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<u>Report</u> Reproductive health and reproductive health services in North-East Kazakhstan

Experiences and opinions of providers and users of services

STICHTING PRO projecten rusland in ontwikkeling

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PROJECT

"Delivery without fear"





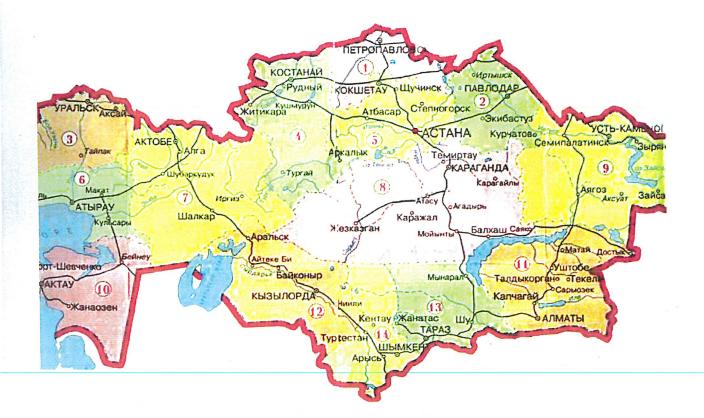
MATERIALS OF THE RESEARCH ON THE ATTITUDE TOWARDS HEALTH CARE INSTITUTIONS AND DELIVERY AMONG THE POPULATION IN EAST KAZAKHSTAN

> East Kazakhstan Ust-Kamenogorsk, 2005 y.

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This report summarizes the findings of the survey among the general population in North East Kazakhstan. The survey has been carried out in the framework of the Rody bez Strakha project, implemented in North East Kazakhstan during 2004-2005 by the Dutch Stichting PRO and the Kazakh partners KPMA (Almaty, Semipalatinsk) and Status (Ust Kamenogorsk). The Rody bez Strakha project has been financed by Tacis IBPP.

The survey had been implemented to gain knowledge about what clients, doctors and policy developers think about the reproductive health care services in the region, and to know more about the attitude towards pregnancy and delivery these groups in society have. The ultimate goal is to use this knowledge for the enhancement of the quality of care.



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PO "Women's Federation "Status" questionnaried 2500 respondents from Ust-Kamenogorsk, Ridder, Ulanskiy and Glubokovskiy districts according to the planned sample of research. The main role in gathering and initial processing of questionnaires belongs to Gukovich S.E.

the Netherlands Institute for Health Services Research, took the analytical part of the survey. We would kindly thank **Therese Wiegers and Wienke Boerma** of NIVEL for their scientific contributions

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### Foreword

The programme Rody bez Strakha has been implemented by foundation PRO, The Netherlands, from 1998 on in Russia, Belarus, Ukraine and, during 2004/2005, in Kazakhstan. The idea behind the program is, that after more than a decade of restructuring the health sector, women and infants in Former Soviet Union still face serious health issues. Though the situation in the countries may differ, the heritage of the Soviet system is similar across former Soviet countries, including Central Asia: women have little access to information to prepare them for birth, practices in maternity wards are over-medicalized and strip women from human dignity, partners are not allowed to be present for delivery. In addition, seriously outmoded standards and *prikazy* hamper introduction of evidence based practices. Misconceptions about pregnancy and childbirth are widely spread and elevate additional fears and anxiety. Prenatal stress predisposes mothers to a harder time during labour, can lead to further problems in the afterbirth period and breastfeeding, and can eventually contribute to a high susceptibility to infections for infants. Absence of a professional counselling and almost zero-level of grassroots awareness in reproductive health leaves the population in these countries almost ignorant of family planning and preventative medicine.

Such a picture is, unfortunately, still existent in Kazakhstan, where the important population and reproductive health issues that need to be more forcefully addressed are:

- 1. High maternal mortality rates;
- 2. Inadequate access to- or absence of- quality services for prenatal, natal and postnatal care;
- 3. The need to address the reproductive health needs of young people, ensuring access to information and services to help them adopt healthy behaviours;
- 4. Inadequate access to counselling, diagnosis and treatment of STIs (including HIV/AIDS) is increasingly recognized as a constraint in the whole Central Asia;
- 5. The almost zero-level of knowledge on reproductive health&rights among vulnerable populations

According to recent UN country reports, the primary factors contributing to maternal mortality are the poor health status and nutrition of women.

Other reasons are:

- Early pregnancy;
- Obstetric hemorrhage (30%)
- Abortions and their complications (24%)
- Serious forms of gestose (23%)
- Extra-genital and septic diseases (9%)
- Poorly trained birth attendants, with over medicalization of practices in the maternity wards

As a result, there is a high rate of complications during pregnancy and births. At least sixty percent of deliveries are with complications, with the Kazakh government conceding that 40 percent of all maternal deaths might have been prevented by improving access to quality healthcare.

Of particular interest is the fact that maternal mortality is occurring mainly in maternity wards (though Kazakh professionals are opposing the idea of home deliveries) while prenatal mortality is not occurring in small and low-weight babies, but rather in normal babies and those weighing above 2.5 kg.

What these statistics tell us is that there is a tremendous problem with quality healthcare within institutions where women and babies should not die.

There is a real need to retrain most of the country's gynecologists and nutritionists; the training they had received during the time of the Soviet Union is now obsolete. Practices are absolutely outdated when compared with the advances of modern healthcare. Care is very much medicalized, heavily dependent on doctors and nurses, with very little on prevention. "You would be surprised at the frequency of injecting solutions and drugs for many, many treatments, which in other parts of the world are seldom used. We are trying to provide our protocols to look at the same issue, but in a more simplified way." stated one Unicef –researcher during the research we made.

The fact that service providers lack adequate counseling skills result in bad communication between patient and doctor, what in turn lead to lack of trust from the side of the patient. Focus groups from North East Kazakhstan report numerous stories of incompetence and frustration when talking about sexual and reproductive health with local medical staff and facilities. A growing number of women do not even visit the women's consultations when

they are pregnant, as they feel that they do not get the needed support and care. Reproductive health programs should complement client education efforts with efforts to upgrade the quality of provider skills, in the area of interpersonal communication and counselling as well as modern medical-technical aspects. A reallocation of work division between the medical provider (gynaecologist) and the nurse or midwife (who in the current work division is mainly doing administrative tasks) should be introduced. Providers should be trained in the use of client-oriented interaction skills to improve their relationships with clients in order to enhance the Quality of Care. This is especial needed for young people, who can go practically nowhere with their specific reproductive and sexual health questions.

Exactly these issues have been addressed in the Rody bez Strakha program. In the four countries more than 400 midwives-gynaecologists were trained in Communication and Professional Attitude, 250 instructors for courses to prepare future parents were trained, alternative health services were created in 12 cities, cooperation agreements between women health services and maternity wards for continuity of care were promoted. In Belarus an independent League of Midwives has been founded, in Ukraine new protocols to support normal birth were introduced by the MoH. Trained doctors reported dramatically decrease of complications during delivery, total length of delivery process decreased with 2 hours, 70% of hospitals at sites allowed other than vertical deliveries, the number of medical interferences decreased: especially episiotomy and Caesareans. The use of pain killers fell with a quarter, as well as artificial stimulation of contractions.

In North East Kazakhstan 40 gynaecologists and midwives have been trained and 30 instructors. In Semipalatinsk and Ust Kamenogorsk two services are founded, where people of reproductive age as well as medical service providers can have information and training seminars on reproductive health issues.

In this report you will find information on what clients, doctors and policy developers think about the reproductive health care services in the region, and learn more about the attitude towards pregnancy and delivery these groups in society have. In the framework of United Nations Development Assistance Framework (UNDAF) the Kazakh Ministry of Health launched the Country Programme Action Plan on Reproductive Health and Safe Motherhood 2005-2010. The strategy of this Country Programme is to strengthen the capacity of the Kazakh MoH to formulate reproductive health policies and develop legislation and guidelines based on international standards.

We definitively hope that the activities of the project as well as the information in this report will inspire policy developers of the Ministry, decision makers and service providers in the reproductive health system to develop those conditions that will lead to the enhancement of the Quality of Care, what will lead ultimately to a situation, where women are enabled and supported to give birth to a wanted and healthy child.

Olga de Haan, project leader Stichting PRO, Amsterdam, The Netherlands

Reproductive health and reproductive health services in North-East Kazakhstan - Experiences and opinions of providers and users of services -

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### 1. Introduction

Kazakhstan is a former Soviet Republic in central Asia with approximately the size of Western Europe (2.7 million square kilometres) and a population similar in size to that of the Netherlands (±16 million). The region Semipalatinsk is located in the north east of the country, bordering on Russia and China. The region Semipalatinsk is the ecologically most unfavourable region in Kazakhstan, especially for childbearing women, because of the presence of a nuclear test site.

The Kazakhstan Association for Sexual and Reproductive Health (KMPA) has held a survey about the actual care during pregnancy and childbirth and the desired changes in reproductive health care in the region. They interviewed people involved in the provision of (maternity) health care (in particular, physicians and civil servants) as well as (potential) receivers of health care.

### 2. Method

Structured interviews using questionnaires were held with four groups: physicians, working in the obstetric system in Semipalatinsk; representatives of the local and regional authorities; pregnant women between 15 and 49 years of age residing in the region; men and women between 15 and 49 years of age also residing in the region. Data have been analysed using SPSS statistical software.

### Respondents

400 Physicians, of whom 39 percent are 40 years of age or younger, the majority (62%) living in a city. The physicians are working in a variety of settings: in rural practices (ambulatoria) 26%, in children's policlinics 9.5%, in antenatal clinics 27%, in maternity hospitals 21%, in hospital obstetrics departments 11%, or in another setting 5.5%.

