvalues then the dimension is not studied any more (compare the use of a screen test in factor analysis). Many other details can be given here, but we refer for these to the references above and below.
It is also possible to use a similar procedure to make a representation for the column points, using a matrix with conditional proportions $p_{i|j}$ to calculate chi-squared distances $\boldsymbol{\delta}_{jj'}$ between columns j and j'.

$$\delta_{jj'}^2 = \Sigma_i (1/p_{i+}) (p_{j|i} - p_{i|j'})^2$$

where $p_{i+} = n_{i+}/n_{++}$. Similar to the rows, a representation can be made for the columns.

The representation for the rows and the representation for the columns are closely related, in fact using one the other can be derived from it (see Greenacre, 1984). The way to interprete the relation is that rows and column depart in the same way from the origin [i.e. point (0,0) if $p_{i|j} > p_{i+}$ (and then also $p_{j|i} > p_{+j}$)].

Correspondence analysis is commercially available in statistical software packages like SPSS, SAS and BMDP.

Chapter 4

NONVERBAL BEHAVIOUR IN NURSE-ELDERLY PATIENT COMMUNICATION

Caris-Verhallen W.M.C.M., Kerkstra A., Bensing J.M. (1999)
Nonverbal behaviour in nurse-elderly patient communication. *Journal of Advanced Nursing; 29(4): 808-818*

Abstract

This study explores the occurrence of nonverbal communication in nurse-elderly patient interaction in two different care settings: home nursing and a home for the elderly. In a sample of 181 nursing encounters, involving 47 nurses, a study was made of videotaped nurse-patient communication. Six nonverbal behaviours were observed: patient-directed eyegaze, affirmative head nodding, smiling, forward leaning, affective touch and instrumental touch. With the exception of instrumental touch these nonverbal behaviours are important in establishing a good relationship with the patient. To study the relationship between nonverbal and verbal communication, verbal communication was observed using an adapted version of Roter's Interaction Analysis System, which distinguishes socio-emotional and task-related communication. Data was analysed in hierarchical linear models.

The results demonstrate that nurses use mainly eyegaze, head nodding and smiling to establish a good relation with their patients. The use of affective touch is mainly attributable to nurses' personal style. Compared to nurses in the community, nurses in the home for the elderly, more often display nonverbal behaviours like patient directed gaze and affective touch.

Introduction

People are social beings. Relating with other people, provides support, comfort, love and affection, which are needs we all have. There is no indication that these needs will diminish with age. Yet, as people grow older, they experience several changes in life, which interfere with developing social contact. Because of declining physical function, a lower income and a decreasing social network, elderly people may have few relationships. For people depending on care, a situation may develop in which the elderly person is mainly reliant on nurses who deliver nursing care (Staab & Hodges 1996, Arnold & Boggs 1995, Nesbitt-Blondis & Jackson 1978). This means that, apart from the fact that nurses need good communication skills to assess the patients' needs and to provide care that is tailored to the individual, there is also a need for communication to create good interpersonal relationships in which there is room for socializing, affection and empathy. These communication aspects can be expressed verbally or nonverbally. However, most authors agree that nonverbal behaviour is an essential mode to convey warmth, love and support (Bensing et al. 1995, Roter & Hall 1992, Strecher 1983, Mehrabian 1981). Mehrabian (1981) even states that nonverbal communication is the pre-eminent mode to build rapport with other persons.

Nonverbal communication includes all forms of communication that do not involve the spoken word (Greene et al. 1994). Perception of nonverbal communication involves all of the senses, including hearing used on the verbal level to detect vocal characteristics of the spoken word (Sundeen et al. 1989). Nonverbal communication becomes significant when elderly people develop hearing problems that affect their verbal communication ability. Touch is increasingly important in visually impaired persons. Most of research into nurses' interaction with elderly patients is still directed at verbal communication. When attention is paid to nonverbal behaviour, most of the time the study is confined to one nonverbal aspect, such as: for instance touch. As a part of a larger study of nurse-patient communication (Caris-Verhallen et al. 1997ab), this paper investigates how nurses use a number of nonverbal behaviours in interaction with elderly people. The relationship of nonverbal to verbal communication was also studied.

The role of nonverbal communication in the nursing process

Human communication, especially face to face communication, is largely nonverbal. Gross (1990) stated that the nonverbal component of communication comprises from 55 to 97 percent of the message communicated.

Nonverbal communication has different functions. Argyle (1972) contends that nonverbal communication:

- conveys interpersonal attitudes and emotional states;
- supports or contradicts the verbal communication;
- functions as substitute for language, if speech is impossible.

There are numerous aspects of nonverbal communication. In this study we are interested in nonverbal behaviour that is important for the establishment of the nurse-patient relationship. Heintzman et al. (1993) describe five nonverbal behaviours which were found to be essential in a person's attempt to build rapport with another person: eyegaze, affirmative head nodding, smiling, body positioning, and touch.

Eyegaze behaviour

Eyegaze takes a special place in nonverbal communication. In western cultures, gaze is a positive value in communication between people: listeners are expected to look at the speaker, and speakers look at the listeners to check whether the information is understood (Collier 1985). Eibl-Eibesfeldt (1972, 1971) and Von Cranach (1971) consider eyegaze as a signal for readiness to initiate interaction with others. Maintaining moderate to high levels of direct eye contact conveys a sense of interest in the person with whom one is communicating. Conversely, averting one's eyes while talking with someone can damage the rapport building because it is interpreted as expressing disinterest, detachment and dislike (Heintzman et al. 1993). To express warmth and empathy the nurse needs to make eye contact with the patient. Apart from that, the amount of patient-directed gaze influences the patient's share of talking. Bensing et al. (1995) showed that the duration of the General Practitioner's gaze was related to the duration of patient speaking time about psycho-social health problems. Moreover eye contact at appropriate levels has been shown to contribute positively to another's perceptions of an individual's competence and credibility (Burgoon 1994, Heintzman et al. 1993).

Affirmative head nodding

Affirmative head nods do have an obvious social function. Schabracq (1987) distinguishes three functions in affirmative head nods:

- regulation of the interaction, especially changing turns in speaking;
- support of spoken language;
- comment upon the interaction concerning the rapport and the content of the communication. For instance, nodding to affirm what was said and nodding while listening, to convey interest (Anderson 1985, Mehrabian 1972).

Nurse's head nods encourage the client to tell their story (Caris 1997) In addition, people who use affirmative head nods frequently are considered as more friendly and more concerned (Heintzman et al. 1993).

Smiling

Smiling may be one of the most important characteristics of a nurse who wishes to establish good rapport with patients (Heintzman et al. 1993, Schabracq 1987). Smiling is positively judged by other people and is considered as a sign of good humour, warmth and immediacy (Mehrabian 1972, Reece & Whitman 1962).

Body positioning

A person's body positioning may indicate if he is listening, attending and involved (Gross 1990, Von Cranach 1971). Leaning forward is a way to show awareness and immediacy. During the interaction with another person it clearly suggests interest in that person (Heintzman et al. 1993, Schabracq 1987). Forward leaning is also a sign of attention (Rosenfeld 1978). In earlier research Reece and Whitman (1962) showed that leaning forward conveys warmth and friendliness. Forward leaning combined with smiling, eye contact and verbal attentiveness (with hm-hm) communicates an attitude of involvement. This behaviour stimulates the other person to continue with talking (Caris 1997, Reece & Whitman 1962).

Touch

Touch is a very important aspect in building rapport and establishing a relationship. Touch has also the potential to convey affection, care and comfort (McCann & McKenna 1993, De Wever 1977). Following Watson (1975), in research into the effect of touch in the nurse-patient interaction,

touch is divided into two categories. 'Instrumental touch' and 'affective' or 'expressive' touch. Instrumental touch is defined as deliberate physical contact necessary to perform a task, e.g. to dress a wound, or to take a pulse. Expressive touch is relatively spontaneous and affective, and is not necessary for the completion of a task (McCann & McKenna 1993, Oliver & Redfern 1991, Le May & Redfern 1987). In nursing, the latter type of touch is used seldom compared with instrumental touch (Routasalo 1996, McCann & McKenna 1993, Le May & Redfern 1987). Moore and Gilbert (1995) showed that residents of a home for the elderly experienced more immediacy and affection from nurses who used expressive touch than from nurses who did not. Hollinger (1986) found a relationship between nurses' touch and the verbal responses of the hospitalized elderly during the nurse-patient interactions.

Aim of the study

The aim of the current study was to investigate nonverbal communication in nursing care for the elderly. The study used a descriptive design and has been carried out in the community and in a home for the elderly. More specifically three research questions guided this study:

1. To what extent do nurses display nonverbal communication, in particular eyegaze direction, affirmative head nodding, smiling, forward leaning and touch?
2. How are nonverbal behaviours related to the verbal communication of nurses?
3. Are the nonverbal behaviours related to the setting (home nursing versus home for the elderly) and the type of care provided?

To answer these questions, observations were made of videotaped nurse-patient communication. Based on one of the functions of nonverbal behaviour, the support of verbal communication, it is expected that affective verbal communication and the affective nonverbal communication categories will be related to each other.

As the two care settings differ in character and their patients' age, gender and level of independence (Caris-Verhallen et al. 1997b), one could assume differences in nurses nonverbal behaviour. In the home for the elderly, the residents, although living in separate rooms, make up part of a ward, on which nursing care carries on all day. Nurse-patient communication patterns reflect a daily routine in nursing (Nyström & Segesten 1996). Apart from

communication related to the delivered care, there is more time for socializing than in the community where the elderly live independently and each nursing visit has an explicit start and finish.
Furthermore, there is some evidence that the relationship between nurse and elderly patient in institutional care is different from the nurse-patient relationship in home care. Some researchers describe this relationship in institutional care as strongly reciprocal, intimate and even mimicking a family bond (Nyström & Segesten 1996, Sumaya-Smith 1995). Based on this literature, one might expect that nurses would display a lot of nonverbal behaviour, which is an essential mode for conveying affection, love and support (Strecher 1983, Mehrabian 1972). Although in the community, nurse-patient relationships can be also very intimate and reciprocal, the major objective of a home visit in the community is to deliver nursing care. Earlier research into verbal behaviour in these settings (Caris-Verhallen et al. 1997b) showed that the interactions in home nursing are less familiar than in institutional care. This could be connected with a lower level of nonverbal behaviour.
As regards the different types of nursing care, it is expected that nurses will display more nonverbal behaviour during psycho-social care than during personal hygiene and technical nursing care. Psycho-social care requires empathy and concern, which are especially conveyed by nonverbal communication.

Materials and methods

Data collection

In order to meet the research objectives real nurse-patient interactions were videotaped, during the delivery of nursing care. Each encounter was videotaped entirely using a manned camera, focusing on the nurse and the patient, except in the case of nursing activities where the patient was undressed. In such cases, the video camera was focused on the nurse only, or when that was impossible only verbal communication was recorded. A few days, prior to the data collection, nurses informed their patients about the research, and asked them to give informed written consent to participate. Very sick patients, patients suffering from dementia and terminally ill patients were excluded from participation. In the community very few patients refused

consent. In the home for the elderly, half of the sixty residents who were asked to participate did. Nurses did not systematically inform us about those patients who did not want to co-operate, but they reported that there was no clear difference between participant and non participant residents.

Table 1 Distribution of different characteristics of nurses participating in the study n=47

Provider variables	Nurses in the community n=24	Nurses in a home for the elderly n=23
women	100%	91%
men		9%
mean age[a]	37.4	40.9
(sd)	(9.3)	(8,7)
education)[1])[b]		
nurses	46%	35%
auxiliary nurses	54%	65%
years of employment[a]	16.5	15.9
(sd)	(8.8)	(7.2)

)[1] nurses = Dutch higher professional education level, HBO or 3,5 years of in-service training

auxiliary nurses = Dutch secondary professional education level, MBO or 2,5 years of in-service training

[a] Differences in age and amount of experience were tested by means of t-tests and were not significant

[b] Differences in gender and education level were tested by means of a chi-square tests and were not significant

Nurses

Forty-seven nurses of different grades took part in this study. The nurses were not a random sample, but nurses who were going to participate in a larger project, aiming at improving their communication skills. Twenty-four nurses worked in an organization for home nursing and provided nursing care in the community. Twenty-three nurses provided care in a home for the elderly. Each nurse was followed a part of the day in which, on average, four encounters with patients were recorded. The two groups did not differ signifi-

cantly with respect to age, gender, education and years of experience (see Table 1).

Patients

One hundred and nine patients agreed to participate in the study. Together they participated in 181 recorded nursing encounters. Eighty one patients lived in the community; mean age 77.5 years. Most of the patients in the community received nursing care for a long period (mean 37 months). Twenty-eight patients were residents of a home for the elderly. These patients were older than the patients in the community. Their mean age was 86.7 years. On average, they lived about five and a half years in the home for the elderly.

These two groups of patients can be considered representative samples of the populations of patients in the community and in homes for the elderly, with regard to age and gender (Delnoij et al. 1996, CBS 1995). The two groups differed from each other, in respect of age, gender and mean duration of nursing care received (see Table 2).

Table 2 Distribution of age, sex and duration of receiving nursing care of patients, who took part in the study n=109

Patients characteristics	Patients in the community n=81		Patients in the home for elderly n=28	
	mean	(sd)	mean	(sd)
gender				
women	65%		89%	
men	35%		11%	
mean age	77.5	(8.7)**	86.7	(4.4)
mean duration of received nursing care in months	37	(43.6)*	70	(77.2)

* significance level of $p \leq .05$
** significance level of $p \leq .01$

Observation scheme

The observation scheme is directed at nonverbal and verbal communication.

Nonverbal communication

The observation scheme contains six nonverbal categories: patient-directed-gaze, affirmative head nods, smiling, forward leaning and instrumental and affective touch. Actually, instrumental touch does not play a role in building rapport. But because this kind of touch is inherent in nursing it has to be observed to distinguish it from affective touch.

* Patient-directed-gaze is defined as the nurse looking at the face of the patient.
* Head nods are defined as nodding one or more times as a sign of attentiveness in conversation or as reinforcing the spoken word (Anderson 1985, Mehrabian 1972).
* Smiling in this context is defined as an utterance of friendliness. Laughing out loud on the other hand, in response to a joke, is not considered as nonverbal communication, it is coded in the verbal part of the observation scheme.
* Forward leaning is defined as a posture which involves bending towards or sitting closer to the patient, when this is not necessary to carry out the nursing tasks. This position conveys involvement and a concentrated focus on the interaction partner (Heintzman et al. 1993).
* Affective touch is relatively spontaneous and affective, and not necessary for the completion of a task (Le May & Redfern 1987). An example is a nurse who puts an arm around the shoulder of a distressed patient.
* Instrumental touch is deliberate physical contact, which is necessary in performing the nursing task. An example is touch while dressing a wound.

The duration of all six nonverbal categories was recorded.

The type of nursing care was also coded, using Kerkstra & Vorst-Thijssen (1991), as a point of departure. We discerned three types of encounters: encounters dominated by personal hygiene care, encounters principally involving technical nursing procedures and encounters which were dominated by psycho-social care.

Verbal communication

As a method to observe the verbal communication of the nurses, an adapted version of Roter's Interaction Analysis System (RIAS) was used (Roter 1989). In this system all utterances in patient and nurse dialogue are coded in separate and non overlapping scoring categories. RIAS discerns socio-emotional and instrumental communication. Within these two categories we defined in an earlier study five clusters, based on Correspondence Analysis (Caris-Verhallen et al. 1997b):

* Social communication, which provides information about the degree to which the nurse uses social conversation that has no particular function in nursing activities such as personal statements, banter, jokes and small talk.
* Affective communication, which provides information about the extent to which the nurse shows verbal attentiveness, concern, empathy and sympathy with the patient.
* Communication that structures the encounter, involves utterances that indicate guidance and direction such as orienting and instructing, requests for clarification, asking for understanding and asking for opinion.
* Communication about nursing and health, which contains all items with respect to nursing, medical or therapeutical topics.
* Communication about lifestyle and feelings, which contains all verbal expressions with respect to lifestyle issues and emotional topics.

Reliability of the observations

The video recordings were systematically observed by two observers using the CAMERA computer system (Iec ProGAMMA 1994), which is especially designed for coding behavioural interactions from video recordings.

With respect to the nonverbal behaviours, both duration and frequencies of the variables were recorded. In this study duration was used. Ten of the contacts were coded by each of the two observers in order to calculate the interrater reliability of the nonverbal behaviours. Pearson's R proved to be between .70 and .98.

Cohen's Kappa was used to calculate the interobserver-reliability of the five verbal communication categories. This statistical procedure corrects for agreement based on chance and is especially suitable for observations coded in exclusive categories (Hollenbeck 1978). A kappa coefficient can range from

-1 to +1 and a value of $\geq$.60 is indicating an acceptable level of reliability (Cichetti 1984). Cohen's Kappa in our study varied between .74 and .81 .
Following Henbest and Fehrsen (1992), who noted that scoring only a part of a consultation could be as reliable as scoring an entire consultation, preliminary observations with observation periods of 5 minutes, 10 minutes and the total length were carried out on 48 encounters. As 10 minutes observation periods proved to be very reliable compared with the observation of the total length (nonverbal communication between .61 and .92 and verbal clusters between .80 and .93, Pearson's R), observation time was standardized and the first 10 minutes were observed of each of the 181 nursing encounters.

Analyses

In order to answer the first research question, we specify the amount of nurses' nonverbal communication during the nursing encounters. Proportional scores were used. The recorded time spans of 'eyegaze direction', 'forward leaning', 'affective touch' and 'instrumental touch' were divided by the duration of time that nurse and patient were in sight. Likewise the time span of 'head nodding' and 'smiling' were adjusted by dividing duration by the time that the nurse's face was in sight.
A problem in answering the second and third research question, relates to the nesting of the nursing encounters within the 47 nurses. This implies that the 181 encounters cannot be considered completely as independent observations. Because of each nurse's style of behaviour, it might be argued that the encounters of one nurse, on average would be more alike, than those of different nurses (Bensing et al. 1995). The amount of nesting is calculated by multi-level analysis and represented by an intra-class correlation coefficient (Prosser et al. 1991).
The second research question concerning how nonverbal behaviours were related to verbal communication, was investigated using correlational techniques.
Lastly, additional analyses were carried out to investigate whether setting and type of nursing care affected nurse's nonverbal communication.

Results

Nonverbal communication in nurse-patient interaction

It was only possible to observe nonverbal communication in 165 of the 181 nursing encounters. In 16 encounters nursing care consisted mainly of personal hygiene care during which it was impossible to focus on the nurse, while avoiding the undressed patient. In these cases only verbal communication was recorded.

Table 3 Overview nonverbal communication categories during nursing encounters n=165

Nonverbal categories	Number of encounters in which nonverbal behaviour is shown		Mean duration nonverbal behaviour	(Standard deviation)
	abs.	perc.		
patient-directed-eyegaze	165	100%	41.3%	(27.4)
affirmative head nodding	152	92%	2.4%	(3.2)
smiling	141	85%	1.5%	(1.8)
forward leaning	95	58%	2.7%	(5.3)
affective touch	69	42%	2.1%	(6.4)
instrumental touch	128	78%	20.2%	(19.4)

Table 3 shows that in all 165 nursing encounters there is some patient-directed eyegaze, varying between 5% to 98% of the time both nurse and patient were in sight. On average in 41% of the observation time, the nurse looks in the direction of the face of the patient. In nearly all encounters nurses smile and make head nods. In 58% of the nursing encounters nurses display forward leaning, expressing immediacy and interest behaviours. The mean duration of this posture is nearly 3% of the observation time. In more than 40% of the nursing encounters, there is some kind of affective touch. This type of touch is shown in about 1,5% of the observation time. As is to be expected, the amount of affective touch is much lower than the amount of instrumental touch. The latter was displayed in three fourths of the encounters, during twenty percent of the observation time.
The standard deviations make clear that the amount of nonverbal behaviour in the encounters varied to a large extent. As mentioned before, the scores of

nonverbal behaviour might belong to a nurse's communication style and in that sense the encounters are not independent. Table 4 presents the intra-class correlation coefficients for nonverbal and verbal nurses' behaviour. From the six nonverbal behaviours the highest coefficient is the affective touch (.40), meaning that 40% of the variance is accounted for the nurse level, while the remaining 60% is due to variance between encounters. The intra-class coefficient of patient directed gaze is .20, meaning that 20% of the variance is attributable to the nurse. The variance in verbal communication is with exception to affective communication mainly due to the variability in encounters.

Summarizing these results, we may say that the encounters within one nurse have indeed a greater degree of similarity than encounters of different nurses, but only in a limited way. The similarity refers mainly to affective verbal communication and affective touch.

Table 4 Intra-class correlation coefficients of nonverbal and verbal communication, measured on the level of encounters

Nurse behaviour	Intra-class R
nonverbal behaviour	
patient-directed-eyegaze	0.20*
affirmative head nodding	0.10
smiling	0.00
forward leaning	0.01
affective touch	0.40***
instrumental touch	0.07
verbal behaviour	
social communication	0.15
affective communication	0.17*
structuring communication	0.03
communication nursing and health care topics	0.13
communication lifestyle and emotional topics	0.01

The number of nurses is 47 and the number of encounters is 181.
*** significance level $p \leq 0.001$
* significance level $p \leq 0.05$

Relations between nurses' nonverbal communication and verbal communication

Table 5 shows a positive relationship between patient-directed eyegaze on one hand and the two verbal socio-emotional categories and talking about lifestyle and emotions on the other. Verbal behaviour that structures the encounter (like 'asking for an opinion', 'asking for understanding' and 'orienting and instructional remarks') and conversation about nursing and health topics are both negatively related to nurses' eyegaze. It seems that nurses mainly display these types of verbal communication during encounters in which hygienic or technical nursing care is provided. This is confirmed by the positive correlations between instrumental touch on one hand and structuring communication and communication about nursing and health topics on the other. The latter are very common in technical and hygienic care.

Table 5 Overview correlations between verbal categories and nonverbal categories. n=165 nursing encounters.

nonverbal behaviour	social communication	affective communication	communication that structures the encounter	communication nursing and health topics and medical topics	communication lifestyle and emotions
patient-directed-eyegaze	.20 ***	.25 **	-.54 ***	-.30 ***	.26 **
affirmative head nodding	.08	.31 ***	-.40 ***	-.25 **	.21 **
smiling	.19 *	.03	-.22 **	-.21 **	.08
forward leaning	-.20 *	.10	.10	.10	.05
affective touch	-.12	.16 *	-.03	.08	-.03
instrumental touch	-.13	-.12	.38 ***	.19 *	-.26 ***

Correlation coefficients are computed in hierarchical linear models; 165 encounters nested within 47 nurses.

*** significance level of $p \leq 0.001$
** significance level of $p \leq 0.01$
* significance level of $p \leq 0.05$

Nurses' head nodding is positively related to affective communication and communication about lifestyle and emotions. Head nodding is negatively related to task related verbal communication.

Smiling is positively related to social communication. Nurses show these

nonverbal behaviours less frequently when the encounter is instrumental in nature.

Finally, affective touch is related to affective verbal communication, meaning that as the nurse shows empathy and concern during encounters she also expresses this by touching the patient.

Difference in nonverbal behaviour between nurses in the community and in institutional care

As the standard deviations in Table 3 make clear the observations of the six nonverbal behaviours for each encounter were very different. Table 4 showed the variance in these behaviours, except for affective touch, could hardly be attributed to nurses. In the next analysis we investigate whether nonverbal behaviours were related to the setting (community versus home for the elderly) or the type of care. In a hierarchical linear model mean proportions of nonverbal communication are computed in settings and per setting in each type of nursing care, separately. The results are shown in Table 6.

The table shows that nurses in the home for the elderly look significantly more in the direction of the patient than nurses in the community (row 1 column 1,5). This counts especially for hygiene care (row 1 column 2,6) and technical nursing care (row 1 column 3,7). The proportion eyegaze is largest during psycho-social care in both settings, namely 63% in home care and 73% in the home for the elderly. The difference between settings, during this type of care, is not statistically significant.

Nurses in the home for the elderly usually display more affective touch than their colleagues in home nursing (row 5, column 1,5). This is principally the case, during psycho-social encounters (row 5, column 4,8).

The amount of instrumental touch is significantly more often shown by nurses in the community (row 6, column 1,5). This is mainly attributable to instrumental touch during hygienic care.

In general there is no difference between nurses in the two settings concerning affirmative head nodding, smiling and forward leaning. However, comparing the amount of head nodding during the different types of care we see that nurses in the home for the elderly nod significantly more during hygiene care (row 2, columns 2,6). As regards smiling and forward leaning (row 3,4), significant effects are found from the type of nursing care that is provided. Especially during technical nursing care, nurses in the home for the elderly use more often these types of nonverbal behaviour.

Table 6. Mean scores)[1] of nurses nonverbal behaviour, by setting and type of care. n=165 nursing encounters

	Home nursing				Home for the elderly			
	1. In general n=73	2. Hygienic care n=46	3. Technical nursing care n=13	4. Psycho social care n=14	5. In general n=92	6. Hygienic care n=69	7. Technical nursing care n=8	8. Psycho-social care n=15
1. patient directed eyegaze	35.5**	26.1***	27.1*	63.3	44.9	41.8	49.5	73.3
2. affirmative head nodding	2.2	0.7***	1.9	5.2	2.9	2.5	3.8	5.0
3. smiling	1.6	1.1	1.4*	2.6	1.7	1.4	3.1	1.8
4. forward leaning	2.2	2.3	0.8*	2.7	3.1	2.9	4.5	2.6
5. affective touch	1.1***	0.3	0.0	1.4**	2.2	2.6	2.8	6.3
6. instrumental touch	22.5*	29.5**	23.8	7.9	18.2	19.6	21.8	2.7

)[1] Means are calculated in Hierarchical Linear Models. The number of nurses is 47 and the number of encounters, in which nonverbal behaviour is measured, is 165.

*** significance level of $p \leq 0.001$
** significance level of $p \leq 0.01$
* significance level of $p \leq 0.05$

Discussion

In this study, we have paid attention to nonverbal communication of nurses like patient-directed eyegaze, head nodding, smiling, forward leaning and touch.

In describing nurses' nonverbal behaviour we found that patient directed eyegaze was observed during all nursing encounters. On average of 40% of the time, nurses look in the direction of the face of the patient. This result is consistent with findings from other studies, in which the amount of gaze

ranges from 30%- 70%. (Argyle 1988, Vrugt 1983). Affirmative head nods and smiles were shown frequently, although it is remarkable, however, that in 15% of the encounters nurses do not smile at all, although especially smiling is a means of nonverbal communication by which warmth, openness and sympathy is conveyed (Heintzman et al. 1993, Argyle 1988).
As is the case in other studies into the use of touch in nursing (Routasalo 1996, McCann & McKenna 1993, Oliver & Redfern 1991, Le May & Redfern 1987), nurses appeared to use instrumental touch more frequently than affective touch. The amount of affective touch appeared to belong to a nurse's communication style, to a large extent. This counts less for smiling. Other nonverbal behaviours were mainly attributable to the encounter.
In accordance with the expectations, it appeared that nonverbal and verbal communication were related to each other, meaning that task-related communication (structuring communication and communication about nursing and health topics) was positively related to instrumental touch and negatively related to nonverbal communication that was affective in nature (gaze, head nodding and smiling). On the other hand, affective communication and communication about lifestyle and emotions were positively related to gaze and head nodding, but negatively related to instrumental touch.
Furthermore the results show that, consistent with our expectations concerning the difference between these two care settings, nurses in a home for the elderly show more often nonverbal behaviours. These findings were not attributable to the differences between patient populations in the two care settings, like age, gender, perceived health or length of time the nurse has cared for the patient. An earlier study (Caris-Verhallen et al. 1997b) showed that those patient characteristics were hardly related to the way nurses communicate with their patients.
The more frequent occurrence of nonverbal behaviour may reflect the familiar atmosphere in the home for the elderly. Based on the literature, described earlier in this paper, one could expect that compared with nurses in the community, nurses in the home for the elderly, more often displayed nonverbal behaviours, because apart from hygiene and technical nursing goals they also paid a lot of attention to familiar contact and socializing. The latter are connected with nonverbal behaviour, especially with affective touch.
Expectations with respect to the type of care were partly confirmed. Nurses in home care show more nonverbal behaviour to build rapport during psychosocial care, than during hygiene and technical nursing care. But nurses in the

home for the elderly showed some exceptions. They smiled and leant forward more frequently during technical and hygiene care. As was to be expected, we see that instrumental touch is predominantly affected by the type of nursing care. This is not surprising, because instrumental touch is inherent in hygiene or technical nursing care, while this is not so usual in encounters which are dominated by psycho-social care.

Methodological issues

Some methodological points need special attention. Firstly, in investigating the relationship between verbal and nonverbal communication we used a correlational design. In interpreting these results, we must keep in mind that this provides us with associations, however it is not allowed to make causal explanations. This is a limitation, because it is plausible to suggest some kind of causality. For instance, as the nurse displays a lot of nonverbal behaviour, patients may bring up socio-emotional topics. But the opposite is equally possible, the topics that are brought up can influence nurses' nonverbal communication. With the techniques used, no such conclusions can be made. Analyses of behavioural sequences are recommended in looking at causality.

With the techniques used, it was possible to determine that all findings pointed in the same direction. In particular encounters which were characterized by instrumental verbal communication, were negatively related to nonverbal behaviour that was affective in nature, but a positive relationship was found with instrumental touch. These findings indicate convergent validity of the used instruments. Another issue, however, is conceptual validity. Actually nonverbal behaviour is more complex than described in this paper. For instance, some of the nonverbal communication categories are multi-interpretable. Apart from that, combining some nonverbal behaviours can lead to another interpretation. Combined forward leaning and eyegaze direction can indicate paying attention but this combination can also indicate dominance (Heintzman et al. 1993). Smiling can convey friendliness but also cynicism or arrogance. In this study forward leaning and affective touch is considered as conveying warmth and kindness, but a patient may also perceive these behaviours as intrusive or degrading, and consequently as annoying. To observe behaviour in a more specific and valid way, one should have close-ups of faces. Therefore one has to use more than one video camera and record from different angles. These kind of studies are not possible in nursing practice, but restricted to experimental arrangements.

Actually, in analysing verbal behaviour and the atmosphere during the encounter, nurses showed rarely hostility or dis-agreement with their patients (Caris-Verhallen et al. 1997b). Therefore patient-directed-gaze, smiling, head nodding, forward leaning and affective touch were considered as positive.
Finally, there were some practical issues. The nurses participating were not a random sample, but nurses who were going to receive training in communication skills. Because patients were recruited by the nurses themselves in the patient group as well some selectivity could have been present. This could provide a limited bias in the data and accordingly conclusions about nurse-elderly patient communication in general, should be drawn with caution.
Moreover, there is some concern as to whether nurses may have been subject of performance bias (Levinson & Roter 1993), meaning that nurses, being aware of being videotaped, possibly behaved differently. We think that this type of bias was limited. The videotaping continued for half-a-day and the literature confirms that people concerned tend to resume their natural behaviour in a fairly short time (Verhaak 1988, Schepers 1991). Apart from that, most of the nurses and patients reported afterwards in a questionnaire that the videotaped encounter was comparable to the normal situation (Caris-Verhallen et al. 1997b).

