COMMUNICATION BETWEEN NURSES AND ADMITTED CANCER PATIENTS:

the evaluation of a communication training program

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Contents

Introduction

The topic of this thesis concerns the communication between (ward)nurses and recently diagnosed cancer patients, who are admitted in the hospital for treatment. Cancer and its consequences have a high impact on the life of the patient in terms of severe stress levels and high levels of fear, anger and depression. When these patients have to be admitted to hospital for treatment, ward nurses, in particular, are closely involved with patients' concerns as they provide 24-hour care. In order to meet these concerns, good patient education and support is of vital importance (Wilkinson 1991, Wilkinson 1992). However, giving this kind of psychosocial help to patients with a life threatening disease like cancer is no sinecure. In particular the emotional load in cancer nursing makes effective communication with cancer patients a challenge (Vachon 1987, Booth 1996, Heaven & Maguire 1996, Degner 1991, Suominen et al. 1995, Krishnasamy 1996, Maguire & Faulkner 1988). In the first place the patients' future prospects are limited and in certain cases, the length of life is reduced. Patients also suffer from the consequences of the disease in that they have to undergo medical treatment which can have far-reaching consequences such as disfigurement. In addition, the far-reaching consequences of the treatment can cause increased emotional distress, which, in turn, can lead to acute anxiety and depressive states (Hanson et al. 1994). Anxiety and depression are, therefore, the most common psychosocial problems among cancer patients (Massie & Holland 1989, Berglund et al. 1991, Heim et al. 1997). Cancer patients also experience uncertainty when discussing their diagnosis and prognosis (Harisson et al. 1994). Finally, there are physical complaints, and there is an increased chance of fatigue (Smets et al. 1998) and limitations in daily life functions. In other words, a life threatening disease such as cancer demands a great deal of adaptability from patients and their environment.

The growing awareness of the importance but at the same time of the complexity of communication between health care providers and cancer patients has led to elaborate research in this field over the past 20 years. Accordingly, many educational communication programs have been developed, and are generally accepted as an important medium in improving the care for oncology patients. (Kruijver 2000a, Kruijver et al. 2000b, Hulsman 1998). However, the literature reveals that relatively few of these programs have been evaluated particularly in nursing research (Kruijver et al. 2000b).

Evaluation studies are useful in gaining insight into the effect of these programs on nurses' levels of communication skill and other nurse and patient outcomes. In nursing research particularly, the majority of the evaluation studies have an exploratory character (Kruijver et al. 2000b). This was the reason why we decided to start a new research project to investigate the effects of a communication training program on nurses' communication style in a clinical oncology setting. In order to meet empirical demands, we decided to make use of a randomized pre-test/post-test control group design.

Another break with the more traditional research was our decision to work with simulated patients as well as with real patients, thereby enabling investigation of the relationship between the two research methods that are both widely used, but seldom compared. When using simulated patients nurses' communicative skills are assessed under relatively ideal conditions (competence); when using real patients, nurses' communicative behaviours are assessed in 'real life' clinical situations (performance). Working with both methods makes it possible to compare the outcomes of both types of communication research in a single study design.
In current medical and nursing research in this area, a distinction is frequently made between 'competence' as the outcome variable, measured using simulated patients, and 'performance', measured using real or actual patients (Holzemer et al 1986, Rethans et al. 1991, Francke et al. 1995, Pieters et al. 1994, Ram et al. 1999, Kinnersly & Pill 1993, Yelland 1998, Colliver et al. 1999, Beullens et al. 1996, Foley et al. 1997, Van der Vleuten et al. 1990). Competence relates to the level at which a health care provider is capable of demonstrating a skill, and performance to how a health care provider actually demonstrates a skill in day to day practice (Senior 1976, Loyd 1979). Competence comprises knowledge, skills and attitudes (Pieters et al. 1994, Rethans et al. 1991, Ram et al. 1999, Francke et al. 1995), and is usually considered as an important mediator in performance in daily practice. The literature shows that competence is widely used for teaching and assessment targets of health care providers. In the current nursing and medical schools, the use of simulated patients is commonly integrated in the educational programs as a tool in teaching skills, since it provides in a direct way student's insight in their own clinical and communication styles, including the strengths and weaknesses. Direct feedback from the teachers aims to provide optimal preparation for performance in daily practice (Nicol & Freeth 1998, O'Neill &

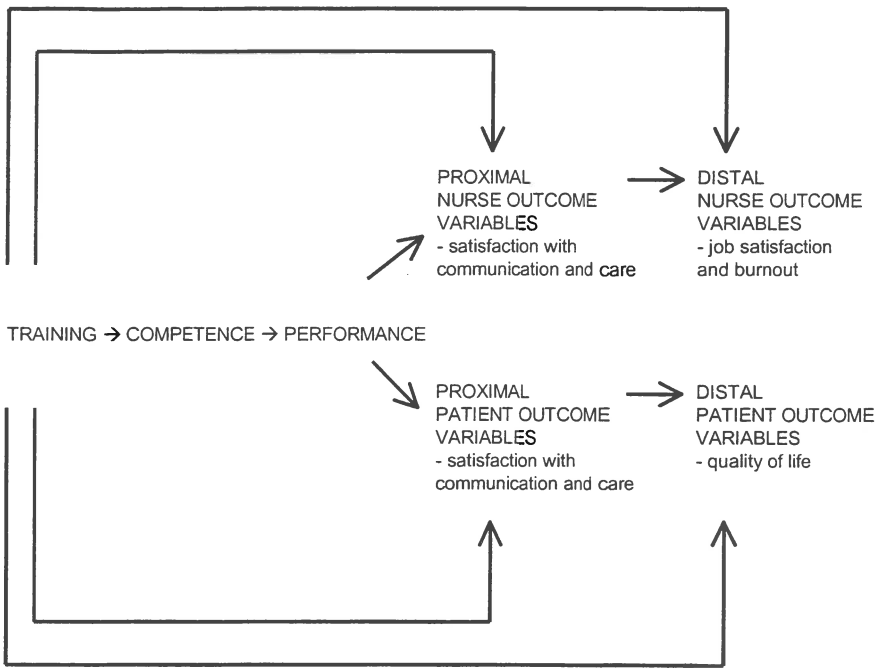
McCal 1996, Barrows 1993, Colliver et al. 1998, Miller et al. 1998, Ladyshewsky & Gotjamanos 1997).

Although working with simulated patients is very popular, it is remarkable that relatively few studies have been published in which a relationship has been investigated between competence and performance (Pieters et al. 1994, Ram et al. 1999). Given the emphasis in the literature on competence on the one hand, and realising on the other that not competence but performance (the step from 'knowing' and 'knowing how' to 'showing') is what really matters in the end, and also taking into account its omission in the literature on comparative studies we decided to dedicate a part of our research to investigating the relationship between nurses' communicativel competence and their communicativel performance. Insight into the relationship between the two approaches gives insight into the extent to which nurses' skills competence with simulated patients predicts their demonstrated skills with actual patients. This, in turn, could be used as feedback for future training programs and evaluation research. In other words, acquired knowledge in this area of research could contribute to improving the quality of nurse-patient communication.

Another important issue we met in planning our study was the use of a standardized test situation. Where clinical practice is characterized by a certain level of 'hectic' activity, in which a number of processes occur at the same time, evaluation studies require an unidimensional relatively orderly setting in order to obtain sufficient levels of (internal) validity and reliability. For the purpose of this thesis as a compromise, the admission interview between nurses and cancer patients was chosen as the 'assessment-situation', because it is one of the most standardized and well-structured patient-nurse interactions. It starts with the nurse taking the patient's history and ends with the nurse providing information about medical issues with regard to treatment, organizational issues relating to ward rules and services during admission. During the interview however, it is not only important that the nurse is able to demonstrate adequate cognitive or instrumental communication. Since most patients are (or get) quite upset during the interview, the nurse must also be able to create an environment of trust, in which the patient feels respected, involved and accepted. Where this is done properly, the patient is able to disclose concerns, which may give him/her relief, which in turn may lead to an

increased concentration, from the patient's side, on the nurse's information and questions asked during the admission interview.
The last issue we would like to raise here, is the choice and definition of target-criteria or dependent variables, supposedly positively affected after a communication training program. The main assumption of the study was that training in communication skills would improve the communicative skills (competence) and behaviours (performance) of nurses and, by so doing would positively influence patient as well as nurse outcomes. As regards the expected chain of effects, three main objectives of the investigation were specified: (1) to evaluate the effect of the training on the communicative skills and behaviours of oncology nurses; (2) to evaluate a *direct* relation between the improvement of communicative skills and behaviours of oncology nurses and certain patient and nurse outcomes. These include patients' and nurses' satisfaction with communicative interactions, which are considered as *proximal* outcome measures; (3) to evaluate an *indirect* relation between the improvement of the communicative skills and behaviours of oncology nurses and certain nurse and patient outcomes. These include 'quality of life' of patients, and 'job satisfaction and stress' of nurses, which are as *distal* outcome measures.
Regarding the influence of the training on the distal outcome variables mentioned, it was assumed that these variables were affected by factors in addition to the training. Consequently, we expected the training to have a moderate influence on the distal outcome variables, especially quality of life of the patients.

Since communication training should theoretically be able to affect even distal patient outcomes in a positive way (La Monica 1987), the expected chain of effects (the training influences competence and performance, which, in turn, influence the proximal and distal outcomes) is not shown alone in the figure. The figure also illustrates the possibility of the direct influence of the training on the proximal and distal outcome variables in the absence of shifts in competence and performance.



We decided to address the following research questions which give this thesis thematic cohesion:

1 What is the effect of a training in communication skills on the communicative behaviours of nurses?

It was expected that after the training the nurses would use more facilitating or affective communication. Also, it was expected that nurses would pay more attention to psychosocial subjects, as against biomedical subjects.

2 What is the direct effect of the training on nurse and patient outcomes?

It was expected that giving communication skills training to nurses would improve their communicative skills and behaviours, which would have a positive effect on:

nurses' and patients' satisfaction with communication during the admission interview, and during patients' hospital stay;

3 What is the indirect effect of the training on nurse and patient outcomes?
It was expected that giving communication skills training to nurses on an oncology ward would improve their communicative skills and behaviours, which would have a positive effect on job satisfaction and nurse burnout and patient quality of life.

Structure of this thesis

In chapter 1, a review of the literature on communication between nurses and cancer patients will be presented. Chapter 2 concerns a literature review as well, in which effects of communication training programs for nurses in general will be described. Chapter 3 describes the results of a study into the communicative skills of nurses during interactions with simulated cancer patients. The objective of chapter 4 is to investigate the effect of a communication skills training program on affective and instrumental communication employed by ward nurses during the admission interview with simulated recently diagnosed cancer patients. Chapter 5 will cover the results of a randomized trial. In this study the effect of a communication skills training program on nurses' communicative behaviours, and on the mentioned proximal and distal outcome variables will be investigated. Chapter 6 describes a study into the relationship between nurses' skills competence with simulated patients and their demonstrated behaviour with actual patients. This thesis will conclude with chapter 7 in which a summary and a general discussion will be presented.

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Chapter 1

NURSE-PATIENT COMMUNICATION IN CANCER CARE

a review of the literature

Kruijver I.P.M., Kerkstra A., Bensing J.M., Wiel H.B.M. van de (2000). Nurse-Patient communication in cancer care: a review of the literature. *Cancer Nursing; 23:1, 20-31*

Abstract

Patients with cancer seem to experience distress particularly in the first period following diagnosis, and are likely to develop an affective disorder in the first 2 to 3 months. Communicative behaviours of nurses seem to play an important role in meeting the cognitive and affective needs of patients with cancer. This review of the literature examines the communicative behaviours of nurses during care activities with patients who have cancer. The studies show that emphasis is placed on the affective side, in which facilitating behaviours, such as empathy, touch, comforting, and supporting are considered essential in caring for patients with cancer.

Unfortunately, further studies in this review demonstrate that communication in oncologic care is complicated by such emotionally laden issues as the consequences associated with the life-threatening character of the disease and the far-reaching consequences of the medical treatment. This results in barriers to effective communication between patients with cancer and nurses. It is important, therefore, that nurses working with patients who have cancer are provided both structurally and repeatedly with continuing education programs in communication. Finally, most of the studies covered in this review have an explorative character. Future research in this area should pay attention to the use of controlled studies, large sample sizes, and observational instruments.

Keywoords: Cancer / oncology, Nurse caring behaviours, Nurse communication skills, Nurse-patient interaction / communication / relation

Introduction

Over the past 30 years, communicative exchanges between health care providers and patients have become an area of increasing interest for research, because researchers as well as medical and nursing professionals are becoming progressively more aware of the importance of communication and its impact on patient outcomes (Anderson et al. 1991). In addition, elaborate research in this field has led to a growing awareness that the provider-patient interaction, is a complex phenomenon. Although the provider and patient are pursuing a common objective, their positions are non-equal, their interaction and cooperation are non voluntary, and their perspectives are often different (Chaitchik et al. 1992; Timothy et al. 1989).

The aim of this article is to provide an overview of communication between nurses and patients with cancer. Communication is especially important where life-threatening illnesses such as cancer are concerned. Patients with cancer seem to experience psychological and relational problems particularly after diagnosis (Maguire et al. 1988; Fallowfield, 1988). Many concerns involve uncertainty about the deterioration of their health, future prospects, confrontation with death and fear of the dying process (Harrison et al. 1994). When patients' emotional resources are inadequate to cope with the stress, psychological distress may result. Maguire (1995) emphasized that patients who are not coping effectively with cancer after diagnosis are likely to develop an affective disorder. In addition, the far-reaching consequences of the treatment can cause increased emotional distress, which, in turn can lead to acute anxiety and depressive states (Hanson 1994). Anxiety and depression are, therefore, the most common psychosocial problems among patients with cancer (Massie et al. 1989).

Furthermore, one fourth of these patients seem to need special help for these problems Massie et al. 1989; Schrameijer et al. 1992). Authors state that to prevent severe psychosocial problems and to increase quality of life for patients with cancer, medical and nursing professionals in particular have an important task with regard to informing patients, assessing their problems, giving them emotional support and, if necessary, referring them Schrameijer et al. 1992; Aalten et al. 1992; Grijpdonck 1989).

Wilkinson (1992) stressed the importance of effective communication to successful nursing and medicine, stating that effective communication is achieved when open two-way communication takes place and patients are informed about the nature of their illness and treatment, and are encouraged to express their anxieties and emotions.

Aim of the study

As the introduction reveals, the communicative behaviours of nurses play a crucial role in meeting the cognitive and, particularly, the affective needs of patients with cancer. These behaviours can help patients who experience considerable distress in the first period after diagnosis to integrate the disease into their daily lives.

Up to now, researchers have placed primary emphasis on the communicative behaviours of physicians. Because most of the available literature is about physician-patient communication and because research into nurse-patient communication vis-à-vis physician-patient communication is more exploratory and qualitative, it is worth shedding more light on patterns of nurse-patient interaction in oncologic care.

The aim of this study was to gain more insight in the state of art of research into the communicative behaviours of nurses during care activities with patients who have cancer. For this purpose, the following question is addressed in this article: What communicative behaviours of nurses can be distinguished during the care of patients with cancer?

Method

To obtain the relevant literature, a search was made of three databases: Medline, Nursing and Allied health Literature and the Library Catalogue of the Netherlands Institute of Primary Health Care. The literature from 1980 through 1997 was selected. In keeping with the aim of this article, the literature was restricted to research, on nurse-patient communication in cancer care. The following key words also were used in combination: cancer/oncology in combination with nurse-patient interaction/communication/relation, nurse communication skills, nurse caring behaviours.

A total of 127 articles were found in this way
The following inclusion criteria were used for the review:

- The study was directed at the interaction between nurses and oncology patients.
- It used observation techniques, interviews or questionnaires.
- It was published in English or Dutch.

All the studies meeting these criteria were included, regardless of the quality and sample size. Twenty studies met the inclusion criteria.

Results

Several communicative behaviours used by nurses in an oncology setting can be identified in the literature. Table 1 gives an overview of research into nurse communicative behaviours during care activities with patients who have cancer.

Empathy

The first three studies summarized in Table 1 show that empathy, a concept that originates in the work of psychotherapists, seems to play a significant role in the communication between nurses and patients with cancer (Reid-Ponte 1992; Raudonis 1983; La Monica et al. 1987). Raudonis (1983) identified two major categories of empathy in a hospice setting: affirmation as a person and friendship. *Affirmation as a person* refers to the patient being acknowledged by the nurse as an individual, a person of value, regardless of the diagnosis and the stage of disease. *Friendship* in a hospice setting refers to an intense, deep and meaningful relationship between nurses and patients with cancer, in which feelings and information are shared reciprocally. In addition, Raudonis found that an empathic relationship between nurses and hospice patients had a positive impact on patients' physical and emotional well-being.
Reid-Ponte (1992) stated that empathy signifies several behaviours and defines empathy as 'a certain sensitivity to others' feelings and ability to explore those feelings, to express sympathetic understanding, and to act in a caring or nurturing way' (p. 284). In her study, Reid Ponte found that nurses generally scored low in the use of empathy skills in the daily care of patients with cancer. Furthermore, Reid Ponte found a significant relationship between nurses' empathy skills and patients' experience of distress. Her explanation

was that nurses who scored high on perceiving and listening may elicit more distress responses from patients with cancer. In other words, empathy may facilitate patients' expression of their physical and emotional distress. Additionally, Reid-Ponte found that perceiving and listening scores decreased as nurses' educational level increased, and that nurses' empathy scores for verbal response decreased significantly as their age and years of experience increased.

La Monica (1987) stressed the significance of establishing a helping relationship with patients in order to fulfill nursing goals, and stated that empathy is an important component in achieving such relationships. In La Monica's study, it appeared that nurses' empathy levels did not change after training. Furthermore, La Monica found that empathy relieves pain, depression and anxiety of patients with cancer.

Types of attending and types of touch

The Bottorff (1993; 1994; 1995) studies shown in Table 1 define four caring activities known as 'types of attending' as well as different types of touch that seem to accompany these initial varieties in the attending of patients with cancer in a clinical setting. The first type of attending is defined as *doing more*, which refers to nurse doing something beyond what usually is required to complete the care. The nurse's attention is focused on the patient, providing the patient the opportunity to confide in the nurse.

In *doing more*, comforting, connecting and working touches seem to figure most frequently. A 'comforting' touch is given to reassure, calm or encourage the patient. It is considered an expression of nurse's caring and concern. A 'connecting touch' is given in the case of a more superficial talk about care, social talk, or a talk in which the nurse gives instructions. 'Working' touches include all the types of physical contact necessary to complete activities.

The second type of attending is defined as *doing for*, which denotes nurses responses to patient requests and needs that are not treatment related. It can be characterized by a personalized approach to giving assistance. In doing for, working and connecting touches predominate.

The third type of attending is characterized as *doing with*, which is a willingness to work cooperatively with the patient. The nurse focuses on both the task and the patient. In doing with, working touch seems to occur frequently, and some connecting and orienting touches also occurs. The main purpose of the 'orienting' touch is to clarify. Nurses most often use their fingertips in pointing to particular areas of the patient's body.

The last type of attending is characterized as *doing tasks*. In this type of attending, the nurse focuses on equipment, treatment and getting the job done. There is an exclusive focus on tasks. In doing tasks, the working touch seems to predominate.

With respect to touch, another distinction is made between task-oriented or procedural touch and comforting or affective touch, as described in the next by Morales (1994). 'Task-oriented' or 'procedural' touch is associated with a technical procedure that have a curative purpose; whereas comforting or affective touch is intended to ease psychological and physical distress and to convey confidence (Morales 1994). Bottorff's working and orienting touch are similar to task-related touch. The comfort, social and connecting touches identified by Bottorff are similar to affective touch.

Bottorff et al. (1993; 1994;1995) emphasizes awareness of types and meaning of touch, which might afford nurses the opportunity to increase the therapeutic value of touch as nursing intervention. Morales (1994) also stressed that nursing touch is an important behaviour for transmitting confidence, and found that two aspects of confidence in patients with cancer can be enhanced by nurses through touch: being helped to enhance coping abilities and being accepted as a person within the process of disease. Morales (1994) found that although nurses reported the importance of affective touch for enhancing patients' confidence, this nonverbal behaviour was minimal during interactions between nurses and patients with cancer in daily care. Morales concluded that more emphasis should be given to touch in nursing education.

Comforting strategies

Bottorff et al. (1995), as shown in Table 1, conceptualized comforting strategies, used by nurses to meet the physical and emotional needs associated with the illness or treatment of patients with cancer.

As with empathy, comforting is considered an important skill in nursing care for patients with cancer. Bottorff et al. (1995) shed more light on this concept and showed that comforting appears to be an unclearly defined skill in nursing literature. Descriptions of comfort seem to lack specification, or to focus mainly on measures to relieve pain.

Bottorff et al. (1995) indicated that comforting strategies involve more than mere relief of pain. They also include humour, physical comfort, emotionally supportive statements and comforting and connecting touch. Comfort provides opportunities for patients to make choices, supplies them with information, and engages them in social exchanges. It also provides a feeling of closeness.

These comforting strategies also show aspects of instrumental and affective behaviours and comprise a significant part of the types of attending and touch described, as also defined by Bottorff (1993).

Specific comforting strategies in palliative care

In the studies by Flemming et al. (1987), Degner et al. (1991) and Rittman et al. (1997), described in Table 1, specific comfort measures are described, in which the focus of care for patients with cancer shifts from cure to palliation. In the first place, a significant instrumental task in a palliative care setting is providing physical comfort, which includes reducing the severity of the illness by minimizing symptoms and offering adequate pain control.

Furthermore, specific affective tasks in a palliative care setting seem to be of significance. These include providing psychosocial and spiritual comfort and responding to the family. Providing psychosocial comfort refers to activities, directed at emotional care such as listening, touching and keeping hope alive by helping patients to use the time left for achieving goals that are meaningful to them. Providing spiritual comfort refers to nurses acknowledging the religious and philosophical beliefs of the patient and responding to spiritual aspects, by praying with the patient, or by taking the patient to religious services. Responding to the family refers to meeting the needs of the family and providing for privacy, especially during actual death.

The measures described show that providing instrumental and affective comfort becomes nurses' major concern when meeting the specific needs of severely ill patients with cancer.

A major prerequisite for adequate performance of these tasks seems to entail acknowledging the patient's disease status and his or her illness experience, reading the signs of physical and mental changes, and enhancing the patient's sense of a person and individuality. Degner et al. (1991) found that when these specific tasks are performed adequately, nurses are enabled to define a role for themselves in helping the severely ill patient with cancer, and to experience personal growth as a result of their involvement in care. Rittman et al. (1997) stressed that nurses, in managing the emotional demands of their work, must recognize the importance of their involvement at different levels with the severely ill patient in varied situations. This means being very involved and feeling close to the severely ill patient in certain circumstances and having a relationship with the patient that is less intense in other circumstances.

Finally, in the three studies, good communication and cooperation between colleagues is emphasized, which involves a multidisciplinary approach and

adequate provision or reception of support or criticism.

Supportive behaviours

The studies by Krishnasamy (1996) and Larson (1984), in Table 1 describe important nurse behaviours from the perspective of the patient with cancer. Krishnasamy (1996) studied supportive and unsupportive nurse behaviours as perceived by patients with cancer. It appeared that patients with cancer perceived behaviours that reflect respect and intimacy, providing companionship, reassurance, encouragement and accompaniment in stressful situations as most supportive, followed by behaviours providing information and clarification about the disease, treatment and subjective feelings.

In contradistinction to Larson's study (1984) it appeared that the emotionally supportive behaviours, listening and talking, became important to patients with cancer only after their 'getting better' needs were met. The patients ranked nurses' competence related to clinical know-how, which is an instrumentally supportive behaviour, as most important.

Blocking and facilitating behaviours

In eight studies shown in Table 1, authors stress the importance of how nurses use communicative behaviours in meeting the needs of the patients with cancer. These behaviours can hinder or stimulate the patient in expressing his or her concerns and information needs.

In the research on the communication between the nurse and the patient with cancer, these nursing behaviours are the so called 'blocking' and 'facilitating' behaviours (Wilkinson 1991; Maguire et al. 1986; Booth et al. 1996; Heaven et al. 1996). It is assumed that by using blocking behaviour, nurses prevent the patients from talking about their problems. They ignore patients' cues or switch topics.

On the contrary, nurses who facilitate patients talking about their problems seem to be able to achieve more 'in depth' assessment of patients' problems. This facilitating behaviour on the part of nurses is associated with greater patient satisfaction with care, and with patients reporting a more confidential interaction (Ridgeway et al. 1982). As regards the blocking and facilitating behaviours, Wilkinson (1991) identified four styles: the facilitators, the ignorers, the informers and the mixers.

The *facilitators* use skills such as picking up cues and clarifying and summarizing patients' problems. With these skills, patients are helped to talk about their concerns. Because facilitators are able to interact effectively with patients

who have cancer in emotionally laden situations, they seem to achieve more in-depth assessments. The *ignorers* neglect patients' cues and switch topics when talking with the patient. This enables them to keep out of emotionally laden situations. The *informers* give inappropriate information and opinions throughout the interaction with the patient. These relate mainly to physical areas, especially procedures which have to be carried out. The *mixers* are nurses who use a mixture of blocking and facilitating behaviours. These nurses recognize their use of blocking verbal behaviours during their interaction with patients to a greater extent than the informers and the ignorers.

Wilkinson (1991) found that nurses used blocking behaviours more than 50% of the time during conversations with patients who have cancer. These findings agree with the studies of Heaven et al. (1996); Booth et al. (1996) and Maguire et al. (1996), who found that nurses, despite communication training, were not very successful in identifying what the patient's concerns were.

In the study of Heaven et al. (1996), only 52% of the patients' biggest concerns were identified before training with 59% identified afterward. Booth et al. (1996) found that the more the patient with cancer disclosed feelings, the more blocking behaviours occurred. Maguire et al. (1986) found that the use of leading questions and clarification of physical aspects strongly inhibited patients' disclosure of significant information. On the contrary, the use of open directive questions and empathy facilitated patients' disclosure of concerns and feelings about their illness and treatment.

The study by Webster (1981) shows that severe blocking behaviours also occur during the care of patients dying with cancer. Blocking behaviours in this context are predominantly characterized by using avoidance behaviours or distancing tactics in circumstances perceived by nurses as stressful. These behaviours agree with Degner's (1991) description of affective and instrumental behaviours (Table 1), which were found to be executed in a positive (facilitative) or negative (blocking) way (not documented in Table 1). The specific blocking behaviours identified in these studies patients dying with cancer can be summarised as follows:

- *denial of the seriousness of patient's condition*, which results in neglect and poor symptom management because of poor knowledge;
- *not responding to patient's emotional, spiritual and informational needs*, which results in abrupt changing of the subject of conversation, behaving as though the patient had not spoken at all, concentration intensely on the physical task at hand, pursuing the least threatening aspect of conversation, introducing a joking atmosphere,

- *not responding to the needs of the family*, which results in behaviours that show lack of respect for family, for example not providing privacy to the patient and family, ignoring the family's need for information; and behaviours that block family involvement, passing judgement on family behaviours toward the dying patient.

Webster (1981) found that most of the nurses participating in the study were conscious of using these distancing tactics. They were afraid of losing control over the situation when not using them.

Dennison (1995) studied the verbal communication that took place when nurses were administering cytotoxic chemotherapy in a specialized gynaecological oncological unit. Most interactions were initiated by the nurses and concentrated on information giving. Detailed, clear and precise explanations were provided, reflecting the highly technical nature of the procedure. However, nurses rarely made assessed of patients' understanding of the situation or their feelings. Dennisson (1995) emphasized that there is a need to structure and improve the emotional, supportive and information-giving techniques employed by nurses.

In Bond's (1983) study, observations and reports of interactions showed that dyadic interaction rarely took place between patients with cancer and nurses in a ward. On the whole, nurses showed an overwhelming concern with the physical care and treatment problems. Although nurses were aware of adjusting patients' problems after diagnosis, there rarely was discussion of personal problems or social matters that could be affected by the illness.

Finally, the study by Suominen et al. (1995) concentrated on nurses' performance of behaviours as perceived by patients with cancer and the nurses themselves. Suominen et al. (1995) found that especially during hospitalization, patients with cancer felt they received insufficient information and inadequate psychological and social support. Patients felt that nurses did not talk to them, share experiences with them, listen to them, or treat them on an individual basis. However, most of the nurses disagreed with these patients' perceptions. Furthermore, both patients and nurses thought nurses were preoccupied with their work. In reviewing most of the patients, nurses did not have enough time for them. A majority of the patients reported that nurses did not provide support for their relatives, whereas a minority of the nurses reported that they were not providing support for the patients' relatives.

Table 1: Summary of research into nurse - cancer patient interaction: study aims, methods, used instruments, validity and reliability

Source	Setting and Sample	What was being studied	Methods
Raudonis (1993)	- 14 terminally ill patients receiving hospice care ranging from 3 weeks to 17 months. They experienced multiple home visits by one or more hospice nurses. - 4 home care hospices	To study the meaning and impact of empathic relationships on hospice nurses	- A natural field study was used, using in depth interviewing for data generation. The interviews were recorded and transcribed. Data reduction and coding took place with the use of three pre-specified codes: nature, meaning and impact; latent content analysis was used to identify and describe subcategories of these codes; a constant comparative method was used to examine similarities an differences across categories
Reid Ponte (1992)	- A convenient sample of 65 professional staff nurses and cancer patients of primary nursing surgical care units in a 957 -bed, private, non-profit teaching hospital	To study the relationship between: - primary nurses' empathy skills and the distress level of their cancer patients; - primary nurses, demographic variables and their empathy skills	- Questionnaires were used to assess: empathy (LEP), dimensions to affect mood or affect (POMS), distress (SLC-90-R), and the relation between POMS scores, and pain intensity and distress (VAS)
La Monica et al. (1987)	- Two units of a major cancer centre in an urban area (USA) -109 registered nurses and 656 clients	- To investigate the effects of nurse empathy training on the client outcomes of anxiety, depression, hostility, satisfaction with care and the impact of group instruction on the empathy levels of nurses	- Nurses were presented with an empathy training program (N=56) or a control program N=53) - Client outcome measures included the Multiple Affect Adjective Check List and the La Monica/Oberst Patient Satisfaction Scale; nurse outcome measures included the Empathy Construct Rating Scale

Variables	Reliability and validity	Findings
Empathy	No findings	- Two categories of empathy were identified: affirmation as a person, and friendship. A major outcome of the empathic relationships was improvement or maintenance of the patients' physical and emotional well-being or quality of life
Empathy	- LEP: internal consistency: Cronbach's coefficient alpha ranges from 0.96 to 0.98. - POMS: no figures - VAS: no figures	- A significant correlation was found between nurses' emphatic behaviours and cancer patients disclosure of concerns
Empathy	- MAACL: reliability and validity are well documented in the literature - LOPSS: Cronbachs alpha was 92 - ECRS: Evidence for reliability and validity is not presented in this article	- Clients cared for by nurses in the experimental group showed significantly less anxiety and hostility than clients cared for prior to the experimental treatment; mean differences on depression and satisfaction with care were in the hypothesized direction

Source	Setting and Sample	What was being studied	Methods
Bottorff (1993, 1994)	- One private room on an active treatment oncology ward 8 patients - 32 nurses - Audiotaped unstructured interviews with 8 nurses and 6 patients took place to provide data to support observational data	- To examine patterns of touch nurses use when caring for patients with cancer (1993) - To identify the types of nurse patient interactions in which touching behaviours are used (1994)	- A qualitative and observational approach was used to inductively identify the types of attending - Nurse-patient interactions were videotaped for 72 hours each patient - audiotaped unstructured interviews with 8 nurses and six patients took place to provide data to support observational data
Morales (1994)	- Eight cancer patients at a tertiary 12-bed oncology research unit in Porto Rico	- To elicit the meaning of nurses' touch for hospitalized cancer patients	- Data gathering methods included participant observation and ethnographic interviews; content analysis was used to identify nurses' touch behaviours
Bottorff et al. (1995)	- See Bottorf 1994	- To identify and describe nurses' use of comforting strategies	- A qualitative and observational approach was used to identify comforting strategies, used by nurses. - Nurse-patient interactions were videotaped for 72 hours each patient

Variables	Reliability and validity	Findings
Types of attending / types of touch	No figures	- Five types of touch were identified and described: comforting, connecting, working, orienting and social touch - Four types of attending were identified: doing more, doing with, doing for and doing tasks. They accompany the different types of touch
Types of touch	No figures	Two types of nurses' touch were identified: procedural and affective touch. According to patients perceptions, conveying confidence is a central theme of touch by nurses. On the whole, touch by nurses was minimal and procedural in nature
Comforting strategies	No figures	- Using the qualitative ethology, nurses' comforting strategies included: gentle humour, physical comfort measures, emotionally supportive statements and comforting and connecting touch

Source	Setting and Sample	What was being studied	Methods
Fleming (1987)	- 145 nursing staff members of an acute care hospital of the United States	- To identify and describe of comfort needs of advanced cancer patients as reported by nursing staff	- An open-ended self report questionnaire was used to identify comfort needs of advanced cancer patients. - Qualitative analysis was used to classify aspects of comfort needs
Degner (1991)	- 10 palliative care nurses from a palliative care unit in Canada - 10 educators from different parts of Canada, experienced in reaching nursing students	- To identify and describe critical nursing behaviours in care for the dying	- Semi-structured (tape recorded) interviews took place; the interviews were transcribed and read independently by two investigators to identify essential behaviours. The behaviours were clustered into categories. Final clustering took place after a third independent coding. - A review was conducted to identify critical nursing behaviours in care for the dying
Rittman (1997)	- Six oncology nurses working on an oncology unit, considered by their colleagues to have a high degree of expertise. The nurses had at least five years oncology nursing experience	- To explore the experience of nurses engaged in relationships with dying patients in order to describe skills and shared practices of oncology nurses	- The hermeneutic method was used: data consisted of six narratives written by oncology nurses. - In depth interpretation of each narrative took place

Variables	Reliability and validity	Findings
Special comfort measures in palliative care	No figures	- The following seven key components of comfort were identified: Physiological-; spiritual-; psychosocial-; patient's rights, dignity, self-worth, and patient involvement in care; reducing severity of the illness; family/friends-; multidisciplinary team approach
Special comfort measures in palliative care	- No findings	- Behaviours identified after content analysis of transcribed interviews were: providing comfort, responding to anger, enhancing personal growth, responding to colleagues, enhancing quality of life during dying and responding to the family. These nursing behaviours occurred in a facilitating or blocking way
Special comfort measures in palliative care	- No findings	- Nurses who have expertise in caring for dying patients establish different levels of involvement in different situations. Using the hermeneutic method, four themes were identified. these included: knowing the patient and the stage of Illness, preserving hope, easing the struggle, and providing for privacy

Source	Setting and Sample	What was being studied	Methods
Krishna samy (1996)	- Eight hospitalized cancer patients (four male, four female), diagnosed with haematological malignancy	- To identify the nursing behaviour patterns perceived of as being helpful and unhelpful by eight hospitalized cancer patients	- Eight, one time, semi-structured taped interviews were undertaken. The interviews were transcribed. Gottlieb's classification system was adapted and used to code the transcribed data concerning supportive nursing behaviour. - A five-category classification of unsupportive behaviour patterns was devised following further consideration of Gottlieb's scheme and from a review of the relevant literature
Larson (1984)	- Fifty-seven adult patients with cancer, hospitalized for treatment in three acute care hospitals in the United States	- To determine which nurse caring behaviours are perceived by patients as being most important or least important	The Caring Assessment Instrument (CARE-Q) was used to obtain patients' perceptions of important nurse caring behaviours

Variables	Reliability and validity	Findings
Emotionally supportive behaviours, informationally supportive behaviours, instrumentally supportive behaviours	- No findings	The findings of semi-structured interviews revealed that cancer patients emotionally supportive behaviours as the most supportive behaviours, followed by informational supportive behaviours. Unsupport behaviours were those perceived of as lacking or devoiding the emotional component
	- No findings	Supportive behaviours included: trusting relationship; comforts; explains/facilitates; monitors/follows trough; assessable. The results show that patients ranked as most important nurse caring behaviours the technical behaviours, such as competent clinical know-how; ranked as least important were affective behaviours such as asking for the name the patient wants to be called, and sitting down with the patient. Listening to the patients was ranked by patients as a moderate important nurse caring behaviour

Source	Setting and Sample	What was being studied	Methods
Wilkinson (1991)	- 54 registered nurses completed 3 audiotaped histories with a cancer patient; a self-administered questionnaire and a semi-structured audio-taped interview. - The study was conducted in a specialist and non-specialist hospital	- The study aimed to determine: - the extent to which nurses facilitate or block patients and awareness of their verbal behaviours; - whether there is a relation ship between nurses' verbal behaviours and levels of anxiety, social support, work support and attitude to death; -nurses' difficulties in caring for cancer patients	- Self-administered questionnaires were used to assess demographic data, fear of death, social support and state trait anxiety - Tape-recorded nursing history took place with cancer patients. A coding system, adapted from Forest was used to categorise nurses, behaviours. - Semi structured tape-recorded interviews on difficulties in caring for patients took place
Booth (1996)	- 41 hospice nurses of two hospices in the north of England; - 113 patients were interviewed	- To test the impact of training hospice nurses in key assessment skills, and to study the relation between the occurrence of blocking behaviours and perceived professional support	- All nurses were presented with a training program - nurses assessment measures concerning professional support included a semi structured interview, and a revised version of the House & Wells support scale - nurses assessment measures concerning their attitudes towards communication with cancer patients included a 4-point scale questionnaire; - Nurses views about their supervisor's competence in doing his/her job was measured with a scale developed by House, and House and Wells. - Nurses' assessment skills before and after the training were assessed with an audio-taped interview with a hospice patient

Variables	Reliability and validity	Findings
Blocking and facilitating behaviours:	Interrater agreement using the categories adapted from Forest: Cohen Kappa coefficient was .65 or above - No figures with regard to the other methods	- The findings indicate an overall poor level of facilitative communication. -Four styles of nurses' (blocking/facilitating) behaviours were identified: facilitators, ignorers, informers and mixers - Nurses' communication style is influenced by the environment created by the ward sister, the nurses' religious beliefs and attitude to death, rather than specific education in communication skills
- Blocking and facilitating behaviours	No findings concerning the reliability and validity of the questionnaires. The inter-rater system concer-ning coding the blocking behaviours ranged from .64 to .93 (Spearman, and from .005 to .469 (Wilcoxon)	The results of the study showed that a weak improvement of nurses' assessment skills after the training. The only significant difference was in the use of open-directive questions (P .002); The more disclosure of feeling by the patient, the more blocking behaviours of nurses occurred. Nurse used blocking behaviours less frequently when the they got practical and emotional support from their supervisors

Source	Setting and Sample	What was being studied	Methods
Maguire (1986)	- 216 health professionals: 65% of them were nurses. - simulated patients (exact number is not described)	- To test the impact of a workshop in health professionals' key assessment skills, and to test which behaviours promote or inhibit (simulated) cancer patients' disclosure of key information.	- All professionals attended a three to five day workshop. Before and after the workshop, the participants had an interview with a simulated patient, which was recorded on audiotape. A rating system, developed in Cancer Research Campaign by Maguire et al. was used to rate patient's and provider's utterances
Heaven & Maguire (1996)	Setting: two northern hospices in England Sample: 44 nurses and 87 cancer patients	To test the impact of a communication skill program on nurses' ability to elicit cancer patients' concerns	Nurses' skill level and their ability to elicit their patients' concerns were rated from audiotape. A rating system was used, measuring psychological depth, form, function, and blocking behaviours. Patients' state of anxiety and depression were measured with the Hospital Anxiety and Depression Scale (HADS) and the Spielberger State Anxiety questionnaires (SSA)
Webster (1981)	- 53 nurses (student/pupil nurses) and dying patients at different wards of four hospitals in the north of England (exact number of patients is not documen-ted)	- To identify distancing tactics of nurses when communicating with dying patients during caring activities	- Field observation by one researcher took place; describing and categorising the actual incidents between nurses and dying patients; no in depth analysis

Variables	Reliability and validity	Findings
Blocking and facilitating behaviours	- Interrater agreement of the rating system ranged from 82% to 92 %	- The use of leading questions and clarifying of physical aspects strongly inhibited patients disclosure of significant information; the use of open directive questions and empathy facilitated patients' disclosure of concerns and feelings about their illness and treatment. After the training, the facilitating were more used
Facilitating behaviours	No findings regarding the inter-rater reliability and validity of the rating system. H.A.D.S. no findings S.S.A. no findings	No significant improvement of nurses' skill level and their ability to elicit and identify their patient's concerns
- Blocking behaviours	- No findings	Field observation concerning nurses and dying patients revealed seven distancing tactics: Denial of the seriousness of the patients problem; abrupt change of the subject of conversation; behaving as though the patient had not spoken at all; intense concentration on the physical task in hand; pursuing the least threatening aspect of conversation; introducing a joking atmosphere, disappearing from a stressful situation

Source	Setting and Sample	What was being studied	Methods
Dennis-son (1982)	- A ward in a specialized cancer centre where patients are treated for gynaecological malignancies. - Eight nurses and eight patients, recently diagnosed with stage III ovarian cancer, receiving for the first time intravenous chemo-therapy treatment	- To investigate how nurses communicate with patients receiving their first intravenous chemotherapy treatment	- A qualitative and observational approach was adopted - The conversation between nurses and patients during treatment were audiotaped; the tapes were transcribed and the transcriptions were coded using a self developed classification system
Bond (1983)	- Fifty five cancer patients interacting with nurses on an oncology ward of a hospital in England	- To study nurses' communication with cancer patients	- The nurses were directly observed, and nurses' reports concerning the content of their conversation with patients were used. - A four-point rating system (developed by Altdchul) was used to indicate nurses' conceptualisations of their interactions. Another categorizing system was used to measure the level of nurses' understanding of patients physical and mental condition

Variables	Reliability and validity	Findings
Communicative behaviours	- No findings	- Qualitative analysis of the tape recordings showed that the most conversations were concentrated on information giving; only 25 % of the nurses explored patient feelings about chemotherapy, or asked them about their understanding of the treatment. In addition, most of the conversations were initiated by nurses, but nurses did not go on to explore issues in any depth, and cues from patients were not always appreciated
Blocking behaviours	- No findings	- Direct observation and nurses' reports concerning the content of their conversations with cancer patients showed an overwhelming concern with physical care and problems associated with ongoing treatment. Rarely was there discussion or exploration of how patients felt about their condition

Source	Setting and Sample	What was being studied	Methods
Suominen (1995)	- 140 Finish women who were diagnosed with breast cancer within the preceding three years - 125 nurses: 89 ward nurses and 36 nurses from out patient clinics in Finland	- To discuss the physical, psychological and social support of breast cancer patients, as evaluated by patients as well as by nurses	- Two questionnaires with open ended and multiple choice questions were developed to measure patients' and nurses' perceptions of support provided by nurses

Variables	Reliability and validity	Findings
Communicative behaviours	No findings	Especially during hospitalisation, patients felt that they received insufficient information, psychological and social support. However, the majority of the nurses disagreed with these patients perceptions. Further, according to the majority of the patients, nurses had insufficient time for them

Discussion

Patients with cancer seem to experience very considerable distress particularly in the first period after diagnosis, and are likely to develop an affective disorder in the first 2 to 3 months. The communicative behaviours of nurses seem to play a crucial role in meeting the cognitive and, more especially, the affective needs of patients with cancer.