40 Civil servants, of whom 26 are employees of the State Health Department, 8 are representatives of the Public Health Care, 4 are representatives of the Social Services, and 2 are representatives of the Transport Department. 1999 Pregnant women, 51% of whom are 25 years of age or younger and 10% are older than 35 year, almost all of whom are married, either registered (77%) or non-registered (16%). One in three started and 28% finished higher education, 36% received vocational training after secondary school. One in ten is student (9%) or pupil (1%), 45% are housewives, the others work in an office (27%), a factory (12%) or in trade (6%).

2000 Women, 39% of whom are 25 years of age or younger and 30% are older than 35 year, 61% of whom are married, either registered (52%) or non-registered (9%). Thirty-five and a half percent started and 27% finished higher education, 36% received vocational training after secondary school. A minority is student (11%) or pupil (5%), 24% are housewives, the others work in an office (36%), a factory (16%) or in trade (8%).

560 Men, 56% of whom are 25 years of age or younger and 23% are older than 35 year; 44% of whom are married, either registered (42%) or non-registered (2%). Thirty-six percent started and 26% finished higher education, 32% received vocational training after secondary school. A minority is student (24%) or a pupil (7%), 3% work at home, the others work in an office (29%), a factory (31%) or in trade (2%).

(see appendix for an overview of the data on women and men).

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## 3. Physicians and civil servants about health care and obstetric care

This chapter deals with opinions of physicians and civil servants concerning quality and access to health care and obstetric services, their knowledge an attitudes related to pregnancy and delivery and the role of women in it.

## 3.1 Opinions concerning health care

Table 3.1: Opinions of phy	sicians about he	pinion on level and qu	ality of services	(% agreement)		
Physicians'	0]	oinion on level and qu	Low	No service	Other	N
work setting	High level and	Low level because	quality	at all	opinion	
	high quality	of under-financing		14.6	1.9	103
Rural practice	10.7	59.2	13.6	18.4	0.0	38
Children's policlinic	10.5	68.4	2.6	6.8	0.0	44
Hospital obstetric dept.	11.4	81.8	0.0	0.0	0.0	81
Maternity hospital	18.5	80.2	1.2		4.7	106
	28.3	63.2	2.8	0.9	0.0	21
Antenatal clinic	19.0	52.4	0.0	28.6		393
Other	17.6	67.7	4.8	8.1	1.8	393
All physicians	17.0					

about health care in Kazakhstan

Physicians are not very positive about the level and quality of care in Kazakhstan: only 18% assess the medical services rendered as being of high level and high quality. Physicians differ in this judgement according to their position in the health system. Rural doctors and those from children policlinics (so, those working in the first line of health care) are the least positive: less than 11 % agrees that quality and level of health services are high. Most positive are physicians from Antenatal clinics (28% agreement) and Maternity hospitals (19%). About two thirds of the doctors think that the level of services is not sufficient because of under-funding. Particularly hospital doctors agree that this is the problem. More than their colleagues in other settings rural doctors also think that the quality of health care is low (14%). And a relative large proportion of both rural doctors and those from children policlinics agree that there is a complete absence of services (15% and 18% respectively).

This question was also asked to civil servants, and it appeared that they were not positive either: only 15% agreed that the level and quality of the medical services are high, while 34% think the quality to be low. However, half of the responding civil servants did not answer this question.

## 3.2 Opinions concerning obstetric care

Physicians' and civil servants' opinions were asked whether the Kazakhstan obstetric care system would meet international criteria for client friendly attitudes? From the answers it appeared that less than half of both the physicians (41%) and the civil servants (45%) think that the Kazakhstan obstetric system is in line with international criteria for client friendly attitude. Similar proportions have explicitly disagreed with this statement. Nineteen percent of the physicians and 10% of the civil servants have not answered this question.

In table 3.2 the answers of the physicians have been broken down by the working situation of the physicians.

Table 3.2: Physicians' opinions about C	client friendliness of Kazakhstan obstetric system Criteria of client friendliness	
Physicians'	are met (% agreement)	
work setting	32.0	103
Rural practice	57.6	33
Children's policlinic	52.3	44
Hospital obstetric dept.	56.3	80
Maternity hospital	67.4	43
Antenatal clinic	52.4	21
Other	49.4	324
All physicians		

Physicians in antenatal clinics are most positive about client-friendliness of obstetric services: well over two-thirds (67%) think that this is the case. In contrast, among the doctors in rural practices more than two-thirds (68%) hole the opinion that obstetric services are not client friendly. Doctors in the other work settings are in intermediate positions in this respect, with at least a majority agreeing that criteria of client-friendliness are met.

### 3.3 Access to obstetric services

Physicians'	Perceived access of obstetric services (% agreement)						
work setting	unrestricted for all women	only for those able to pay	only for those living close to facilities	No / very poor access	Ν		
Rural doctor's practice	47.6	1.0	51.5	0.0	103		
Children's policlinic	47.4	5.3	47.4	0.0	38		
Hospital obstetric dept.	36.4	2.3	61.4	0.0	44		
Maternity hospital	66.7	2.4	31.0	0.0	84		
Antenatal clinic	80.7	0.0	15.6	3.7	109		
Other	40.9	0.0	59.1	0.0	22		
All physicians	59.0	1.5	38.5	1.0	400		

Table 3.3. How physicians perceive women's access to obstetric services.

Table 3.3 shows that overall only 59% of the physicians agree with the statement that obstetric services have unrestricted access for all women in Kazakhstan. Again, there are strong differences between doctors according to their working place. On the one extreme, there are 81% of doctors in antenatal clinics who feel that there is unrestricted access, while, on the other extreme, only 36% of their colleagues in obstetric departments of hospitals agree with this point of view. Among physicians in rural practices and children policlinics there is no majority thinking that access is free of obstacles. Colleagues in maternity hospitals are more positive, with 67% agreement. In addition, it was asked to which extent doctors saw obstacles to access more in financial terms or related to the distance to facilities. It is remarkable how few doctors see ability to pay as an obstacle for access. However, distance seems to be a problem in the eyes of many doctors; 39% agrees that obstetric services are only well accessible for those who live nearby. Especially hospital doctors (61%), but also about half of the physicians in rural practices (52%) and children policlinics (47%) hold this opinion.

Physicians and civil servants were asked what should be done to facilitate access to care services and to offer care of good quality to women. Results are in table 3.4.

Perceived remedies	% Physicians	% Civil servants
People should take responsibility for their own health	46.8	37.5
Increase the budget	45.8	52.5
Training of personnel	40.3	37.5
Provide social work	12.5	20.0
Improve legislation/regulation	11.3	22.5
A dopt new laws	6.3	27.5

Table 3.4. Remedies for poor access and quality of care as perceived by physicians and civil servants

More than civil servants (38%) do physicians (47%) see improvement of access and quality of care as a personal problem of patients: people should take more responsibility for health. Civil servants tend to see solutions more in terms of increased budget (53%, versus physicians 46%), improved regulation (23% versus 11%) and new legislation (28% versus 6%). About equal proportions in both groups think that changes will result from training of medical staff (38% and 40%). Twenty percent of civil servants and 13% of doctors see provision of social work as a solution.

In table 3.5 results of the physicians have been broken down to wok setting.

Table 3.5: Physicians in different settings about possible remedies for poor access and quality

Physicians'	Percei	Perceived ways to improve access/quality of obstetric services (% agreement)							
Work setting	People are responsible for	Increase the budget	Training of personnel	Provide social work	improve regulation	adopt new laws	N		
	own health								
Rural doctor's practice	58.3	47.6	21.4	17.5	16.5	5.8	103		
Children's policlinic	31.6	44.7	36.8	5.3	10.5	5.3	38		
Hospital obstetric dept.	47.7	36.4	20.5	4.5	2.3	2.3	44		
Maternity hospital	70.2	69.0	36.9	13.1	21.4	13.1	84		
Antenatal clinic	20.2	26.6	72.5	13.8	3.7	3.7	109		
Other	59.1	63.6	27.3	9.1	4.5	4.5	22		
All physicians	46.8	45.8	40.3	12.5	11.3	6.3	400		

Among doctors working in maternity hospitals (70%) and those in rural practices (58%) the conviction is most widespread that personal responsibility for health matters is crucial for improvement. But at the same time these two groups are more than average in favour of increasing the budget for obstetric services (69% and 48% respectively). Personal responsibility and the need to rise the budget are much less of a problem to their colleagues in antenatal clinics (20% and 27% respectively); but these expect much more from staff training 73% than other doctors do (from 21% to 37%). Finally, hospital doctors differ from all other doctors in their preference for regulatory and legislative changes.

## 3.4 Effectiveness of obstetric services

The physicians were asked to express their opinion about the effectiveness of a number of routine interventions during delivery of low risk women. The interventions concerned and the answers are in figure 3.1 and table 3.6.

