

Antenatal Care in Kosovo

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Acronyms

EAR	European Agency for Reconstruction
KOGA	Kosovo Obstetrics and Gynaecologists Association
KMCHC	Kosovo Mother and Child Health Council
MoH	Ministry of Health
NIPHK	National Institute of Public Health of Kosovo
RAE	Roma, Ashkali and Egyptians
UCCK	University Clinical Centre of Kosovo
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
UNMIK	United Nation Mission in Kosovo
WB	World Bank
WHO	World Health Organization

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Authors

Executive Summary

Main objective of the study was to evaluate the quality and access to antenatal health care services. In addition, the study aimed at offering information about participation and number of the antenatal visits, knowledge, awareness and practices in the frames of antenatal healthcare services. This study is planned in the frames of the joint project for “Improving health of women and children of Kosovo” financed by the Government of Luxembourg and implemented by UNICEF, UNFPA and WHO Offices in Kosovo in cooperation with the Ministry of Health.

This study brought to light many interesting arguments that illustrate the situation regarding the quality and access to antenatal care. Significant number of women (over 60 Percent) starts to use antenatal care services from the fourth month. Number of the antenatal visits during the whole pregnancy period in 78.1 Percent of the cases was equal to or more than 4 antenatal visits.

According to the study results gynaecologist is health worker that offers most of antenatal care service (98.5 Percent). Family physicians despite efforts and plans to have an active role in antenatal care services are visited by very low number of woman (2.7 Percent). Private institutions are the most visited institutions during the pregnancy (71.3 Percent). Only 28.7 Percent of women visited public institutions for antenatal services. Infrastructure of the institutions as one of the dimensions of quality of antenatal care has been valued quite high. 86.0 Percent of women reported that there was a waiting room in institutions that they have requested services or consultations and 94.5 Percent of women reported that examination room was separated from other working space.

When considering quality of medical examination, 34.9 Percent of respondents reported that they didn't undergo any internal gynaecological examination and in 23.3 Percent of the cases reported that external gynaecological examination hasn't been done during antenatal visits. In 41.2 Percent of the cases has been reported verbal interruption by physician. More concerning are the results related to examination and instruction of the patients. 16.5 Percent of women claimed that they were not offered any health advice for pregnancy. 22.2 Percent of women claimed that they were not asked for details of history of previous diseases, while 65.9 Percent reported that they didn't undergo any physical examination.

Coping with travel costs was an additional problem confirmed in the study. From interviewed women, 30 Percent in Mitrovicë / Mitrovica and 55 Percent in Ferizaj / Uroševac claimed that they can cope partly with travel costs related to use of antenatal care services, while from 10 Percent to 18 Percent (depending on region) declared that they couldn't cope with those costs. There is still

a high percentage of cases (from 15 to 45 Percent depending on region), where decision for an antenatal visit is made by somebody else instead of pregnant women.

Over 65 Percent of responders reported that they believe it's not needed to apply any food diet during pregnancy and only 27 Percent were aware that they need to have some food limitations. 12.9 Percent of responders confirmed that they smoke, whereas use of alcohol and narcotic substances was almost inexistent.

Perception of the situation and the quality of antenatal services from health workers during focus groups confirmed many findings from the survey of pregnant women. Moreover focus groups clarified the background of the organization and provision of health care services. As main problems were: limitation of working space that hampers possibility for having appropriate medical visits and treatment of different pathologies; medical tests are mainly done in private laboratories, but even in private labs there's no complete spectre of services; there is scepticism from medical staff on the quality of medical procedures and many times the respondents did emphasize the lack of auditing of work of physicians that results with the lack of working standards and failures in offering proper antenatal health services; ultrasound examination is often done in private institutions and mostly as a mean to detect gender of the embryo; there are problems in supply with medicines as well as work conditions in general; pregnant women are more informed and prepared compared with the previous periods (before the war); physicians report a massive smoking from pregnant women, which is partially confirmed in survey; health booklet for pregnant women is considered as proper act in advancing the organization of antenatal care services, however there is no real implementation of this in most of the times; in all regional secondary care centres physicians confirmed that they are aware of protocols for antenatal care developed by KOGA, but at the same time they confirmed that the same are not applied in practice; despite the growing number of gynaecologists there is continual lack of specialization and continual education; inappropriate reference of pregnant women through health institutions of different levels of care is apparent as one of key complaints of physicians working in regional hospitals as well as UCCK.