Wilkinson's (1992) stated that effective communication with patients who have cancer is achieved when open two-way communication takes place and patients are informed about the nature of their illness and treatment, and are encouraged to express their anxieties and concerns. This statement corresponds to the research on doctor-patient communication, in which a clear distinction is made between instrumental or task-related behaviours and affective behaviours in order to meet patient's needs.

Instrumental behaviours refer to a technical intervention 'in order to solve the problem, for which the physician is consulted' on the basis of his expertise. Affective behaviours refer to a nontechnical interventions, which are important mainly important in gaining patient's confidence and in paying attention to other aspects of the patient's quality of life (Hall et al. 1987; Bensing 1992). From a patient's perspective, these behaviours coincide with two needs that must be met during the information exchange with the provider: the need to 'know and understand' and the need to 'feel known and understood' (Engel 1988).

A conceptual link has been made between the literature of doctor-patient communication and the literature of stress and coping (Bensing 1994). The instrumental or technical behaviour of the provider corresponds to 'problem-oriented coping', or the patient's effort at solving problems brought about by the disease, whereas the affective behaviour of the provider corresponds with 'emotion-oriented coping', or the patient's handling of emotions evoked by the disease. Both behaviours can have a positive impact on the patient's coping process, especially in the case of the patient with cancer, who feels stress on being confronted with a life-threatening disease.

The nursing activities reviewed in this article demonstrate that nurses also perform instrumental and affective behaviours during care activities with patients who have cancer, but their instrumental and affective communication is not as explicitly described in the research as doctor-patient communication. As a consequence, the picture of nurse-sourced important communicative behaviours during care activities with patients who have cancer remains

unsystematic.

Nevertheless, a number of the studies reviewed show that emphasis is placed on the affective side in which empathy, touch, facilitating and blocking behaviours, and comforting and supporting skills are considered to be essential themes in caring for patients with cancer. This corresponds with the character of the nursing profession, in which not only instrumental care but also the intimacy with patients who have cancer is considered as important (Raudonis 1983; Degner et al. 1991; Peteet et al. 1989; Ross et al. 1992).

Unfortunately, more studies of this review demonstrate a gap between the need of patients' with cancer for emotional support during the treatment and nurses' ability to give them adequate emotional care (Maguire 1995; Krishnasamy et al. 1996; Wilkinson 1991; Booth et al. 1996; Heaven et al. 1996; Maguire et al. 1996; Webster 1981; Bond 1983; Suominen et al. 1995). In these studies, nurses perform predominantly instrumental behaviours or use distancing tactics, which block the expression of concerns by patients with cancer or present an obstacle to their asking questions. Consequently, patients with cancer receive information that does not match their personal needs and poor psychosocial treatment from the nursing professionals (Chaitchik et al. 1992; Wilkinson 1992; Booth et al. 1996; Webster 1981).

On the whole, nurses seem to be aware of the discrepancy between their perceptions concerning the quality of care on the one hand and the nature of the actual care on the other. They report 'informing', 'assessing, 'giving support' and 'problem solving' as important tasks in caring for patients with cancer, while describing their use of strategies to avoid letting patients talk (Wilkinson 1991; Webster 1981; Dennison 1995) or their performance of mainly somatic or instrumental tasks in practice (Dennison 1995).

The principal explanation authors mention for the problematic interaction between these professionals and patients with cancer is the complexity of communication in an oncologic setting. The literature reveals that communication is complicated by emotional issues in patients with a poor prognosis, especially patients with cancer (Chaitchik 1992; Northouse et al. 1987; Maguire 1985; Faulkner 1993). Faller and Schilling (1985) pointed out that patients with cancer give themselves significantly more hope than doctors and nurses do. Interaction time with patients who have cancer tends to be abbreviated and distancing tactics are used (Maguire 1985) because of the unease that physicians and nurses experience in discussing emotional issues. One view is that when these providers deal with patients who have cancer, fear of their own death becomes intensified (Blanchard et al. 1983). Another view of doctors and

nurses focused on uncertainty: If they talk openly with patients who have cancer, they could be faced with problems with which they will not be able to cope (Webster 1981; Maguire 1985).
One result of these difficulties in nurse-patient communication is vagueness (Amir 1987). For patients who avoid information because they have reached a particular stage in their coping process, vagueness is not a real problem. However, a barrier exists when patients who are eager for information, receive vague responses from medical or nursing professionals. Vagueness can be seen as a struggle between awareness of the patient's right to know and the desire to protect the patient by withholding information or providing nonalarming information in a supportive manner (Amir 1987). This is how physicians and nurses attempt to survive emotionally and avoid confrontation with the overwrought emotions and anxiety of patients with cancer. It illustrates the 'pact of silence', by virtue of which providers and patients do not openly discuss issues for different reasons. A consequence of this problematic information exchange is that doctors and nurses do not routinely detect patient concerns.
The preceding illustrates the point that oncological settings, in particular, are characterized by specific aspects that make working and communicating with patients who have cancer challenging. Vachon (1987) described the stressors regularly experienced by oncologists and oncology nurses. These include caring for patients who are extremely sick , dealing with patient death at all ages, coping with poor staff communication, experiencing intense involvement with patients and their families, resolving conflicts between research and clinical care goals, and managing the work load imposed by the complicated responsibility of oncology care. Breitbart & Holland (1993) described the development of physical symptoms, psychological symptoms, and burnout of medical staff as a consequence of stress in a cancer setting.
It is important therefore that nurses working with patients who have cancer will structurally provided with continuing education programs in the future. Such programs should be focused on facilitative skills to elicit patients' concerns, in which nurses learn how to integrate these skills with the task related care for patients with cancer.
Regarding the quality of the studies in this review, it can be concluded that there are methodological shortcomings. In the first place, small sample sizes were used in several studies. In addition, observational analysis was used in only nine of the studies. Observational analysis is preferred because it is the most direct method of evaluating performed behaviours. Furthermore, the majority of the studies revealed no figures concerning the reliability and validity

of the measuring instruments. As a consequence of the small sample sizes and the poorly validated instruments, the quality of several studies is doubtful. On the basis on this review of the literature, it may be recommended that in future research, more controlled studies in this area should be conducted. These controlled studies should use observational methods that have proved to be reliable and valid. Finally, with regard to generalization of the findings, larger sample sizes should be used.

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Chapter 2

EVALUATION OF COMMUNICATION TRAINING PROGRAMS IN NURSING CARE

a review of the literature

Kruijver I.P.M., Kerkstra A., Francke A.L., Bensing J.M., Wiel H.B.M. van de (2000). Evaluation of communication training programs in nursing care: a review of the literature.
Patient Education and Counseling; 39:129-145

Abstract

An important aspect of nursing care is communication with patients. Nurses' major communication tasks are not only to inform the patient about his/her disease and treatment, but also to create a therapeutically effective relationship by assessing patients' concerns, showing understanding, empathy, and providing comfort and support. In this review, 14 studies, which focus on the evaluation of the effects of communication training programs for nurses, have been evaluated. The selected studies were screened on several independent, process and outcome variables as described by Francke et al. (1995). In this way not only is the training program taken into account as a variable which may be responsible for nurses' behavioural change and for changes in patient outcomes, but also a range of other variables which can give more nuanced explanations for a training program's degree of effectiveness

On the whole, the studies reviewed showed limited or no effects on nurses' skills, on nurses' behavioural changes in practice, and on patient outcomes. Finally, the majority of the studies had a weak design. The use of experimental research designs should be pursued in future studies in order to eliminate the influence of confounding variables.

Keywords: Nurses, Communication training programs, Evaluation

Introduction

Within current nursing care, increasing attention is being paid to effective communication, which according to Wilkinson (1991 & 1992) is defined as open two way communication in which patients are informed about the nature of their disease and treatment and are encouraged to express their anxieties and emotions. Two communicative behaviours employed by nurses seem to be important in meeting the communication needs of patients as defined above. First are the instrumental behaviours, which are of significance in informing the patient about the disease and treatment. Second are affective behaviours, such as showing respect and providing comfort and trust (Bensing 1991) which are important in creating a good relationship with the patient. An additional distinction to be made is that between the verbal and nonverbal components of communication within instrumental and affective communication. Nonverbal communication refers to paralinguistic features and behaviour, which conveys messages without the use of verbal language. Examples are speech rate, speech volume, facial expression, eye contact, posture, gesture, physical appearance and touch. Nonverbal communication appears to be especially important with respect to building rapport with others, and for conveying empathy and support (Caris-Verhallen et al. 1997; Heintzman et al. 1993).

In the case of life threatening diseases such as cancer, in particular, nurses report a need for communication training programs in which they can learn how to communicate effectively on emotional issues and psychosocial aspects, and also how to integrate these issues purposefully in delivering medical or technical care in nursing practice (Peteet et al. 1989; Ross et al. 1992).

During the last decade, many training programs in communication have been developed which target the improvement of nurses' communicative behaviours in daily practice. However, the literature reveals that relatively few of these programs have been evaluated. Evaluation studies are useful in gaining insight into the effect of these programs on nurses' levels of communication skill and other nurse and patient outcomes.

The effectiveness of communication training programs is not only dependent on program characteristics, but may be affected by a range of other variables as well. On the basis of a review of the literature, Francke et al. (1995) described several independent and process variables, which may be related to behavioural changes in nurses following training programs.

In the first place nurses' working experience is an independent variable. It is a background characteristic. The fact that inexperienced participants who have only a few years of nursing experience, may profit more from training programs than experienced nurses (Grond et al. 1979; Pool 1983) illustrates its influence. Other independent variables further include characteristics of the program itself (e.g., topics and duration), and the professional background of the teachers. Finally, independent variables include the social system in the working environment. Characteristics of the social system in the working environment include social support from superiors, and encouragement from colleagues in applying the newly acquired knowledge and skills in daily practice.
Process variables include the characteristics of the relationship with the teacher and that among the participants. Nurses often prefer warm, enthusiastic, friendly teachers with a great deal of expertise. Reciprocal sympathy and support, respect and feedback among participants may also contribute to the success of the learning process (Francke et al. 1995).
Francke et al. (1995) also described several outcome variables, which may be important mediators for behavioural change in practice. These include knowledge, skills, attitudes and an intention to change behaviours after the training. These variables mediate nurses' behavioural changes. However, the literature reveals (Smith et al. 1998; Boink 1996) that positive changes in knowledge, skills, attitudes and the intention to change do not automatically lead to actual behavioural changes. Yet, we consider behavioural changes highly important, since they are, in turn, (partially) responsible for positive changes in patient outcomes.

We screened selected studies of the independent process and outcome variables mentioned in this review of the literature. This allowed us not only to take the training program into account as a variable, possibly responsible for nurses' behavioural change and changes in patient outcomes, but also for a range of other variables. It may be helpful in explaining the effects of a communication training program. In addition, we looked at the research methods used in the selected evaluation studies to interpret the value of the effects measured.

The research questions addressed in this article are:

1. What are the characteristics of the communication training programs evaluated for nurses with regard to the following independent variables: participants' background characteristics, professional background of the teachers, characteristics of the training program?
2. What research methods are used to evaluate the outcomes of the training?
3. What are the process-oriented and effect-oriented outcomes of the training programs?

Methods

In order to obtain the relevant literature, a search was made of three data bases, running from 1985 to 1998: Medline, Nursing and Allied Health Literature and the Catalogue of the Netherlands Institute of Primary Health Care. The bibliographies of the selected articles also revealed some relevant articles, running from 1979. In general, studies of communication training programs for nurses appeared to be scarce. For this reason, the literature search covers the long period from 1979 through 1998. The majority of the articles selected, however, were from the last ten years.

The key-words used in these searches were:

nurse-patient relations/interaction in combination and sequence with: communication skills; training; teaching; education programs.

A total of 53 references were found by these searches. The following inclusion criteria were used for the review:

- The study was directed at evaluating communication training for nurses only or for nurses in combination with other professionals.
- It was published in English or Dutch.
- It was published as a thesis or in a scientific journal.

Considering the small number of evaluation studies found, all the studies which met these criteria were included, regardless of the quality of the training program or the evaluation methods used. Fourteen studies met the inclusion criteria, and are described in the Results section.

Results

Independent variables

The studies, when compared on the independent variables, showed the following results: (see Table 1)

Characteristics of the participants

Setting

Participants were working in an oncology setting (in eight studies), in a psychiatric setting (in one study); in a psychogeriatric setting (in one study), or in a general health care setting (in four studies).

Discipline(s)

Table 1 shows that in twelve studies, the participants were nurses. In four studies, the group was multi-disciplinary, also including physicians (Maguire et al. 1996; Ravazi et al. 1988), social workers (Maguire et al. 1996; Faulkner 1992), psychologists (Maguire et al. 1996), nursing and medical students and dieticians (Schlundt et al. 1994). The number of participants ranged from 8 to 218.

Working experience

The studies of Pool (1993) and Grond et al. (1979) showed that nurses' working experience can change the effects of the training. Both studies showed that participants with little nursing experience reported most behavioural changes. The study by Ravazi et al. (1993) which took place in an oncology setting was the only study which documented at least six months participant experience in caring for cancer patients. In five studies, registered nurses participated; registered nurses and student nurses participated in four studies. One study (Paxton et al. 1988) had only student nurse participants. In the study by Booth et al. (1992), Grond et al. (1979), it was reported that all ward staff participated (including experienced and inexperienced patients).
Finally, in two studies, the nurses' working experience was not documented.

Characteristics of the training program

Topics:

The training programs selected focussed on teaching various types of communication skills, (see Table 1). The different skills were taught to improve interaction between nurses and patients. Facilitating skills were taught in order

to encourage patients to disclose their concerns particularly in the training programs in oncology. In the studies by Ravazi et al. (1988; 1993), a training program was evaluated which aimed not only at improving nurses' communication skills, but also at positively changing nurses' attitudes towards their work, and decreasing nurses' stress.
In one study, nurses were trained in communication skills to promote patient compliance (Schlundt et al. 1994); finally, in the study by Kihlgren et al. (1990) nurses were not only taught skills, but also taught how to create a patient friendly environment to optimize psychosocial treatment for psychogeriatric patients.

Didactic strategies
In the selected studies, theoretical and/or practical didactic strategies were presented (see Table 1). The theoretical strategies included techniques such as theoretical information, discussion of the theory and cases, exchange of experience and information, and modelling. The practical instructions included role-playing exercises, rehearsal, feedback and 'on the job' exercises.
In nine studies, the program included a combination of practical as well as theoretical training. Role-playing and feedback were often used as didactic strategies within the selected studies.
Two studies (Paxton et al. 1988; Kihlgren et al. 1990), gave theoretical training only; one study taught only practical skills (Faulkner et al. 1984). Finally (Maguire et al. 1996; La Monica et al. 1987), there were two studies without didactic strategies.

Duration
All but two of the studies (Faulkner 1992; Faulkner et al. 1984) provided information about the duration of training (see Table 1). In eight studies, this information was provided in terms of hours, and in six studies in terms of the time period in which sessions took place. The number of hours ranged from 6 to 24; the training periods ranged from two days to ten weeks.

Professional background trainers
In two studies, the trainer(s) had a nursing background; in four a psychology background; in two studies the trainers had professional backgrounds in two disciplines: both in nursing as well as psychology (Kilhgren et al. 1990), or psychology and psychiatry (Ravazi et al. 1988). In six studies, the trainer's background was not documented. One study (Pool 1983) gave some

information about the relationship between background of the trainer and nurse/patient outcomes. Pool (1983) reported that, in nurses' opinion, teachers were unfamiliar with nursing practice and that their approach was too general. Pool suggested that this had a negative influence on nurses' behaviour change in practice.

The social system of the working environment

Two studies mentioned the influence of nurses' working environment on the use of skills in practice. Booth et al. (1996) found that nurses used blocking behaviours less frequently when they received practical and emotional support from their supervisors. Pool (1983) reported that nurses were hindered in putting the therapeutic skills learned during training into practice as a consequence of time pressure and negative attitudes on the part of colleagues.

Research design and instruments used to evaluate the training outcomes

Research design

Three studies had a classic experimental research design, individual participants were randomly allocated to a control and an experimental ward (see Table 2). In another study (La Monica 1987) randomization took place at ward level, which meant that the wards were randomly allocated as a control or experimental ward. A pretest-post-test nonrandomized design with an experimental and a control group was used in four studies. A single group pretest-post-test design was used in six studies.

On the whole, the pre-tests were often a few days before training; the post-tests varied from a few days to three months after training.

In five studies, two post-tests were used. The second post-test varied from two to nine months after the first post-test.

Instruments: type

Measuring nurses' communication skills

In order to assess communication skills, videotapes (in four studies) or audiotapes (in seven studies) were made of interviews between nurses and patients (see Table 2). In five studies, interviews were taped with simulated patients; in six studies real patients were involved in the taped interviews with nurses.

With the exception of the study by Grond et al. (1979), nurses' skills were observed during the interviews, using an observation system tailored to the specific skills taught during training. In the study by Grond et al. (1979), nurses' therapeutic skills were observed using three generic scales: the non-directivity scale derived from Neuteboom (1966), and warmth and empathy scale, developed by Truax et al. (1967).
With regard to the majority of the studies in the oncology setting, the observation systems used the same categories, but small adaptations were made for the different oncology studies. This makes the different studies comparable (see Table 2).
In addition to observations on tape which is a direct observational method, nurses' self-reporting in the form of questionnaires, was used to measure skill levels. La Monica et al. (1987) used the Empathy Construct Rating scale to measure empathy skills. In the study by Pool (1983) and Grond et al. (1979), the short version of the therapeutic behaviour questionnaire developed by Cassee (1973) and adapted by Jonkers (1974) and Poortinga (1975) was used to measure therapeutic behaviours.

Measuring other nurse outcomes
The studies by Ravazi et al. (1988; 1993) are the only studies in which communication skills were taught but not explicitly measured as an outcome variable. Ravazi et al. (1988; 1993) measured the impact of the training on nurses' attitudes towards their work, using the Semantic Differential Questionnaire (1988; 1993), and the impact of the training on nurses' stress levels, using the Nursing Stress Scale (Ravazi et al. 1993).

Measuring patient outcomes
In three studies, questionnaires were used to measure patient outcomes, such as state of depression and anxiety (La Monica et al. 1987; Jonkers 1974), satisfaction with care (La Monica 1987), perception of the quality of communication with the nurses (Grond et al. 1979) or perceptions of change in nurses' communication skills after the training (Haak et al. 1982).

Validity and Reliability of the instruments
Instruments measuring nurses' skills: coding systems and questionnaires
In three studies the inter-rater reliability of the coding system is explicitly documented. Correlations varied from 0.68 (Haak et al. 1982) to 0.87 (Schlund et al. 1994), the significance of the agreements measured with kappa coefficient

varied from $p<0.05$ to $p<0.01$ (Faulkner et al. 1984). In the study by Maguire et al. (1996), and Heaven et al. (1996) it was stated that there was an acceptable agreement, but it was not explicitly documented. The validity of the coding systems was not documented in any study.
In three studies (Grond et al. 1979; Pool 1983; La Monica et al. 1987), a questionnaire was used to measure nurses' skills. Evidence for reliability and validity of the scale, used in the study by la Monica et al. was not presented in this study but in another one. Only in the study by Pool (1983), was the reliability of the scale documented; Chronbachs alpha varied from 0.85 and 0.89. The validity of this scale is not reported.

Instruments measuring other nurse outcomes, and patient outcomes
Only those instruments used in the studies by Ravazi et al. (1988; 1993), in order to measure nurses' stress and attitudes have proved reliable (stress) or valid (attitudes).
With regard to the patient outcomes, the instruments used in the study by La Monica et al. (1987) in order to measure patient satisfaction and depression have proved reliable and valid in the literature. No detailed information about them is given in La Monica's study. Finally, reliability of the scale used in the study by Haak et al. (1982) was established; in this, patients perceptions of the quality of nurses communication skills were measured.

Process and outcome variables

In addition to the independent variables, we screened the studies of our review for process and mediating outcome variables, as defined by Francke et al. (1995), as well as on outcomes relating to nurses' behavioural changes in daily practice, and patient outcomes.

Characteristics of the trainer, their relationship with the participants, and the relationship between participants
One study (Faulkner et al. 1984) reported the importance of giving the participants feedback on their performance in a 'safe environment'. This included first giving the participants feedback about their good points to reduce the risks of undermining confidence (see Table 1).

Skills, Attitudes and Knowledge

The influence of the training on nurses' attitudes, skills and knowledge was measured in studies in which video or audio observations were made of nurses interaction with simulated patients (Maguire et al. 1996; Faulkner 1992; Schlundt et al. 1994; Paxton et al. 1988; Ravazi et al. 1993; Haak et al. 1982), and/or in studies in which questionnaires (Grond et al. 1979; Ravazi et al. 1988; La Monica et al. 1987) were used (see Table 2).

Ravazi et al. reported a positive change in nurses attitudes, especially attitudes toward illness and death, personal growth professional relationship (Ravazi et al. 1993) and occupational stress related to inadequate preparation (Ravazi et al. 1988).

Paxton et al. (1988) found a significant change in one style of behaviour: after training, nurses used statements more as opposed to questions. Faulkner (1992) reported a significant relation between simulated patients' disclosure of psychological problems and providers' use of open and directive questions, clarification of cues, negotiating style, the use of empathy, and understanding hypotheses. It remains unclear if this correlation is found during pre- or post-test.

Finally, in the study by Schlundt et al. (1994), significant short-term improvements were observed in skills relating to: relationship building, interviewing, problem diagnosis, and behavioural intervention. In four studies, no significant effect of the training on nurses' attitudes, skills, and (or) knowledge was found (Grond et al. 1979; Ravazi et al. 1988; La Monica et al. 1987; Haak et al. 1982).

Intention to change

None of the studies reported nurses' intention to change their behaviour after the training (see Table 2).

Behavioural changes in nursing practice

The influence of the training on nurses' behavioural change was measured in the five studies in which video or audio observations were made of nurses with actual patients (see Table 2).

From the study by Booth et al. (1996) and Heaven et al. (1996), it appeared that even after the training, nurses were no better in identifying what cancer patients concerns were. In general, the more disclosure of feeling by the patient, the more blocking behaviours there were from nurses. Booth et al. found a significant small increase of nurses' use of open direct questions.

Table 1: Independent and procesvariables related to behavioural change following communication training

	Independent variables	
Authors	Characteristics of the participants	Training: didactic strategies, duration, topics
Grond & Visser 1979	*Setting/discipline*: General health care/two surgical wards of a general hospital in the Netherlands. *Experience*: not explicitly documented (All nursing staff)	*Didactic strategies*: theoretical part: studying and discussing theory practical part: role-playing exercises and discussion *Duration*: 4x 1,5 hours *Topics*: therapeutic behaviours, especially the non directive skills (warmth, empathy)
Pool 1983	*Setting/discipline*: General health care/nurses working on different wards of a general hospital *Experience*: registered as well as learner nurses	*Didactic strategies*: theoretical part: studying and discussing theory practical part: role-playing exercises and discussion *Duration*: 8x 2,5 hours *Topics*: therapeutic behaviours, especially the non directive skills
Maguire et al 1996	*Setting/discipline*: Oncology/health professionals: 65% nurses. *Experience*: ??	*Didactic strategies*: theoretical part: videotape demonstration of key communication skills, and discussion; a practical part role playing sessions *Duration*: 3 or 5 days *Topics*: interviewing skills
Ravazi et al 1988	Setting/discipline: oncology/health professionals working in different cancer centres. *Experience*: licensed health professionals	*Didactic strategies*: exchange of experiences, theoretical information, role playing sessions, case discussions *Duration*: 12 hours (weekly sessions of 180, 120, 90 or 75 minutes). *Topics*: attitude towards death and dying

		Process variables
Social System of the working environment	Background teachers	Characteristics of relationships with teachers and participants
---	Psychology (1 trainer)	---
A barrier to bringing into practice the therapeutic skills learned during the training as a consequence of time pressure and a negative attitude of collegues	Social psychology (2 trainers)	The teachers were unfamiliar with nursing practice; they had a general approach
---	Background and number of trainers: ??	---
---	Psychology/ psychiatry (2 trainers)	---

Table 1 (continued)

	Independent variables	
Authors	Characteristics of the participants	Training: didactic strategies, duration, topics
Faulkner 1992	*Setting/discipline*: Oncology/health professionals caring for cancer patients (hospice doctors, Macmillan nurses, social workers, and other health care providers) *Experience*: licensed health professionals	*Didactic strategies*: ?? *Duration*: ?? *Topics*: assessment skills and psychological depth
Schlundt et al 1994	*Setting/discipline*: General health care/health professionals (practising nurses, nursing and medical students, dietic interns and dietitians). *Experience*: licensed as well as student health professionals	*Didactic strategies*: faculty demonstration, participant rehearsal, and group and individual feedback. *Duration*: 3 to 5 days *Topics*: relationship building, interviewing, problem diagnosis, and behavioural intervention
Paxton et al 1993	*Setting/discipline*: Psychiatry/learner psychiatric nurses at an education centre within a general hospital. *Experience*: learner nurses	*Didactic strategies*: theory: teaching the conversation model of psychotherapy on the base of videotapes of the nurses with simulators *Duration*: 2 days *Topics*: therapeutical qualities of day to day conversations with patients

		Process variables
Social System of the working environment	Background teachers	Characteristics of relationships with teachers and participants
---	Background and number of trainers: ?? (not clearly documented)	---
---	Background and number of trainers: ??	---
---	Background and number of trainers: ??	—

Table 1 (continued)

	Independent variables	
Authors	Characteristics of the participants	Training: didactic strategies, duration, topics
Ravazi et al 1993	*Setting/discipline*: oncology/nurses in four general hospitals. *Experience*: registered nurses, 6-month experienced in caring for cancer patients	*Didactic strategies*: theoretical information, case presentations, role-playing exercises with video-taped feedback, exchanges of experiences. *Duration*: 8 weekly sessions of 3 hours. *Topics*: communication skills and attitudes
Booth et al 1996	*Setting/discipline*: Oncology/nurses of two hospices. *Experience*: not explicitly documented (All nursing staff)	*Didactic strategies*: ?? *Duration*: 6 sessions spread over 2 months *Topics*: assessment skills and psychological depth
Kihlgren et al 1990	*Setting/discipline*: Psychogeriatry/nurses of a long term ward of a nursing home *Experience*: registered as well as learner nurses	*Didactic strategies*: Theory: education about a theoretical model of interaction between patients in advanced stage of dementia and their care givers. Instructions about creating a patient friendly ward environment. *Duration:* one week *Topics*: Theory concerning human relationships, normal ageing, environment, interaction, communication, human territory, confusion and dementia diseases. Discussion of the Erikson theory in relation to demented patients.
Faulkner & Maguire 1984	*Setting/discipline*: Oncology/ward nurses. *Experience*: registered nurses	*Didactic strategies*: videotape demonstration, to record interviews on the basis of a standard assessment from, in order to discuss them and giving feedback. *Duration :??* *Topics*: assessment skills

		Process variables
Social System of the working environment	Background teachers	Characteristics of relationships with teachers and participants
---	Psychology (2 trainers)	---
Nurse used blocking behaviours less frequently when they got practical and emotional support from their supervisors	Background trainer ?? (1 trainer)	---
---	Psychology and nursing science (2 trainers)	—
---	Nursing science (number of trainers ??)	Feedback in a 'safe environment'

Table 1 (continued)

	Independent variables	
Authors	Characteristics of the participants	Training: didactic strategies, duration, topics
La Monica et al 1987	*Setting/discipline*: Oncology/nurses of two units of a cancer centre. *Experience:* registered nurses	*Didactic strategies*: didactic and experimental techniques, modelling, rehearsal, feedback, imagery *Duration*: 14 to 16 hours *Topics*: helping model, emphatic responses, communication theory, perception of verbal and nonverbal feelings, ineffective communication styles, care of oneself
Heaven & Maguire 1996	*Setting/discipline*: Oncology/nurses of two hospices *Experience*: ??	*Didactic strategies*: skills and content of assessment brainstorming sessions, video demonstrations of assessment interviews, feedback on audiotapes concerning interviews of nurses with patients *Topics*: assessment skills
Haak & Sijlbing 1982	*Setting/discipline*: General health care/nurses, working on an urology and an internal ward of a general hospital *Experience*: registered as well as learner nurses	*Didactic strategies*: Video-demonstrations, exercises according to the micro-counselling model, 'on the job exercises'. *Duration*: 8 sessions of 3 hours *Topics*: communication skills

		Process variables
Social System of the working environment	Background teachers	Characteristics of relationships with teachers and participants
---	Nursing science (1 trainer)	---
---	Background trainer ?? (1 trainer)	---
---	Psychology (2 trainers)	---

Table 2: Methods of evaluation studies and outcomes variables

	Methods	
Authors	Design and sample	Instruments: name/characteristics
Grond & Visser 1979	- a randomized design with a pretest and a post-test (last measurements: directly after the training) - 25 nurses - 50 patients	-nurses' therapeutic skills: video-observations. Three scales: the nondirectivity scale, derived from Neuteboom's scale; the warmth and empathy scale, developed by Truax and Carkhuff (reliability and validity ??). -Patients' experience: a self developed scale (reliability and validity ??) -nurses' therapeutic behaviours: a scale developed by Pool, Visser and Kraan (1978) (reliability and validity ??)
Pool 1983	- a nonrandomized pre-posttest design with an experimental group and a non-equivalent control group - 24 nurses - no patients	-Nurses' therapeutic behaviours: a short version of the behaviour questionnaire (developed by Cas-see (1973) and adapted by Jonlers (1974) and Poortinga (1975) (reliability established; validity ??) -Nurses' perceptions about the training, and their opportunities to use the learned skills into practice: a self developed written evaluation with open questions at two time points (directly after the training and three months after the training) (validity and reliability ??)
Maguire et al 1996	- a single group pre-post-test design (last measure-ments: directly after the training) - 216 health professionals - ?? simulated patients	-Nurses' skill level and their ability to elicit their patients' concerns: audiotaped interviews. - The rating system: (C.R.C.W.E.M), providing a rating of form, content, function and the use of blocking behaviours of each utterance of the inter-views. In addition, psychological depth was measured in level 0 to 3 (inter-raterreliability established)

		Outcome variables
Knowledge, skills, attitudes	Behavioural change or intention to behavioural change	Patient outcomes
improvement of therapeutic skills: 0	Changes in nurses therapeutic behaviours: 0	patients' perceptions concerning nurses' therapeutic behaviours (in general positive): 0
improvement of therapeutic behaviours: 0	----	----
improvement of nurses' skill level and their ability to elicit and identify their patient's concerns: 0	----	---

Table 2 (continued)

	Methods	
Authors	Design and sample	Instruments: name/characteristics
Ravazi et al 1988	- a non randomized pretest-posttestdesign with a control and an experimental group (2 posttests; last measurements after 2 months) - 165 health professionals - no patients	- Health professionals' attitudes: the semantic differential questionnaire (validity established, reliability ??)
Faulkner 1992	- a single group pre-posttest design (last measurements ??) - 218 health professionals - ?? simulated patients (exact number is not described)	-Health professionals' skill level: audiotaped interviews. A rating system was used, measuring form, content, psychological depth, function and the use of blocking behaviours of each utterance of the interviews. Inter-rater reliability and validity ???
Schlundt et al 1994	- a single group pretest-posttest design (last measurements: directly after the training) - 39 health professionals ?? simulated patients	Providers' communication skills: videotaped provider-(simulated) patient interactions. The rating system: self developed, consisting of 17 skill categories (inter-raterreliability established, validity ??)

		Outcome variables
Knowledge, skills, attitudes	Behavioural change or intention to behavioural change	Patient outcomes
positive attitude change with regard to attitude about oneself, attitude toward illness and death, personal growth, professional relationship, and occupational attitudes: +	----	---
relation between simulated patients' disclosure of psychological problems and providers' use of open and directive questions, clarification of cues, negotiating style, the use of empathy, and understanding hypotheses: +	----	----
(short term) improvements concerning: relationship building, interviewing, problem diagnosis, and behavioural intervention: +	----	—

Table 2 (continued)

	Methods	
Authors	Design and sample	Instruments: name/characteristics
Paxton et al 1993	- a randomized design with one pretest and two posttests (last measurements: after 3 months). - 10 nurses - ?? simulated patients (exact number is not described)	Nurses' therapeutic skills: videotaped interviews. The rating system: the method of Maguire (1984) and Goldberg (1984), measuring initial behaviours, picking up cues, style, function, time focus, contents of provider's utterances (inter-rater reliability ad validity ??)
Ravazi et al 1993	- a randomized pre-post-test design (2 posttests; last measurements: two months after the training) - 72 nurses - ?? simulated patients.	- Nurses' attitudes: the Semantic Differential Questionnaire (reliability and validity ??) -Nurses' levels of stress: the Nursing Stress scale (validity established, reliability ??) - Nurses' communication skills: videotaped interviews. - The rating system: (C.R.C.W.E.M), providing a rating of form, content, function and the use of blocking behaviours of each utterance of the interviews (reliability and validity ??)

		Outcome variables
Knowledge, skills, attitudes	Behavioural change or intention to behavioural change	Patient outcomes
- use of more statements, not questions: + (the only significant difference).	---	---
- more in control of the interview: + - improvement of attitudes related to self concept and on the level of occupational stress: +	---	---

Table 2 (continued)

	Methods	
Authors	Design and sample	Instruments: name/characteristics
Booth et al 1996	a single group pre-posttest design (2 post-tests; last measurements: after 9 months) - 41 hospice nurses - 113 hospice patients	- nurses' professional support: a semi structured interview, and a revised version of the House & Wells support scale (validity and reliability ??) - nurses' attitudes towards communication with cancer patients: a 4-point scale questionnaire (validity and reliability ??) - Nurses views about their supervisor's competence in doing his/her job: a scale developed by House, and House and Wells (validity and reliability). - Nurses' assessment skills: an audiotaped interview patient. A rating system was used, measuring form, content, function and the use of blocking behaviours of each utterance of the interviews. In addition, psychological depth was measured in level 0 to 3 (inter-rater reliability established, validity ??)
Kihlgren et al 1990	- a non randomized pre-posttest design with a experimental and control group (last measurements: 3 months after the training) - 10 nurses - 10 patients	Nurses' communication skills: videotaped nurse-patient interactions. The rating system: focussing on clarity of cues, sensitivity and synchronicity (validity and inter-reliability ??).

		Outcome variables
Knowledge, skills, attitudes	Behavioural change or intention to behavioural change	Patient outcomes
----	- improvement of nurses' assessment skills: 0 - the use of open-directive questions: + (the only significant difference) - reducement of the use of blocking behaviours: 0	---
----	-warmer and friendlier environment:+ -more sitting with and talking to patients:+ -increased sensitivity to patients' cues:+; - patients were given more opportunities to make their own choices:+	During the music sessions: - more active + - increased helpfulness: + - increased synchronisity: + - less aggressive: +

Table 2 (continued)

	Methods	
Authors	Design and sample	Instruments: name/characteristics
Faulkner & Maguire 1984	- a single group pre-post-test design (last measurements ??) - 8 nurses - ?? patients	-Nurses' skill level and their ability to assess their patients' concerns: audiotaped interviews. A rating system was used, measuring the use of clarification, control, precision, facilitation, open questions, brief questions, respons to verbal leads, avoidance or repetition, handling emotionally laden areas, avoidance of jargon and rejection of jargon (American Psychological Association 1980). Inter-rater reliability established, validity ??
La Monica et al 1987	- a randomized pre-post-test (last measurements: directly after the training) - 109 nurses - 656 patients	- Patient outcome measures: the Multiple Affect Adjective Check List and the La Monica/Oberst Patient Satisfaction Scale (validity and reliability established); - Nurse outcome measures: the Empathy Construct Rating Scale (validity and reliability established)

		Outcome variables
Knowledge, skills, attitudes	Behavioural change or intention to behavioural change	Patient outcomes
----	- improvement regarding the assessment of problems: + -improvement of skills (handling emotionally laden areas, open and brief questions, verbal leads, showing empathy and competence): +	---
improvement empathy skills (self report ECRS as well as patient rating) scores: 0	----	less anxiety and hostility +

Table 2 (continued)

	Methods	
Authors	Design and sample	Instruments: name/characteristics
Heaven & Maguire 1996	- a single group pre-post-test design (2 posttests; last measurements: after 9 months) - 44 nurses - 87 cancer patients	Nurses' assessment skills: audiotaped interviews. A rating system was used, measuring psychological depth, form, function blocking behaviours and behaviours which show concern of nurses. (validity and (inter)reliability ??) - Patients' state of anxiety and depression: the Hospital Anxiety and Depression Scale (HADS) and the Spielberger State Anxiety questionnaires (SSA) (validity and reliability ??)
Haak & Sijlbing 1982	- a non randomized pre-posttest design with a control and an experimental group (last measurements: directly after the training) - 20 nurses - 81 simulated patients	Nurses' communication skills: videotaped observations. The rating system: eight observation categories (not clear documented) (inter rater reliability established, validity ??). - patients' perceptions of nurses change in communication skills: the 'gespreksvaardigheden vragenlijst' (GV)(reliability established, validity ??)

		Outcome variables
Knowledge, skills, attitudes	Behavioural change or intention to behavioural change	Patient outcomes
----	improvement of nurses' skill level and their ability to elicite and identify their patient's concerns: 0	not reported
improvement of communication skills: 0	----	patients' perceptions about changes of nurses' communication skills: 0

Explaining of the signs:

+ = positive effects
0 = no positive effects

Further, results from Booth's study showed a weak increase in nurses' assessment behaviours after the training. Grond et al. (1979) found that nurses' therapeutic behaviours did not increase after the training.
The only two studies in which significant improvements were measured, were the studies by Kihlgren et al. (1990) and Faulkner et al. (1984). Kihlgren et al. (1990) found that after training, the environment was warmer and friendlier, patients were given more opportunity to make their own choices, the caregivers more often sat and talked to patients, and finally the caregivers showed an increased sensitivity to patients' cues. From the study of Faulkner et al. (1984), it appeared that after training, nurses increased the use of relevant interviewing techniques and assessment of patients' problems.

Patient outcomes

In four studies, patient outcomes were measured (see Table 2). In the study by La Monica et al. (1987) and Kihlgren et al. (1990), the effect of the training on patients well-being was reported.
La Monica et al. found that patients cared for by trained nurses showed significantly less anxiety and hostility than patients cared for by untrained nurses. Kihlgren et al. found that during the music sessions patients were more active; that there was an increased helpfulness and synchronicity between patients, and that patients were less aggressive.
In the study by Haak et al. (1982) and Grond et al. (1979), patients perceptions about the quality of nurses' communicative behaviours were reported.
Haak et al. (1982) and Grond et al. (1979) reported that there was no change in patients' perceptions about changes of nurses' communication skills between pre- and post-test. Further Grond et al. (1979) reported that on the whole, patients' perceptions of therapeutic behaviours were positive.

Discussion

In this study, an overview is presented of fourteen evaluation studies of communication training programs for nurses. Most of the studies reviewed showed limited effects on nurses' behavioural changes in practice and on patient outcomes. In order to understand those (limited) effects, we reviewed the selected studies on several independent, process, and (mediating) tcome variables as defined by Francke et al. (1995).

As regards the *independent variables,* it is the professional background in particular that is given in most studies. In most programs, psychologists were involved, and in a minority of them nurses. It is not always clear whether there is a relationship between the professional background of the teachers and the effects measured. In his study, Pool (1983) suggests that the fact that the trainers were psychologists with limited knowledge about nursing resulted in an approach too general. This could have inhibited effects on nurses' behaviour change in practice. These findings are in line with our findings, that in the only two studies (Kilhgren et al. 1990; Faulkner et al. 1984), in which positive effects on nurses' behavioural changes were found, did the teachers have a nursing background.

It is difficult to find a relationship between characteristics of the program and effects as well. The didactic strategies, a main characteristic of the program itself, varied in relation to positive behavioural changes. Behavioural changes were found in the programs that consisted of theory alone Kihlgren (1990) or consisted of only practical exercises (Faulkner et al. 1984). Effects on nurses' skills, knowledge and attitudes were predominantly shown in the studies with the combination of practical and theoretical didactic strategies.

With regard to the communication topics in the training programmes, it is remarkable that no attention is paid to nonverbal communication. In the selected studies, investigators focussed exclusively on the verbal component of communication, and neglected the nonverbal component which also influences the interaction between patient and nurse.

In two studies, the importance of social system in the working environment was mentioned. Pool (1983) reported that a negative work environment, which means lack of support from supervisors for use of the newly acquired skills in practice, formed a barrier in putting the skills learned into practice; Booth et al. (1996) reported that a positive work environment led to increased use of facilitating behaviours, which means nurses ability to assess and clarify patients' concerns.

Faulkner et al. (1984) stressed the importance of giving the participants feedback on their performance in a 'safe environment' with respect to the *process variables,* as regards the characteristics of the trainer, his/her relationship with the participants, and the relationship between the participants.