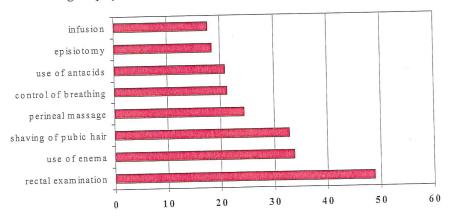


Figure 3.1 Intervention considered as <u>not</u> effective routines, according to physicians

Table 3.6: Physicians about the effectiveness of 9 interventions made as a routine during derivery.	Table 3.6:	Physicians about the effectiveness of 9 interventions made as a routine du	uring delivery.
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Physicians' % agreeing that this intervention as a routine is <u>not</u> effective									
Physicians'		D / 1 Control of Perineal H							
work setting	Use of	Shaving of	Use of	Infusion	Supine		breathing	massage	tomy
_	enema	pubic hair	antacids		position	examı-	breathing	massage	tomy
		1				nation			
D 1	54.4	37.9	27.2	15.5	24.3	61.2	33.0	35.0	19.4
Rural practice			50.0	36.8	28.9	31.6	28.9	26.3	31.6
Children policlinic	50.0	55.3			63.6	79.5	38.6	61.4	29.5
Hospital obstet dept.	68.2	75.0	11.4	9.1			11.9	17.9	28.6
Maternity hospital	22.6	16.7	31.0	29.8	22.6	67.9			
Antenatal clinic	10.1	15.6	2.8	4.6	8.3	19.3	11.0	7.3	2.8
		31.8	13.6	31.8	27.3	31.8	4.5	9.1	9.1
Other	0.0	-		17.8	24.5	48.8	21.3	24.5	18.5
All physicians	33.8	32.8	21.0	1/.0	44.5	40.0	2110		

The intervention judged as ineffective by the largest part of the doctors was the rectal examination: half of all physicians (49%) considered it ineffective. Furthermore one-third (34%) regarded routine enema as ineffective and also one-third (33%) regarded shaving as an ineffective routine measure. (In the international literature these interventions are regarded as obsolete indeed).

One quarter (25%) of the physicians agreed that the supine position is ineffective as a routine, while 21% held this opinion with the routine application of antacids, 19% with routine episiotomy and 18% with routine infusion. (There is general agreement, that infusion, episiotomy and antacids should not be given routinely and that a supine position, if not actually complicating, at the least is not facilitating the birth process). Finally, 25% answered that routine perineal massage was not effective and 21% that routine breath control is ineffective.

Variation among doctors in their belief in these routine procedures is very large. In general, respondents working in antenatal clinics were stronger than any other subgroup believing in the effectiveness of these routines. Most critical (or one could say: relatively well-informed) are doctors from hospital obstetric departments and those from

children policlinics. But even among the hospital doctors, for instance, large majorities belief in the effect of routine antacid application and infusion (which are not state of the art).

Another question dealt with the visit frequency of pregnancy monitoring clinics with respect to low risk pregnancies. Physicians were asked what should be the preferred frequency to see pregnant women in such conditions.

Physicians	preferred frequency of pregnancy monitoring clinics (% physicians)							
work setting	Weekly	2 weekly	Monthly	4-5 visits	No doctor's visit			
work setting	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	2		in total	necessary /other			
Rural practice	8.9	29.7	49.5	11.9	0.0			
Children policlinic	28.6	20.0	48.6	2.9	0.0			
Hospital obstetric dept.	18.2	0.0	75.0	6.8	0.0			
Maternity hospital	18.5	28.4	23.5	28.4	1.2			
Antenatal clinic	25.6	34.9	20.9	11.6	7.0			
Other	22.7	45.5	13.6	13.6	4.5			
All physicians	17.8	26.1	40.2	14.4	1.5			

Table 3.7 Physicians about desired frequency of pregnancy monitoring clinics

The answers, shown in table 3.7, point to little agreement among doctors regarding the preferred frequency of pregnancy monitoring visits. Many (40%) think that such checks should take place once a month, but hospital doctors do think so much more often (75%) than do doctors working in antenatal clinics (21%). A quarter (26%) of all responding physicians think that pregnant women should be seen every two weeks, and 18% even think it should be every week. Fourteen percent have answered that four to five visits during pregnancy is enough and 1.5% think that women with low risk pregnancies do not need to see a physician at all.

### 3.5 Physicians' knowledge and attitudes

Most responding physicians (84%) reported to be acquainted with the WHO programme 'Safe Motherhood'. However only 39% knew about the Kazakhstan documents and regulations concerning sexual and reproductive rights of patients. Among civil servants this percentage was 55%.

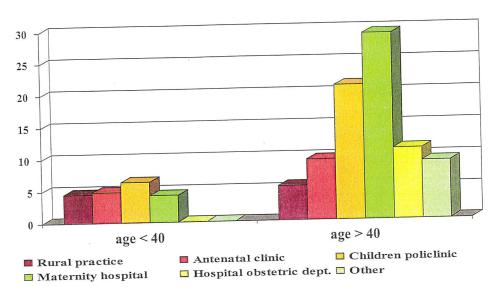
Physicians were asked to which extent they are familiar with new alternative methods of pregnancy monitoring and delivery control

Table 3.8 Knowledge of physicians about programmes and alternative methods of pregnancy and delivery control

Physicians	Knowledge about alternative methods of pregnancy and delivery control						
work setting		Intil 40 years of a		Over 40 years of age <sup>2)</sup>			
work setting	ves	110	not enough	yes	no	not enough	
Rural practice	43.2	15.9	36.4	58.6	22.4	19.0	
Children's policlinic	35.3	47.1	17.6	33.3	19.0	47.6	
Hospital obstetric dept.	38.5	30.8	30.8	82.8	6.9	10.3	
Maternity hospital	36.7	30.6	32.7	46.2	19.2	30.8	
Antenatal clinic	50.0	37.5	8.3	63.3	19.0	5.1	
	44.4	44.4	11.1	63.6	9.1	27.3	
Other All physicians	41.0	30.1	26.9	59.8	17.9	17.4	

<sup>1)</sup> 1.9% did not answer <sup>2)</sup> 4.9% did not answer

Older doctors, those being 41 years of age or older, more often told to be sufficiently informed about alternative methods of pregnancy and delivery control than younger doctors (60% and 41% respectively). This age difference was much stronger among physicians working in the hospital obstetric departments: the older ones more than twice as much reported to have sufficient knowledge (83%) than the younger ones (39%). Doctors in children policlinics more than others answered not be (sufficiently) informed; particularly the older ones.



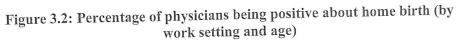


Table 3.9: Physicians opinions about home birth and need for change in obstetric care

	Opinion on hom	he hirth and perceived n	eed for change in the ob	stetric care system	
Physicians	Until 101	years of age	Over 40 years of age		
work setting	% positive towards home birth needed		% positive towards home birth	% thinking changes needed in obstetric	
	nome birm	in obstetric care		care	
	4.5	93.2	5.4	78.6	
Rural practice		29.4	21.1	66.7	
Children policlinic	6.3		11.1	89.7	
Hospital obstetric dept.	0.0	76.9	29.2	81.8	
Maternity hospital	4.2	81.1		16.0	
Antenatal clinic	4.8	62.5	9.5		
	0.0	66.7	9.1	57.0	
Other All physicians	4.0	74.8	12.0	57.0	

Figure 3.2 and table 3.9 show that doctors are certainly not in favour of the idea of home deliveries: 84% would not support it. This is even more true for younger doctors, of whom only 4% is positive, than for the older ones, where 12% is positive about it. The comparison of the age groups shows an interesting 'generation gap' among doctors in both maternity hospitals and children policlinics. In these two settings the older doctors are much more positive (29% and 21% respectively) than their younger colleagues (4% and 6% respectively). In the light of these negative attitudes towards home birth it is interesting that almost three quarters (73%) of the physicians answered to be interested in information about the obstetric care system in the Netherlands, where almost one third of the deliveries is at home.

A majority of the physicians (64%) feel that changes are needed in the obstetric system in their region. In general, this opinion is more widespread among younger doctors (75%) than among the older ones (57%), although this difference is not true in hospital obstetric departments and children policlinics. The need for change is strongest felt by doctors in rural practices, hospital obstetric departments and maternity hospitals.

### 3.6 Need for information

A large majority of physicians (89%) and of civil servants (90%) would like to receive more information about sexual and reproductive rights and about the Kazakhstan law covering these themes.

Physicians	Preferred mode of information							
work setting	Until	40 years of	f age (% prefer	ence)	Ov	ver 40 years	s of age (% prefe	erence)
Home Section B	journals	news-	information	quarterly	journals	news-	information	quarterly
	Journaid	papers	letters	reports	-	papers	letters	reports
Rural practice	40.9	13.6	9.1	20.5	43.1	17.2	15.5	20.7
Children's policlinic	41.2	29.4	23.5	5.9	19.0	38.1	42.9	0.0
Hospital obst. Dept.	53.8	30.8	15.4	0.0	24.1	6.9	0.0	10.3
Maternity hospital	50.0	16.7	18.8	14.6	38.5	23.1	23.1	11.5
Antenatal clinic	8.3	45.8	12.5	20.8	15.2	68.4	8.9	7.6
Other	44.4	44.4	0.0	11.1	33.3	44.4	0.0	0.0
All physicians	40.0	24.5	14.2	14.8	27.5	37.8	14.0	10.8

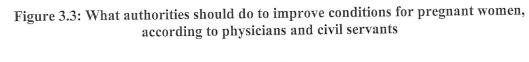
Table 3.10: Physicians' preferred mode of information on sexual/ reproductive rights and related legal topics

Except for physicians working in antenatal clinics and for older physicians working in a children's policlinic or a hospital obstetric department, the preferred mode of receiving information on sexual and reproductive rights and related legal topics is through journals (see table 3.10). In general, journals are more often preferred for this purpose by younger than by older physicians.

This question was also asked to civil servants and these appear to prefer almost equally newspapers (25%), information letters (25%) and journals (22,3%), rather than quarterly reports (7,5%) as a way to be informed.

## 3.7 The perceived role of authorities in improving conditions for pregnant women

Both physicians and civil servants were asked what kind of measures authorities should take to improve the situation of pregnant women. Answers are in figure 3.2 and table 3.11.