Directions in future research

Despite of the restrictions described above the technique of recording behaviour in real nursing encounters has high face validity, and observation was found to be reliable. Yet, this research was only a start to describe a comprehensive topic, on which much research remains to be done. Firstly, future research should do justice to the interactive nature of communication and take both nurse and patient into account. Apart from that, verbal and nonverbal communication are both critical aspects of any behavioural interaction. Accordingly it could be important to examine the effects of verbal communication on nonverbal behaviour and vice versa, in both interaction participants. A method for this is lag sequential analysis, a method developed by Sackett (1977), in which contingency patterns among interacting individuals are identified.
Another topic that is imperative for future research is measuring patient outcome. There is evidence from studies into physician-patient interaction, that doctor's nonverbal behaviour is correlated significantly with patient

outcomes like satisfaction and understanding (Caris-Verhallen et al. 1997a). It would therefore be of interest to investigate patients opinion about the communication during the nursing encounter.

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Chapter 5

FACTORS RELATED TO NURSE COMMUNICATION WITH ELDERLY PEOPLE

This is an adapted version of the article:
Caris-Verhallen W.M.C.M., Gruyter I.M. de, Kerkstra A., Bensing J.M.
Factors related to nurse communication with elderly people.
Journal of Advanced Nursing (in press)

Abstract

This study explores variables that might influence nurses' communication with elderly patients. Three groups of variables arise from the literature that seem to affect the quality or quantity of nurse-patient communication: variables related to nurses, to patients, and to the setting in which nursing care takes place.

The study was conducted in two different care settings: a home for elderly people and a home care organization. In a sample of 181 videotaped nursing encounters, involving 47 nurses and 109 patients a study was made of nurse-patient communication. In addition, relevant data related to patients, nurses and situation were gathered by questionnaires and were combined with the results of observations of videotaped nurse-patient interactions.

It was found that the educational level of nurses was related most strongly to the way nurses communicate with their elderly patients. Patient characteristics such as age, gender and subjective state of health appeared to play a minor role in the way nurses communicate.

Introduction

Communication with patients has been recognized as one of the most important aspects of nursing elderly people (Hockey 1976, Armstrong-Esther et al. 1989, Van Cott 1993). Furthermore, communication is an important aspect of the quality of care. From several studies it appears that poor communication is the largest source of dissatisfaction in patients (Macleod Clark 1985, Ley 1988, Davies & Fallowfield 1991). Consequently, the quality of care may improve with effective communication.

Effective communication does not just depend on the acquisition of the right communication skills (Wilkinson 1991). In the literature, three groups of variables have been identified that seem to determine the quality or quantity of nurse-patient communication: variables related to nurses (referred to in this article as provider variables), variables related to patients and variables related to the situation, in particular ward characteristics (Caris-Verhallen et al. 1997a). In this article, these three groups of variables are related to the way nurses communicate in practice with elderly people.

Provider variables

In several studies it has been suggested that nurses' approach to and treatment of elderly people is mainly determined by a negative predisposition towards elderly patients and a tendency to stereotype them as having undesirable traits and characteristics (Taft 1985, Brasker & Visser 1990, Treharne 1990, Penninx 1995). Armstrong-Esther et al. (1989) showed that nurses in different grades, with a favourable attitude towards elderly people, attached value to conversations with their older patients, while nurses with a less favourable attitude thought it was more important to deliver physical, hygienic care. In contrast, Salmon (1993) was not able to demonstrate a relationship between nurses' attitude towards older people and their communicative behaviour. Actually, he found that establishing formal interaction periods led to a greater increase in interactions than targeting nurses' attitudes.

One positive factor relating to communication might be the amount of nurses' job satisfaction. Wilkinson (1991) reported that nurses used more facilitating than blocking communication, when they were satisfied with the general atmosphere on the ward. Kramer and Kerkstra (1991) showed that nurses with high levels of intrinsic job motivation and satisfaction with colleagues

were more sensitive to elderly patients' needs than nurses with lower levels of these job satisfaction aspects.
The amount of training and the educational level of nurses are other characteristics that have been shown to have an influence on nurses' communication. Davies (1992) found that although trained and untrained staff used broadly the same range of verbal strategies, trained staff used proportionately more of those strategies that promoted patients' dignity, self-respect, choice and independence. Moreover, unqualified nurses were less sensitive to underlying meanings in verbal communication of elderly clients. Liefbroer and Visser (1986) asserted that nurses with a higher level of education use more patient directed statements than nurses with a lower level of education. High level nurses for instance provide the patient with more information about sickness and health than lower level nurses. Burgener and Shimer (1993) demonstrated that the total number of years of education was related to a number of communication categories, such as paying attention, giving comfort and the use of feedback behaviours. These authors also showed there was a relationship between the amount of nursing experience with cognitively impaired patients and nurses' nonverbal behaviour, smiling in particular.
The relationship between demographic factors and nurse communication has been examined in several studies (Pool 1983, Liefbroer & Visser 1986, Wilkinson 1991, Burgener & Shimer 1993). It is not clear whether characteristics such as age, gender and years of employment are related to the quality and quantity of communication. The results of existing studies are contradictory (Caris-Verhallen et al. 1997a).

Patient characteristics

Patient characteristics that have been shown to have an influence on nurse communication are gender, age and health. Lane (1989) studied 80 registered nurses in an outpatient setting and found that they were less likely to touch a male patient than a female patient. Visser (1988) reported that hospitalized elderly people, were kept less informed about medical topics than younger people. Concerning health, Allen and Turner (1991) suggested in a study that nurses might be less likely to interact with physically dependent patients than the more physically able. They referred to the Armstrong-Esther and Browne study (1986), which produced a comparable conclusion for mentally impaired patients: nurses interacted significantly less with confused elderly patients

than with their alert patients. De Wilde and De Bot (1989) described nurses as using the characteristics of baby talk with patients showing signs of dementia.

Situational variables

Ward characteristics have in several studies been shown to have an effect on nurse-patient interaction. Gibb and O'Brien (1990) showed that nurses who were responsible for the ward during morning care and experienced pressure of time, were brief and task-related in interaction with their patients. They used mostly closed rather than open questions, and did not negotiate about the care delivered. Yet, pressure of time does not always influence nurses' communication negatively. Wilkinson (1991), for instance, compared nurses on six different wards in a general hospital and found that the ward where the best communication took place was very busy. Additionally, the nursing organization method is a setting variable of influence. Thomas (1994) showed that nurses on primary care wards (a patient is allocated to a nurse, who has responsibility for patient's total care) used different verbal strategies than nurses who worked on wards using team and functional nursing. In that study team nursing was defined as patient allocation to a small team of responsible nurses and functional nursing was a way of organizing nurses' work divided into separate tasks (Thomas & Bond 1990, Thomas 1994).
In other studies, it appeared that on wards where special activity programmes were arranged, there was a positive influence on the amount of nurse-patient interaction (Salmon 1993, Turner 1993).

Research questions

As a part of a larger study into nurse-elderly patient communication (Caris-Verhallen et al. 1997b), the aim of this research was to investigate how characteristics of nurses, patients and situation relate to nurse-patient communication. Three research questions guided this report:

1. To what extent are provider variables, such as educational level, nursing experience, attitude, job satisfaction, age and gender related to the way nurses communicate with their patients?
2. To what extent are patient variables, such as age, gender, subjective health and duration of received care related to the way nurses communicate with their patients?
3. To what extent are situational variables, such as pressure of time and

the number of patients in a shift related to the way nurses communicate with their patients?

It was hypothesized that nurses with a positive attitude towards elderly patients, would pay more attention to social conversation in nursing. Because nurses with a higher level of satisfaction were shown to be more sensitive to patients' underlying problems, it was expected that they would pay more attention to psychosocial items and use more affective communication, which is necessary to create and maintain a relationship with their patients. Further, we hypothesized that nurses with a higher educational level would use more patient directed communication strategies, including providing information about nursing and health, than lower level nurses. Based on previous research there were no expectations in respect to nurses' age, gender and work experience.

With respect to patient variables we expected that nurses communicate less about nursing and health with older patients than with younger ones. It was also assumed that male patients were less often touched by nurses than female patients. On the basis of the research cited above it was not possible to express expectations concerning the relationship between patient health and nurse communication, because study designs and settings were not comparable.

With respect to the situational factors, it was assumed that nurses who have little work pressure would concentrate on creating and maintaining a relationship with their patients. They will more often employ social conversation and affective behaviour than nurses under pressure of work.

Methods

Subjects

Forty seven nurses took part in the study. They all were participants in a larger project, in which training in communication skills was given and evaluated, using a pre-test post-test design. This article reports about the pre-test.

Twenty-four nurses worked in a home care organization and provided nursing care in the community. Twenty-three nurses provided care in a home for elderly people. The nurses had completed initial nursing training at two levels,

their mean age was 39 years. On average, they had about sixteen years experience as a nurse (Table 1).
One hundred and nine patients agreed to participate in the study. Eighty one patients lived in the community, their mean age was 77.5 years. Most of the patients in home care received nursing care for a long period (mean 37 months). Twenty-eight patients were residents of an old people's home. These residents were older than the patients in the community. Their mean age was 86.7 years. On average, they lived about five and a half years in the institution (Table 2).

Data collection

In order to meet the research objectives, several methods for data collection were used. At the start of the project, all participating nurses were asked to complete questionnaires on provider characteristics. Then, to describe nurse-patient communication 181 real nurse-patient interactions were videotaped, during the delivery of nursing care. A supervised camera was used, with the focus on the interaction, except during nursing activities where the patient was undressed. In these cases the video camera focused on the nurse, or where that was impossible only verbal communication was recorded. Nurses recruited the patients for this study. A few days prior to the data collection, nurses informed their patients about the research, and they asked them to give informed written consent to participation. Only a minority of patients refused permission. Very sick patients, patients suffering from dementia and terminally ill patients were excluded from participation.
The video recordings, which were later systematically observed and analysed by the researchers, yielded data about the nurse-patient interaction. In addition, patients informed the researchers about demographic characteristics and health, during a short interview, after each videotaped encounter, while nurses completed a questionnaire on situation variables.

The observation scheme

The observation scheme consisted of three parts: verbal communication, nonverbal communication and the atmosphere during the nursing encounter. The latter was assessed with affect ratings.

Verbal communication

Verbal communication was observed using the adapted version of Roter's

Interaction Analysis System (RIAS) (Roter 1989). This scheme uses verbal utterances as a unit of analysis. Each utterance, which is defined as the smallest distinguishable speech segment to which a coder can assign a classification, was allocated to one of 24 categories. In earlier research these 24 categories were clustered into five clusters of more general communication behaviours (Caris-Verhallen et al. 1998). These include:

1. Social communication, providing information about the degree to which the nurse uses social conversation that has no particular function in nursing activities such as personal statements, small talk and banter.
2. Affective communication, involves utterances that express verbal attentiveness, concern and empathy with the patient.
3. Communication that structures the encounter, involves utterances that indicate guidance and direction such as orienting and instructing, requests for clarification, asking for understanding and asking for opinion.
4. Communication about nursing and health, containing all items with respect to nursing, health, medical or therapeutic topics.
5. Communication about lifestyle and feelings, containing all items with respect to lifestyle and emotions.

In this study for each of the five verbal behaviours summary statistics were calculated, representing the proportion of total amount of utterances nurses spent within one of the five types of verbal communication.

Nonverbal communication

The observation scheme contained five nonverbal categories that are important to establish a good relationship with the patient (Heintzman et al. 1993): patient directed gaze, affirmative head nods, smiling, forward leaning and touch. Because touch is inherent in nursing activities, during observation a distinction was made between instrumental touch, which is necessary to perform a task, and affective touch which expresses affection. Only the latter is important for rapport building. For the nonverbal categories, the duration was recorded. Proportional scores were used. The variables 'eye gaze direction', 'forward leaning', 'affective touch', and 'instrumental touch' were divided by the duration of time that nurse and patient were in sight. Similarly the 'head nodding' and 'smiling' variables were adjusted by dividing duration by the time that the nurse's head was in sight (Caris-Verhallen et al. 1997b).

Affect ratings
In addition to the observation of nonverbal and verbal communication, as described above, the general impression of nurse's communication was rated by two observers on seven 6-point rating scales, measuring irritation, nervousness, assertiveness, interest, warmth, patronizing/unequal attitude and involvement. (1= low, 6 = high) (Roter 1989, Caris-Verhallen et al. 1997b).

Observations
All 181 video records were systematically observed by two observers using the CAMERA computer system (Iec ProGAMMA 1994), which is designed for coding behavioural interactions from video recordings. Based on the results of a preliminary study (Caris-Verhallen et al. 1998) the observation time was standardized and the first 10 minutes were observed of each nursing encounter.
Ten of the encounters were coded by each of the two observers in order to calculate the inter-rater reliability. Cohen's Kappa of the verbal categories varied between .74 and .81., and Pearson's r of the nonverbal categories and affect ratings proved to between .70 and .98 Pearson's r.

Measurement of related factors

provider variables

* Nurses' attitude towards elderly people was measured using Kogan's Old People Scale (KOP-scale) (Kogan 1961). Although this instrument is 35 years old, it is still used in many studies (Smith 1982, Brown et al. 1992, Armstrong-Esther et al. 1994, Hope 1994, Lookinland & Anson 1995), which report a good level of reliability. The original version of the KOP scale presents 17 positively and 17 negatively formulated statements, with a 5-point response format (strongly agree, agree, don't know, disagree and strongly disagree). Usually these items are disguised in long questionnaires between other items, so it is not too obvious that two opposites of the same questions are being asked. This was not possible in our study. Accordingly, opposite questions were presented in pairs, and respondents were asked how much they agreed with the statements. The internal consistency of this adapted instrument was acceptable (Cronbach's alpha .72).

* Nurses' tendency towards therapeutic behaviour was measured with the therapeutic behaviour scale, constructed and examined for validity and reliability by Pool (1983). This is a 26-item scale, by which nurses have to assess the amount and quality of the provision of information, emotional support and promotion of autonomy. The respondents had to rate how often they carried out a particular intervention on a 5-point scale (5 = very often, 1 = never). Because some of the items were not characteristic for nursing, the original 26-item scale was adapted to a 23-item instrument. The internal consistency for the questionnaire was .87 (Cronbach's alpha).
* Based on the literature, two satisfaction outcomes were measured, which are derived from the satisfaction questionnaire from Boumans et al. (1989). 'Satisfaction with work intrinsic aspects' is a 7-item scale, with items such as: 'For me, my job is significant' (5-point scale 1= very dissatisfied, 5= very satisfied). The internal consistency was .84 (Cronbach's alpha). The 'satisfaction with peer contacts' scale comprises six items (Cronbach's alpha = .85) and measures how satisfied nurses are with social contacts with colleagues. E.g. 'To what degree are you satisfied having good friends among your colleagues?' (5-point scale 1= very dissatisfied, 5= very satisfied).
* Several individual characteristics were measured like education, amount of nursing experience and demographic characteristics.

Patient characteristics

* Age, gender, and duration of nursing care were registered for all participating patients.
* Subjective health was measured on a 5-item scale, which formed part of an instrument measuring elderly peoples' well-being (Tempelman 1987). The internal consistency of this scale was .84 (Cronbach's alpha).

Situational variables

* To measure the amount of time pressure, a 5-item scale was used (Ruijters & Stevens 1992) indicating how nurses judge the amount of time they are able to spend to direct patient care (5-point scale: 1= enough time, 5= too little time, Cronbach's alpha = .77).
* The amount of workload was determined by asking the number of working hours a week and the number of nursing encounters during a shift.

Analyses

In order to investigate whether nurse, patient or situational characteristics were related to the way nurses communicated with their patients, correlational techniques were used. The strength of the relations was expressed as Pearson's r. Since directional expectancies were presented on most variables, one-tailed significance tests were employed.

Prior to the correlational analyses, we tested differences between the two settings concerning patients, nurses, and situational characteristics, using t-tests and chi square tests. This procedure enabled us to control the setting when that was required.

A complicating factor in answering the research question was that the 181 encounters could not completely be considered as independent observations. Because of a behavioural style belonging to each nurse, it might be argued that encounters of one nurse, on average would be more alike, than those of different nurses (Hox 1995). We calculated intraclass correlation coefficients to determine this interdependency. These coefficients reflect the proportion of total variance of an observation that is associated with the class (the nurse) to which it belongs. The magnitudes of intra-class correlations necessitated the use of a multi-level analysis. This type of analysis creates the option of analysing data at the level of the nurse, without disregarding the variance on the level of the nursing encounter (Hulsman 1998). Therefore correlation coefficients were computed in hierarchical linear models, using MLn software (Rasbash & Woodhouse 1995).

Results

We tested to see if the two settings differed significantly with respect to the variables under examination. No differences were found with respect to the nurses in attitudes towards elderly people, therapeutic attitude, job satisfaction or personal characteristics (Table 1). There were more male patients in home care than in the residential home (Table 2). The patients in home care were, on average, 10 years younger than patients in the old people's home ($p \leq 0.01$). The residents in the home experienced better health than patients in the community ($p \leq 0.01$). The mean duration of care was longer in the institution than in home care ($p \leq 0.05$).

Table 1. Distribution of different characteristics of nurses participating in the study n=47

Provider variables	Community n=24		Residential home n=23	
	mean	(sd)	mean	(sd)
Attitude:				
Attitude towards the elderly	4.0	(0.3)	4.1	(0.4)
Patient directed attitude	3.7	(0.3)	3.5	(0.5)
Job satisfaction[a]				
Intrinsic job motivation	3.8	(0.4)	3.7	(0.5)
Satisfaction with colleagues	4.0	(0.4)	4.0	(0.6)
Demographic characteristics				
Gender[b]				
Women	100%		91%	
Men			9%	
Mean age[a]	37.4	(9.3)	40.9	(8.7)
Educational level[1b]				
Nurses	46%		35%	
Auxiliary nurses	54%		65%	
Years of employment[a]	16.5	(8.8)	15.9	(7.2)

[1] Nurses = Dutch higher professional education level (HBO or 3.5 years of in-service education)
Auxiliary Nurses = Dutch secondary professional education level (MBO or 2.5 years of in-service education)

[a]Differences in attitudes, job satisfaction, age and amount of experience were tested by means of t-tests.

[b]Differences in gender and education level were tested by means of a chi-square tests.

Since patient characteristics seemed to be related to setting, the correlation between these characteristics and nurse communication style were calculated separately for each setting.

Concerning the situational characteristics (Table 3) nurses in the old people's home had a greater number of patients during a shift than nurses in home care ($p \leq 0.01$). Because of this distinction, correlations between situation characteristics and nurses communication were calculated separately for each setting.

Table 2 Distribution of patient characteristics in home care and the residential home (n=109)

Patient characteristics	Community n=101		Residential home n=28	
	mean	(sd)	mean	(sd)
Gender[b]				
Women	65%	89%		
Men	35%	11%		
Mean age[a]	77.5	(8.7)**	86.7	(4.4)
Subjective health[a]	2.0	(0.4)**	2.3	(0.4)
Mean duration of received nursing care in months[a]	37	(43.6)*	70	(77.2)

[a]Differences in age, subjective health and mean duration of received nursing care were tested by means of t-tests.
[b]Differences in gender were tested by means of a chi-square tests.
* significance level of $p \leq .05$
** significance level of $p \leq .01$

Table 3 Distribution of situation characteristics n=47

Situation variables	Home care n=24		Residential home n=23	
	mean	(sd)	mean	(sd)
Time pressure	2.5	(0.7)	2.7	(1.0)
Number of patients during a shift	7.2	(1.1)**	11.4	(5.5)
Hours of employment a week	28.0	(6.1)	25.1	(10.0)

** significance level of $p \leq .01$

Provider variables related to nurse-patient communication

Table 4 shows the relationships between provider variables and nurses' communication behaviour. It is primarily nurses' educational level, that relates strongly to nurses' verbal and nonverbal communication. Nurses with a higher

level of education less often employed social communication (personal statements, small talk and banter) than caregivers trained as auxiliary nurses. Level of education was also positively related to the amount of communication structuring the encounter (e.g. orientation and instruction, requests for clarification, and asking for understanding) and communication on nursing and health topics.

The higher the level of education, the less nonverbal behaviour was used. These correlations were significant for eye gaze direction and head nodding. The education of nurses also appears to be related to the amount of irritation and dominance they show. In addition, the level of education was negatively related to the degree of involvement on the part of the nurses as perceived by observers. Nursing experience seemed to be more important in showing affective communication than the level of education. When nurses had more working experience, they showed more affective verbal communication.

Another variable of interest was the attitude nurses had towards older patients. Nurses with a positive attitude had more social conversation, used more banter with their patients and used fewer verbal utterances indicating guidance and direction.

Nurses who had higher intrinsic job motivation communicated more often about topics concerning nursing and health. Intrinsic work motivation was negatively related to smiling and affective touch. There was a negative correlation between satisfaction with peer contacts at work and affective verbal communication (r -.24). A comparable relationship was found with affective touch (r -.34), meaning that the more satisfied nurses were with peer contacts the less often they showed signs of affection like empathy, concern and touch. Nurses who rated themselves high on the therapeutic attitude scale were judged as more interested by the observers.

Demographic variables like age and gender of nurses seemed of minor importance in nurse communication. The two male nurses were judged to be warmer by the observers.

Table 4 Overview correlations between provider variables and verbal and nonverbal communication N=47 nurses[1]

	Age	Gender	Education	Years of employ-ment	Attitude towards elderly	Intrinsic work motivation	Satisfaction with colleagues	Thera-peutic attitude
Verbal communication								
Social conversation and jokes	.06	-.06	-.35**	-.04	.25*	-.15	.08	-.17
Affective communication	.22	.01	.15	.39**	.11	-.09	-.24*	.18
Communication that structures the encounter	-.10	-.20	.30*	-.12	-.32*	.09	-.01	-.04
Communication nursing and health	-.11	.21	.28*	-.09	-.17	.27*	.06	.07
Communication lifestyle and emotions	-.10	.01	-.10	-.10	-.05	-.04	.03	.09
Nonverbal communication								
Eye gaze direction	-.12	.06	-.33*	-.13	.08	.01	.00	.04
Forward leaning	.11	.21	-.07	-.05	-.07	-.15	-.10	-.15
Head nodding	-.06	.12	-.24*	.09	.15	-.01	.12	-.03
Smiling	.29*	.02	-.08	.17	.14	-.27*	-.10	.12
Affective touch	.19	-.07	-.13	-.22	.07	-.26*	-.34**	.06
Instrumental touch	-.06	-.15	.11	.01	-.06	-.04	.22	-.05
Affect ratings								
Anger/irritation	-.13	.06	.26*	-.08	-.12	.09	.07	.10
Nervousness	-.01	.07	-.06	.05	.05	.10	-.20	-.05
Dominance	.21	.19	.38**	.10	-.04	-.06	-.05	.03
Interest	.01	-.03	-.09	-.06	.20	.00	.09	.27*
Warmth	.05	-.30*	-.04	-.01	.23	-.02	.02	.21
Patronizing	.06	.05	.21	.17	-.06	.00	-.04	-.10
Involved attitude	.11	-.17	-.26*	.05	.10	-.12	-.14	.17

[1]The observation variables were aggregated to the level of the nurse

* p= $\leq$ .05 (1-tailed significance)
** p= $\leq$ .01

Patient characteristics related to nurse-patient communication

In Table 5 the relationships are displayed between patient characteristics and nurses' communication behaviour. Since patient characteristics were related to setting, correlations for the different settings are presented separately.

Table 5 Overview correlations between patient variables and nurses verbal and nonverbal communication n=109 patients[1]

	Community				Residential home			
	Gender	Age	Subjective state of health	Duration of received nursing care	Gender	Age	Subjective state of health	Duration of received nursing care
Verbal communication								
Social conversation and jokes	.06	.10	.04	.13	-.08	-.19	-.08	-.13
Affective communication	-.04	-.03	-.13	-.17	-.14	.10	.14	-.07
Communication that structures the encounter	.01	.01	-.05	.08	.07	.16	-.15	.12
Communication nursing and health	-.07	-.09	-.07	-.01	.09	.13	-.10	.19
Communication lifestyle and emotions	-.01	-.03	.23*	-.07	.20	-.04	.30	.01
Nonverbal communication								
Eye gaze direction	.01	.09	-.05	-.13	-.14	.20	.29	-.16
Forward leaning	.02	.15	.17	.00	-.45**	.17	-.24	.12
Head nodding	.08	.15	.04	-.07	-.03	.21	.14	-.20
Smiling	.05	.15	.21	-.04	.06	-.19	-.15	-.11
Affective touch	.16	.11	-.11	-.07	-.18	-.29	-.27	.13
Instrumental touch	-.10	.00	.02	.15	.04	.45**	.24	.69***

[1]The observation variables were aggregated to the level of the patient

* $p \leq .05$ (1-tailed significance)
** $p \leq .01$
*** $p \leq .001$

In home care nurses' verbal and nonverbal communication were virtually unrelated to patient characteristics. Only at the level of patients' subjective health there was a positive relation to communication about lifestyle and emotions, which means that if patients felt healthy nurses paid more attention to their lifestyle and feelings. Patient characteristics did not influence nurses' nonverbal communication.

In the home for elderly people, characteristics were not related to nurses' verbal communication, which means that nurses communicated generally in the same way, irrespective of patient characteristics like age, gender or subjective state of health. This is not completely true for nonverbal communication: nurses leaned forward less when they cared for women. In addition, there were strong correlations between the duration of received nursing care and age, on one hand, and the amount of instrumental touch on the other, meaning that patients received more hygienic and technical nursing care the longer they had been in residential care.

Situation variables related to nurse-patient communication

The relationships between situational characteristics and communication are presented in Table 6. The correlations were calculated separately per setting.

In home care, relationships occurred between the amount of hours of employment on one hand and the amount of communication that structured the encounter and instrumental touch on the other. Home care nurses taking care of more patients during a shift, talked less about nursing and health topics and more often about lifestyle and emotions. Nonverbal communication was almost unaffected by situational characteristics in home care. The only significant correlation was found between the number of patients in a shift and nurses' head nodding.

In contrast with home care, in the residential home the amount of time pressure was a noticeable variable. A negative relationship existed between pressure of time and affective communication and talking about lifestyle and feelings. As nurses worked against the clock, they spent less time talking with patients about subjects, which did not directly arise from instrumental nursing tasks. As the nurse had to take care of a greater number of patients during a shift, she also used more communication that structured the encounter. The number of hours nurses worked per week was positively related to communication about lifestyle and emotions.

Situation characteristics in the elderly home were shown to be of lesser importance for the nonverbal behaviours of nurses. The number of hours employed was positively related to the amount of smiling. Lastly, nurses smiled less under pressure of time.

Table 6 Overview correlations between situation variables and nurses verbal and nonverbal communication n=47 nurses[1]

	Community			Residential home		
	Hours of employment	Number of patients in a shift	Pressure of time	Hours of employment	Number of patients in a shift	Pressure of time
Verbal communication						
Social conversation and jokes	-.16	-.30	-.06	-.17	-.15	.29
Affective communication	-.24	.12	-.13	.11	-.01	-.41*
Communication that structures the encounter	.39*	.07	.17	.11	.40*	-.16
Communication nursing and health	.25	-.34*	.18	-.18	-.26	.20
Communication lifestyle and emotions	-.13	.59***	-.16	.39*	.04	-.39*
Nonverbal communication						
Eye gaze direction	-.11	-.33	-.09	.14	.22	-.21
Forward leaning	-.33	-.12	.08	-.11	.22	-.23
Head nodding	-.25	.45**	-.11	-.03	.10	-.29
Smiling	-.27	-.32	-.10	.39*	-.02	-.37*
Affective touch	.08	-.12	.33	.19	-.05	-.17
Instrumental touch	.42*	-.21	.17	.04	-.08	.11

[1]The observation variables were aggregated to the level of the nurse
* p= $\leq$ .05 (1-tailed significance)
** p= $\leq$ .01
*** p= $\leq$ .001

Discussion

In the present study we examined factors that might influence the way nurses communicate with their elderly patients. On the basis of a review of the literature (Caris-Verhallen et al. 1997a), variables related to nurses, to patients and to the setting were identified. The relationship of these variables to verbal and nonverbal communication was investigated.

Provider characteristics

The general conclusion on provider variables is that the level of nursing education in particular was related to the way nurses communicated with their patients. More highly educated nurses showed more task related communication such as remarks that guided the patient through the encounter and conversations about nursing and health topics, and they employed less small talk and banter with their patients. This is in accordance with Liefbroer and Visser (1986), who found that higher level nurses provided the patient with more information about sickness and health, than lower level nurses.

A remarkable finding is that the level of education was negatively related to nurses' nonverbal communication, especially eye gaze direction and head nodding. A possible explanation may be that more highly educated nurses were more often engaged in technical nursing care, during which they nodded less, because their gaze was directed to the task. This explanation is supported by the finding that educational level is also related to communication about nursing and health topics.

On the basis of earlier research (Armstrong-Esther et al. 1989), it was expected that nurses with favourable attitudes would pay more attention to social talk and relatively less time to task related communication. These expectations were confirmed. Attitudes towards elderly patients (KOP-scores) were positively related to social talk and negatively related to communication indicating guidance and direction.

The expectation with respect to job satisfaction was not confirmed. Nurses who were satisfied with peer contacts communicated in an affective way less often. They showed less verbal attention, empathy, concern and affective touch. There is no clear explanation for these remarkable findings. It may be assumed that these nurses pay more attention to the relationship with colleagues than with patients.

Demographic variables like nurses' gender and age play only a minor role in nurses' communication style. In interpreting that male nurses were judged to be warmer, we must keep in mind that only two nurses were male.

Patient' characteristics

While the literature provided some support for the influence of patient age, gender and level of health, our expectations about the relationship between patient characteristics and nurses' communication were not confirmed. In home care, few of the correlations between patient characteristics and nurses' communication were significant. In the home for elderly people, no significant correlations were found for verbal communication. This is in accord with the study of Brasker and Visser (1990) who found that nurses make little allowance for the specific characteristics of elderly patients. Nevertheless, this is a curious result, meaning that nurses generally communicate in the same way, irrespective of patient characteristics like age, gender or subjective state of health. Yet, one would expect a different approach to a healthy old man from a woman of 65, who is seriously ill.

Situational characteristics

In home care, the number of patients cared for in a shift seemed to be important. A positive relation was found between the number of patients nurses had to care for and the amount of communication about lifestyle and emotions. On the other hand, the number of patients in a shift was negatively related to conversation about nursing and health topics. A possible explanation could be that nurses who are in charge of a greater number of patients are more often engaged in routine care, in which explanations of nursing and health topics is less relevant.

In the literature, another variable of interest was pressure of work, which was expected to be related to the amount of nurses' social and affective communication. Both types of communication are needed to establish and maintain a relationship with the patient. In residential care the results supported this hypothesis. Experiencing time pressure may lead the nurse in the institution to ignore lifestyle and emotional topics. This is doubtful because, according to literature, there is need in elderly people to talk about their daily life and the limitations they experience with illness and growing older (Nesbitt Blondis & Jackson 1978, Poole & Rowat 1994). Most patients perceive their health problems as an integrated part of their existence. Task

related communication, which is only directed to the isolated health problem is insufficient to meet the needs in the patient and his or her environment (Pool 1996).

Methodological issues

Methodological issues concerning the observations are described in our related papers (Caris-Verhallen et al. 1997b, 1998). In this paper we confine ourselves to issues concerning the study design and the extent to which conclusions can be generalized. Since this part of the study was explorative in nature, correlational procedures were applied. In using these procedures one must be cautious when carrying out multiple tests and a relevant question is whether the results are statically valid. In other words what are the chances that the findings are 'false positive' (falsely assuming that a hypothesis is confirmed, type I error) or 'false negative' (falsely reject a hypothesis, type II error).