As regards the *(mediating) outcome variables*, the results show that the effects on behavioural changes were limited. Only Kihlgren et al. (1990) and Faulkner et al. (1984) found improved behavioural changes in practice. With regard to

skills, knowledge or attitudes, changes were found in four studies (Ravazi et al. 1988; Schlundt et al. 1994; Paxton et al. 1988; Ravazi et al. 1993).
Although a small number of studies showed some improvement in nurses communicative behaviour in practice, it remains unclear however as to whether these behavioural changes resulted in positive effects on patients as well. Kihlgren et al. (1990) and La Monica et al. (1987) assessed patients' well-being. However, the question remains as to whether patients' well-being was affected by more factors than the training alone. It is remarkable that, although La Monica did not find effects on nurses' communication behaviour, the patients outcomes do give an indication that nurses (and therefore also patients) benefited from the programme which was focussed on teaching empathic behaviour. Grond et al. (1979) and Haak et al. (1982) could not detect improvements in patients' satisfaction about nurses' communication skills after training. Patients' perceptions were positive and didn't change significantly. Our findings on this accord with other research, which reveals that patient satisfaction is always high, which results in limited variance in the scores (Frederikson, 1995; Cohen, 1996).
With regard to the *research methods*, we see that an experimental design was used in relatively few studies, which in general is the most reliable design for measuring effectiveness of a training program. It is also worth noting that in the studies using an experimental design (Grond et al. 1979; Pool 1983; Ravazi et al. 1988; Paxton et al. 1988; La Monica et al. 1987) limited results were reported concerning improved skills (Ravazi et al. 1988; Paxton et al. 1988; Ravazi et al. 1993) and no results are reported concerning behavioural changes (Grond et al. 1979; La Monica et al. 1987). According to Black (1996) these reduced effects are a consequence of the limitations of experimental trials. In spite of the many advantages of this research design, Black emphasizes that random assignment may interfere with subjects' motivation to participate in the training. This, in turn, may reduce the effects of the training.
In contrast, more effects were reported in the studies with an alternative design (Schlundt et al. 1994; Booth et al. 1996; Kilhgren et al. 1984; Faulkner et al. 1984). When considering the studies without a control group however, questions can be raised as to whether the improved skills and behaviours were a result of the training. The pre- and post-test mostly took place immediately before and after the training. However, in the literature it is suggested that the communicative behaviours of the nurses after the training still improve during their nursing practice, which means that it may take some time before the newly acquired or modified behaviours are integrated into the daily routine

(Hulsman 1998). Several of the studies reviewed carried out a second follow-up measurement which was generally done three months after the training and in a few studies, at least nine months after the training.

In order to measure nurses' skills and behavioural changes, video and audiotapes were made of nurses with patients. This makes it possible to measure the effect of the training by means of direct observation of nurses' communicative skills and this can therefore be regarded as the most important indicators of training effects. For this purpose, simulated or actual patients participated in the studies. With simulated patients, nurses' competence in their communicative skills can be measured; with real patients nurses' performance of their communicative skills or behavioural change in daily practice can be measured (Pieters 1991). The advantage of using simulated patients is that they play the same role for every nurse. The disadvantages of working with simulated patients however are that interacting with them may be artificial, and that patient outcomes cannot be measured. A realistic picture can be drawn from working with actual patients, yet actual patients may differ. Uncontrolled patient influences may obscure the measurement of training effect. A combination of working with real as well as with simulated patients could be control for the limits relating to working with one of the two patient groups. This combination was used in none of the selected studies.

Finally, in evaluation studies, the content of the training is standard for every participant. However, participants may differ in their educational needs. In that case, the one participant will learn and benefit more from the training than the other participant. This, in turn can also lead to reduction of the effectiveness of a communication training.

In future studies, more focus should be placed on investigating, evaluating and inculcating skills that optimize nurse-patient communication. From our study it appears that relatively few of these programmes have been evaluated. Evaluation studies are useful in gaining insight into the effect of these programs on nurses' levels of communication skills and other nurse and patient outcomes. Further, an increased focus in research on the evaluation of communication training programs may increase the attention paid to the importance of teaching and evaluating the relevant skills needed to optimize nurse-patient communication. This, in turn, can lead to an enhanced implementation of effective (continuing) education programs for nurses in patient care.

Additionally, future studies should focus more on evaluating nonverbal communication, which has shown to be important with respect to building

rapport with patients, and with respect to conveying empathy and support, in nurse-patient interactions. Hitherto the nonverbal component in this area has been widely neglected.

We do not yet possess a complete picture of the influence of the independent, process and outcome variables, as described by Francke et al. (1995). In order to strengthen the theoretical frame of this model, more research is needed to investigate the precise influence of these variables when evaluating the effect of communication training programmes on nurses' communication.

As regards the outcome variables, it is to be recommended that studies should use a combination of real and simulated patients to control for the limits in working with one of the two patient groups.

Finally, the use of experimental research designs can be pursued in future studies in order to eliminate the influence of confounding variables. Although randomization at the individual level is theoretically the strongest design, it seems that, especially in field studies, it is practically impossible to keep nurses separate in the control and intervention conditions, especially when they are working on the same ward. Effectiveness of the intervention can be reduced to cross-over of information between the conditions. Randomization at ward level is a suitable alternative, as the groups in both conditions are working on separate wards. In order to investigate the effects of a communication training programme for nurses during interactions with cancer patients, we are currently conducting an experimental pre-test - post-test study, characterized by randomization at ward level.

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Chapter 3

COMMUNICATION SKILLS OF NURSES DURING INTERACTIONS WITH SIMULATED PATIENTS WITH CANCER

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Abstract

In this paper the balance of affective and instrumental communication employed by nurses during the admission interview with recently diagnosed cancer patients was investigated. For this purpose, admission interviews between 53 ward nurses and simulated cancer patients were videotaped and analysed using the Roter Interaction Analysis system, in which a distinction is made between instrumental and affective communication.

The results reveal that more than 60% of nurses' utterances were of an instrumental nature. Affective communication occurred, but was more related to general communication like giving agreements and paraphrases than to discussing and exploring actively patients feelings by showing empathy, showing concern and optimism.

In future, nurses should be systematically provided with (continuing) training programmes, in which they learn how to communicate effectively in relation to patients' emotions and feelings, and how to integrate emotional care with practical and medical tasks.

Keywords: Cancer, Nurse-patient interaction, Admission interview, Instrumental communication, Affective communication

Introduction

It is widely known that in cancer nursing, communication with patients is emotionally laden (Chaichik et al. 1992, Northouse & Northouse 1987, Maguire 1988, Faulkner 1993). Cancer is a life-threatening disease, and medical treatment can have far-reaching consequences. Consequently, many cancer patients seem to experience distress after diagnosis (Maguire & Faulkner 1988, Maguire 1995, Fallowfield 1988, Harrisson et al. 1994). When these patients have to be admitted to hospital for treatment, ward nurses, in particular, are closely involved with patients' concerns as they provide 24 hour care. Accordingly, communication is one of the most important aspects of nursing care in an oncology setting (Wilkinson 1991). In line with research into doctor-patient communication, two types of communicative behaviours employed by nurses seem to be important in meeting the cognitive and especially the affective needs of cancer patients. In the first place, these include instrumental behaviours, which are of significance in informing the patient about the illness and treatment, and providing medical and practical care. In the second place, they include affective behaviours, such as showing respect, giving comfort and trust which are important in building a relationship with the patient, in which s/he has a sense of being understood (Bensing 1991, Hall *et al.* 1987), and in creating a trustful atmosphere, in which the patient is helped to disclose information and concerns relating to confronting with a life-threatening disease (Wouda & van de Wiel 1996).
However, the emotional load in cancer nursing makes interactions between nurses and patients difficult. Research shows that nurses' communication exhibits more negative or blocking features than positive facilitative ones during interactions with cancer patients (Kruijver et al. 2000). These blocking behaviours are characterized by overwhelming patients with medical information (Dennisson 1995), failing to establish what patients understand about their illness and treatment (Dennisson 1995), an overwhelming concern with the physical care and treatment problems (Bond 1983), use of closed questions (Maguire et al. 1996), not being able to assess problems and concerns, and not being able to get patients to disclose feelings (Webster 1981, Degner et al. 1991, Heaven & Maguire 1996). These findings seem to disclose an imbalance in nurses' performance of both types of communication behaviours: nurses' affective communication is virtually entirely absent. Research shows that imbalance leads to dissatisfaction from cancer patients (Suominen et al. 1995). They view nurses' communication as unsupportive when the nurses pay no attention to the emotional component (Krishnasamy 1996a).

This paper focuses on the balance as regards affective and instrumental communication employed by nurses in a clinical oncology setting. The balance is particularly important during admission interviews with recently diagnosed cancer patients. At this time, the patient becomes acquainted with the nurse who, in the primary nursing system, will be primarily responsible for the care of the patient during his/her stay in hospital (Ersscher & Tutton 1991). The admission interview usually starts with history taking, in which the nurse gathers information from the patient about medical and lifestyle issues relevant to treatment. The use of exploratory skills encouraging the patient to respond freely about affective and medical topics, alternating with skills that structure the conversation, are in consequence important (Wouda & van de Wiel 1996). Another important nursing aspect of the admission interview concerns providing clear information about medical issues with regard to treatment, and providing clear information about ward organisational issues, and services during admission (Wouda & van de Wiel 1996).

From the patient's perspective, the admission situation can cause emotional distress as it follows recent diagnosis of a life-threatening disease, and admission for cancer treatment. In this situation, it is important for the nurse to be able to create an environment of trust, in which the patient feels respected, involved and accepted. In a good environment, the patient is helped to disclose concerns, which may relieve him/her. Relief, in turn may lead to an increased concentration, from patient's side, on the nurse's information and questions asked during admission. In such circumstances, a nurse's ability to adapt the information to the patient's emotional condition is of significance (Krishnasamy 1996b, Wouda & van de Wiel 1996).

These nursing tasks during the admission interview show the significance in turn of affective and instrumental communication.

Aim of the study

An exact picture as regards the ratio of instrumental to affective communication of nurses during interactions with cancer patients has never been investigated in nursing research before. Insight about this could give a more nuanced picture of the (im)balance as regards instrumental and affective communication employed by ward nurses in a clinical oncology setting. In relatively few studies the method of systematic observation with videotapes has been used (Kruijver et al. 2000a, Kruijver et al. 2000b). This is preferred since it is the most direct and complete

method of evaluating communication behaviours, including nonverbal communication. In most previous studies, communicative behaviours were measured with questionnaires and audiotapes. Consequently, nonverbal communication, which has hardly shown to be important during nurse-patient interactions, has been investigated up till now (Kruijver et al. 2000a, Kruijver et al. 2000b)
Therefore, this paper reports a direct observational study, using video tapes. The study focusses on the balance of affective and instrumental communication employed by ward nurses during the admission interview with recently diagnosed cancer patients, including nonverbal communication.

The research question addressed in this study was:
What is the actual balance of affective and instrumental communication, employed by ward nurses during the admission interview with recently diagnosed cancer patients?

Methods

Sample
In total, 53 registered (ward) nurses with different medical specialisms at three hospitals in the Netherlands participated in the study. All nurses had experience in caring for cancer patients. The three hospitals that participated were two university hospitals and one general hospital. The nurses were recruited from 11 wards: gynaecology, urology, surgery, internal medicine/haematology and ear, nose and throat diseases (E.N.T). In Table 1, background characteristics of the nurses are presented.

Procedure
Ethics committee approval for the study was provided by each of the three hospitals. The nurses were approached by the researcher and were informed about the purposes of the study both verbally (by means of holding presentations on the wards and in writing.
The participants were assured that anonymity of the results was guaranteed, and that they were free to withdraw. Then, enthusiastic nurses could sign up for participation.

This research is part of a randomized pretest-post-test study, in which the communication skills of these nurses during interactions with simulated patients, as well as with real cancer patients in daily practice, are investigated. Also, the question of how the communication skills of the participating nurses can be improved by a communication skills training programme is addressed. For the purposes of that study a power analysis was calculated in order to determine the population size of the nurses. The power analysis revealed that a sample size of 2 x 30 trainees (30 trainees in the experimental condition and 30 trainees in the control condition) would result in an acceptable power coefficient. In fact, we recruited 53 registered (ward) nurses who were willing to participate.
A major strength of the study was that the participants were rewarded for their participation with a training in communicating skills during the study (experimental group) or afterwards (control group).

Table 1 Background characteristics of the participating nurses (N=53)

		sd
GENDER		
- Man	15%	
- Woman	85%	
AGE		
- mean age	32 years	8
EDUCATIONAL LEVEL		
- HBO (Dutch higher educational level)	34%	
- MBO (Dutch secondary educational level)	62%	
- missing	4%	
mean years of employment	11 years	8
mean years of employment in oncology	5 years	5

Simulated patients

Simulated patients were used to answer the research question. The advantage of the simulated patient technique is that it directly assesses nurses' communication skills that are important during the daily performance in nursing practice. Further, there was an elaborate and standardized script, allowing nurses to test their skills. This improves comparability between nurses since patient variations may be reduced.

Each nurse completed one video taped admission interview with an actor. In total, three actors participated. The actors were trained professionals who played a recently diagnosed cancer patient who had arrived on the ward for admission. The actors were instructed to play a cancer patient according to the scenario which was developed specifically for this study. In order to write a realistic and elaborate scenario including significant elements to test the nurses on their skills, an oncologist, an oncology nurse and a cancer patient checked the script for quality based on their specific expertise.

The script related to a middle-aged female cancer patient who was being admitted for cancer treatment. The treatment was curative. The underlying emotions arising from confrontation with a life-threatening disease, like resistance, anger, denial, and anxiety, were central themes.

For each nurse, the script was standard, but small adaptions were made for each medical specialism. The participating nurses within the different medical specialisms were comparable, since cancer patients experience the same emotions after being diagnosed, regardless the kind and stage of the disease, and since the admission procedure within the different medical disciplines was the same.

Assessment

The participating nurses were asked to go through the admission procedure with the simulated patient in the same way as they did on the ward with actual patients. The interviews with the simulated patients lasted no more than 20 minutes. After 20 minutes, the procedure was interrupted. The nurses did not have to finish the admission procedure themselves, although they could finish it earlier than the 20 minute limit. The mean length of the interviews was 18.42 minutes (sd 2.58 minutes).

Directly after the admission interview, each participant had a short encounter with the actor and the researcher, during which the nurse got the opportunity to tell about their feelings of the experience. Although in general, the participants experienced some stress before the admission interview, the majority of them reported afterwards that they forgot that they were interacting with an actor and videotaped, which made that stress did not really affect their behaviour. On the whole, the participants experienced the encounter with the simulated patient as a real life admission interview.

Observation scheme

Affective and instrumental communication

The 53 videotaped admission conversations with simulated patients were

observed using the Roter Interaction Analysis System (RIAS) (Roter 1989). In this system, a distinction is made between instrumental or task-related and affective or socio-emotional verbal communication. The Roter Interaction Analysis System was originally designed to code doctor and patient communication, but has also proved to be reliable with respect to the observation of nurse-patient interactions (Gruijter de & Schirm 1995, Caris-Verhallen et al. 1999).
In this study, some small adaptions were made, tailored to the nurse-patient interaction in a clinical oncology setting. The adapted version included 32 behavioural categories for the nurses (see Table 2). Each nurse utterance was coded into one of the instrumental or affective categories, which are mutual exclusive. An utterance is a communication unit which conveys one thought, or is related to one specific interest. The utterance varies from one word to a sentence.
Patients' utterances can also be coded with the RIAS. They are important since patients can differ widely in their communication style which, consequently, by definition will have impact on nurses' communicative behaviours. However, this study focusses on nurses' communication behaviours only since the variability in patient behaviour in a standardized setting is controlled. More precisely, patient communication was performed by the actor in the same way for each participant. For this reason, we did not code the patients' utterances.

Instrumental communication consists of categories, which contain all items with respect to nursing and medical topics, items about the organisation on the ward and services, and verbal expressions about lifestyle issues and psychosocial topics. Further, instrumental communication consists of categories that indicate guidance and direction through the conversation, such as orientation and instructing, requests for clarification, asking for opinion asking for understanding (see Table 2).
During the history-taking stage of the admission interview, the use of open questions are important in exploring, alternating with closed questions (among others requests for clarification) in order to get supplementary information. During the information-giving stage of the admission interview the use of skills that structure the information, for example giving orientations, is significant. Further it is important to avoid a monologue. This can be achieved by using skills that involve the patient during information-giving, e.g. by asking the patient about understanding of the information, and by asking for their opinion and experience.

Table 2 Occurence of nurses' verbal behaviours within the instumental / affective categories

	range	mean freq.	perc.	inter-rater reliability (Pearson's r)
Affective				
personal remarks/social conversation	0-23	5	3%	.88**
jokes/laughs	0-7	.5	-	
approval	0-4	.3	-	
compliments	0-2	-	-	
shows concern/worry	0-10	3	2%	.65*
shows agreement/understanding	7-110	39	19%	.94**
paraphrase/check	4-46	21	10%	.61
empathy/legitimize	0-19	4	2%	.54
reassurance/encouragement/optimism	0-32	4	2%	.72*
shows partnership	0-32	.7	-	
disapproval	0-1	-	-	
criticism	-	-	-	
asks for reassurances	0-2	-	-	
total utterances	37-54	77	38%	
Instrumental				
orientations/instructions	1-21	6	3%	.86**
asks for clarification	0-4	.3	-	
asks for understanding	0-11	2	1%	
asks for opinion	0-8	1	1%	
closed questions:				
medical/therapeutic items	0-26	10	5%	.86**
hospital/ward items	0-5	.7	-	
lifestyle items	0-20	7	3%	.94**
psycho-social/feelings	2-38	9	5%	.71*
open questions:				
medical/therapeutic items	0-7	2	1%	
hospital/ward items	0-1	-	-	
lifestyle items	0-3	.1	-	
psycho-social items/feelings	0-11	4	-	
information related to:				
medical/therapeutic items	13-110	50	24%	.94**
hospital/ward items	0-96	12	6%	.71*
lifestyle items	0-19	1	-	
psycho-social items/feelings	2-58	24	11%	.89**
counsels medical/therapeutic behaviour	0-8	.7	-	
counsels lifestyle behaviour and feelings	0-19	3	1%	
rest	0-4	.4	-	
Total utterances	55-262	131	62%	

*p < 0.05, **p < 0.01

Affective communication consists of the categories which refer to those aspects needed to establish trusting relationships between nurses and patients in order to facilitate information exchange. Additionally, affective communication refers to nurses' social conversation that has no particular function in nursing activities, such as personal statements and jokes (see Table 2).
During the admission procedure in particular, affective communication is important in encouraging the patient to disclose concerns. Examples of affective behaviours are paraphrases, showing concern, showing empathy, showing optimism and understanding. These behaviours convey respect, attention and intimacy, and provide companionship and encouragement (Krishnasamy 1996b, Roter 1889, Wouda & van de Wiel 1996).

Based on the research of Caris-Verhallen et al. (1999), we also observed five affective nonverbal affective nurse behaviours, which also appear to be important in the establishment of the nurse-patient relationship, including patient-directed gaze, affirmative head nodding, smiling, leaning forward and affective touch (Heintzman et al. 1993, Caris-Verhallen et al. (1999). These behaviours convey involvement, closeness, friendliness and attentiveness. They are not necessary in performing nursing tasks, but do facilitate verbal interaction between nurses and patients (see Table 3).

Table 3 Occurrence of nonverbal behaviours (n=53)

	perc	mean	sd	interrater reliability (Pearson's r)
minutes				
patient directed gaze	88%	16.1	2.7	.84**
frequencies				
affirmative head nodding		21.6	11.4	.86**
smiling		4.1	4.7	.66
forward leaning		1.4	2.6	
affective touch		.7	1.4	

* $p < 0.05$
**$p < 0.01$

Reliability of the observations

The affective and instrumental communication between nurses and cancer patients was observed by two independent raters directly from video recordings using the CAMERA computer system which is especially designed to code the observed behavioural interactions from video recordings (Iec ProGAMMA 1994). Pearson's product-moment correlation coefficients were used to measure the inter-observer reliability, based on 20 percent (10 interviews) of the total number of videotaped admission conversations. Two observers rated the same 10 interviews. Inter-observer correlations for the verbal instrumental behaviours ranged from .54 to .94; for the verbal affective behaviours inter-observer correlations ranged from .66 to .94 (see Table 2). Inter-observer reliability was not measured for the verbal utterances by nurses which took up less than 2 percent of the utterances.

Inter-observer correlations for the nonverbal affective behaviours ranged from .66 to .86 (see Table 3). The nonverbal behaviours forward leaning and affective touch were performed too rarely by the nurses to allow measurement of inter-observer reliability.

Results

In order to answer the research question, the ratio of instrumental to affective communication was examined first. The results show that 62% of the communication behaviours employed by nurses were instrumental, and 38% were affective. This means that the majority of the nurses' utterances concerned instrumental communication.

Table 4 Occurrence of nurses' verbal behaviours: instrumental versus affective (n=53)

	range	mean	perc. freq.
-affective behaviours	37-154	77	38%
-instrumental behaviours	55-262	131	62%
-total utterances	98-338	208	100%

Next, the occurrence of nurses' communication behaviours within the affective and instrumental categories were examined.

It appeared that a relative largely part of affective communication was related to the more global affective behaviours, such as giving agreements (19%) and paraphrases (10%). The minority of the affective utterances was related to specific affective behaviours such as showing concern (2%), empathy (2%), and providing reassurance/optimism (2%).
Within the instrumental categories, the results show that most communication by the nurses consisted of providing medical information (24%), followed by information about psychosocial issues (11%), and information about the organisation of the ward (6%). Further, it appeared that few utterances were related to structuring communication behaviours such as giving orientation (3%) and requests for clarification (0%). Additionally, few utterances were related to behaviours that involve the patient during the discourse such as asking the patient for understanding (1%), and asking the patient for opinion (1%).

With regard to the facilitating verbal skills of nurses, which have been shown to be important in the nursing literature, the ratio of open to closed questions was investigated as well. Open questions have a probing intent, and facilitate patients to respond freely about affective or medical topics. Closed questions are direct questions that ask for specific information, and, consequently limit patients responses to a yes or no answer. Table 4 shows that the nurses asked predominantly closed questions (88%).

Table 5 Question asking (n=53)

	range	mean	perc. freq.
open questions	1-16	5	18%
closed questions	8-63	27	82%
total questions	9-64	32	100%

Finally, the nurses' nonverbal affective communication with recently diagnosed cancer patients during the admission conversation was investigated.
Table 6 shows that patient-directed gaze occurred most of the time. Affirmative head nodding was also a frequently used nonverbal behaviour. Further it appeared that smiling, forward leaning and affective touch occurred relative rarely.

Table 6 Occurrence of nonverbal behaviours (n=53)

	perc	mean	sd	interrater reliability (Pearson's r)
minutes				
patient directed gaze	88%	16.1	2.7	.84**
frequencies				
affirmative head nodding		21.6	11.4	.86**
smiling		4.1	4.7	.66
forward leaning		1.4	2.6	
affective touch		.7	1.4	

* $p < 0.05$
** $p < 0.01$

Discussion

In this study the balance of affective and instrumental communication employed by nurses during the admission interview with newly diagnosed cancer patients was investigated. For this purpose, admission interviews of 53 ward nurses with simulated cancer patients were videotaped and analysed with the Roter Interaction Analysis system, in which a distinction is made between instrumental and affective communication (Roter 1989).

The results show that nurses predominantly employed instrumental communication, mostly consisting of giving information about medical topics. Structuring behaviour and behaviour that involved the patient in the conversation, which seem to be important instrumental skills during the admission, were rarely used. When looking at the way in which nurses asked questions, it appeared that nurses mostly used closed questions, which limit the patient's expression of feelings and concerns. Affective communication occurred, but was more related to global affect ratings like agreements and paraphrases than to specific affective behaviour like showing empathy, concern and optimism.

With regard to nurses' nonverbal affective communication, patient-directed gaze occurred most of the time. This can be explained by the fact that nurse and patient were sitting at a table in front of each other. Nursing activities during the admission were mainly characterized by information exchange. Nurses therefore use a great part of the time for eye contact with the patient. Leaning forward and

affective touch occurred rarely. Although the simulated patient was acting in a distressed way, nurses scarcely used behaviours which are important to create a trusting relationship.
These results indicate that an imbalance does indeed exist in nurses' use of instrumental and affective behaviours: the nurses predominantly gave information about medical topics, which certainly is an important aspect of the admission procedure. However, they rarely made any assessment of the patient's understanding of the situation. Neither did they explore the patient's feelings actively, and they rarely discussed the emotional aspects of the disease in order to create a comforting and helpful atmosphere. These findings agree with the findings from the literature which show an imbalance in nurses' use of both types of communication, characterized by an overwhelming medical concern (Dennisson 1995, Webster 1981, Bond 1983) and neglect of the emotional component (Webster 1981, Degner et al. 1991, Heaven & Maguire 1996). These behaviours are especially viewed by patients as unsupportive behaviours (Krishnasamy 1996a), which lead to dissatisfaction (Suominen et al. 1995).

Other studies show that cancer patients' need to disclose concerns is only met when nurses are willing to explore and listen to these concerns. Reid Ponte (1992) found that the more the nurses showed empathy, the more concerns were disclosed by patients. Webster (1981) and Degner et al. (1991) found that patients' disclosure of feelings was strongly inhibited by nurses' avoidance behaviours, such as abrupt change of the subject of conversation, and behaving as though the patient had not spoken at all.

A post-hoc look at patients' ratio of instrumental to affective communication behaviour in this study (not reported in the results), revealed that patients' ratio was the same as nurses' ratio. This indicates that, in accordance with the literature, patients do not express concerns, when they feel that there is no room for this. In other words, nurses' agenda predominates, and determines the course of interactions with cancer patients.
Emotional care, in addition to practical and medical care, is a crucial task in the professional role of the nurse. However, research shows that discussing emotional issues with patients is at the same time one of the most difficult tasks for nursing professionals because of the unease they experience when discussing these issues with cancer patients (Maguire 1985, Webster 1991). Webster (1991), for example, found that nurses caring for severely ill cancer patients were conscious of using distancing tactics. They were afraid of losing control over the

situation when not using these tactics.
In future, nurses should be systematically provided with (continuing) training programmes. During these education programmes, they learn how to explore and discuss actively emotions and feelings without losing control of their own emotions. Further, they learn how to integrate emotional care with the information-giving techniques, and with practical and medical care during interactions with cancer patients.
A shift in the desired direction as regards the balance of instrumental and affective behaviours performed by nurses could lead to increased satisfaction and well-being for cancer patients as well as for nurses caring for these patients.

Methodological issues

Because we were primarily interested in the ratio of affective to instrumental communication of ward nurses during the admission interview with cancer patients, the simulated patient method was used in order to answer our research question. This method has the advantage that variations among patients may be reduced as a consequence of a standardized situation. However, up till now the validity of the simulated patient method has scarcely been investigated in nursing research. In current medical and nursing research in this area a distinction is frequently made between 'competence' as outcome variable, measured with simulated patients, and 'performance' as outcome variable, measured with real or actual patients (Rethans 1991, Francke et al. 1991, Pieters 1994, Ram et al. 1999). Competence concerns the level to which a health care provider is capable of performing a skill, and performance to how a health care provider actually performs a skill in day to day practice (Pieters 1994).
An interesting topic of research would be further investigation of the validity of working with the simulated patient method. This could enlarge insight into the extent to which communication skills of nurses, as measured with simulated patients, can predict communicative behaviours with actual patients in day to day practice. We are currently conducting a validation study in this area.

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Chapter 4

COMMUNICATION BETWEEN NURSES AND SIMULATED CANCER PATIENTS:

evaluation of a communication training program

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Abstract

In this paper the effect of a communication training program on the instrumental and affective communication skills, employed by ward nurses during the admittance interview with recently diagnosed cancer patients was investigated. The training was focussed on teaching nurses skills to discuss and handle patient emotions.
For this purpose, 46 nurses participated in 92 videotaped admittance interviews with simulated patients. The study had a randomized pre-test-post-test design. Multi-level analysis was used to measure the effects of the training.

The results revealed that the trained nurses significantly increased asking open-ended psychosocial questions, which indicates that they explored actively to patients' feelings. Furthermore, the patients of the trained nurses showed a significant increase of affective communication.

In conclusion, the results of this study demonstrate that, although limited, training can induce favourable changes in the communication skills of nurses, and can even affect patient communication.
In future studies, focus should be enhanced on investigating, evaluating and educating communication skills.

Keywords: Cancer, Nurse-simulated patient interaction, Communication training, Admission interview, Observation study

Introduction

Providing emotional care, in addition to practical and medical care, is a crucial task in the professional role of the nurse when caring for cancer patients. Cancer is a life-threatening disease, and medical treatment can have far-reaching consequences. Consequently, many cancer patients seem to experience distress after diagnosis, which may be characterised by fear, anger, anxiety, depression or helplessness (Maguire & Faulkner 1988, Fallowfield 1988, Harrisson et al. 1994). When these patients have to be admitted to hospital for treatment, ward nurses, in particular, are closely involved with patients' concerns as they provide 24-hour care. Accordingly, effective communication is one of the most important aspects of nursing care in an oncology setting, which, according to Wilkinson, is defined as open two way communication in which patients are informed about the nature of their illness and treatment and are encouraged to express their anxieties and emotions (Wilkinson 1991)

In line with the research into doctor-patient communication, two types of communicative behaviours employed by nurses seem to be important in meeting the communication needs of patients as defined in this definition. In the first place, these include instrumental behaviours, which are of significance when informing the patient about the illness and treatment, and providing medical and practical service. In the second place, they include affective behaviours, such as showing respect, giving comfort and trust. These are important aspects in the building of the relationship with the patient, in which the patient has a sense of being understood (Bensing 1991, Hall et al. 1987), and in creating a trustful atmosphere, in which the patient is helped to disclose information and concerns relating to the confrontation with a life-threatening disease (Wouda & van de Wiel 1996).

Unfortunately, the research shows that nurses' communication exhibits more negative or blocking features than positive facilitative ones during interactions with cancer patients. (Kruijver et al. 2000 [A]). An imbalance exists in nurses' use of both types of communication, characterized by an overwhelming medical concern (Dennisson 1995, Webster 1981, Bond 1983) and neglect of the emotional component (Webster 1981, Degner et al. 1991, Heaven & Maguire 1996). These behaviours are especially viewed by patients as unsupportive behaviours (Krishanamy 1996a), which lead to dissatisfaction (Suominen et al. 1995). The above illustrates that the emotional load in

particular is a specific aspect of cancer care that makes communication with patients challenging. In general, nurses appear to be conscious of using distancing tactics. They seem to be afraid of losing control over the situation when not using these tactics (Webster 1981). Consequently, particularly in cancer care, nurses report a need for communication training programs in which they learn to communicate effectively on emotional issues and psychosocial aspects, and learn how to integrate these issues usefully in delivering medical or technical care in nursing practice (Peteet et al. 1989, Ross et al.1992).
When reviewing the literature (Kruijver et al. 2000 b), it appears that relatively few of these programs have been evaluated and the majority of these studies had a non-randomized research design, which in general is a weaker design in evaluating the effect of a training intervention. Evaluation studies are useful in gaining insight into the effect of these programs on nurses' levels of communication skills and other nurse and patient outcomes. Also, an increased focus in research on the evaluation of communication training programs may increase attention to the importance of teaching and evaluating the relevant skills that are needed to handle emotions in order to optimize the balance between instrumental and affective communication. This, in turn, can lead to an enhancement of the implementation of effective (continuing) education programs for nurses in cancer care, for which there is a fundamental need.

This paper focuses on the effects of a communication training program on nurses' communication skills in a clinical oncology setting. The balance, as regards affective and instrumental communication employed by nurses, is particularly important during admission intake/interviews with recently diagnosed cancer patients. At this time, the patient becomes acquainted with the nurse who, in the primary nursing system, will be primarily responsible for the care for the patient during his/her stay in hospital (Ersscher & Tutton 1991). The admission interview starts with the patients' history, in which the nurse gathers information from the patient about medical and lifestyle issues relevant to treatment. The use of exploratory skills, encouraging the patient to respond freely about affective and medical topics, alternating with skills that structure the conversation are, in consequence, important (Wouda & van de Wiel 1996). Another important nursing task during the interview concerns providing clear information about medical issues with regard to treatment, and providing clear information about organizational issues on ward rules, and services during admission (Wouda & van de Wiel 1996).

From the patient's perspective, the admission situation can cause emotional distress, as it follows recent diagnosis of a life-threatening disease, and admission for cancer treatment. In this situation, it is important for the nurse to be able to create an environment of trust, in which the patient feels respected, involved and accepted. In a good environment, the patient is helped to disclose concerns, which may relieve him/her. Relief, in turn may lead to an increased concentration, from the patient's side, on the nurse's information and questions asked during the admission interview. In such circumstances, a nurse's ability to adapt the information to the patient's emotional condition is of significance (Krishanamy 1996b, Wouda & van de Wiel 1996). Nursing tasks during the admission interview show their significance in turn of affective and instrumental communication.

Aim of the study

The aim of this study was to investigate the effect of a communication skills training program on affective and instrumental communication employed by ward nurses during the admission interview with recently diagnosed cancer patients. The research questions addressed in this paper were the following:

- What is the effect of a communication skills training program on the affective and instrumental communication of ward nurses during the admission interview with recently diagnosed cancer patients?
- Do ward nurses' communication skills after the training affect the communicative behaviours of the recently diagnosed cancer patients during the admission interview?

Methods

Training

The underlying assumption of the course was that effective communicative behaviours of nurses would facilitate their interaction with cancer patients. This, in turn, will benefit cancer patients who experience psychosocial problems due to the life threatening disease, as well as the nurses themselves. The acquired skills will enable nurses to increase their stability and control in handling emotionally laden situations, thereby facilitating their primary task.

This will lead to increased problem assessment, emotional support, and problem solving (Wouda & van de Wiel 1996).
The total length of the training was 18 hours. Nurses were taught communication skills for six days in periods of three hours. The group consisted of ten to fifteen participants, and training was conducted by two trainers, experienced in clinical patient care.
In addition to theoretical education, there was feedback in role playing sessions. In this way, the participants learned how to handle problems they experienced in practice interactively. Every lesson finished with a practical homework assignment, to be accomplished in the work field or at home. More detailed information is presented in Appendix 1.

Design and sample
Effects of the training were measured using a randomized pre-test/post-test control group design.
In total, 53 registered (ward) nurses from different medical specialisms in three hospitals in the Netherlands started the project. During the course of the study, 7 nurses dropped out. Reasons given were: illness/pregnancy (n=4), not motivated anymore (n=1), another job (n=2). The remaining 46 nurses completed the pre-test, the training, and the post-test. The experimental group consisted of 25 nurses who had participated in the training, and the control group consisted of 21 nurses who intended to participate in the training later on (after the study). All the nurses had experience of caring for cancer patients. The three hospitals that participated were two university hospitals and one general hospital. The nurses were recruited from 11 wards consisting of the following medical specialisms: gynaecology, urology, surgery, internal medicine/haematology and the ear-nose-throat diseases. Randomization took place at ward level. In Table 1, several background characteristics of the nurses are presented. There were no significant differences between the experimental and control group with regard to the background characteristics.

Table 1 Background characteristics of the participating nurses (N=46)

	Experimental group (n=25)	Control group (n=21)	p
GENDER			
- Man	12%	19%	X^2=.44
- Woman	88%	81%	Df=1
			P=.51
AGE			
- mean age	33 years	31 years	t=.85
			Df=44
			P=.39
EDUCATIONAL LEVEL			
- HBO (Dutch higher educational level)	71%	65%	X^2=.17
- MBO (Dutch secondary educational level)	29%	35%	Df=1
- missing	4%	5%	.68
mean years of employment	12 years	10 years	t=.73
			Df=44
			p=.47
mean years of employment in oncology	5 years	5 years	t=-.45
			Df=43
			P=.25

To test the differences in background characteristics, t-tests and x^2 analysis were used

Simulated patients

Simulated patients were used to answer the research question addressed. The advantage of the simulated patient technique is that it assesses nurses' communication skills that are important during the daily performance in nursing practice directly. Further, there is an elaborate and standardized script, allowing nurses to test their skills. This improves comparability between nurses.

In total, three actors participated. The actors were trained professionals who acted as recently diagnosed cancer patients who had arrived at the ward for admission. The actors were instructed to play a cancer patient in the script, which was developed specifically for this study. In order to write a realistic and

elaborate script including significant elements to test the nurses on their skills, an oncologist, an oncology nurse, and a cancer patient screened the script on a quality basis on their specific professional expertise.
The script involved a female cancer patient in middle age, who was going to be admitted for cancer treatment. The treatment had a curative purpose. The underlying emotions of being confronted with a life-threatening disease, such as resistance, anger, denial, and anxiety, formed a central theme of the script.
For each nurse, the script was standard, but small adaptations were made for each medical specialism. The participating nurses within the different medical specialisms are comparable, since cancer patients experience the same emotions after being diagnosed, regardless of the kind of the disease, and since the admission procedure within the different medical disciplines is the same.

Assessment
Prior to the training and then one month after the training, each nurse had a videotaped admission interview with an actor. The actor was blind for the condition (experimental or control) of the participating nurses. The nurses were instructed to go through the admission procedure with the simulated patient in the same way as they did on the ward with actual patients. The interviews with the simulated patients lasted 20 minutes. After 20 minutes, the procedure was interrupted. The nurses didn't have to finish the admission procedure themselves, although they were allowed to finish it earlier.

Observation scheme
Affective and instrumental communication
The 92 (46 pre- 46 post-test) videotaped admission interviews with simulated patients were observed using the Roter Interaction Analysis System (RIAS) (Roter 1989). In this system, a distinction is made between instrumental or task-related and affective or socio-emotional verbal communication. The Roter Interaction Analysis System was also originally designed to code both doctor and patient communication, but has also proved to be reliable with respect to the observation of nurse-patient interactions (De Gruyter & Schirm 1995, Caris-Verhallen et al. 1998).
In this study, some small adaptations were made, tailored to the nurse-patient interaction in a clinical oncology setting. The adapted version included 32 behavioural categories for the nurse and 27 behavioural categories for the patient (see Table 2 and 3). Each utterance was coded into one of the instru-

mental or affective categories, which are mutually exclusive. An utterance is a communication unit which conveys one thought, or is related to one specific interest. The total length of one utterance varies from one word to a sentence.

Instrumental communication consists of the categories, which contain all items concerning nursing and medical topics, items about the organisation on the ward and services, and verbal expressions about lifestyle issues and psychosocial topics. Furthermore, instrumental communication consists of categories that indicate guidance and direction through the conversation, such as orientation and instructing, requests for clarification, asking for an opinion or asking for understanding (see Table 2).
During the history-taking stage of the admission, the use of open questions is important in exploring, when alternated with closed questions (among others requests for clarification) in order to get supplementary information. During the information giving stage of the admission, conversation and the use of skills that structure the information, for example providing orientation is significant. It is also important to avoid monologues. This can be achieved by using skills that involve the patient during information giving, e.g. by asking the patient if he/she understands the information, and by asking for the patient's opinion and experience.
Affective communication consists of the categories, which refer to those aspects needed to establish trusting relationships between nurses and patients in order to facilitate the information exchange. Additionally, affective communication refers to nurses' social conversations that have no particular function in nursing activities, such as personal statements and jokes (see Table 3).
During the admission procedure in particular, affective communication is important in encouraging the patient to disclose concerns. Examples of affective behaviours are paraphrases, showing concern, showing empathy, showing optimism and understanding. These behaviours convey respect, attention and intimacy, and provide companionship and encouragement (Krishnasamy 1996b, Roter 1889, Wouda & van de Wiel 1996).

We also observed five affective non-verbal nurse behaviours, which appear to be important in the establishment of the nurse-patient relationship, including patient-directed gaze, affirmative nodding, smiling, leaning forward and affective touch (Heintzman et al. 1993, Caris-Verhallen et al. 1999). These behaviours convey involvement, closeness, friendliness and attentiveness.

They are not necessary in performing nursing tasks, but do facilitate the verbal interaction between nurses and patients (see Table 4).

Reliability of the observations

The affective and instrumental communication between nurses and cancer patients was observed by two independent raters directly from video-recordings using the CAMERA computer system, which is especially designed to code the observed behavioural interactions from video-recordings (Iec ProGAMMA 1994).

Pearson's product-moment correlation coefficients were used to measure the inter-observer reliability, based on 10 interviews of the total number of videotaped admission conversations. Two observers rated the same 10 interviews. The inter-observer correlations for the verbal instrumental behaviours by nurses and patients ranged from .59 to .94 (patients' giving psychosocial information: .59, the other nurse and patient categories: ranging from .68 to .94). For the verbal affective behaviours the inter-observer correlations ranged from .54 to .94 (nurses' empathy: .54; nurses paraphrasing: .61; the other nurse and patient categories: ranging from .65 to .94). Inter-observer reliability was not measured for the verbal utterances by nurses and patients, which took up less than 2 percent of the time.

The inter-observer correlations for nurses' non-verbal affective behaviours ranged from .66 to .86. The non-verbal behaviours, forward leaning and affective touch were performed too rarely by the nurses to allow measurement of inter-observer reliability.

The content validity and discriminant validity of the RIAS proved to be satisfactory (Ong et al. 1989)

Power Analysis

The population size of the nurses has been based upon a power analysis. In the following, the power analysis relating to the population size of the nurses is demonstrated.

> Relationships have been shown between training interventions and improved communication skills, measured with RIAS, with an effect size between medium and high (Roter et al. 1995). Fixing the effect size also medium to high (d=0,65), using a one-tail significance test (x = 0,05), a sample size of 2 x 30 will result in an acceptable power coefficient of 0,800.

> The mentioned power and effect size for the nurse population indicate that effects stand an fairly small chance of going undetected.

In fact, we recruited 53 registered (ward) nurses who were willing to participate in the study. During the course of the study, 7 nurses dropped out. The remaining 46 nurses completed the pre-test, the training, and the post-test. The power coefficient, based on these 46 nurses is slightly low, namely 0.67.

Statistical Analysis

Percentages were calculated of the communication behaviours as the frequency of nurses' and patients' communicative utterances within the specific instrumental and affective categories were proportionate to the total number of verbal utterances.

Statistical analysis was carried out in the following way: Change scores (post-test minus pre-test) were calculated of the percentages of the nurses and simulated patients of the communication behaviours in experimental as well as in control conditions. ANCOVA analysis was used to test whether the nurses and simulated patients in the experimental condition had significantly changed instrumental and affective communication behaviours as a result of the training, compared with the untrained group nurses and their patients. More precisely, we tested whether the difference pre and post-test of the trained nurses was significantly different from the difference pre and post-test in the control group. As a result of some of the pre-test scores of the experimental and control group appearing to be significantly different from each other, the pre-test scores were used as co-variates in the analysis. Before the above analysis, we tested to see if there were any interaction effects between the experimental conditions and the co-variates (pretest scores) and the dependent variables (change scores) in communication behaviours as this is a prerequisite for analysis of covariance.