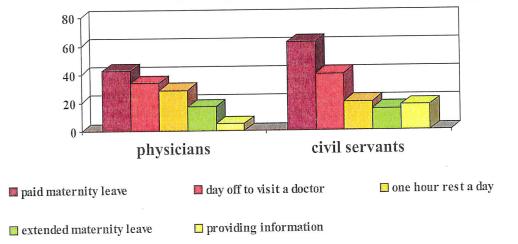


Table 3.11: Opinion of physicians (n = 400) and civil servants (n = 40) about possibilities of authorities to improve conditions for pregnant women

Possible measures	Physicians N=400	Civil servants N=40
	%	%
Paid maternity leave	42.5	62.5
Weekly day off to visit a doctor	34.0	40.0
One hour rest a day	28.5	20.0
Extended maternity leave	17.0	15.0
Providing information	5.0	17.5

The measure which is expected to be most helpful for pregnant women is paid maternity leave; 43% of the physicians and 63% of the civil servants agree that salary should be paid until the end of maternity leave. The statement that one day a week should be free to visit a physician is supported by 34% of the physicians and by 40% of civil servants. Furthermore 29% of physicians and 20% of civil servants agreed with the statement that employers should give pregnant women one hour rest a day. Maternity leave should be extended according to 17% of the physicians and 15% of civil servants. Finally, 5% of physicians and 18% of civil servants think that providing more information to pregnant women would improve their situation.

## 3.8 Way to women's preferences

Physicians were asked about effects of giving women choice about their position during delivery and effects of physical and psychological-emotional support during delivery. Most physicians are inclined to give women freedom of choice concerning her position during birth, but still 16% (even 24% among the youngest age group) indicate there is no need to give women such freedom.

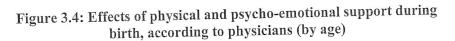
Concerning the expected effects of such freedom one in five physicians does not see any positive effects. Among the younger physicians (under 40) the proportion that does not expect any effect is higher (27%) than among those over 50 (19%), or those between 41-50 years (14%).

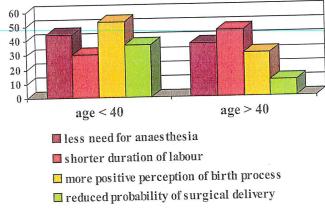
Results according to the type of effects are shown in tables 3.12 and 3.13.

Table 3.12: Physicians expected effects of women's choice of birth position
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D1		Expected eff	ects of women's ch	oice (% agreein	ng that it reduce	s:)		
Physicians		Until 40 years of		Over 40 years of age				
work setting			Perineal trauma	Discomfort	Pathology	Perineal trauma		
	Discomfort	0.	9.1	19.0	27.6	27.6		
Rural practice	27.3	36.4		38.1	52.4	9.5		
Children policlinic	29.4	35.3	17.6		51.7	27.6		
Hospital obst.dept.	35.5	46.2	15.4	27.6		42.3		
Maternity hospital	59.2	10.2	16.3	53.8	46.2			
Antenatal clinic	54.2	29.2	20.8	86.1	10.1	3.8		
		44.4	44.4	45.5	18.2	27.3		
Other	77.8		16.7	50.9	28.6	19.2		
All physicians	45.5	28.2	10.7	2019				

Almost half of the physicians (49%) consider it might reduce the discomfort, well over one quarter (28%) consider it might reduce the number of pathological deliveries, while 18% think it might reduce perineal trauma. Only very few doctors (3%) expect that free choice of position will reduce infections (this option is not shown in the table). Overall, the differences between the younger and the older doctors are small, but if work settings are taken into account variation is more clear. For instance, doctors in maternity hospitals and in antenatal clinics more often than the average think that giving women choice of birth position reduces discomfort. Doctors in the obstetric departments more often belief that it will reduce pathology. A relatively large proportion of older doctors in maternity hospitals expect that free choice will reduce perineal traumas.





Physicians	Expected effects (% agreeing)							
work setting		Until 40	vears of age			Over 40	years of age	
	Less need	Shorter	More	Reduced	Less need	Shorter	More positive	Reduced
	for	duration	positive	probability	for	duration of	perception of	probability of
	anaesthesia	of labour	perception of	of surgical	anaesthesia	labour	birth process	surgical
			birth process	delivery	*			delivery
Rural practice	40.9	15.9	45.5	40.9	41.4	20.7	53.4	6.9
Children	29.5	29.4	35.3	35.3	33.3	42.9	28.6	28.6
policlinic								
Hospital	15.4	53.8	35.8	15.4	41.4	24.1	6.9	6.9
obst.dept.								
Maternity	63.3	26.5	65.3	51.0	80.8	38.5	73.1	30.8
hospital								
Antenatal	33.3	50.0	45.8	12.5	17.7	79.7	10.1	5.1
clinic								
Other	55.6	33.3	66.7	33.3	54.5	27.3	18.2	18.2
All physicians	44.2	30.1	52.6	36.5	37.5	46.4	30.4	11.6

Table 3 13.	Physicians expected ef	fects of physical	and psycho-emotion	al support during birth
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Although only 3% of the physicians expect that physical and psycho-emotional support of the women during delivery will have no impact at all on the result of the delivery, almost two thirds (63%) have generally low expectations of the possible effects of such support. Younger doctors are slightly more positive about it than the older age groups. Asked about specific effects, 41% of the physicians think it will reduce the need for anaesthesia, 40% belief it will reduce the duration of the delivery, 39% think it will result in a more positive perception of the birth process, and 22% expect it will reduce the probability of a surgical intervention.

Comparatively, doctors in maternity hospitals have more expectations of support during delivery than other doctors. Greater than average proportions of doctors in maternity clinics expect that support will result in a lower need for anaesthesia, a more positive perception of the birth process and a reduced probability of surgical intervention. Physicians working in antenatal clinics think that deliveries with support will be shorter. A relatively large proportion of older rural doctors expect that the perception of the birth process will be more positive. Many older doctors working in children policlinics expect that fewer surgical interventions will be needed.

### 4. Women's and men's opinions related to obstetric care and pregnancy

### 4.1 Visit frequency and perceived quality of services

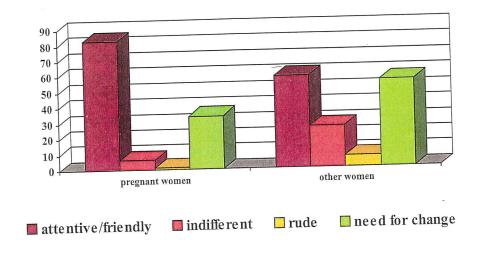
The pregnant women were asked how often they visited a gynaecologist

Place of living /	Frequency of visiting a gynaecologist/physician (%)						
Category	Monthly	Once in 3 months	Once in 6 months	Yearly	Less than yearly	N	
City	43.2	12.8	17.2	17.2	9.7	1446	
District/small town/suburb	39.1	7.9	24.3	19.3	9.4	202	
Village/rural	44.7	7.8	9.7	16.5	21.4	103	
All pregn. Women	42.8	11.9	17.5	17.4	10.3	1751	

Table 4.1 Visit frequency of pregnant women to a gynaecologist / physician

Of the pregnant women 43% see their gynaecologist once a month, 12% once every three months, 18% once every six months and 17% once a year. In district and small towns and suburbs the group with monthly visits is slightly smaller than in larger centres and rural areas. In rural areas we see a discrepancy between a large group of frequent attenders and another relatively large groups of very infrequent attenders (less than one a year). The visit frequency in the intermediary group of district and small towns and suburbs is relatively low, with an overrepresentation of women visiting only once or two times per year.

The visit frequency reported by the pregnant women is in sharp contrast with the preferred visit frequency to antenatal clinics as reported by the physicians in table 3.7. No less that 84% of the doctors answered that a pregnant woman should be seen at least monthly.



# Figure 4.1: Service quality of antenatal clinics and perceived need for change of these services, according to women

Table 4.2 Opinion of pregnant and non-pregnant women about service quality of antenatal clinics and perceived need for change of these services.

Place of living /	Perceived qua	Perceived quality of service (% agreeing)				
Pregnant women	Attentive/friendly	Indifferent	Rude			
	82.5	6.6	0.7	35.1	1656	
City	84.0	7.8	3.7	29.2	219	
District/small town/suburb		6.9	3.4	26.7	116	
Village/rural place	81.9	6.7	1.2	34.0	1991	
All pregn. Women	82.7	0.7				
Other women		22.2	7.8	62.0	988	
City	53.9	32.2		44.9	492	
District/small town/suburb	68.1	18.7	6.1		512	
	59.0	22.5	7.4	54.5	-	
Village/rural place All other women	58.7	26.4	7.3	55.9	1992	

As figure 4.1 and table 4.2 show, pregnant women are much more positive about the antenatal care than nonpregnant women. According to a large majority of pregnant women (83%) antenatal clinics are attentive and friendly. Only few pregnant women think that these clinics treat women indifferently (7%) or that treatment is rude (1%). There are only very small differences related to the place of living. Non-pregnant women are considerably less positive. Only 59% hold the opinion that antenatal clinics are attentive and friendly. More than a quarter of these women (26%) reported indifference at the clinics.

Not surprisingly, therefore, that in the non-pregnant group many more women (56%) see a need for change in the antenatal clinics than among the pregnant women group ( $3\dot{4}$ %). It is noteworthy, however, that many pregnant women who perceive the clinics as friendly and attentive are still in favour of change.

## 4.2 Opinions and attitudes related to parenthood and childbirth

Pregnant women, non-pregnant women and men differ in their personal experience with pregnancy and childbirth. Of the group of pregnant women and of the men almost half (46% and 45% respectively) have children. The group of non-pregnant women is predominantly childless; only 7% have children.

The respondents were asked which factors influenced their decision to have or not to have (more) children. Results per category of respondent, broken down by their level of education and the place of living are presented in table 4.3.