In our study the significance level was set at $p \leq .05$. In such a case, one out of twenty tests will be coincidentally significant. To account for the number of comparisons being performed, it is often recommended to lower the alpha level (Hayes 1988). A simple, but conservative method, is the Bonferroni correction. However in recent statistic literature, Armitage and Colton (1998) report that this type of correction is merely useful in carrying out a limited number of tests, which are not related to each other. These assumptions were not true for our study. In addition, lowering the alpha level would increase the possibility of a Type II error (Perneger 1998). Type II errors can also be caused by a too small sample. The sample size in our study was determined on the basis of practical considerations related to the project. We were therefore confronted with a limited sample size, which made the chance to find significant results smaller, than it would be the case having a big sample. Because of a limited sample size and the unmet assumptions mentioned above, the Bonferroni correction was not applied.

Another limitation affects the extent to which generalizations can be made. The results are based on two samples in specialized settings and the nurses were not a random sample, but nurses who were going to receive training in communication skills. Due to these limitations we should consider the results with care, providing us with future directions in research on nurse-patient communication. Some findings, however, give us indications for interventions aiming at improving nurse-patient communication.

Implications for practice

From the preceding it appears that time pressure, especially in the residential home, is a determinant for the verbal communication of nurses and the topics that come up for conversation. As nurses experience more time pressure they talk less about topics concerning lifestyle and emotions. This is an important point for consideration because, in nursing, high pressure is often present. One of the solutions in this area would be the establishment of more staffing. As matter of fact this would not automatically lead to an improved quality of care. From several studies it appeared that simply employment of more staff, does not lead to better communication (Pool 1983, Liefbroer & Visser 1986, Wilkinson 1991). The intervention has to be broader. In addition to a reduction in workload, the nurses should be trained to use their time efficiently. From the results it appeared that nurses verbal communication is hardly connected to patient characteristics. Therefore in basic and continuing nursing education nurses should be trained to be sensitive to the different needs of their patients and to create an atmosphere that facilitates the patients' questions and express their needs. Additionally, it is important for nurses to learn how to attune to patient needs, so that they can offer nursing care that is tailored to the individual.

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Chapter 6

THE QUALITY OF CARE FOR ELDERLY PEOPLE

Comparisons between the viewpoints of nurses and their elderly patients

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This chapter is an adapted version of the article:
Caris-Verhallen, W.M.C.M., Spierings, M. & Kerkstra, A. (1998). Kwaliteit van zorg en ouderen: Het perspectief van verplegenden en hun oudere patiënten vergeleken. *Verpleegkunde;* 13(4): 239-249

Summary

This article presents a method for the measurement of quality of care from the vantage points both of clients and nurses. Forty-seven nursing staff and 109 patients were involved in this study that is part of a research into communication between nurses and their elderly patients. It took place in a home for the elderly and in home care. The study is directed at process aspects relating to communication. Relevant aspects of quality were derived from the literature. The questionnaire looks at each aspect and asks whether patients or nurses found it important (importance) and whether they had experience of it in practice (experience).

The questionnaire was administered orally to the patients and in a written form to the nurses. The analyses determined whether discrepancies arose between the importance and experience scores. The method used provides differentiated information about the quality assessment by patients and nurses.

Introduction

The Act on Quality in Institutions of Care (Staatsblad, 1996) has led to an increasing degree of attention being paid to the quality of care by care providers. The judgement of the patient on the care provided is regarded as an essential part of this; after all, if the intention is to attune quality policy to the patient's interests, this information is of great importance.
Quality is defined in many different ways. The definition used by the National Council for Public Health (1990) is 'the degree to which the totality of the qualities of a product, process or service meets the requirements ensuing from its objectives'. According to the Council, the objective of use cannot be stated simply, but is determined by the parties in different ways.
Quality of care is a portmanteau concept that contains a large number of qualities and aspects. Generally, an approach using aspects or indicators forms the basis of quality of care. Donabedian (1968, 1980) has proposed a tripartite division for the various aspects of the quality of care which has become the point of departure for much research into the concept. A distinction is made in terms of the aspects of structure, outcome and process. Aspects of structure are those aspects which count as prerequisites for the care to be provided, such as training of nurses, material provision and organization. Process aspects include those which relate to the provision of care itself such as treatment and approach. These aspects indicate the quality of the process in which communication between the nurse and the patient is a special area. Relevant aspects are: the willingness to provide information, a considerate approach, trust, nurse/patient accountability and cooperation (RGO 1990). The outcome aspects relate to the effects of care, such as the degree to which the patient is able to look after him/herself and the assessment by the patient on the care provided.
It should be noted that the three-dimensional distinction is to a certain degree, artificial (Donabedian 1966). During the nursing process, there is particular concern with a chain of process factors and the outcomes achieved in the intervening period. These, again, have influence on the manner in which communication takes place. This gives an indication of the complexity of the 'quality of care' concept that is also shown to be a relative one. The assessment of quality is, after all, dependent on aspects given importance and the perspective from which it is viewed. It is not at all surprising therefore

that patients and their caregivers place different emphases in assessing the quality of care (Harteloh & Casparie 1991). In order to chart these properly, attention has to be paid to the views both of the carer and the patient.
In this article, we shall make a contribution to this. In this context, we are looking at the assessment of the various aspects of the process of care shown by studies to be found relevant by patients (RGO 1990, Groen et al. 1990, Oudenampsen et al. 1993, Post et al. 1993). These are the relational quality aspects in particular (NRV 1992). They tell us something about the quality of the interaction between the nurse and the patient.

Theoretical context

In the establishment of the patients assessment, various methodological problems play a role. The first problem is of a conceptual nature; it transpires that when patients are asked to give their assessment of care, that the majority express positive views (Locker & Dunt 1978, Van Campen et al. 1992, Van Campen et al. 1995).
This 'satisfaction' is open to question. Has it been properly measured? In much research into health care, gratitude plays a role when questions are asked about satisfaction. Patients in this type of research often therefore tend to give socially desirable answers (De Heer et al. 1988, Visser 1988). A more highly differentiated answer in respect of patient assessment is obtained when more detailed questions about various aspects and the actual experience of care are asked (Van Campen et al. 1992, Sixma et al. 1994). Van Campen et al. (1995) state in a review of measurement instruments that an assessment of the quality of care can be measured reliably and validly by taking the theory of Parasuraman et al. (1985) as a basis. These authors regard the assessment of quality in the provision of service as the result of a comparison that patients make between their expectations and experience of service. The assessment of the patient as regards the quality of care can, therefore, be regarded as the discrepancy between experience and expectation. Although in many theories a distinction is made between expectation and experience (Van Campen et al. 1995), this is generally not measured separately in satisfaction research in health care, because measuring expectation is complex. A person's expectations are not distinct from his/her experience. It may also be that an individual does not always have realistic expectations. We decided in this study to ask how important people find particular aspects of quality, because various research papers (Babakus & Mangold 1992,

Zastowny et al. 1995) have shown that it is useful to determine the weight that a person attaches to a particular aspect. Subsequently, we determined how experiences in respect of these aspects turned out. Where the experience score is lower than the importance score, this can be seen as a signal of lesser quality. In various recent studies on the judgement of the quality of care by patients (Zastowny et al. 1995, Caris-Verhallen & Friele 1996, Jansen et al. 1997), this method provided differentiated information on patient satisfaction with various aspects of the provision of care.

Research questions

This study paid attention to the different ideas of nurses and patients about the quality of care. As it was part of a larger project which focused on communication between nurses and elderly patients (Caris-Verhallen et al. 1997), the assessment of the quality of care was restricted to what are known as the relational quality aspects. The following research questions were posed:

1. What relational quality aspects are important within the provision of nursing care in the view both of patients and nurses?
2. Are there differences between patients on the one hand and nurses on the other, in the extent to which they assess different aspects of quality as important?
3. How do patients and nurses assess the quality aspects of care: or, in other words, to what degree is there a discrepancy between the importance attached to particular aspects and experience of them?
4. Are there differences among nurses and patients, as regards their assessment of the relational quality aspects of the care provided?

In order to operationalize the concept of quality of care, links were sought with existing lists of quality aspects (NRV 1990, RGO 1990, NWO 1992, Post et al. 1993). In view of the topic of the research, (communication between nurses and elderly patients) of which the study described here forms a part, a choice was made of relational aspects for a completed nursing encounter on which both the patient and the nurse can have views. In Table 1, an overview is given of the aspects which form the basis for the development of the questionnaire. Accordingly, a new questionnaire was developed.

Methods

The development of the questionnaire

In this study quality of care was assessed, both from patient and nurse perspectives. Van. Campen et al.'s (1992, 1995) studies of the literature showed that there was no suitable instrument available for measuring quality of care from the patient's vantage point.

Table 1 Overview of relational quality aspects, serving as a basis for the development of the questionnaire.

Quality aspect	Description	Examples of Indicators
Considerate approach	The degree to which the nurse treats the patient as an equal fellow human being and takes his integrity and responsibility as a point of departure.	Friendliness Being taken seriously
A relationship of trust	Do nurse and patient get on? Is confidentiality maintained? Is personal life respected?	Putting you at your ease
Willingness to give information	The degree to which the nurse provides relevant information to the patient and the patients' relatives both at the nurse's own initiative and when asked.	Intelligible explanation
Involvement	The degree to which the patient is informed about the care and is enabled to play an active role in it.	Paying attention to the patient
Patient autonomy	The degree to which the patient has the option of independent decision relating to the care received	Investigating what the patient is able to do him/herself
Nurse/patient accountability	The nurse should be able to account for the choice of behaviour and approach to the patient	Evaluation of care
Cooperation	Is the relationship between the nurse and the patient a cooperative together relationship? Restricting the option for misuse of the unequal relationship (particularly in the area of expertise) is the point at issue here.	Talking things over

In the literature, we examined what patients and nurses regarded as indicators for the aspects mentioned. Use was made of the measurement of quality in home care (Unie KBO 1994), the Handbook on Users Information (LVT 1994) and research by Groen et al. (1990), Oudenampsen et al. (1993) and Van der Waal et al. (1994). One or more indicators were sought for each quality aspect. Here too, the criterion was that they must be able to be assessed both by the patient and nurse after a completed nursing encounter. Furthermore, in the selection of the indicators, we aimed to develop a short and simple questionnaire. By comparing the documentation already mentioned, only frequently mentioned indicators were detected. These were regarded as the most relevant and included in the questionnaire. For example, in relation to willingness to provide information, we detected the following indicators regularly in the literature: is the reason for the encounter clear; does the nurse provide sufficient information; is the explanation intelligible? These three indicators were all included in the questionnaire. Indicators with regard to nurse/client accountability, relate to the provision of information and to the regular checks on patients' views about care. As the first indicators have already been mentioned under willingness to give information, only the last was included.
In formulating questions for the patient version of the questionnaire we built on the discrepancy-theory of Linder-Pelz (1982), Pascoe (1983), and Parasuraman et al. (1985), who see the assessments of the quality of care comprising experience minus expectation. Two types of questions were included from this viewpoint on the quality aspects as shown in Table 1. In the first place, questions were formulated which targeted the patients' interest in an aspect. For example, 'How important is it to you that the nurse explains clearly the nursing care provided?' (5-point scale: 1=unimportant, 5=very important). Secondly, questions were formulated, directed at the experience of indicators relating to the aspect, for example: 'I felt that the nurse gave me sufficient explanation about how to use the medication' or 'I could easily understand what the nurse said about the use of medication' (5-point scale: 1=definitely disagree, 5=fully agree).
In addition to questions which were directed at the assessment of relational quality aspects, some topics were added to the questionnaire. To describe the population, demographic characteristics and the subjective experience of patient health (Tempelman 1987) were also inventoried. As an indication of the general assessment of the provision of care patients were asked to give a

grade for the nursing encounter.
In order to determine whether the relational quality aspects were presented in a representative way, the draft questionnaire was presented to five nurses who were closely involved with the provision of care to the elderly. At the same time, a check was made to see whether the questionnaire used the language actually employed in practice. The formulation of a number of questions was changed. In addition, brief prior research was carried out among five elderly patients in order to determine the usefulness of the oral questionnaire. This led to a number of changes in the instructions to the interviewers. For example, it was demonstrated that instead of 'caregiver' it was better to say 'nurse' or use the first name of the nurse. Further, it seemed advisable to mention concrete activities such as 'explanation of medication' instead of 'explanation of nursing care'.
The reliability of the instruments was determined by calculating Cronbach's alpha for both the importance scores and the experience scores (.77 and .83 respectively).
The measuring instrument for patients served as a basis for the questionnaire used for the assessment of the nurses. The formulations were adjusted to put the questions from the nurses' vantage point. The subjective health scale was removed from this list. A number of questions were also added to provide information about the nature of the nursing encounter with which the questionnaire was concerned. In order to make the questionnaire suitable for written administration, the instructions were adjusted. The reliability of the measuring instrument for the nurses on the two scales with importance and experience scores was .84 and .89 (Cronbach's alpha) respectively.

The collection of data

Data was collected from 24 and 23 nurses working in an organisation for home care and in a home for the elderly respectively. These 47 nurses did not form an a-select random sample, but all took part in a bigger project which involved participation in a training course on communication skills at a later date. The average age of the nurses was 39. Nineteen had been trained as nurses (higher education, HBO[1], or 3.5 years of in-service training), 28 had been trained as auxiliary nurses (secondary education level, MBO or 2.5

[1] Dutch registration certificates

years of in-service training).
The nurses were accompanied for part of a day in their nursing encounters by a researcher, to collect the data about the evaluation of quality of care. After the nursing encounter the questionnaire was administered, in writing, to the nurses and, orally, to the patients.
The nurses themselves asked the patients to participate. Prior to the research, patients of 55 years of age and above were given information about the project and asked if they were prepared to participate. All participating patients gave consent, using a written statement of informed consent. Patients who were suffering from dementia or were seriously or terminally ill were excluded. In home care, few patients refused to participate; in the home for the elderly, they were somewhat more reticent and about half of the patients participated. The nurses did not inform the researchers systematically about the reasons the non-participants gave for not cooperating. However, they indicated that they did not see a difference between the group which did participate and the group which did not. In total, 181 sets of data on nursing encounters were collected, 109 patients were involved in the study, with average age of 79. More than 70% were women.

The analyses

Information was collected about the importance that patients and nurses attached to each quality aspect (importance scores) in the questionnaire. Furthermore, using one or more indicators, information was obtained about the related quality aspect in the nursing encounter in respect of experience (experience scores).
In order to obtain a broad insight into the question of what relational quality aspects are regarded as important, the mean importance scores are presented first. The differences between the patient group and the professional group were tested non-parametrically using the Wilcoxon-test.
Then a discrepancy score is calculated between each 'importance' score and the related 'experience score', indicating the quality of care. For example, when patients indicated in their 'importance scores' that they found a clear explanation important, while their 'experience scores' stated that the explanations were unintelligible, there is a discrepancy between the 'importance' and 'experience score', which can be seen as an indicator of poorer quality. The discrepancy scores were determined on the following principle: quality of care = experience - importance. The quality of care was

considered as good if the discrepancy score was positive or zero. The quality of care leaves something to be desired when there was a significant negative score. Significance was tested with a non-parametric procedure for related samples (Wilcoxon test).

Results

The importance that patients and nurses attach to differing relational quality aspects

In Table 2, the mean importance attached by patients and nurses to the differing quality aspects is shown (5-point scale: 1=unimportant, 5=very important). The numbers per aspect differ because of the varying number of the missing scores.

Table 2 The importance that patients and professionals attach to the different quality aspects (n=181 nursing encounters).

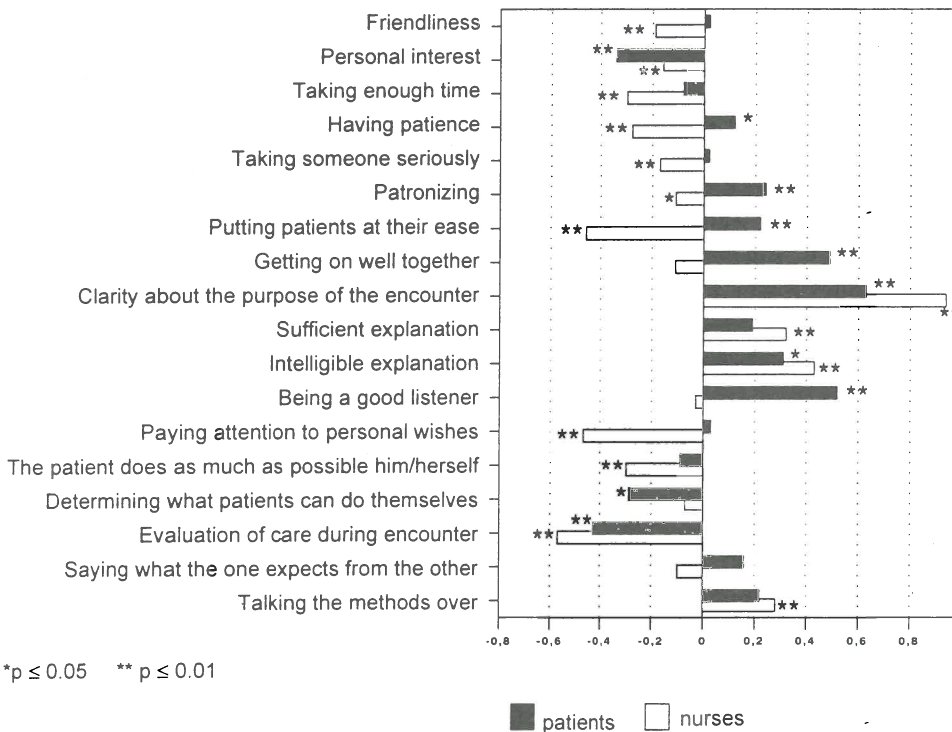
	Patients	Nurses		Number of encounters
	n=109	n=47		
	Importance score	Importance score		
Quality aspects	mean (s.d.)	mean (s.d.)	p	
Approach				
Friendliness	4.92 (.39)	4.65 (.51)	<.001	n=168
Showing personal concern	4.91 (.31)	4.70 (.48)	<.001	n=164
Taking enough time	4.68 (.65)	4.63 (.52)	n.s	n=164
Taking the patient seriously	4.61 (.65)	4.77 (.45)	<.01	n=168
Relationship of trust	4.40 (.75)	4.51 (.88)	n.s	n=166
Willingness to give information	4.21 (.99)	3.69 (1.17)	<.001	n=147
Involvement	4.18 (.84)	4.44 (.96)	<.01	n=156
Patient autonomy	4.08 (.99)	3.67 (1.28)	<.05	n=145
Nurse/patient accountability	3.54 (1.09)	3.48 (1.26)	n.s	n=144

What is striking is that both nurses and patients give above average value to all aspects. The patients in particular attach a relatively high value to many aspects of quality. The nurses group is somewhat more varied as far as the sub-aspects of approach are concerned. We see the meaningful result that, from both points of view, these aspects are, on average, regarded as the most important. The relatively small standard deviations reveal that both patients and providers of care are of the same opinion.
If the mean importance scores of patients and nurses are compared, it appears that patients find particular aspects significant more important. In the areas of approach, for example, this is true of two of the four sub-aspects. Further, there are differences as regards willingness to give information and patient autonomy. The patients, on average, find these more important than the nurses. These mean scores lead one to assume that patients and nurses attach differing interest to aspects of approach, in respect, for example, of monitoring independence. However, it appears that, within the two groups, there is considerable agreement in the ordering of the importance of relational quality aspects. The Spearman's rank correlation is .89. Both parties find the approach aspects more important than cooperation and nurse/patient accountability. This last is found the relatively least important.
As expectations were that nurses and patients would find several aspects equally important, they were also asked which of the ten specified sub-aspects they found most and which they found least important. This revealed that patients both in the home for the elderly and in the community valued friendliness more than anything else. 64% and 43% respectively held this opinion (not shown in the table). The nurses attached the most importance to taking the patient seriously. Among the professionals in the home for the elderly, the figure was 29%, whereas 40% in district nursing believed that this was the most important aspect. As far as willingness to give information was concerned, nurses in both settings attached the least importance to this. Patients in both settings, found that nurse/patient accountability, operationalized as evaluation of nursing treatment during the nursing encounter, was the least important.

Discrepancies

In order to gain an insight into the discrepancies of each quality aspect, the difference between the importance that was attached to differing quality aspects and the experience of the relevant indicators was examined.

Figure 1. Overview of discrepancy scores. The bars display the discrepancy between the importance that respondents attach to a (sub-)aspect and experience relating to this (sub-)aspect



*p ≤ 0.05 ** p ≤ 0.01

Building on Parasuraman's (1985) theory, it is possible to look upon a negative discrepancy as an indicator of lesser quality. A discrepancy can also be positive when it is shown that the aspect is found reasonably important but, nevertheless, encounters its indicators in greater frequency. In this study, only a significant negative discrepancy is regarded as an indicator of absence of quality. In order to obtain a precise impression of the discrepancy, the deviation was calculated for each item between the experience score and the importance score. Figure 1 gives the discrepancy scores for both patients and nurses.

First, we deal with the discrepancies for the patient which are indicated by the horizontal black bars in the histogram. These items are ordered in terms of

patients' importance scores. At the top of the figure, there are aspects of approach like friendliness and patience to which patients attach a great deal of importance. The indicators show that these aspects are available in abundance in care. Most of them do indicate a slight positive or slight negative discrepancy. A significant negative discrepancy can be seen when we, look at the item of personal interest. Although this is an aspect of approach that patients find important, it is experienced to too small a degree in a number of encounters. This does not mean that most patients assess care negatively on this point. Further analyses of the figures shows that about 28% of the patients who found care on this point below their expectations and that 67%, equal to their expectations and 3.7% above their expectations.
In relation to the indicators for good level of understanding, such as 'being able to get on well together' and 'feeling at ease with one another', the scores were positive. Although a great deal of importance is attached to these indicators in terms of good relations, they appear to be very much in evidence for patients so that, in this case, this is a positive discrepancy.
In the central region of Figure 1, there are a number of items with a positive discrepancy. These are items in the area of willingness to give information. Patients experienced these aspects to a greater degree than would have been expected in terms of the importance scores. The most positive discrepancy related to clarity about the objective of the nursing encounter. Although this kind of information was found of moderate importance, it appeared that this criterion was met with great frequency.
The aspects at the bottom of Figure 1 were for patients relatively the least important. Yet, we see a negative discrepancy in terms of respecting the independence of the patient. Patients find that care is insufficiently targeted to allow them to do as much as they can themselves. The highest level of discrepancy was found in the evaluation of the care. Although little value is, in general, attached to this aspect, in practice, it appears to occur so seldom that discrepancy turns out negative. This is perhaps part of the routine character of the nursing encounters about which questions are asked.
It should be noted that patients generally were very positive in their assessment of care. In summary, three of 18 aspects turned out to have a significant negative discrepancy. Moreover the numerical grade, where it was asked for, was a very good, 9 out of 10.
The nurses adopted a more critical attitude to the provision of care. They gave a grade of 7½ and ten of the 18 quality aspects revealed to have

negative discrepancies.
If we look at the results, item for item, several aspects of a considerate approach, such as 'being patient' and 'taking enough time for the patient' have a negative score. The indicators that are concerned with willingness to give information generally scored positively, just as was the case in patients' scores. The 'evaluation of care during the encounter' has the most negative value. This aspect was not found so important by nurses but, in most cases, it appeared to be scarcely present, leading to a negative discrepancy.

Discussion

In this study, the assessments of nurses and their elderly patients on quality aspects relating to communication were investigated and the results reveal that both receivers and providers of care attach considerable importance to these aspects. In particular, aspects of approach like friendliness and taking the patient seriously have high priority. In earlier research on quality criteria, in which attention was paid to the patients' perspective, it was revealed that the provision of information was regarded as an absolutely essential quality aspect of care (Groen et al. 1990, Oudenampsen et al. 1993). In the research described here, both patients and nurses attached less importance to this. This finding is probably ascribable to the specificity of the patient group. We were concerned here with elderly people who had been receiving routine care for a longer period and it is easy to imagine that other patient groups would have different interests.
The patients in this research were generally very positive in their assessment; they gave a high grade in general to the assessment of care. When one looks at the negative discrepancies as an indicator of lesser quality, only in few quality indicators does one find a significant negative discrepancy.

The study carried out here differs from the usual satisfaction research. In the first place, assessment of quality is measured both from the patient perspective and from the nurses. A second characteristic in which this study differs is the way in which the questions were posed. It was determined whether the respondents found particular aspects important and what experience they had in relation to these aspects of the provision of care. The

differences between both values were considered as indicators on quality of care.

What has this approach produced? The method provides more outcomes than is generally the case in research into patients' assessment alone. Information has been obtained from the two most important parties in the process of care and it can be determined whether the nurses have the same objectives as their patients at micro-level. Furthermore, it is possible, with the method used here, to determine whether the care is well tailored to fit the patient. From the results it is possible to state that the elderly patients who were involved in the study, attached more importance to approach and relatively less to encouraging self-care. This sort of information can be useful in interventions, for example, in communication training for nurses.

Although this method, in comparison with a traditional approach, supplied extra information that can be useful for improving the quality; it also, in accord with other satisfaction-research in health care (Van Campen et al. 1992, 1995), revealed a satisfied patient. Of course, these results should be looked at in a relative perspective. As we said earlier, research was carried out among an elderly patient population and research shows that elderly patients are generally more satisfied than younger ones when it comes to quality of care assessments (Kistemaker & Visser 1995). Furthermore, the participating nurses asked their patients for cooperation with the study themselves and, because it can be assumed that the nurses asked those patients with whom they had a good relationship, one can not exclude a selection effect producing socially desirable answers. Although the plan of the research was to ask questions about concrete experience precisely to avoid social assessments in the answer, it is not entirely clear to what extent these actually did play a role. Some indicators do have a very positive connotation. For example, a question such as 'was the nurse patient when she was putting on your stockings?' makes it difficult to avoid a socially desirable answer.

Furthermore, the way in which the questionnaire was formulated presented us with other problems. It turned out that the patient group was so varied that for a number of the elderly the questionnaire was too difficult because the distinction between importance and experience was too complex. Despite training and regular consultation among the interviewers, it appeared that in some cases the questionnaire was difficult to use. In addition, the content of care, despite the fact that it was largely routine, was highly variable. So using a standard questionnaire was not always suitable on every occasion. For

example, it is difficult to talk about order in working when a patient has received care for putting on her stockings every day for a year. This, consequently, means that a number of values are missing. Prior to the study, this problem was anticipated by registering the nature of the nursing encounter, the amount of time patients had been in care and how often the nurse visited the patient. However, if we had to control for all of these variables, the number of cases per subgroup would have been too small to give reliable results.
In summary, it can be stated that the method used, in which questions were asked on the importance attached to quality aspects and their presence, produced more differentiated information on assessments of quality by patients and nurses. However, as is revealed by the above, it is to be recommended in future research that attention be paid to refining the instruments. It is also important to relate the assessments made in this research to a more neutral measure like the assessments of an independent expert. In a follow-up study to this project, in which video recordings of nursing encounters are assessed, this will be among the options.

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Chapter 7

EFFECTS OF VIDEO INTERACTION ANALYSIS TRAINING ON NURSE-PATIENT COMMUNICATION IN THE CARE OF THE ELDERLY

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Abstract

This paper describes an empirical evaluation of communication skills training for nurses in elderly care. The training programme was based on Video Interaction Analysis and aimed to improve nurses' communication skills such that they pay attention to patients' physical, social and emotional needs and support self care in elderly people.
The effects of the training course were measured in an experimental and control group. They were rated by independent observers, by comparing videotapes of nursing encounters before and after training. Forty nurses participated in 316 videotaped nursing encounters. Multi-level analysis was used to take into account similarity among same nurse encounters.
It was found that nurses who followed the training programme, provided the patients with more information about nursing and health topics. They also used more open-ended questions. In addition, they were rated as more involved, warmer and less patronizing. Due to limitations in the study design, it could not be demonstrated that these findings can entirely be ascribed to the training course. Further research, incorporating a randomized controlled design and larger sample sizes, is recommended to determine whether the results can be attributed to this specific type of training.

Introduction

It is generally agreed that the quality of nurse-patient interaction is an important aspect in nursing the elderly. Yet, a variety of studies suggest that nurses overlook patients' social and emotional needs, focus on physical care instead and interact with their patients in a superficial way (Nolan et al. 1995, Salmon 1993, Armstrong-Esther et al. 1989, 1994, Macleod Clark 1983). Apart from that, nurses seem to have adopted inappropriate communication styles (Waters 1994). Several studies into verbal communication show that nurses' conversation style is dependency creating, for instance in its use of 'secondary babytalk', which is defined as a set of accommodations including simplification and high and variable pitch, usually addressed to children, but also used in talking to the elderly (De Wilde & De Bot 1989, Bouchard Ryan et al. 1994a, 1994b). Nurses also tend to exercise power in their communicative style and have a tendency to treat patients in a routine way without bothering to explain what they are doing. This may result in uncertainty in patients (Hewison 1995). By explaining their behaviour and intentions, i.e. by formulating goals and saying what they are doing, nurses may reduce patients' feelings of uncertainty and thereby increase the quality of care (Caris 1997).
In addition to verbal behaviour, a variety of studies have underscored the importance of adequate nonverbal behaviour. Nonverbal behaviour is the preeminent mode of building rapport with other persons and of conveying empathy and support (Bensing et al. 1995, Mehrabian 1981, Roter & Hall 1992, Strecher 1983, Caris-Verhallen et al. 1997a). For instance looking, smiling and nodding at someone conveys interest and warmth (Heintzman et al. 1993, Vrugt 1983) and such gestures appear to contribute positively to other's perceptions of competence and credibility (Caris 1997, Heintzman et al. 1993, Burgoon 1994). Besides, touch is also a very important aspect in establishing a relationship and can convey affection, care and comfort (De Wever 1977, McCann & McKenna 1992, Moore & Gilbert 1995).
In response to the problems mentioned above, teaching communication skills is often promoted during and after the vocational training of nurses. However, simply giving nurses new protocols to follow is not enough to change patterns of interaction. Educational programmes should pay attention to both verbal and nonverbal communication in realistic situations (O'Connor et al. 1990).

For this reason, the use of video is often recommended in training health care professionals. It is interesting to note that video feedback is widely used in medical and GP training (Cox & Mulholland 1993), but thus far it has not been very common in training nurses (Wilkinson 1991, Parathian & Taylor 1993, Heaven & Maguire 1996).
Recently, a group of nurses were trained using Video Interaction Analysis. The present study examines the effects of this training. The main research question to be addressed is:
What are the effects of a communication training, based on Video Interaction Analysis, on the communicative behaviour of nurses and patients in elderly care?

Communication training
The general aims of the training programme were to improve nurses' communication skills such that they pay attention to patients physical and social needs, facilitate selfcare in elderly patients and support them in finding their own solutions to their problems, in stead of giving the usual solutions from the professional vantage point (Van Etten 1997).
Training focused on:
- development of nurses' awareness of the physical, social and emotional needs of the elderly
- verbal communication techniques, such as, 'structuring', 'exploring patients' ideas and opinions'
- enhancing patients' feelings of competence, by supporting them in finding their own answers. This requires nurses to show verbal attentiveness (paraphrasing and encouraging utterances like 'uhm's' and 'ah's') and help patients to explore the topic by means of open-ended questions (What did you think the solution was?, What had you tried before? etc.).
- nonverbal behaviours, such as 'looking at the patient while listening', stimulating the patients talk by 'head nodding' and 'forward leaning' as a sign of attention.