For this study 1000 respondents were selected as a sample representing reproductively active woman population of Kosovo. Face to face interviewing in the households of respondents was used. Sample was distributed in regions of Prishtina / Priština, Mitrovicë / Mitrovica, Prizren / Prizren, Gjakova / Đakovica, Gjiilan / Gnjilane and Peja / Peć, including rural and urban areas. In addition 6 focus groups with healthcare professionals took place in 6 regional healthcare centres: Gjiilan, Gjakova, Prizren, Prishtina / Priština, Peja / Peć and Mitrovicë / Mitrovica in order to review the situation regarding the healthcare services and for discussing the preliminary results of the study.

1. Introduction

The study aimed to evaluate the quality and access to antenatal care in Kosovo. In addition the study aimed to offer information regarding the participation and number of antenatal care visits, knowledge, awareness and practices in relation to antenatal healthcare services. The aims of the study are threefold:

- a) To assess the quality of antenatal healthcare services, including issues and problems affecting the quality;
- b) To assess the approach, involvement and number of antenatal healthcare services for all the communities, issues and problems; and,
- c) To reveal information regarding awareness, knowledge and practices of pregnant women, concerning antenatal care services and healthy behaviour during pregnancy.

This study is planned as part of the joint project “Improving health of women and children of Kosovo” financed by Government of Luxembourg and implemented by offices of UNICEF, UNFPA and WHO in Kosovo in collaboration with the Ministry of Health.

Even before the political crisis, Kosovo’s health care statistics were among the poorest in Europe on virtually every indicator of the health care system. As with most other former socialist countries, was heavily geared towards the provision of secondary and tertiary care and treatment rather than prevention. The result was a centralized, bureaucratic and for the most part ineffective health system with large and inefficient facilities, low bed occupancy rates and extended stays in hospital for patients. The cessation of the conflict saw the severe disruption in the health care services compounded by the burden of neglect of the past ten years pose enormous challenges in the area of health care reform.

Having established their presence in Kosovo since 1999, WHO, UNFPA and UNICEF have strongly supported and provided massive investments in the health sector. To further bolster their measures, the recent joint project of WHO/UNFPA/UNICEF has supported government initiatives in strengthening the health care system while improving the quality of mother and child health care services. The envisaged synergistic approach, wherein UNICEF, UNFPA and WHO work within their mandates to complement each other, has been facilitating the governmental efforts to achieve the United Nations Millennium Development Goals 4 (reduce child mortality) and 5 (improve maternal health). The planned inputs expect to achieve among other things, greater awareness and enhanced demand for reproductive health care services, improved access to quality reproductive health care and child health services, reduction and prevention of morbidity and mortality among women and children from major diseases, increased knowledge and improved clinical skills of

health care providers leading to strengthened caring practices and service delivery at the facility level.

In Kosovo despite high natality rate, there's high perinatal mortality rate. In the perinatal report for 2007 (Perinatal situation in Kosovo for years 2000-2007, Ministry of Health and its partners) there is an apparent decline on level of perinatal mortality from 29.1‰ in year 2000 to 20.0‰ in year 2007 for newborns with $\geq 500\text{g}$ of weight. Despite the continual decline, perinatal mortality is still very high comparing with most countries of Western Europe. Based on the study "Micro-nutrition situation in Kosovo" in year 2001, about 96 Percent of the pregnant women give birth in health institutions with professional care. In the study performed by Medical Consulting Group, supported by UNICEF, in 2003, the quality of services during antenatal care was reported as weak and without a systematic approach when performing some essential examinations such as measuring of the fetal heart rate, weight of the mother, height of uterus and blood pressure. Access and use of the services was satisfactory according to this study but in comparison with proportion of visits that included basic examinations, it was poorer in both; the private and public institutions.

Antenatal care represents "Services before birth – during the pregnancy" and includes education, systematic examination and treatment for supervision and promotion of wellbeing of mother and child – fetus (WHO 2005). In addition, antenatal care must offer support for female patients, partner and family. This means that treatment as well as health education is requested from these health services (WHO 2005).

This study was designed to evaluate the situation using the parameters set forth in health demographic surveys (Demographic Health Surveys), principles of antenatal care defined by regional office of WHO in Europe, basics of quality of services defined by Donabedian (1990) as well as work that was done previously in Kosovo from many foreign and local agencies.