Categories /		Influe	nces on de	cision to h	ave children	n (% agre			
Locations	Financial situation	Health status	Environ- mental situation	Level of medical service			Environ- mental situation	Level of medical service	Ν
	10	wer educa	ated (30%)		h	igher edu	cated (70%)	)	
Pregn. women							25.2	14.0	1652
City	37.2	51.3	26.8	13.1	45.6	57.9	35.3	14.8	-
District/small town/suburb	51.6	32.9	38.8	3.7	55.3	51.6	34.7	6.8	219
Village/rural	44.3	35.7	22.9	1.4	45.7	43.5	39.1	10.9	116
All preg. women	39.7	47.4	27.7	10.6	46.6	56.8	35.4	13.7	1987
All preg. women		lower educated (28%)			higher educated (72%)				
Other women				10.0	70.4	55.0	35.4	19.5	987
City	67.4	45.7	26.0	12.0	70.4	55.0		19.5	492
District/small town/suburb	55.5	37.0	27.6	6.3	51.2	46.5	38.6		509
Village/rural	59.7	50.0	27.9	10.4	43.9	38.9	38.6	11.5	
All other women	61.9	44.6	26.7	10.0	59.3	49.0	37.1	16.4	1988
	10	ower educ	ated (32%)		1	nigher edu	acated (68%	) )	
Men		1	10.0	14.0	76.0	561	49.8	19.6	364
City	66.7	44.1	40.9	14.0	76.0	56.1	27.3	12.7	110
District/small town/suburb	89.1	10.9	70.9	20.9	77.3	41.8			83
Village/rural	5.9	0.0	0.0	0.0	40.0	73.3	20.0	13.3	
All men	44.9	24.4	26.7	9.7	72.4	53.0	42.8	17.3	557

Table 4.3: Women and men about the influences on the decision to have children

The importance of the influences on the decision to have children is different according to the place of living. For pregnant women in cities, irrespective the level of education, health status is the most important aspect. For pregnant women living outside cities the financial situation is more important, in particular to those with a lower level of education.

Both non-pregnant women and men think that the financial situation comes first and health status second. This is true for both the higher and the lower educated women and men. The environmental situation also plays an important role in the decision, almost equally with all three groups of respondents. It is mentioned by about 27% of the lower educated respondents (pregnant women, non-pregnant women and men) and by about 37% of the higher educated respondents. The level of medical service is clearly less important. It is mentioned by 11% of the lower educated respondent and by about 14% of those with a higher education.

## 5. Stress and worries related to pregnancy and childbirth

The pregnant women were asked some specific questions about their pregnancy. A majority of 65% wanted to get pregnant when they did and so for 35% it was not their intention. Yet, 22% were happy with their pregnancy, but that does not mean they are without worries. Asked how they feel about their pregnancy, only 41% say they feel well and only 46% are looking forward to having a baby. Three out of four of the pregnant women (75%) are afraid of the coming birth, mostly because they are concerned about the health of their baby (57%) or because they are afraid of pain (46%). Ten percent say they are afraid because they do not trust doctors, while 23% report to be concerned about their own health situation. Older women, in particular those above 30 years of age, reported somewhat less fear than those in the younger age groups.

### 5.1 The stress of childbirth

All groups of respondents were asked whether they considered childbirth as a stressful event and if so, the origins of that stress. The care providers tend to see childbirth as more stressful than the care receivers (see table 5.1).

	% Physicians	% Civil servants (N=40)	% Pregnant women (N=1999)	% Other Women (N=2000)	% Men (N=560)
	(N=400)	87.2	60.9	63.6	62.1
Childbirth is stressful	79.2		(N=1217)	(N=1271)	(N=348)
Perceived reason:	(N=309)	(N=34)	56.4	49.1	50.9
Fear for the health of the baby	51.5	61.8	32.9	34.5	42.0
Fear for uncertainty	39.2	50.0	28.6	35.6	48.6
Severe pain	30.4	32.4	27.6	29.0	39.9
Fear for own health	29.4	32.4		10.8	12.9
Fear for the hospital	9.4	17.6	10.9	6.4	6.6
Loneliness; desperation	4.6	5.9	1.9	0.4	310

Table 5.1: Perception of childbirth as a stressful event and perceived reasons for stress.

Fear for the baby's health is the most important reason of stress to all groups of respondents. About half of the physicians, women and men see it as a source of stress. Among civil servants it is even mentioned by 62%. Fear for uncertainty, severe pain and fear for one's own health are bout equally important reasons for stress concerning childbirth. These are mentioned by a quarter to half of the respondents. Among the men these reasons are somewhat more frequently mentioned compared to the other groups. Fear for uncertainty is more prominent with civil servants. Loneliness and desperation are seldom mentioned as a reason

In table 5.2 answers of the physicians on the question of sources of stress have been specified by the working place of the physicians.

Physicians:		Perce	eived reasons (% a	greeing)		
Place of work	Fear for baby's health	Fear for un- certainty	Severe pain	Fear for own health	Fear for the hospital	N
	71.3	28.8	28.8	42.5	2.5	80
Rural practice	41.7	22.2	33.3	11.1	11.1	36
Children's policlinic		9.8	14.6	43.9	4.9	41
Hospital obst. dep.	53.7		59.0	41.0	21.3	61
Maternity hospital	72.1	36.1	11.8	7.9	3.9	76
Antenatal clinic	17.1	73.7	53.3	26.7	33.3	15
Other	53.3	53.3		29.4	9.4	309
Total	51.5	39.2	30.4	29.4		

Table 5.2: Sources of childbirth stress as perceived by physicians in different place of work

Physicians differ strongly in their perception of the sources of stress related to childbirth. The baby's health is indeed a major concern of physicians in rural practices and in maternity hospitals, and to a lesser extent of those in the obstetric departments and children policlinics. In antenatal clinics physicians have a different perception of sources of stress than their colleagues in other settings: here only 17% reported that the baby's health is a reason for stress, while 74% mentioned fear for uncertainty as the most important source. Severe pain, fear for one's own health and fear for the hospital are all considered less important sources by doctors in antenatal clinics than by colleagues elsewhere. Severe pain was mentioned by a relatively high proportion of physicians in maternity hospitals (59%).

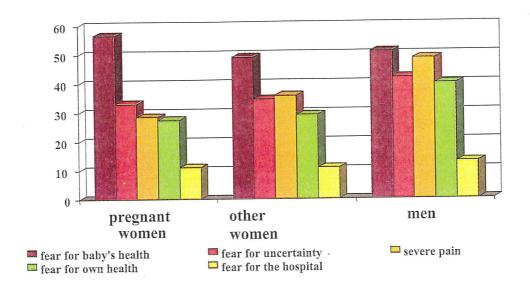


Figure 5.1: Perceived sources of childbirth related stress, according to women and men

		1	· C 11	1 flinning
T 11 5 2 D ' 1	of shildbirth strags he	Trumen and men	specified by	place of living
Table 5.3: Perceived sources	or childdiffin Suess D	y women and men,	specified by	pince of minab

1 childen an ouress e		/							
	Perceiveo								
Fear for baby's	Fear for un-	Severe pain	Fear for own	Fear for the	Ν				
health	certainty		health	hospital					
58.7	33.0	28.0	27.7	12.1	994				
52.7	35.3	32.0	26.7	. 7.3	150				
36.4	28.8	30.3	25.8	3.0	66				
56.7	33.1	28.6	27.4	11.0	1210				
Total         56.7         53.1         26.0         27.4         11.0         1210           Other women									
55.9	34.9	39.1	33.5	12.1	696				
49.4	38.2	37.1	31.1		251				
34.1	31.0	27.2	17.6		323				
49.1	34.6	35.7	29.0	10.8	1270				
48.9	36.9	54.9			268				
60.3	54.8	28.8	37.0	2.7	73				
	100.0	14.3	14.3	14.3	7				
50.9	42.0	48.6	39.9	12.9	- 348				
	Fear for baby's health 58.7 52.7 36.4 56.7 55.9 49.4 34.1 49.1 48.9 60.3 28.6	Fear for baby's health         Fear for un- certainty           58.7         33.0           52.7         35.3           36.4         28.8           56.7         33.1           55.9         34.9           49.4         38.2           34.1         31.0           49.1         34.6           48.9         36.9           60.3         54.8           28.6         100.0	Perceived reasons (% a           Fear for baby's health         Fear for un- certainty         Severe pain           58.7         33.0         28.0           52.7         35.3         32.0           36.4         28.8         30.3           56.7         33.1         28.6           55.9         34.9         39.1           49.4         38.2         37.1           34.1         31.0         27.2           49.1         34.6         35.7           48.9         36.9         54.8           28.6         100.0         14.3	Perceived reasons (% agreeing)Fear for baby's healthFear for un- certaintySevere pain healthFear for own health $58.7$ $33.0$ $28.0$ $27.7$ $52.7$ $35.3$ $32.0$ $26.7$ $36.4$ $28.8$ $30.3$ $25.8$ $56.7$ $33.1$ $28.6$ $27.4$ $55.9$ $34.9$ $39.1$ $33.5$ $49.4$ $38.2$ $37.1$ $31.1$ $34.1$ $31.0$ $27.2$ $17.6$ $49.1$ $34.6$ $35.7$ $29.0$ $48.9$ $36.9$ $54.9$ $41.4$ $60.3$ $54.8$ $28.8$ $37.0$ $28.6$ $100.0$ $14.3$ $14.3$	Perceived reasons (% agreeing)Fear for baby's healthFear for un- certaintySevere pain severe painFear for own healthFear for the hospital $58.7$ $33.0$ $28.0$ $27.7$ $12.1$ $52.7$ $35.3$ $32.0$ $26.7$ $7.3$ $36.4$ $28.8$ $30.3$ $25.8$ $3.0$ $56.7$ $33.1$ $28.6$ $27.4$ $11.0$ $55.9$ $34.9$ $39.1$ $33.5$ $12.1$ $49.4$ $38.2$ $37.1$ $31.1$ $8.4$ $34.1$ $31.0$ $27.2$ $17.6$ $9.9$ $49.1$ $34.6$ $35.7$ $29.0$ $10.8$ $48.9$ $36.9$ $54.9$ $41.4$ $15.7$ $60.3$ $54.8$ $28.8$ $37.0$ $2.7$ $28.6$ $100.0$ $14.3$ $14.3$ $14.3$				

Respondents in rural areas are generally less concerned about the baby's health than those in cities and small towns (see figure 5.1 and table 5.3). Among non-pregnant women, those in rural areas less often report fear for uncertainty, severe pain and fear for the hospital as sources of stress than women in other places.