An important part of the training was dedicated to Video Interaction Analysis sessions in which pairs of trainees, guided by their trainer, watched and discussed videotapes of their own performance during nursing encounters.
In its entirety, the communication skills training programme combined:
- A two day introductory course, with a theoretical introduction on communication in nursing and the ageing adult, an explanation of the

Video Interaction Analysis method and communication practice during role-play presentations with nurse-patient interactions. In the role-play, patients were simulated by actors.
- Six small group sessions in which two trainees, guided by the trainer, analyzed and discussed their own videotaped nursing encounters. During these sessions, three types of learning processes were supposed to take place: natural learning from the trainee's own review of performance on tape, peer comments and trainer feedback.
- Homework: the sessions alternated at six-week intervals in which trainees practised the application of what they had learned. They also prepared the next Video Interaction Analysis session by recording a nursing encounter on video, which they had to analyze individually in advance.
- At the end of the course, there was a plenary meeting with the trainees, who participated in the introductory course. During the meeting, experiences were discussed and the course was evaluated with respect to its structure, process and personal results.

In terms of the aims of the training, trainees were expected to pay more attention to both the physical and social needs of patients, to be more supportive, less dominant, to disagree less and show more empathy. Trainees were also expected to demonstrate more rapport-building nonverbal behaviour, such as patient-directed eye gaze, affirmative nodding, smiling, leaning forward, and touch (Heintzman et al. 1993, Caris-Verhallen et al.1999). Finally, it was hypothesized that patients in the intervention group would take a more active part in the interaction.

Methods

Design and sample

Effects of the programme were measured in a pre-test post-test control group design. The experimental group included 24 nurses who had participated in the training and the control group consisted of 23 nurses who participated in the training later on. The nurses were working in two different settings: in a home care organisation and in a home for the elderly. All nurses who met the inclusion criteria, i.e. of having completed a basic nursing training and being involved in direct patient care activities, were asked to cooperate. As all

subjects planned to participate in the training, assignment to experimental or control group was mostly on practical criteria. Two nurses in the experimental group and 5 nurses in the control group did not remain in the study until the last measurement. Reasons were: resignation (n=3), illness/pregnancy (n=3), change of job (n=1). The effects of the training were determined on the basis of data from 40 nurses. Table 1 summarizes nurses' characteristics in both groups. There were no significant differences between experimental and control group with respect to the background characteristics.

Table 1 Comparison between nurses in the experimental and control group with respect to background characteristics

Background characteristics	**Participants in the study**		
	Experimental group n=21	Control group n=19	Test
Gender			
Female	95.2%	100%	
Male	4.8%		
Educational level)*			
Nurses	42.8%	31.6%	χ^2 = 1.63
Auxiliary nurses	57.1%	68.4%	df = 1
			p = .20
Age in years	39.4	35.3	t = 1.64
			df = 37
			p = .11
Years of employment as a nurse (years)	17.0	14.5	t = .84
			df = 37
			p = .41
Number of nurses working in			
home care	52.4%	47.3%	χ^2 = .17
institutional care	47.6%	52.6%	df = 1
			p = .68

To test the differences in background characteristics t-tests and χ^2 tests were used.

)* Nurses = Dutch higher professional education level, HBO or 3,5 years of in-service education

Auxiliary nurses = Dutch secondary professional education level, MBO or 2,5 years of in-service education

Procedure

Prior to and two months after completing the training, videotaped data of nurse-patient interaction was collected. For that purpose, each participating nurse was followed for part of the day, during which about four nursing encounters were recorded. Nurses recruited the patients for this study. A few days prior to data collection, nurses informed their patients about the research, and asked patients to give informed written consent to allow the recording for research purposes. Very sick patients, patients suffering from dementia and terminally ill patients were excluded from participation. Very few home care patients refused to participate. In the home for the elderly, half of the sixty residents who were asked to participate did so during the pre-test. During the post-test, participation increased to 75%. Nurses did not systematically inform the researchers about those patients who did not wish to cooperate, but they reported that there was no clear difference between the participating and non-participating residents. Moreover, the two groups of patients could be considered representative samples of the populations of patients in the community and in homes for the elderly, with regard to age and gender (Caris-Verhallen et al. 1999). In total 241 patients participated. There were no significant differences in patient characteristics, between pre- and post-test (Table 2).

Assessment

Observations and analysis of communication.

Nurse-patient communication was measured by two independent observers, who were not informed about the experimental conditions. They used the CAMERA computer system (Iec Progamma 1994), which is especially designed for coding behavioural interaction directly from video recordings.

The verbal communication process was analysed using an adapted version of Roter's Interaction Analysis System (RIAS) (Roter 1989), adapted by Caris-Verhallen et al. (1997b, 1998). The system is widely used, has been shown to be reliable (Van Dulmen 1997, Van den Brink-Muinen 1996, De Gruyter & Schirm 1995, Bensing 1991) and was relatively favourably judged in a comparative study (Inui et al. 1982). In addition, RIAS is most suitable for our study, because it pays attention to socio-emotional and task-related communication

The adapted version contains 24 verbal categories which were grouped into five clusters of more general communication behaviours (Caris-Verhallen et al. 1998). These include:

1. Social communication, containing social conversation that has no particular function in nursing activities, such as personal statements, small talk and banter.
2. Affective communication, containing verbal attentiveness, concern and empathy with the patient.
3. Communication that structures the encounter, involving utterances that indicate guidance and direction such as providing orientation and instruction, making requests for clarification, asking for understanding and asking for opinions.
4. Communication about nursing and health, containing all items with respect to nursing, health, medical or therapeutic topics.
5. Communication about lifestyle and feelings, containing all items with respect to lifestyle and emotions.

In addition to verbal communication, five nonverbal behaviours were observed which were considered to be essential for building rapport: patient directed eyegaze, affirmative nodding, smiling, leaning forward and touch (Heintzman et al. 1993). Because touch is inherent in nursing activities, a distinction was made between instrumental touch, which is necessary in performing a task, and affective touch which expresses affection. Only the latter plays a role in rapport building.

The nonverbal categories were expressed as proportions. The total registrated time in 'patient directed eyegaze', 'forward leaning', 'affective touch' and 'instrumental touch' was divided by the duration of time that nurse and patient were in sight. Similarly, the time span of ' nodding' and 'smiling' were divided by the time that the nurse's face was in sight.

In addition to the observation of specific nonverbal behaviours, the general affective impression of nurse's communication was rated on seven 6-point rating scales, measuring irritation, nervousness, assertiveness, interest, warmth, patronizing and involvement (1= low, 6 = high)(Roter 1989, Caris-Verhallen et al. 1997b).

Following Henbest and Fehrsen (1992), who noted that scoring only a part of a consultation was as reliable as scoring an entire consultation, preliminary assessments with observation periods of 5 minutes, 10 minutes and the total

length of the encounter were carried out on 48 encounters and compared. As 10 minutes observation periods proved to be very reliable when compared with the total observation time (mean Pearson's r .91) (Caris-Verhallen et al. 1997b, 1998), observation time was standardized to the first 10 minutes. Interrater reliability for verbal and nonverbal communication behaviours was sufficient, ranging between .70 and .98 (Pearson's r) (Caris-Verhallen et al. 1998, 1999).

Table 2 Distribution of age, sex and duration of receiving nursing care of patients, who took part in the study n=241

	Pre-test			**Post-test**		
	Total	Home care	Home for the elderly	Total	Home care	Home for the elderly
	109	81 (75%)	28 (25%)	132	85 (64%)	47 (36%)
Gender						
Female	71%	67%	89%	76%	69%	87%
Male	29%	33%	11%	24%	31%	13%
Mean age	79	77	87	80	76	86
Mean duration of received nursing care in months	44	37	70	37	29	52

Assessing the effects of training

Before examining specific training effects, overall changes in nurses' communication behaviour were explored by analysing the five general verbal communication behaviours. These reveal information about the amount of affective and task-related communication and the conversation topics, i.e. on nursing and health or lifestyle and emotions.

In addition, several verbal composites were calculated, related to the hypotheses in the study. These included: the number of questions in general, open-ended questions and closed questions; a measure summing up all utterances of giving information and a measure for the number of counselling

utterances and advice, reflecting the supportive attitude of the nurse. Besides, the amount of disagree and criticism were measured. Both verbal cluster measures and composites are expressed as proportional frequencies relating to the total number of utterances. A measure of nurses' verbal dominance was calculated by the mean speaking time in minutes. In addition to these verbal measures, the mean proportion of nonverbal categories and assessments on global affect ratings were investigated.
The patients' active part in the interaction was assessed with verbal composite scores, that were comparable with those of the nurses. However, no distinction was made in type of questions. Furthermore, the category of 'counselling and advice' had a slightly different definition and referred to utterances in which patients formulated solutions to their own problems.

Statistical analysis
The data set in this study consists of two levels. The level of the encounter and the level of the nurse. The observations at the encounter level were expected to be explained by interventions at the nurse level (Hulsman 1998). A complicating factor in answering the research question was that the 316 encounters cannot be considered completely as independent observations. As each individual nurse has her own behavioural style, it might be argued that the encounters of one nurse, on average, would resemble one another more than those of different nurses (Bensing et al. 1995). In an earlier study (Caris-Verhallen et al. 1999), we calculated intra-class correlation coefficients to determine this interdependency. These coefficients reflect the proportion of total variance of an observation associated with the class (the nurse) to which it belongs. The magnitudes of intra-class correlations necessitated the use of a multi-level analysis. This type of analysis creates the option of analysing data at the encounter level, without disregarding the interdependency at the level of the nurses. Data were, therefore, analysed in hierarchical linear models, which were also controlled for type of nursing activity, as the latter had been shown previously (Caris-Verhallen et al. 1998) to be related to nurse communication. Contrast analyses were carried out to test for differences between the pre- and post-measurements within the control and the experimental groups. In addition, mean pre-test post-test differences in the experimental group were tested against mean pre-test post-test differences in the control group by means of interaction-tests. The analyses were performed with MLn software (Rasbash & Woodhouse 1995).

Results

Nurses' verbal communication

The mean proportions of verbal behaviour, calculated for the two different settings seperately, are displayed in Tables 3a and 3b. Contrast analyses were made between the scores of the trained nurses at the post-test and the other measurements.

Table 3a Weighted mean proportions and standard errors of nurses' verbal communication and composites of nurses' verbal communication behaviours at pre- and post measurement, in the home care organisation

	Experimental group				Control group				
	Pre n=44 encounters		Post n=43 encounters		Pre n=31 encounters		Post n=35 encounters		
Variables	M	(se)	M	(se)	M	(se)	M	(se)	p[1]
Verbal communication clusters									
Social communication	.194	(.037)	.186	(.038)	.171	(.046)	.202	(.042)	.50
Affective communication	.357	(.025)	.323	(.026)	.331	(.031)	.283	(.028)	.60
Communication that structures the encounter	.120	(.019)	.095	(.019)	.130	(.023)	.123	(.021)	.50
Communication nursing and health care	.199	(.030)	.267	(.031)*	.238	(.038)	.278	(.034)	.50
Communication lifestyle and feelings	.128	(.019)	.123	(.020)	.127	(.024)	.112	(.022)	.75
Verbal composites									
Disagreement	.006	(.002)	.002	(.002)**	.004	(.002)	.003	(.002)	.30
Questions	.097	(.014)	.113	(.014)	.100	(.017)	.095	(.015)	.30
Closed questions	.086	(.012)	.095	(.012)	.086	(.015)	.078	(.014)	.35
Open-ended questions	.011	(.003)	.019	(.004)*	.014	(.004)	.017	(.004)	.40
Information	.202	(.023)	.262	(.023)**	.244	(.028)	.282	(.026)	.50
Counselling and advices	.028	(.004)	.014	(.004)**	.020	(.005)	.013	(.005)	.30
Speaking time (minutes)	2.64	(.161)	2.56	(.165)	1.98	(.196)	.184	(.181)	.45

pre-test versus post-test * $p \leq .05$ ** $p \leq .01$

p1 Significance level based on interaction tests of mean pre-test post-test differences in experimental and control group.

In both settings, we see minor alterations in the five communication behaviours (upper part of Tables 3a and 3b), indicating that the general communication patterns did not change with different measurements. As regards the verbal composites, it appears that changes in the experimental group were most strongly evidenced in home care. Several significant contrasts emerged. At the post-test, trained nurses appeared to give

Table 3b Weighted mean proportions and standard errors of nurses' verbal communication and composites of nurses' verbal communication behaviours at pre- and post measurement, in the home for the elderly

	Experimental group				Control group				
	Pre n=43 encounters		Post n=44 encounters		Pre n=38 encounters		Post n=38 encounters		
Variables	M	(se)	M	(se)	M	(se)	M	(se)	p[1]
Verbal communication clusters									
Social communication	.453	(.054)	.523	(.048)	.495	(.057)	.536	(.053)	.90
Affective communication	.265	(.029)	.237	(.026)	.234	(.031)	.223	(.029)	.80
Communication that structures the encounter	.069	(.017)	.040	(.015)*	.084	(.018)	.063	(.017)	.25
Communication nursing and health care	.078	(.023)	.058	(.020)	.064	(.024)	.034	(.023)	.75
Communication lifestyle and feelings	.132	(.019)	.144	(.017)	.123	(.020)	.144	(.019)	.75
Verbal composites									
Disagreement	.002	(.002)	.001	(.001)	.002	(.002)	.001	(.001)	.90
Questions	.069	(.011)	.065	(.010)	.049	(.012)	.044	(.011)	.90
Closed questions	.060	(.010)	.053	(.009)	.040	(.011)	.032	(.010)	.90
Open-ended questions	.009	(.003)	.012	(.003)	.009	(.003)	.011	(.003)	.75
Information	.126	(.020)	.129	(.018)	.124	(.021)	.122	(.020)	.85
Counselling and advices	.016	(.003)	.008	(.003)**	.013	(.003)	.009	(.003)	.30
Speaking time (minutes)	2.05	(.176)	2.19	(.165)	1.82	(.191)	2.09	(.185)	.10

pre-test versus post-test * $p \leq .05$ ** $p \leq .01$

p[1] Significance level based on interaction tests of mean pre-test post-test differences in experimental and control group.

significantly more information, in particular, information about topics on nursing and health care. They showed signs of disagreement, misunderstanding or criticism less often and gave less advice. When looking at the type of questions, it appeared that closed questions were used more frequently than open questions, which encourage patients to tell their story. In the experimental group, the number of open-ended questions had significantly increased, while the total number of questions remained more or less the same.

Table 4a Weighted mean proportions and standard errors for nonverbal communication at pre- and post measurement, in the home care organisation

	Experimental group				Control group				
	Pre n=44 encounters		Post n=43 encounters		Pre n=31 encounters		Post n=35 encounters		
Variables	M	(se)	M	(se)	M	(se)	M	(se)	p[1]
Nonverbal behaviour									
Eye gaze	.624	(.042)	.644	(.043)	.592	(.053)	.546	(.046)	.30
Affirmative head nodding	.046	(.005)	.054	(.005)	.036	(.006)	.036	(.006)	.30
Smiling	.024	(.003)	.015	(.003)*	.015	(.004)	.011	(.003)	.30
Forward leaning	.022	(.006)	.003	(.005)*	.014	(.008)	.004	(.007)	.40
Affective touch	.004	(.003)	.006	(.003)	.004	(.003)	.004	(.003)	.70
Global affect ratings									
Anger/irritation	1.04	(.074)	1.05	(.075)	1.00	(.093)	1.12	(.082)	.20
Nervousness	1.07	(.144)	.99	(.148)	1.34	(.178)	.97	(.162)*	.15
Dominance	2.92	(.189)	2.68	(.194)	2.93	(.234)	2.85	(.213)	.50
Interest	4.34	(.186)	4.66	(.190)**	4.09	(.221)	4.58	(.208)*	.40
Warmth	3.90	(.222)	4.64	(.227)***	3.79	(.266)	4.14	(.249)	.10
Patronizing	1.93	(.157)	1.31	(.162)***	1.39	(.194)	1.09	(.178)	.15
Involved attitude	3.78	(.173)	4.23	(.178)**	3.54	(.214)	3.90	(.196)*	.70
Mean duration encounter (minutes)	27.1	(2.6)	23.9	(2.6)	22.8	(3.2)	24.7	(2.8)	.20

* pre-test versus post-test $p \leq .05$ ** $p \leq .01$ *** $p \leq .001$

p[1] Significance level based on interaction tests of mean pre-test post-test differences in experimental and control group.

In the home for the elderly (Table 3b) we see at post-measurement that experimental nurses made fewer utterances providing guidance and direction such as giving orientation and instruction, making requests for clarification and asking for understanding, compared with the pre-test. As in home care, the amount of counselling and advice had decreased in nurses in the experimental group. In the home for the elderly, no other differences were found between the scores of the control and the experimental group at the pre- and post-test.

Table 4b Weighted mean proportions and standard errors for nonverbal communication at pre- and post measurement, in the home for the elderly

	Experimental group				Control group				
	Pre n=43 encounters		Post n=44 encounters		Pre n=38 encounters		Post n=38 encounters		
Variables	M	(se)	M	(se)	M	(se)	M	(se)	p[1]
Nonverbal behaviour									
Eye gaze	.749	(.050)	.796	(.044)	.759	(.054)	.758	(.051)	.50
Affirmative head nodding	.053	(.008)	.054	(.007)	.061	(.008)	.053	(.008)	.40
Smiling	.030	(.007)	.028	(.007)	.031	(.008)	.042	(.008)	.25
Forward leaning	.034	(.012)	.017	(.011)	.017	(.013)	.008	(.012)	.60
Affective touch	.054	(.018)	.029	(.015)	.013	(.018)	.023	(.018)	.10
Global affect ratings									
Anger/irritation	1.00	(.027)	1.04	(.024)	.99	(.029)	1.02	(.027)	.60
Nervousness	1.01	(.108)	1.10	(.102)	1.06	(.118)	1.25	(.114)*	.50
Dominance	2.52	(.142)	2.50	(.125)	2.24	(.149)	2.43	(.139)	.40
Interest	4.41	(.165)	4.89	(.154)***	4.27	(.179)	4.42	(.173)	.08
Warmth	4.36	(.187)	4.87	(.176)***	4.36	(.204)	4.51	(.197)	.07
Patronizing	1.42	(.154)	1.17	(.145)*	1.48	(.168)	1.24	(.162)	.90
Involved attitude	4.02	(.167)	4.31	(.156)*	4.09	(.181)	4.18	(.174)	.30
Mean duration encounter (minutes)	15.8	(1.7)	14.2	(1.5)	12.2	(1.8)	13.2	(1.7)	.25

* pre-test versus post-test $p \leq .05$ ** $p \leq .01$ *** $p \leq .001$

p[1] Significance level based on interaction tests of mean pre-test post-test differences in experimental and control group.

In some instances Table 3a and Table 3b are showing improvements of verbal communication of the untrained nurses, although the pre- and post-test differences do not reach statistical significance. Using open-ended questions, for instance, improved from .014 (pre-test) to .017 (post-test) in untrained nurses in home care organizations - see Table 3a. To account for the various improvements in the untrained group, no matter how small they are, we have tested the equality of the pre- and post-test differences in the trained nurses against the pre- and post-test differences in the untrained nurses. The p-values of these (interaction)tests are shown in the right-most column of Table 3a and Table 3b. None of the test statistics reached statistical significance. This means, for example, that although the trained nurses in home care organizations improved in using open-ended questions .011 (pre-test) to .019 (post-test), their performance improved not significantly more than that of the untrained nurses. The same goes for all the verbal communication clusters and composites of Tables 3a and 3b. So, the positive changes we found in the experimental group cannot be attributed completely to the intervention.

Nurses' nonverbal communication

In home care, contrary to expectation, we see a decrease in two nonverbal behaviours in the experimental group (Table 4a). Experimental nurses smiled to a lesser extent and leaned forward less frequently, after the training.

These differences were not apparent in the control group. In the home for the elderly (Table 4b) no effects with respect to the five nonverbal behaviours were found within the two groups. In both settings, the experimental groups showed more changes in the global affect ratings than in specific nonverbal behaviours. In home care we see four significant differences in the experimental group, all in the direction expected.

After training, nurses showed more interest in their patients, were warmer and more involved, and they behaved in a less patronizing way. Contrary to expectations, the control group shows also an increase in interest. Moreover this group shows another unexpected effect. The degree of nervousness is significantly lower at the post-test compared to the pre-test. This is possibly due to a high baseline score for nervousness at the pre-test, which was significantly higher, when compared with the other group. In the home for the elderly we see several significant changes in global affect ratings. Nurses in the experimental group were rated as more interested, involved and warm during the post-test. In addition, they were less patronizing. These changes

were not found in the control group. The right column of both Table 4a and 4b shows the p-values of the (interaction)tests on the equality of the pre- and post-test differences of the trained nurses against the pre- and post-test differences of the untrained nurses. The results show that none of the tests reach statistical significance at .05. Looking at the p-values between .05 and .10 for trends, reveals that trained nurses improved more in showing interest and warmth than the untrained nurses, but only in the home for the elderly (Table 4b). All of the other nonverbal behaviour variables and global affect ratings of the trained nurses did not improve significantly more than those of the untrained nurses.

Table 5a Weighted mean proportions and standard errors for patients' verbal communication composites at pre- and post measurement, in the home care organisation

	Experimental group				Control group				
	Pre n=44 encounters		Post n=43 encounters		Pre n=31 encounters		Post n=35 encounters		
Variables	M	(se)	M	(se)	M	(se)	M	(se)	p[1]
Verbal composites									
Disagreement	.016	(.003)	.004	(.003)***	.013	(.004)	.005	(.004)	.60
Questions	.007	(.003)	.006	(.003)	.011	(.004)	.008	(.004)	.70
Information	.550	(.033)	.656	(.034)***	.566	(.041)	.623	(.037)	.30
Counselling and advices	.001	(.001)	.004	(.001)***	.001	(.001)	.001	(.001)	.12
Speaking time (minutes)'	4.32	(.266)	3.97	(.270)	3.57	(.334)	3.53	(.295)	.50

* pre-test versus post-test $p \leq .05$ ** $p \leq .01$ *** $p \leq .001$

p[1] Significance level based on interaction tests of mean pre-test post-test differences in experimental and control group.

Table 5b Weighted mean proportions and standard errors for patients' verbal communication composites at pre- and post measurement, in the home for the elderly

	Experimental group				Control group				
	Pre n=43 encounters		Post n=44 encounters		Pre n=38 encounters		Post n=38 encounters		
Variables	M	(se)	M	(se)	M	(se)	M	(se)	p[1]
Verbal composites									
Disagreement	.005	(.003)	.003	(.003)	.003	(.003)	.008	(.003)	.15
Questions	.004	(.005)	.003	(.004)	.006	(.005)	.008	(.005)	.70
Information	.359	(.044)	.373	(.039)	.364	(.047)	.354	(.044)	.70
Counselling and advices	.000	(.000)	.001	(.000)	.000	(.000)	.001	(.000)	.90
Speaking time (minutes)	4.26	(.300)	4.38	(.269)	3.67	(.319)	4.47	(.300)*	.40

* pre-test versus post-test $p \leq .05$

p[1] Significance level based on interaction tests of mean pre-test post-test differences in experimental and control group.

Patients' share in the interaction

In home care, patients who received care from trained nurses showed less disagreement during the interaction (Table 5a). Moreover, they gave more information about nursing and health topics and their lifestyle. Moreover, patients of trained nurses more often came up with ideas of their own and solutions to their problems. These differences were not apparent in the control group.

In the home for the elderly no effects were found, with respect to patients' share in the interaction (Table 5b). Contrary to our expectations, the speaking time of patients in the control group increased.

Finally, it was tested whether the patients' share in encounters of trained nurses changed more than patients' share in encounters of untrained nurses.

The right column of Tables 5a and 5b shows that none of these differences reach statistical significance, indicating that patients receiving care from trained nurses, changed in the same way as patients receiving care from the untrained nurses.

Discussion

The aim of this evaluation study was to explore the effects of a communication training, based on Video Interaction Analysis. Findings within groups indicate that communication patterns do indeed change. This counts especially for the nurses in home care. We found that nurse communication after training was more facilitating. Nurses showed less disagreement, used more open-ended questions and gave more information. Furthermore, these nurses were rated as more interested and involved, warmer, and less patronizing. Although the training is primarily directed at nurse communication, the changes in interaction extended to the patients as well. Patients of trained nurses showed a decrease in disagreement, they gave more information and produced their own solutions more often.
The effects in the home for the elderly were less convincing and mainly limited to the emotional tone during the encounter, assessed on the global affect scales. After the training nurses showed a more involved and warmer attitude. As regards verbal communication categories, we see effects in the amount of counselling and advice.
It is not completely clear how differences in both settings can be clarified. As we concluded in an earlier study, the nurses in the two settings did not differ with respect to attitudes towards elderly people, therapeutic attitude, job satisfaction or personal characteristics (Caris-Verhallen et al. 1997b, 1998). A possible explanation might be the characteristics of the setting. In institutional care, daily activities are more tightly scheduled than in home care. Nurses and patients on the ward have to do with the ward culture and daily routine. In home care, patients live independently, are visited by their nurse and ward characteristics do not influence nurse-patient interaction. Perhaps, this independence is conducive to the implementation of the communication skills learned.
There were some other unexpected findings that need to be clarified. Firstly,

we hypothesized that nurses would express fewer dominant behaviours. No significant effects were found in this respect; although, in the home care setting, nurses did show a decrease in patronizing behaviour. Trained nurses in the home for the elderly showed a decrease in the type of communication that structures encounters. The characteristics of this type of communication meant that we could interpret this effect positively. A majority of utterances in this cluster are orientating and instructional remarks like 'let's start' 'you can go to the bathroom' and asking for understanding or clarification. Use of these utterances structures the interaction from the nurses' point of view. In that sense, a decrease in this kind of communication might indicate a decrease in dominance. Similarly, the decrease in counselling and advice, which we found in the experimental groups in both settings could be interpreted as an effect in the desired direction. These kind of utterances do not always support patients to find their own answers, and if patients not specifically ask for advice they can even be patronizing and dependency creating (Hewison 1995).

Secondly, trained nurses in home care showed a significant decrease in smiling and leaning forward, which could not be attributed to different types of nursing care provided, because the scores were controlled for this. In a sense, these results are disappointing because these behaviours are considered to be important in establishing a good relationship with the patient (Caris-Verhallen et al. 1997a, 1999, Heintzman et al. 1993). Smiling may be one of the most important characteristics of a nurse who wishes to establish good rapport with patients (Heintzman et al. 1993, Schabracq 1987), while leaning forward is a sign of attention and conveys warmth and friendliness (Reece & Whitman 1962).

This brings up the important issue of conceptual validity. Actually, nonverbal behaviour is more complex than we suggested in this paper. Some nonverbal behaviours are multi-interpretable. For instance leaning forward combined with eye gaze direction can both indicate paying attention and dominance (Schabracq 1987). Smiling can convey friendliness but also cynicism or arrogance (Heintzman et al. 1993, Vrugt 1983). To observe these behaviours in a more valid way, one should have more than one video camera and record from different angles. The use of such methods is not possible in nursing practice, but is restricted to experimental arrangements.

Another point of concern is a possible selection bias, as a result of the fact that nurses recruited the patients for the study themselves. This procedure of

patient selection may have resulted in a bias of the effects, because nurses might have selected, with whom they were getting on well together. However, the methods were similar for experimental and control group, so both groups were advantaged equally much.
Apart from questions of selection bias, there was a limitation in the study concerning the quasi-experimental design. The results showed that the nurses in the experimental group changed significantly on several scores. This was especially true for nurses in home care. When looking at the control group, there were also changes in the desired direction, although mostly non-significant. Changes in communication patterns in both conditions may not only be due to the intervention, but also to participating in the project. All participating nurses had basic nurse training and may be expected to have knowledge on effective communication in nursing. The control nurses were exposed twice to video measurements together with the experimental group, they however had no training. The possibility of contamination between groups, the effect of video-recording and knowing that it has something to do with communication could have targeted earlier input on communication, leading to adaptations in behaviour in both conditions. When aiming to draw conclusions on the effect of the intervention *per se*, a comparison should be made between differences in the experimental group and the control group. Doing this, we were confronted with the problem that observations at the encounter level were used to measure effects of an intervention at the nurse level. For each nurse a number of 3 or 4 encounters was videotaped in the pre-test and the post-test phase of the study. The encounters were characterized by heterogeneity, meaning that at pre- and post measurement different patients were involved and also different types of care were concerned. In the multi level model we corrected for interdependency on nurses level and types of encounters. Still there was a lot of variation for which correction was not possible. These circumstances did not allow us to calculate differences between pre-test and post-test scores in the experimental and control group, which is the traditional method in a design with repeated measures (MANOVA). To address this problem we tested mean differences between pre- and post-test in the experimental group against mean differences in the control group by means of interaction-tests. This method failed to demonstrate any significant difference in change between the experimental and control group. Only some trends in the desired direction were found. Compared to the traditional approach the interaction tests

seemed to be less powerful to detect significant between-group differences. Subsequently, conclusions on the effects in the experimental group should be taken with caution. On the basis of systematic observations of nurses' verbal and nonverbal behaviour, we may say that there were some interesting results which might be induced by Video Interaction Analysis training, especially in the home care setting. Yet, due to limitations in research methods and study design the evidence is not strong enough as a proof.
Although this article only provides information about changes in communication behaviour, it was also found that the trainees assessed the training course positively on most counts (Van Etten 1997). They considered the educational method appropriate for learning communication skills and evaluated the training method as meaningful and relevant to daily nursing practice. Summing up these findings, it may be concluded that training based on Video Interaction Analysis is suitable when targeting change in the communicative behaviour of nurses in the care of the elderly. Effects of the training method should be replicated in a randomized controlled design, using larger sample sizes.

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Chapter 8

SUMMARY AND DISCUSSION

Summary and discussion

This thesis has highlighted nurse-patient communication in elderly care. It concerns a significant topic nowadays, because due to major growth in the aging population, elderly people have become the most important consumer group in long-term nursing care, just as nurses are probably the most important care providers for elderly people with health related problems. Nursing elderly people challenges nurses to provide 'good quality care'. They have to meet the variety of needs in this growing population, in an era characterised by an increasing demand for care facilities, the need to control health care expenditure and at the same time, the obligation to assure quality. Effective communication is a vital prerequisite in providing quality care. This especially is true in nursing elderly patients, because this communication faces specific challenges. First, sensory deficits can affect communication for both partners in interaction. Hearing loss is very common in the older patient and may create difficulties leading to isolation (Seiler 1990). The nurse, on the other hand, has to speak louder and to articulate clearly, which can be easy interpreted as patronizing or childish. Secondly, the generation gap between caregivers and elderly patients makes effective communication difficult. Older people have different values and different expectations from the young. The elderly are, for instance, less likely to challenge the authority of health care providers, to become involved in decision making and to discuss psycho-social issues (Greene et al. 1994). Thirdly, aged patients and nurses may have different agendas. The patient, who is deprived of social contact, wants to continue the interaction in social talk, while the busy nurse with a host of tasks wants to get on with her work. These factors may all influence the dynamic nature of nurse-elderly patient interaction, which demands particular communication skills.

This thesis aimed at providing more insight into how nurses communicate with elderly people and what determinants affect the quantity and quality of communication. The research is mainly based on observation studies of videotaped real life nursing encounters. In addition, we evaluated a communication skills training course for nurses in elderly care.