2. Methodology and sample

2.1 Study preparation

Initially the literature has been consulted with the aim of getting informed and as guide in development of the measurement instruments for the study. In this direction has been used professional literature and different reports from governmental institutions, professional associations and different international agencies.

2.2 Country wide survey

To ensure total representation of population, 1000 females were interviewed, from which 312 from Prishtina / Priština region and 688 from other regions of Kosovo. From 1000 respondents 968 were Albanians and 32 from other communities (31 - Roma, Ashkalia, Egyptian - RAE and 1 Bosniac). Survey method was face-to-face paper and pencil interview, in the house of interviewers using multi-staged random probability sampling.

Sample was classified according to regions of Prishtina / Priština, Mitrovicë / Mitrovica, Prizren / Prizren, Gjakova / Đakovica, Gjiilan / Gnjilane and Peja / Peć as well as into rural areas respectively urban areas. Selection of households was based on "random route" methodology. Women that were pregnant/gave birth in the last 5 years were selected for the study. Substitution of respondents has been performed in case of 3 failures of first contact. As result 92.8 Percent of interviews were completed during the first visit, 5.9 Percent during second visit and 1.3 Percent during third visit. Field visits were performed during month of August and 41 interviewers were included. 15 Percent of the interviews were double checked by field managers as a mechanism to ensure the quality of the data. Because of political situation just after independence, despite the couple of attempts and good will it was not possible to include representatives of Serb community in the study.

2.3 Focus groups with healthcare professionals

As part of the study 6 focus groups with 6-20 participants were organized in 6 regional healthcare centers: Gjiilan / Gnjilane, Gjakova / Đakovica, Prizren / Prizren, Prishtina / Priština, Peja / Peć and Mitrovicë / Mitrovica. Group participants were healthcare professionals of different profiles i.e. specialists and physicians in specialization of gynaecology and obstetrics, paediatricians, neonatologists, family doctors, nurses and midwives.

3. Study results

3.1. General data on sample

In Figure 3.1.1 as well as in Table 3.1.1 is presented the structure of sample disaggregated by region, age, marital status, level of education and ethnicity. In sample can be seen that there are no members of Serb community included due to political situation and difficulties to conduct an adequate and randomized participation of respondents from Serb ethnic group. In the Table 3.1.1 total of participants in the study is shown in the last row and it applies for all groups which are disaggregated in set categories.