Finally, ANCOVA was used in a multi-level framework as a control for the effect of nurses being nested within wards, and wards being nested within the hospitals. The analyses were performed in Mln software (Rasbash & Woodhouse 1995).

Results

Multi-level analysis (not presented in a table), revealed that nurses' communication was not affected by nurses being nested within wards, and wards being nested within the hospitals.

The first research question concerned the effect of the training on nurses' communication behaviours.
The percentages of nurses' verbal communication behaviour during pre- and post-test, calculated for the experimental and control group separately, are displayed in Tables 2 and 3.

The ratio of instrumental versus affective communication was evaluated first. At the foot of Table 2 and 3, it is shown that after the training, the instrumental and the affective communication of the trained nurses remained the same. This indicates that this ratio did not change significantly at post-test measurement.
Looking to the occurrence of nurses' communication behaviours within the affective and instrumental categories, the results reveal that some significant changes in nurses' instrumental communication behaviours occurred at post-test measurement.
It appeared that the trained nurses asked significantly more open questions in the psychosocial domain. Their closed psychosocial questions did not change at post-test while the nurses in the control group asked, in turn, significantly fewer closed psychosocial questions. Looking to nurses' total open and closed ended question asking, it appeared that while both groups of nurses showed an increase in open questions at post-test, the increase within the untrained group of nurses was stronger. This was contrary to our expectations. Table 2 also demonstrates that the amount of information given on medical topics by the trained nurses remained more or less the same, while the untrained nurses significantly increased information provision at post-test measurement.

Table 2 Percentages of nurses' verbal instrumental communication at pre- and post-measurement

	experimental group (n=25) perc.		control group (n=21) perc.	
	pre	post	pre	post
orientations/instructions	2.6	1.5	3.2	1.3
asks for clarification	.3	.2	.2	.2
asks for understanding	.9	.2	.7	.1
asks for opinion	.6	.7	.7	.6
closed questions:				
medical/therapeutic items	4.5	4.1	5.1	4.2
hospital/ward items	.5	.1	.3	.2
lifestyle items	3.1	2.8	2.9	2.3
psycho-social/feelings **	5.1	4.8	4.1	2.9
open questions:				
medical/therapeutic items	1.3	1.4	.6	.8
hospital/ward items	-	-	-	-
lifestyle items	-	-	.1	-
psycho-social items/feelings **	2.1	3.0	1.3	1.3
total open questions*	22.9	27.0	13.7	18.3
total closed questions*	77.1	73.0	86.3	81.7
information:				
medical/therapeutic items *	21.8	23.1	25.5	31.3
hospital/ward items	4.8	5.5	5.5	4.0
lifestyle items	.2	.2	.4	.6
psycho-social items/feelings	11.7	10.5	11.2	10.7
counseling:				
medical/therapeutic behaviour	.5	.1	.2	.2
lyfestyle behaviour and feelings	1.3	.9	.9	.8
other	.3	.2	.2	.3
Total instrumental utterances	61.6	58.9	62.7	61.5

The meaning of the * is as follows: the difference between pre- and post-test in the experimental group is significant different from the difference between pre- and post-test in the control group $^{*}p < 0.05$ $^{**}p < 0.01$

Table 3 Percentages of nurses' verbal affective communication at pre- and post-measurement.

	experimental group (n=25) perc.		control group (n=21) perc.	
	pre	post	pre	post
Affective				
personal remarks/social conversation	2.1	2.3	3.1	2.2
jokes/laughs	.3	.3	.2	.1
approval	.2	.3	.1	.1
compliments	-	-	-	-
shows concern/worry	1.4	1.7	1.6	2.1
shows agreement/understanding	19.4	20.4	18.7	21.7
paraphrase/check	11.1	10.7	8.8	8.4
empathy/legitimize	1.7	2.1	2.2	1.5
reassurance/encouragement/optimism	1.8	3.0	2.1	2.3
shows partnership	.2	.3	.3	.1
disapproval	-	-	-	-
criticism	-	-	-	-
asks for reassurance	-	-	-	-
total affective utterances	38.4	41.1	37.3	38.5

The meaning of the * is as follows: the difference between pre- and post-test in the experimental group is significant different from the difference between pre- and post-test in the control group $^{*}p < 0.05$ $^{**}p < 0.01$

As regards the affective communication, the difference score in the pre- and post-test of the trained nurses did not change significantly from the difference score of the untrained group of nurses.
Yet, the trained nurses made considerable more encouraging and optimistic remarks, which is important in dealing with the feelings of distressed people and showed increased empathic behaviour ($p<.06$) at post-test measurement. However, none of the test statistics reached significance level. As regards nurses' non-verbal communication, no significant alterations at post-test measurement were found. (Table 4).

The second research question concerned the impact of the skills of the trained ward nurses on the communicative behaviours of the simulated cancer patients during the admission/intake interview.
In order to answer this research question, the ratio of patient's instrumental versus affective communication was also first evaluated.

Table 4 Nurses' nonverbal communication behaviours at pre- and post-measurement

Nonverbal behaviour	experimental group (n=25) perc.		control group (n=21) perc.	
	pre	post	pre	post
percentages				
patient directed gaze	88.6	90.4	86.4	91.4
frequencies				
affirmative head nodding	17.9	20.3	22.0	26.0
smiling	4.3	2.8	3.3	1.4
forward leaning	1.4	.31	1.1	.3
affective touch	.5	.6	1.0	.5

Table 5 Percentages of patients' verbal instrumental communication at pre and postmeasurement.

	experimental group (n=25) perc.		control group (n=21) perc.	
	pre	post	pre	post
orientations/instructions	-	-	-	-
asks for clarification	.2	-	.2	.2
asks for understanding				
asks for opinion	-	-	-	-
questions				
medical/therapeutic items	4.3	4.8	6.1	6.6
hospital/ward items	.6	.6	.9	.4
lifestyle items	.1	.1	.1	.2
psycho-social items/feelings	1.2	.5	.6	.5
information				
medical/therapeutic items**	16.0	14.5	17.2	20.0
hospital/ward items	.8	.1	.9	.3
lifestyle items	11.0	12.0	10.9	11.1
psycho-social/feelings	29.4	26.8	24.4	25.1
other	.3	.2	.2	.2
Total instrumental utterances *	63.8	59.5	61.5	64.5

The meaning of the * is as follows: the difference between pre- and post-test in the experimental group is significant different from the difference between pre- and post-test in the control group $^{*}p < 0.05$ $^{**}p < 0.01$

Table 6 Percentages of patients' verbal affective communication at pre- and post-measurement

	experimental group (n=25) perc.		control group (n=21) perc.	
	pre	post	pre	post
personal remarks/social conversation	3.8	3.8	4.3	3.0
jokes/laughs	.3	.1	-	1
approval	.2	.3	.2	-
compliments	-	-	-	.1
shows concern/worry	10.1	14.8	9.6	12.7
shows agreement/understanding	19.0	20.0	20.2	6.6
paraphrase/check	1.9	.5	2.3	1
empathy/legitimize	-	-	-	-
reassurance/encourage/optimism	.2	.2	.2	.2
shows partnership	-	-	-	-
disapproval	-	.1	.2	.2
criticism	.1	.1	.3	.1
reassurance	.6	.8	1.1	1.3
total affective utterances *	36.2	40.5	38.5	35.5

The meaning of the * is as follows: the difference between pre- and post-test in the experimental group is significant different from the difference between pre- and post-test in the control group $^{*}p < 0.05$ $^{**}p < 0.01$

At the foot of Table 6 we show that the total number of the simulated patients' affective utterances in the experimental condition had increased significantly. This indicates that the ratio of instrumental versus affective communication changed significantly at post-test measurement.

More detailed analysis of patient communication within the different categories revealed that at post-measurement, the patients in the experimental condition decreased giving medical information whereas the patients of the untrained nurses increased giving medical information (Table 5).

Favourable shifts within the affective categories also occurred, although the differences did not reach statistical significance. It appeared for example that the trained nurses' patients expressed concerns considerably more at post-test measurement, compared with the group of untrained nurses (Table 6).

Discussion

In this study, the effects of a communication training program on nurses' instrumental and affective communication skills during simulated cancer patient intake were investigated.
Although the ratio of instrumental versus affective communication of the trained nurses at post-test measurement remained the same, more significant changes were found within specific categories of communication.
With respect to nurses' instrumental behaviours, the open psychosocial questions had increased significantly. Furthermore, in contradistinction to the untrained nurses, the trained nurses did not significantly increase the amount of medical information given at post-test measurement.
These results were limited, but beneficial when placed in the context of the aims of the training program, and in the context of the required communication skills of the nurses during the admission interview. Training was focussed on teaching the nurses facilitating communication skills in order to deal with the emotions of cancer patients. The assumption underlying the training was that the skills acquired for communicating emotions effectively with cancer patients (instead of using distancing tactics), would enable nurses to increase their own stability and control in dealing with emotionally fraught situations, thereby supporting patients by facilitating their expression of concern.
The increased amount of open psychosocial questions indicated that the trained nurses were less focussed on their medical agenda, in the sense that they were more able to alternate the medical information with open questions in the psychosocial domain which are exploring skills that facilitate and encourage patients to tell their story, enhancing problem assessment- and solving. This is favourable since the professional played a patient who was very distressed and concerned after being confronted with a life threatening disease. Research shows that in such circumstances in particular, an overwhelming medical concern on the nurses' side leads to dissatisfaction among cancer patients (Suominen et al. 1995).

Shifts in the affective domain at post-test did not occur. This is in a sense disappointing, since affective behaviours, in particular such as showing empathy, showing concern and manifesting optimism appear to be of great significance in creating a trusting atmosphere, in which distressed cancer patients are helped to express concern. Although not significant, the trained nurses showed improvement in two of these important affective behaviours at

post-measurement, they increased their encouraging and optimistic remarks, and emphatic behaviour.
No significant alterations were found after the training, with respect to the non-verbal affective communication. This is dissatisfying since non-verbal behaviours in particular, are considered to be important in conveying warmth and interest and in establishing good relations with the patient (Heintzman et al. 1993). Patient-directed gaze did not significantly change at post-test measurement, and was already high in both groups of nurses. The high percentage of patient-directed gaze in this study can be explained by the fact that nurse and patient were sitting at a table in front of each other. Nursing activities during the admission interview were mainly characterized by information exchange. Nurses therefore used a great part of the time for patient directed gaze.

Patients' communication behaviour was also investigated in order to assess the impact of the communication skills of the trained ward nurses on the communicative behaviours of the simulated cancer patients during the admittance interview. The ratio of instrumental versus affective communication behaviour of the patients revealed that patients' affective communication had increased significantly at post-test measurement.
These findings indicate that the favourable changes in patient communication were a consequence of the major effect of the training, namely an increase in the facilitative behaviours of the trained nurses within instrumental communication, reflecting the shift from a primary focus on exchanging bio-medical information to an increased focus on discussion of psychosocial topics, which encourage patients to tell their story.
A further detailed analysis of patient communication within the different instrumental and affective categories revealed that at post-measurement, the patients in the experimental condition gave significantly less medical information. Further they showed favourable alterations in the affective domain, although the differences did not reach statistical significance. Yet, the fact that the ratio of affective versus instrumental communication of the trained nurses remained the same implies that the favourable shifts in the communication of the patients, as described in the results, took place within nurses medical program which predominates, and which determines the course of the interactions with cancer patients.

All in all, we see some favourable, but limited changes after the training. The limited effects on nurses' communication skills in this study accord with the studies as described in the literature, measuring effects of training programs for nurses in oncology care with audio or videotapes. Faulkner & Maguire (1984) found that after the training, nurses improved in the use of relevant interviewing techniques and in assessing patients' problems. From the study by Booth et al. (1996) and Heaven et al. (1996) however, it appeared that after the training, nurses were no better at identifying what cancer patients concerns were. In general, the more disclosure of feelings by the patient, the more blocking behaviours from nurses occurred. Booth found only one significant small improvement in nurses' use of open direct questions. Further, results of the Boot's study showed a weak improvement of nurses' assessment skills after the training. Maguire (1988) found no significant effect of the training on nurses' communication skills.

Hitherto, a golden standard as regards the balance of using instrumental/affective communication during interactions with cancer patients has not been established. Investigators of recent nursing studies present their results more in terms of 'an overwhelming medical concern' or distancing tactics or blocking behaviours, indicating an imbalance in both types of communication and lacking an emotional component. It seems to be clear that balance reflects the provision of medical and practical care, which is the primary task of nurses, integrated with the provision of emotional care.
The ratio of instrumental/affective communication of nurses as found in this study, agrees with this ratio, as found in other studies using RIAS (van Dulmen 1998, van den Brink-Muinen 1996). These studies, however, took place in an outpatient paediatric setting (van Dulmen 1998), and in a general (women's) health care setting (van den Brink-Muinen 1996), and in concerned interactions between physicians and patients. An exception is the study of Caris-Verhallen et al. (1998) who investigated the communication between nurses and elderly people. Affective behaviour occurred more often in that study (48% in home care, and 63% in institutional care).

Methodological issues

The power of the sample in our study was slightly low, namely 0.67. It is possible that the limited changes after the training are a consequence of the sample size which, in fact, was smaller than we calculated for reasons of

difficulties with getting a large enough sample. If the sample had been larger, changes may have been detectable.

This research is part of a randomized pretest-post-test study in which the effects of a training with actual patients are being measured as well. The simulated patient method, used in this study, has the advantage that variations among patients may be reduced as a consequence of a standardized situation. The disadvantage, however of this method is that there is no 'real life' situation, which may lead to artificial interactions, and that other patient outcomes (e.g. quality of life) can't be measured. Yet, up till now the validity of the simulated patient method has scarcely been investigated in nursing research. In current medical and nursing research in this area a distinction is frequently made between 'competence' as outcome variable, measured with simulated patients, and 'performance' as outcome variable, measured with real or actual patients (Rethans et al. 1991, Francke et al. 1991, Pieters et al. 1994, Ram et al, 1999). Competence concerns the level in which a health care provider is capable of performing a skill, and performance as how a health care provider actually performs a skill in day to day practice (Pieters et al. 1994). Competence comprises knowledge, skills and attitudes (Rethans et al. 1991), which are usually considered important mediators in daily practice (Francke et al. 1995) An interesting topic of research would be further investigation of the validity of working with the simulated patient method. This could enlarge the insight into the extent in which communication skills of nurses, as measured with simulated patients are representative of communicative behaviours with actual patients in day to day practice. We are currently conducting a study in this area.

Another interesting research question concerns the extent to which such communication training programs can induce changes in real life situations as well. In other words, what is the effect of a communication training program on interactions between nurses and actual cancer patients? We are currently conducting a study in which the effects of a training with actual patients are being measured.

Finally, focus should be enhanced in investigating, evaluating and educating communication skills in future studies, in order to increase the attention paid to the importance of communicative balance between instrumental and affective communication in nursing care for cancer patients. This, in turn, can lead to reinforcement in the implementation of effective (continuing) education programmes for nurses in patient care for which there is a fundamental need.

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APPENDIX 1

The content of the communication training program

During every meeting the skills were taught according to a regular schedule, which consisted of the following elements:

- a test of the theory;
- a short discussion of the assigned homework and the theoretical background of the current lesson;
- instruction regarding the objective of skills and how to use them;
- demonstration of the skills;
- practicising the skills by means of role playing and homework assignment (this is an exercise which has been taught during the course and will be applied to a home or work situation).

The oncological and communicative themes to be taught during the training program were the following:

Day 1

During the first lesson the participants were taught the basics of the communication theory, in order to get more insight into the question: 'What is communication?'

Also several psychosocial aspects regarding the confrontation with cancer were discussed, such as the life threatening character of the disease and the emotional and physical burden of the treatment.

Day 2

During the second lesson the emotional consequences of cancer were discussed, such as coping with the loss of health, and emotions like anxiety, depression, anger, guilt shame etc.

Participants also received insight in separate communication skills, which are considered basic elements of a conversation. These include the non-directive communication skills on the one hand, such as eye contact, posture, verbal attentiveness, (open) question asking, silence, etc; and the more directive or controlling skills on the other hand, such as paraphrasing, emotional reflection, summarizing, concretisizing, own expression etc.

Day 3

During the third lesson, attention was paid to handling patients' emotions. Also the participants got an insight into the structure of a conversation; for example the different phases of a conversation such as the introduction, the middle part and the end of the conversation, and the use of appropriate skills during the different phases.

Day 4

During the fourth lesson, patient education was a central theme.
The participants received an insight into how to structure the information with which they provide patients. Relevant counselling skills, which can be used during the provision of patient information, were also taught.

Day 5

During the fifth lesson resistance of oncology patients was taught, such as 'irrational thoughts'. Nurses got an insight into different therapeutic techniques, focussed on handling resistance (such as challenging, rewarding/punishing).

Day 6

During the sixth lesson, resistance of nurses themselves was a central theme. The participants got an insight into how to deal with their own resistance regarding emotionally laden situations, such as caring for terminally ill cancer patients.

Follow up

After two months, there was a follow up meeting in which the training was evaluated by the members of the course, and where the participants still got the opportunity to acquire communication skills by means of role playing exercises.

Chapter 5

COMMUNICATION BETWEEN NURSES AND ADMITTED CANCER PATIENTS:

the impact of a communication training program on nurse and patient outcomes

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To be submitted

Abstract

In this article, a study is described in which the effect of a communication skills training program on the communicative behaviours employed by ward nurses during the admission interview with recently diagnosed cancer patients was investigated. For this purpose, 53 nurses participated in 265 videotaped admission interviews with patients. The study was conducted according to a randomized pre-test post-test design. Multi-level analysis was used to measure the effects of the training. The main assumption underlying this study was that a training in communication skills would improve communicative behaviours of nurses and, by doing so, would positively influence certain patient as well as certain nurse outcomes. These include in the first place patients' and nurses' satisfaction with communicative interactions, which are be considered as *proximal* outcome measures. Secondly, these include 'patient quality of life', and 'nurse burnout and job satisfaction', which are considered as *distal* outcome measures. Effects of the training were measured using a randomized pre-test/post-test control group design.

The results of this study reveal that no effects of the training were found, either on nurses' communication behaviours, or on the proximal and distal nurse and patient outcomes.

At the post-test measurement, the trained nurses employed instrumental communication in the same way as they did at the pre-test measurement, it mostly consisting of giving information about medical topics. The same was true of nurses' affective communication, which was more related to general affective behaviour, such as showing agreement and paraphrasing, rather than to specific affective behaviour, such as showing empathy, concern and optimism. Additionally, nurses' nonverbal behaviour had not changed significantly at post-test measurement. Nurses' and patients' satisfaction with communication was already high at pre-test measurement, and did not further increase at post-test measurement. Nurse job satisfaction and burnout did not change after the training either. As regards patient quality of life, the only significant favourable shift concerned a significant increase in social function of patients in the experimental condition at three months after discharge.

This article concludes with several reflections on the findings. The first reflection relates to the characteristics of the training program. Although the trainees were positive, and reported that the training was very instructive, only 49% of them felt encouraged by their supervisors and colleagues to put what they had learned into practice, and only 50% of the nurses said that they actually practised what they

had learned. These findings indicate that the training was less sufficient in respect of taking into account context-related factors of the professional working environment in which the acquired skills have to be performed.
The second reflection relates to the variety of communication style of patients in an actual setting. Uncontrolled patient influences may obscure the measurement of training effects, and the question remains as to whether even experimental trials control sufficiently for that.
The third reflection relates to the characteristics of the observation instrument used in our study. A major characteristic of the RIAS is that it makes a clear distinction among instrumental or task-related and affective or socio-emotional verbal communication, which have been shown to be important during nurse-patient encounters. A second major characteristic of the RIAS concerns the frequency based nature of the instrument. As a result of this approach, there is no information about how and in what context the communication is performed. This means that limited conclusions can be drawn about the interaction process during the nursing encounter on frequency based data. We still are unaware as to whether the psychosocial and affective communication of the trained nurses (which did not significantly increase) occurred in a context that was more attuned to patient needs.

Key words: Cancer, Admission interview, Communication training, Performance, Proximal/distal outcomes, Observation study

Introduction

Providing emotional care, in addition to practical and medical care, is a crucial task in the professional role of the nurse when caring for cancer patients. Cancer is a life-threatening disease, and medical treatment can have far-reaching consequences. Consequently, many cancer patients seem to experience distress after diagnosis, which may be characterized by fear, anger, anxiety, depression or helplessness (Maguire & Faulkner 1988, Berglund et al.1991, Heim et al. 1997, Harrisson et al. 1994).

When cancer patients have to be admitted to hospital for treatment, ward nurses, in particular, are closely involved with patients' concerns as they provide 24-hour care. Accordingly, 'good' communication is one of the most important aspects of nursing care in an oncology setting (Heaven & Maguire 1996) which, according to Wilkinson, is defined as open two way communication in which patients are informed about the nature of their illness and treatment and are encouraged to express their anxieties and emotions (Wilkinson 1991)

Two types of communicative behaviour, employed by nurses and linked to their *role function,* seem to be important in meeting the communication needs of patients as defined in this definition. In the first place, these include instrumental behaviours, which are of significance when informing the patient about the illness and treatment, and providing medical and practical service. In the second place, they include affective behaviours, such as showing respect, giving comfort and trust. These are important aspects in the building of the relationship with the patient, in which the patient has a sense of being understood (Bensing 1991, Hall et al. 1987), and in creating a trustful atmosphere, in which the patient is helped to disclose information and concerns relating to the confrontation with a life-threatening disease (Wouda & Van de Wiel 1996).

Further, value is placed on the link of both types of behaviours to *patient outcomes*, such as compliance, medical knowledge (Blanchard et al. 1986, Inui et al 1982, Roter & Hall 1987, Smith et al. 1981, Bensing 1991, Ong 2000), quality of life and satisfaction (Kruijver et al. 2000a, Kruijver et al. 2000b). In nursing research, in particular, the effect of the affective behaviour 'empathy' on patient outcomes has been investigated: it seems to relieve patient's pain, depression and anxiety (La Monica et al. 1987), it seems to have a positive impact on patient's quality of life (Raudonis 1993), it seems to facilitate patients' expression of their physical and emotional distress (Reid-Ponte 1992), and finally, it is associated with higher patient satisfaction: patients who are helped by nurses to discuss their worries or concerns feel more satisfied with care (Ridgeway et al.

1982).
However, since communication in oncology care is emotionally laden, the communication of nurses with cancer patients is also linked with a negative *nurse outcome*, namely 'burnout'. Vachon (1987) described the stressors that are regularly experienced by oncologists and oncology nurses. These include caring for extremely sick patients, dealing with the patient death at all ages, poor staff communication, intense involvement with patients and their families, conflicts between research and clinical care goals and the work load imposed by the complicated work of oncology care. Wilkinson (1992) found a relationship between nurses' communicative behaviours and job stress: nurses who used blocking behaviours experienced more stress than nurses who used facilitating behaviours. Breitbart & Holland (1993) described the development of physical symptoms, psychological symptoms and burnout of medical staff as a consequence of stress in a cancer setting.
Although there is a growing attention to, and growing awareness of the importance of effective communication during nurse-patient encounters, relatively few communication training programs for nurses have been evaluated in nursing research (Kruijver et al. 2000b). Besides, the majority of these studies had a non-randomized research design, which in general is a weaker design in evaluating the effect of a training intervention. This was an important reason for us to conduct training evaluation study in this area according to a randomized pre-test/post-test control group design since with this research design measurements are made under controlled conditions.
Evaluation studies are useful in gaining insight into the effect of these programs on nurses' levels of communication skills and other nurse and patient outcomes. Also, an increased focus on the evaluation of communication training programs may increase attention to the importance of teaching and evaluating the relevant skills that are needed to handle emotions in order to optimize the balance between instrumental and affective communication. This, in turn, can lead to an enhancement of the implementation of effective (continuing) education programs for nurses in cancer care, for which there is a fundamental need.

Aim of the study

The aim of this study is to investigate the effect of a communication skills training program on affective and instrumental communication employed by ward nurses during the admission interview with recently diagnosed cancer patients. The main

assumption underlying this study is that a training in communication skills will improve communicative behaviours of nurses and, in so doing, will positively influence certain patient as well as certain nurse outcomes.

The main research questions with expectations were formulated as follows:

1 What is the effect of training in communication skills on the communicative behaviour of nurses?
It was expected that after the training nurses would use more facilitating or affective behaviours. Also, it is expected that nurses would pay more attention to psychosocial subjects, relating to biomedical subjects.

With respect to the first research question, we also investigated nurses' opinions about the quality of the training program, and some independent and process variables, which according to Francke et al. (1995) may be related to the effectiveness of a communication training program as well. The independent variables include the social system of the working environment, for example social support from superiors, and encouragement from colleagues in applying the newly acquired skills and knowledge in daily practice. The process variables include the characteristics of the relationship with the teacher and that among the participants. Nurses often prefer warm, enthusiastic, friendly teachers with a great deal of expertise. Reciprocal sympathy and support, respect and feedback among the participants may also contribute to the success of the learning process. (Francke et al. 1995)

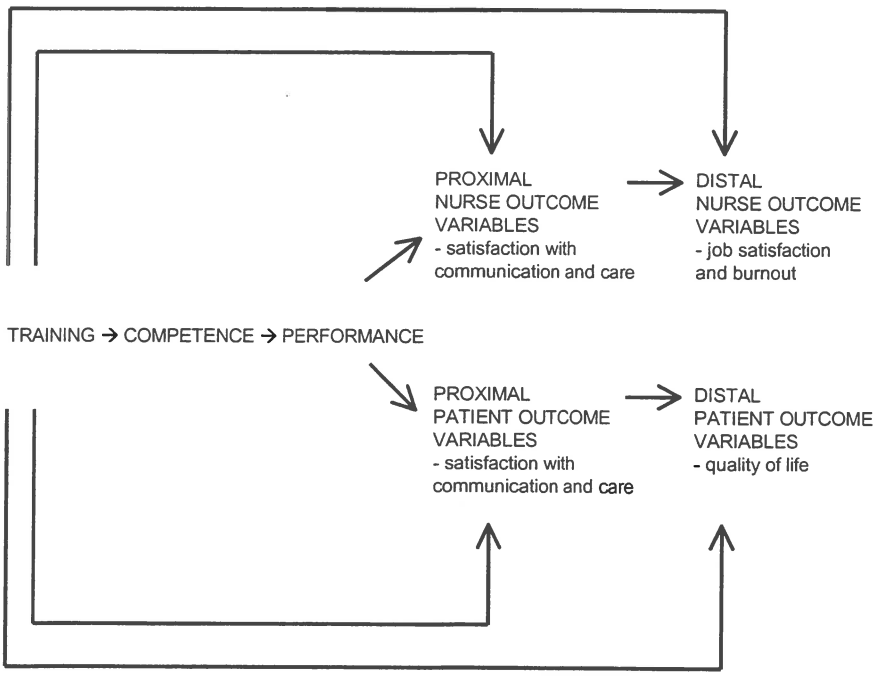
On the basis of the first question, the following research question was formulated in which several *proximal* relations between communication training on the one hand, and patient and nurse outcomes on the other hand are expected:

2 What is the direct effect of the training on nurse and patient outcomes?
It was expected that giving a training in communication skills to nurses would improve their communicative behaviour, which would have a positive effect on:
- nurses' and patients' satisfaction with communication during the admission interview, and during patients' hospital stay;

Additionally, on the basis of the first question, the following research question was formulated in which several *distal* relations between communication training and nurse outcomes were expected:

3 What is the indirect effect of the training on nurse and patient outcomes? It was expected that giving a training in communication skills to nurses on an oncology ward would improve their communicative behaviours, which would have a positive effect on:
- nurse burnout and job satisfaction;
- patient quality of life.

Figure 1 shows the relationship between the communication training program and outcome variables.



Since communication training should theoretically be able to affect even distal patient outcomes in a positive way (La Monica 1987), the expected chain of effects (the training influences competence and performance, which, in turn, influence the proximal and distal outcomes) is not shown alone in the figure. The figure also illustrates the possibility of the direct influence of the training on the proximal and distal outcome variables in the absence of shifts in competence and performance.

Methods

Training

During the training sessions, the participants were taught facilitating skills, and how to integrate these skills with their primary nursing tasks. Specific skills were also taught to achieve common goals with the patient, tailored to their specific needs The underlying assumption of the course was that effective communicative behaviour of nurses would facilitate their interaction with cancer patients. This, in turn, would benefit cancer patients who experience psychosocial problems due to the life threatening disease, as well as the nurses themselves. The acquired skills would enable nurses to increase their stability and control in handling emotionally laden situations, thereby facilitating their primary task. This would lead to increased problem assessment, emotional support, and problem solving (Wouda & van de Wiel 1996).

The training program lasted 18 hours. Nurses were taught communication skills for six days in periods of three hours. The group consisted of ten to fifteen participants, and training was conducted by two trainers, experienced in clinical patient care.

In addition to theoretical education, there was feedback in role playing sessions. In this way, the participants learned how to handle problems they experienced in practice interactively. Every lesson finished with a practical homework assignment, to be accomplished in the work field or at home. More detailed information is presented in Appendix 1.

Design and sample

Effects of the training were measured using a randomized pre-test/post-test control group design.

Nurses

In total, 53 registered (ward) nurses from different medical specialisms in three hospitals in the Netherlands started in the project. During the course of the study, 7 nurses dropped out. Reasons given were: illness/pregnancy (n=4), not motivated anymore (n=1), another job (n=2). As a consequence, 51 nurses completed the pretest, of which 46 nurses completed the pre-test, the training, and the post-test. The experimental group consisted of 28 nurses (25 nurses at post-test) who had participated in the training, and the control group consisted of 23 nurses (21 nurses at post-test) who intended to participate in the training later on (after the study). All the nurses had experience of caring for cancer patients.

The three hospitals that participated were two university hospitals and one general hospital. The nurses were recruited from 11 wards consisting of the following medical specialism: gynaecology, urology, surgery, internal medicine/haematology and ENT. Randomization took place at ward level. In Table 1, several background characteristics of the nurses were presented. There were no significant differences between the experimental and control group nurses with regard to the background characteristics.

Table 1 Background characteristics of the participating nurses (N=53)

	Experimental group	Control group
GENDER		
- Man	7%	17%
- Woman	89%	78%
	4%	4%
AGE		
- mean age	33.5 years	31.5 years
EDUCATIONAL LEVEL		
- HBO (Dutch higher educational level)	68%	48%
- MBO (Dutch secondary educational level)	25%	43.5%
(- missing	7%	8.5%
mean years of employment	12 years	10 years
mean years of employment in oncology	5 years	5.5 year

To test the differences in background characteristics, t-tests and x^2 analysis were used

Patients

During pre-test and post-test, each nurse carried out one or more videotaped admission interviews (range 1-6) with a recently diagnosed cancer patient (n=135 at pre-test; n=130 at post-test)) who had arrived at the hospital for treatment. The background characteristics of the patients are presented in Table 2. There were no significant differences between the experimental and control group patients with regard to the background characteristics.

Table 2 Background characteristics of the patients who participated in the study (n=135)

	Experimental group mean frequency		Control group mean frequency	
	pre(n=78)	**post(n=85)**	**pre(n=56)**	**post(n=45)**
CANCER DIAGNOSIS IN THE FOLLOWING MEDICAL AREAS:				
-surgical	35.4%	41.1%	20.0%	31.8%
-gynaecological/urological	26.6%	24.5%	41.7%	40.9%
-haematological/internal	26.6%	22.2%	26.7%	13.6%
-ENT	11.4%	12.2%	11.7%	13.3%
DURATION OF CANCER DIAGNOSES				
-mean duration of being diagnosed with cancer	3.1 months	2.9 months	2.9 months	3.8 months
GENDER				
- Man	48%	41%	47%	46%
- Woman	53%	59%	53%	54%
AGE				
- mean age	57.7%	56.2%	54.2%	55.6%
EDUCATIONAL LEVEL				
- WO (academic educational level)	5.1%	5.6%	8.3%	6.8%
- HBO (Dutch tertiary educational level)	17.7%	24.4%	13.3%	25.0%
- MBO (Dutch secondary educational level)	7.6%	23.3%	11.7%	13.6%
-LBO (Dutch first educational level)	24.1%	17.8%	26.7%	25.0%
-MO (secundary education)	19.0%	15.6%	25.0%	22.7%
-LO (Primary education)	26.6%	13.3%	15.0%	6.8%
single	24.1%	16.7%	20.0%	22.7%
employed	27.8%	31.1%	35.0%	34.1%

To test the differences in background characteristics, t-tests and x^2 analysis were used

The reason for selecting the admission interview for investigating and comparing nurse-patient communication in the experimental and control condition is that the balance of instrumental and affective communication employed by nurses is particularly important during these interviews with recently diagnosed cancer patients. At this time, the patient becomes acquainted with the nurse who, in the primary nursing system, will be primarily responsible for the care of the patient during his/her stay in hospital (Ersscher & Tutton 1991). The admission interview starts with the patients history, in which the nurse gathers information from the patient about medical and lifestyle issues relevant to treatment. The use of exploratory skills, encouraging the patient to respond freely about affective and medical topics, alternating with skills that structure the conversation are, in consequence, important (Wouda & van de Wiel 1996). Another important nursing task during the interview is to provide clear information about medical issues with regard to treatment, and provide clear information about organizational issues on ward rules, and services during admission (Wouda & Van de Wiel 1996).
From the patient's perspective, the admission situation can cause emotional distress, as it follows recent diagnosis of a life-threatening disease, and admission for cancer treatment. In this situation, it is important for the nurse to be able to create an environment of trust, in which the patient feels respected, involved and accepted. In a good environment, the patient is helped to disclose concerns, which may provide him or her with relief. Relief in turn, may lead to increased patient concentration on the information and questions asked by the nurse during the admission interview. In such circumstances, a nurse's ability to adapt the information to the patient's emotional condition is of significance (Krishnasamy 1996, Wouda & Van de Wiel 1996). Nursing tasks during the admission interview reveal their significance in affective and instrumental communication.

Procedure

Ethics committee approval for the study was provided by each of the three hospitals. The patients were approached by the oncologist and the researcher, and were informed about the purposes of the study both verbally and in writing. Patients who agreed to participate were asked to sign a consent form. The nurses were approached by the researcher and were informed about the purposes of the study both verbally by means of holding presentations on the wards and in writing. Then, enthousiastic nurses could sign up for participation. The participating nurses and patients were assured that anonymity of the results was guaranteed, and that they were free to withdraw.

Planning videotaped interviews at pre- and post-test period.
At the beginning of the study, wards were randomly assigned to an experimental or control condition. The videotaped admission interviews between nurses and patients in both conditions during the pre-test period started after randomization. On each ward, the pre-test period lasted 7 months. After that time, the experimental nurses took part on the training during a period of three months. One month after the last training session, a post-test period of seven months followed, in which the second set of videotaped admission interviews between the nurses and patients took place. At the end of the research period, the nurses in the control condition got the opportunity to participate in the training afterwards.

Planning measurements of patient and nurse outcomes at pre- and post-test period.
Patients were assessed at three different points in time: immediately after the videotaped admission interview (T1), at the moment of discharge (T2), and at three months after discharge (P-T3). Nurses were assessed at four different points in time: before the training (N-T0); immediately after the videotaped admission conversation with the patients (T1), at the moment of discharge of these patients (T2), once after every individual nurse has completed five videotaped admission conversations (N-T3). (see Figure 2).

Observation scheme
*Affective and instrumental communication*The 265 (135 pre- 130 post-test) videotaped admission interviews with the patients were observed using the Roter Interaction Analysis System (RIAS) (Roter 1989). In this system, a distinction is made among instrumental or task-related and affective or socio-emotional verbal communication. The Roter Interaction Analysis System was also originally designed to code both doctor and patient communication, but has also proved to be reliable with respect to the observation of nurse-patient interactions (De Gruyter & Schirm 1995, Caris-Verhallen 1999).
In this study, some small adaptations were made, tailored to the nurse-patient interaction in a clinical oncology setting. The adapted version included 32 behavioural categories for the nurse and 27 behavioural categories for the patient (see Table 3-7). Each utterance was coded into one of the instrumental or affective categories, which are mutually exclusive. An utterance is a communication unit which conveys one thought, or is related to one specific interest. The total length of one utterance varies from one word to a sentence.

Instrumental communication consists of the categories, which contain all items concerning nursing and medical topics, items about the organization on the ward and services, and verbal expressions about lifestyle issues and psychosocial topics. Furthermore, instrumental communication consists of categories that indicate guidance and direction through the conversation, such as orientation and instructing, requests for clarification, asking for an opinion or asking for understanding (see Table 3).
During the history-taking stage of the admission interview, the use of open questions is important in exploring, when alternated with closed questions (among others requests for clarification) in order to get supplementary information. During the information giving stage of the admission interview, conversation and the use of skills that structure the information, for example providing orientation is significant. It is also important to avoid monologues. This can be achieved by using skills that involve the patient during information giving, e.g. by asking the patient if he/she understands the information, and by asking for the patient's opinion and experience.
Affective communication consists of the categories, which refer to those aspects needed to establish trusting relationships between nurses and patients in order to facilitate the information exchange. Additionally, affective communication refers to nurses social conversations that have no particular function in nursing activities, such as personal statements and jokes (see Table 4).
During the admission procedure in particular, affective communication is important in encouraging the patient to disclose concerns. Examples of affective behaviours are paraphrases, showing concern, showing empathy, showing optimism and understanding. These behaviours convey respect, attention and intimacy, and provide companionship and encouragement (Krishnasamy 1996b, Roter 1889, Wouda & Van de Wiel 1996).

We also observed five affective non-verbal nurse behaviours, which appear to be important in the establishment of the nurse-patient relationship, including patient-directed gaze, affirmative nodding, smiling, leaning forward and affective touch (Heintzman et al. 1993, Caris-Verhallen 1999). These behaviours convey involvement, closeness, friendliness and attentiveness. They are not necessary in performing nursing tasks, but do facilitate the verbal interaction between nurses and patients.

Reliability of the observations

The affective and instrumental communication between nurses and cancer patients was observed by two independent raters directly from video-recordings using the CAMERA computer system, which is especially designed to code the observed behavioural interactions from video-recordings (Iec ProGAMMA 1994). Pearson's product-moment correlation coefficients were used to measure the inter-observer reliability, based on 10 interviews of the total number of videotaped admission conversations. Two observers rated the same 10 interviews. The inter-observer correlations for the verbal instrumental behaviours by nurses and patients ranged from .59 to .94 (patients' giving psychosocial information: .59, the other nurse and patient categories: ranging from .68 to .94). For the verbal affective behaviours the inter-observer correlations ranged from .61 to .94 (nurses' paraphrasing: .61; the other nurse and patient categories: ranging from .65 to .94). Inter-observer reliability was not measured for the verbal utterances by nurses and patients, which took up less than 2 percent of the utterances.
The inter-observer correlations for nurses' non-verbal affective behaviours ranged from .66 to .86. The non-verbal behaviours, forward leaning and affective touch were performed too rarely by the nurses to allow measurement of inter-observer reliability. The content validity and discriminant validity of the RIAS has proven to be satisfactory as well in an oncology setting (Ong et al. 1998).

Questionnaires

Satisfaction with communication and care

An adapted version of the Patient Satisfaction Questionnaire (PSQ-C), developed by Blanchard et al (1986) was used to measure patients' and nurses' satisfaction with the admission conversation. This questionnaire was originally developed to measure cancer patients' responses to oncologist visits. Further, in the adapted version, the same items are measured from nurses' perspective:
The list consists of the following items: patients' satisfaction with: needs addressed, active involvement in the interaction, interaction in general, information received, and emotional support received. The items were answered using visual analogue scales (varying from 0 '*not satisfied*' to 10 '*very satisfied*'). In addition, two items from the 'Visit-Specific Questionnaire (Davis & Ware 1991) were added, which measures patients' perceptions about the time the nurses spent with them, and patients' perceptions about being treated like an individual by the nurse. The items were answered in a 5 point Likert type questions (varying from 0 '*very bad*' to 5 '*excellent*')

Job satisfaction

Based on the study of Boumans, (Boumans 1990) nurses' job satisfaction was measured by the following subscales of a questionnaire consisting of 50 items: satisfaction with the quality of care, with clarity, with growth at work, satisfaction with colleague contacts, with promotion at work, with patient contacts, general work satisfaction, intrinsic work motivation. The items were answered in a 5 point Likert type questions (varying from 0 '*very dissatisfied*' to 5 '*very satisfied*').
With the exception of the subscale 'intrinsic work motivation' the internal consistency of each subscale was acceptable to high (Cronbach's α ranged from .62 to .88). For that reason, we excluded the subscale intrinsic work motivation from the analysis.

Burnout

Nurses' levels of burnout were measured with the Dutch version of the 'Maslach Burnout Inventory' (MBI-NL), translated and validated by Schaufeli & van Dierendonk (Schaufeli & van Dierendonk 1993, Schaufeli & van Dierendonk 1994). The questionnaire consists of 20 items, divided in three subscales which measure emotional exhaustion (8 items), depersonalization (5 items) and personal accomplishment (7 items). A high degree of burnout was reflected in high scores on the emotional exhaustion and depersonalization subscales, and in low scores in the on the personal accomplishment subscale. The items were answered in a 7 point Likert type questions (varying from 0 *never* to 6 *always*).
The internal consistency of the subscale emotional exhaustion and personal accomplishment were acceptable (Cronbach's α a was resp .74 and .67). The depersonalization subscale was too low. For that reason, we excluded this subscale from the analysis.
To get a better idea of the scores on emotional exhaustion and personal accomplishment, a comparison was made with a 'standard for nurses', as investigated by Schaufeli & van Dierendonck (2000) which was based on scores from 2.313 nurses. The standard is 1.62 for 'emotional exhaustion' and 4.05 for 'personal accomplishment'.

Quality of life

The EORTC Core QLQ-C30, a 'disease specific' quality of life questionnaire, was used to measure cancer patients quality of life. This questionnaire is validated in a cancer population and has satisfactory psychometric qualities (Aaronson 1993). The QLQ-C30 is composed of both multi-item scales and single item measures.