Four research questions guided this study:

1. How do nurses communicate with elderly patients, i.e. what kind of verbal and nonverbal strategies do they use in communicating with elderly people?

2. What factors are related to nurses' communication with elderly people?
3. How do elderly patients and nurses assess quality aspects related to communication?
4. What are the effects of a communication training programme, based on Video Interaction Analysis, on the communicative behaviour of nurses in elderly care?

These questions have been addressed in six chapters, each chapter focusing on a part of the whole. In this final chapter an overview of the study and the results will be presented related to the four research questions. Next the discussion will focus on methodological issues leading to some recommendations for future research. Then, some theoretical implications will be addressed. Finally, the implications of the study for the daily practice of nurses are discussed.

Design and methods

The study was conducted in two care settings: in a home care organisation and in a home for the elderly. To answer the research questions several methods for data collection were applied. First, videotaped data of nursing encounters was collected. Forty-seven nurses were accompanied for part of a day during which around four nursing encounters were recorded. After each nursing encounter a questionnaire was administered, in writing, to the nurses and, orally, to the patients. These questionnaires aimed to assess the quality of care, as perceived by the patients and the nurses. In addition, at the start of the project, all participating nurses were asked to complete questionnaires on their own provider characteristics, such as education, amount of nursing experience and demographic characteristics, attitude towards elderly people and job satisfaction. The first three research questions were answered using this data.

When investigating the effects of the training programme (research question 4), a non-randomized experimental control group design was applied. The experimental group included 21 nurses who had participated in the training and the control group consisted of 19 nurses who intended to participate later on. Nurse-patient communication was observed by two independent observers, using the CAMERA computer system, is especially designed for coding behavioural interaction directly from video recordings.

Theoretical backgrounds in the development of observation instruments

At the start of the study, the role attributed to communication in theoretical nursing models was investigated. In addition, we examined how research into nurse-elderly patient communication has been carried out over the last ten years. On the basis of this review of the literature we concluded that there were hardly any theory-based instruments available which were applicable to systematic observation of nurse-patient interaction. Consequently, we considered research methodology in other health care professions. The Roter Interaction Analysis System (RIAS) (Roter 1989) was adapted for the analysis of verbal communication. This scheme, which was originally designed to code doctor-patient communication, seemed appropriate for our study, because it pays attention to socio-emotional and task-related communication, which are both essential in nursing (see Appendix 2).

In adjusting RIAS, the theoretical nursing model of King (1981) was used as a point of reference. Apart from the central role of communication in this framework, this model was judged as appropriate for nursing elderly people, because the focus is on active patient involvement in health care, counteracting the growing dependency of elderly people (Kenny 1990, Bowsher et al. 1993). Using the King model, we ascertained whether the adapted version of RIAS covered relevant nursing behaviour. In addition, the model proved to be helpful in interpreting and verifying several verbal clusters which were distinguished in the study. Using the adapted instrument, we were able to discern different types of verbal behaviour which were considered essential in nursing, such as socio-emotional communication, needed to establish a relationship with the patient; exchanging and interpreting information to recognize presenting conditions, and mutual tuning. In addition, the adapted instrument appeared to be sensitive to communication differences in the two different care settings, home care and institutional care, and to various communication patterns during different types of nursing encounters.

To observe nonverbal communication we relied on the study of Heintzman et al. (1993). Within the numerous aspects of nonverbal communication, these authors consider five nonverbal behaviours, to be essential to an individual's attempt to build rapport with another person: eye gaze, affirmative head nodding, smiling, body positioning, and touch. Because touch is inherent in nursing activities, during observation a distinction was made between instrumental touch, which is necessary for a task, and affective touch which expresses affection. Only the latter is important in building rapport. Apart from

these specific nonverbal behaviours, a general impression of nurses' attitude was assessed with rating scales measuring irritation, nervousness, assertiveness, interest, warmth, unequal attitude and involvement.

Discussion of the results

Verbal communication

In analysing nurses' verbal behaviour, we found that nurses paid a lot of attention to the establishment of a good relationship with the patient. About half of the verbal behaviour comprises so-called socio-emotional communication which involves social chat, jokes, verbal attentiveness, concern and empathy. This result is inconsistent with findings from previous studies in nursing the elderly, which showed nurse-patient interactions to be limited, task-related and superficial (May 1990, Liukkonen 1992, Kihlgren et al. 1993, Salmon 1993, Armstrong-Esther et al. 1994, 1989, Nolan et al. 1995). The distinct results in our study may perhaps be attributed to the type of nursing encounters in which mostly long-term and routine care was provided. It is easy to imagine that these communication patterns reflect a daily practice in nursing by which there is less need for task-related communication like explication and information exchange and more room for socializing. This suggestion is confirmed by the finding that social chats in the residential home were more frequent than in home care. The residential care in our study was to a larger extent characterized by long term and routine than care in the community.

Another explanation might be the setting of the investigations. Several of the studies, referred to, were conducted on a hospital ward or a unit in a nursing home. In this kind of setting the accent is often on functional nursing and traditional task allocation. Moreover, several patients and nurses are present in one room, there is limited privacy and interaction is regularly interrupted with questions or remarks from other patients and staff. In a figurative sense, the care provided in these settings can be likened to a dissection, in which parts of care are interrupted and the accent is on efficient use of time. This way of organizing nursing care is related to a more task-related communication style (Gibb & O'Brien 1990). This is in contrast with our study, where patients lived at home or in an apartment in a residential home. Care was provided during nursing visits with a start and a finish, and in interaction with

one patient and one nurse only. These encounters can be characterized as 'a journey' in which a fixed sequence of activities is carried out, for example from getting up, toiletting, showering, dressing and grooming. The 'journey' was found to be related to a speech style which contains more socio-emotional communication (Gibb & O'Brien 1990). Although it is a positive finding that through the years nurses' communication may have improved, we must keep in mind that the characteristics of the setting and routine nursing care in our study will certainly have had an impact on the results concerning verbal behaviour.

Nonverbal communication

With respect to nurses' nonverbal behaviour, the results demonstrated that nurses use mainly eye gaze, head nodding and smiling to establish a good relation with their patients. As is the case in other studies of the use of touch in nursing (Routasalo 1996, McCann & McKenna 1993, Oliver & Redfern 1991), nurses appeared to use instrumental touch more frequently than affective touch. The use of affective touch could mainly be attributed to nurses' personal style.

Furthermore, the results showed that nurses in the home for the elderly used nonverbal behaviour more often than nurses in the community. This may reflect the familiar atmosphere in a home for the elderly, where apart from hygiene and technical nursing goals, also a lot of attention is paid to familiar contact and socializing. These types of nursing encounters relate closely to nonverbal behaviour, especially to affective touch.

Touch is a very strong nonverbal behaviour with a great impact. In previous studies it was found that elderly patients appeared to perceive greater immediacy and affection from nurses' use of comforting touch (McCann & McKenna 1993, Moore & Gilbert 1995). In our study we did not investigate how patients perceived touch, but the observers rated nurses, who regularly touched their patients, as warmer, more interested and involved compared to nurses who touched their patients less frequently.

The results also indicated that nonverbal and verbal communications were related to each other, meaning that task-related communication was positively related to instrumental touch and negatively related to nonverbal communication that was affective in nature. On the other hand, affective communication and communication about lifestyle and emotions were positively related to gaze and head nodding, but negatively related to instrumental touch.

Factors related to nurse communication with elderly people

The review of the literature showed three groups of variables that seem to affect nurse-patient communication: variables related to nurses, to patients, and to the setting in which nursing care takes place. In addition to the video recordings, we gathered relevant information through questionnaires and combined it with the results of the observations of the videotaped nurse-patient interactions.

In respect of the provider variables, such as education, job experience, attitude, job satisfaction, age and gender, it was found that educational level related most strongly to the way nurses communicated with their patients. More highly educated nurses showed more task-related communication. They talked more often about nursing and health topics and used utterances that structured the encounter, such as orienting and instructional remarks, requests for clarification, and for opinions. In comparison with auxiliary nurses, registered nurses had less social chat with their patients, but on the contrary more often used phrases expressing empathy and concern. It appeared that the communication by registered nurses was more professional in nature and that they relied to a lesser extent on routine social chat, than auxiliary nurses did. This result is consistent with the findings from a previous study (Davies 1992) that showed that although registered nurses and auxiliary nurses used broadly the same range of verbal strategies, however first level nurses used proportionately more of those strategies which are considered as professional communication.

A remarkable result was that nurses who were satisfied with their peer contacts at work less often showed signs of affection like empathy, concern and touch. There is no clear explanation for these findings. It may be assumed that these nurses pay more attention to the relationship with colleagues than with patients.

Among situation variables, such as pressure of time and the number of patients in a shift, time pressure was a variable of interest. It can be concluded from the results that the need to hurry may lead the nurse to ignore lifestyle and emotional topics in their conversation. Moreover, nurses working against the clock show less affective communication. This threatens good quality nursing care, because most patients perceive their health problems as an integrated part of their existence and have a need to talk about the limitations they experience with growing older (Poole & Rowat 1994, Staab & Hodges 1996). Communication, which is only directed at the

isolated health problems is insufficient to meet the needs in the patient (Pool 1996).

A noticeable result is that nonverbal communication was almost unaffected by time pressure. In addition, the amount of social conversation did not seem to be related to a busy schedule. Apparently, nurses have always time present for a social chat, but not for emotional matters. This raises the question to what extent nurses use social chat to by-pass topics that need more time and attention. Perhaps, nurses consider social conversation as more controllable than the response evoked by the introduction of a conversation topic about emotions.

Patient characteristics such as age, gender and subjective state of health appeared to play a minor role in the way nurses communicate. It seems that nurses make little allowance for these specific patient characteristics and generally communicate in the same way. Yet, one would expect a different approach to a healthy old man, over ninety, or to a woman of 65, who is seriously ill. This is a remarkable finding in a time when the individuality of patients and the uniqueness of patients' needs are emphasized (Luker 1997). A relevant question here is how concepts such as patient-centred communication and individuality of patients are applied in nursing practice. On the basis of these results it would perhaps be more realistic to talk about nurse-centred communication.

Communication and quality of care

Communication is considered an important aspect of the quality of nursing care. Consequently, we investigated how nurses and their elderly patients evaluated quality of care. The study was restricted to quality aspects related to communication, the focus of our investigation.

In the establishment of the patient assessments, various methodological problems play a role. When patients are asked to give an assessment of this care, they often express positive views, because gratitude plays a role and they tend to give socially desirable answers (De Heer et al. 1988, Van Campen 1992). To overcome this problem, we built on the existing methodology in consumer research (Parasuraman et al. 1985, Babakus & Mangold 1992, Zastowny et al. 1995, Sixma et al. 1998). Authors in this field regard the judgment of quality in the provision of service as the result of a comparison that patients make between their expectations and their experience of the service. Based on this notion, we asked both patients and

nurses, what quality aspects they found important and to what degree they experienced these aspects in actual practice. The quality score was regarded as the discrepancy between experience and importance score.

The results revealed that both receivers and providers of care attached considerable importance to aspects of a considerate approach, like friendliness and taking the patient seriously. The provision of information, which in many studies on quality of care is regarded as absolutely essential (Groen et al. 1990, Oudenampsen et al. 1993) was considered as less important in the research described here both by patients and nurses. This is probably attributable to the relative stable nursing situation in our study. Most people had been receiving routine care for a longer period and it is easy to imagine that these patients had different interests.

It appeared that patients were generally very positive in their assessment of the care received. In other words there were relatively few negative discrepancies. Such as there were concerns to the way nurses and patients maintained a collaborative relationship. Patients thought that nurses did not give them sufficient encouragement in avoiding dependency. For example, care was insufficiently targeted to enable them to do as much as they could themselves. It was also found that nurses did not check sufficiently to see how patients experienced the care provided. Quality improvement should be directed to these aspects.

Effects of the training on communication skills

Recently, new methods in training communication skills have been developed and applied. A special kind of training is called Video Interaction Analysis. In this type of training trainees are guided by their trainer, with whom they watch and discuss videotapes of their own actual performance during nursing encounters. We undertook an empirical evaluation of this training course, using an non-randomized experimental control group design.

Videotaped encounters were rated by independent observers. Findings within the experimental group indicated that communication patterns did indeed change. After the training nurse communication was more facilitating. Nurses used more open questions and gave more information. There were fewer signs of disagreement in the nurse-patient interaction. Furthermore, the nurses were rated as more interested and involved, warmer, and less patronizing by the observers. Moreover, the changes in interaction extended to the patients as well. The patients of trained nurses gave more information

about nursing and health topics and produced their own solutions more often. Interestingly, the nurses in both settings did not change to the same extent after the training. In the home for the elderly, the changes were mainly restricted to ratings of nurses' attitudes and the atmosphere during the nursing encounter. A possible explanation for this might be the different characteristics of the settings. In institutional care, nurses have to do with the ward culture and daily routine. In home care, patients live independently, are visited by their nurse and ward characteristics do not influence nurse-patient interaction. Perhaps, this independence is beneficial to the implementation of newly acquired skills.

Although, we found some interesting changes in nurses in the experimental group, the control nurses showed some changes in communication patterns as well, however mostly non-significant. Probably, participating in a project, with communication as the central theme and being exposed to video measurements was enough to induce change in communication patterns in both groups. Due to limitations in the study design, such as small sample sizes per setting and different patients in each measurement, it was not possible to determine whether there were significant differences between the two conditions. Consequently, it could not be demonstrated that the findings can entirely be ascribed to the training course. Further research, incorporating a randomized controlled design and larger sample sizes, is recommended to determine whether the results can be attributed to this specific type of training.

Methodological reflections

The study described here, leads to the conclusion that observation research can reveal useful information and interesting findings concerning nurse-patient communication. The fact that observational data of day-to-day realities was combined with data from questionnaires and interviews, was beneficial. This part of the discussion will focus on some general methodological issues. For a more detailed discussion we refer to the earlier chapters.

The video data collection

The main part of this thesis is based on observation studies of videotaped real life nursing encounters. This allows the study of both verbal and nonverbal communication. Moreover, using video makes it possible to observe parts of the videotapes repeatedly which may improve the reliability

of observational data.
Although it has been shown that videotaping is a feasible method in nursing research, some sources may threaten reliability and validity. First, a manned camera was used because this enabled the camera angle to be changed where circumstances required, for instance in cases the patient was undressed. A script was developed, in which a standard method of recording was described to control for subjective recordings in using a supervised camera. For example, the position of the camera person was defined and zooming in was not recommended.
Apart from a bias induced by the camera-operator, nurses and patients may be the subject of performance bias, meaning that their awareness of being videotaped, might cause them to behave differently. However, as most of the nurses and patients reported afterwards in a questionnaire that the videotaped encounter reflected the normal situation, this bias may be considered limited. Further, the videotaping continued for half-a-day and the literature shows that, after a while, patients and nurses may simply forget about the cameras because they are busy or involved in their ongoing activities (Morse & McHutchion 1991, Bottorff 1994). The presence of an observer, equipped with a notebook, may also be as intrusive as a camera person, who is concealed. In this study, the advantages of video recordings outweighed the disadvantages. An additional benefit was that video recordings, with informed consent, were available for further analysis and secondary research questions.

Selectivity in data collection
The nurses were not a random sample, but nurses who were participating in a larger project, aiming to improve communication skills. The nurses in the experimental group were those participating in the first run of the educational programme and the nurses in the control group were those who would participate later. A real selection did not take place. At the onset of the study the following inclusion criteria were formulated: participants had completed basic nursing training and were involved in direct patient care activities. In the home for the elderly all nurses who met the criteria participated. In the home care organisation nearly all nurses working in the community of the municipal region took part. Supervisors in each setting assigned trainees to the experimental or control group. As all subjects planned to participate in the training, assignment to a group was mostly on practical criteria (planned

holidays, maternity leave, limited number per ward). It is therefore unlikely that the experimental and control group differed in respect of motivation level. Moreover, differences in demographic variables, attitudes towards the elderly, job satisfaction and reported patient-centred behaviour, were not detected in the data from the questionnaires.
As patients were recruited by the nurses in the study, some selectivity in the patient group could have appeared as well. We assume that this type of selection is limited, because the two groups of patients formed representative samples of the populations of patients in the community and in homes for the elderly, as regards age and gender (Delnoij et al. 1996, CBS 1995). Still, it is reasonable to assume that nurses will have selected convenient encounters and patients they relate to in a pleasant way. However, these circumstances will not lead to a bias of the results assessing the effects of the training, because it would affect the experimental and control group in the same way.

The observation method
In this study an observation schedule was developed, to observe verbal and nonverbal communication. As regards verbal communication we built on RIAS (Roter 1989), which has proven to be reliable in several studies in analysing doctor-patient communication. As in other studies, the inter-observer reliability and intra-observer reliability showed satisfactory values.
This is also true for the measurement of nonverbal behaviour. Based on Heintzman et al. (1993) we observed five nonverbal behaviours, considered important in establishing a good relationship with patients. Again the figures for reliability were sufficient.
The validity of the data is a greater issue. The results show that using the adapted version of RIAS enabled us to detect a variety in verbal communication behaviours which were considered as relevant for the nursing process. It can therefore be concluded that the domain of verbal communication in nursing care is properly covered. Moreover RIAS was sensitive to different types of nursing encounters and the observation results for each type of nursing visit were pointed in the same direction. For example, nursing encounters which were dominated by technical nursing care, were characterized by instrumental verbal communication and instrumental touch, while nonverbal behaviour that was affective in nature was less presented. On the other hand, encounters directed at a psycho-social issue, showed a typical pattern of verbal behaviour that was related to affective nonverbal

behaviour. These findings suggest convergent validity of the instruments used. Nevertheless, there is a concern about conceptual validity of the observational results. For instance, nonverbal behaviour is more complex than described in this thesis, because the nonverbal categories are multi-interpretable. For example, smiling can convey friendliness but also cynicism or arrogance. Leaning forward and affective touch were considered as expressing sympathy and concern, but a patient may also perceive these behaviours as intrusive or degrading, and therefore as irritating. Additionally, when combined some nonverbal behaviours can lead to another interpretation. Looking at someone as well as leaning forward may both indicate paying attention but when combined these behaviours may also reflect dominance (Heintzman et al. 1993). Eye gaze while listening to someone conveys interest, while looking during speaking conveys a signal that the person one is speaking to is on turn (Eibl-Eibesfeldt 1972, 1971, Von Cranach 1971, Kalma 1992). To interpret nonverbal behaviours properly, it is important to take into account the context of the communication. To observe behaviour in a more specific way, one has to use several video cameras, enabling recording from different angles and close-ups of faces. However, this type of data collection is not suitable in nursing practice and restricted to experimental arrangements. In fact, in analysing verbal behaviour and the atmosphere during the encounter, nurses showed rarely hostility or dis-agreement with their patients. We decided therefore to consider eye gaze, smiling, nodding, leaning forward and affective touch as positive.
There were only few problems of multi-interpretable verbal communication, because an extensive manual of RIAS was available with specific instructions and examples on how to code ambiguous utterances. Still, to increase the validity and accuracy of the information, further specification of some verbal categories is suggested. For instance, the 'social talk' category was very broad and encompassed all personal remarks and social conversation. Within this category a difference should be made between superficial chat possibly applicable to any situation, or social talk attuned more deeply to the individual's world of interest. Another example is the 'orienting and instructing remarks' category, comprising all statements indicating what is going on or about to happen. These statements may just have a function to dictate the other person what he has to do. On the other hand, these remarks can have an affirmative function in the interaction, reducing insecure feelings in patients (Dekker & Biemans 1994). A distinction within these categories is

recommended.

Finally, there is a need to discuss the restrictions of frequency-based ratings. The methods used supply information about the nature and frequency of behaviour categories in the nurse-patient interaction. Unfortunately, frequencies are limited to distinguishing between successful and unsuccessful communication, because there is no information about how the communication was performed (Hulsman 1998). For example, ratings indicating how often the nurse gives information, do not provide insight into how the information was presented. It would be of interest to know whether the information was given at the right moment, presented in a clear way and comprehensible to the patient. Moreover, frequency-based data does not really do justice to the context of the communication. For instance, nurses can touch a patient in a way that is not appropriate, or nurses may chat when patients want to discuss a problem with their diet. Besides, by using frequency-based data only limited conclusions can be drawn about the interaction process during the nursing encounter. On the basis of the data on the general affect ratings we have some impression about the atmosphere during the encounter, however it is not possible to determine specifically how patients are influenced by nurse communication and how patients affect the nurses. Questions such as 'does a particular nurse behaviour really encourage patients to tell their story?' or 'does a nonverbal nurse behaviour increase the patients' tendency to express their feelings?' could not be answered.

Assessing quality of care

As communication is recognized as an important aspect of high quality nursing care, it is important to know how patients assess quality. Several methodological problems in assessing patients' satisfaction led us to build on the discrepancy theory (Parasuraman et al. 1985, Sixma et al. 1998) and ask patients about the importance and the perception of quality aspects related to communication. Compared with the traditional approach, the method provided us with detailed information about the aspects that are considered important by patients and the aspects that need attention. These findings are useful for quality assurance. Nevertheless, some methodological issues are worth consideration. The first issue relates to the operationalization of quality of care by making a distinction between the degree of importance and the experience of a quality aspect. It turned out that for a number of elderly

patients this distinction between importance and experience was too complex, so they judged both dimensions in a similar way. Although this problem was anticipated by using different and specific formulations for both types of questions, it is a problem that needs to be elaborated.

Another point of concern is that most patients were very satisfied about the care received. This is in accord with other satisfaction-research in health care, showing that elderly patients are generally more satisfied with the care provided than younger ones are (Kistemaker & Visser 1995). Moreover, the fact that participating nurses asked their patients to cooperate in the study, may have increased the social desirability of the answers. There was little variety in satisfaction scores, and the data was not suitable for use in analyses investigating whether patient satisfaction improved as a result of the training.

The design in assessing the effects of training

Quantitative research using statistical methodology has been helpful in advancing nursing as scientific discipline (Couchman & Dawson 1990). Using true experiments, characterized by experimental manipulation, one or more controls over the experimental situation and a random assignment to conditions, is considered the ideal in science. The effects of the intervention are measured as precisely as possible and highly advanced statistical techniques are employed to evaluate whether any differences shown in these results are due to the intervention or just chance (Friedman et al. 1984). In true experiments, one can be reasonably confident about the results because the measurements are made under controlled conditions. In nursing, however, a true experiment is not always a viable choice, because a lot of variables cannot be controlled, or technically manipulated (Brink & Wood 1989). In addition, there are ethical reasons for not manipulating patients and caregivers in an experimental design. Moreover, there is some concern about the artificiality and thus diminished external validity. (Burns & Grove 1987). Quasi-experimental designs, therefore will be often a suitable option. The great strength of these quasi-experiments lies in their practicality, feasibility and face validity. Yet, quasi-experimental studies using behavioural outcomes are difficult to conduct in nursing practice and relatively few have been reported in the area of the evaluation of training programmes (Kruijver et al.1999).

The study reported on in Chapter 7 had a quasi-experimental nature. There

was an intervention and a control group. However random assignment of individual subjects to treatment conditions was not possible; indeed, this is generally the case in nursing care. In addition, actual communication behaviour was measured using videotapes of real-life nursing encounters. The results showed that nurses in the experimental group changed behaviour significantly on several scores. When looking at the control group, there were also changes in the desired direction, although mostly non-significant. It is not too surprising that changes in both conditions did appear. After all, all nurses had completed basic nursing training, and might be expected to have a knowledge of effective communication in nursing. A project concerning communication with double exposure video measurements could have targeted earlier input on communication, leading to adaptations in behaviour in both conditions. When aiming to determine whether the effect on communication variables could actually be attributed to the experimental manipulation, the traditional approach would have been to test changes in the experimental group against changes in the control group. In doing this, we were confronted with the problem that observations at the encounter level were used to measure effects of an intervention at the nurse level. A number of encounters were videotaped in the pre-test and the post-test phase of the study for each nurse. The encounters were characterized by variability, meaning that at pre- and post measurement, different patients and also different types of care were involved. Although we corrected for interdependency on nurses' level and type of encounter in a multi-level model, there was a lot of variation left for which correction was not possible. These conditions did not allow us to calculate differences between pre-test and post-test scores in the experimental and control group, but we had to resort to interaction tests. The latter failed to demonstrate significant differences between the two conditions. Since the study was constrained by small sample sizes, the power of the interaction tests was limited and the possibility of a type II error (a false conclusion to the effect that the intervention was not efficacious) was raised.

This real possibility for a false conclusion led us to decide not to overstep the *within- group* effects. Although this "bottom up" approach is in stark contrast to an experimental approach (Black 1996), we realized also that the study was not exclusively experimental in nature. Relying solely on significance levels in interaction effects could have adverse consequences and might result in conclusions that underestimated the effects of the intervention

(Abdellah & Levine 1994). Although the results of the interaction effects were somewhat disappointing, we considered that the changes within the experimental group had provided some promising findings. These were encouraging because a review study of the evaluation of training programmes showed that even in single group studies, behavioural changes were hardly ever found (Kruijver et al. 1999).
Replication of the study, methodological sophistication and designs involving larger sample sizes are needed to determine whether the results can be attributed to this specific type of training.

Implications for research methods

Summarizing the foregoing reflections, several suggestions for future research can be made. First, refinement of observation schedules is recommended. Especially, a manual with specific instructions and examples on coding nonverbal behaviour has to be elaborated. Moreover nonverbal categories need a sophistication in a sense that attention is paid to the context.
In addition some refinement of verbal categories and devoting attention to the context of communication is recommended, aiming at improving the validity of the observations. However, we must keep in mind that there is an optimum in these refinements. Further specification of instruments may on one hand improve validity, while on the other hand reliability is threatened or their practical use may be limited.
A further recommendation is to examine the effects of verbal communication on nonverbal behaviour and vice versa, in both interaction participants. A method for this is lag sequential analysis, developed by Sackett (1977), in which contingency patterns among interacting individuals are identified.
Special attention should be paid to development of instruments measuring patient satisfaction on quality of care. In the care for the elderly in particular methods should go further than asking what patients think important and how they perceive nursing care. To acquire information on whether nursing care is tailored to patient needs it would perhaps be better to watch videotapes of an encounter with the patient and to use qualitative techniques to retrieve communication perception.
Lastly, some recommendations on evaluating the training course can be made. As described, nurses in both conditions showed change in their communication patterns. To define what changes are attributable to the

training program per se, the study should be replicated in a more sophisticated design, involving larger sample sizes.

Theoretical reflections

Although in research the interest in nurse-patient communication is increasing, the literature review in Chapter 2 showed that studies focusing on systematic observation and analysis of concrete behaviour were rarely carried out. Moreover, theory-based observational instruments were lacking. In the present study we took a first step in developing an instrument suitable for systematic observation, making use of knowledge from nursing science and from related professions. In applying these instruments, the study provided a systematic description of the complex field of nurse-patient interaction. Nevertheless, borrowing instruments developed for interaction in a medical context, has limitations in the study of nurse-patient communication, as medicine differs from nursing in important ways. Communication in medical encounters is mainly characterized by diagnosing and medical problem solving. Socio-emotional communication, although considered as very important, has a subservient role and is mainly used to facilitate the problem solving process. On the contrary, in nursing, the process of care is an important aspect (Benner 1984). Within the caring relationship problem solving is closely intertwined with the provision of psycho-social support, in the broadest sense. Apart from the need of a patient to be recognised and understood as a person, elderly patients in particular need an interpersonal relationship with their nurse, in which there is room to share experience, to socialize and receive affection.

Although we used the King model (1981) to ascertain that the specificity of nurse-patient communication was taken into account, this choice does not seem to have been entirely appropriate. Communication is a central theme in King's theoretical model and was chosen for this reason. However, just as in medicine, the framework has a problem solving vantage point. According to King, the goal of nursing, is to help people cope with health problems or adjust to interference in their state of health. Communication is considered mainly as "the vehicle for goal setting, exploring means and agreeing on means to achieve these goals" (King 1981). The nature of the intimate contacts between nurses and patients is underexposed.

As the way a researcher on communication looks at the data is largely determined by the observation system that is used and the underlying

theoretical notions (Bensing 1991), we must conclude that assessment of non task-related nursing behaviour was not entirely captured in our investigation. However, the study offers a framework for understanding nurse-patient communication, the role of sociol-emotional behaviour in nursing needs to be further conceptualized. This is especially true for social conversation, which seems to have an important place in the nurse-patient relationship, comprising aspects such as distraction, generating interest, means of time passing, exchange of interests. All these aspects within the range of social conversation may be appropriate in some nurse-patient interactions; however there is a need to identify when it is adequate, how it is used and what patient outcomes are the result of nurses' social conversation. We suggested in an earlier section that nurses seem to a large extent to have time for a social chat, while emotional matters are passed by. A more complete understanding of the meaning of different types of social conversation may be revealed by studying them in the context of the interaction. Future research should reconsider social conversation as a nursing task.

Finally, there is a need to clarify what adequate communication is in nursing elderly people. Nursing theories and knowledge from psychology, sociology and medical science serve as the foundation for nursing practice. However these notions need development when applied in specific age groups. For instance, contemporary nursing literature advocates patient participation and a collaborative relationship with patients (Cahill 1997). The results in our study indicate also that quality assurance should be directed to a participational relationship. Nevertheless, this suggestion needs some elaboration, because in this approach it is particularly important to take the patient's point of view into account. For example, it has to be borne in mind that not all patients want to be actively involved in decisions about care. Among the elderly in particular, some patients may prefer to share responsibility with a nursing professional and others may prefer an entirely passive role (Luker 1997, Coulter 1997). Discovering these variable demands, requires a patient-centred communication style, with a special focus on patients' needs and individuality, and enabling patients to specify their needs in this area. In addition, efforts need to be made to formulate and develop standards and methods to assess patients' preferences as regards participation and decision making. Video data collection may be helpful in this kind of research. Looking together with a patient at a videotaped interaction and discuss together what is going on may reveal detailed insight in patients'

needs, preferences and experiences. These kind of data may form the point of departure for theory development and training.

Implications for practice

The results of this study have implications for nursing practice, administration and education. The findings indicate that nurses ought to convert from a nurse-centred to a patient-centred approach. It was shown that nurse communication does not relate closely to patient characteristics. Accordingly, in basic and continuing nursing education, nurses should be trained to be sensitive to the different needs of their patients and to safeguard the patients' individuality.

Another result was that nurses put a major focus on socio-emotional communication during encounters. It is important to realize that elderly people have a need for this kind of communication because they often rely on nurses for their social contacts. Moreover, when asked, most elderly patients said that they valued the nurse who is friendly and shows personal interest highly. In socializing and affective communication nurses can fulfil these patients' needs and contribute to patients' feelings of well-being. Consequently, the significance of this type of communication should be continuously emphasized in supervision and in training of nurses. This is especially true in a fast paced-society, in which efficiency and functionality have pride of place.

The part of the study directed at factors related to nurse-patient interaction showed work pressure to be an important issue for discussion. Nurses working against the clock may overlook, or even avoid talking with their elderly patients about subjects relating to daily life problems or feelings. Although these matters are important to elderly people, they will be reluctant to bring them up for discussion, as they know that the nurse is very busy. One of the solutions in this area would be to reduce the workload and increase staffing. However, several studies have demonstrated that this would not automatically lead to an improved quality of care (Adams & Bond 1997, Wilkinson 1991). Nurses may also have to develop strategies in order to use their time more efficiently. Time spent on social chat could be used for other topics, especially when one takes into account that social chat often lasts for more than half of the conversation time in the nursing encounter. As we mentioned before, social conversation encompasses a broad range of verbal categories. Nurses may chat aiming to distract while undertaking a technical procedure, nurses may talk to pass the time of day, or to cheer up a patient.