### 5.2 Worries about the environment

In the time of the Soviet Union, nuclear tests have been carried out in the North-Eastern region of Kazakhstan. Therefore questions have been asked on possible worries concerning health risks for currently born babies. Answers have been related to the length of living in this region. Among the pregnant women 43% has been living their whole life in the region; 22% has lived there for more than 7 years; 12% has lived there 3-7 years and 23% less than 3 years. Among the other women 51% had lived in the region lifelong; 23% more than 7 years; 11% 3-7 years and 17% less than 3 years. With the male respondents 55% had always been living in the region; 22% more than 7 years; 13% 3-7 years and 11% less than 3 years.

All respondents are worried about health consequences of the tests. The majority of respondents is convinced that there is a risk to give birth to an unhealthy child, because they are living in a region where nuclear tests have been held: 64% of pregnant women, 78% of other women and 73% of men agreed with this statement.

More than one in five respondents (19% among pregnant women, 27% among other women and 22% among men) have the experience that in their family or among close relatives unhealthy babies have been born as a result of the nuclear tests. Table 5.3 shows details.

Table 5.3: Respondents personally knowing unhealthy consequences of nuclear testing (in particular the birth of unhealthy children).

Place of living	% personally knowing	health consequences	
Pregnant women	Until 7 years in the region	More than 7 years in the region	N
	22.5	18.6	1443
City	6.7	14.4	200
District/small town/suburb	16.7	22.7	106
Village/rural place	20.2	18.5	1749
Total	20.2		
Other women	23.2	25.4	954
City		25.6	468
District/small town/suburb	25.2	31.4	505
Village/rural place	41.1	26.9	1927
Total	29.5	20.9	1947
Men		21.5	357
City	7.1	31.5	
District/small town/suburb	0.0	33.8	108
Village/rural place	12.5	8.9	64
Total	5.3	28.7	529

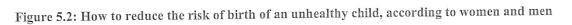
Women who have lived more than 7 years in the region in general do not report more frequently to know cases of health consequences related to the nuclear tests than women who have lived there a shorter period of time. Among men, however, such a difference is evident.

Table 5.4: Respondents' belief that there are currently existing health risks resulting from previous nuclear testing

Place of living	Existence of health risk o	Existence of health risk of nuclear tests (% agreeing)			
Pregnant women	Until 7 years in the region	More than 7 years in the region	N		
	68.7	73.8	1500		
City District/small town/suburb	67.1	65.9	196		
	66.7	55.1	106		
Village/rural place	68.4	71.3	1802		
Total	00.1				
Other women	77.6	91.5	946		
City	52.7	81.9	463		
District/small town/suburb		83.8	498		
Village/rural place	63.9	87.9	1907		
Total	63.3	01.9			
Men		90.4	346		
City	80.3		110		
District/small town/suburb	67.5	91.4	81		
Village/rural place	100.0	6.8			
Total	77.4	75.8	537		

There is a strong belief in the population that health risks related to the previous testing still exist: about three quarter of our respondents do think so. Among the non-pregnant women this belief is more widespread in the category who have lived more than 7 years in the region (8%) than in the group who has lived there shorter (63%). This difference is absent with pregnant women and men. This feeling seems to be somewhat stronger among those living in cities than with people living elsewhere.

People were asked how this health risk could be dealt with or reduced. See figure 5.2 and table 5.5.



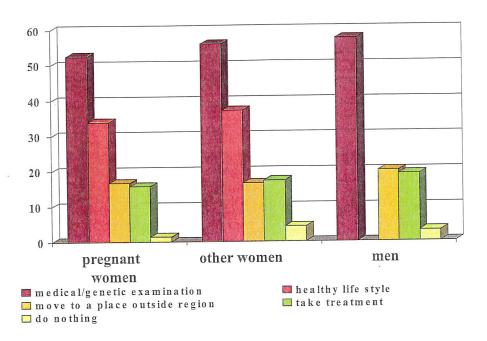


Table 5.5: How to reduce the birth of an unhealthy child according to pregnant women, other women and men (specified by their living place).

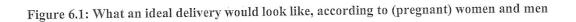
	1 .1	1 1 1 1 1 1 - 141	hildren are h	0.0770		
Ways						
	1	0 0			D	
Medical/	Healthy life	Well	Move to			
genetic examination	style	balanced diet	another place	treatment	0	N
51.8	34.5	21.5	16.7	16.1		1656
67.6	30.1	18.3	14.6	12.8		219
34.5	31.0	13.8	21.6	14.7	0.0	116
52.5	33.9	20.7	16.7	15.7	1.3	1991
59.4	42.9	N.A.	20.9	17.7		988
52.8	35.6	N.A.	12.4	18.9		492
52.3	27.5	N.A.	12.1	14.6	5.5	512
56.0	37.1	N.A.	16.5	17.2	4.2	1992
			8			
68.0	N.A.	N.A.	17.8	23.5	4.1	366
60.0	N.A.	N.A.	30.0	15.5	1.8	110
	N.A.	N.A.	16.9	4.8	0.0	83
	N.A.	N.A.	20.0	19.1	3.0	559
	Medical/ genetic examination 51.8 67.6 34.5 <b>52.5</b> 59.4 52.8 52.3 52.3 56.0 68.0 60.0 8.4	(per           Medical/         Healthy life           genetic examination         style           51.8         34.5           67.6         30.1           34.5         31.0           52.5         33.9           59.4         42.9           52.8         35.6           52.3         27.5           56.0         37.1           68.0         N.A.           60.0         N.A.           8.4         N.A.	(percentage agreemed medical/         Healthy life style         Well balanced diet           51.8         34.5         21.5           67.6         30.1         18.3           34.5         31.0         13.8           52.5         33.9         20.7           59.4         42.9         N.A.           52.8         35.6         N.A.           52.3         27.5         N.A.           56.0         37.1         N.A.           68.0         N.A.         N.A.           68.0         N.A.         N.A.           8.4         N.A.         N.A.	(percentage agreement)           Medical/ genetic examination         Healthy life style         Well balanced diet         Move to another place           51.8         34.5         21.5         16.7           67.6         30.1         18.3         14.6           34.5         31.0         13.8         21.6           52.5         33.9         20.7         16.7           59.4         42.9         N.A.         20.9           52.8         35.6         N.A.         12.4           52.3         27.5         N.A.         12.1           56.0         37.1         N.A.         16.5           68.0         N.A.         N.A.         16.5           68.0         N.A.         N.A.         16.9           8.4         N.A.         N.A.         20.9	Medical/ genetic examination         Healthy life style         Well balanced diet         Move to another place         Take treatment           51.8         34.5         21.5         16.7         16.1           67.6         30.1         18.3         14.6         12.8           34.5         31.0         13.8         21.6         14.7           52.5         33.9         20.7         16.7         15.7           59.4         42.9         N.A.         20.9         17.7           52.8         35.6         N.A.         12.4         18.9           52.3         27.5         N.A.         12.1         14.6           56.0         37.1         N.A.         16.5         17.2           68.0         N.A.         N.A.         16.5         17.2           68.0         N.A.         N.A.         16.9         4.8           8.4         N.A.         N.A.         16.9         4.8	Medical/ genetic examination         Healthy life style         Well balanced diet         Move to another place         Take treatment         Do nothing           51.8         34.5         21.5         16.7         16.1         1.5           67.6         30.1         18.3         14.6         12.8         0.0           34.5         31.0         13.8         21.6         14.7         0.0           52.5         33.9         20.7         16.7         15.7         1.3           59.4         42.9         N.A.         20.9         17.7         2.8           59.4         42.9         N.A.         12.4         18.9         5.5           52.3         27.5         N.A.         12.1         14.6         5.5           56.0         37.1         N.A.         16.5         17.2         4.2           68.0         N.A.         N.A.         17.8         23.5         4.1           60.0         N.A.         N.A.         16.9         4.8         0.0           8.4         N.A.         N.A.         16.9         4.8         0.0

N.A. = not asked

The most frequently mentioned way to reduce the risk of giving birth to an unhealthy child was: a medical examination and a consultation with a geneticist before the pregnancy (pregnant women 53%, other women 56% and men 58%). Other suggestions were: following a healthy life style (on average 35%), keeping a well-balanced diet (pregnant women 21%), moving out of the area (17%) or get medical treatment (17%). Only 3% of people answered that nothing should be done.

### 6. The ideal delivery

The respondents were asked to indicate, on a list with nine options, what their ideal delivery would look like. Results are described in figure 6.1 and tables 6.1 to 6.4.



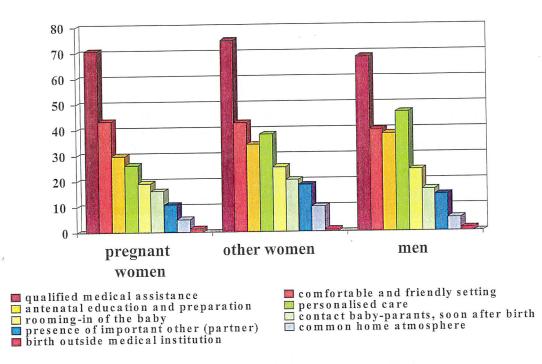


Table 6.1: What an ideal delivery would look like, according to pregnant women, other women and men.