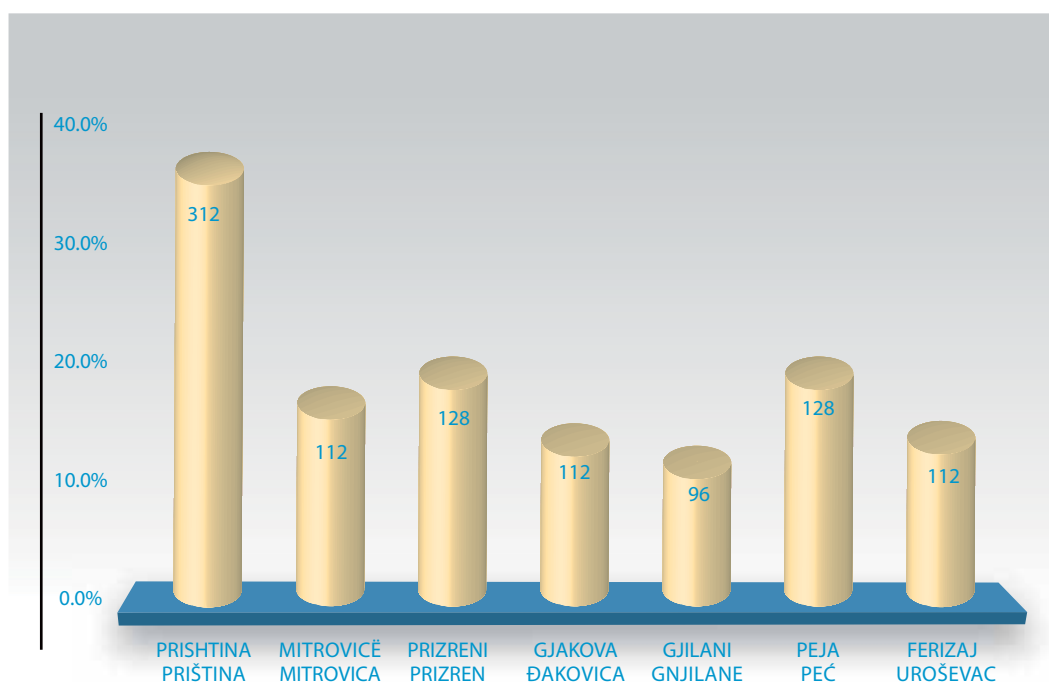


Figure 3.1.1 Sample structure according to regions

		N	%
Age	15 – 19 years	15	1.5
	20 – 24 years	130	13.0
	25 – 29 years	302	30.2
	30 – 34 years	333	33.3
	35 – 39 years	151	15.1
	40 – 44 years	52	5.2
	45 – 49 years	15	1.5
	Over 50 years	2	0.2
Marital status	Married	985	98.5
	Live with my partner	9	0.9
	Divorced / separated from husband	5	.5
	Widow	1	0.1
Level of education	None	76	7.6
	Elementary education not completed	483	48.3
	Elementary education completed	42	4.2
	High school not completed	260	26.0
	High school completed	56	5.6
	University/studies not completed	52	5.2
	University/study completed	3	0.3
	Master/Doctorate	76	7.6
Ethnicity	Albanian	968	96.8
	Bosniac	1	0.1
	RAE	31	3.1
Total		1000	100.0

Table 3.1.1 Sample structure

3.2. Trends in antenatal care and quality of services

From Figure 3.2.1 can be seen that 32.7 Percent of women start with antenatal visits at the beginning of pregnancy (0 – 3 months). Still a considerable (over 60 Percent) of women start to use antenatal services from the fourth month. From Figure 3.2.1 can be concluded that in Gjakova / Đakovica and Ferizaj / Uroševac region percentage of pregnant women that make their first antenatal visit during the first three months is less than 20 Percent. Results show that there are no late antenatal visits from 8 months and onwards, as it can be the case in other developing countries.