Nurses may even use a social chat to bypass the more serious topics that require time and attention. There are several situations in which each of these types of social conversation is justified. However, when communicating efficiently, it is not good enough to use social chat out of habit. To deliver nursing care tailored to the patient needs, nurses have to consider repeatedly whether: patients want this kind of interaction, what is the best time to talk about this and that and whose need (the nurse's or the patient's) is being fulfilled by the use of social conversation. Nurses ought to develop a communication style that transcends the daily routine.

In summary, it is important that communication skills programmes incorporate several topics. It is critical for nurses to be trained to be aware of patient's needs and to learn how to attune themselves to these needs. Trainers must also bear in mind the fact that there are no specific standards of successful behaviour. The communication style adopted will always depend on the patient, the nurse and situational characteristics. It is therefore to be recommended that nurses are taught several repertoires and awareness of the situation in which a specific repertoire is expected to be successful. In a sense, nursing professionals, who depend on communication skills to provide high quality care, can be considered as actors. Perhaps they should be trained as actors, recognizing what behavioural repertoires correspond to the role they want to play, not overacting, not dramatizing but being natural and controlling their behaviour in a professional way, flexible and always attuned to their audience.

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SAMENVATTING EN DISCUSSIE

Samenvatting en discussie

In dit proefschrift wordt verslag gedaan van een onderzoek naar de communicatie van verpleegkundigen en verzorgenden met hun oudere cliënten. Dit is een actueel onderwerp binnen de beroepsgroep van verplegenden[1], omdat ouderen door de toenemende vergrijzing een belangrijke groep van zorggebruikers zijn geworden. Voor oudere mensen die te maken krijgen met problemen in hun gezondheid zijn verplegenden vaak de personen binnen de gezondheidszorg waar zij het meest mee te maken hebben.

Het bieden van kwaliteitszorg aan ouderen vraagt om een grote deskundigheid. Zo is het van belang om te achterhalen wat de behoeften van deze, overigens divers samengestelde, groep cliënten zijn. Naast onderscheid in cultuur en sociaal economische status, bestaan er in de groep vanaf 65 jaar grote verschillen in leeftijd, het type beperkingen waar men mee te maken heeft, of de mening die men heeft over het ouder worden. Bovendien staat de zorg onder druk door de toenemende behoefte aan verpleging of verzorging en tegelijkertijd door een gebrek aan middelen. Deskundige communicatie is een essentiële voorwaarde om binnen deze context kwaliteitszorg te kunnen bieden. Dit geldt zeker voor de zorgverlening aan ouderen waarin de communicatie met specifieke problemen gepaard kan gaan. Ten eerste kan communicatie namelijk bemoeilijkt worden door zintuiglijke problemen. Veel ouderen zijn hardhorend en hebben moeite met het verstaan van de ander. De verplegende zal op haar beurt luider gaan spreken, duidelijk willen articuleren en veel klemtonen gebruiken. Dit maakt het echter weer moeilijk om nuances aan te brengen in de taal, waardoor de gesproken taal als kinderlijk of als bazig kan worden ervaren. Ten tweede kan er sprake zijn van een generatiekloof die goede communicatie belemmert. Ouderen hebben andere normen en waarden dan de jongere zorgverleners. Zij zullen bijvoorbeeld niet zo gauw in discussie gaan met hulpverleners, de

[1] In dit hoofdstuk wordt met de term verplegende of zorgverlener een functionaris bedoeld die belast is met de verzorging en verpleging van cliënten ongeacht het deskundigheidsniveau waarop men werkzaam is of het soort zorginstelling waar men werkt. In veel gevallen kan men voor deze termen ook lezen: (wijk)verpleegkundige, (wijk)ziekenverzorgende, bejaardenverzorgende etc. Met de keuze voor één term wordt beoogd de leesbaarheid van dit hoofdstuk te vergroten. Overeenkomstig wordt met de term verpleging of verzorging alle activiteiten bedoeld binnen het taakgebied van de voornoemde functionaris.

besluitvorming niet willen beïnvloeden en ze zijn niet zo gewend om over emotionele problemen te praten. Ook kunnen cliënt en zorgverlener een ander doel voor ogen hebben tijdens het zorgcontact. Een eenzame cliënt wil misschien langer blijven praten, terwijl de zorgverlener wil opschieten omdat ze nog veel werk te doen heeft. Al deze factoren hebben invloed op de interactie tussen verplegende en cliënt en vragen om specifieke communicatieve vaardigheden van de zorgverlener.
De doelstelling van het onderzoek was inzicht krijgen in de wijze waarop verplegenden met oudere cliënten communiceren en nagaan welke factoren van invloed zijn op de kwaliteit van deze interacties. Bovendien werd een evaluatie-onderzoek uitgevoerd naar de effecten van een trainingsprogramma op de communicatievaardigheden van verplegenden in de ouderenzorg. In het onderzoek stonden vier onderzoeksvragen centraal:

1. Op welke wijze, zowel verbaal als non-verbaal, communiceren verplegenden met oudere cliënten?
2. Welke factoren hangen samen met de kwaliteit van de communicatie tussen verplegenden en hun oudere cliënten?
3. Hoe oordelen cliënten en verplegenden over kwaliteitsaspecten die betrekking hebben op de communicatie tussen hen beiden?
4. Welk effect heeft een trainingsprogramma gebaseerd op Video-Interactie Analyse op het communicatieve gedrag van verplegenden in de zorgverlening aan ouderen?

Deze vragen zijn behandeld in zes hoofstukken waarbij in elk hoofstuk een vraag of deelvraag aan de orde is gesteld. In dit hoofdstuk wordt een overzicht gegeven van het gehele onderzoek. De resultaten worden gepresenteerd aan de hand van bovenstaande onderzoeksvragen. Vervolgens komt een aantal methodologische kwesties aan de orde, op grond waarvan aanbevelingen worden gedaan voor toekomstig onderzoek. Na een bespreking van theoretische kanttekeningen worden tot slot aanbevelingen gedaan voor de dagelijkse praktijk van de verpleging van oudere cliënten.

Design and methode

Het onderzoek werd uitgevoerd in twee verschillende typen organisaties: een instelling voor thuiszorg en een verzorgingshuis. Om de onderzoeksvragen te beantwoorden zijn verschillende databronnen gebruikt. Ten eerste zijn video-opnames gemaakt van de interactie tussen zorgverleners en hun cliënten

tijdens zorgcontacten. Zevenenveertig zorgverleners werden gedurende een dagdeel met een videocamera gevolgd. Tijdens dit dagdeel werden gemiddeld vier zorgcontacten gefilmd. Na elk hulpverleningscontact werd bij de cliënt een mondelinge en bij de zorgverlener een schriftelijke vragenlijst afgenomen. Met deze vragenlijsten werd een indruk verkregen hoe de betrokkenen zelf oordeelden over de communicatie tijdens de zorgverlening. Bovendien vulden de verplegenden aan het begin van het project een schriftelijke enquête in, waarmee informatie werd verzameld over hun attitude ten opzichte van ouderen, hun arbeidstevredenheid, hun opleiding, ervaring en demografische kenmerken. Met deze gegevens werden de eerste drie onderzoeksvragen beantwoord.

Om de effecten van het trainingsprogramma te onderzoeken (onderzoeksvraag 4) werd een niet-gerandomiseerd design gebruikt met een voor- en een nameting in een experimentele en controlegroep. De experimentele groep bestond uit 21 verplegenden die deelnamen aan de training. De controlegroep bestond uit 19 personen, die op een later tijdstip aan de training zouden deelnemen.

Gedurende het onderzoek hebben twee onafhankelijke observatoren de videobanden met zorgcontacten geobserveerd. Zij maakten daarbij gebruik van CAMERA, een computerprogramma dat speciaal ontwikkeld is voor het coderen van interacties die op de video zijn opgenomen (Iec ProGAMMA, 1994).

Theoretische achtergronden bij de ontwikkeling van de observatie-instrumenten.

Bij de aanvang van de studie is een literatuuronderzoek uitgevoerd naar het belang dat wordt toegeschreven aan communicatie in de diverse verplegingswetenschappelijke modellen. Bovendien werd nagegaan op welke wijze er de laatste tien jaar in onderzoek aandacht is besteed aan communicatie tussen zorgverleners en cliënten. Dit literatuuronderzoek toonde aan dat er geen geschikte meetinstrumenten voor een systematische observatie van de communicatie tijdens de verpleging van cliënten bestonden. Daarom is bij de ontwikkeling van een observatie-protocol ook nagegaan welke observatie-instrumenten bij andere beroepen in de gezondheidszorg werden gebruikt. Uiteindelijk werd voor de analyse van de verbale communicatie het RIAS (Roter Interaction Analysis System, Roter 1989) aangepast. Dit instrument, dat oorspronkelijk is ontwikkeld voor de observatie van arts-patiënt communi-

catie, bleek geschikt voor dit onderzoek omdat het aandacht besteedt aan sociaal-emotionele en instrumentele communicatie. Sociaal-emotionele communicatie omvat de wijze waarop de hulpverlener betrokkenheid toont en emotionele steun geeft. Instrumentele communicatie is gericht op de uitvoering van taken en omvat het maken van sturende opmerkingen, het stellen van open en gesloten vragen en het geven van informatie en adviezen. Beide typen van communicatie zijn van belang gedurende het verpleegproces (zie Appendix 2).

Bij de aanpassing van het RIAS diende het 'General Systems Framework' van King (1981) als uitgangspunt. In dit model staat de communicatie tussen verplegende en cliënt centraal. Bovendien wordt dit model volgens diverse auteurs geschikt geacht voor de geriatrische verpleging en ook voor onderzoek op dat terrein, omdat er in het framework vanuit wordt gegaan dat de cliënt actief wordt betrokken in het zorgproces. Deze betrokkenheid voorkomt dat de cliënt te zeer afhankelijk wordt van de zorg (Kenny 1990, Bowsher e.a. 1993).

Het framework is bruikbaar gebleken bij de interpretatie van verbale clusters die met behulp van de gebruikte analysetechnieken werden bepaald. Tevens is, met behulp van het model, vastgesteld dat het domein van gedragingen in het verpleegproces adequaat wordt weergegeven. Met het aangepaste RIAS konden de voor het verpleegproces relevante communicatieve gedragingen, geobserveerd worden, zoals sociale conversatie, affectieve communicatie, communicatie gericht op wederzijdse afstemming, het uitwisselen van informatie en het adviseren. Bovendien bleek het RIAS gevoelig te zijn voor verschillen in communicatie per setting en per taak die werd uitgevoerd.

Voor de studie van de non-verbale communicatie is aansluiting gezocht bij een onderzoek van Heintzman e.a. (1993). Binnen het gehele scala van non-verbale gedragingen onderscheiden deze onderzoekers vijf specifieke gedragingen die een positieve bijdrage kunnen leveren aan de opbouw van een goede relatie: aankijken, bevestigend knikken, (glim)lachen, een toegewende lichaamshouding en aanraken. Omdat aanraken onlosmakelijk verbonden is met de uitvoering van verpleegkundige en zorgtaken, werd bij de observatie een onderscheid gemaakt in instrumenteel en affectief aanraken. Instrumenteel aanraken werd gedefinieerd als een bewust fysiek contact dat nodig is om een taak uit te voeren. Affectief aanraken werd gedefinieerd als relatief spontaan en affectie uitdrukkend gedrag, niet nodig voor de uitvoering van een taak.

Naast deze specifieke non-verbale gedragingen werd in meer algemene zin de houding van de zorgverlener beoordeeld aan de hand van affect beoordelingsschalen gericht op geïrriteerdheid, gespannenheid, dominantie, interesse, warmte/vriendelijkheid, betuttelend gedrag en betrokken houding.

Discussie van de resultaten

Verbale communicatie

Bij de analyse van de verbale communicatie kwam naar voren dat zorgverleners veel tijd besteden aan het leggen en in stand houden van een relatie met hun cliënt. Bijna de helft van de verbale uitingen behoort namelijk tot de zogenaamde sociaal-emotionele communicatie, dat wil zeggen sociale conversatie zoals een praatje over het weer of over de televisie en het maken van een grapje, en affectieve communicatie waarmee zorgverleners aangeven de ander aan te voelen en te begrijpen. Dit resultaat is nogal opvallend, omdat het afwijkt van vrij algemeen geformuleerde conclusies in vergelijkbare onderzoeken, waarin veelal wordt aangegeven dat de communicatie van verplegenden met cliënten minimaal is, oppervlakkig en meestal instrumenteel van aard (May 1990, Liukkonen 1992, Kihlgren e.a. 1993, Salmon 1993, Armstrong-Esther e.a. 1994, 1989, Nolan e.a. 1995). De bevindingen in de onderhavige studie kunnen voor een deel toegeschreven worden aan het type zorgverlening dat gefilmd werd. Vaak waren de cliënten al langere tijd in zorg en was de zorgsituatie stabiel, zodat er ten aanzien van de te verrichten taken sprake was van een enigszins routinematig karakter. Het is voorstelbaar dat er in dergelijke contacten minder tijd nodig is voor uitleg over handelingen en meer tijd besteed kan worden aan sociale conversatie en gezelligheid. Deze indruk wordt bevestigd door het gegeven dat in het verzorgingshuis veel frequenter een praatje werd gehouden dan in de thuiszorg. In het verzorgingshuis genoten de bewoners vaak langduriger zorg, zodat er meer sprake was van dagelijkse routine dan in de thuiszorg.

Een andere verklaring kan worden gevonden in de setting waar het onderzoek heeft plaatsgevonden. De meeste van de eerdere studies zijn uitgevoerd op een ziekenhuisafdeling of een afdeling van een verpleeghuis. In deze settings is vaak sprake van een taakgerichte zorgverlening, met het accent op efficiënt gebruik van tijd. Er is een beperkte privacy en de zorgverlener is meerdere cliënten tegelijk aan het verzorgen, zodat de

zorgprocedure nogal eens wordt onderbroken. De communicatie is met name gericht op de uit te voeren taken en heeft daardoor een instrumenteel karakter (Gibb & O'Brien 1990). Dit is tegengesteld aan de situatie in ons onderzoek, waar cliënten of thuis woonden of in een kamer/appartement van een verzorgingshuis. De zorg werd verleend tijdens een zorgbezoek, waarbij verplegende en cliënt zonder andere aanwezigen communiceerden. De zorgverlening tijdens een dergelijk contact heeft het karakter van een 'journey' (letterlijk: reis), een begrip dat door Gibb en O'Brien (1990) werd geïntroduceerd. Tijdens de 'journey' wordt een aantal taken aaneengesloten uitgevoerd. De zorgverlener is gedurende de hele ochtendverzorging bij de cliënt betrokken: men begint met hulp bij het opstaan en na de toiletgang, het douchen en aankleden wordt er verder toilet gemaakt. In tegenstelling tot de 'onderbroken zorg' ziet men dat communicatie tijdens de 'journey' veel minder taak-gerelateerd is en juist veel sociale en affectieve componenten bevat (Gibb & O'Brien 1990).
Kortom, hoewel het een positieve bevinding is dat de zorgverleners in dit onderzoek meer tijd besteden aan sociaal-emotionele communicatie dan dat in eerder onderzoek werd gerapporteerd, moet bij de interpretatie van deze gegevens rekening worden gehouden met de mogelijkheid dat de eigenschappen van de settings en het soort zorg dat werd verleend effect hebben gehad op de onderzoeksresultaten inzake het verbale gedrag.

Non-verbale communicatie

Binnen het gebied van het non-verbale gedrag blijken met name aankijken, knikken en glimlachen van betekenis te zijn voor het overbrengen van interesse en betrokkenheid. Deze gedragingen komen in vrijwel alle contacten voor. Wanneer men naar de verschillen kijkt tussen de zorgverleners in de twee settings, dan valt op dat de verplegenden in het verzorgingshuis veel meer non-verbaal gedrag vertonen dat affectief van aard is dan de wijkverplegenden. Waarschijnlijk is dit het gevolg van een meer familiaire sfeer in het verzorgingshuis, waar naast lichamelijk hygiënische zorg ook een woonomgeving aan oudere cliënten wordt geboden, waarin men aandacht wil besteden aan huiselijk contact en gezelligheid. Het creëren van een vertrouwelijke atmosfeer hangt samen met het vertonen van non-verbaal gedrag, en in het bijzonder met affectief aanraken.
In overeenkomst met andere studies naar aanraken in de verpleging (Routasalo 1996, McCann & McKenna 1993, Oliver & Redfern 1991), blijkt

dat instrumenteel aanraken naar verhouding veel meer voorkomt dan affectief aanraken. Met name in de thuiszorg zijn de contacten meer instrumenteel van aard dan in het verzorgingshuis en dientengevolge ziet men ook meer aanraking van instrumentele aard. De mate waarin zorgverleners hun cliënten affectief aanraken is met name toe te schrijven aan iemands persoonlijke communicatiestijl, en wordt in mindere mate bepaald door het type zorgcontact of door de setting.

Een spontane aanraking is een sterke non-verbale prikkel, waarmee affectie en troost kan worden overgebracht. Er zijn verschillende studies waar uit naar voren komt dat oudere cliënten nabijheid en warmte ervaren van verplegenden die hen aanraken (McCann & McKenna 1993, Moore & Gilbert 1995). In de hier beschreven studie is niet onderzocht hoe cliënten reageren op aanraakgedrag van de verplegenden. Wel blijkt dat affectief aanraken zeer bepalend is voor het oordeel van de observatoren op de globale affectschalen. Zorgverleners die hun cliënten meer affectief aanraken worden als warmer, meer geïnteresseerd en meer betrokken beoordeeld.

Tot slot is er een relatie gebleken tussen de verbale en non-verbale communicatie van de zorgverleners. Zo werd een samenhang gevonden tussen taak-gerelateerde communicatie en instrumenteel aanraken, terwijl non-verbale affectieve communicatie juist minder voorkwam naarmate het contact meer instrumenteel van aard was. Affectief verbaal gedrag of het praten over leefstijl en emoties bleek samen te gaan met aankijken en knikken, terwijl in die gevallen instrumenteel aanraken minder voorkwam.

Factoren die gerelateerd zijn aan de wijze waarop verplegenden met oudere cliënten communiceren

Uit het literatuuronderzoek, dat is beschreven in Hoofdstuk 2, kwamen meerdere variabelen naar voren die van invloed kunnen zijn op de kwaliteit of kwantiteit van de verplegende-cliënt communicatie. Deze kunnen worden ingedeeld in zorgverlenerskenmerken, situationele kenmerken en cliëntenkenmerken. Om deze te kunnen onderzoeken is door middel van vragenlijstonderzoek relevante informatie verzameld bij zowel de deelnemende zorgverleners als de deelnemende cliënten. De verzamelde informatie werd gerelateerd aan de resultaten van de video-observaties.

Van de zorgverlenerskenmerken, zoals opleidingsniveau, ervaring, attitude ten opzichte van ouderen, arbeidstevredenheid, leeftijd en geslacht, blijkt opleidingsniveau de meest belangrijke variabele te zijn. Zorgverleners met

een opleiding tot verpleegkundige (HBO of in-service opleiding A, B, of Z) laten in vergelijking met (zieken)verzorgenden meer instrumentele verbale communicatie zien. Zij spreken vaker over onderwerpen die met de verpleging of gezondheid te maken hebben en geven meer richting aan het zorgcontact door te vragen om een mening of om verduidelijking en door instruerende opmerkingen. In vergelijking met (zieken)verzorgenden voeren zij minder sociale conversatie, maar gebruiken wel vaker affectieve uitingen, zoals het aangeven dat men de ander begrijpt, dat men bezorgd is of uitingen van empathie. Wellicht wordt hier zichtbaar dat in de opleiding van verpleegkundigen meer aandacht is voor professionele communicatie dan in de opleiding van verzorgenden, waardoor verpleegkundigen minder snel vervallen in een routine van het praten over ditjes en datjes. De hier gepresenteerde bevindingen komen overeen met de resultaten van eerder onderzoek (Davies 1992), waarbij werd aangetoond dat verpleegkundigen en verzorgenden weliswaar vergelijkbare verbale uitingen gebruikten, maar dat verpleegkundigen naar verhouding vaker uitingen gebruikten die binnen het verpleegkundige beroep als professioneel worden beschouwd.

Een opmerkelijke bevinding is dat verplegenden die tevreden zijn met de collegiale contacten op hun werk, minder vaak affectieve uitingen laten zien, zoals aangeven dat zij meeleven of dat zij bezorgd zijn. Ook raken zij de cliënt minder vaak spontaan aan. Deze bevindingen zouden aan het toeval toegeschreven kunnen worden. Dit ligt echter niet voor de hand omdat bij zowel het verbale als het non-verbale gedrag hetzelfde type verband werd gevonden. Een duidelijke verklaring voor het gevonden resultaat is niet te geven, maar men zou kunnen veronderstellen dat zorgverleners die tevreden zijn over het contact met hun collega's meer belang hechten aan (en daardoor meer investeren in) een goede relatie met hun collega's dan aan een relatie met hun cliënten.

Een belangrijk situationeel kenmerk is de werkdruk die verplegenden ervaren. Uit de resultaten blijkt dat verplegenden bij een hogere ervaren werkdruk minder affectie in hun verbaal gedrag tonen. Bovendien komen zij minder toe aan een gesprek over onderwerpen die met het dagelijks leven van de cliënt te maken hebben of met meer emotionele aangelegenheden. Aangezien ouderen juist wel behoefte hebben om over hun dagelijkse leven en de beperkingen die ze daarbij hebben te praten (Nesbitt Blondis & Jackson 1978), raakt de kwaliteit van zorg hier in het geding. Immers een cliënt beleeft een gezondheidsprobleem als een onderdeel van het bestaan. Instrumentele

communicatie, die slechts gericht is op het gezondheidsprobleem, is onvoldoende om goed aan te sluiten op de cliënt en diens leefwereld (Pool 1996). Het is overigens opvallend dat het voeren van sociale conversatie vrijwel niet gerelateerd blijkt te zijn aan drukke werkzaamheden. Kennelijk kunnen zorgverleners gemakkelijker tijd vinden om over ditjes en datjes te praten dan over gewichtiger zaken. Daarmee rijst dan ook de vraag in hoeverre verplegenden de sociale conversatie gebruiken om niet in te hoeven gaan op problematische onderwerpen die wellicht emoties oproepen. Waarschijnlijk wordt sociale conversatie, met name als men het druk heeft als meer controleerbaar gezien, dan een emotionele reactie die loskomt bij het aan de orde stellen van een wezenlijk probleem.
Eigenschappen van cliënten, zoals leeftijd, geslacht, en de wijze waarop men zijn gezondheid ervaart, blijken nauwelijks van invloed op het contact tussen zorgverleners en hun cliënten. Het lijkt erop dat verplegenden in veel gevallen een zelfde communicatiestijl hanteren. Toch is het aannemelijk dat een 'jongbejaarde', die ernstig ziek is, andere behoeften heeft dan een hoogbejaarde, die zich redelijk gezond voelt. De bevinding is dan ook op zijn minst opvallend te noemen zeker in een tijd waarin de individualiteit van de zorggebruiker met zijn unieke zorgbehoefte onder de aandacht staat (Luker 1997). Een relevante vraag in dit verband is op welke wijze een begrip als 'cliëntgerichtheid' daadwerkelijk in de praktijk gestalte krijgt. Op grond van de hier gepresenteerde resultaten kan men zich afvragen in hoeverre de verplegende zich vooral laat leiden door de eigen werkzaamheden en agenda. Misschien is het wel realistischer om te spreken van een 'gerichtheid op de zorgverlener'.

Communicatie en de kwaliteit van zorg

Binnen de gezondheidszorg erkent men dat communicatie tussen zorgverlener en cliënt bijdraagt aan de kwaliteit van zorg. Daarom werd tijdens dit onderzoek nagegaan hoe cliënten en verplegenden oordeelden over kwaliteitsaspecten die te maken hebben met communicatie.
Bij het vaststellen van het cliëntenoordeel spelen verschillende methodologische problemen. Zo blijkt in onderzoek waarbij aan cliënten naar hun oordeel over de kwaliteit van zorg wordt gevraagd, dat veel cliënten zich positief tot zeer positief uitlaten, omdat zij dankbaar zijn voor de zorg die zij ontvangen en mede daardoor neigen tot sociaal wenselijke antwoorden (De Heer e.a. 1988, Van Campen 1992). Om dit probleem het hoofd te bieden

werd aansluiting gezocht bij bestaande methodologie in consumentenonderzoek (Parasuraman e.a. 1985; Babakus & Mangold 1992, Zastowny e.a. 1995, Sixma e.a. 1998). Hierin wordt het oordeel over kwaliteit (in dienstverlening) gezien als het resultaat van een vergelijking die een cliënt maakt tussen zijn verwachting en zijn waarneming. Het oordeel van de cliënt over de kwaliteit van zorg wordt dus beschouwd als de discrepantie tussen diens waarneming en de verwachting van de zorg. In navolging van de genoemde auteurs werd gevraagd welk belang cliënten en verplegenden aan bepaalde aspecten hechtten en vervolgens werd nagegaan hoe de ervaringen ten aanzien van die aspecten waren. Wanneer de ervaringsscore lager uitviel dan de belangscore dan werd dit als een indicatie voor minder goede kwaliteit beschouwd.

Uit de resultaten van dit deel van het onderzoek bleek dat zowel de zorgontvangers als de zorgverleners veel waarde hechten aan bejegeningsaspecten zoals een vriendelijke benadering en het serieus nemen van cliënten. De verschaffing van informatie, een aspect dat in veel kwaliteitsonderzoek vaak als essentieel naar voren komt (Groen e.a. 1990, Oudenampsen e.a. 1993), wordt door zowel de cliënten als door verplegenden in dit onderzoek van minder belang geacht. Dit is vermoedelijk toe te schrijven aan de samenstelling van de groep cliënten. Het betrof oudere mensen, in een redelijk stabiele zorgsituatie, die gedurende een langere periode zorg ontvingen. Het is voorstelbaar dat andere cliëntengroeperingen, zoals in het onderzoek waarnaar wordt verwezen, andere aspecten van belang achten.

De cliënten in dit onderzoek zijn over het algemeen zeer positief en kennen een hoog rapportcijfer toe in hun algemeen oordeel over de zorg. Bij enkele kwaliteitsindicatoren werd echter een negatieve discrepantie gevonden. Het gaat dan om de samenwerkingsrelatie tussen cliënt en zorgverlener. Cliënten vinden dat verplegenden te weinig aandacht hebben voor hun zelfstandigheid en zijn van oordeel dat de zorg er te weinig op gericht is om hen zoveel mogelijk zelf te laten doen. Bovendien blijkt dat de zorgverleners onvoldoende nagaan wat de cliënt van de zorgverlening vindt. Kwaliteitsbevorderende activiteiten zouden zich op deze aspecten moeten richten.

De effecten van een trainingsprogramma gericht op communicatie-vaardigheden

De laatste decennia zijn er tal van les- en bijscholingsprogramma's op het gebied van communicatieve vaardigheden ontwikkeld en toegepast. Een speciaal type training is de Video Interactie Begeleiding. Tijdens zo'n training kijkt een zorgverlener samen met een supervisor naar videobanden, waarop de betreffende zorgverlener in haar werksituatie te zien is (zie Appendix 1). In dit onderzoek heeft een evaluatie plaatsgevonden van een dergelijke training, volgens een niet-gerandomiseerd 'pretest-posttest controle groep design'.

Voor en na de interventie werden video-opnames van zorgverleningscontacten geobserveerd door twee onafhankelijke observatoren. Op basis van de observatiegegeven kon een verandering van het communicatieve gedrag in de experimentele groep worden vastgesteld. Na afloop van de training stelden zij meer open vragen en gaven meer informatie. Bovendien bleek de communicatie meer in harmonie te verlopen, omdat er minder onenigheid of kritiek werd geuit. Aan de hand van beoordelingsschalen bleken verplegenden die de training hebben gevolgd bovendien meer geïnteresseerd en betrokken te zijn, terwijl ze als minder betuttelend werden beoordeeld door de observatoren. Daarnaast bleek er ook een indirecte verandering in het communicatieve gedrag van cliënten van getrainde verpleegkundigen. De cliënten van de groep getrainde zorgverleners, uitten eveneens minder kritiek en onenigheid, ze gaven meer informatie en opperden vaker zelf een oplossing voor een probleem.

De veranderingen waren in beide settings niet gelijk. In het verzorgingshuis beperkten deze zich voornamelijk tot de houding van de zorgverlener. Op de beoordelingsschalen worden getrainde verplegenden als meer geïnteresseerd en vriendelijker beoordeeld. Deze ongelijkheid is wellicht het gevolg van verschillen die tussen beide settings bestaan. In het verzorgingshuis heeft men, ondanks dat iedere bewoner een eigen kamer/appartement heeft toch in sterkere mate te maken met een afdelingscultuur en een dagelijkse routine, die mede daardoor wordt bepaald. Dat geldt niet voor de thuiszorg, waar elke cliënt op zich zelf woont en wordt bezocht door een verplegende. Wellicht is werken onafhankelijk van team of organisatie gunstig om nieuw verworven gedrag in de praktijk toe te passen.

Tot slot dient opgemerkt te worden dat na de interventie ook in de controle groep enkele veranderingen in het communicatieve gedrag werden geconstateerd, hoewel deze vaak niet statistisch significant waren.

Vermoedelijk heeft deelname als controlegroep aan een project, waarin de aandacht gericht was op communicatie en waarbij ook video-opnames gemaakt werden, er toe bijgedragen dat bij deze deelnemers, zonder training, het communicatieve gedrag veranderde. Vanwege beperkingen in het onderzoeksdesign, zoals een relatief kleine onderzoeksgroep per setting en verschillende cliënten per meting, konden de gevonden effecten niet geheel aan de training worden toegeschreven. Om de effecten van de training nader vast te stellen is vervolgonderzoek dan ook aanbevolen.

Methodologische kanttekeningen

In dit onderzoek zijn verschillende databronnen gebruikt. Er zijn observatiegegevens verzameld, schriftelijke vragenlijsten afgenomen en korte gestructureerde interviews gehouden. Door de combinatie van deze methodieken is de communicatie van zorgverleners op systematische wijze in kaart gebracht. Via observaties is inzicht verkregen in de wijze waarop verplegenden in de praktijk communiceren; deze gegevens zijn gerelateerd aan factoren die mogelijk met de kwaliteit van de communicatie samenhangen; tevens is aandacht besteed aan het oordeel van verplegenden en cliënten over de kwaliteit van de communicatie. In de volgende paragrafen wordt de gevolgde methode kritisch beschouwd.

Het gebruik van video opnames

Een belangrijk deel van dit onderzoek is gebaseerd op de observatie van op video opgenomen zorgverleningscontacten. Daardoor kon aandacht worden besteed aan verbale en non-verbale communicatie. Bovendien heeft het gebruik van video-opnames als voordeel dat episodes op een band meerdere keren bekeken kunnen worden en door meerdere observatoren kunnen worden beoordeeld. Dit verhoogt de betrouwbaarheid van de observatiegegevens.