	% Pregnant women (N=1987)	% Other women (N=1988)	% Men (N=557)
1. Qualified medical assistance	70.8	74.8	68.2
2. A comfortable and friendly setting	43.4	42.7	39.8
3. Antenatal education and preparation	29.9	34.2	38.2
4. Personalised care	26.2	38.1	46.6
5. Rooming-in of the baby	19.1	25.2	24.1
6. Contact between baby and parents just after birth	16.0	20.3	16.4
7. The presence of important others (partner)	10.7	18.2	14.3
8. A common home atmosphere	5.0	9.7	5.2
9. Birth outside of the medical institution	1.5	0.8	1.1

Clearly, pregnant women, non-pregnant women and men agree that the ideal delivery, first of all, is associated with qualified medical assistance. This is in line with the ideal of 71% of pregnant women, 75% of the other women and 68% of the men. All other aspects, which are in some way related to information, a friendly setting and feeling at home, contribute much less to the ideal. It seems that 'safety' is by far the highest priority of respendents. The second choice, a comfortable and friendly setting, is part of an ideal delivery for around 40% of the respondents. Antenatal education and preparation is more appreciated by non-pregnant women (34%) and men (38%) than by pregnant women (30%). The same goes for personalised care (belonging to the ideal of 26% of pregnant women and of 38% and 47% of other women and men respectively) and rooming-in of the baby (preferred by 19% of the pregnant women and 25% and 24% of both other groups). Virtually nobody is in favour of birth outside a medical setting.

Pregnant women	How an ideal delivery would look like? (% agreeing) *							
	Lower educated (30%)							
Place of living	Qual. med.	Comf./friend	Antenatal	Personalise	Rooming-in	Baby-parents		
	assistance	ly setting	preparation	d care	(5)	contact		
	(1)	(2)	(3)	(4)		(6)		
City (N=496)	63.5	34.7	21.0	23.7	16.4	15.9		
District/small town/suburb (N=66)	60.7	32.0	19.6	13.7	9.6	7.3		
Village/rural (N=35)	64.3	15.7	10.0	7.1	12.9	7.1		
Total	63.2	32.1	19.7	20.5	15.3	13.9		
	Higher educated (70%)							
City (N=1183)	73.8	51.8	33.8	29.8	21.8	17.7		
District/small town/suburb (N=153)	79.7	28.1	41.8	25.5	16.3	13.7		
Village/rural (N=81)	67.4	23.9	32.6	13.0	13.0	8.7		
Total	74.3	48.4	34.5	28.7	20.8	16.9		

Table 6.2: Aspects of the ideal delivery, according to *pregnant women* (specified for educational level and place of living)

\* numbers in brackets correspond to those in table 6.1

Table 6.2 shows the appreciation by pregnant women of the 6 most frequently mentioned aspects from table 6.1, broken down to educational level and place of living of the pregnant women. Pregnant women with a higher than average level of education turn out to appreciate all aspects more frequently than do the lower educated women. The difference between the educational levels is highest with the comfortable and friendly setting and antenatal education and preparation.

When place of living is taken into acount only small differences are seen concerning the women's appreciation of qualified medical assistance. Concerning the other aspects, women in cities more often mentioned a comfortable and friendly setting, personalised care, rooming in and baby-parent contact as ideal conditions than women living in rural areas. So in general, non-medical conditions are higher appreciated by women in cities and by women with a higher education.

Table 6.3: Aspects of the ideal delivery, according to *other women* (specified for educational level and place of living)

Other women		How an ideal	delivery wou	ld look like? (%	% agreeing) *			
	Lower educated (28%)							
Place of living	Qual. med. assistance (1)	Comf./friendly setting (2)	Antenatal preparation (3)	Personalised care (4)	Rooming-in (5)	Baby-parents contact (6)		
City (N=276)	81.8	47.7	31.4	41.1	26.7	21.3		
District/small town/suburb (N=138)	58.7	37.7	18.8	32.6	18.1	13.0		
Village/rural (N=143)	72.1	21.4	28.6	15.6	20.1	15.6		
Total	72.9	37.6	27.5	31.7	22.5	17.5		
	Higher educated (72%)							
City (N=711)	85.9	56.1	44.2	47.6	32.2	28.8		
District/small town/suburb (N=354)	64.7	36.2	27.7	33.6	18.1	16.4		
Village/rural (N=366)	65.6	29.9	31.0	33.8	22.5	11.5		
Total	75.9	44.8	37.0	40.9	26.4	21.5		

\* numbers in brackets correspond to those in table 6.1

Also in the group of non-pregnant women a qualified medical assistance is the most important feature of an ideal delivery. This applies more strongly to women in cities than to women in rural areas. The educational level of the women does not make a difference in this respect. Comparison with the previous table shows that non-pregnant women more highly appreciate the non-medical (service-related) aspects than the pregnant women do; this difference is stronger among women with a lower education.

Men	How an ideal delivery would look like? (% agreeing) *							
Wien	Lower educated (32%)							
Place of living	Qual. med.	Comf./friendly	Antenatal	Personalised	Rooming-in	Baby-parents contact		
	assistance	setting	preparation		(5)	(6)		
	(1)	(2)	(3)	(4)				
$C \mapsto (N - 116)$	78.5	51.6	44.1	54.8	33.3	25.8		
City (N=116)	82.9	74.3	37.1	65.7	60.0	51.4		
District/small town/suburb (N=35)	3.6	0.0	0.0	0.0	0.0	0.0		
Village/rural (N=27)			27.8	34.1	21.6	16.5		
Total	49.4	33.0						
				ucated (68%)	244	15 1		
City (N=248)	76.0	48.0	46.1	63.1	24.4	15.1		
	77.3	29.3	37.3	26.7	28.0	22.7		
District/small town/suburb (N=75)		46.7	26.7	26.7	33.3	13.3		
Village/rural (N=56)	93.3		-	52.2	25.5	16.5		
Total	76.9	42.8	42.8	52.2	43.5	1 1010		

Table 6.4: Aspects of the ideal delivery, according to men (specified for educational level and place of living)

\* figures in brackets correspond to those in table 6.1

According to men qualified medical assistance is the most important aspect, like it is for pregnant and non-pregnant women. However, also the service aspect are highly appreciated by men. Men do like these aspect more than women do, in particular in comparison to pregnant women. The difference is most remarkable concerning personalised care. Men (except those in rural areas) like this aspect much more strongly than women from both categories. Another remarkable finding is the deviant position of lower educated men in rural areas. These men have quite poorly answered this question; it seems they had little idea about an ideal delivery.

## 7. The intended role of partners

## 7.1 Presence of partner at delivery

Kazakhstans are ambivalent about the general idea of partners and close relatives being present during the delivery. Above we have seen that to only a small minority of the respondents it belongs to the ideal situation with delivery. But more directly asked about it, it turns out that 44% of the pregnant women and 47% of the non-pregnant women react positive. Men, with 53%, are slightly more in favour of it than the women.

react positive. With 35%, are singlify more in favour of it than the moment. However, when asked if they would want *their own* partner to be present when they give birth, the women are less enthusiastic: only 38% of the pregnant women and 40% of the other group of women answered positively to that question. Also men are more reluctant when it refers to themselves: only 44% would want to be present personally during a delivery.

Table 7.1 Men about their wish either or not to be present during delivery (broken down to place of living)

wishing to be present	wishing not to be present (%)	has been present in the past (%)	Ν
	45.4	1.9	366
41.8	55.5	0.0	110
12.0		49.4	83
12.0		8.6	559
	wishing to be present (%) 51.4 41.8 12.0 43.6	(%)         present (%)           51.4         45.4           41.8         55.5           12.0         88.0	(%)         present (%)         the past (%)           51.4         45.4         1.9           41.8         55.5         0.0           12.0         88.0         49.4

As table 7.1 shows, the attitude of men towards being present during delivery differs strongly between cities and rural areas. In cities, well over half of the men answered that they would like to be with their partner during the delivery of the baby, while in rural areas only 12 percent expressed this wish. Half of the rural respondents has had experience with being present during childbirth in the past, but it seems most of them do not want this to happen again.

The main reason for men to be present is to be near with their partner. Also sharing happiness and giving support are mentioned as important reasons.

The main reason *not* to be present differs depending of the place of living. A majority (58%) of men in rural areas answers that national traditions are the main reason, while fear is the most important reason to men in cities (47%) and small towns and suburbs (36%).

Men	Perceived role (% agreeing)						
	Psychological	Simply be	Help changing	Communicate	Give	N	
Place of living	support	near	positions	with doctor	massage		
City	66.7	27.9	15.0	6.3	4.4	366	
District centre/small town/suburb	68.2	23.6	3.6	4.5	0.0	110	
Village/rural place	15.7	4.8	0.0	6.0	0.0	83	
Total	59.3	23.6	10.5	5.9	2.9	559	

Table 7.2 The role men see for themselves during delivery (broken down to place of living)

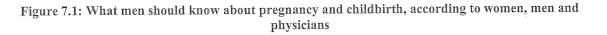
In line with previous results only very few men in rural areas perceive any role for themselves during delivery. The other men most frequently (about two-thirds) answer that they provide psychological support to their partner. About one quarter mentioned that their is 'simply be near'.

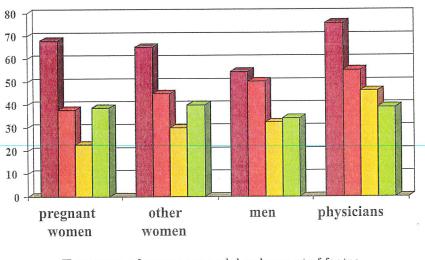
### 7.2 What men should know

Respondents were asked whether information about pregnancy and childbirth should be directed at women only or also given to men, and , if so, what they would think men need to know. Although most physicians, women and men are of the opinion that, in general, men should be informed about pregnancy and childbirth, not all subjects seem to be equally urgent (see figure 7.1 and table 7.3).