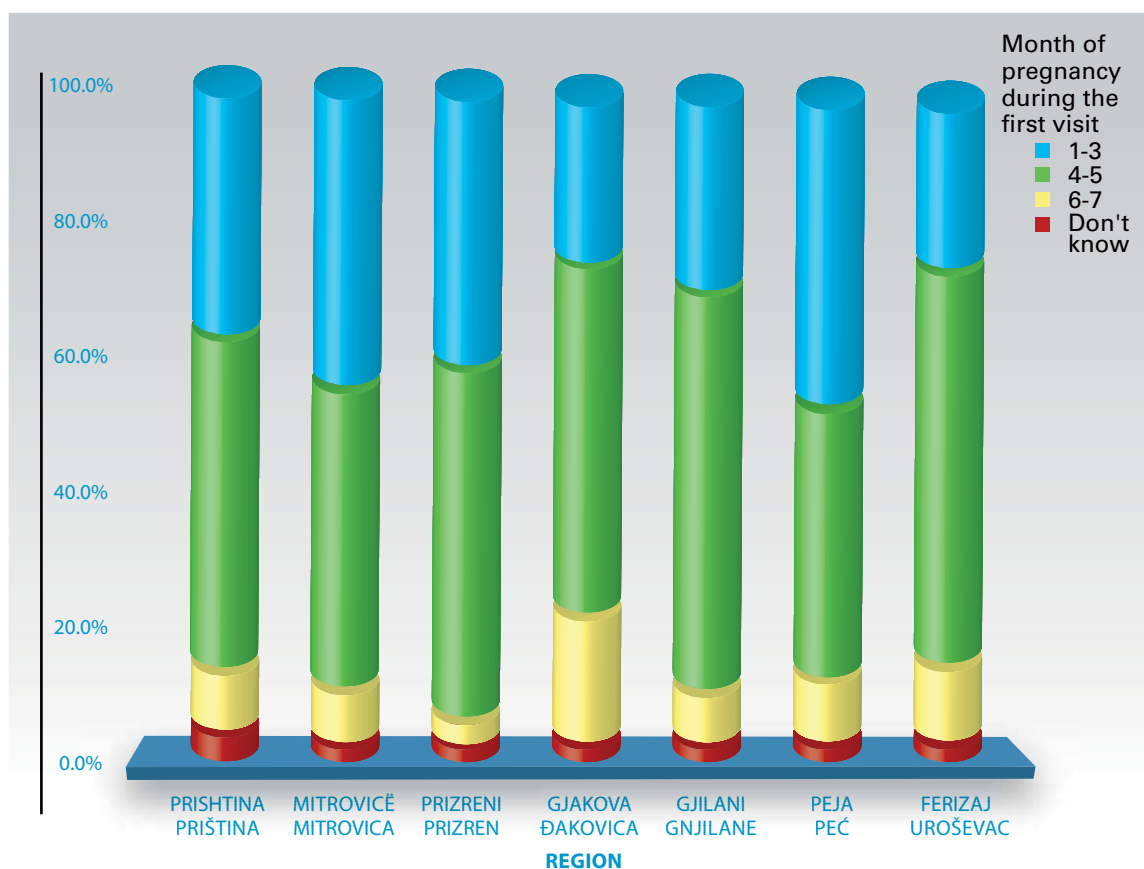


Figure 3.2.1 First antenatal visit according to pregnancy months

For early use (during first three months) of antenatal visits, is distinguished Mitrovicë / Mitrovica region with 41.1 Percent, follows Peja / Peć region with 39.8 Percent and Prizren / Prizren region with 39.4 Percent from total of interviewed women.

Number of antenatal visits during the pregnancy period in 78.1 Percent of the cases is equivalent or more than 4 antenatal visits (Table 3.2.1). The highest percentage with 4 or more visits has been registered in Peja / Peć (81.2 Percent) and Prishtina / Priština (80.8 Percent). In Ferizaj / Uroševac and Gjakova / Đakovica this number was 72.3 Percent and 73.0 Percent respectively.

		Number of antenatal visits				Month of pregnancy for the first visit			
		1 (%)	2 – 3 (%)	≥ 4 (%)	Don't remember (%)	0 – 3	4 – 5	6 – 7	Don't remember (%)
Region	Prishtina / Priština	4.2	13.1	80.8	1.9	34.9	48.4	13.5	3.2
	Mitrovicë / Mitrovica	3.6	15.2	76.8	4.5	41.1	46.4	11.6	.9
	Prizren / Prizren	4.7	15.7	78.7	0.8	39.4	52.0	7.9	.8
	Gjakova / Đakovica	3.6	21.6	73.0	1.8	19.8	52.3	25.2	2.7
	Gjilan / Gnjilane	4.2	15.6	78.1	2.1	24.0	62.5	10.4	3.1
	Peja / Peć	3.1	15.6	81.2	.0%	39.8	43.0	14.1	3.1
	Ferizaj / Uroševac	6.2	19.6	72.3	1.8	22.3	58.9	17.0	1.
Total		4.2	15.9	78.1	1.8	32.7	50.9	14.0	2.4

Table 3.2.1 Number of antenatal visits and month of the first visit

According to the results of the study, gynaecologist is the healthcare professional offering most antenatal services (Table 3.2.2). 98.5 Percent of woman reported that they visited the gynaecologist, while only 9.1 Percent of women reported that they visited nurses during antenatal visits.

Region	Gynecologist / obstetrician		Family doctor		Nurse		Midwife		Traditional person ¹		Healthcare worker in the community	
	N	%	N	%	N	%	N	%	N	%	N	%
Prishtina / Priština	310	99.4	6	1.9	12	3.8	6	1.9	8	2.6	0	.0
Mitrovicë / Mitrovica	107	95.5	0	.0	3	2.7	14	12.5	4	3.6	2	1.8
Prizren / Prizren	124	96.9	3	2.3	2	1.6	2	1.6	1	.8	2	1.6
Gjakova / Đakovica	111	99.1	3	2.7	1	.9	2	1.8	2	1.8	1	.9
Gjilan / Gnjilane	94	97.9	3	3.1	19	19.8	4	4.2	6	6.2	1	1.0
Peja / Peć	127	99.2	11	8.6	49	38.3	13	10.2	0	.0	0	.0
Ferizaj / Uroševac	112	100.0	1	.9	5	4.5	3	2.7	0	.0	2	1.8
Total	985	98.5	27	2.7	91	9.1	44	4.4	21	2.1	8	.8

Table 3.2.2 Which healthcare professional you have consulted/visited during pregnancy?

Family physicians, despite many efforts to position them in a more active role in antenatal care, continue to be visited very rarely (2.7 Percent) without any difference between the regions, including those targeted with specific programs (i.e. Mitrovicë / Mitrovica, Gjilan / Gnjilane, Gjakova / Đakovica). Very low number (2.1 Percent) of women reported that they visited traditional persons. In region of Gjilan / Gnjilane this was reported the highest (6.2 Percent).