These include five functional scales (physical, role, emotional, cognitive, social functioning), three symptom scales (fatigue, nausea/vomiting/pain), a global health status/Qlq scale, and six single items (dyspnea, insomnia, appetite loss, constipation, diarrhoea, financial difficulties). All of the scales and single item measures range from 0 to 100. A high score for a functional scale represents a high/healthy level of functioning, a high score for the global health status represents a high Quality of life, but a high score for a symptom scale- or single item represents a high level of symptomatology/problems (Fayers et al. 1995). In our study, we did not include the single symptom items of the QLQ-C30, since these symptoms were to specific for our patient population. Two of the three symptom scales were included in this study, namely pain and fatigue.
With the exception of the multi item scale cognitive functioning and vomiting the internal consistency of each multi item scale was acceptable to high (Cronbach's α ranged from .68 to .87). For that reason, we excluded the multi-item scale 'cognitive functioning and 'vomiting' from the analysis.

Nurses' opinions about the quality of the training, and the independent and process variables.
A questionnaire, especially developed by the IKN (Integraal Kankercentrum Noord Nederland) was used to evaluate nurses' opinions about the training program. Nurses were asked to assess the following issues: gained insight and knowledge about different aspects of oncological care, organization and content of the training, and professional competence of the teachers. We also measured the nurses' judgement of the *independent* and *process* variables, as described in Figure 1. These included: the social system of the working environment, and the atmosphere during the training session. The items were answered in a 5 point Likert type questions (varying from 0 *'not'* to 5 *'very/a lot'*)

Sample
Of the 265 videotaped admission interviews, the following percentages of the nurse and patient questionnaires were available:

Nurse questionnaires
100% of the nurse questionnaires were available at T0 (n=53) and at T1 (n=265). At T2, 72% of the nurse questionnaires were available (n=192). At T4, 83% of the nurse questionnaires were available (n=44).

Patient questionnaires

At T1, 98% of the patient questionnaires were available (n=258); at T2, 81% of the patient questionnaires were available (n=214); at T3, 83% of the patient questionnaires were available (n=219).

Statistical Analysis

Percentages were calculated of the communication behaviours as the frequency of nurses' and patients' communicative utterances within the specific instrumental and affective categories were proportionate to the total number of verbal utterances

Statistical analysis was carried out in the following way: ANOVA analysis for communicative behaviour was used to test whether there was a statistically significant interaction between pre- and post-measurement of the experimental and control group. In other words: the mean pre-test post-test differences of the experimental group were tested against mean pre-test post-test differences in the control group.

ANCOVA analysis for patients' quality of life and satisfaction with communication was used, corrected for age, gender, length of diagnosis, marital status and level of education.

ANOVA and ANCOVA analysis were used in a multi-level framework as a control for the effect of patients being nested within nurses, nurses being nested within wards, and wards being nested within the hospitals (Snijders & Bosker 1999). The analyses were performed in Mln software (Rasbash & Woodhouse 1995).

Change scores (post-test minus pre-test) were calculated for participants 'burnout and job satisfaction. Ancova analysis was used to test whether nurse burnout and job satisfaction in the experimental condition had significantly changed as a result of the training, compared with the untrained group of nurses.

Power Analysis

The population size of the nurses and patients was based upon two considerations. The first being the feasibility. It is considered feasible to incorporate the population-size within the time frame of this study. The second consideration was based upon a simple power analysis.

Patient population

One of the central dependent variables of this study is the percentage total affective utterances of the nurses (see at the foot of Table 4). In our study, the effect size of the training on nurses' affective communication was 0.35, which is

small to medium. Fixing the effect size also at small to medium using a one-tail significance test (α = 0,05), a sample size of 4 x 33 (33 patients in the experimental and control condition at pre- and post-test) will result in an acceptable power coefficient of 0,800 (Cohen 1988). Taking into account the patients being nested within nurses with an intra-class correlation coefficient of 0.25, a sample size of 4 x 66 (which is twice as much) will result in a acceptable power coefficient of 0.800 (Snijders & Bosker 1999).

Nurse population

Relationships have been shown between training interventions and improved communication skills with an effect size between medium and high (Roter 1995). Fixing the effect size also medium to high (d=0,65), using a one-tail significance test (α = 0,05), a sample size of 2 x 30 nurses (30 nurses in the experimental condition and 30 nurses in the control condition) will result in an acceptable power coefficient of 0,800 (Cohen 1988). The mentioned power and effect size for the patient population as well as for the nurse population indicate that effects stand an fairly small chance of going undetected.

In fact, we recruited 53 registered (ward) nurses who were willing to participate in the study. During the course of the study, 7 nurses dropped out. The power coefficient, based on 46 nurses is still acceptable, namely 0.67.

RESULTS

The effect of the training on nurses' communicative behaviour in daily practice

In Table 3 and 4, nurses' communication at pre- and post-test measurement is presented. It reveals that after training, the ratio of instrumental to affective communication of the trained nurses did not change significantly at post-test measurement. Assessment of nurses' communication behaviour within the instrumental and affective categories, revealed that none of them showed significant changes in the experimental group nurses at post-test measurement either.

Table 3 Percentages of nurses' verbal instrumental communication at pre- and post-measurement

	experimental group perc. pre (n=79)	sd	post (n=85)	sd	control group perc. pre (n=56)	sd	post (n=45)	sd
guiding behaviours	***4.7***	***(2.4)***	***3.9***	***(2.2)***	***4.3***	***(2.0)***	***3.4***	***(1.6)***
orientations/instructions	2.5	(1.4)	1.5	(.9)	2.4	(1.6)	1.3	(.8)
asks for clarification	.2	(.3)	.1	(.3)	.1	(.2)	.1	(.3)
asks for understanding	1.9	(1.8)	1.6	(1.7)	2.0	(1.1)	1.9	(1.3)
asks for opinion	.1	(.3)	.2	(.3)	.1	(.2)	.1	(.1)
medical topics	***43.5***	***(9.7)***	***42.2***	***(11.4)***	***45.7***	***(10.4)***	***41.7***	***(10.2)***
closed questions about:								
medical/therapeutic items	5.1	(2.9)	3.9	(2.2)	4.3	(2.0)	4.0	(2.6)
hospital/ward items	1.4	(1.2)	1.2	(1.3)	1.3	(1.2)	1.2	(1.2)
open questions about:								
medical/therapeutic items	.7	(.6)	.7	(.8)	.5	(.6)	.5	(.5)
hospital/ward items	.1	(.2)	.1	(.4)	-	(-)	.1	(.2)
information								
medical/therapeutic items	22.1	(10.3)	22.5	(10.9)	28.7	(11.9)	26.8	(9.9)
hospital/ward items	13.3	(8.2)	10.8	(5.0)	9.7	(6.3)	8.3	(4.7)
counselling								
medical/therap. behaviour	1.0	(.9)	1.0	(.7)	1.0	(1.2)	.9	(.8)
psychosocial topics	***12.6***	***(4.8)***	***12.4***	***(4.5)***	***12.9***	***(4.5)***	***11.9***	***(3.8)***
closed ended questions about								
lifestyle items	3.4	(2.2)	2.5	(1.7)	3.3	(2.3)	2.5	(1.7)
psycho-social/feelings	1.9	(1.5)	1.8	(1.2)	1.5	(1.2)	1.2	(.8)
open ended questions about								
lifestyle items	.1	(.3)	.2	(.3)	.1	(.2)	.1	(.3)
psycho-social items/feelings	.5	(.5)	.4	(.5)	.3	(.5)	.3	(.2)
information								
lifestyle items	.6	(.9)	.7	(.9)	.8	(1.2)	.6	(.6)
psycho-social items/feelings	5.1	(3.3)	5.8	(3.3)	5.5	(2.9)	6.1	(3.3)
counselling								
lyfestyle behaviour & feelings	1.	(1.1)	.9	(.8)	1.4	(1.4)	1.2	(1.0)
other	.5	(.6)	.3	(.5)	.6	(.9)	.1	(.2)
Total instrumental utterances	60.8	(10.6)	58.5	(12.4)	62.9	(10.7)	57.0	(10.2)

Table 4 Percentages of nurses' verbal affective communication at pre-and post-measurement

	experimental group perc.				control group perc.			
	pre (n=79)	sd	post (n=85)	sd	pre (n=56)	sd	post (n=45)	sd
social topics	***3.1***	***(1.9)***	***3.5***	***(3.2)***	***3.1***	***(2.1)***	***4.2***	***(2.8)***
personal remarks /social conversation	1.7	(1.3)	1.8	(1.4)	1.5	(1.2)	2.5	(2.1)
jokes/laughs	1.4	(1.1)	1.7	(1.4)	1.6	(1.7)	1.7	(1.4)
emotional topics	***35.6***	***(10.5)***	***37.7***	***(11.8)***	***33.4***	***(10.5)***	***38.7***	***(10.2)***
appproval	.8	(1.1)	.6	(.7)	.7	(.8)	.5	(.5)
compliments	.1	(.2)	-	(-)	.1	(.3)	.1	(.2)
shows concern/worry	.3	(.7)	.1	(.2)	.4	(1.0)	.1	(.1)
shows agreement/ understanding	23.9	(10.5)	26.1	(11.0)	23.4	(8.4)	27.4	(8.4)
paraphrase/check	8.1	(3.2)	8.1	(2.9)	6.5	(2.8)	7.5	(2.4)
empathy/legitimize	1.0	(1.0)	1.5	(1.2)	.7	(.7)	1.7	(1.1)
reassurance/ encourage/optimism	1.2	(1.0)	.9	(.7)	1.4	(1.0)	1.1	(.9)
shows partnership	.2	(.3)	.4	(.6)	.2	(.4)	.4	(.5)
disapproval	-	-	-	-	-	-	-	-
criticism	-	-	-	-	-	-	-	-
? reassurance	-	-	-	-	-	-	-	-
Total affective utterances	38.7	(10.6)	41.3	(12.4)	36.5	(10.6)	42.9	(10.3)

The communicative behaviours of nurses in the experimental group at post-test measurement were predominantly related to instrumental communication, characterized by providing information about medical topics and about hospital ward issues. To a lesser extent they showed communication which was related to psycho social topics. Further, it appeared that few utterances were related to structuring communication behaviours such as giving orientation and requests for clarification. Additionally, few utterances were related to behaviours that involved the patient during the discourse such as asking the patient for understanding, and asking the patient for an opinion

As regards affective communication, the difference scores of the pre- and post-test of the trained nurses were not significantly different from the difference scores

of the untrained nurses . The affective communication of the trained nurse at post-test measurement was mainly related to the more globally affective utterances, such as showing agreement and checking. The minority of the affective utterances concerned specific affective behaviours such as showing concern, empathy, and providing reassurance/optimism.

Table 5 Nurses' nonverbal communication behaviours at pre- and post-measurement

Nonverbal behaviour	experimental group perc.				control group perc.			
	pre (n=79)	sd	post (n=85)	sd	pre (n=56)	sd	post (n=45)	sd
percentages								
patient directed gaze	74.8	(14.4)	75.5	(10.7)	76.9	(10.2)	76.1	(8.4)
frequencies								
affirmative head nodding	102.6	(66.8)	120.6	(63.6)	118.7	(57.1)	131.7	(85.5)
smiling	26.5	(24.1)	35.5	(20.8)	29.5	(26.9)	34.4	(45.4)
forward leaning	1.2	(4.2)	2.8	(5.1)	1.2	(3.3)	2.4	(3.4)
affective touch	.9	(3.0)	.4	(1.8)	.7	(1.6)	.2	(.7)

Consideration of nurses' nonverbal communication revealed no significant changes at post-test measurement either. Patient-centred gaze was already high at pre-test measurement, and did not significantly change after the training. Forward leaning and affective touch occurred rarely.

The communicative behaviours of the patients are presented in Tables 6 and 7. The results show no significant changes as regards patients in the experimental condition at post-test measurement. On the whole, the patients showed the same communication patterns as the nurses, characterized mostly by providing information about medical issues, followed by psychosocial communication. In line with the nurses, patients showed mainly global affective communication, such as showing agreement.

Table 6 Percentage of patients' verbal instrumental communication at pre- and post-measurement

Nonverbal behaviour	experimental group perc. pre (n=79)	sd	post (n=85)	sd	control group perc. pre (n=56)	sd	post (n=45)	sd
guiding behaviours	***1.0***	***(1.2)***	***1.4***	***(1.5)***	***.7***	***(1.1)***	***1.2***	***(1.1)***
orientations/instructions	.1	(.2)	.1	(.2)	.1	(.2)	.1	(.3)
asks for clarification	.2	(.4)	.2	(.6)	.2	(.3)	.2	(.3)
asks for understanding	.6	(1.1)	1.1	(1.4)	.4	(1.0)	.9	(1.0)
asks for opinion	-	-	-	-	-	-	-	-
medical topics	***37.1***	***(10.3)***	***30.1***	***(10.6)***	***34.4***	***(9.7)***	***29.1***	***(9.4)***
questions								
medical/therapeutic items	2.8	(2.2)	2.1	(2.1)	5.1	(5.1)	2.7	(1.8)
hospital/ward items	1.2	(1.3)	.8	(.8)	1.62	(1.7)	1.1	(1.0)
information								
medical/therapeutic items	30.5	(10.5)	24.6	(4.2)	25.4	(10.2)	22.6	(9.1)
hospital/ward items	2.6	(2.1)	2.7	(2.2)	2.2	(2.0)	2.7	(2.0)
psychosocial topics	***27.6***	***(9.8)***	***27.1***	***(10.2)***	***26.4***	***(11.1)***	***26.1***	***(8.5)***
questions								
lifestyle items	.3	(.4)	.2	(.3)	.3	(.5)	.3	(.4)
psycho-social items /feelings	.3	(.5)	.3	(.4)	.3	(.4)	.4	(.5)
Information								
lifestyle items	13.2	(7.2)	12.7	(7.9)	12.1	(8.0)	10.8	(6.2)
psycho-social/feelings	13.8	(6.2)	13.9	(5.9)	13.7	(6.6)	14.6	(6.5)
other	.8	(1.5)	.4	(1.0)	.5	(1.0)	.2	(.3)
Total instrumental utterances	65.6	11.8)	58.7	(13.3)	61.5	(14.5)	56.4	(12.2)

Table 7 Percentages of patients' verbal affective communication at pre- and post-measurement

	experimental group perc. pre (n=79)	sd	post (n=85)	sd	control group perc. pre (n=56)	sd	post (n=45)	sd
Affective								
social topics	***4.4***	***(3.4)***	***5.4***	***(6.5)***	***4.6***	***(3.5)***	***5.7***	***(4.1)***
personal remarks/ social conversation	2.2	(2.2)	3.2	(6.5)	2.0	(2.5)	3.0	(4.0)
jokes/laughs	2.1	(2.1)	2.2	(1.8)	2.6	(2.4)	2.7	(1.9)
emotional topics	***29.1***	***(11.4)***	***35.5***	***(12.8)***	***33.4***	***(15.1)***	***39.1***	***(9.4)***
approval	.3	(.5)	.2	(.3)	.3	(.4)	.1	(.3)
compliments	.1	(.3)	.1	(.3)	.1	(.2)	.2	(.4)
shows concern/worry	1.3	(1.5)	1.1	(1.2)	1.2	(1.3)	1.2	(1.1)
shows agreement/ understanding	24.8	(11.2)	29.6	(11.8)	29.7	(15.0)	30.9	(12.1)
paraphrase/check	2.2	(1.5)	3.7	(2.2)	1.9	(1.7)	4.4	(1.9)
empathy/legitimize	-	-	-	-	-	-	-	-
reassurance/ encouragement/optimism	.1	(.4)	.5	(.6)	-	.6	(.8)	0.18
shows partnership	-	.6	-	-	.1	.5	-	-
approval	-	-	-	-		-	-	-
criticism	-	-	-	-	-	-	-	-
asks for reassurance	.1	(.2)	.2	(.3)	.2	(.4)	.2	(.4)
total affective utterances	33.5	(11.6)	41.0	(13.3)	38.0	(14.5)	43.3	(12.2)

The effect of nurses' communication behaviour after the training on proximal nurse and patient outcomes: satisfaction with communication and care

Since the communication training did not have major effects on the trainees' communicative behaviours, we did not investigate the chain of effects as demonstrated in the figure above further, i.e.: analysis of correlations between the communicative skills and behaviours in the experimental and control condition and the proximal and distal outcome variables. In fact, we investigated the direct effect of the communication training on the proximal and distal outcome variables, also shown in Figure 1, which will be discussed in the following section.

Table 8 Differences between the pre and posttest for nurses' satisfaction with communication during the admittance interview (T1), and during the whole period of patient's admittance (T2)

Satisfaction with	Experimental group mean				Control group mean			
	pre		post		pre		post	
	T1 (n=79)	T2 (n=63)	T1 (n=85)	T2 (n=48)	T1 (n=56)	T2 (n=49)	T1 (n=45)	T2 (n=32)
meeting patients' needs	7.4	7.0	7.3	7.0	7.6	6.7	7.8	6.9
involving the patient actively	7.7	7.2	7.6	7.2	7.8	7.3	8.1	7.3
interaction in general	6.9	6.9	7.2	6.9	7.4	7.0	7.8	6.8
information provided	7.0	7.1	7.2	7.0	7.4	7.5	7.8	6.8
emotional support provided	6.9	6.8	7.1	6.9	7.2	6.9	7.4	6.9
time spended with the patient	3.5	3.4	3.4	3.4	3.6	3.5	3.6	3.4

The tables show that the difference scores of nurses' (Table 8) and patient satisfaction (table 9) with communication in the experimental condition at pre- and post-test did not significantly change from the difference scores in the control condition. Both the patients and nurses were well satisfied. We see that at the first (T1) and second time (T2) point, the nurses were comparatively lower satisfied with the interaction in general and the emotional support provided to the patients. In general, patient satisfaction at the different times was higher than nurses satisfaction. Also, at T2 we see one significant difference score: patient satisfaction with the interaction in general in the untrained condition increased at post-test measurement, while patient satisfaction in the experimental condition remained the same.

Table 9a Differences between the pre and posttest for patients' satisfaction with communication during the whole period of admittance, and during the whole period of patient's admittance

Satisfaction with	Experimental group mean frequency pre T1 (n=79)	T2 (n=63)	T3 (n=66)	post T1 (n=85)(	T2 n=68)	T3 (n=71)
Needs addressed	9.2	8.7	8.4	8.8	8.5	8.5
Being involved actively	8.5	8.5	8.2	8.5	8.4	8.3
Interaction in general	9.4	8.9*	8.5	8.9	8.8	8.5
Information received	9.2	8.8	8.2	8.8	8.7	8.3
Emotional support received	8.8	8.8	8.1	8.6	8.6	8.1
Time spent with the nurse	4.3	4.0	3.8	4.4	4.0	4.0
Being treated by the nurse as an individual	3.9	4.1	4.1	3.9	3.9	4.1

* $p < 0.05$

Table 9b Differences between the pre and posttest for patients' satisfaction with communication during the whole period of admittance, and during the whole period of patient's admittance

Satisfaction with	Control group mean frequency pre T1 (n=56)	T2 (n=49)	T3 (n=41)	post T1 (n=43)(	T2 n=31)	T3 (n=36)
Needs addressed	8.8	8.3	8.1	8.6	8.5	8.1
Being involved actively	8.2	7.7	8.1	8.3	8.2	7.9
Interaction in general	8.8	8.4*	8.2	8.7	8.9	8.2
Information received	8.7	8.2	7.9	8.7	8.6	7.9
Emotional support received	8.5	8.0	7.8	8.0	8.1	7.8
Time spent with the nurse	4.1	4.1	3.7	4.1	4.2	3.7
Being treated by the nurse as an individual	3.9	4.1	4.1	3.8	4.0	4.0

* $p < 0.05$

The effect of nurses' communication behaviour after the training on distal nurse and patient outcomes: job satisfaction and nurse burnout, and patient quality of life

Table 10 Differences between the pre- and post-test for nurses' job satisfaction and burnout

Job satisfaction with	Experimental group (n=23) mean		Control group (n=21) mean	
	pre(sd)	**post(sd)**	**pre(sd)**	**post(sd)**
Job satisfaction				
Quality of care	3.6 (.63)	3.7 (.54)	3.9 (.35)	3.6 (.57)
Clarity	3.9 (.45)	3.6 (.53)	3.8 (.25)	3.8 (.39)
Contact with collegues	4.0 (.48)	3.9 (.47)	4.1 (.45)	4.1 (.44)
Supervisory satisfaction	3.6 (.60)	3.3 (.94)	3.7 (.51)	3.5 (.71)
Growth at work	3.8 (.52)	3.8 (.56)	3.7 (.50)	3.5 (.53)
Promotion at work	3.1 (.65)	2.9 (.68)	3.0 (.61)	2.9 (.76)
Patient contacts	3.9 (.40)	3.9 (.35)	3.8 (.40)	3.7 (.35)
General job satisfaction	3.7 (.47)	3.6 (.44)	3.6 (.33)	3.3 (.37)
Burnout				
Emotional exhaustion	2.8 (.74)	3.1 (.75)	3.0 (.55)	3.1 (.67)
Personal accomplishment	5.3 (.43)	5.2 (.35)	5.0 (.40)	5.0 (.42)

Table 10 reveals that the training did not have significantly impact on nurse burnout and job satisfaction. On the whole, the nurses scored higher than the standard scores for the nursing professionals on emotional exhaustion (Schaufely & van Dierendonck 2000). Also the nurses scored rather high on personal accomplishment already at pre-test level, which did not further increase at post-test measurement. Further, they were satisfied with the different aspects of job satisfaction, as shown in Table 10. This related especially to their contacts with colleagues and patients.

Table 11a Differences between the pre and posttest for patients' quality of life

Satisfaction with	Experimental group mean frequency pre T1 (n=79)	T2 (n=63)	T3 (n=66)	post T1 (n=85)(	T2 n=68)	T3 (n=71)
fysical functioning	94.9	87.3	89.6	94.1	88.6	89.7
role functioning	78.9	49.1	58.9	78.0	48.7	64.3
emotional functioning	68.9	68.4	75.7	71.5	74.2	77.3
social functioning	87.6	69.9	75.4*	90.5	74.3	81.7
global quality of life	71.8	59.5	69.4	78.5	62.5	72.1
fatigue	26.5	44.5	39.9	24.3	40.7	40.3
pain	21.6	36.5	22.3	17.5	28.7	21.9

* $p < 0.05$

Table 11b Differences between the pre and posttest for patients' quality of life

Satisfaction with	Control group mean frequency pre T1 (n=52)	T2 (n=47)	T3 (n=46)	post T1 (n=39)	T2 (n=33)	T3 (n=36)
fysical functioning	94.7	85.9	89.9	93.7	87.8	87.0
role functioning	78.0	41.6	58.6	77.7	38.2	55.5
emotional functioning	67.8	72.2	79.6	67.2	73.4	77.0
social functioning	81.6	60.1	85.9	82.8	66.5	74.8
global quality of life	79.0	62.3	76.1	77.9	63.5	73.8
fatigue	30.0	49.4	35.2	30.6	49.8	43.2
pain	19.5	32.4	16.0	15.5	38.5	17.8

* $p < 0.05$

Table 11 reveals that nurses communicative behaviours after the training did not have a significant impact on patient quality of life on the different time points. We see that at the third time point (T3) there is one significant difference score of the patients in the experimental or control condition: the patients of the trained nurses increased on social functioning, while the patients of the untrained nurses decreased on social functioning. On the whole, the patients scored relatively high on the functional scales, and low on the symptom scales.

Nurses perceptions of the quality of the training program and the independent and process variables

Additionally, we evaluated nurses' opinion about the quality of the training program. Table 12 relates to nurses' acquired insight and knowledge of different aspects relating to caring for cancer patients.

Table 12 Nurses' evaluation of the training program

Nurses' insight in	Mean	sd	not/hardly (1-2) %	rather (3) %	considerable/a lot (4-5) %
coping with cancer	3.5	.897	9.8	43.9	46.3
psychosocial care	3.8	.738	4.9	22.0	73.1
communicative skills	3.9	.573	-	19.5	80.5
special forms of oncological care	3.3	.728	12.2	43.9	43.9
handle own emotions	3.4	.628	7.3	46.3	46.3
interact effectively with difficult patients	3.9	.667	2.4	24.4	73.2

The results reveal that their acquired knowledge about specific psycho-oncological aspects varied. In particular their acquired insight in handling own emotions, special (psycho)oncological care, and coping with cancer was relatively moderate.

Table 13 Nurses' satisfaction with the professional competence of the trainers

Nurses' satisfaction with teachers'	Mean	sd	not/hardly (1-2) %	rather (3) %	considerable/a lot (4-5) %
professional competence as regards oncological guidance education, and communication	4.0	.474	-	12.2	87.8
conveying theory and skills	4.0	.632	2.4	12.2	85.4
giving room for discussion	4.2	.843	7.3	4.9	87.8
giving feedback with respect to attitude and performance	4.1	.654	-	14.6	85.4

Table 13 shows that on the whole, the nurses were well satisfied with the professional competence of the teachers. Additionally (not documented in the table), the participants were quite satisfied (mean 3.6) with the content of the training program, and its organization as regards the amount, length and frequency of the training sessions and the measure of the group.

We also evaluated nurses' judgements about the relationship with the teachers and among the participants during the training sessions (process variable), and the extent in which the working environment of the nurses stimulated them to bring in practice what they had learned (independent variable), as shown in Table 14.

The results demonstrate that the trainees felt comfortable with the teachers and participants (mean 4.1). The results further demonstrate that less than 50 % of the trainees felt encouraged by their colleagues and supervisors to put what they had learned into practice. Table 14 further shows that, although the majority of the trainees were intended to perform what they had learned, only 50 % of the trainees reported that they actually performed the newly acquired skills in practice. The evaluation finally revealed that 93% of the nurses would recommend the training to others. This indicates that the trainees judged the training program positive, and they reported that the training was very instructive.

Table 14 Nurses' opinion about the atmosphere during the training sessions, the support they receive from the social environment, and their intention to change communicative behaviours in daily practice after the training

Nurses' opinion about	Mean	sd	not/hardly (1-2) %	rather (3) %	considerable/a lot (4-5) %
Nurses opinions about the training atmosphere :					
the contact with the teachers	4.0	.689	2.4	17.1	80.5
to feel comfortable with the teachers	4.2	.70	2.4	9.8	87.8
the contact with the participants	4.1	.735	2.4	14.6	82.9
to feel comfortable with the participants	4.2	.748	2.4	14.6	82.9
Nurses' opinion about:					
received support from supervisors	3.3	1.18	24.4	26.8	48.8
received support from colleagues	3.3	1.00	22.0	29.3	48.8
The extent in which nurses:					
are intended to perform what they have learned in future	4.0	.608	-	14.6	85.4
perform in practice what they have learned	3.5	.552	-	48.8	51.2

DISCUSSION

In this study, the effect of a communication skills training program on the communicative behaviours employed by ward nurses during the admission interview with recently diagnosed cancer patients was investigated. The main assumption underlying this study was that a training in communication skills would improve communicative behaviours of nurses and, by doing so, would positively influence certain patient as well as certain nurse outcomes. These include in the first place patients' and nurses' satisfaction with communicative interactions, which are be considered as *proximal* outcome measures. Secondly, these include patient 'quality of life' and 'nurse burnout and job satisfaction', which are considered as *distal* outcome measures. Effects of the training were measured using a randomized pre-test/post-test control group design. The results of this study reveal that no effects of the training were found, neither on nurses'

communication behaviours, nor on the proximal and distal nurse and patient outcomes.
At the post-test measurement, the trained nurses employed instrumental communication in the same way as they did at the pre-test measurement, mostly consisting of giving information about medical topics. The same concerned nurses' affective communication, which was more related to general affective communication like agreements and paraphrases, than to specific affective behaviour, like showing empathy, concern and optimism. Additionally, nurses nonverbal behaviour had not changed significantly at post-test measurement. Patient-directed gaze occurred most of the time. This can be explained by the fact that nursing activities during the admission interview were mainly characterized by information exchange. Nurses therefore use a great part of the time for eye contact with the patient. Leaning forward and affective touch still occurred rarely at post-test measurement.

Although a communication training can positively influence distal patient outcomes (La Monica 1987), the results of our study as regards the absence of significant effects on patient quality of life are in line with what we expected. The decreasement of patient quality of life at hospital discharge (T2), is a consequence of having undergone medical treatment, and being out of daily routine during admission. Three months (T3) after discharge, the patients reached more or less their level of quality of life as measured directly after the admission interview (T1). The only significant change included an increased social functioning of the patients in the experimental condition at T3, which was a quality of life outcome. These findings indicate that quality of life is undoubtedly affected by more factors such as undergoing medical treatment, besides a communication training program.

The absence of training effects on nurse job satisfaction can be explained by the fact that the nurses had a high level of job satisfaction in most respects. In our study, the participants scored rather high on supervisory satisfaction and growth at work already at pre-test measurement, which did not further increase after the training.
Although the participants' scores on emotional exhaustion were not remarkable high, they scored higher on this burnout subscale than the standard scores for nursing professionals, as investigated by Schaufeli & van Dierendonck (2000) which was based on scores by 2.313 nurses. This can be explained by the fact that the nurse in our research setting cared for cancer patients, which is

complicated by emotional issues. Consequently, we hoped to find a significant decrease of emotional exhaustion of the nurses in the experimental conditions which did not occur. At the same time, it is well-known that more factors, especially individual characteristics such as preference of autonomy, and time pressure, are related with burnout (Jansen 1996).

We expected to find more impact of the communication skills training, on nurse and patient satisfaction with communication, especially directly after the admission interview (T1). The only significant chance occurred in the group patients of the untrained nurses at the second time point (T2), consisting of an increased satisfaction of the interaction with the nurse in general. However, it is well documented in the literature (Frederikson 1995, Cohen 1996) that it is difficult to measure changes in patient satisfaction, since there is low variance in scores which, in general, are high. In our study, we found also high satisfaction scores at pre-test measurement , which did not further increase after the training. This so-called 'ceiling effect' was also evident in the satisfaction scores of the nurses.

In order to understand the absence of training effects on nurses' communicative behaviours, we will make a number of comments. The first relates to the quality of the training program. When looking at the positive judgements about the training of the nurses, we should not directly expect absence of training effects: the nurses were well satisfied with the professional competence of the teachers, and with the content and organization of the training. Additionally, the participants judged the relationship with the teachers and that among the participants as highly positive. In total, 86% of the nurses intended to use what they have learned in future, and 93% of them would recommend the training to others. All in all, nurses were positive, and reported that the training was very instructive.
At the same time however, less than 50 % of the participants reported that their knowledge and insight into dealing with their own emotions, in special forms of psychosocial care, and in aspects of coping with cancer improved. The limited increased insight in these facts may explain the fact that trained nurses generally continued their instrumental behaviours at post-test measurement on the same way, and did not significantly increase affective behaviours.
Besides, only 49% of the participants felt encouraged by their supervisors and colleagues to put into practice what they had learned, and only 50% of the nurses said that they actually practiced what they had learned. Pool (1983) reported that a negative work environment, which means lack of support from supervisors for use of the newly acquired skills in practice, formed a barrier in putting the skills

learned into practice; Booth et al. (1996) reported that a positive work environment led to increased use of facilitating behaviours, which means nurses ability to assess and clarify patients' concerns.G iven this knowledge, the absence of training effects are not very surprising. These findings indicate that the quality of the training was less adequate in taking into account context-related factors of the professional working environment in which the trainees have to perform the acquired skills.

The second comment relates to patient communication styles which can differ widely, and consequently have considerable impact on the course of the interactions. For example, in our study, it turned out that more patients tried to reduce stress by asking the nurse many medical questions, while other patients predominantly expressed concerns and emotions in order to alleviate stress. In particular in emotionally laden situations, there is a dynamic interaction between nurse and patient, dealing with the contextually bound and individual problems of the patient. Unique patient circumstances have an immediate impact on the course of the interaction with nurses. In other words: in real patient encounters specific situations require specific communication styles of nurses, and it remains the question whether even experimental trials control sufficiently for uncontrolled patient influences which may obscure the measurement of training effects.
As a consequence of unverifiable patient influences, the sample size of the nurses and patients must be quite large to neutralize this type of bias in order to provide enough power to find significant shifts. Although our sample was impressive for this area of research, it remains to be seen whether the sample size of the nurses and patients was sufficient to establish the power we needed.

The third comment relates to the observation systems which are used in nursing research up till now. Most of the systems focus mainly on nurses' communication (Kruijver et al. 2000b). In our study, (an adapted version of) the RIAS was used, which has the advantage that it not only measures provider communicative behaviours, but also that of patients (Roter 1989).A major characteristic of the RIAS is that it makes a distinction among instrumental or task-related and affective or socio-emotional verbal communication, which have shown to be important during nurse-patient encounters in our research setting. A second major characteristic of the RIAS is that it makes no differentiation between 'good' and 'bad' communication since the RIAS is based on frequencies. In our study, the *frequency* with which a communicative behaviour occurs, gives an indication of the *quality* of communication. Although the frequency with which (for example) an

affective utterance occurs is an indication for the extent to which a health care provider is concerned with patient feelings, there is no information about how and in what context these utterances are made (Hulsman 1998, Caris-Verhallen 1999). This makes that with frequency based data only limited conclusions can be drawn about the interaction process during the nursing encounter. The interaction process is important since it provides insight in the context in which communication takes place. On the one hand, the context of communication is determined by specific patient characteristics, such as their personality, their contribution to the encounter, their needs and expectations (Bensing 1991, Bensing 1992), and on the other hand by the organizational and structural characteristics of the professional working environment, such as working experience, the relationship with supervisors and colleagues, and workload (Francke et al. 1995, Ram et al. 2000). Besides, the nature of the communication is related to specific goals that have to be achieved. Examples are establishing a good interpersonal relationship, the exchange of information, and medical decision-making (Ong. 2000). It is clear that the variety in types of patients, health problems and contextual situations demand differentiated goals during the nursing encounters.

In our study, we expected to find that the trained nurses would substitute their medical instrumental communication for psychosocial instrumental and affective communication, like showing concern and empathy, significantly more often. At the same time, we still are unaware as to whether psychosocial and affective communication by the trained nurses (which had not significantly increased) was effected in a context more attuned to patient needs. This is also true for the way we measured nonverbal behaviour. We decided to measure nonverbal communication as well, since nonverbal behaviour is considered to be important in establishing a good relationship with the patient (Heintzman et al. 1993, Caris-Verhallen 1999), and thus provides more information about the psychotherapeutic facet of interactions in which the information exchange takes place. However these are also based on frequencies, and we do not know on what specific patient utterances they are related to.

In spite of the limitations mentioned of observation systems based on frequencies, it is important to note that the observation systems which make a distinction between 'good' and 'bad' communication do not demonstrate more desirable communication shifts of nurses and doctors after a communication training intervention (Kruijver et al. 2000b, Hulsman 1998) either. In fact, in medical and

nursing research thus far, the observation methods provide clear information about communication patterns of health care providers, but the question remains as to whether these instruments are sensitive enough to measure the specific needs and goals related to interaction process between providers and patients, and secondly, shifts in communication patterns after training interventions.

In conclusion, we have mentioned different reasons which may explain the phenomenon of why in nursing research thus far we can not find what we hope to find, namely improved communication skills and behaviours of nurses after a communication training program.
In future research, more attention should be paid to evolving refined methodologies which give insight into specific situations in which particular communication styles of nurses are successful. This could be reached by empowering the RIAS by developing additional qualitative observation systems, tailored to the specific characteristics of each separate communication training program, and sensitive enough to measure the context in which the interaction between nurses and patients place. With such qualitative research tools, detailed insight could be gained into the sequences of the dyadic interaction, and into the goals and needs related context in which these utterances occur. Also, more insight could be gained into the extent to which, the specific training goals are achieved.

Further, communication training programs should take more into account the context of organizational and structural characteristics of the professional working environment in which the acquired skills have to be performed. The few studies, which investigated influences of the work environment on nurses' performance of communication in practice (Pool 1983, Booth et al. 1996) revealed that the work environment can hinder or encourage nurses in putting into practice the skills acquired. These findings indicate that the factors like work environment have a higher impact on the quality of communication than we had hitherto thought.

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APPENDIX 1

The content of the communication training program

During every meeting the skills were taught according to a regular schedule, which consisted of the following elements:

- a test of the theory;
- a short discussion of the assigned homework and the theoretical background of the current lesson;
- instruction regarding the objective of skills and how to use them;
- demonstration of the skills;
- practicising the skills by means of role playing and homework assignment (this is an exercise which has been taught during the course and will be applied to a home or work situation).

The oncological and communicative themes to be taught during the training program were the following:

Day 1

During the first lesson the participants were taught the basics of the communication theory, in order to get more insight into the question: 'What is communication?'

Also several psychosocial aspects regarding the confrontation with cancer were discussed, such as the life threatening character of the disease and the emotional and physical burden of the treatment.

Day 2

During the second lesson the emotional consequences of cancer were discussed, such as coping with the loss of health, and emotions like anxiety, depression, anger, guilt shame etc.

Participants also received insight in separate communication skills, which are considered basic elements of a conversation. These include the non-directive communication skills on the one hand, such as eye contact, posture, verbal attentiveness, (open) question asking, silence, etc; and the more directive or controlling skills on the other hand, such as paraphrasing, emotional reflection, summarizing, concretisizing, own expression etc.

Day 3
During the third lesson, attention was paid to handling patients' emotions. Also the participants got an insight into the structure of a conversation; for example the different phases of a conversation such as the introduction, the middle part and the end of the conversation, and the use of appropriate skills during the different phases.

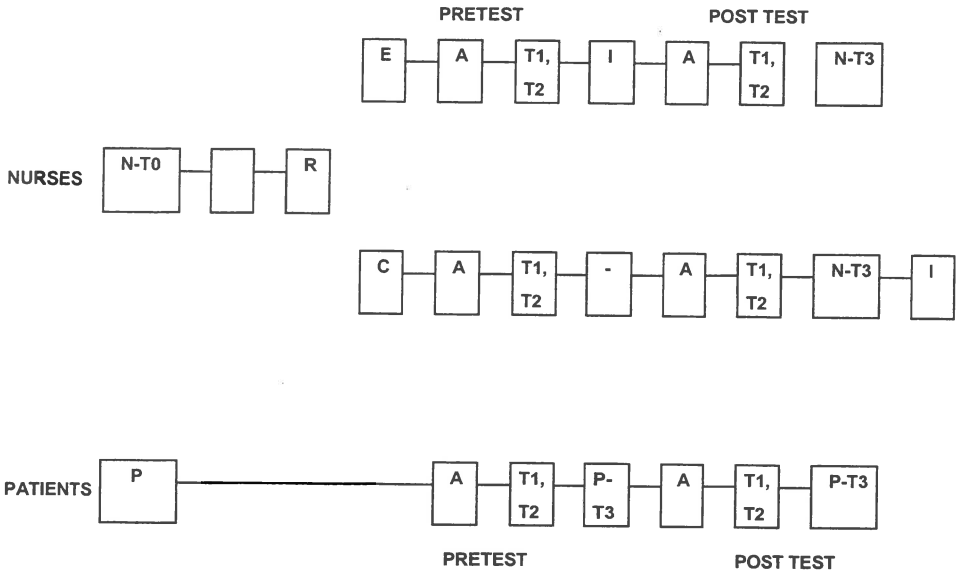
Day 4
During the fourth lesson, patient education was a central theme.
The participants received an insight into how to structure the information with which they provide patients. Relevant counselling skills, which can be used during the provision of patient information, were also taught.

Day 5
During the fifth lesson resistance of oncology patients was taught, such as 'irrational thoughts'. Nurses got an insight into different therapeutic techniques, focused on handling resistance (such as challenging, rewarding/punishing).

Day 6
During the sixth lesson, resistance of nurses themselves was a central theme. The participants got an insight into how to deal with their own resistance regarding emotionally laden situations, such as caring for terminally ill cancer patients.

Follow up. After two months, there was a follow up meeting in which the training was evaluated by the members of the course, and where the participants still got the opportunity to acquire communication skills by means of role playing exercises.

Figure 2



N-T0=baseline: measuring nurse burnout and job satisfaction
R=randomization: randomly assignment of oncology wards to 'experimental' or 'control' ward
E=experimental group
C=control group
A=admission interview
I=training intervention
T=after the admission interview: measuring quality of life (patients), and satisfaction with communication (patients and nurses)
T=at discharge: measuring quality of life (patients), and satisfaction with communication (patients and nurses)
P-T3=three months after discharge: measuring patient satisfaction with communication, and quality of life.
N-T3=at the end of the study: measuring nurse burnout and job satisfaction.

Chapter 6

COMMUNICATION BETWEEN NURSES AND CANCER PATIENTS:

competence and performance

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Abstract

The objective of this study was to investigate the extent to which nurses' competence and performance as regards their communication with patients in a clinical oncology setting appear to be related.

In total, 50 ward nurses of different medical disciplines completed one videotaped interview with a simulated cancer patient (N=50), and one or more (varying from 1 to 6) videotaped interview(s) with actual cancer patients (N=134). These patients were recently diagnosed, and were admitted in the hospital for treatment. The videotaped admittance interviews with simulated patients were observed using the Roter Interaction Analysis System, in which a division is made between instrumental and affective categories. Additionally, three nonverbal communication behaviours were observed.

For statistical analysis, T-tests were calculated between the percentages of communication in each separate category with the simulated patients at the one hand and the average of the real patients on the other hand. The correlation between the communication with the simulated patients and the real patients was calculated by means of a special form of linear regression analysis - hierarchical linear modelling. The analyses were performed in MIn software.

The results show that nurses' instrumental communication in the psychosocial domain, like question asking and information giving occurred more during the encounters with the simulated patients. This was also true for major affective communication behaviours, such as showing concern, empathy and optimism. The results further show that the majority of the significant correlations were predominantly related to nurses' verbal instrumental communication. Significant correlations concerned nurses' asking open questions about medical and psychosocial issues, their asking closed questions about psychosocial and lifestyle issues, giving medical information, asking for understanding, showing agreement, and joking/laughing. Additionally, nurses' nonverbal communication was significantly correlated.

In conclusion, our findings indicate that nurses' competence in nonverbal and verbal instrumental communication is more representative of their performance in daily practice than affective communication, since it is affected less by patient communication. In future, more research into the relationship between competence and performance has to be done, in order to shed more light on the validity as regards findings based on 'competence' .