Table 7.3: What men should know about pregnancy and childbirth.

Information about	% Physicians (n=321)	% Pregnant women (n=1638)	% Other women (n=1553)	% Men (n=41)
Progress of pregnancy and development of the foetus	75.7	68.1	65.2	54.4
Signs of the onset of labour	55.1	37.9	44.9	50.2
Conception and the start of pregnancy	46.1	22.6	29.9	32.2
The birth process	38.9	38.6	39.9	34.1





progress of pregnancy and development of foetus
 signs of onset of labour
 conception and start of pregnancy
 birth process

Most important for men to know, according to the respondents, seems to be general information related to pregnancy: knowing about the progress of pregnancy and the development of the foetus is considered relevant by 76% of the physicians, 68% of the pregnant women and 65 % of the other women. Men themselves are less convinced about this: only 54% think this should be known. Half of the physicians and the men think that men should be able to recognise the signs of the onset of labour, but only around 40% of the women think so. According to 46% of the physicians men should know about the conception and the start of pregnancy, but only about 25% of the women share this opinion. Knowledge about the birth process should be known by men according to almost 40% of respondents in all groups.

## 8. Views on alternative approaches

We have seen that qualified medical assistance was mentioned as the most important aspect of an ideal delivery. Do people think that giving birth is possible without any medical assistance, for instance in the home situation? Tables 8.1 and 8.2 give the answers.

	Is it possible to give birth without medical assistance? (% answering 'no')					
	lower education		higher e	N		
	Age 15-25	Age 26+	Age 15-25	Age 26+		
Duegnant women	94.4	87.5	91.4	94.1	1863	
Pregnant women	84.0	84.8	83.5	82.6	1937	
Other women	04.0	0.10				
Men			25.2	50.3	352	
City	37.3	64.3	35.3			
district/small town/suburb	25.0	100.0	29.2	46.4	108	
			11.1	60.0	50	
village/rural place	86.1	-		49.3	510	
Total	51.3	76.2	32.9	47.3	510	

Tab 8.1: What women and men think about the possibility to give birth without medical assistance

According to well over 90% of pregnant women and well over 80% of other women giving birth without medical assistance is unthinkable. This opinion consists equally among women in all age groups and places of living. Men are less decided about this; about half of them think that medical assistance is not always necessary. Among men in rural areas those with a lower education more often think that medical assistance is indispensable than those with a higher education.

	would you agree to a home birth? (% answering 'yes')				
	lower education		higher education		N
	Age 15-25	Age 26+	Age 15-25	Age 26+	
Other women	0				0.50
City	31.0	17.2	25.9	23.3	959
	32.4	17.6	17.9	19.1	481
district/small town/suburb	31.9	44.4	25.3	24.9	485
village/rural place			23.8	22.7	1925
Total	31.6	24.2	23.0	22.1	1720
Men				12.0	351
City	14.5	21.4	5.1	13.9	
district/small town/suburb	0.0	42.9	25.0	29.6	110
	62.5	-	22.2	0.0	78
village/rural place		28.6	9.3	18.6	539
Total	34.5	28.0	7.5	10.0	

Table 8.2: What women and men feel about home birth.

In the light of previous results women and men are not strongly rejecting the idea of a home birth. About one quarter of the (non pregnant) women would agree with a home birth if that would be possible. Among the lower educated women there is some age effect: younger women are more positive than the older one (except in rural areas).

Lower educated men, especially those in rural areas, are more positive towards home births than higher educated men.

## 9 Information needs on pregnancy and childbirth

9.1 Perceived information level and information needs

Table 9.1: Level of information on pregnand	y and childbirth perceived by women and men
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Place of living	Information level about pregnancy and childbirth					
	Fully No systematic		Not			
Pregnant women	informed	information	informed	Ν		
City	38.5	46.1	6.6	1656		
District /small town/suburb	43.8	47.0	2.3	219		
Village/rural place	44.8	27.6	10.3	116		
Total	39.4	45.2	6.3	1991		
Other women						
City	44.3	46.4	7.1	988		
District/small town/suburb	42.5	41.7	12.6	492		
Village/rural place	42.8	44.7	11.7	512		
Total	43.5	44.8	9.6	1992		
Men						
City	23.2	39.9	35.0	366		
District/small town/suburb	15.5	53.6	26.4	110		
Village/rural place	9.6	7.2	2.4	83		
Total	19.6	37.7	28.4	559		

Information on pregnancy and childbirth is far from complete. Only 39% of pregnant women and 44% of the other women answered to be completely informed about this subject. 45% of both groups of women indicates that systematic information is missing.

Men are more poorly informed than women on pregnancy and childbirth. This seems to apply more to men in rural areas than among those elsewhere. However, the explanation is difficult because this question was so poorly filled in by men from rural places.

### 9.2 Sources of information

% Pregnant	% Men	% Other
women	(n=560)	women
(n=1999)		(n=1975)
50.9	19.8	47.3
46.1	35.4	34.4
24.6	12.9	25.2
13.1	18.9	19.2
10.2	21.4	19.3
	women (n=1999) 50.9 46.1 24.6 13.1	women (n=1999)         (n=560)           50.9         19.8           46.1         35.4           24.6         12.9           13.1         18.9

Preferred information source:			
Medical specialist / employee	81.0	50.4	76.8
Literature	14.9	26.3	18.8
Workshops	10.5	13.4	12.3
Close people (family, friends)	8.7	12.5	5.8
Mass media	7.0	12.0	8.9

According to the three groups of respondents medical specialists are the preferred source of information, to a higher extent than they are at present. To both pregnant women and non-pregnant women the most important sources used are from medical institutions and from relatives. They would like medical specialists to be more important as a source of information. Relatives and friends may become less important. Also men would like to have more information from medical specialists. Now their main source of information is still relatives and friends

### 10. Conclusions

- Physicians are critical about the quality of health services in general. Under-funding is seen as a major reason for this situation. Besides, many physicians think that health services cannot meet international standards for patient-friendliness.
- According to the physicians, there are problems of access to obstetric care. These are related to the poor distribution of services (and thus long distances for patients and long travel times) and problems with transport.
- Many physicians do not belief in the effectiveness of procedures which are carried out routinely in obstetric care. Some of these routines are indeed obsolete, while others should not be applied as a routine. Variation in judgements between doctors points to lack of information concerning the state of the art.
- Doctors mention a number of remedies to improve health services. Firstly, the budget should be increased. Furthermore staff should be better trained. Last but not least: patients should take more responsibility for their own health.
- Important proportions of physicians, in particular younger doctors, express not to be sufficiently informed about alternative methods of pregnancy monitoring and delivery control.
- A large majority of physicians would like to be informed about reproductive rights; preferably via (professional) journals.
- Very few physicians are positive about home deliveries
- As measures to improve conditions for pregnant women, physicians would like to see a paid maternity leave, a day off for women when they want to visit a doctor, and one hour rest per working day.
- Although they have low expectations of its effects, most physicians would like to give women freedom of choice of position during the delivery.
- There seems to be a discrepancy between the frequency of maternity clinics visits as preferred by physicians and the frequency reported by the women. This may point to a weakness in the pregnancy risk monitoring system.
- Pregnant women are satisfied about attention and friendly treatment in antenatal care. Nevertheless one-third beliefs that changes are needed in the antenatal clinics.

- In cities the decision to have children is primary influenced by the health status of the woman, while in rural areas the most important influence is the financial situation. The third mentioned influence is the environmental situation.
- A large majority of pregnant women experience fear: either for the baby's health, or pain or general uncertainty.
- Both men and women worry about the health consequences of the nuclear tests in the past. A large majority think that an elevated health risk continues to exist, which may result in the birth of an unhealthy child. More than one in five has had personal experience with the birth of an unhealthy child caused by the nuclear pollution. A medical-genetic examination prior to pregnancy is seen as a major strategy to cope with this situation.
- According to women and men the most important feature of an ideal delivery is the availability of qualified medical assistance. Personalised care and service aspects are considered less important, but these are higher appreciated by higher educated women and by women in cities.
- The presence of partners at the delivery is not self evident. A majority of women would not like to have her partner in the delivery room. This preference is much stronger in rural areas, where tradition is a major role for men not to be there. In general, it seems that men in rural areas, in contrast to other men, do not see a clear role for themselves related to pregnancy and birth.
- Alternative modes of delivery are not popular. A delivery without medical assistance is unthinkable. Most women are not in favour of home birth, although about one third would consider this possibility.
- A lot more information needs to given on pregnancy and delivery. It is only a minority who
  answered to be fully informed on the subject. Medical specialist are, more than they currently are,
  the preferred source of information. The information role of family and friends may consequently
  be reduced according to the respondents.

## Appendix

## Characteristics of respondents

	Pregnant women	Men	Other women
	(n=1999)	(n=560)	(n=2000)
Age distribution:			
15-20	16	30	19
21-25	35	25	20
26-30	24	12	17
31-35	15	9	14
36-40	6	10	11
Over 40	4	14	19
Level of education:			
Initial	1	4	1.5
Secondary	29	27.5	27
Secondary-special (vocational)	36	32	36
Higher	28	26	27
Higher (not finished)	6	10	8.5
Occupational status:			
Pupil	1	7	5
Student	9	24	11
Employee	27	29	36
Housewife/work at home	45	3	24
Worker	12	31	16
Trade employee	6	2	8
Marital status:			
Married (registered)	77	42	52
Married (non-registered)	16	2	9
Not married	6	50.5	30
Divorced	1	4.5	9

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