Private institutions are institutions that are visited mostly by women during pregnancy (71.3 Percent) (Figure 3.2.2). Only 28.7 Percent of women visited public institutions for antenatal services. Use of services in private sector during pregnancy is more apparent in Prishtina / Priština (80 Percent) and in Ferizaj / Uroševac (78 Percent). Use of services in the public sector was emphasized in

¹ Persons that offer mainly health counselling services. They mainly come from community based organizations (religious, civil society, etc)

region of Gjakova / Đakovica, with about 50 Percent. Further analysis has shown increased use of antenatal services in private sector with increase of level of education and income of the household. I.e. women with completed higher education reported in 88 Percent of cases that they used more often private institutions.

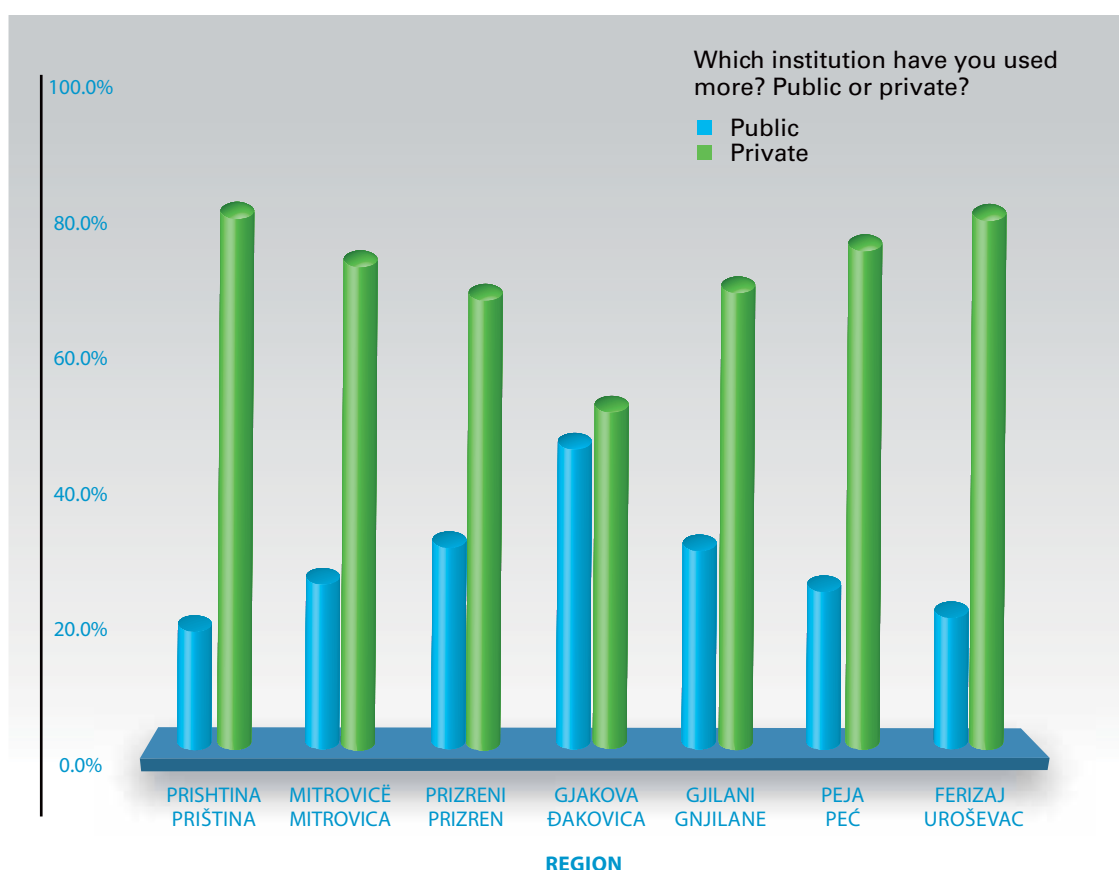


Figure 3.2.2 Institutions visited more often

When it comes to quality of medical examinations, 34.9 Percent of respondents reported that they didn't have gynaecological examination (Table 3.2.3). In Prishtina / Priština, Peja / Peć and Mitrovicë / Mitrovica this was over 40 Percent of the cases. 62.7 Percent of woman reported a gynaecological examination with an average of 3 examinations during whole course of pregnancy. 23.2 Percent of respondents reported that no external gynaecological examination was performed during antenatal visits. In 74.2 Percent of the cases it was reported that external gynaecological examination was performed with an average of 6 examinations during whole course of pregnancy. 91.3 Percent of women reported measurement of blood pressure during antenatal visits with an average of 6 times during all antenatal visits. 81.7 Percent of women underwent blood routine tests, in 91.9 Percent of cases was determined blood group, while 74.1 Percent of respondents declared that they made routine urine tests (Table 3.2.4).