Keywords: Nurse-patient communication, Performance, Competence, Oncology, Observation study

Introduction

The simulated patient method has been used for over 20 years, and has grown considerably in popularity for teaching and evaluating the clinical and communication skills of health care providers.
In the current nursing and medical schools, the use of simulated patients is commonly integrated in the educational programs as a tool of teaching skills, since it provides in a direct way student's insight in their own clinical and communication styles, including the strengths and weaknesses. Direct feedback of the teachers is aimed at making them to be optimal as possible prepaired for performance in daily practice (Nicol & Freeth 1998, O'Neill & McCal 1996, Barrows 1993, Colliver et al. 1998, Miller et al. 1998, Ladyshewsky & Gotjamanos 1997).

Based on his overview, Barrows (1993) considers the simulated patient technique as a significant breakthrough in performance- based assessment, compared to non-observational research. Working with simulated patients to evaluate objectives has the advantage that it directly assesses those behaviours that are required in a competent clinical performance. Further, there is a standard script, which means that the standardized patient presents the same problem for all participants. In this way, biases related to variations among patients and settings may be reduced. In general, there is opportunity to assess a wide range of skills in health care providers in a controlled setting .

In current medical and nursing research in this area, a distinction is frequently made between 'competence' as the outcome variable, measured using simulated patients, and 'performance' as the outcome variable, measured using real or actual patients (Holzemer et al 1986, Rethans et al. 1991, Francke et al. 1995, Pieters et al 1994, Ram et al. 1999, Kinnersly & Pill 1993, Yelland 1998, Colliver et al. 1999, Beullens et al. 1997, Foley et al. 1997, van der Vleuten et al. 1990). Competence relates to the level at which a health care provider is capable of demonstrating a skill, and performance to how a health care provider actually demonstrates a skill in day to day practice (Senior 1976, Loyd 1979). Competence comprises knowledge, skills and attitudes (Pieters et al. 1994, Rethans et al. 1991, Ram et al. 1999, Francke et al. 1995). Competence is usually considered as an important mediator in performance in daily practice

Although working with simulated patients is very popular and widely used for teaching and assessment targets, relatively few studies have been published in which a comparison has been made of the assessment of skills with simulated patients as against the assessment of skills with real patients. This is relevant for gaining insight into the extent to which providers' skills competence with simulated patients predicts their demonstrated skills with actual patients.

A search of the literature in this domain revealed one study among nurses, and three studies using physicians. Holzemer et al.(1986) explored the validity of clinical simulation by examining nurse practitioners' skills with respect to managing hypertension as measured by direct observation, chart audits, and clinical simulation. From their study, it appeared that nurses' skills in managing hypertension, as measured with a similated patient, did not significantly correlate with their performance with an actual patient. Holzemer et.al. concluded that clinical performance appears to be contextually bound, which makes the assessment of nurses' managing skills with a simulated hypertensive patient different from performance assessment with an actual hypertensive patient.

A study of the relationship between the medical competence and medical performance of general practitioners was conducted by Rethans et al. (1991). The findings of their study showed that the level of consultation skills of the trainees in the simulation encounter was higher than in daily practice. However, the skills of the trainees were better in actual practice when factors such as efficiency and consultation time were taken into account. Rethans et al. concluded that competence and performance were distinct constructs, this was in line with the conclusions of Holzemer et al.

Pieters et.al. (1994) carried out a study into the validity of actor simulation to reflect the real life situation of GPs' consultation skills. The results of their study revealed that the level of consultation skills among the trainees in the simulation encounter was higher than that in daily practice. In particular, it appeared that when general practitioners' skills during the simulation encounter were inadequate, their performance with actual patients was also inadequate. The authors concluded that the predictive value of inadequate skills among the trainees in simulation appeared to be high.

Ram et al. (1999) assessed the medical and communication skills of family physicians in controlled simulation and in a real life situation. They found that physicians' medical skills correlated in the two methods. As regards the communication skills, no significant correlations were found. On the whole, Ram et al. concluded that assessment by video observation in daily practice was superior to video assessment in a simulated setting using standardized patients,

since the domain of general family practice care was better covered.

To our knowledge, there has been no study in which the correlation was investigated between the communication skills of nurses with simulated patients (competence) and their communication skills with actual patients in an oncology setting (performance). Outcomes of nursing studies in this field are primarily based on either working with simulated patients or working with real patients (Kruijver et al. 2000a, Kruijver et al. 2000b).
In this study, we are interested in the extent to which nurses' competence and performance with respect to communication in a clinical oncology setting are related. When it appears for example that competence and performance are related, more communication evaluation studies could be carried out without further burdening the cancer patients, who in general, are subject to considerable emotional distress after being confronted with this life-threatening disease.

On the basis of the above-mentioned findings of investigators in this area, and especially on the findings of Ram et al., we expected to find more significant correlations of nurses' competence and performance with respect to their technical or instrumental communication (e.g. giving medical information), than with their affective communication (e.g. showing concern).
The research question addressed is the following: Is nurses' communicational competence with simulated cancer patients related to their communicational performance in a clinical oncology setting?

Methods

Participants

In total, 50 registered (ward) nurses from different medical specialisms in three hospitals in the Netherlands participated in the study.
The three hospitals that participated were two university hospitals and one general hospital. The nurses were recruited from 11 wards including the following medical specialisms: gynaecology, urology, surgery, internal medicine/haematology and ENT diseases. In Table 1, several background characteristics of the nurses are presented.

Table 1 Background characteristics of the participating nurses (N=50)

		sd
GENDER		
- Man	14%	
- Woman	86%	
AGE		
- mean age	32.5 years	8
EDUCATIONAL LEVEL		
- HBO (Dutch higher educational level)	34%	
- MBO (Dutch secondary educational level)	62%	
- missing	4%	
mean years of employment	11 years	8
mean years of employment in oncology	5 years	5

Each participating nurse completed one videotaped interview with a simulated patient (N=50), and one or more (varying from 1 to 6) videotaped interview(s) with actual cancer patients (N=134). These patients were recently diagnosed, and were admitted to the hospital for treatment. The background characteristics of the actual patients are presented in Table 2.

Simulation scripts

In total, three actors participated. The actors were trained professionals who behaved like recently diagnosed cancer patients who had arrived for admission to the ward. The actors were instructed to play a cancer patient in the script, which was developed specifically for this study. In order to write a realistic and elaborate script including significant elements to test the nurses on their skills, an oncologist, an oncology nurse, and a cancer patient screened the script on quality based on their specific professional expertise.

The script related to a female cancer patient of middle age, who was going to be admitted for cancer treatment. The treatment had a curative purpose. The underlying emotions of being confronted with a life-threatening disease, such as resistance, anger, denial, and anxiety, were a central theme in the script.

Table 2 Background characteristics of the actual patients who participated in the study (n=134)

CANCER DIAGNOSIS IN THE FOLLOWING MEDICAL AREAS:	
-surgical	27.8%
-gynaecological/urological	33.0%
-haematological/internal	27.8%
-ENT	11.3%
DURATION OF CANCER DIAGNOSES	
-mean duration of being diagnosed with cancer	3.1months
GENDER	
- Man	48%
- Woman	52%
AGE	
- mean age	56
EDUCATIONAL LEVEL	
- WO (academic educational level)	6.8%
- HBO (Dutch tertiary educational level)	15.8%
- MBO (Dutch secondary educational level)	8.3%
- LBO (Dutch first educational level)	25.6%
-MO (Secundary education)	21.8%
-LO (Primary education)	21.8%
single	21.8%
employed	30.1%

For each nurse, the script was standard, but small adaptations were made for each medical specialism. Within the different medical specialisms were comparable, since cancer patients experience the same emotions after being diagnosed, regardless of the kind of the disease, and since the admission procedure within the different medical disciplines is the same.

Assessment

Actual patients

Each nurse (N=50) performed one or more videotaped admission interviews (range 1-6) with a recently diagnosed cancer patient (N=134) who had arrived at the hospital for treatment.

Reason for selecting the admission interview for investigating and comparing nurse-patient communication in both settings is that effective communication employed by nurses is particularly important during these interviews with recently diagnosed cancer patients. At this time, the patient becomes acquainted with the nurse who, in the primary nursing system, will be primarily responsible for the care of the patient during his/her stay in hospital (Ersscher & Tutton 1991). The admission interview starts with the patients history, in which the nurse gathers information from the patient about medical and lifestyle issues relevant to treatment. The use of exploratory skills, encouraging the patient to respond freely about affective and medical topics, alternating with skills that structure the conversation are, in consequence, important (Wouda & van de Wiel 1996). Another important nursing task during the interview is to provide clear information about medical issues with regard to treatment, and provide clear information about organizational issues on ward rules, and services during admission (Wouda & Van de Wiel 1996).

From the patient's perspective, the admission situation can cause emotional distress, as it follows recent diagnosis of a life-threatening disease, and admission for cancer treatment. In this situation, it is important for the nurse to be able to create an environment of trust, in which the patient feels respected, involved and accepted. In a good environment, the patient is helped to disclose concerns, which may provide him or her with relief. Relief in turn, may lead to increased patient concentration on the information and questions asked by the nurse during the admission interview. In such circumstances, a nurse's ability to adapt the information to the patient's emotional condition is of significance (Krishnasamy 1996, Wouda & van de Wiel 1996). Nursing tasks during the admission interview reveal their significance in affective and instrumental communication.

Simulated patients

Each nurse did one videotaped admission interview with an actor as well (N=50). The participating nurses were instructed to go through the admission procedure with the simulated patient in the same way as they did on the ward with actual patients. The interviews with the simulated patients lasted 20 minutes. After 20

minutes, the procedure was interrupted. The nurses didn't have to finish the admission procedure themselves, although they were allowed to finish it earlier. The real encounters lasted twice as long as the simulated encounters. For that reason only the first 20 minutes of the real encounters were included for statistical analysis, since the simulated patient encounters were interrupted after 20 minutes. This makes the encounters in both settings congruent and comparable.

Observation scheme

Affective and instrumental communication

The videotaped admission interviews with simulated and real patients were observed using the Roter Interaction Analysis System (RIAS) (Roter 1989). In this system, a distinction is made between instrumental or task-related communication on the one hand and affective or socio-emotional verbal communication on the other. The Roter Interaction Analysis System was originally designed to code doctor and patient communication, but has also proved to be reliable in the observation of nurse-patient interactions (De Gruyter & Schirm 1995, Caris-Verhallen et al. 1998).

In this study, some small adaptations were made, tailored to the nurse-patient interaction in a clinical oncology setting. The adapted version included 32 behavioural categories for the nurse and 27 behavioural categories for the patient. Each utterance was coded into one of the instrumental or affective categories, which were mutually exclusive. An utterance is a communication unit which conveys one thought, or is related to one specific interest. The total length of one utterance varies from one word to a sentence. In this study, eight categories of nursing verbalization were excluded (including giving compliments, disapproval, criticism, asking for reassurance, asking for clarification, asking for opinion, open questions about lifestyle items and hospital/ward items), since nurses' utterances within these categories occurred less than .5 percent of the time. For the same reason nine patient categories were excluded. (Including questions about lifestyle items, asking for opinion, approval, compliments empathy/legitimation, reassurance/optimism demonstrating partnership, disapproval, criticism, and asking for reassurance. Nurses' verbal behavioural categories are presented in Tables 3 and 4. Patients' verbal behavioural categories are presented in Tables 6 and 7.

Instrumental communication consists of the categories, which contain all items relating to nursing and medical topics, items about the organization of the ward and services, and verbal expressions about lifestyle issues and psychosocial topics. Further, instrumental communication comprises categories that indicate guidance and direction through the conversation, such as orientation and instruction, requests for clarification, asking for an opinion or asking for understanding (see Table 4).
During the history-taking stage of the admission, the use of open questions is important in explorations, alternating with closed questions (among others requests for clarification) in order to get supplementary information. During the information giving stage of the admission, conversation and the use of skills that structure the information, for example providing orientation is significant. It is also important to avoid monologues. This can be achieved by using skills that involve the patient during information giving, e.g. by asking the patient if he/she understands the information, and by asking for patient's opinion and experience.

Affective communication consists of the categories, which refer to those aspects needed to establish trusting relationships between nurses and patients in order to facilitate the information exchange. Additionally, affective communication refers to nurses social conversations that have no particular function in nursing activities, such as personal statements and jokes (see Table 3).
During the admission procedure in particular, affective communication is important in encouraging the patient to disclose concerns. Examples of affective behaviours are paraphrases, showing concern, showing empathy, showing optimism and understanding. These behaviours convey respect, attention and intimacy, and provide companionship and encouragement (Krishnasamy 1996a, Krishnasamy 1996b, Roter 1889, Wouda & van de Wiel 1996).

We also observed five non-verbal affective nurse behaviours, which also appeared to be important in the establishment of the nurse-patient relationship, including patient-directed gaze, affirmative nodding, smiling, leaning forward and affective touch (Heintzman et al. 1993, Caris-Verhallen et al. 1999). These behaviours convey involvement, closeness, friendliness and attentiveness. They are not necessary in performing nursing tasks, but do facilitate the verbal interaction between nurses and patients (see Table 5). Since two of the non-verbal nurse behaviours did not occur in this study (including leaning forward and affective touch), they are excluded.

Reliability of the observations

The affective and instrumental communication between nurses and cancer patients was observed by two independent raters directly from video recordings using the CAMERA computer system which was especially designed to code the observed behavioural interactions from videorecording (Iec ProGAMMA 1994). Pearson's product-moment correlation coefficients were used to measure the inter-observer reliability, based on 10 interviews of the total number of videotaped admission conversations. Two observers rated the same 10 interviews. The inter-observer correlations for the verbal instrumental behaviours by nurses and patients ranged from .59 to .94 (patients' giving psychosocial information: .59, the other nurse and patient categories: ranging from .68 to .94). For the verbal affective behaviours the inter-observer correlations ranged from .54 to .94 (nurses' empathy: .54; nurses paraphrasing: .61; the other nurse and patient categories: ranging from .65 to .94). Inter-observer reliability was not measured for the verbal utterances by nurses and patients which took up less than 2 percent of the time.

The inter-observer correlations for nurses' non-verbal affective behaviours finally, ranged from .66 to .86.

Statistical Analysis

Percentages were calculated for the communication behaviours, as the frequency of nurses' and patients' communicative utterances within the specific instrumental and affective categories were proportionate to the total number of verbal utterances.

The communication of a nurse with the simulated patient was compared with the communication of the same nurse with real patients in two ways. T-tests were calculated between the percentages of communication in each separate category with the simulated patients at the one hand and the average of the real patients on the other hand. The correlation between the communication with the simulated patients and the real patients was calculated by means of a special form of linear regression analysis - hierarchical linear modelling (Bryk and Raudenbusch 1992, Goldstein 1995) for two reasons: Firstly, because we had a four stage sample of patients within nurses within wards and within hospitals. Secondly, because each nurse communicated with only one simulated patient and more than one real patient, so we had information on two levels: nurses and patients. In hierarchical linear modelling these different levels are taken into account (Snijders and Bosker 1999). The percentages of communication in with the simulated patient was

considered as an independent variable, while the percentage of communication with the real patients was the dependent variable. For ease of interpretation all variables were transformed to z scores, so regression coefficients became correlation coefficients (Kerlinger & Pedhazur, 1973, p26). The analyses were performed in MIn software (Rasbash & Woodhouse 1995).

Results

Multi-level analysis (not presented in a table) revealed that nurses' communication showed no systematic similarity within wards or hospitals.

Sufficient congruency of nurses' communication style in the standardized and actual patient setting not only means that the communicative behaviours of the nurses are significant correlated (dealing with the individual variance), but also means that the percentages of the communicative behaviours of the whole group of nurses are in line with one another. For this reason, we first addressed the percentages of the communicative behaviours of the whole group of nurses in order to answer the research question addressed in this study.

Table 3 Percentages of nurses' verbal affective communication

	Nurses with Actual patients (n=134)			Nurses with Simulated patients (n=50)				
	Perc.	(min	max)	Perc.	(min	max)	Corr.	P-value
Affective								
social affective communication	*2.7*	*(-*	*8.4)*	*2.8*	*(-*	*10.3)*	*0.31**	*.45*
personal remarks /social conversation	1.4	(-	7.1)	2.4	(-	10.3)	0.17	.00**
jokes/laughs	1.2	(-	4.8)	.3	(-	3.3)	0.39*	.00**
emotional affective communication	*39.5*	*(16*	*82.2)*	*35.3*	*(-*	*57.0)*	*0.12*	*.02**
approval	.6	(-	4.2)	.2	(-	2.0)	0.17	.00**
compliments	.1	(-	1.8)	-	(-	.4)	0.06	.01**
shows concern/worry	.4	(-	6.8)	1.5	(-	4.8)	0.13	.00**
shows agreement/ understanding	27.3	(6.5	68.7)	19.2	(3.1	42.2)	0.37*	.00**
paraphrase/check	8.5	(1.2	35.7)	10.1	(2.2	18.3)	0.15	.02*
empathy/legitimize	1.2	(-	8.5)	1.9	(-	7.4)	0.17	.00**
reassurance/ encuragement/optimism	1.2	(-	8.5)	2.0	(-	12.5)	0.13	00**
shows partnership	.2	(-	1.7)	3	(-	1.5)	0.04	.06
total affective utterances	42.1	(16.9	82.8)	38.	(16.3	18.6)	0.31*	.03*

* a significant correlation of nurses' nonverbal communication in both settings;
* $p < 0.05$
**$p < 0.01$

Table 4 Percentages of nurses' verbal instrumental communication

	Nurses with Actual patients (n=134)			Nurses with Simulated patients (n=50)				
	Perc.	(min	max)	Perc.	(min	max)	Corr.	p value
guiding communication	*4.2*	*(-*	*12.1)*	*4.8*	*(-*	*13.4)*	*0.28**	*.98*
orientations/instructions	2.5	(-	9.0)	2.8	(.4	12.1)	0.27*	.59
asks for understanding	1.6	(-	6.0)	.8	(-	4.2)	0.20*	.00**
bids for repetition	-	-	-		-	-		
asks for opinion	-	-	.8		(-	4.0)	-	.00**
closed questions:	*11.7*	(1.6	27.8)	*13.1*	*(3.5*	*43.0)*	*0.10*	*.32*
medical/therapeutic items	5.7	(-	18.4)	4.7	(-	13.6)	0.08	.06
hospital/ward items	1.0	(-	6.3)	4.0	(-	3.4)	0.03	.00**
lifestyle items	3.1	(-	11.6)	3.1	(-	7.9)	0.21*	.54
psycho-social/feelings	1.7	(-.	9.8)	4.7	(1.2	14.4)	0.20*	.00**
open questions:	*1.5*	*(-*	*9.4)*	*2.9*	*(-*	*7.0)*	*0.29**	*.00***
medical/therapeutic items	.9	(-	5.0)	.9	(-	3.8)	0.22*	.38
hospital/ward items -		-						
ifestyle items	-		-					
psycho-social items/ feelings	.4	(-	4.3)	1.7	(-	4.7)	0.29*	.00**
information:	*38.3*	*(6.9*	*70.5)*	*39.4*	*(15.6*	*72.0)*	*0.33**	*.32*
medical/therapeutic items	25.0	(-	68.5)	22.0	(5.7	48.7)	0.29*	.32
hospital/ward items	8.2	(-	29.2)	5.8	(-	26.7)	0.05	.01**
lifestyle items	.6	(-	11.4)	.3	(-	7.4)	0.00	.37
psycho-social items/ feelings	4.6	(-	17.9)	11.2	(1.3	28.4)	0.14	.00**
counseling:	*1.6*	*(-*	*7.1)*	*1.4*	*(-*	*6.5)*	*0.05*	*.52*
medical/therapeutic behaviour	.8	(-	6.6)	.3	(-	5.2)	0.06	.02*
lyfestyle behaviour and feelings	.8	(-	6.2)	1.1	(-	5.6)	0.04	.21
Total instrumental utterances	57.3	(16.7	82.6)	61.7	(41.1	83.7)	0.31*	.01**

* a significant correlation of nurses' nonverbal communication in both settings;
* $p < 0.05$
**$p < 0.01$

Looking at the foot of table 3 and 4, in which percentages of nurses' verbal instrumental and affective communication are presented for both conditions (communicating with simulated patients or communicating with actual patients) we see that the ratio of instrumental versus affective communication is significantly different. The nurses showed more affective and less instrumental communications in the actual patient setting.

Considering the percentages of nurses' communication within the instrumental and affective clusters, we see that information giving, counseling, and social affective communication agreed significantly in both conditions. During the encounters with the actual patients the nurses asked less open and closed questions, and showed more emotional affective communication.
Looking to nurses' communication within the separate instrumental and affective categories, we see that open and closed questions about medical issues, and the information provided by the nurses about medical and ward issues were significantly in line with each other for both conditions (table 3). This is different from nurses' question asking and information giving in the psychosocial domain, which occurred significantly more during the interactions with the simulated patients (table 3)
Additionally, nurses showed significantly more agreement and made significantly more jokes during interactions with the actual patients, while major affective communication behaviours such as showing concern, empathy and optimism, occurred significantly more during nurses' interactions with the simulated patients (table 4).
As regards nurses' nonverbal affective communication, patient directed gaze occurred significantly more with the simulated patients. The other non-verbal communicative behaviours however, occurred significantly more with the actual patients.

When considering the correlation coefficients of nurses' communication style for both settings, we found that the ratio of instrumental versus affective communication was significantly correlated (see at the foot of Table 3 and 4). Significant correlations were also found in the following clusters: guiding communication, asking open questions, giving information, and emotional affective utterances. The separate instrumental and affective categories show (see Table 3 and 4) that nurses' open questions about medical and psychosocial issues, their medical information and their closed questions about psychosocial and lifestyle issues were significantly correlated, as also were several guiding

behaviours, such as giving orientation, and asking for understanding. Further, showing agreement and joking/laughing were significantly related.

Table 5 Percentages of nurses' nonverbal communication communication

Nonverbal behaviour	Nurses with Actual patients (n=134)			Nurses with Simulated patients (n=50)				
	Perc.	(min	max)	Perc.	(min	max)	corr.	P value
percentages								
patient directed gaze	79%	18.7%	99.1%	87.7%	63.9%	97.5%	0.28*	.00*
frequencies								
affirmative head nodding	66.6	(9	166)	21	(4	65)	0.26*	.00*
smiling	13.2	(-	54)	4	(-	20)	0.39*	.00*

* a significant correlation of nurses' nonverbal communication in both settings;
* $p < 0.05$
**$p < 0.01$

As regards nurses' non-verbal communication, patient centred gaze, affirmative head nodding, and smiling showed a significant relationship in both settings (see Table 5).

Since we have to interpret the results of the nurse communication in the context of their interaction with the patients, we also analysed the patient communication in both settings (see Table 6 and 7)

Table 6 Percentages of patients' verbal affective communication

	Actual patients With nurses (n=134)			Simulated patients With nurses (n=50)			Corr	p-value
	perc.	(min	max)	perc.	(min	max)		
Social affective communication	*3.4*	*(-*	*12.5)*	*4.3*	*(-*	*11.8)*	*0.02*	*.07*
personalremarks/ social conversation	1.5	(-	9.8)	4.1	(-	11.7)	0.00	.00**
jokes/laughs	2.0	(-	9.9)	.2	(-	4.0)	-0.08	.00**
emotional affective communication	*29.0*	*(2.1*	*76.8)*	*32.9*	*(12.5*	*53.9)*	*0.01*	*.22*
appproval	.2	(-	2.4)	.2	(-	2.3)	0.02	.58
compliments	-				-			
shows concern/worry	1.5	(-	7.1)	10.4	(-	29.5)	0.00	.00**
shows agreement/ understanding	25.0	(1	67.1)	18.5	(-	39.5)	0.15	.00**
paraphrase/check	2.0	(-	7.4)	2.1	(2.2	18.2)	-0.12	.92
empathy/legitimize	-			-	-	-		-
reassurance/ encourage/optimism	.1			.2			-0.08	.23
shows partnership	-				-			
disapproval	-			.1	(-	1.7)	0.06	.10
criticism	-			.5	(-	3.7)	0.02	.00**
? reasurance	.2	(-	3.4)	.9	(-	8.4)	0.05	.01**
total affective utterances	32.4	(2.6	76.8)	37.3	(13.4	63.0)	0.11	.06

* a significant correlation of nurses' nonverbal communication in both settings;
* $p < 0.05$
** $p < 0.01$

Table 7 Percentages of patients' verbal instrumental communication

	Actual patients With nurses (n=134)			Simulated patients With nurses (n=50)				
	perc.	(min	max)	perc.	(min	max)	Corr.	P value
guiding communication	.9	(-	17.2)	.4	(-	5.4)	-0.08	.07
orientations/instructions	.2	(-	1.4)		-		-	
asks for clarification	.2	(-	2.6)	.3	(-	1.4)	-0.04	.81
asks for understanding	.5	(-	6.8)	.2	(-	2.6)	-0.05	.01**
asks for opinion		-			-			
questions	*4.7*	*(-*	*25.3)*	*6.3*	*(-*	*20.8)*	*0.01*	*.01***
medical/therapeutic items	3.5	(-	22.5)	4.6	(-	16.8)	0.19*	.02*
hospital/ward items	.8	(-	6.8)	.7	(-	4.4)	0.00	.66
lifestyle items	.2	(-	2.3)	.1	(-	1.7)	0.02	.01**
psycho-social items/ feelings	.2	(-	40)	.9	(-	4.3)	0.09	.00**
information	*61.1*	*(17.3*	*19.7)*	*55.9*	*(20.0*	*78.2)*	*0.15*	*.08*
medical/therapeutic items	35.3	(4	71.8)	16.1	(1.1	36.4)	0.05	.01**
hospital/ward items	1.4	(-	7.3)	.7	(-	3.9)	0.17	.00**
lifestyle items	11.0	(-	40.9)	11.1	(1	25.1)	0.13	.86
psycho-social/feelings	13.6	(-	12.3)	27.8	(10	48.0)	0.24*	.00**
Total instrumental utterances	66.7	(23.2	95.2)	62.6	(36.9	68.8)	0.08	.08

* a significant correlation of nurses' nonverbal communication in both settings;
* $p < 0.05$
** $p < 0.01$

In considering the ratio of affective to instrumental communication among the patients, the percentages illustrate that the simulated patients showed (almost significantly) more affective and less instrumental communication.
Looking to the percentages of patients' communication within the instrumental and affective clusters, we see that guiding communication, information giving and social affective communication significantly agreed in both settings.
As regards patients' communication within the separate instrumental and affective categories, the percentages illustrate that the simulated patients showed significantly more concern and significantly less agreement. The simulated patients further asked significantly more questions about medical and psychosocial issues. Finally, they gave significantly less information about medical, hospital and lifestyle issues. An exception was information giving in the psychosocial domain, which occurred significantly more in the simulated patient setting.

With respect to the correlation coefficients, only two significant correlations within the separate communication categories of the patients occurred. These included giving psychosocial information and asking medical questions.

Discussion

The main purpose of this study was to investigate the extent to which nurses' competence and performance as regards their communication with patients in a clinical oncology setting appear to be related.
The results show that relatively few communicative behaviours of nurses demonstrated a significant relationship in both settings. The most convincing correlation concerned the ratio of instrumental to affective communication and the nurses giving medical information : not only did significant correlations appear, but the percentages also agreed here for the group of nurses with one another. Further, significant correlations concerned nurses' asking open questions about medical and psychosocial issues, their asking closed question about psychosocial and lifestyle issues, giving medical information, asking for understanding, showing agreement, and joking/laughing.
All in all, we see that the majority of the significant correlations predominantly related to nurses' instrumental communication. This is in line with our expectations, as mentioned in the introduction to this article, and in line with the literature (Ram et al. 1999) in which more significant correlations were found as

regards physicians medical competence, compared with physicians communication skills.
Our findings, confirmed by findings in the literature, indicate that nurses' competence in instrumental communication is more representative of their performance in daily practice than affective communication, since it is affected less by patient communication. After all, history taking and informing the patient about the medical treatment and stay in the hospital is an integral part of nurses' medical agenda during the admission interview. Nurses are particularly experienced in these skills and therefore it is relatively 'safe' for them to demonstrate instrumental communication, especially if the work load circumstances are high. This is also true of the two global affective behaviours of the nurses (agreement, and laughing) which showed a significant correlation.
On the whole, nurses' instrumental communication in the psychosocial domain, like question asking and information giving occurred significantly more during the encounters with the simulated patients. This was also true for major affective communication behaviours, such as showing concern, empathy and optimism. A reasonable explanation for to the higher psychosocial and affective communication of the nurses in the standardized setting may be the script. An actor played a recently diagnosed cancer patient in which underlying emotions of being confronted with a life-threatening disease, such as resistance, as anger, denial, and anxiety, were a central theme.
Another explanation may be the difference in practical context of the two test-situations. During the session with the actors, the practical conditions were ideal since the nurses did not have to take into account the demands of their professional working environment, such as jobs waiting to be done. In the real patient encounters, conditions can be far less ideal, which again requires a far higher level of communicative skills to deal with.

With respect to nurses non-verbal communication, all behaviours showed a significant correlation. These results indicate that non-verbal communication, in particular patient-centred gaze, head nodding and smiling, is mainly a nurse feature, and consequently less affected by different circumstances in real practice. This means that nurses' non-verbal behaviour in a standardized setting with simulated patients is representative of their non-verbal communication in a real life situation.
On the whole, the significant correlations found in this study were not convincing inasmuch as they were low. Two explanations may underlie these low correlations.

The first explanation concerns the fact that in the actual patient setting there was a lack of standardization among the real encounters since patients can differ widely in their communication style. This, in turn, illustrates that it is difficult to standardize verbal communication. In particular in emotionally laden communication, there is a dynamic interaction between nurse and patient, dealing with contextually bound and individual problems of the patient. Unique patient circumstances have an immediate impact on the course of the interaction with nurses. This also justifies the very few and low correlations of patient communication in both settings (see Table 6 and 7).

The second explanation may be a methodological one. As described in this article, we compared the admission interviews of nurses with the simulated patients (lasting 20 minutes) with admission interviews of nurses with the actual patients (the first 20 minutes). The admission interview comprises different sections, for example it starts with a history-taking section, followed by a section in which the nurse gives information to the patient about the treatment and stay in the hospital.

Although in theory there is a certain sequence to these sections, they may have an uncertain sequence in daily practice. For instance, an emotional patient, who express his/her concerns at the beginning stage of the admission interview, may in that stage trigger more affective communicative behaviours of nurses than a patient who lets the nurse initiate the course of the conversation. Consequently, there is a chance that the sections were not always in line with one another when analysing nurses competence and performance. This, perhaps, may have resulted in lower correlations. In order to eliminate such biases, it would be relevant in future research to investigate competence and performance in a more refined way. Namely by observing and analysing only one section of the admission interview.

In conclusion, the results of this study agree with the results of other validation studies, in which partially or no significant correlations were found as regards general practitioners' and nurses' competence (assessing skills in a standardized setting) and performance (assessing behaviours in an actual patient setting). Our findings showed that especially nurses' non-verbal and instrumental skills competence with simulated patients predicted their demonstrated skills with actual patients.

These findings indicate that, when assessing communication patterns, investigating competence only is not sufficient. In future, more research into the

relationship between competence and performance has to be done, in order to shed more light on the validity of 'competence' on based findings.

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Chapter 7

SUMMARY AND DISCUSSION

Chapter 7

Introduction

The topic of this thesis is communication between nurses and cancer patients. The main aim was to investigate the effect of a communication training program on communicative skills and behaviours of nurses and other nurse and patient outcomes. In order to meet this objective, the following research questions were addressed in this dissertation:

1 What is the effect of a training in communication skills on the communicative skills and behaviours of nurses?
It was expected that after the training the nurses would use more facilitating or affective communication. It was also expected that nurses would pay more attention to psychosocial subjects, compared with biomedic subjects.

On the basis of the first question, the following research question was formulated in which several *proximal* relations between communicative behaviours of nurses on the one hand, and patient and nurse outcomes on the other hand were expected:

2 What is the direct effect of the training on nurse and patient outcomes?
It was expected that giving a training in communication skills to nurses would improve their communicative skills and behaviours, which would have a positive effect on nurse and patient satisfaction with communication during the admission interview, and during patients' hospital stay.

On the basis of the first question, a research question was also formulated in which several *distal* relations between communicative behaviours of nurses and nurse outcomes were expected:

3 What is the indirect effect of the training on nurse and patient outcomes?
It was expected that giving a training in communication skills to nurses on an oncology ward would improve their communicative skills and behaviours, which would have a positive effect on:
- nurse burnout and job satisfaction;
- patient quality of life.

Summary

Chapter 1 presents an overview of the literature concerning the communicative behaviour of nurses during care activities with cancer patients. Cancer patients, in particular, seem to experience distress in the first period following diagnosis and are likely to develop an affective disorder in the first two to three months. Communicative behaviours of nurses seem to play an important role in meeting the cognitive and affective needs of cancer patients. The studies show that emphasis is placed on the affective side in which facilitating behaviours, such as empathy, touch, comforting and supporting skills, are considered essential themes in caring for cancer patients. Furthermore, studies in this review demonstrate that communication in oncological care is complicated by emotionally laden issues such as the consequences of the life-threatening character of the disease and the far-reaching consequences of the medical treatment. This results in barriers to effective communication between cancer patients and nurses, characterized by an overwhelming medical concern and neglect of the emotional component by nursing professionals. Finally, most of the studies covered in this review have an exploratory character The small sample size and the poorly validated measuring instruments make the quality of several studies dubious.

Chapter 2 describes a review of 14 studies, which focus on the evaluation of the effects of communication training programs for nurses. Nurses' major communication tasks are not only to inform the patient about his/her disease and treatment, but also to create a therapeutically effective relationship by assessing patient concerns, showing understanding, empathy, and providing comfort and support. The selected studies were screened on several independent, process and outcome variables considered to be important in the nursing literature. In this way not only is the training program taken into account as a variable which may be responsible for nurses' behavioural change and for changes in patient outcomes, but a range of other variables which can give more precise explanations for a training program's degree of effectiveness is also covered.
On the whole, the studies reviewed showed limited or no effects on nurses' skills, on nurses' communicative behaviours in practice, or on patient outcomes. Finally, the majority of the studies had weak research design.

Chapter 3 describes a study in which the balance of affective and instrumental communication employed by nurses during the admission interview with recently diagnosed cancer patients was investigated. For this purpose, admission

Chapter 7

interviews between 53 ward nurses and simulated cancer patients were videotaped and analysed using the Roter Interaction Analysis system, in which a distinction is made between instrumental and affective communication.
The results show that nurses predominantly employed instrumental communication, generally consisting of providing information about medical topics. Structuring behaviour and behaviour that involved the patient in the conversation, which seem to be important instrumental skills during the admission, were rarely used. When looking at the way in which nurses asked questions, it appeared that nurses mostly used closed questions, which limit the patient's expression of feeling and concern. Affective communication occurred, but was more related to general affective communication like agreements and paraphrases than to specific affective behaviour like showing empathy, concern and optimism.
With regard to nurses' nonverbal affective communication, patient-directed gaze occurred most of the time. This can be explained by the fact that nurse and patient were sitting at a table in front of one another. Nursing activities during the admission were mainly characterized by information exchange. Nurses are therefore in eye contact with the patient for a great part of the time. Leaning forward and affective touch occurred rarely. Although the simulated patient was acting in a distressed way, nurses scarcely used behaviours which are important to create a trusting relationship.
In conclusion, these results indicate that there is indeed an imbalance in nurses' use of instrumental and affective behaviours: the nurses predominantly gave information about medical topics, which certainly is an important aspect of the admission procedure. However, they rarely made any assessment of the patient's understanding of the situation; nor did they explore the patient's feelings actively, and they rarely discussed the emotional aspects of the disease in order to create a comforting and helpful atmosphere.

Chapter 4 describes an experimental study into the effect of a communication training program on the instrumental and affective communication skills, employed by ward nurses during the admission interview with recently diagnosed simulated cancer patients. Training focused on teaching nurses skills in discussing and handling patient emotions. For this purpose, 46 nurses participated in 92 videotaped admission interviews with simulated patients. The study had a randomized pre-test/post-test design. Multi-level analysis was used to measure the effects of the training. The results revealed that the trained nurses significantly increased asking open-ended psychosocial questions, which

indicates that they explored actively to patients' feelings. Furthermore, the patients of the trained nurses showed a significant increase of affective communication. To conclude, the results of this study demonstrate that, although limited, training can induce desirable changes in the communication skills of nurses, and can even affect patient communication.

In chapter 5, a study is described in which the effect of a communication skills training program on the communicative behaviours employed by ward nurses during the admission interview with recently diagnosed cancer patients was investigated. For this purpose, 53 nurses participated in 265 videotaped admission interviews with patients. The study was conducted using a randomized pre-test/post-test design. Multi-level analysis was used to measure the effects of the training. The main assumption underlying this study was that a training in communication skills would improve communicative behaviours of nurses and, in so doing, would positively influence certain patient as well as certain nurse outcomes. These include in the first place patient and nurse satisfaction with communicative interactions, which are be considered as *proximal* outcome measures. Secondly, these include patient 'quality of life' and nurse 'burnout and job satisfaction', which are considered as *distal* outcome measures.
The results of this study reveal that no effects of the training were found, either on nurses' communication behaviours, or on the proximal and distal nurse and patient outcomes.
At post-test measurement, the trained nurses employed instrumental communication in the same way as they did at the pre-test measurement, mostly consisting of giving information about medical topics. The same concerned nurses' affective communication, which was more related to general affective behaviour, such as showing agreement and paraphrasing, than to specific affective behaviour, such as showing empathy, concern and optimism. Additionally, nurses nonverbal behaviour had not changed significantly at the post-test measurement. Nurse and patient satisfaction with communication was already high at pre-test measurement, and did not further increase at post-test measurement. Nurse job satisfaction and burnout did not change after the training as well. As regards patient quality of life, the only significant favourable shift concerned a significant increase of social functioning of the patients in the experimental condition at three months after discharge.
Chapter 5 ends with several reflections on the findings. The first reflection relates to the characteristics of the training program. Although the trainees were positive and reported that the training was very instructive, only 49% of them felt

Chapter 7

encouraged by their supervisors and colleagues to put what they had learned in practice, and only 50% of the nurses said that they actually practised what they had learned. These findings indicate that the training was inadequate in taking into account context related factors of the professional working environment in which the acquired skills have to be performed.

The second reflection relates to the variety of communication styles used by patients in an actual setting. Uncontrolled patient influences may obscure the measurement of training effects, and the question remains as to whether even experimental trials control sufficiently for that. The third reflection relates to the characteristics of the observation instrument we used in our study. A major characteristic of the RIAS is that it makes a clear distinction among instrumental or task-related and affective or socio-emotional verbal communication, which has been shown to be important during nurse-patient encounters. A second major characteristic of the RIAS concerns the frequency-based nature of the instrument. Consequently, there is no information about how and in what context the communication is performed. This makes that with frequency-based data limited conclusions can be drawn about the interaction process during the nursing encounter. We still are unaware if psychosocial and affective communication of the trained nurses (which did not significantly increase) were performed in a context that was more attuned to patient needs.

In chapter 6, a study is described, the aim of which was to investigate the extent to which nurse competence and performance as regards their communication with patients in a clinical oncology setting were related.

In total, 50 ward nurses from different medical disciplines completed one videotaped interview with a simulated cancer patient (n=50), and one or more (varying from 1 to 6) videotaped interview(s) with actual cancer patients (n=134). These patients were recently diagnosed, and were admitted in the hospital for treatment.

The videotaped admission interviews with simulated patients were observed using the Roter Interaction Analysis System, in which a division is made between instrumental and affective categories. Additionally, three nonverbal communication behaviours were observed.

For statistical analysis, T-tests were calculated between the percentages of communication in each separate category with the simulated patients at the one hand and the average of the real patients on the other hand. The correlation between the communication with the simulated patients and the real patients was calculated by means of a special form of linear regression analysis - hierarchical linear modelling The analyses were performed in MIn software.

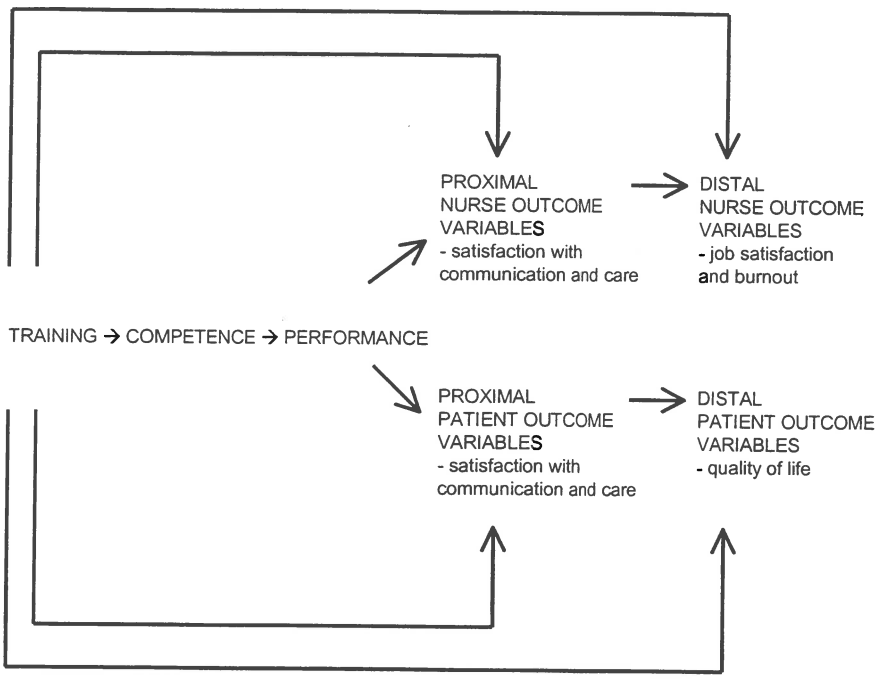
The results show that on the whole, nurses' instrumental communication in the psychosocial domain, like question asking and information giving occurred significantly more during the encounters with the simulated patients. This was also true for major affective communication behaviours, such as showing concern, empathy and optimism. The majority of the significant correlations were predominantly related to nurses' verbal instrumental communication. Significant correlations concerned nurses' asking open questions about medical and psychosocial issues, their asking closed questions about psychosocial and lifestyle issues, giving medical information, asking for understanding, showing agreement, and joking/laughing. Additionally, nurses' nonverbal communication was significantly correlated in the two settings.
In conclusion, our findings showed that nurses' non-verbal and instrumental skills competence with simulated patients in particular predicted their demonstrated skills with actual patients, since this is affected less by patient communication. These findings indicate that, when assessing communication patterns, investigating competence only is not sufficient. In future, more research into the relationship between competence and performance has to be done, in order to shed more light on the validity of on 'competence' based findings.