Hoewel het onderzoek heeft aangetoond dat het maken van opnames van de verplegende-cliënt interactie goed uitvoerbaar is, zijn er ook allerlei invloeden mogelijk waardoor de betrouwbaarheid en de validiteit van de onderzoeksgegevens in gedrang komen. Zo werd er in het onderzoek gebruik gemaakt van een bemande camera, om zo nodig vanuit een andere hoek te kunnen filmen, bijvoorbeeld om te voorkomen dat een cliënt ongekleed in beeld zou

komen. Zo'n bemande camera kan echter met zich meebrengen dat het materiaal minder objectief wordt verzameld. Met als doel de betrouwbaarheid te verhogen werden de opnames zo goed mogelijk gestandaardiseerd. Daartoe was bij aanvang van het onderzoek een uitgebreid draaiboek ontwikkeld, waarin een compleet protocol voor de filmer was vastgelegd. Onder andere was voorgeschreven vanuit welke positie de filmer moest filmen en het inzoomen van een scene werd ontraden.
Een ander ongewenst effect bij het maken van video-opnames is het optreden van de zogenaamde 'performance bias'. Daarmee wordt bedoeld dat deelnemers in het onderzoek zich mogelijk anders gaan gedragen dan normaal het geval is, omdat zij er zich van bewust zijn dat er opnames worden gemaakt. Waarschijnlijk is een dergelijke vertekening beperkt gebleven omdat vrijwel alle deelnemers bij een vraaggesprek achteraf aangaven dat het gefilmde contact goed overeenkwam met de situatie zoals die gebruikelijk was. Bovendien werd er per zorgverlener een dagdeel gefilmd. Bij verschillende onderzoeken in een vergelijkbare situatie wordt beschreven dat betrokkenen vrij snel hun normale gedrag hervatten en de videocamera vergeten omdat zij bezig zijn met andere activiteiten die hun aandacht vragen (Morse & McHutchion 1991, Bottorff 1994). Overigens geldt dat het aanwezig zijn van een observator, uitgerust met een notitieblok, zeker zo indringend is als de aanwezigheid van een persoon die vanuit een verdekte opstelling de opname-apparatuur bedient. In dit onderzoek lijken de voordelen van het maken van video-opnames op te wegen tegen de nadelen. Daar komt bij dat video-opnames voor langere tijd beschikbaar zijn. Wanneer de opnames eenmaal gemaakt zijn blijft het materiaal, uiteraard binnen de overeenkomsten die zijn gemaakt uit het oogpunt van privacy-bewaking, bruikbaar voor nadere analyses of secundaire onderzoeksvragen.

Selectiviteit in de gegevensverzameling

De verplegenden die deelnamen aan het onderzoek behoorden niet tot een willekeurige steekproef. Zij namen allen deel aan een project dat als doel had de communicatievaardigheden van zorgverleners in de verpleging te verbeteren. De verplegenden in de experimentele groep zouden als eerste aan de training deelnemen en degenen die behoorden tot de controle groep zouden de training op een later tijdstip volgen. Bij aanvang van het project was vastgesteld dat de deelnemers aan de training een basisopleiding op het gebied van verpleging of verzorging moesten hebben gevolgd. Bovendien

zouden potentiële kandidaten betrokken moeten zijn bij de directe cliëntenzorg. In het verzorgingshuis namen alle zorgverleners die aan deze criteria voldeden aan de training deel. In de thuiszorg deden vrijwel alle verplegenden uit de stedelijke regio die aan de eisen voldeden mee. De bij de training betrokken staffunctionarissen wezen de deelnemers aan de experimentele of controleconditie toe. Omdat uiteindelijk alle zorgverleners de training zouden volgen, vond toewijzing aan een bepaalde groep plaats op praktische gronden (geplande vakanties, zwangerschapsverlof, een beperkt aandeel per team of afdeling). Het was daarom niet te verwachten dat de beide groepen verschillen vertoonden ten aanzien van kenmerken die het trainingseffect kunnen beïnvloeden. In ieder geval kon met behulp van de gegevens van de vragenlijsten worden vastgesteld dat de groepen niet verschilden in demografische kenmerken, attitudes ten aanzien van ouderen, arbeidssatisfactie of de mate waarin zij zich zelf als cliëntgericht beschouwden.

Omdat de zorgverleners in deze studie zelf de cliënten vroegen om deel te nemen aan het onderzoek is het aannemelijk dat er enige selectie heeft plaatsgevonden in de cliëntengroep. Daarom is een aantal demografische variabelen vergeleken met gegevens van de landelijke populatie. Op grond daarvan is vastgesteld dat de twee groepen cliënten met betrekking tot hun woonsituatie, leeftijd en geslacht, als representatief kunnen worden beschouwd voor de populaties in de thuiszorg en in een verzorgingshuis (Delnoij e.a. 1996, CBS 1995). Het blijft echter voorstelbaar dat de zorgverleners juist die cliënten uitzochten waarvan ze verwachtten gemakkelijk toestemming te krijgen voor een video-opname of waar men goed mee kon opschieten. Hoewel deze veronderstelling zeker als reëel beschouwd kan worden zullen deze omstandigheden de experimentele en controle groep op gelijke wijze hebben beïnvloed.

De observatie methode

In het onderhavige onderzoek is een observatie-protocol ontwikkeld om de verbale en de non-verbale communicatie te observeren. Voor de observatie van verbale communicatie is gebruik gemaakt van een bestaand instrument, het RIAS (Roter 1989). Uit diverse onderzoeken naar arts-patiënt communicatie bleek dit systeem geschikt om op betrouwbare wijze de interactie binnen een hulpverleningssituatie te observeren. Ook in de onderhavige studie was de inter-beoordelaarsbetrouwbaarheid en de intra-

beoordelaarsbetrouwbaarheid voldoende hoog.
De observatie van het non-verbale gedrag was gebaseerd op een studie van Heintzman e.a. (1993). Er werden vijf non-verbale gedragingen geobserveerd die belangrijk werden geacht voor het aangaan en het in stand houden van een relatie met een cliënt. Ook hier waren de waarden voor de betrouwbaarheid van de observaties voldoende hoog.
De validiteit van de gegevens is moeilijker vast te stellen. Met het RIAS bleek het mogelijk om diverse communicatieve gedragingen, die relevant zijn voor het verpleegproces, te onderscheiden. Op grond daarvan kan geconcludeerd worden dat het domein van relevante gedragingen adequaat gedekt werd. Bovendien bleek het RIAS voldoende gevoelig te zijn voor verschillen in communicatie per setting en per uitgevoerde taak en hingen de observaties die werden gedaan op een logische wijze met elkaar samen. Dat wil zeggen dat zorgcontacten waarin het accent lag op verpleegtechnische zorg ook gekenmerkt werden door verbale en non-verbale communicatie die instrumenteel van karakter was, terwijl contacten waarin psycho-sociale begeleiding aan de orde kwam juist gekenmerkt werden door een typisch patroon van verbale uitingen en affectief nonverbaal gedrag. Deze bevindingen suggereren convergente validiteit van de gebruikte instrumenten. Een groter probleem is echter de begripsvaliditeit. Met name non-verbaal gedrag is meer complex dan in deze studie werd verondersteld. Zo zijn bepaalde gedragingen multi-interpreteerbaar. Glimlachen kan inderdaad vriendelijkheid overbrengen, maar iemand kan ook arrogant of nerveus glimlachen. Zich naar iemand toewenden of iemand aanraken kan aangeven dat iemand aandacht heeft of bezorgd is, maar een cliënt kan deze gedragingen ook als opdringerig of irritant ervaren. Ook geldt dat bepaalde combinaties van gedragingen verschillende betekenis kunnen hebben. Zowel iemand aankijken als zich toewenden naar iemand geven aan dat er aandacht is voor de ander, maar tezamen kunnen deze gedragingen ook duiden op dominantie (Heintzman e.a. 1993). Wanneer men iemand aankijkt terwijl men luistert communiceert men geïnteresseerdheid, terwijl aankijken als men spreekt een signaal is dat men zijn spreekbeurt gaat beëindigen en dat de ander aan de beurt is (Eibl-Eibesfeldt 1972, 1971, Von Cranach 1971, Kalma 1992). Om non-verbale gedragingen op een juist wijze te interpreteren is het van belang op de context van de uitingen te letten. Wil men non-verbaal gedrag op eenduidige wijze kunnen observeren, dan zou men bij de opnames over meerdere camera's moeten beschikken zodat men close-ups van

gezichten kan maken of uit verschillende hoeken kan filmen. Een dergelijke dataverzameling past echter niet in de dagelijkse verplegingspraktijk en is voorbehouden aan meer experimentele omstandigheden. Aangezien uit de analyses van het verbale gedrag en van de globale affectmaten naar voren kwam dat er vrijwel geen onenigheid of vijandigheid heerste tijdens de zorgverleningscontacten werden gedragingen als aankijken, glimlachen, hoofdknikken, toewenden en aanraken als positief beschouwd.

Bij de observatie van het verbale gedrag kwamen kwesties van multi-interpreteerbaarheid veel minder aan de orde. Verbale uitingen laten zich gemakkelijker omschrijven en ten behoeve van de observatie was een uitgebreide handleiding ter beschikking, met specifieke instructies over de codering van ambigu gedrag. Toch kunnen op grond van de onderzoeks-ervaringen enige suggesties worden gedaan voor de specificatie van verbale categorieën, zodat de gegevens op meer exacte wijze geobserveerd kunnen worden. De verbale categorie sociale conversatie was bijvoorbeeld erg breed en omvatte alle uitingen die te maken hadden met begroeting, persoonlijke opmerkingen en het praten over het weer, hobby's, de televisie enz. Omdat deze sociale conversatie zo verweven is met de verpleging en verzorging van cliënten is het wellicht beter om een onderscheid te maken tussen oppervlakkig gebabbel, vrijwel toepasbaar in iedere situatie, en conversatie die nauw is afgestemd op de belangstellingswereld van de persoon waarmee men praat.

Een andere klasse die verfijning behoeft is de categorie 'oriënterende en instruerende opmerkingen'. Deze omvat alle uitlatingen die gericht zijn op wat er gebeurt of gaat gebeuren. In veel gevallen geven dit soort uitingen richting aan het handelen. Ze worden echter ook gebruikt om het gedrag van de zorgverlener te begeleiden ("ik maak de verbandspullen vast klaar" of "ik schrijf even op wat u zegt"). Door het benoemen van wat men gaat doen wordt de cliënt betrokken bij het contact en weet wat hem te wachten staat. Dit zou onzekerheid bij de cliënt reduceren (Dekker & Biemans 1994). Vanwege deze verschillende functies valt het aan te bevelen een onderscheid te maken in opmerkingen die het contact sturen en opmerkingen die de handelingen van de zorgverlener benoemen en begeleiden.

In dit onderzoek is met name gebruik gemaakt van frequentiegegevens. Daarmee wordt informatie verkregen over welke gedragscategorieën voorkomen binnen de verplegende-cliënt interactie en hoe vaak deze voorkomen. Met frequenties kan echter geen inzicht worden verkregen in de

wijze waarop gecommuniceerd wordt en of het gedrag succesvol is (Hulsman 1998). Informatie over hoe vaak een verplegende informatie geeft zegt immers niets over hoe die informatie wordt gepresenteerd. Het is ook interessant om te weten of de informatie op het juiste moment wordt gegeven en of deze duidelijk is en begrijpelijk voor de cliënt. Frequentiegegevens leveren geen informatie over de context waarin gecommuniceerd wordt. Zorgverleners kunnen bijvoorbeeld hun cliënt net op het verkeerde moment aanraken of babbelen over een televisieprogramma, terwijl de cliënt al twee keer een probleem met zijn dieet aan de orde heeft gesteld. Op grond van frequentiegegevens zijn conclusies over het interactieproces slechts beperkt mogelijk. Hoewel naast de verbale en non-verbale uitingen ook aan de hand van de globale affectmaten enige informatie is verkregen over de atmosfeer tijdens de zorgverleningscontacten, kan met de verzamelde gegevens niet worden nagegaan hoe cliënten beïnvloed worden door de verplegenden en vice versa. Vragen zoals 'leiden open vragen er toe dat de cliënt zijn verhaal beter vertelt?'of' 'leidt non-verbaal gedag van de zorgverlener er toe dat de cliënt zijn gevoelens beter uit?' kunnen niet worden beantwoord. Daarvoor dienen onderzoeksmethoden te worden ontwikkeld waarmee aandacht wordt besteed aan sequenties van gedrag.

Het oordeel over de kwaliteit van zorg

Cliënten beschouwen de wijze waarop verplegenden met hen communiceren als een belangrijk aspect van de kwaliteit van zorg. Daarom is nagegaan hoe tevreden cliënten waren met verschillende kwaliteitsaspecten. Omdat er bij het meten van het cliëntenoordeel over de kwaliteit van zorg allerlei methodologische problemen spelen, werd aangesloten bij een wat nieuwere methodiek op het terrein van satisfactie-onderzoek. We vroegen aan cliënten welke aspecten zij belangrijk vonden en wat zij vervolgens met betrekking tot deze aspecten hadden ervaren. In vergelijking met de gangbare benadering heeft dit gedetailleerde informatie opgeleverd over aspecten die deze specifieke cliëntengroep belangrijk vindt en waar een eventuele kwaliteitsverbetering zich op zou moeten richten. Niettemin zijn er ook een aantal kanttekeningen bij de gevolgde werkwijze te plaatsen. De wijze waarop kwaliteit van zorg geoperationaliseerd was leidde ertoe dat de ondervraagde een onderscheid moest maken tussen het belang dat men hechtte en wat men met betrekking tot dat aspect in een concreet zorgverleningscontact had ervaren. Voor een aantal cliënten binnen de groep die ondervraagd werd,

bleek dit onderscheid te complex te zijn, zodat zij op beide type vragen op dezelfde wijze reageerden. Ondanks het gegeven dat daar bij de ontwikkeling van de vragenlijst op was geanticipeerd door per type vraag verschillende en zo specifiek mogelijke formuleringen te kiezen, kon dit probleem niet geheel worden ondervangen en in toekomstig onderzoek dient aan dit onderwerp nader aandacht te worden besteed.
Een ander punt ter beschouwing is dat de meeste cliënten in het onderzoek tevreden tot zeer tevreden waren over de zorgverlening. Dit ziet men vaak in tevredenheidsonderzoek in de gezondheidszorg. Bovendien blijkt dat vooral oudere cliënten over het algemeen meer tevreden zijn over de aan hen verleende zorg dan jongeren (Kistemaker & Visser 1995). Daar komt nog bij dat de deelnemende zorgverleners zelf aan cliënten om hun deelname aan het onderzoek hebben gevraagd. Deze procedure heeft de kans op sociaal wenselijke antwoorden door cliënten waarschijnlijk doen toenemen. Dit alles leidde tot weinig variatie in de scores, waardoor de data niet geschikt waren om te gebruiken in een analyse waarmee kon worden nagegaan of de tevredenheid van de cliënten na de training van de verplegenden was toegenomen.

Aanbevelingen voor verder onderzoek

Samenvattend kunnen op grond van bovenstaande opmerkingen de volgende aanbevelingen worden gedaan voor toekomstig onderzoek. Ten eerste zou het bestaand onderzoekinstrumentarium verfijnd kunnen worden. Er zou een meer specifieke instructie ontwikkeld kunnen worden met omschreven voorbeelden, die behulpzaam kunnen zijn bij de codering van non-verbaal gedrag. Daarbij moet aandacht worden besteed aan de context waarin de non-verbale communicatie plaatsvindt.
Bovendien is enige differentiatie van de verbale categorieën gewenst met als doel de validiteit van de observatiegegevens te verbeteren. Overigens dient men er bij dergelijke aanpassingen altijd rekening mee te houden dat er een soort van optimum bestaat. Nadere specificatie van de instrumenten mag dan wel leiden tot meer validiteit maar kan negatieve gevolgen hebben voor de betrouwbaarheid van een instrument of de praktische bruikbaarheid.
Voorts is het aan te bevelen om de effecten van verbale en non-verbale communicatie op beide participanten in het interactieproces te onderzoeken. Een methode daarvoor is sequentiële analyse, ontwikkeld door Sackett (1977). Met dit type analyse kan worden onderzocht hoe interactiepartners op

elkaar reageren.
Tot slot zou in toekomstig onderzoek aandacht dienen te worden besteed aan de ontwikkeling van meetinstrumenten waarmee inzicht wordt verkregen in het oordeel over de kwaliteit van zorg door oudere cliënten. Met name in de zorg aan ouderen dienen methodes verder te gaan dan vragen naar wat men belangrijk vindt en hoe men bepaalde kwaliteitsaspecten waarneemt. Om na te gaan of zorg op de juiste wijze is afgestemd op de behoefte van de oudere cliënt en om inzicht te krijgen in hoe men over de interactie oordeelt zou het wenselijk zijn om samen met een cliënt naar video-opnames van zorgverlening te kijken. Met gebruik van de juiste kwalitatieve technieken kan zo achterhaald worden wat oudere cliënten vinden van de benadering van de zorgverlener.

Theoretische beschouwing

In deze studie is een instrument ontwikkeld dat bruikbaar is voor systematische observatie van verplegende-cliënt communicatie. Daarbij is gebruik gemaakt van de kennis en theorievorming binnen de verpleging en van kennis van andere beroepen in de gezondheidszorg, met name op het gebied van arts-patiënt communicatie. Met behulp van dit observatie-instrumentarium zijn we er in geslaagd op een systematische wijze de communicatie tijdens de verpleging van cliënten te beschrijven. Echter het 'lenen' van meetinstrumenten die oorspronkelijk bedoeld zijn om de interactie tussen arts en patiënt te beschrijven heeft beperkingen voor een studie in het beroepsgebied van de verpleging. Immers het verplegen van mensen verschilt nog al van medische zorg. Communicatie tijdens een consult van een arts wordt gekenmerkt door het zoeken naar een diagnose en het oplossen van problemen. Hoewel tijdens het bezoek aan een arts de sociaal-emotionele communicatie van belang wordt geacht, heeft deze toch een min of meer ondergeschikte rol. De patiënt wordt bijvoorbeeld op zijn gemak gesteld om het diagnostisch proces of de oplossing van een probleem te faciliteren. In het verpleegproces, daarentegen, is zorg essentieel (Benner 1984) en binnen een zorgende relatie zijn probleemoplossing en het bieden van sociaal-emotionele ondersteuning, in de breedste zin, zeer met elkaar verweven. Los van de behoefte aan aandacht en begrip heeft zeker de oudere cliënt behoefte aan een relatie waarbinnen ruimte is voor het delen van ervaringen, gezelligheid en affectie. Binnen een dergelijke relatie heeft de sociale conversatie dus een heel andere rol.

Hoewel we een verplegingswetenschappelijk model hebben gebruikt (King 1981) om er zeker van te zijn dat de specificiteit van de verplegende-cliënt relatie goed tot uiting zou komen, is gaandeweg het onderzoek gebleken dat het model toch niet geheel toereikend is. Ofschoon communicatie het centrale thema is in het theoretisch model van King, heeft het model ook heel duidelijk een probleemgericht oriëntatie. Volgens King is het doel van verplegen mensen te leren omgaan of met of zich aan te passen aan gezondheid-gerelateerde problemen. Zij beschouwt communicatie vooral als "een manier om in de interactie tussen verplegende en cliënt doelen te stellen, middelen te onderzoeken en overeenstemming te bereiken over middelen om de gestelde doelen te behalen" (King 1981). Eigenlijk wordt de aard van een vertrouwensrelatie tussen verplegende en cliënt niet ten volle belicht door King. Omdat de wijze waarop de onderzoeker naar het verzamelde materiaal kijkt grotendeels wordt bepaald door het gebruikte observatie-instrument en de theoretische noties die daaraan ten grondslag liggen (Bensing 1991), lijkt de conclusie gerechtvaardigd dat de wijze waarop sociaal-emotionele communicatie is gemeten niet geheel recht doet aan de realiteit van de dagelijkse praktijk. Alhoewel dit onderzoek zeker een raamwerk biedt om inzicht te krijgen in verplegende-cliënt communicatie, dient in de toekomst de rol van de sociaal-emotionele communicatie nader geconceptualiseerd te worden. Dit geldt vooral voor de sociale conversatie. Deze blijkt diverse aspecten te omvatten, zoals afleiden, animeren, tijdverdrijf en praten over wederzijdse interesses. Al deze aspecten kunnen een belangrijke rol vervullen in de relatie met de cliënt. Het verdient echter aanbeveling te bestuderen wanneer dit type gedrag gewenst is, hoe het wordt gebruikt, en wat de cliënt heeft aan dit type conversatie. We hebben al eerder gezien dat zorgverleners over het algemeen wel tijd vinden voor een praatje, terwijl de wat meer serieuze zaken onder tijdsdruk niet aan bod komen. We zouden een beter begrip van de betekenis van verschillende vormen van sociale conversatie kunnen krijgen door deze te bestuderen in relatie met de context waarin deze voorkomt. Wellicht komt daaruit naar voren dat sociale conversatie beschouwd kan worden als een wezenlijk onderdeel van het takenpakket van de verplegende.

Tot slot lijkt het zinvol om zicht te krijgen op wat nu eigenlijk als adequate communicatie beschouwd kan worden in de verpleging van oudere mensen. Verplegingswetenschappelijke modellen en kennis van verschillende vakgebieden zoals psychologie, sociologie en geneeskunde vormen

doorgaans de basis voor het verpleegkundig handelen. Principes voor het verpleegkundig handelen dienen echter kritisch beschouwd te worden wanneer men deze van toepassing acht op specifieke cliëntengroeperingen. Zo is het tegenwoordig 'in' om te praten over cliëntenparticipatie en een 'samenwerkingsrelatie' tussen verplegende en cliënt (Cahill 1997). De resultaten in onze studie wijzen er eveneens op dat kwaliteitsbevorderende activiteiten zich zouden moeten richten op de samenwerkingsrelatie tussen verplegende en cliënt. Wanneer men echter vanuit het perspectief van een cliënt naar cliëntenparticipatie kijkt, dan kan dit een ander licht werpen op 'adequate communicatie'. De mening van de cliënten ten aanzien van kwaliteit kan namelijk verschillen van de mening van zorgverleners. Lang niet alle cliënten willen actief betrokken worden bij hun zorg en de beslissingen daaromtrent. Met name binnen de groep van ouderen bestaan er veel cliënten die de verantwoordelijkheid juist liever bij de professionele zorgverlener laten en bij voorkeur een passieve rol innemen (Luker 1997, Coulter 1997). Het ontdekken van deze verschillende behoeften vraagt een cliëntgerichte communicatiestijl, met speciale aandacht voor de individuele behoefte van elke cliënt, waarbij cliënten in staat worden gesteld om hun behoeften op dit gebied te uiten. Wanneer men zich wil richten op adequate communicatie is het dus van belang om richtlijnen te formuleren en methodes te ontwikkelen waarmee men de behoefte van een cliënt op juiste wijze kan inschatten. In dergelijk onderzoek kan video een belangrijk hulpmiddel zijn. Samen met cliënten kan naar videomateriaal worden gekeken om zo een gedetailleerd inzicht te krijgen welke behoefte, voorkeuren en ervaringen men heeft. Dit type gegevens kan als vertrekpunt dienen bij theorie-ontwikkeling en de ontwikkeling van bijscholingsprogramma's voor verplegenden.

Implicaties voor de praktijk

De resultaten van dit onderzoek hebben implicaties voor het zorgbeleid, de opleiding en de praktijk van verplegenden. Zo kan geconcludeerd worden dat verplegenden zich zouden moeten ontwikkelen naar een meer cliëntgerichte benaderingswijze. Uit de resultaten is bijvoorbeeld gebleken, dat de wijze waarop verplegenden communiceren vrijwel niet samenhangt met cliëntenkenmerken. Verplegenden zouden er in hun basisopleiding en ook in bij- en nascholing op getraind moeten worden hoe zij zich kunnen richten op het individu en hoe zij kunnen aansluiten bij de persoonlijke behoeften van cliënten.

Een andere bevinding is dat zorgverleners in de verpleging veel aandacht besteden aan sociaal-emotionele communicatie. Dit is een belangrijk aspect in de zorgverlening aan ouderen, die door hun afnemend sociaal netwerk vaak op een zorgverlener zijn aangewezen voor sociaal contact. Het blijkt ook uit de onderzoeksresultaten dat ouderen behoefte hebben aan vriendelijkheid, gezelligheid en persoonlijke belangstelling. Door middel van een gemoedelijk gesprek, door aandacht te schenken en te praten over onderwerpen die aansluiten bij de belangstellingswereld van de oudere cliënt kunnen verplegenden aan deze behoeften tegemoet komen en bijdragen aan de kwaliteit van leven van oudere cliënten. Het belang van dit type communicatie dient, juist in een tijd waar de nadruk ligt op efficiëntie en doelmatigheid, blijvend de aandacht te krijgen in de opleiding, bijscholing en werkbegeleiding van zorgverleners.
Het onderzoek naar factoren die samenhangen met de kwaliteit van de communicatie liet vooral zien dat de ervaren tijdsdruk in de zorgverlening een punt van aandacht is. Wanneer verplegenden onder tijdsdruk moeten werken neigen zij er toe voorbij te gaan aan onderwerpen die te maken hebben met problemen van het dagelijks leven of de gevoelswereld van de oudere cliënt. Onderwerpen die zeker voor de ouder wordende mens van groot belang zijn, maar die ze zeker niet zo gemakkelijk ter sprake zullen brengen gezien het verschil in generatie en het idee dat de zuster het al druk genoeg heeft. Een van de mogelijke maatregelen is om de verplegenden minder te belasten door meer personeel in te zetten. Er is echter in verschillende studies aangetoond dat dit niet automatisch tot betere communicatie en hogere kwaliteit van zorg leidt (Adams & Bond 1997, Wilkinson 1991). Het lijkt van even groot belang om via training en bijscholing aan verplegenden te leren hoe zij op efficiënte wijze met hun tijd om kunnen gaan. De tijd die wordt besteed aan de gewone dagelijkse conversatie kan deels aan andere onderwerpen worden gewijd, vooral wanneer men bedenkt dat deze sociale conversatie vaak de helft van de communicatieduur tijdens een contact in beslag neemt. Zoals al eerder is aangegeven is het raadzaam om nadere studie te verrichten naar de rol en de plaats van de sociale conversatie in het zorgverleningscontact. Binnen deze gespreksvorm valt een brede range van verbale uitingen. Een zorgverlener kan gezellig babbelen om een cliënt af te leiden tijdens een pijnlijke behandeling, men kan ervaringen uitwisselen, er kan gepraat worden als tijdverdrijf of om een cliënt op te vrolijken. Soms kan een verplegende bij tijdsdruk zelfs haar toevlucht nemen tot een gezellig praatje om te voorkomen

dat een cliënt een onderwerp aan de orde stelt dat teveel tijd en aandacht vraagt. Er zijn allerlei voorbeelden van situaties waarin elke vorm van sociale conversatie gerechtvaardigd is, echter wanneer men als professional op een adequate wijze wil communiceren is het niet genoeg om uit gewoonte maar wat weg te babbelen. Wil een verplegende op juiste wijze aansluiten bij de behoefte van de cliënt dan zal zij zich regelmatig moeten afvragen: wat wil de cliënt in dit contact, wat is een goed moment om een bepaald onderwerp aan de orde te stellen, aan wiens behoefte wordt voldaan (van de cliënt of van de zorgverlener) bij het voeren van sociale conversatie. Professionele communicatie zou moeten uitstijgen boven de dagelijkse routine. Immers daarvoor kan een cliënt in veel gevallen ook bij de buurvrouw terecht.

Samengevat: In opleiding en bijscholing op het gebied van communicatievaardigheden dienen verplegenden te leren sensitief te zijn voor de individuele behoefte van de cliënt en hoe men daar het best op aan kan sluiten. Trainers moeten er rekening mee houden dat er niet zoiets bestaat als een gouden standaard van succesvol gedrag in de verpleging. Immers de wijze waarop men communiceert zal altijd afhankelijk zijn van de cliënt, de zorgverlener en de situatie waarin zij zich bevinden. Het is daarom aan te bevelen om verplegenden meerdere repertoires aan te reiken en een bewustzijn voor situaties waarin een bepaald repertoire succesvol kan zijn. Misschien moeten professionele zorgverleners, die om kwaliteitszorg te bieden afhankelijk zijn van hun communicatieve vaardigheden, wel beschouwd worden als acteurs. Men kan ze daarom ook als zodanig trainen, namelijk door hen te leren welke gedragsrepertoires horen bij de rol die men op dat moment het best kan spelen: niet te gemaakt, niet dramatiseren, zo natuurlijk mogelijk, het gedrag onder controle, maar toch flexibel en altijd afgestemd op de toeschouwers.

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Appendix 1

Training based on video interaction analysis

Teaching nurses communication skills, not only concerns cognitive learning but also involves their every day professional behaviour. Therefore, simply giving nurses theoretical concepts and protocols to follow is not enough to change their patterns of interaction. Educational programmes should pay attention to both verbal and nonverbal communication in realistic situations. For this reason, the use of video is often recommended in training health care professionals. The training programme which is evaluated in chapter 7 was based on Video Interaction Analysis. This appendix will describe several aspects of the training. These concern the backgrounds, the aim, the instructional design, educational methods, instructors and participants.

Background to Video Interaction Analysis

Video Interaction Analysis has a history in youth health care (Kemper & Janssens 1997). In the eighties, the video was applied in supervision of multi-problem families. Basic family situations were video recorded at home and discussed with the family members. The method was called 'Video Home Training', and the supervisor was called the 'home trainer'. The method appeared to be a success and in using it, residential care for the children was prevented. One important aspect of the video home training was that normally occurring communication patterns were video taped. Parents and children looked together with their supervisor ('the home trainer') at video taped interaction within their own family. The home trainer pointed out to parents successful aspects in their own communication, and taught them to be their own role model (Van Helmond et al. 1996). In his supervising role the home trainer in turn was supervised in the same way, using the video tapes of his own performance.
Now the scope of the method has been broadened and in addition to the use of video in therapeutic relations, it has also been adopted in training communication skills of other health care professionals.
Video Interaction Analysis is founded and developed in practice. In developing a theoretical framework to elucidate the active elements, theoretical roots were located in different disciplines, such as human ethology, social learning theory and developmental psychology (Schepers 1991, Van Helmond et al. 1996). Within each of these scientific domains, theoretical principles can be established, which function as the basis for practising Video Interaction Analysis.
As in Video Home Training, Video Interaction Analysis is based on the analysis

of the every-day behaviour of the professional nurse during encounters with patients. A detailed analysis of videotaped real life situations is used to allow them to reflect on their own behaviour, to detect successful communication and to learn how to develop this behaviour. Video has the advantage that moments of interest can be observed repeatedly, while other parts can pass very quickly.

Aims of the training

The general aims of the training were to improve nurses' communication skills such that they pay attention to patient needs, facilitate selfcare in elderly people and support them in finding their own solutions to their problems, instead of giving the usual solutions from the professional vantage point (van Etten 1997). In particular, training focused on:

- development of nurses' awareness of elderly people's physical, social and emotional needs.
- verbal communication techniques, such as 'paraphrasing', 'structuring', 'exploring patients' ideas and opinion'.
- enlargement of patients' feelings of competence by supporting them to find their own answers. This requires that nurses show verbal attentiveness and help patients to explore the topic by means of open questions.
- nonverbal behaviours, such as 'looking at the patient while listening', encouraging the patients to talk by 'giving back-channels' and 'leaning forward' as a sign of attention.