	Have you had gynaecological examination (internal examination) during these visits?			If yes, how many times?	Have you had any abdominal control (external control) during the visits?			If yes, how many times?	Did they measure blood pressure during these visits?			If yes how many times?
	Yes (%)	No (%)	Don't know (%)		Yes (%)	No (%)	Don't know (%)		Yes (%)	No (%)	Don't know (%)	
Total	62.7	34.9	2.4	3	74.2	23.3	2.5%	6	91.3	8.3	.4	6

Table 3.2.3 Examinations during pregnancy (1)

	Did you make any blood test during pregnancy?			If yes how many times?	Did they determine blood group		Did you make urine tests during these visits?			If yes how many times?
	Yes (%)	No (%)	Don't know (%)		Yes (%)	No (%)	Yes (%)	No (%)	Don't know (%)	
Total	81.7	17.9	.4	3	91.9	8.1	74.1	24.8	1.1	3

Table 3.2.4 Examinations during pregnancy (2)

Ministry of Health launched pregnancy health booklet in 2006 and in 2007 that was affirmed with Administrative Instruction that obliged use of the same by institutions and woman. However, distribution of booklet among pregnant women and its use have failed significantly in implementation. In over 40 Percent of cases woman reported that the booklet wasn't given to them. The best implementation of pregnancy booklet was seen in Mitrovicë / Mitrovica region with almost 70 Percent of woman reporting receipt of the booklet. In Figure 3.2.3 differences between regions are presented.