Discussion

In order to answer our research questions as described in the beginning of this chapter, communication literature in nursing research of the past 20 years was studied. (Kruijver et al. 2000a, Kruijver et al. 2000b) and an empirical study was conducted. Our review of the literature which focused on the evaluation of the effects of communication training program for nurses showed limited or no effects on nurses' skills, on nurses' behavioural changes in practice, and on patient outcomes (Kruijver et al. 2000b). However, the majority of the studies had a weak design. This was an important reason for us to conduct a randomized trial. The emphasis in this discussion will be on the results of our own empirical study. In the section below, we will firstly reflect on the major findings of our study from methodological point of view. We will do that on basis of the research scheme as demonstrated below. After that we will reflect on our findings from theoretical point of view. We will finish this chapter with implications for future research methods, and implications for education in practice.

Chapter 7

The research scheme



A short summary of the findings

In order to evaluate the effect of a training program, we used two different outcome concepts: competence and performance. The most important outcome of a communication training program is performance, and competence is considered as an important intermediator for behavioural changes in practice (Rethans et al. 1991, Ram et al. 1999, Kinnersly & Pill, 1993, Beullens et al. 1997, Francke et al, 1995, Foley et al. 1997, Nicol & Freeth 1998, Barrows 1993, Colliver et al. 1998, Miller et al. 1998). The results of our study in terms of competence, conducted within a randomized trial and using actors as target population, revealed that the trained nurses significantly increased asking open-ended psychosocial questions. Furthermore, the patients of the trained nurses showed a significant increase in affective communication, which indicates that the trained nurses explored patient feelings actively. These results however were

limited, but one could conclude that training can induce desired changes in the communication skills of nurses, and can even affect patient communication. The same design was used to evaluate changes in nurses' communicative performance with real patients, and evaluating changes in patient and nurse satisfaction with communicative interactions as *proximal* outcome measures, and patient 'quality of life' and nurse 'burnout and job satisfaction' as *distal* outcome measures. The results revealed that no effects of the training were found, either on nurses' communication behaviours, or on the proximal and distal nurse and patient outcomes. The only significant result was an increase in patients' social functioning in the experimental condition at the third time point, namely at three months after discharge. These results are remarkable if we contrast them with the trainees' very positive judgements about the training. We should not directly expect absence of training effects since the nurses were well satisfied with the professional competence of the teachers, and with the content and organization of the training. Additionally, the participants judged the relation with the teachers and that among the participants highly positively. In total, 86% of the nurses intended to practice what they had learned in future, and 93% of them would recommend the training to others. All in all, nurses were positive, and reported that the training was very instructive.

Methodological reflections

Since the communication training did not have major effects on the trainees' competence and performance, we did not further investigate the chain of effects as demonstrated in the figure above, i.e. analysing correlations between the communicative skills and behaviours in the experimental and control condition and the proximal and distal outcome variables. In fact, we investigated the direct effect of the communication training on the proximal and distal outcome variables, also showed in the figure above.

In order to understand the moderate training effects on nurses' communicative skills and the absence of training effects on nurses' communicative behaviours, the proximal and distal outcomes, we will first look at these findings from a methodological point of view. The following will be described:

- unverifiable patient influences,
- power,
- standardization of test situation,
- video observations,
- regression to the mean,
- multi causal effects.

Chapter 7

Unverifiable patient influences

The first explanation concerns unverifiable patient influences which may interfere with the results. Contrary to many studies in nursing research thus far, we conducted a randomized trial. In general, this design is considered as the most 'safe' research design since the measurements are made under controlled conditions. Consequently relatively few biases interfere with the results. Nevertheless, patients can differ widely in their communication style. For example, in our study, it happened that many patients tried to reduce stress by asking the nurse many medical questions, while other patients predominantly expressed concerns and emotions in order to alleviate stress. In emotionally laden situations in particular, there is a dynamic interaction between nurse and patient, dealing with contextually bound and individual problems of the patient. Unique patient circumstances have an immediate impact on the course of the interaction with nurses. In other words, in real patient encounters specific situations require specific communication styles of nurses, and the question remains as to whether even experimental trials control sufficiently for uncontrolled patient influences which may obscure the measurement of training effects .

Power

As a consequence of unverifiable patient influences, the sample size for the nurses and patients must be quite large to neutralize this type of bias in order to provide enough power to find significant shifts. Although our sample was impressive for this area of research, the question remains as to whether the sample size of the nurses and patients especially in the actual setting was sufficiently powerful. The results of our study as described in chapter 4, like many other studies on this topic (Kruijver et al. 2000b), also point in that direction. The results of that study revealed that in the albeit limited standardized setting, more training effects were found on nurses' and even on patients' communication than in the real encounters.

Standardization of the test situation

The advance of using simulated patients is that the variability in patient behaviour is more controlled since professionals play a patient according to a script (Barrows 1993). The results of our study showed that, although limited, more training effects were found on nurses' competence than on their performance in daily practice. A major explanation may be the difference in practical context of the two test-situations. During the session with the actors, the practical conditions were ideal; no disturbances from pagers, no jobs waiting to be done, no colleagues rushing

by in the corridors, etc. So, the skills which were learned in a relatively safe and predictable environment, namely during the training sessions, were also tested in a controlled and predictable situation. In the real patient situation, conditions were far less ideal, which again requires a far higher level of communicative skills to deal with.

Video observations

The findings of our study relate to observing videotaped admission interviews between nurses and simulated as well as real cancer patients. This made it possible to investigate training effects by means of direct observation of nurses 'verbal and nonverbal communicative behaviours, and this can therefore be regarded as the most important indicators of training effects.

The disadvantage of videotaping nurse-patient encounters is the danger of performance bias, meaning that nurses' and patients' awareness of being videotaped, might cause them to behave differently. However, we think, that this bias may be limited since the nurses and patients reported afterwards that during the admission interview, they forgot that they were videotaped. This is in line with findings from the literature (Bottorff & Morse 1994, Caris-Verhallen 1999).

Regression to the mean

The absence of training effects on patient and nurse satisfaction with communication could be a result of the so-called 'ceiling effect' meaning that there is low variance in scores which, in general, are high (Frederikson 1995, Cohen 1996). In our study, we found also high satisfaction scores already at pre-test measurement, which could therefore hardly increase after the training. The same holds for job satisfaction of the trainees which in general were rather high at pre-test measurement, especially as regards their satisfaction about contacts with colleagues and patients.

With respect to burnout, the ceiling effect was also evident on the personal accomplishment score of the participants, which was rather high already at pretest.

Multi causal effects

As regards emotional exhaustion, there was no significant training effect either. Although the participants' scores on emotional exhaustion were not remarkably high, they scored higher on this burnout subscale than the standard scores for nursing professionals, as investigated by Schaufeli and van Dierendonck (2000). This can be explained by the fact that the nurse in our research setting cared for

Chapter 7

cancer patients, which is complicated by emotional issues. Consequently, we hoped to find a significant decrease of emotional exhaustion of the nurses in the experimental conditions which did not occur. On the other hand, it is well-known more factors, especially individual characteristics such as preference of autonomy, and time pressure, are related with burnout (Jansen 1996). Although a communication training should theoretically be able to affect even distal patient outcomes in a positive way (La Monica et al. 1987), the chances of so doing in reality are very low. The decrease in patient quality of life at hospital discharge (T2), is a consequence of having undergone medical treatment, and being out of daily routine during admission. Three months after discharge (T3) the patients reached more or less their level of quality of life as measured directly after the admission interview (T1). These findings indicate that quality of life is undoubtedly affected by more factors besides a communication training program: in the first place, future prospects are reduced, and in certain cases, the length of life is diminished. Additionally, people suffer from the consequences of the disease in that they have to undergo medical treatment which can have far-reaching consequences such as disfigurement. Further, they experience uncertainty when discussing their diagnosis and prognosis. Also, there are physical complaints, and there is an increased chance of fatigue (Smets et al. 1998) and limitations in daily life functions (Andersen 1994, Hanson et al. 1994, Spiegel 1996). In other words, a life-threatening disease such as cancer demands a great deal of adaptability from patients and their environment. Anxiety and depression are, therefore, the most common psychosocial problems among cancer patients (Massie et al. 1989, Berglund et al. 1991, Heim et al. 1997).

In conclusion, the impact of a communication training program for nursing professionals is influenced by many factors, especially as regards nurses' performance and the proximal and distal nurse and patient outcomes. Desirable shifts only occurred in the standardized setting (competence), and not only at the side of the nurses in the experimental condition, but also at the side of the patients. In the controlled test situation, the trainees showed easier their acquired communication skills. These findings indicate that from methodological point of view, a controlled test situation is less disturbed by factors obscuring training effects.

Theoretical reflections

In the section below, we will reflect on our findings from theoretical point of view The following reflections will be made:

- the characteristics of the observation system: RIAS;
- the characteristics of the training intervention;
- the relationship between competence and performance.

The Characteristics of the observation instrument: RIAS

Most of the evaluation studies in nursing research are focused on provider communication only.

In our study, we used the the Roter Interaction Analysis System (RIAS), which has the advantage of not only measuring provider communication, but also patient communication (Roter 1989).The RIAS was originally designed to code both doctor and patient communication, but has proven to be reliable with respect to the observation of nurse-patient interactions (De Gruyter & Schirm 1995, Caris-Verhallen. 1999) and to have feasible, reliable and valid psychometric properties in an oncology setting (Ong et al. 1998). Apart from its psychometric properties, it is relevant to reflect on its usefulness in relation to our research questions. It is important therefore to analyze the content of the RIAS in relation to the relevant characteristics of the admission interview. A first major characteristic of the RIAS is that it makes a distinction among instrumental or task-related and affective or socio-emotional verbal communication, which have shown to be important during provider-patient encounters. Instrumental behaviours are of significance when informing the patient about the illness and treatment, and providing medical and practical service. Affective communication is important in the building of the relationship with the patient, in which the patient has a sense of being understood (Bensing 1991, Hall et al. 1987). The RIAS origins in the 'cure-oriented' tradition, i.e.: the information exchange between doctors and patients is regarded as the main medium for problem solving, and the affective categories are conceptualized within the problem solving process (Bensing 1991, Ong 2000). Bearing this in mind when looking to the information exchange between the nurses and patients in our setting, we see that information giving and question asking in order to take history indeed are an integral part of nursing tasks throughout the admission interview .

From the patient's perspective, the admission situation can cause emotional distress, as it follows recent diagnosis of a life-threatening disease, and admission for cancer treatment. In this situation, it is important for the nurse to be able to create an environment of trust, in which the patient feels respected, involved and accepted. In a good environment, the patient is helped to disclose concerns, which may relieve him/her. Relief, in turn, may lead to an increased concentration, from the patient's side, on the nurse's information giving and question asking

Chapter 7

during the admission interview. In such circumstances, a nurse's ability to adapt the information to the patient's emotional condition is of significance (Krishnasamy 1996, Wouda & Van de Wiel 1996). We may conclude that in admission interviews both instrumental an affective communication is necessary to fulfill the goals of the interview, and that the RIAS is well equipped to measure these types of behaviours, as well as the balance between between instrumental and affective behaviour. The ratio of instrumental/affective communication of nurses as found in our study is comparable with results in other studies using RIAS (Van Dulmen 1998, Van den Brink-Muinen 1996) and shows the dominance of instrumental behaviour over affective behaviour. The training did not succeed in altering this ratio.

A second major characteristic of the RIAS is that it is based on frequencies, making no differentiation between 'good' and 'bad' communication. Although the frequency in which (for example) an affective utterance occurs is an indication of the extent to which a health care provider is concerned with patient feelings, there is no information about how and in what context the utterances are made (Hulsman 1998, Caris-Verhallen 1999). This means that with frequency based data only limited conclusions can be drawn about the interaction process during the nursing encounter. The interaction process is important since it provides insight in the context in which communication takes place. On the one hand, the context of communication is determined by specific patient characteristics, such as their personality, their contribution to the encounter, their needs and expectations (Bensing 1991, Bensing 1992), and on the other hand by the organizational and structural characteristics of the professional working environment, such as working experience, the relationship with supervisors and colleagues, and workload (Francke et al. 1995, Ram et al. 2000). Besides, the nature of the communication is related to specific goals that have to be to be achieved. Examples are establishing a good interpersonal relationship, the exchange of information, and medical decision-making (Ong. 2000). It is clear that the variety in types of patients, health problems and contextual situations ask for differentiated goals during the nursing encounters.
In our study, we expected to find that the trained nurses would significantly more substitute their medical instrumental communication for psychosocial instrumental and affective communication, such as: showing concern and empathy At the same time, we still are unaware whether psychosocial and affective communication by the trained nurses (which had not significantly increased) was achieved in a context that was more attuned to patient needs. This is also true for

the way we measured nonverbal behaviour. We decided to measure nonverbal communication as well, since nonverbal behaviour is considered to be important in establishing a good relationship with the patient (Heintzman et al. 1993, Caris-Verhallen 1999), and thus provides more information about the psychotherapeutic facet of interactions in which the information exchange takes place. However these are also based on frequencies, and we do not know on what specific patient utterances they followed.

In spite of the limitations of observation systems based on frequencies already mentioned, it is important to note that the observation systems which make a distinction between 'good' and 'bad' communication do not demonstrate more desirable communication shifts by nurses and doctors after a communication training intervention (Kruijver et al. 2000b, Hulsman 1998) either. In fact, in medical and nursing research up till now, the observation methods provided clear information about communication patterns of health care providers, but the question remains as to whether these instruments are sensitive enough to measure the specific needs and goals related to interaction process between providers and patients, and secondly, shifts in communication patterns after training interventions.

The characterisics of the training intervention

The basic philosophy of the training, the Ahmas approach, was to reach pre-set goals as efficiently as possible, like giving information, getting information, providing emotional support etc. For that purpose, the participants were taught general and specific skills, and how to integrate these skills into their primary nursing tasks (Wouda & Van de Wiel 1996).

At first glance the most simple explanation for lacking significant changes in outcomes is off course that the training program is inadequate. Either it does not lead to favorable outcomes, or it does but does not have sufficient power to show favorable changes. However, given the very positive subjective evaluation of the participating nurses, the first explanation does not seem very likely. Changes in competence did occur and make clear that the training in itself has the power to change communication behaviour in a favorable way. To sum up, the quality of the training with respect to the content was sufficient. Nevertheless, one reflection can be made. The educational method of the training program of our study consisted of a combination of theoretical education and exercises by means of role playing sessions of the participants with feedback by the trainers. The role playing sessions in particular have the advantage that the trainees not only

Chapter 7

acquire insight in relevant skills ('knowing') but also in how to use them ('Knowing how', and 'showing how'). These outcomes are regarded as important mediators for communicative performance in daily practice. Yet, in our evaluation study, like in many evaluation studies in nursing research, the content of training is standard for every participants while participants may differ in their educational needs (Kruijver et al. 2000b). In that case the one participant will learn and benefit more from the training than the other participant. This, in turn, could hinder the desirable effects of communication training programs.

A greater issue concerns the context and conditions in which the training program took place. Our study showed that although the majority of the participants (86%) intended to perform the acquired skills in practice, only 49% of the of them felt encouraged by their supervisors and collegues. Further, only 50% of the nurses reported practised what they had learned. The few studies, which investigated influences of the working environment on nurses' performance of communication in practice (Pool 1983, Booth et al. 1996) revealed that a negative working environment, which means lack of support from supervisors for using the newly acquired skills in practice, formed a barrier in putting the skills learned into practice, and that a positive working environment led to increased use of successful communication behaviour by nurses.
Given this knowledge, it is not very surprising that results were limited, especially in terms of performance. These findings indicate that the quality of the training was less sufficient as regards taking into account context-related factors when teaching skills, confirmed by the findings of our study as described in chapter 5. This brings us to the next reflection we will address:

The relationship between competence and performance

In current medical and nursing research in this area, a distinction is frequently made between 'competence' as the outcome variable, measured using simulated patients, and 'performance' as the outcome variable, measured using real or actual patients. (Holzemer et al. 1986, Rethans et al. 1991, Francke et al. 1995, Pieters et al. 1994, Ram et al. 1999, Kinnersly & Pill 1993, Yelland 1998, Colliver et al. 1999, Beullens et al. 1996, Foley et al. 1997, van der Vleuten et al. 1990). Competence relates to the level at which a health care provider is capable of demonstrating a skill, and performance to how a health care provider actually demonstrates a skill in day to day practice (Senior 1976, Loyd 1979). Competence comprises knowledge, skills and attitudes (Pieters et al. 1994, Rethans et al. 1991, Ram et al. 1999, Francke et al. 1995), and is usually considered as an

important mediator in performance in daily practice. These studies reveal that competence is widely used for teaching and assessment targets.
Given the popularity of working with simulated patients, it is remarkable that relatively few studies have been published in which a relationship has been investigated between competence and performance (Pieters et al. 1994, Ram et al. 1999). Insight in the relationship between the two approaches gives insight into the extent to which nurses' skills competence with simulated patients predicts their demonstrated skills with actual patients. In contrary to the more traditional research, our dual approach (investigating competence as well as performance) enabled us also to investigate the relationship between competence and performance. The results of that study as described in chapter 6, revealed that nurses' instrumental communication in the standardized setting was predominantly representative for communicational performance with actual patients. On the whole, nurses' instrumental communication in the psychosocial domain, like question asking and information giving occurred more during the encounters with the simulated patients. This was also true for major affective communication behaviours, such as showing concern, empathy and optimism. Several explanations can be mentioned for the few and low correlations. During the admission interview, the complexity of effective communication is evident: the nurse has not only to provide information to the patient about medical treatment and stay in hospital. Also, the nurse has to acquire information from the patient about medical and psychosocial and lifestyle matters. In addition, the nurse has to build up a relationship with the patient, and, when the patient is emotionally distressed, it is important for the nurse to create a safe and confidential atmosphere in which a patient feels respected, and is facilitated to express emotions. However, especially in daily practice in which the workload of nurses in general is high, it seems to be difficult for nurses to comply with these communicative goals. Hence, in high workload circumstances on the ward, these goals can have a paradoxical relationship with each other. In chapter 6, we see that nurses' medical agenda dominates, mostly consisting of providing information about medical and ward issues This makes clear that nurses are particularly experienced in these skills, and therefore it is relatively 'safe' for them to perform instrumental communication, particularly in less ideal circumstances. This may explain the significant correlations found in the instrumental domain and the absence of significant correlations found in the affective domain. Context- related factors such as high workload and moderate support from supervisors may also explain the fact that after the training, the nurses in the experimental condition scored better in the standardized test situation as compared to the actual

Chapter 7

situation: they asked significantly more open psychosocial questions. Even a significant desirable shift in patient communication occurred after the training: the patients in the experimental condition showed significantly more (total) affective communication and gave significantly less medical information.
Although competence is considered an important mediator for behavioural change in practice, competence in affective communication did not lead to behavioural changes, as found in our research (chapter 5). Our results as regards the relationship between competence and performance suggest that the performance of affective communication in particular can be hindered or stimulated by context related factors. These findings indicate that, when evaluating training effects investigating competence only is not sufficient. More research into the relationship between competence and performance is needed, in order to shed more light on the validity as regards findings based on competence.

Implications for future research

Most evaluation methods in nursing research up till now are focused on provider communication only (Kruijver et al. 2000b). As a consequence, limited insight is gained into the context in which nurse-patient communication takes place. The limited insights in the interaction process during the nurse patient encounter, in turn, may explain the few significant desirable changes found in nursing research up till now as regards communicative competence and performance after communication training programs. Another explanation relating to the limited training effects in this area may be the extent to which the training methods and the evaluation methods are geared to one another. With respect to our empirical research, the effects of the communication training program were evaluated with the RIAS. A characteristic of the RIAS is that it makes a distinction between instrumental and affective communication. During the training sessions however, the trainees were taught instrumental and affective communication skills, as well as specific communication strategies in order to achieve common goals with the patient, tailored to their individual needs. Although during the admission interview affective and instrumental communication was important, the RIAS did provide limited information where the specific goals were achieved after the training procedure.
In future research, more attention should be paid to developing refined methodologies which give insight into which specific situations particular communication styles of nurses are successful. This could be reached by empowering the RIAS by developing additional qualitative observation systems, tailored to the specific characteristics of each separate communication training

program, and sensitive enough to measure the context in which the interaction between nurses and patients take place. With such qualitative research tools, detailed insight could be gained into the sequences of the dyadic interaction, and into the goals and needs related context in which these utterances occur. Also, more insight could be gained into the extent to which the specific training goals are achieved.

Implications for education and practice

Thus far in medical and nursing research, education and communication programs predominantly focus on teaching general communication skills (Kruijver et al. 2000b, Hulsman 1998). As regards the content of the training programs it can be recommended that more attention should be paid to the context in which communication takes place. The final goal of a communication training program is that the acquired skills will be practised. The step from 'knowing' and 'knowing how' to 'showing' requires insight in context-related factors. With this insight, the trainees know better in what circumstance general skills and in what circumstance specific skills have to be performed (Ram 2000, Francke et al. 1995). Accordingly, communication training programs should be tailor-made with respect to specific needs of patients, to specific goals that have to be achieved, and to organizational and structural characteristics of the professional working environment, such as working experience, the relationship with colleagues and supervisors, and workload. The few nursing studies in this area, revealed that the influences of the working environment can hinder or encourage nurses' performance of the acquired skills in practice (Pool 1983, Booth et al. 1996) Besides, our study showed that only 49% of the participants felt encouraged by their supervisors and colleagues to put in practice what they had learned, and that only 50% of the nurses reported practising what they had learned. These findings indicate that context-related factors as working environment have a higher impact on the quality of communication than we had hitherto thought. Further research in this area is needed.

Also, training programs should take more into account the individual educational needs of the trainees This can be reached by watching and discussing videotapes of trainees' actual communicative performance during the training sessions. An important aspect of this educational method is that the participants get direct feedback on their actual communicative performance from their colleagues and the trainer. Further, it gives insight in each participant's communication style, and feedback in this way is more attuned to each participant's unique educational

Chapter 7

need (Van Dulmen & Holl 2000, Van Dulmen & Van Weert (in press)). Although videotapes are commonly used to evaluate trainees' competence and performance after a communication training, watching and discussing videotapes of trainees' actual communicational performance during the training sessions is less usual (Kruijver et al. 2000b).

Moreover, our review, as described in chapter 1 demonstrates that communication between nurses and cancer patients is problematic, characterized by an overwhelming medical concern. Our own research and the literature (Kruijver et al. 2000b) shows that positive changes in knowledge and skills, attitude and intention to change after a training do not automatically lead to actual behavioural changes, which in fact is the final aim of a training. Effective communicative performance of nurses in daily practice after a training requires regularly exercising and feedback of the teachers. Therefore it is not only important that for nurses to be structurally and repeatedly provided with (continuing) communication training programs. It is important that institutions create opportunity for trainees to regularly brush up their communication skills after training.
Consequently, in order to increase emotional support during cancer patients' stay in the hospital, structural attention should be paid to exploring and communicating emotional distress with them. This could be reached by organizing more structural nurse-patient encounters during hospital stay in addition to the admission interview, in which patient needs can be addressed and in which there is more opportunity to communicate specific goals.

In conclusion, our findings and the above-mentioned implications make clear that there is much to do in future research as regards teaching and evaluating communication in health care. Education programs have to be developed which prepare the trainees better to use the skills acquired within the social system of their working environment. Observation systems have to be developed which are more attuned to the goal and need- related provider-patient communication, as well as to the context of organizational and structural characteristics of the professional working environment in which the interaction takes place.
We will end this chapter with one final recommendation: especially the integration of affective communicational performance in patient care, which is a major task of nursing professionals, has shown to be difficult. A protocol for nursing professionals should be developed, in which not only the importance of balance in instrumental communication and supportive care, meaning more affective communication in order to create a good relationship with the patient and his/her

family is stressed, but in which also the context-related factors of the professional working environment (in which communication is performed), is taken into account.

Chapter 7

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Chapter 7

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SAMENVATTING

EN

DISCUSSIE

Het onderwerp van dit proefschrift is communicatie tussen verpleegkundigen en kankerpatiënten. Het belangrijkste doel van het hier beschreven onderzoek is het bestuderen van het effect van een communicatietraining op de communicatieve vaardigheden en gedragingen van verpleegkundigen. Tevens wordt de relatie tussen de communicatietraining en andere verpleegkundig en patiënt-gerelateerde uitkomstmaten onderzocht.

Het onderzoek heeft drie vraagstellingen, waarvan de eerste als volgt luidt:

1 Wat is het effect van een communicatietraining op de communicatieve vaardigheden en gedragingen van verpleegkundigen?
De verwachting is dat verpleegkundigen na de training meer ondersteunend of affectief gaan communiceren. Daarnaast wordt verwacht dat verpleegkundigen relatief meer aandacht gaan besteden aan psychosociale onderwerpen en minder aan biomedische onderwerpen.

De tweede vraagstelling heeft betrekking op de proximale relatie tussen communicatieve vaardigheden en gedragingen van verpleegkundigen enerzijds, en verpleegkundige en patiënt-gerelateerde uitkomstmaten anderzijds:

2 Wat is het directe effect van een communicatietraining op verpleegkundige en patiënt uitkomsten?
De verwachting hierbij is dat het geven van een training in communicatieve vaardigheden leidt tot verbeterde communicatieve vaardigheden en communicatief gedrag van verpleegkundigen. Dit heeft, naar verwachting, op zijn beurt een positief effect op de tevredenheid van verpleegkundigen en patiënten met de communicatie tijdens het opnamegesprek en gedurende het verblijf in het ziekenhuis.

Tot slot gaat de derde onderzoeksvraag in op de distale relatie tussen communicatieve gedragingen van verpleegkundigen en uitkomstmaten op verpleegkundig en patiëntniveau:

3 Wat is het indirecte effect van de training op verpleegkundig- en patiënt-gerelateerde uitkomsten?
Hierbij is de verwachting dat het geven van een communicatietraining leidt tot verbeteringen in communicatieve vaardigheden en gedragingen van verpleegkundigen die op hun beurt weer een positief effect zullen hebben op de arbeidssatisfactie van verpleegkundigen en de kwaliteit van leven van de patiënten.

Samenvatting

Hoofdstuk 1 biedt een overzicht van de literatuur op het gebied van communicatie tussen verpleegkundigen en kankerpatiënten. Kankerpatiënten blijken veel psychosociale problemen te ervaren in de periode direct na de diagnose. Het is met name in deze periode dat ze kans lopen affectieve stoornissen te krijgen. Communicatie van verpleegkundigen blijkt een belangrijke rol te spelen in het tegemoet komen aan de cognitieve en emotionele behoeften van kankerpatiënten.
In de literatuur wordt affectieve communicatie, zoals empathie, aanraken en ondersteunende vaardigheden beschouwd als essentieel voor de zorg van kankerpatiënten. Verder komt uit de literatuur naar voren dat de zorg voor patiënten in een oncologische setting complex is. Deze complexiteit is het gevolg van de emotionele lading die de ziekte met zich meebrengt. Voorbeelden hiervan zijn de levensbedreiging die van de ziekte uitgaat en de vergaande consequenties van de medische behandeling. Vaak zijn barrières in effectieve communicatie tussen kankerpatiënten en verpleegkundigen hiervan het gevolg. De communicatie wordt gekarakteriseerd door een overweldigende aandacht voor de medische aspecten en het achterwege blijven van emotionele zorg door verpleegkundige professionals. De kanttekening die gemaakt kan worden bij de tot nu toe verrichtte studies is dat zij veelal een exploratief karakter hebben. Het gebruik van kleine steekproeven en slecht gevalideerde meetinstrumenten geven aanleiding om te twijfelen aan de kwaliteit van de meerderheid van deze studies.

Hoofdstuk 2 geeft een overzicht van veertien studies waarin het effect van communicatietrainingen op het gedrag van verpleegkundigen onderzocht wordt. Verpleegkundigen hebben een aantal belangrijke communicatieve taken. Uiteraard is één van deze taken het informeren van de patiënt over zijn/haar ziekte en behandeling. Daarnaast is ook het creëren van een therapeutisch effectieve relatie belangrijk. Een dergelijke relatie kan tot stand komen door in te gaan op de zorgen en emoties van de patiënt, door empathisch te zijn en door het aanbieden van steun en comfort. In de veertien studies wordt niet alleen het effect van de communicatietraining op gedragsveranderingen bij verpleegkundigen bestudeerd, maar wordt eveneens gekeken naar effecten van andere variabelen op communicatief gedrag. Hierdoor kunnen exactere verklaringen gegeven worden voor de mate van effectiviteit van de training. Over het algemeen komen uit de studies weinig of

geen effecten naar voren van communicatietraining op de communicatieve vaardigheden en gedragingen in de praktijk. Effecten van communicatie-training op patiënt gerelateerde uitkomsten zijn eveneens nauwelijks gevonden. Evenals bij het overzicht in hoofdstuk 1 het geval was, geldt bij de studies die in dit hoofdstuk zijn beschreven dat de meerderheid een zwak onderzoeksdesign had.

Hoofdstuk 3 wordt verslag gedaan van de verhouding tussen affectieve en instrumentele gedragingen van verpleegkundigen gedurende het opnamegesprek met recentelijk gediagnosticeerde kankerpatiënten is onderzocht. Hiertoe werd van 53 verpleegkundigen het opnamegesprek dat ze hadden met simulatiepatiënt op video vastgelegd. Deze video-opnames werden geanalyseerd aan de hand van het Roter Interactie Analyse Systeem (RIAS), dat een onderscheid maakt tussen instrumentele en affectieve communicatie. De resultaten van deze studie laten zien dat de verpleegkundigen voornamelijk op instrumentele wijze met de patiënten communiceerden. De verpleegkundigen maakten nauwelijks gebruik van structurerende communicatie en communicatie die de patiënt in de conversatie betrok. Verder bleek dat verpleegkundigen vooral gesloten vragen stelden, waardoor de patiënt beperkt werd in het uiten van gevoelens en emoties. Affectieve communicatie kwam op zich wel voor, maar was meer gerelateerd aan algemene communicatieve uitingen zoals instemmen en parafraseren dan aan specifieke affectieve uitingen, zoals empathie, bezorgdheid en geruststellen.

Wat betreft de non-verbale affectieve communicatie, bleek dat verpleeg-kundigen de patiënt gedurende het grootste deel van het gesprek aankeken. Dit kan verklaard worden door de setting waarin het gesprek plaatsvond: de verpleegkundige en de patiënt zaten tegenover elkaar aan een tafel. De verpleegkundige activiteiten gedurende de opname werden voornamelijk gekenmerkt door het uitwisselen van informatie met de patiënt. Hierbij hadden de verpleegkundigen veel oogcontact met de patiënt. Toewenden en affectief aanraken gebeurden echter nauwelijks. De verpleegkundigen vertoonden nauwelijks gedrag dat van belang is voor het creëren van een troostrijke relatie. Dit ondanks het feit dat de simulatiepatiënt geïnstrueerd was de rol van geëmotioneerde patiënt te spelen.

De resultaten van het onderzoek wijzen erop dat het gebruik van instrumentele en affectieve gedragingen door verpleegkundigen niet in evenwicht is. Medische informatie geven is weliswaar een belangrijke taak van verpleegkundigen gedurende het opnamegesprek, maar het geven van deze informatie overheerste alle andere gedragingen van de verpleegkundigen. Zij vroegen nauwelijks aan de patiënt of deze de informatie begreep. Ook gingen zij nauwelijks in op de gevoelens van de patiënt. De verpleegkundigen bespraken nauwelijks de emotionele aspecten van de ziekte met de patiënt om zo een veilige troostrijke atmosfeer te creëren.

Hoofdstuk 4 beschrijft een experimentele studie waarin het effect van een communicatietraining op instrumenteel en affectief gedrag van verpleegkundigen geëvalueerd werd. De studie had een gerandomiseerd pre-test post-test design. Randomisatie vond plaats op afdelingsniveau. 25 Verpleegkundigen volgden de training en 21 verpleegkundigen vormden de controlegroep. De verpleegkundigen van de controlegroep volgden de training na afloop van het onderzoek.
De nadruk van de training lag op het aanleren van vaardigheden om emoties van de patiënt te bespreken en met deze emoties om te kunnen gaan. De studie had een gerandomiseerd pre-test-post-test design. Alle verpleegkundigen voerden twee keer een opnamegesprek met een simulatiepatiënt: één voor en één na de training. Beide gesprekken werden vastgelegd op video. De videobanden werden geanalyseerd met het eerder genoemde RIAS. De effecten van de training op het communicatief gedrag van de verpleegkundigen werden geschat met behulp van multi-level analyse.

De resultaten lieten zien dat de getrainde verpleegkundigen significant meer open psychosociale vragen gingen stellen, hetgeen indiceert dat zij actief ingingen op de gevoelens van de patiënt. Daarnaast bleek dat de patiënten van de getrainde verpleegkundigen meer affectief gingen communiceren. De conclusie van deze studie is dat een communicatietraining een positief effect kan hebben op de communicatieve vaardigheden van verpleegkundigen, en zelfs effect kan hebben op communicatief gedrag van patiënten.

De in hoofdstuk 5 beschreven studie is vergelijkbaar met die in hoofdstuk 4 met dat verschil dat de opnamegesprekken met echte kankerpatiënten werden gevoerd. Gekeken werd of de communicatietraining effect had op instrumenteel en affectief gedrag van de verpleegkundigen tijdens het

opnamegesprek met deze recentelijk gediagnosticeerde kankerpatiënten. Voor dit doeleinde werden van 28 verpleegkundigen in de experimentele groep en van 23 verpleegkundigen in de controlegroep in totaal 135 opnamegesprekken voorafgaand aan de training, en 130 opnamegesprekken na afloop van de training vastgelegd op video. De videobanden werden geanalyseerd met het RIAS. Evenals in de studie met de simulatiepatiënten werd gebruik gemaakt van een gerandomiseerd pre-test-post-test design en werden de analyses uitgevoerd met behulp van multi-level analyse.

De belangrijkste veronderstelling bij deze studie was dat een training in communicatieve vaardigheden leidt tot verbeterd communicatief gedrag van de getrainde verpleegkundigen. Dit verbeterd communicatief gedrag heeft, naar verwachting, dan weer een positief effect op een aantal proximale en distale verpleegkundig en patiënt-gerelateerde uitkomstmaten. De proximale uitkomstmaten waarnaar in deze studie gekeken is, zijn de tevredenheid van verpleegkundigen en patiënten met de communicatie tijdens het opname-gesprek en tijdens het verblijf in het ziekenhuis. Arbeidssatisfactie van verpleegkundigen en kwaliteit van leven van de patiënten zijn de distale uitkomstmaten die in dit onderzoek zijn bestudeerd.

De resultaten van deze studie lieten geen effecten zien van de training, noch op het communicatief gedrag van de verpleegkundigen, noch op de proximale en distale uitkomstmaten. De verpleegkundigen in de experimentele conditie, ofwel degenen die een training hadden gevolgd, vertoonden na het volgen van de training dezelfde mate van instrumentele communicatie als voor de training, waarin de nadruk sterk lag op het geven van medische informatie. Ook de affectieve communicatie van de experimentele groep verpleegkundigen was na de training niet veranderd. De verpleegkundigen toonden zowel voor als na de training meer algemene affectieve uitingen (zoals instemmen en para-fraseren) dan specifieke affectieve uitingen (zoals empathie, bezorgdheid en geruststellen). De tevredenheid van de verpleegkundigen en patiënten met de communicatie was bij de voormeting al tamelijk hoog, en was niet meer toegenomen nadat zij getraind waren. De arbeidssatisfactie en gevoelens van burnout van de getrainde verpleegkundigen veranderden eveneens niet na de training. Wat betreft de kwaliteit van leven van de patiënten was er een significant positief effect van de training op het tijdstip van drie maanden na ontslag: het sociaal functioneren van de patiënten in de experimentele conditie was op het tijdstip van drie maanden na ontslag verbeterd.

Hoofdstuk 5 eindigt met een aantal reflecties op de bevindingen. De eerste hiervan heeft betrekking op de karakteristieken van het trainingsprogramma. Hoewel de getrainde verpleegkundigen zeer positief waren over de training en de training zeer leerzaam vonden, rapporteerde slechts 49% van hen zich ondersteund te voelen door hun leidinggevenden en collega's om de geleerde vaardigheden in de praktijk toe te passen. Verder gaf slechts de helft van de deelnemers aan dat zij de aangeleerde vaardigheden ook echt in praktijk toepasten. Deze bevindingen indiceren dat in de training te weinig rekening wordt gehouden met dat deel van de context waarin de vaardigheden in praktijk gebracht moeten worden: de professionele werkomgeving.
De tweede reflectie heeft betrekking op de variatie aan communicatiestijlen van patiënten in de dagelijkse praktijk. Door de grote variatie hierin kunnen oncontroleerbare patiëntinvloeden ruis veroorzaken in het meten van trainingseffecten. Hoewel hiermee juist in experimentele trials rekening gehouden wordt, blijft het de vraag of voor een dergelijke mate van ruis te controleren is.
De derde reflectie heeft betrekking op het gebruikte observatie-instrument, het RIAS. Een belangrijk kenmerk daarvan is dat het onderscheid maakt tussen instrumentele en affectieve communicatie. Een tweede belangrijk kenmerk van het RIAS is dat het een op frequenties gebaseerd observatiesysteem is waardoor beperkt inzicht verkregen wordt in de context waarin communicatie plaatsvindt. Dientengevolge kunnen slechts beperkt conclusies worden getrokken over het interactieproces tussen verpleegkundige en patiënt. We weten niet of de psychosociale en affectieve communicatie van de getrainde verpleegkundigen (die niet significant toenamen) plaatsvonden in een context die meer toegesneden was aan de individuele behoeften van de patiënt.

Hoofdstuk 6 beschrijft de resultaten van een studie waarin de relatie tussen competence (vaardigheden) en performance (gedrag) van verpleegkundigen in de communicatie met kankerpatiënten werd onderzocht. In totaal hadden 50 verpleegkundigen van verschillende medische disciplines een interview met één simulatiepatiënt (n=50), en één of meer opnamegesprekken met echte patiënten (n=134). Alle gesprekken werden vastgelegd op video. De patiënten waren recentelijk gediagnosticeerd en werden opgenomen in het ziekenhuis voor medische behandeling. De op video vastgelegde opnamegesprekken werden geobserveerd met het RIAS. Om het verschil in het percentage communicatieve uitingen door verpleegkundigen in de gestandaardiseerde setting te vergelijken met dat in de echte setting zijn t-toetsen gebruikt. De

correlaties tussen de communicatie van de verpleegkundigen in de echte en die in de gestandaardiseerde setting zijn berekend door het gebruik van een speciale vorm van lineaire regressie. De analyses werden uitgevoerd met behulp van het MLN software pakket.

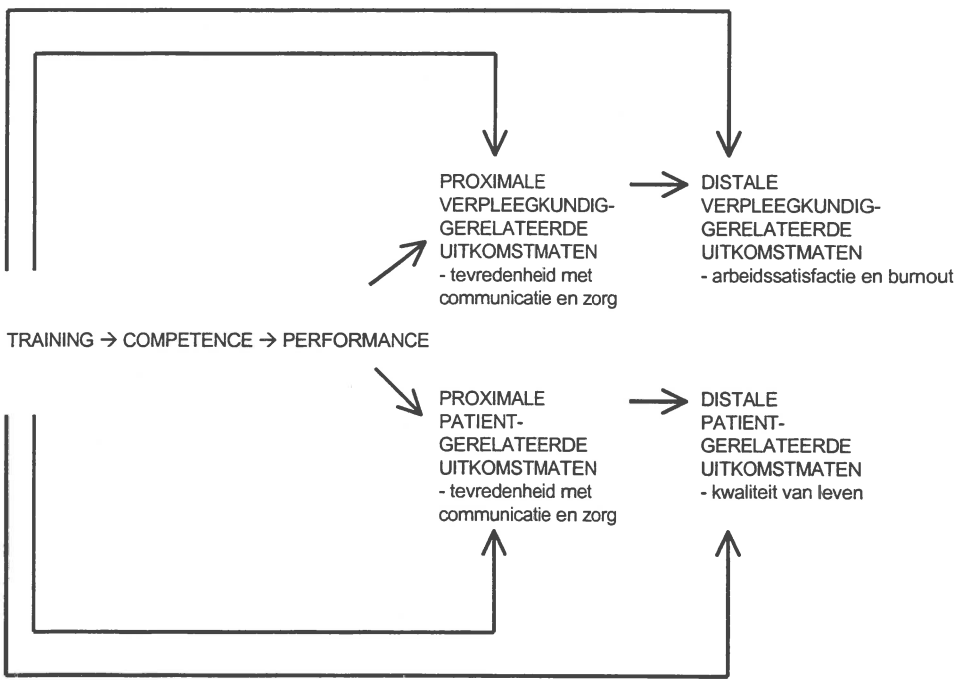
Uit de resultaten blijkt dat met name de instrumentele communicatie van de verpleegkundigen in het psychosociale domein (zoals het stellen van vragen en het geven van informatie) significant vaker voorkwam tijdens de interactie met simulatiepatiënten dan tijdens de interactie met echte patiënten. Hetzelfde gold voor affectief communicatief gedrag, zoals het tonen van bezorgdheid, het empathisch en geruststellend gedrag.
Significante correlaties hadden betrekking op het stellen van open vragen in het psychosociale en medische domein, het stellen van gesloten vragen over psychosociale aangelegenheden en leefstijl, het geven van medische informatie, het checken of de patiënt de informatie begreep, het tonen van instemming en het maken van grapjes. Bovendien was de non-verbale communicatie van de verpleegkundigen in beide settings significant met elkaar gecorreleerd.

De conclusie van deze studie is dat de competence (hoe communiceren verpleegkundigen met simulatiepatiënten) van de verpleegkundigen wat betreft non-verbale communicatie en bepaalde vormen van instrumentele communicatie voorspellend is voor hun performance hierop in de dagelijkse praktijk. Dit geldt niet voor affectieve communicatie en andere vormen van instrumentele communicatie. Deze bevindingen impliceren dat het in kaart brengen van communicatie aan de hand van competence niet voldoende is. Meer onderzoek naar de relatie tussen competence en performance is nodig om beter inzicht te krijgen in de validiteit van bevindingen die gebaseerd zijn op de meting van competence.