Instructors

The programme is taught by two instructors. These instructors were nursing professionals, and had a management and supervisory function in the care institution. Prior to the project the instructors were prepared for their special task by a professional who had special expertise in Video Interaction Analysis.

Participants

The training was directed at 47 nurses and auxiliary nurses. The experimental group included 24 nurses who had participated in the training and the control group of 23 nurses who intended to participate later on. The nurses worked in two different settings: in a home care organisation and in a home for the elderly. All nurses had completed a basic nursing education and were involved in direct patient care activities.

Programme of the training

The programme endured about 14 months and consisted of four parts: an introductory two day course, six small group sessions, an evaluation meeting and a follow-up meeting.

The introductory course

In each setting an introductory course was given, in which 12 trainees participated. Four topics were addressed:

- Theoretical introduction to communication in nursing
- Theoretical introduction to the ageing adult: knowledge about physiological, psychological and socio-economic changes in the elderly and the collective history of elderly people
- Introduction to the method of Video Interaction Analysis, in which information was provided about its aims and content.
- Practising communication during role-play sessions of nurse patient interactions. In these role plays, actors took the role of a patient.

After the introduction, the trainees were assigned to small groups of two and participated in six successive small group sessions.

Small group sessions.

The main part of the programme consisted of small group sessions, attended by two trainees and the trainer, in which the Video Interaction Analysis was central. There were six small group meetings, each with an interval of minimal six weeks. Each cycle (interval and session) consists of:

. practice during daily work;
. recording a nursing encounter on video;
. individual preparation for the group session by analysing the video taped encounter;
. discussing the video recordings under supervision of the trainer;
. personal goal setting.

This cycle was repeated six times.

Three learning processes were available during a session:

. natural learning, from the nurse's own review of performance on the videotape;
. social learning from peer comments;
. trainer opinions, comments and encouragements.

Appendix 1

In general the six small group meetings had the following structure.
Session 1 and 2
Attention was mainly paid to basic interaction principles like:

- following verbal or nonverbal initiatives of the communication partner, like questions or making eye contact or nudging;
- confirming the others' message, by hm-ing, saying yes or nodding the head;
- agreeing and explaining what was going on during the interaction;
- guiding the interaction and ensuring turns were taken.

Session 3 and 4
Attention was paid to communication techniques, such as

- open-(ended) questions;
- rephrasing;
- structuring;
- exploring;
- mirroring nonverbal behaviour.

Session 5 and 6
During the last two meetings professional conversation and counselling came up for discussion. Special attention was paid to enlargement of patients feelings of competence and supporting them to find their own solutions.

Evaluation meeting
Following the six small group sessions there was a plenary session with the twelve trainees from the introductory course. During this meeting the course was evaluated on structure, process and personal results.

Follow-up meeting
About six months after the last small group sessions, every trainee video taped another nursing encounter. Together with their small group partner they discussed the recording on the basis of the goals, set during the training. If required, they could ask the trainer for supervision.

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Appendix 2

Video Observation Form
Based on Roter's Interaction Analysis System (Roter, 1987)
adapted by Caris-Verhallen et al. (1997)

Date : . . . .

No. Nurse : . . . .

No. Patient : . . . .

No. Tape : . . . .

Counter : . . . .

Observed time : . . . .

Observer : . . . .

Remarks : . . . .

. . . .

. . . .

. . . .

. . . .

Type of nursing care

1 . . . .

2 . . . .

3 . . . .

Appendix 2

Overview verbal communication categories

abbreviations	coding	examples
pers	personal remarks, social conversation	- Greetings and initiating contact with friendly statements: "hello", "I am Annie", How is it going"? - Friendly gestures and greetings in return: "fine, how about you?" - Conversation about weather, television pro-grammes and any non-nursing topic, unrelated to health, social context or lifestyle topics
joke	tells jokes, laughs	- Making jokes, trying to amuse or entertain the other person - Laughter in response to jokes
cmpl	gives compliment, shows approval	- Compliments directed at the other person present: "that is fine", "good", "you're looking good today". - Compliments directed at another person not involved: "nurse Helen is so thoughtful". - Giving praise or showing the other apreciation: "I really appreciate what you're doing", "that's a good idea".
agre	shows agreement or understanding	- Signs of agreement or understanding: "I see", "I know". - Back channel responses like "hmmm". - Apologies that do not indicate particular concerns for other's feelings: "I'm sorry I'm late","Pardon me".
para	paraphrase	- Utterances by which the speaker reflects back information, for purpose of checking accuracy of information. Patient: "my legs have been itching since Monday" [inur]. Nurse: "Oh, since Monday"[para].

abbreviations	coding	examples
empa	empathy, legitimizes	- Statements which interpret, recognize or name the other's emotional state: "you must be worried", "I understand how you must be feeling". - Statements that indicate that the other's reactions are understandable: "it's natural to be concerned about that".
conc	shows concern or worry	- A statement indicating that a condition or an event is distressing or deserves special attention: "This might hurt", "Does this hurt too much?" - Negative emotional descriptions: "I've felt lousy". - Self-criticism and doubt about what to do: I'm so listless, I don't know what to do".
reas	reassures, encourages or shows optimism	- Statements indicating optimism, encouragement or relief: "this won't hurt at all". - Positive emotional descriptions: "I'm feeling better than ever".
part	shows partnership and support	- Statements which assure the other person of support and convey a sense of partnership or help: "Let's try that, maybe we can find a solution".
disa	shows disapproval, shows criticism	- Any indication of disapproval, criticism, rejection, disbelief and sarcasm: "that's impossible". - Protests and defensive statements: "I thought you said I wouldn't need any shots"
area	asks for reassurance	- Questions or concern that convey the needs or desire to be reassured: "Will this itching ever stop?"

Appendix 2

abbreviations	coding	examples
orie	gives orientation, gives instructions transition words	- Statements telling the other what is about to happen: "I have two questions". - Instructions relating to nursing care: would you please go to the bathroom now". - Statements that indicate movement to another topic of discussion: "oh well", "let's see".
bids	bids for clarification	- Statements requesting for repetition of the other's previous statement, because this was not clearly heard or because of perceptual difficulties: "what did you say?", "I didn't understand what you said".
aund	asks for understanding	Checks to see if information has been followed or understood: "Do you understand?", "are you clear on this?"
aopi	asking for opinion	- Questions that ask for the patient's opinion, point of view or perspective relating to nursing care: "what do you think would help?"
gnur	closed-ended questions on nursing and health topics	- Direct questions that ask for specific information on nursing and health. An answer of one or two words is usually sufficient: "do you take these pills in the morning or at lunch?"
onur	open-ended questions on nursing and health topics	- Open-ended questions on nursing and health topics, not asking for specific answers but probing intents: "how are you doing with these elastic stockings?"
inur	information nursing and health	- Statements characterized by content on nursing and health topics, presented in a neutral manner, and not explicitly direct others behaviour: "your legs are less swollen now".

abbreviations	coding	examples
		- A yes or no answer giving new information in response to a question is also coded in this category. Patient: "do these elastic stockings help with swollen legs?" [gnur] Nurse: "yes" [inur].
cnur	counsels on topics related to nursing and health	- Statement which suggest or imply resolution or action to be taken by the other person, concerning nursing and health topics: I'd like you to ring if the pain does not decrease
glif	closed-ended questions on life-style, social context and feelings	- Direct questions that ask for specific information on lifestyle, social context and feelings An answer of one or two words is usually sufficient: "who's living with you now?", "are you afraid of being alone?"
olif	open-ended questions on life-style, social context and feelings	- Open-ended questions on lifestyle, social context and feelings, not asking for specific answers but probing intents: "how do you spend your days?", what are you most worried about?"
ilif	information life-style, social context and feelings	- Statements characterized by content on life-style, social context and feelings, presented in a neutral manner, and not explicitly direct other's behaviour: "lots of coffee may make you irritable" - A yes or no answer giving new information in response to a question is also coded in this category. Nurse: "is your family supportive?" [glif] Patient: "yes" [ilif].
clif	counsels or direct behaviour on life-style social context and feelings:	- Statement which suggest or imply resolution or action to be taken by the other person, concerning lifestyle, social context and feelings: "it is important to watch how much you're drinking when you're depressed".

abbreviations	coding	examples
amed	requests for medication/treatment/ services	- patient-initiated requests for treatment, tests, services or materials: "Can you bring me new bandages next week?"
other	not categorizable or unintelligible utterances	- Utterances that can not be heard or categorized are scored in this category - Talk about the video recording is also coded in this category

Nonverbal behaviour

Patient-directed-gaze:	The nurse is looking at the face of the patient.
Nods:	Nodding once or more as a sign of attentiveness in conversation or as reinforcing the spoken word.
Smiling:	Facial utterance of friendliness. Laughing out loud on the other hand in response to a joke is not considered as nonverbal communication, it is coded in the verbal part of the observation scheme.
Leaning forward:	A posture which involves bending towards or sitting closer to the patient, when this is not necessary to carry out the nursing tasks. This position conveys involvement and a concentrated focus on the interaction partner
Affective touch:	Relatively spontaneous and affective touch, which is not necessary for the completion of a task. An example is a nurse who puts an arm around the shoulder of a distressed patient.
Instrumental touch:	Deliberate physical contact, which is necessary in performing the nursing task. An example is touch while dressing a wound.

Appendix 2

Global affect ratings

Nurse	low					high
irritation/anger	1	2	3	4	5	6
nervousness/anxiety	1	2	3	4	5	6
assertiveness/dominance	1	2	3	4	5	6
interest/concern	1	2	3	4	5	6
warmth/friendliness	1	2	3	4	5	6
patronizing/unequal attitude	1	2	3	4	5	6
involvement	1	2	3	4	5	6

Patient	low					high
irritation/anger	1	2	3	4	5	6
nervousness/anxiety	1	2	3	4	5	6
assertiveness/dominance	1	2	3	4	5	6
interest/concern	1	2	3	4	5	6
warmth/friendliness	1	2	3	4	5	6

Overview different types of nursing care
(based on Kerkstra & Vorst-Thijssen, 1991)

1.	Hygienic care:	Bathing the patient, help with washing and dressing, care for hair, nails and feet, and help with the lavatory. Making the bed; cleaning the bathroom; preparing food and drinks
2.	Technical nursing care:	Giving injections, administration of medicines, dressing wounds, catheterization, care of pressure sores and stoma care, recording patient information .
3.	Psycho social care and health education	Support in psychosocial problems, support for informal care givers, support in carrying out therapy, information to patient and relatives regarding therapy, adaptation of the house and the possibility of selfcare.

Appendix 3

Questionnaire for nurses working in elderly care

This section provides an English translation of the questionnaire used in the research presented in chapter 5. The questionnaire was in written administered to the participating nurses, at the start of the project.

Introduction

With this survey, containing divergent questions we want to get insight in various aspects of your work. We ask you to complete the questions below by ticking the answers you most agree with. Please, do not pass over any question. Each of them is important for our research. If you have any remarks or comments please write them on the last page.
You can return the questionnaire in the reply envelope; a stamp is not necessary.
We thank you in advance for your cooperation.

Information: Wilma Caris-Verhallen: 030 - 2729725

Netherlands Institute of Primary Health Care (NIVEL) PO Box 1568, 3500 BN, Utrecht, tel. 030-2729725

A. General Information

1. How old are you?
   .... years

2. Indicate your gender
   ☐ male
   ☐ female

3. What professional nursing education do you have?
   (several answers possible)
   ☐ HBOV (Dutch higher professional education)
   ☐ 3,5 years in service education (A,B or Z)
   ☐ Higher education in nursing in the community
   ☐ MBOV Dutch secondary professional education
   ☐ 2,5 years of in service education (nursing auxiliary)
   ☐ supplementary course in auxiliary nursing in the community
   ☐ In service training as geriatric assistant
   ☐ VO-management
   ☐ VO-professional Innovations
   ☐ VO-Nursing specialist
   ☐ Other......................

4. What is your present-day position?
   ☐ Nursing Auxiliary in the community
   ☐ Community Nurse *all-round*
   ☐ Community Nurse *for adults*
   ☐ Caregiver geriatrics
   ☐ Head nurse geriatrics

5. How long have you been a nurse?
   ..... years

6. How long have you been in your present position?
   ..... years

7. Do you have a full time or a part time job?
   ☐ Full time
   ☐ Part time for .... hours a week

8. How many patients do you care for during a shift?
   ..... patients

B. Statements about elderly people[1]

Below you see several statements about elderly people. The statements are ranged in pairs. Each pair reflects two opposite opinions about elderly people. Please tick the answer that is closest to your own opinion.

If you definitely agree with the statement on the left side please tick 1, and if you agree with the left statement tick 2. If you absolutely agree with the opposite opinion, please tick 5, or, if your opinion is less explicit, tick 4. You can tick 3, if your opinion is neutral concerning the two opposites.

	1	2	3	4	5	
1 It would probably better if most old people lived in residential units with people of their own age	☐	☐	☐	☐	☐	It would probably be better if most old people lived in residential units that also housed younger people
2 There is something different about old people; it is hard to figure out what makes them tick	☐	☐	☐	☐	☐	Most old people are really no different from anybody else; they are as easy to understand as younger people
3 Most old people are set in their ways and are unable to change	☐	☐	☐	☐	☐	Most old people are capable of new adjustments when the situation demands it
4 Most people would prefer to quit work as soon as pensions or their children can support them	☐	☐	☐	☐	☐	Most old people would prefer to continue working just as long as they possibly can rather than be dependent on anybody
5 Most old people tend to let their homes become shabby and unattractive	☐	☐	☐	☐	☐	Most old people can generally be counted on to maintain a clean attractive home
6 It is foolish to claim that wisdom comes with old age	☐	☐	☐	☐	☐	People grow wiser with the coming of old age
7 Old people have too much power in business and politics	☐	☐	☐	☐	☐	Old people should have more power in business and politics
8 Most old people make one feel ill at ease	☐	☐	☐	☐	☐	Most old people are very relaxing to be with
9 Most old people bore others by their insistence on talking about the good old days	☐	☐	☐	☐	☐	One of the most interesting and entertaining qualities of most old people is their accounts of the past

		1	2	3	4	5	
10	Most old people meddle with other peoples affairs and give unsolicited advice	☐	☐	☐	☐	☐	Most old people tend to keep to themselves and give advice only when asked
11	If old people want to be liked, their first step should be to try to get rid of their irritating faults	☐	☐	☐	☐	☐	When you think about it, old people have the same faults as everybody else
12	In order to keep the neighbourhood a pleasant place to live in, it would be best if too many old people did not live in it	☐	☐	☐	☐	☐	You can count on finding a nice residential neighbourhood when there is a sizeable number of old people living in it
13	There are a few exceptions, but in general most old people are pretty much alike	☐	☐	☐	☐	☐	It is evident that most old people are very different from one another
14	Most old people should be more concerned with their appearance; they are too untidy	☐	☐	☐	☐	☐	Most old people seem to be quite clean and neat in their personal appearance
15	Most old people are irritable, grouchy and unpleasant	☐	☐	☐	☐	☐	Most old people are cheerful, agreeable, and goodhearted
16	Most old people are constantly complaining about the behaviour of the younger generation	☐	☐	☐	☐	☐	One seldom hears old people complaining about the behaviour of the younger generation
17	Most old people make more excessive demands for love and reassurance than anyone else	☐	☐	☐	☐	☐	Most old people need no more love and reassurance than anyone else

[1]This part of the questionnaire is an adaptation of Kogan's Old People Scale (Kogan, 1961).

C. Statements about your work[2]

Below you find several statements about your work. For each statement, please circle the number that appeals to you the most.

1 = fully agree
2 = agree
3 = partly agree, partly disagree
4 = disagree
5 = definitely disagree

1.	My job is very meaningful for me	1	2	3	4	5
2.	My job gives me a lot of satisfaction	1	2	3	4	5
3.	I am enthusiastic about my present day work	1	2	3	4	5
4.	My present work gives me a good opportunity to show what I am worth	1	2	3	4	5
5.	Last year my work has grown more interesting	1	2	3	4	5
6.	I think my work is monotonous	1	2	3	4	5
7.	My job is worthwhile to make an effort	1	2	3	4	5
8.	I have enough time to deliver good care to the patients	1	2	3	4	5
9.	The amount of time I spend on clerical duties is reasonable and I know that patients do not be short of care because of that	1	2	3	4	5
10.	I have enough time and opportunity to discuss patients' problems and difficulties with colleagues	1	2	3	4	5
11.	I have enough time available for direct patient care	1	2	3	4	5
12.	I do not think I would function better if it was less busy on the ward	1	2	3	4	5

[2] Items 1 to 7 are derived from the satisfaction questionnaire, subscale 'satisfaction with work intrinsic aspects'(Boumans *et al.* 1989).
Items 8 to 12 are derived from Ruijters & Stevens (1992)

Appendix 3

Below you find several statements about your job satisfaction. Please circle the number that expresses your amount of satisfaction with these aspects of work.

1 = very satisfied
2 = satisfied
3 = neutral
4 = dissatisfied
5 = very dissatisfied

How satisfied are you with[3]

1. the extent to which it is possible making good friends among your colleagues?	1	2	3	4	5
2. the extent to which you like your colleagues?	1	2	3	4	5
3. the extent to which you have the chance to show your colleagues you like them?	1	2	3	4	5
4. the extent to which you feel you belong to your team	1	2	3	4	5
5. the extent to which you feel that your colleagues think you are a decent fellow?	1	2	3	4	5
6. the extent to which you have to do with colleagues who like you?	1	2	3	4	5

[3] These items are derived from the satisfaction questionnaire, subscale 'satisfaction with peer contacts' (Boumans et al. 1989).

D. Statements about your professional behaviour[4]
Below you will find several statements about your professional behaviour. Please circle the number that expresses the answer you most agree with.

1 = very often
2 = often
3 = sometimes
4 = seldom
5 = never

1. Supporting patients to care for themselves as much as possible	1	2	3	4	5
2. Explaining the rules, regulations and customs in the home care organisation to patients	1	2	3	4	5
3. Giving an explanation about a nursing act or treatment to patients	1	2	3	4	5
4. Checking how patients feel about their state of health or nature of a disease	1	2	3	4	5
5. Talking to patients about their disappointment as a result of their failure to recover or the worsening of functional abilities	1	2	3	4	5
6. Asking patients how they evaluate nursing and treatment	1	2	3	4	5
7. Explain to patients why they receive specified medication	1	2	3	4	5
8. Talking to patients about stress and problems caused by their spouse or in family life	1	2	3	4	5
9. Explaining to patients what is going to happen when they have a treatment or a physical examination	1	2	3	4	5
10. Explaining to patients what people work in the community and what their tasks are	1	2	3	4	5
11. Supporting patients and helping them with their problems and difficulties	1	2	3	4	5
12. Giving patients information about regimens, diet, use of medicines, and so on	1	2	3	4	5
13. Supporting informal caregivers to help the patient	1	2	3	4	5
14. Asking the patient how they evaluate everyday nursing care procedure	1	2	3	4	5

15. Asking the patient for his/her evaluation of a specific treatment or nursing care procedure	1	2	3	4	5
16. Asking patients if there are specific problems they want to discuss	1	2	3	4	5
17. Asking patients how they are getting on	1	2	3	4	5
18. Asking patients if there is a need for information	1	2	3	4	5
19. Encouraging patients to talk about their problems	1	2	3	4	5
20. Discussing tools and adaptations which may facilitate or make activities of daily living easier	1	2	3	4	5
21. Talking to patients about issues, such as boredom, unpleasant regimens, decrease of privacy	1	2	3	4	5
22. Encouraging patients to do as much as they can themselves at home					
23. Explaining to patients the complaint's procedure in respect of nursing or treatment	1	2	3	4	5

[4] This is an adapted and translated version of the 'Therapeutisch Gedrag Schaal' (Pool 1983).

Appendix 4

Questionnaire for clients

This section provides an English translation of the questionnaire used in the research presented in chapter 6. The questionnaire was orally administered to the patients, just after a completed nursing encounter.

Date ....

Number client ....

Number nurse ....

Instruction
The text in italics forms the guidelines for this interview. In formulating questions you have to take into account the situation and the language the client is used to. This means that instead of 'caregiver' sometimes it is better to say 'nurse' or to use the first name of the nurse. Further, it is advisable to mention concrete activities where nursing care is mentioned (signed with *).
For instance, Statement C3: 'I could easily understand Annie's explanation while she was dressing the wound', instead of 'I could easily understand the nurses' explanation of the nursing care provided'.

Appendix 4

A General Information

1. Your gender is *(Don't ask, just fill in)*
   - ☐ male
   - ☐ female

2. How old are you?
   ..... years

3. Please indicate the extent to which you agree with the following statements
   (if necessary use answer card 1)

   a. I feel fine
   b. There is always something the matter with my health
   c. I am in a very good health
   d. I very often don't feel well
   e. My state of health is excellent when compared with people the same age

B The importance of different quality aspects

Use card 3 for answer categories. If necessary use card 2 for different statements, also.

How important is it to you	very important	quite important	moderately important	of little importance	un-important
1. that the nurse explains clearly her behaviour and intentions	1	2	3	4	5
2. that the nurse consults you about care/nursing	1	2	3	4	5
3. that the nurse let you take care of yourself as much as possible	1	2	3	4	5
4. that the nurse evaluates the care she is providing	1	2	3	4	5
5. that the nurse is friendly towards you	1	2	3	4	5
6. that the nurse takes you seriously	1	2	3	4	5
7. that the nurse is interested in you	1	2	3	4	5
8. that the nurse takes enough time over you	1	2	3	4	5
9. that the nurse puts you at ease	1	2	3	4	5
10. that the nurse takes your special characteristics and wishes into account	1	2	3	4	5

11. You just defined how important several aspects in the nursing process are to you. I will show you now on a card these different aspects. Please indicate which three aspects are the most important to you, in order of importance (*Show card 2*).

    1. .... 2. .... 3. ....

12. What aspect do you think the least important?

    10. ....

C Evaluation of the nursing encounter just completed

The following statements are concerned with the nursing care you have just received. Please indicate which answer you find best.

Use card 4 for answer categories

		fully agree	agree	partly agree partly dis-agree	dis-agree	definitely dis-agree
1.	It was fully clear to me why the nurse was paying me a nursing visit	1	2	3	4	5
2.	The nurse gave me (or my family members) sufficient explanation of the nursing care provided*	1	2	3	4	5
3.	I could easily understand nurses' explanation of the nursing care provided*	1	2	3	4	5
4.	The nurse told me explicitly what she expected me to do during nursing care*	1	2	3	4	5
5.	The nurse gave me the chance to be present at a discussion of methods and sequence of treatment*	1	2	3	4	5
6.	I thought the nurse was patronizing towards me	1	2	3	4	5
7.	The nurse checked what I could do myself	1	2	3	4	5
8.	The nurse encouraged me to do things myself as much as possible	1	2	3	4	5
9.	The nurse asked my opinion of the care provided, regularly	1	2	3	4	5
10.	During this encounter the nurse was friendly to me	1	2	3	4	5
11.	I felt the nurses was taking me seriously	1	2	3	4	5
12.	The nurse showed personal interest	1	2	3	4	5
13.	The nurse showed a great deal of patience	1	2	3	4	5

	fully agree	agree	partly agree partly dis-agree	dis-agree	definitely dis-agree
14. The nurse took enough time over me	1	2	3	4	5
15. The nurse listened carefully	1	2	3	4	5
16. The nurse put me at ease	1	2	3	4	5
17. We were getting on well together	1	2	3	4	5
18. The nurse paid attention to my special needs and wishes	1	2	3	4	5

19. Please assign a numerical grade to the nursing care just provided.

....

....

....

20. Please clarify why you gave that grade?

....

....

....

21. Are there aspects of the nursing care just provided, which could have been better?

....

....

....

22. To what extent were you made uneasy by the presence of the video camera?

    ☐ rather tense
    ☐ little tense
    ☐ not so tense
    ☐ not tense at all

23. Do you think this nursing encounter reflects the normal situation?

    ☐ yes
    ☐ no

If not

24. Can you explain why this encounter differs from the normal situation?

    . . . .

    . . . .

    . . . .

25. Do you have anything further to say?

    . . . .

    . . . .

    . . . .

Appendix 5

Questionnaire for nurses

This section provides an English translation of the questionnaire used in the research presented in chapter 6. The questionnaire was in writing administered to the nurses, just after a completed nursing encounter.

Date ....

Number client ....

Number nurse ....

Instruction
Please fill in this questionnaire after each completed nursing encounter. Tick the answer that is closest to your view. Fill in the information required on the dotted line.

Appendix 5

A General Information on the nursing encounter

1. How long have you been nursing this patient?
   - ☐ longer than 3 months
   - ☐ between 1 and 3 months
   - ☐ several weeks, but less than a month
   - ☐ one week
   - ☐ several days
   - ☐ starting today

2. How often do you see this patient?
   - ☐ daily
   - ☐ 3 or 4 times a week
   - ☐ 1 or 2 times a week
   - ☐ less than once a week
   - ☐ monthly
   - ☐ less than once a month

3. What was the reason for this encounter?

   ....

   ....

   ....

4. Did this encounter have a special purpose?

   ....

   ....

   ....

B The importance of different quality aspects

Please circle the figure that is most applicable to you for each statement.

To what extent do you think it is important	very important	quite important	moderately important	of little importance	un-important
1. to explain clearly to the patient what you are doing and what you are going to do	1	2	3	4	5
2. to consult the patient about the care/nursing	1	2	3	4	5
3. that the patient takes care of himself as much as possible	1	2	3	4	5
4. that you evaluate the care provided	1	2	3	4	5
5. that you are friendly towards the patient	1	2	3	4	5
6. that you are taking the patient seriously	1	2	3	4	5
7. that you show interest	1	2	3	4	5
8. that you are taking enough time over the patient	1	2	3	4	5
9. that you put the patient at ease	1	2	3	4	5
10. that you take the patient's special characteristics and wishes into account	1	2	3	4	5

11. You just defined how important several aspects in this nursing encounter are. Will you please indicate which three aspects are the most important to you, in this specific encounter.

    1\. .... 2. .... 3. ....

12. What aspect do you think the least important?

    10\. ....

C Evaluation of the nursing encounter just completed

The following statements are concerned with the nursing care you have just provided. Please indicate which answer you find the best.

	fully agree	agree	partly agree partly dis-agree	dis-agree	definitely dis-agree
1. I think it was fully clear to the patient why I was paying him/her a nursing visit	1	2	3	4	5
2. I gave sufficient explanation to the patient (or to his/her family members) of the nursing care provided	1	2	3	4	5
3. My explanation of the nursing care provided was easy to understand	1	2	3	4	5
4. I told the patient explicitly what he/she was expected to do during nursing care	1	2	3	4	5
5. I gave the patient the chance to be present at a discussion of the methods and the sequence of treatment	1	2	3	4	5
6. I think I was patronizing towards this patient	1	2	3	4	5
7. I checked out what the patient could do him/herself	1	2	3	4	5
8. I encouraged the patient to do things by him/herself as much as possible	1	2	3	4	5
9. I asked the patient's opinion of the care provided regularly	1	2	3	4	5
10. I was friendly towards the patient in this encounter	1	2	3	4	5
11. I took the patient seriously during this encounter	1	2	3	4	5
12. I showed personal interest	1	2	3	4	5
13. I showed a great deal of patience	1	2	3	4	5

	fully agree	agree	partly agree partly dis-agree	dis-agree	definitely dis-agree
14. I took enough time over this patient	1	2	3	4	5
15. I think I listened carefully to the patient	1	2	3	4	5
16. I made an effort to put the patient at ease	1	2	3	4	5
17. I think we are getting on well together	1	2	3	4	5
18. I paid attention to the patient's special needs and wishes	1	2	3	4	5

19. Please assign a numerical grade on the nursing care just provided.

. . . .

. . . .

20. Please clarify why you assigned that grade?

. . . .

. . . .

. . . .

21. Are there aspects of the nursing care just provided, which could have been better?

. . . .

. . . .

. . . .

22. To what extent were you made uneasy by the presence of the video camera
    - ☐ rather tense
    - ☐ little tense
    - ☐ not so tense
    - ☐ not tense at all

23. Do you think this nursing encounter reflects the normal situation?

    - ☐ yes
    - ☐ no

If not

24. Can you explain why this encounter differs from the normal situation?

    ....

    ....

    ....

25. Do you have anything further to say?

    ....

    ....

    ....

MET DANK AAN ...

In de periode dat ik aan dit proefschrift heb gewerkt hebben veel mensen, ieder op hun eigen wijze, een belangrijke rol gespeeld. Een aantal van hen wil ik met name noemen. Ada Kerkstra was vanaf het allereerste begin op enthousiaste wijze bij het onderzoek betrokken. Dat begon bij de ontwikkeling van het onderzoeksvoorstel. Daarna, toen het onderzoek eenmaal van start was gegaan, heeft zij mij in haar rol van co-promotor altijd op deskundige en plezierige wijze terzijde gestaan. Voorts ben ik veel dank verschuldigd aan mijn promotoren. Het enthousiasme van Jozien Bensing voor onderzoek naar communicatie in de gezondheidszorg heeft me geïnspireerd om onderzoek te verrichten bij de beroepsgroep waar ik vroeger deel van uitmaakte. Haar onvoorwaardelijke steun en deskundige begeleiding hebben het mogelijk gemaakt dit proefschrift tot een goed einde te brengen. Mieke Grypdonck ben ik dankbaar voor de wijze waarop zij vanuit het verpleegkundig perspectief mijn concepten beoordeelde. Haar uitgebreide kennis van dit vakgebied is van grote waarde geweest.

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CURRICULUM VITAE

Wilma Verhallen werd geboren op 2 februari 1953 te Ravenstein. Na de middelbare school volgde zij achtereenvolgens de in-service opleiding tot algemeen verpleegkundige (diploma A) en tot psychiatrisch verpleegkundige (diploma B). In de jaren daarna volgde zij de opleiding tot docent verpleegkunde en de Hogere Beroepsopleiding tot Verpleegkundige in de Maatschappelijke Gezondheidszorg. Na in totaal 18 jaar werkzaam te zijn geweest op diverse terreinen in de verpleging, begon zij in 1988 aan een studie Psychologie aan de Katholieke Universiteit Brabant te Tilburg. Deze studie, met als afstudeerrichting Arbeid- en Organisatie-psychologie, werd in 1992 cum laude afgerond. Inmiddels had zij bij het NIVEL (Nederlands instituut voor onderzoek van de gezondheidszorg) een werkplek gevonden waar zij de ervaringen uit het eerste deel van haar loopbaan en de studie psychologie kon combineren. Ze is bij het NIVEL bij diverse onderzoeken betrokken geweest. Bijzondere aandacht had zij voor de communicatie tussen zorgverleners in de gezondheidszorg en hun cliënten. Dat onderzoek resulteerde uiteindelijk in het proefschrift dat hier voor u ligt.

Wilma Verhallen was born in Ravenstein, the Netherlands, on February 2, 1953. After completing high school, she took basic nursing training in general and psychiatric nursing. Then she followed higher vocational training as a nurse educator. Subsequently, she studied community nursing and graduated as a Registered Nurse. After working eighteen years in several nursing disciplines, she commenced the study of psychology, specializing in Industrial and Organizational Psychology at the University of Tilburg. In 1992, she graduated with distinction. In the meantime she had begun her research career at the Netherlands Institute of Primary health Care (NIVEL) in Utrecht. She has been involved in several research projects focusing on various topics including quality of care and communication in health care. The latter resulted in this thesis.