Discussie

Om de onderzoeksvragen die aan het begin van dit hoofdstuk zijn geformuleerd te beantwoorden, is de literatuur omtrent communicatie binnen het verpleegkundig onderzoek van de afgelopen 20 jaar bestudeerd (Kruijver e.a. 2000a, Kruijver e.a. 2000b). Daarnaast is een empirische studie uitgevoerd. Het overzicht van de literatuur liet zien dat er weinig of geen effecten van communicatietrainingen werden aangetoond op communicatieve vaardigheden van verpleegkundigen en op gedragsverandering in praktijk. De meerderheid van deze studies had echter een zwak onderzoeksdesign. Dit was de aanleiding om een gerandomiseerde trial uit te voeren.

De nadruk van de discussie ligt op de resultaten van onze eigen empirische studie. Daarna volgen een aantal methodologische reflecties op de belangrijkste bevindingen. Dit gebeurt aan de hand van het onderzoeks-schema, zoals hieronder gepresenteerd. Vervolgens wordt een aantal reflecties op onze bevindingen gegeven vanuit het theoretisch perspectief. We zullen dit hoofdstuk beëindigden met implicaties voor onderzoek in de toekomst en implicaties voor educatie en praktijk.



Een korte samenvatting van de bevindingen

Om effecten van communicatietraining te kunnen evalueren, hebben we gebruik gemaakt van twee verschillende uitkomstmaten: 'competence' (vaardigheden) en 'performance' (gedrag). De belangrijkste uitkomstmaat van communicatietrainingen is 'performance'. Competence wordt beschouwd als een belangrijke tussenschakel voor gedragsverandering in praktijk (Rethans e.a. 1991, Ram e.a. 1999, Kinnersly & Pill, 1993, Beullens e.a. 1997, Francke e.a. 1995, Foley e.a. 1997, Nicol & Freeth 1998, Barrows 1993, Colliver e.a. 1998, Miller e.a. 1998). De resultaten van onze studie in termen van competence lieten zien dat getrainde verpleegkundigen significant vaker open psychosociale vragen gingen stellen, hetgeen indiceert dat zij actief ingingen op en op zoek gingen naar de gevoelens van de patiënt. Ook de patiënten van de getrainde verpleegkundigen gingen meer affectief communiceren. Hoewel de effecten niet sterk waren, kunnen we concluderen dat een communicatietraining gewenste effecten in communicatieve vaardigheden teweeg kan brengen, niet alleen bij verpleegkundigen maar ook bij patiënten.

Om de effecten van communicatietraining op het communicatief gedrag in de dagelijkse praktijk, de performance, te evalueren is hetzelfde onderzoeks-design gebruikt als voor de meting van de effecten op competence. Hierbij werd ook het effect van de communicatietraining op een aantal proximale en distale uitkomstmaten bestudeerd. De proximale uitkomstmaten hadden betrekking op de tevredenheid van verpleegkundigen en patiënten met de communicatie gedurende het opnamegesprek en gedurende het verblijf in het ziekenhuis. De distale uitkomstmaten verwijzen naar de arbeidssatisfactie van verpleegkundigen en de kwaliteit van leven van de patiënten.

De resultaten van deze studie laten nauwelijks effect van de training zien, noch op het communicatief gedrag van de verpleegkundigen, noch op de proximale en distale uitkomstmaten. Het enige significante effect betrof een verbetering in het sociaal functioneren van de patiënten van getrainde verpleegkundigen drie maanden na ontslag uit het ziekenhuis. Het achterwege blijven van trainingseffecten is opmerkelijk omdat de deelnemers zeer positief waren over de training en de training erg leerzaam vonden. Zij waren tevreden over de kundigheid van de trainers. Ook beoordeelden de deelnemers de samenwerking met de trainers en de andere deelnemers positief. Van de getrainde verpleegkundigen rapporteerde 86% dat zij de intentie hadden om het geleerde toe te passen in praktijk en 93% van hen zou de training aan anderen aanbevelen.

Methodologische reflecties

Omdat de training weinig effect toonde op competence en geen effect op de performance, is besloten om de keten van effecten, zoals gedemonstreerd in het schema, niet nader te onderzoeken. Dit betekent dat de samenhang tussen de communicatieve vaardigheden en gedragingen van de getrainde en niet getrainde verpleegkundigen en de proximale en distale uitkomstmaten niet bestudeerd is. Feitelijk onderzochten wij het directe effect van de communicatietraining op de proximale en distale uitkomstmaten, eveneens aangegeven in het bovenstaande schema.

Hieronder bespreken we mogelijke verklaringen voor de geringe effecten die de communicatietraining in onze studie had op competence en voor de afwezigheid van trainingseffecten op performance, op de proximale en op de distale uitkomstmaten. We doen dit vanuit een methodologisch perspectief. De volgende mogelijke verklaringen worden besproken:

- oncontroleerbare patiëntinvloeden
- de power van het onderzoek
- standaardisatie van de test-situatie
- video observaties
- regressie naar het gemiddelde
- multi-causale effecten.

Oncontroleerbare patiëntinvloeden

De eerste verklaring betreft oncontroleerbare patiëntinvloeden die kunnen interfereren met het effect van de training. In tegenstelling tot veel verpleegkundige communicatiestudies voerden wij een gerandomiseerde trial uit. Over het algemeen wordt dit beschouwd als een sterk onderzoeksdesign, omdat de metingen verricht zijn onder gecontroleerde condities. Dientengevolge wordt de kans dat ruis interfereert met de resultaten geminimaliseerd. Desalniettemin kunnen patiënten variëren in hun communicatiestijl. Het kwam in onze studie bijvoorbeeld voor dat de ene patiënt zijn/haar stress reduceerde door veel medische vragen aan de verpleegkundige te stellen, terwijl de andere patiënt vooral emoties uitte om zijn/haar stress te verlichten. Met name in emotioneel geladen situaties is er een dynamische interactie tussen patiënten en verpleegkundigen. De individueel gebonden problematiek speelt in die context een vitale rol. De ene patiënt is de andere niet en de unieke omstandigheden van elke patiënt hebben onherroepelijk invloed op het verloop van de interactie met

verpleegkundigen. In de dagelijkse praktijk vereisen specifieke omstandigheden derhalve specifieke communicatiestrategieën van verpleegkundigen. Het blijft de vraag of het, zelfs in experimentele trials, mogelijk is te controleren voor een dergelijke soort ruis.

Power

Patiëntinvloeden kunnen derhalve de resultaten beïnvloeden. Daarom is het noodzakelijk een steekproef van verpleegkundigen en patiënten in het onderzoek te betrekken die groot genoeg is om te corrigeren voor dit type bias. Een grote steekproef is noodzakelijk om voldoende power te hebben voor het vaststellen van verschuivingen in communicatief gedrag na een communicatietraining. Hoewel onze steekproefomvang, zeker vergeleken met ander onderzoek op dit terrein, groot was blijft het de vraag of voldoende verpleegkundigen en patiënten participeerden om significante effecten te kunnen vaststellen. Dit geldt met name voor de dagelijkse praktijk waarin de variatie aan communicatiestijlen tussen patiënten veel groter is dan in de gestandaardiseerde setting waarin met simulatiepatiënten gewerkt wordt. Dit idee wordt bevestigd door de resultaten van eerder onderzoek (Kruijver e.a. 2000b) en die van onze studie zoals beschreven in hoofdstuk 4: in de gestandaardiseerde setting worden, hoewel in beperkte mate, meer trainingseffecten gevonden op communicatie van de verpleegkundigen (en van patiënten) dan in de dagelijkse praktijk.

Standaardisatie van de test-situatie

Het voordeel van het werken met simulatiepatiënten is dat de variatie in communicatiestijlen wordt gereduceerd. De simulatiepatiënten spelen hun rol immers volgens een gestandaardiseerd script (Barrows 1993). Uit onze studie bleek dat meer trainingseffecten werden gevonden op 'competence' dan op 'performance' van verpleegkundigen. Dit zou verklaard kunnen worden door het feit dat de context van beide test-situaties verschillend is. Tijdens de interacties met de simulatiepatiënten waren de condities voor het gesprek ideaal; er was geen sprake van verstoring door seinen, en de verpleegkundigen hoefden geen rekening te houden met de werkdruk op de afdeling. De vaardigheden die de verpleegkundigen leerden in een relatief veilige en voorspelbare situatie, namelijk gedurende de trainingsessies, werden vervolgens getest in omstandigheden die eveneens gecontroleerd en voorspelbaar waren. De interacties met de echte patiënten daarentegen

vonden plaats in omstandigheden die veel minder ideaal waren, hetgeen een hoger communicatief vaardigheidsniveau van de verpleegkundigen vereist.

Video-observaties

De bevindingen van onze studie hebben betrekking op het observeren van interacties tussen verpleegkundigen en kankerpatiënten die op video vastgelegd waren. Dit maakte het mogelijk om communicatief gedrag op een directe wijze in kaart te brengen. Het nadeel van het vastleggen van interacties tussen verpleegkundigen en patiënten op video is dat 'performance-bias' kan optreden. Dit houdt in dat verpleegkundigen en patiënten zich anders kunnen gaan gedragen dan ze normaal doen omdat ze zich bewust zijn van het feit dat ze gefilmd worden. Wij verwachten echter dat deze bias in onze studie beperkt was. Zowel de verpleegkundigen als de patiënten rapporteerden achteraf dat zij gedurende het opnamegesprek vergaten dat zij gefilmd werden. Deze bevindingen komen overeen met bevindingen van andere onderzoeken in een vergelijkbare situatie (Bottorff & Morse 1994, Caris-Verhallen 1999).

Regressie naar het gemiddelde

De afwezigheid van trainingseffecten op tevredenheid van verpleegkundigen en patiënten over de communicatie zou ook het gevolg kunnen zijn van een zogeheten 'plafondeffect'. Al tijdens de voormeting bleken zowel verpleegkundigen en patiënten in het algemeen erg tevreden te zijn over de manier van communiceren. Dit betekende dat er een geringe spreiding was in de satisfactiescores. Bovendien konden deze scores na de training nog maar nauwelijks omhoog gaan. Dergelijke plafondeffecten zien we ook voor arbeidssatisfactie en gevoelens van persoonlijke bekwaamheid van de verpleegkundigen.

Multicausale effecten

De training had eveneens geen effect op de 'emotionele uitputting' van de verpleegkundigen. Hier gaat echter het idee van een plafondeffect, in dit geval een 'bodemeffect', niet op omdat de scores van de deelnemers op emotionele uitputting niet opmerkelijk hoog waren. Echter, de deelnemers scoorden wel hoger op deze burnout schaal dan verpleegkundigen standaard doen (Schaufeli en Van Dierendonck 2000). Een verklaring hiervoor kan zijn dat de verpleegkundigen in onze studie de zorg hadden voor kankerpatiënten. Deze zorg is complex vanwege de emotionele lading die ermee gepaard gaat. Daarom verwachtten wij dat de verpleegkundigen in de experimentele conditie

na de training een significant lagere score op 'emotionele uitputting' zouden laten zien. Dit bleek niet het geval te zijn. Bekend is dat verschillende factoren, met name individuele karakteristieken zoals voorkeur voor autonomie en tijdsdruk, in verband staan met burnout (Jansen 1996). Deze worden door een communicatietraining niet beïnvloed.

Hoewel een communicatietraining theoretisch effecten zichtbaar zou kunnen maken op distale patiënt-gerelateerde uitkomstmaten (La Monica e.a. 1987), bleek dit in ons onderzoek niet het geval te zijn. De vermindering van de kwaliteit van leven van de patiënten op het moment van ontslag uit het ziekenhuis (T2 in onze studie) lijkt het gevolg te zijn van de medische behandeling die zij ondergingen en van het feit dat zij door de opname geen deel meer konden uitmaken van het dagelijks leven. Drie maanden na ontslag uit het ziekenhuis (T3 in onze studie) hadden de patiënten min of meer hetzelfde niveau van kwaliteit van leven bereikt als vlak na het opnamegesprek met de verpleegkundige (T1). Deze bevindingen tonen aan dat kwaliteit van leven van kankerpatiënten zondermeer beïnvloed wordt door meer factoren dan alleen een communicatietraining. In de eerste plaats is hun toekomstperspectief verstoord en is er vaak sprake van uitzicht op verminderde levensduur. Ook hebben de patiënten last van de directe gevolgen van de ziekte. Ze moeten een medische behandeling ondergaan die bovendien verregaande consequenties kan hebben, zoals lichamelijke verminking. Bovendien ervaren ze onzekerheid over het verloop van de ziekte. Verder zijn er lichamelijke klachten, is er een grotere kans op vermoeidheid (Smets e.a. 1998) en op beperkingen in het dagelijks functioneren (Andersen 1994, Hanson e.a. 1994, Spiegel 1996). Dit betekent dat de confrontatie met een levensbedreigende ziekte zoals kanker veel van het aanpassingsvermogen van de patiënt en diens omgeving vergt. Angst en depressie zijn dan ook de meest voorkomende psychosociale problemen bij kankerpatiënten (Massie e.a. 1989, Berglund e.a.1991, Heim e.a. 1997).

Conclusie

De conclusie is dat de invloed die een communicatietraining op het communicatief gedrag van verpleegkundigen kan hebben, wordt beïnvloed door veel factoren. Dit heeft er mogelijk toe geleid dat in deze studie nauwelijks effecten zijn gevonden van een training op communicatief gedrag en andere uitkomstmaten. De training bleek alleen in een gestandaardiseerde setting effect te hebben op communicatieve vaardigheden van verpleeg-

kundigen (competence), niet alleen bij verpleegkundigen maar ook bij patiënten. In een gecontroleerde test-situatie was het voor getrainde verpleegkundigen gemakkelijker hun verworven communicatievaardigheden toe te passen. De bevindingen tonen aan dat, vanuit methodologisch perceptief gezien, in een gecontroleerde test-situatie factoren die ruis veroorzaken in het meten van trainingseffecten minder aanwezig zijn.

Theoretische reflecties

Vanuit theoretisch perspectief valt ook een aantal kanttekeningen bij de conclusies van het onderzoek te plaatsen. De volgende punten zullen hieronder besproken worden:

- karakteristieken van het observatie systeem: RIAS
- karakteristieken van de communicatietraining
- de relatie tussen competence en performance

De karakteristieken van het observatie instrument: RIAS

De meeste verpleegkundige observatiestudies onderzoeken uitsluitend het communicatief gedrag van zorgverleners. In onze studie maakten wij gebruik van het Roter Interactie Analyse Systeem (RIAS). Het RIAS brengt naast het communicatief gedrag van de zorgverlener ook het communicatief gedrag van de patiënt in kaart (Roter 1989). Het RIAS is oorspronkelijk ontwikkeld om de communicatie tussen artsen en patiënten in beeld te brengen, maar is ook betrouwbaar gebleken bij het observeren van communicatie tussen verpleegkundigen en patiënten (De Gruyter & Schirm 1995, Caris-Verhallen 1999). Bovendien blijken de psychometrische kwaliteiten van het RIAS in een oncologie-setting bevredigend (Ong e.a. 1998). Naast de psychometrische kwaliteiten is het relevant om de bruikbaarheid van het RIAS te evalueren in relatie tot de vraagstelling van ons onderzoek. Voor dat doel is het van zinnig te kijken naar de inhoud van het RIAS in relatie tot het opnamegesprek.

Een eerste karakteristiek van het RIAS is dat het onderscheid maakt tussen instrumentele (taak-gerelateerde) verbale communicatie en affectieve (sociaal-emotionele) verbale communicatie. Instrumentele gedragingen zijn van belang bij het geven van informatie aan de patiënt over de ziekte en behandeling en bij het bieden van medische en praktische zorg. Affectieve communicatie is van belang om een adequate therapeutische relatie met de patiënt aan te gaan, waarin de patiënt zich begrepen voelt (Bensing 1991, Hall e.a. 1987). De oorsprong van het RIAS ligt in de 'cure-georiënteerde' traditie. Hierin wordt informatie-uitwisseling tussen dokters en patiënten beschouwd als een

essentieel medium voor oplossing van het probleem en de affectieve categorieën zijn geconceptualiseerd binnen het probleemoplossend proces (Bensing 1991, Ong 2000). Passen we dit toe op verpleegkundigen en patiënten in onze setting, dan valt op dat het geven van informatie en het stellen van vragen in het kader van de intake-procedure inderdaad een belangrijk onderdeel vormt van de professionele taak van verpleegkundigen. Dit geldt tijdens de hele opnameprocedure. Deze procedure kan bij de patiënt emotioneel leed veroorzaken. De opname volgt immers op de recente diagnose een levensbedreigende ziekte te hebben waarvoor opname in het ziekenhuis voor behandeling nodig is. In dit soort situaties is het van belang dat de verpleegkundige in staat is om een vertrouwelijke, veilige sfeer te creëren waarin de patiënt zich begrepen en gerespecteerd voelt. Een goed therapeutisch klimaat maakt het voor de patiënt gemakkelijker om emoties te uiten, hetgeen kan leiden tot opluchting. Dit kan er weer toe leiden dat de patiënt zich beter kan concentreren op de informatie die door de verpleegkundige wordt gegeven. Met name in dergelijke omstandigheden is het van belang dat de verpleegkundige in staat is om de informatie aan te passen aan de emotionele conditie van de patiënt (Krishnasamy 1996b, Wouda & Van de Wiel 1996). Daarom is tijdens het opnamegesprek zowel affectieve als instrumentele communicatie van belang. Het RIAS is derhalve geschikt omdat het affectieve en instrumentele communicatie kan meten, alsmede de balans daartussen. De verhouding tussen instrumentele en affectieve communicatie in onze studie komt overeen met bevindingen van andere studies waarin met behulp van het RIAS geobserveerd werd (Van Dulmen 1998, Van den Brink-Muinen 1996). Deze laten zien dat instrumentele communicatie overheerst. De communicatietraining bracht hierin geen veranderingen teweeg.

Een tweede kenmerk van het RIAS is dat het een op frequenties gebaseerd observatiesysteem is, dat geen onderscheid maakt tussen goede en slechte communicatie. Hoewel de frequentie waarin (bijvoorbeeld) een affectieve uiting zich voordoet een indicatie is voor de mate waarin een zorgverlener zich betrokken voelt bij de gevoelens van de patiënt, is inzicht in de context waarin de communicatie plaatsvindt gelimiteerd. Als gevolg daarvan kunnen slechts beperkte conclusies worden getrokken over het interactieproces tussen verpleegkundigen en patiënt. Dit interactieproces is van belang omdat het inzicht verschaft in de context waarbinnen de communicatie plaatsvindt. Enerzijds wordt de context bepaald door specifieke karakteristieken van

patiënten zoals hun persoonlijkheid, hun aandeel in het gesprek, en hun behoeften en verwachtingen (Bensing 1991, Bensing 1992). Anderzijds wordt de communicatie beïnvloed door organisatorische en structurele kenmerken van de professionele werkomgeving van de zorgverlener. Voorbeelden van dergelijke kenmerken zijn werkervaring, de relatie met collega's en supervisoren en de werkdruk (Francke e.a. 1995, Ram e.a. 2000). Bovendien is de aard van de communicatie gerelateerd aan de specifieke doelen die ermee bereikt moeten worden. Voorbeelden zijn van dergelijke doelen zijn: het creëren van een goede relatie, de uitwisseling van informatie en de medische besluitvorming (Ong 2000). De doelen die tijdens de interactie bereikt moeten worden, verschillen per gesprek en zijn afhankelijk van de patiënt, diens gezondheidsprobleem en de context waarbinnen het gesprek plaatsvindt. De verwachting in onze studie was dat de verpleegkundigen na de training een deel van de instrumentele medische communicatie zouden vervangen door instrumentele psychosociale communicatie en affectieve communicatie. Dit bleek niet het geval te zijn. Het RIAS neemt echter de context waarin communicatie plaatsvindt niet in beschouwing. We weten echter niet of de psychosociale en affectieve communicatie van de getrainde verpleegkundigen (dat niet significant toenam), plaatsvond in een context die meer toegesneden was op de behoeften van de patiënt.

Hetzelfde geldt voor de wijze waarop wij non-verbale communicatie in kaart brachten. We besloten om non-verbale communicatie te meten, omdat non-verbale communicatie van belang wordt beschouwd in het creëren van een goede relatie met de patiënt (Heintzman e.a. 1993, Caris-Verhallen 1999), en dus meer inzicht verschaft in de psychotherapeutische aard van de interacties waarin de informatie uitwisseling plaatsvindt. De meting van non-verbale communicatie van de verpleegkundigen was in ons onderzoek ook gebaseerd op de frequentie waarmee deze communicatie voorkwam. Hierdoor is niet duidelijk op welke specifieke uitingen van de patiënt de non-verbale communicatie van de verpleegkundige volgde.
Observatiesystemen die gebaseerd zijn op frequenties hebben derhalve beperkingen. Het is echter van belang op te merken dat observatiesystemen die wel onderscheid maken tussen goede en slechte communicatie ook weinig verschuivingen in communicatief gedrag van dokters en verpleegkundigen laten zien na een communicatietraining (Kruijver e.a. 2000b, Hulsman 1998). De observatiesystemen die tot nu toe in verpleegkundig en medisch communicatie-onderzoek zijn gebruikt, lijken op heldere wijze communicatie-

stijlen in beeld te kunnen brengen. Dit ongeacht het feit of ze wel of niet op frequenties gebaseerd zijn. De vraag is echter of de systemen sensitief genoeg zijn om de behoeften van de patiënt en de doel-gerelateerde interactie tussen zorgverlener en patiënt in kaart te brengen. Daarnaast is het de vraag of deze instrumenten verschuivingen in communicatiepatronen als gevolg van een communicatietraining adequaat kunnen meten.

De karakteristieken van de communicatietraining

Uitgangspunt van de communicatietraining in dit onderzoek was om op een efficiënte wijze bepaalde doelen te bereiken, zoals het geven en krijgen van informatie, emotionele ondersteuning etc. Hiertoe werden de verpleegkundigen getraind in algemene en specifieke communicatievaardigheden. Ook kregen ze training in de manier waarop zij de geleerde vaardigheden konden integreren in de verpleegkundige en praktische zorgverlening aan de patiënt (Wouda & Van de Wiel 1996). De training bleek, zoals eerder gezegd, weinig effecten te hebben.

De meest simpele verklaring voor het ontbreken van effecten is dat de training niet adequaat was. Gezien de positieve evaluaties van de verpleegkundigen over de training lijkt dit echter onwaarschijnlijk. De training zou ook niet adequaat kunnen zijn omdat de training niet voldoende krachtig is om de beoogde verschuivingen zichtbaar te maken. Echter, er deden zich verschuivingen voor op het niveau van de competence. Dit betekent dat de training op zich krachtig genoeg is om verschuivingen teweeg te brengen. De inhoud van de training lijkt derhalve van voldoende kwaliteit. Desalniettemin kan bij de inhoud van de training toch een kanttekening gemaakt worden. De educatiemethode van het trainingsprogramma in onze studie bestond uit een combinatie van theoretisch onderricht en oefeningen aan de hand van rollenspel met feedback. Met name het rollenspel heeft als voordeel dat de participanten niet alleen inzicht verwerven in relevante vaardigheden ('weten'), maar eveneens inzicht krijgen in hoe ze deze vaardigheden moeten toepassen ('weten hoe', en 'demonstreren hoe'). Dit wordt gezien als een belangrijke tussenschakel voor performance in de dagelijkse praktijk. De training in onze studie was echter, evenals in vele andere studies, hetzelfde voor alle deelnemers terwijl zij onderling kunnen verschillen in hun educatiebehoeften (Kruijver e.a. 2000b). In dat geval zal de ene deelnemer meer leren en meer voordeel halen uit de training dan de andere deelnemer. Dit zou de beoogde effecten van een communicatietraining kunnen beperken.

Van groter belang is de context waarin en de condities waaronder de training plaatsvond. Onze studie toonde dat de meerderheid van de deelnemers (86%) de intentie had het geleerde in de praktijk uit te gaan voeren. Echter, slechts 49% van hen voelde zich gestimuleerd door hun leidinggevenden en collega's om de verworven vaardigheden in de praktijk toe te passen. Verder zagen we dat slechts 50% van de deelnemers rapporteerde dat zij de aangeleerde vaardigheden ook daadwerkelijk in de dagelijkse praktijk hanteerden. De weinige studies die de invloed van de professionele werkomgeving op communicatief gedrag onderzochten (Pool 1983, Booth e.a. 1996), toonden aan dat verpleegkundigen in een negatieve werkomgeving, hetgeen een gebrek van steun door de leidinggevende inhoudt, werden gehinderd in het in praktijk brengen van de verworven vaardigheden. Een positieve werkomgeving daarentegen leidde tot een verbetering van de communicatieve performance van verpleegkundigen. Derhalve is het niet verrassend dat de resultaten in onze studie beperkt waren, vooral in termen van performance. Deze bevindingen tonen aan dat de communicatietraining minder toereikend was wat betreft het rekening houden met context gerelateerde factoren, hetgeen bevestigd wordt in onze studie, zoals beschreven in hoofdstuk 6. Dit brengt ons naar de volgende reflectie die wij willen maken, namelijk de relatie tussen competence en performance.

De relatie tussen competence en performance

In het verpleegkundig en medisch onderzoek op het gebied van communicatie wordt vaak onderscheid gemaakt tussen de uitkomstmaten 'competence' (gemeten met simulatiepatiënten) en 'performance' (gemeten met echte patiënten) (Holzemer e.a. 1986, Rethans e.a. 1991, Francke e.a. 1995, Pieters e.a. 1994, Ram e.a. 1999, Kinnersly & Pill 1993, Yelland 1998, Colliver e.a. 1999, Beullens e.a. 1996, Foley e.a. 1997, Van der Vleuten e.a. 1990). Competence heeft betrekking op de mate waarin een zorgverlener in staat is om een bepaalde vaardigheid te demonstreren; performance heeft betrekking op hoe een zorgverlener een bepaalde vaardigheid demonstreert in de dagelijkse praktijk. Competence omvat kennis, vaardigheden en attitudes (Pieters e.a. 1994, Rethans e.a. 1991, Ram e.a. 1999, Francke e.a. 1995), en heeft een belangrijke mediërende rol voor het demonstreren van de vaardigheden in de dagelijkse praktijk. De genoemde studies laten zien dat competence veel gebruikt wordt voor onderwijsdoeleinden.

Gezien de populariteit van het werken met simulatiepatiënten is het opmerkelijk dat weinig studies gepubliceerd zijn waarin de relatie tussen competence en performance is onderzocht (Pieters e.a. 1994, Ram e.a. 1999). Inzicht in de relatie tussen de twee benaderingen verhoogt het inzicht in de mate waarin competence een voorspeller is voor performance. Omdat wij in onze studie beide benaderingen hanteerden, hadden we in tegenstelling tot veel andere studies de mogelijkheid om de relatie tussen competence en performance te onderzoeken. De resultaten toonden aan dat met name instrumentele communicatie over medische zaken en non-verbale communicatie van de verpleegkundigen in de gestandaardiseerde setting representatief waren voor de communicatie in de dagelijkse praktijk. Daarentegen deed instrumentele communicatie in het psychosociale domein zich meer voor tijdens de opnamegesprekken met simulatiepatiënten. Hetzelfde betrof het gebruik van belangrijke affectieve gedragingen, zoals het tonen van bezorgdheid, empathie en geruststellen. Voor het ontbreken van samenhang tussen performance en competence zijn enkele verklaringen te geven. De complexiteit van effectieve communicatie met kankerpatiënten tijdens een opnamegesprek is evident. De verpleegkundige moet niet alleen informatie geven aan de patiënt over de medische behandeling en het verblijf in het ziekenhuis; ook moet de verpleegkundige informatie van de patiënt krijgen over leefgewoonten en over psychosociale aangelegenheden. Daarnaast moet de verpleegkundige een therapeutische relatie met de patiënt aangaan. Wanneer emoties bij de patiënt overheersen, is het van belang dat de verpleegkundige een vertrouwelijke en veilige sfeer creëert waarin de patiënt zich gerespecteerd voelt en vrij is om emoties te uiten. Echter, in de dagelijkse praktijk waar de werkdruk hoog is, is het vaak moeilijk om te voldoen aan al deze verschillende communicatieve doelstellingen. Sterker nog, in een situatie waarin de werkdruk hoog is, kunnen deze communicatieve doelen strijdig met elkaar zijn.

Uit hoofdstuk 6 blijkt dat tijdens de opnamegesprekken de medische agenda van de verpleegkundige overheerst. Het gesprek wordt meestal gekarakteriseerd door het geven van medische informatie en informatie over het verblijf in het ziekenhuis. Duidelijk is dat verpleegkundigen ervaren en geroutineerd zijn in deze vaardigheden. Daardoor is het relatief 'veilig' voor hen om instrumenteel te communiceren, vooral in minder ideale omstandigheden. Dit zou de aanwezigheid van significante correlaties tussen competence en performance in het instrumentele domein en de afwezigheid daarvan in het affectieve domein kunnen verklaren.

Context-gerelateerde factoren zoals hoge werkdruk en beperkte ondersteuning van leidinggevenden kunnen ook een verklaring zijn voor het feit dat de verpleegkundigen na de training beter met de patiënten communiceerden in de gestandaardiseerde test-situatie dan in de actuele situatie.

Hoewel competence wordt gezien als een belangrijke schakel voor gedragsverandering in de praktijk, leidde toename van competence in onze studie lang niet altijd tot veranderingen in de performance. De resultaten suggereren dat met name de performance van affectieve communicatie gehinderd of gestimuleerd kan worden door context-gerelateerde factoren. Deze bevindingen impliceren ook dat bij het evalueren van een communicatietraining het niet voldoende is om uitsluitend competence als uitkomstmaat te kiezen. Om meer inzicht te krijgen in validiteit van bevindingen die gebaseerd zijn op competence, moet meer onderzoek naar de relatie tussen competence en performance verricht worden.

Implicaties voor verder onderzoek

In de meeste observatiestudies in verpleegkundig onderzoek wordt alleen gekeken naar het communicatief gedrag van de zorgverlener. Als gevolg daarvan is het inzicht in de context waarbinnen communicatie tussen patiënten en verpleegkundigen plaatsvindt beperkt. Dit beperkte inzicht zou ook weer een verklaring kunnen zijn voor de matige resultaten die in verpleegkundig onderzoek worden gevonden wat betreft het effect van communicatietraining op communicatief gedrag van verpleegkundigen. Een andere verklaring voor de matige effecten van trainingen heeft betrekking op de afstemming tussen trainingsmethodes en evaluatiemethodes. In ons eigen empirisch onderzoek evalueerden wij de communicatietraining aan de hand van het RIAS, dat onderscheid maakt tussen instrumentele en affectieve communicatie. Gedurende de trainingsessies werden de deelnemers echter niet alleen getraind in affectief en instrumenteel gedrag. Zij werden ook getraind in specifieke communicatiestrategieën voor het bereiken van gemeenschappelijke doelen met de patiënt, afgestemd op diens individuele behoeften. Met het RIAS werd slechts beperkt inzicht verkregen in de vraag of de specifieke doelen van de training bereikt waren.

In toekomstig onderzoek zal meer aandacht besteed moeten worden aan het ontwikkelen van methodes, die een verdergaand inzicht geven in situaties waarin specifieke communicatiestrategieën van verpleegkundigen succesvol

kunnen zijn. Dit zou bereikt kunnen worden door het RIAS te versterken met additionele kwalitatieve observatiesystemen die afgestemd zijn op verschillende communicatie- trainingen en die voldoende sensitief zijn om de context te meten waarin de interactie tussen verpleegkundigen en patiënten plaatsvindt. Met zulke kwalitatieve observatie-instrumenten kan op gedetailleerder niveau inzicht verkregen worden in de sequentie van communicatieve uitingen van verpleegkundige en patiënt. Bovendien wordt daarmee het inzicht vergroot in de context van de specifieke doelen en de individuele behoeften van de patiënt waarbinnen deze uitingen voorkomen. Ook zou meer inzicht verkregen kunnen worden in de mate waarin specifieke doelen van de betreffende communicatietraining bereikt worden.

Implicaties voor educatie en praktijk

Tot op heden richten communicatietrainingen zich vooral op algemene communicatieve vaardigheden (Kruijver e.a. 2000b, Hulsman 1998). Het verdient aanbeveling om in de communicatietrainingen meer aandacht te besteden aan de context waarbinnen de communicatie plaatsvindt. Het uiteindelijke doel van een communicatietraining is immers dat de verworven vaardigheden toegepast worden in praktijk. De stap van 'weten' naar 'weten hoe' en 'demonstreren' vereist inzicht in context-gerelateerde factoren. Met dit inzicht weten de getrainde verpleegkundigen beter in welke situaties algemene vaardigheden en in welke situaties specifieke vaardigheden toegepast moeten worden (Ram e.a. 2000, Francke e.a. 1995). Daarom moeten educatie-progamma's afgestemd worden op de specifieke behoeften van de patiënt, op de specifieke doeleinden die met de communicatie bereikt moeten worden, en op de organisatorische en structurele kenmerken van de professionele werkomgeving. De weinige verpleegkundige studies die de invloed van de professionele werkomgeving bestuderen tonen aan dat deze een ondersteunend of juist remmend effect kan hebben op het toepassen van de verworven vaardigheden door verpleegkundigen in de praktijk (Pool 1983, Booth e.a. 1996). Bovendien liet onze studie zien dat slechts de helft van de deelnemers zich gestimuleerd voelde door hun leidinggevende en collega's om de geleerde vaardigheden in praktijk toe te passen. Slechts de helft van de getrainde verpleegkundigen gaf aan de geleerde vaardigheden ook daadwerkelijk in de dagelijkse praktijk uit te voeren. Deze bevindingen laten zien dat context-gerelateerde factoren zoals werkomgeving een grotere invloed hebben op de kwaliteit van communicatie dan tot nu toe verondersteld werd.

Ook moeten communicatietrainingen meer rekening houden met de individuele educatiebehoeften van de deelnemers. Dit zou bereikt kunnen worden door tijdens de trainingssessies video-opnames te bekijken, die gemaakt zijn van elke deelnemer tijdens interacties met patiënten in de dagelijkse praktijk. Het voordeel hiervan is dat de deelnemers direct feedback krijgen van de trainer en van collega's op hun communicatieve performance in de dagelijkse praktijk. Daarnaast biedt het meer inzicht in de communicatiestijl van elke afzonderlijke deelnemer en is de feedback beter afgestemd op de individuele educatiebehoefte van de participant (Van Dulmen & Holl 2000, Van Dulmen & Van Weert (in press). Hoewel video-opnames steeds meer gebruikt worden om communicatieve vaardigheden na een training in kaart te brengen, is het bespreken van video-opnames tijdens trainingssessies minder gebruikelijk (Kruijver e.a. 2000b).

Uit ons literatuuroverzicht komt naar voren dat de communicatie tussen verpleegkundigen en kankerpatiënten nog steeds problematisch is en gekenmerkt wordt door overheersende aandacht voor de medische aspecten van de ziekte. Ons eigen onderzoek en de literatuur (Kruijver e.a. 2000b) tonen aan dat positieve veranderingen in kennis en vaardigheden na een communicatietraining niet automatisch tot gedragsverandering leiden, hetgeen toch het uiteindelijke doel van een communicatietraining is. Effectieve communicatie van verpleegkundigen in de dagelijkse praktijk vereist regelmatige oefening en feedback van trainers. Het is dan ook van belang dat zij regelmatig (bij)geschoold worden. Bovendien moeten de organisaties waarin zij werken mogelijkheden voor hen creëren om hun vaardigheden regelmatig te trainen.

Daarnaast zou, om de emotionele ondersteuning aan patiënten tijdens hun verblijf in het ziekenhuis te verhogen, ook systematisch meer aandacht moeten worden besteed aan het bespreken van psychosociale onderwerpen met kankerpatiënten en de problemen die zich daarbij voordoen. Dit zou bereikt kunnen worden door naast het opnamegesprek meer structurele gesprekken tussen de (eerst verantwoordelijke) verpleegkundige en de patiënt te organiseren, waarin tegemoet kan worden gekomen aan specifieke behoeften van de patiënt.

Onze bevindingen en de daarbij behorende implicaties tonen aan dat er nog veel te doen is in toekomstig onderzoek met betrekking tot het onderricht in en

de evaluatie van communicatie in de gezondheidszorg. Het is van belang dat educatieprogramma's worden ontwikkeld die zorgverleners beter voorbereiden op het toepassen van de verworven communicatieve vaardigheden binnen het sociale systeem van hun werkomgeving. Daarnaast moeten observatie-methodes worden ontwikkeld die beter afgestemd zijn op de behoeften van de patiënt en de specifieke doelstellingen die met de communicatie bereikt moeten worden. Ook dienen organisatorische en structurele kenmerken van de werkomgeving waarbinnen de interacties tussen zorgverleners en patiënten plaatsvinden, in toekomstig onderzoek beter bestudeerd te worden.

We beëindigen dit onderzoek met een laatste aanbeveling. Een belangrijke taak van de verpleegkundige is de integratie van affectieve communicatie in de zorg voor de kankerpatiënt. Integratie van deze vorm van communicatie in de zorg blijkt echter moeilijk. Om dit te vergemakkelijken zou een verpleegkundig protocol ontwikkeld moeten worden, waarin niet alleen het belang van de balans tussen instrumentele en affectieve communicatie benadrukt wordt om een goede therapeutische relatie met de patiënt en zijn/haar familie aan te gaan, maar waarin ook benadrukt wordt dat rekening moet worden gehouden met de professionele werkomgeving waarbinnen communicatie plaatsvindt.

APPENDIX 1

APPENDIX 1

The content of the communication training program

During every meeting the skills were taught according to a regular schedule, which consisted of the following elements:

- a test of the theory;
- a short discussion of the assigned homework and the theoretical background of the current lesson;
- instruction regarding the objective of skills and how to use them;
- demonstration of the skills;
- practicising the skills by means of role playing and homework assignment (this is an exercise which has been taught during the course and will be applied to a home or work situation).

The oncological and communicative themes to be taught during the training program were the following:

Day 1

During the first lesson the participants were taught the basics of the communication theory, in order to get more insight into the question: 'What is communication?'

Also several psychosocial aspects regarding the confrontation with cancer were discussed, such as the life threatening character of the disease and the emotional and physical burden of the treatment.

Day 2

During the second lesson the emotional consequences of cancer were discussed, such as coping with the loss of health, and emotions like anxiety, depression, anger, guilt shame etc.

Participants also received insight in separate communication skills, which are considered basic elements of a conversation. These include the non-directive communication skills on the one hand, such as eye contact, posture, verbal attentiveness, (open) question asking, silence, etc; and the more directive or controlling skills on the other hand, such as paraphrasing, emotional reflection, summarizing, concretisizing, own expression etc.

Day 3

During the third lesson, attention was paid to handling patients' emotions. Also the participants got an insight into the structure of a conversation; for example the different phases of a conversation such as the introduction, the middle part and the end of the conversation, and the use of appropriate skills during the different phases.

Day 4

During the fourth lesson, patient education was a central theme.
The participants received an insight into how to structure the information with which they provide patients. Relevant counselling skills, which can be used during the provision of patient information, were also taught.

Day 5

During the fifth lesson resistance of oncology patients was taught, such as 'irrational thoughts'. Nurses got an insight into different therapeutic techniques, focussed on handling resistance (such as challenging, rewarding/punishing).

Day 6

During the sixth lesson, resistance of nurses themselves was a central theme. The participants got an insight into how to deal with their own resistance regarding emotionally laden situations, such as caring for terminally ill cancer patients.

Follow up

After two months, there was a follow up meeting in which the training was evaluated by the members of the course, and where the participants still got the opportunity to acquire communication skills by means of role playing exercises.

APPENDIX 2

Appendix 2

The Roter Interaction Analysis System (adapted version)

Instrumental categories

Directions
- gives orientation/instruction
- bids for repetition
- asks for understanding
- asks for opinion

Question-asking (closed and open-ended)
- asks questions about medical topics/therapeutic regimen
- asks questions about hospital/ward issues
- asks questions about lifestyle issues
- asks questions about psycho-social topics/feelings

Information-giving
- gives information about medical topics/therapeutic regimen
- gives information about hospital/ward issues
- gives information about lifestyle issues
- gives information about psycho-social topics/feelings

Counselling
- counsels behaviour on medical topics
- counsels behaviour on lifestyle topics and feelings

Socio-emotional categories
- personal remarks/social conversation
- tells jokes/laughs
- shows approval
- gives compliment
- shows concern/worry
- shows agreement/understanding
- paraphrases/checks
- shows empathy/legitimizes
- reassures/encourages/shows optimism
- shows partnership
- shows disapproval
- shows criticism
- asks for reassurance

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CURRICULUM VITAE

Irma Kruijver werd op 22 mei 1963 geboren in Maastricht. Na de afronding van de HAVO (Stedelijk Lyceum te Maastricht, 1982) en het Atheneum (Avond College te Maastricht, 1985) ging zij Gezondheidswetenschappen studeren aan de toenmalige Rijksuniversiteit Limburg (nu Universiteit Maastricht). In 1991 studeerde zij af binnen de afstudeerrichting Geestelijke Gezondheidkunde. In 1993 startte Irma met een sociaal-oncologisch fellowship, verstrekt door de Nederlandse Kankerbestrijding (KWF). De uitvoering van dit fellowship heeft zij verricht op het Nivel (Nederlands instituut voor onderzoek van de gezondheidszorg) in Utrecht onder begeleiding van mw prof. dr. J.M. Bensing. Dit fellowship werd afgerond met het indienen van een promotievoorstel, dat in het najaar van 1995 goedgekeurd werd.

In 1996 ging het promotieproject van start, wederom op het Nivel. Behalve mw prof. dr. J.M. Bensing waren prof. dr. H.B.M. van de Wiel (Rijksuniversiteit Groningen) en mw dr. A. Kerkstra (Nivel) bij de begeleiding betrokken. De basis van dit proefschrift lag in de periode dat het sociaal-oncologisch fellowship werd uitgevoerd, en is door Irma uitgewerkt in de vijf jaren die volgden.

Sinds 1 januari 2001 werkt Irma als sociaal-wetenschappelijk onderzoeker bij het Helen Dowling Instituut. Dit instituut legt zich toe op onderzoek, patiëntenzorg en deskundigheidsbevordering op het terrein van de psychosociale oncologie.