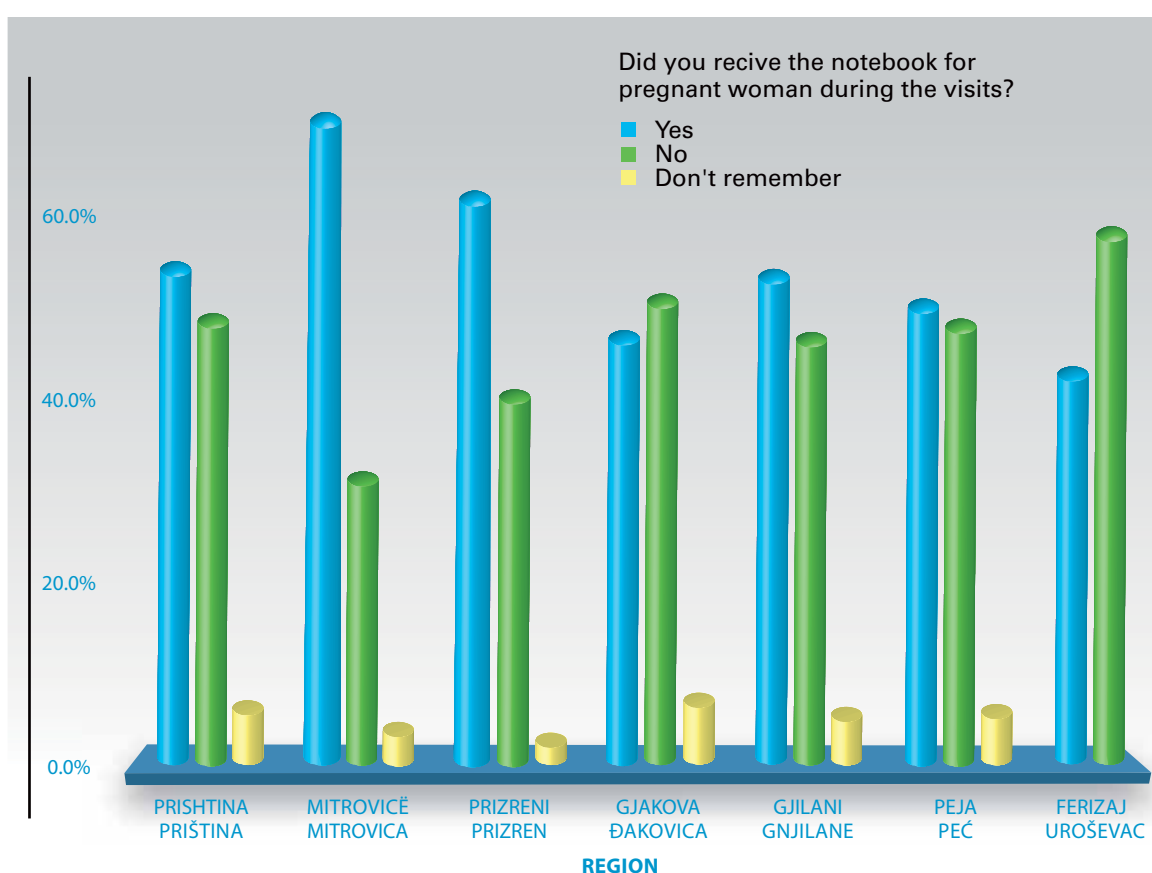


Figure 3.2.3 Use of notebook for pregnant women from year 2006

Infrastructure of institutions where antenatal care services are provided, as one of the dimensions of quality of antenatal care services, was estimated quite high (Table 3.2.5). 86.0 Percent of women reported that there was a waiting room at institutions where they asked advice or consultations. 94.5 Percent of women reported that examination room was separated from other working spaces. 93.7 Percent reported that there was water for hand wash in institutions where they used services. The same for the availability of restrooms with water, which was estimated with 93.7 Percent. This trend was found almost without exceptions, even when the results in different regions were analyzed. Differences were minimal.

	Yes (%)	In some of them (%)	No (%)	I don't remember (%)
Was there a waiting room available at institutions where you received services /consultations?	86.0	7.3	6.2	.5
Was examination space separated from the rest of working spaces?	94.5	2.0	2.5	.9
Was water for hand wash available at institutions where you asked services/consultations?	93.7	1.3	3.6	1.3
Were restrooms with running water available at institutions where you asked services/consultations?	92.5	1.6	3.3	2.5

Table 3.2.5 Quality of antenatal healthcare services (1)

On Table 3.2.6 is presented the analysis of other dimensions of the quality of antenatal care services (behavior and communication of healthcare professionals, medical treatment as well as the hygiene of the object). In 41.2 Percent of the cases was reported that there was verbal interruption of woman while presenting their complaints and 10.0 Percent of the cases reported that this phenomenon happened often. 12.0 Percent of woman emphasized that there was no explanation before the examination started. 10.2 Percent of woman reported that there was no explanation of details around diagnosis and in 7.0 Percent of cases the physician would very rarely give any explanation.

More concerning are the results regarding the instruction and examination of patients. 16.5 Percent of woman reported that they didn't receive any health advice related to pregnancy, while 7.4 Percent of them reported that it rarely happened. 22.2 Percent of woman reported that they were not asked about details from history of previous diseases, while in 9.5 Percent of the cases it rarely happened. 65.9 Percent reported that they didn't undergo physical (non gynecological examination), while among 8.8 Percent this examination rarely happened. From Table 3.2.6 can be seen that hygiene and technical conditions have been reported quite well. Only 1.8 Percent of the cases reported that in examination room didn't have optimal conditions (electricity, lack of moisture, sufficient light, needed serenity), while only 1.4 Percent reported that in examination room there was no optimal hygiene. Only 2.4 Percent declared that in waiting room there wasn't a place for sitting for all that were waiting.

	It never happened (%)	Rarely happened (%)	I don't remember (%)	It happened often (%)	It happened always (%)
Healthcare personnel offered you to sit in order you to feel comfortable.	7.2	5.0	1.5	18.1	68.3
You have been heard carefully during conversation with healthcare personnel.	1.0	3.8	2.7	20.8	71.6
You haven't been interrupted while explaining your problems.	41.2	10.0	3.7	12.2	32.9
Healthcare personnel were very polite.	.8	4.2	1.5	18.5	74.9
You were asked about problems and concerns regarding pregnancy.	4.6	5.0	4.2	21.5	64.7
In examination and consultation room you had full privacy.	2.9	6.2	5.4	17.2	68.4
You have been explained procedure before the examination started.	12.0	6.7	7.6	23.5	50.3
You have been explained in details diagnosis and problems you could have during pregnancy from healthcare personnel.	10.2	7.0	6.6%	19.7	56.5
You have been explained on how you need to use preventive medication.	9.5	2.7	10.8	17.5	59.5
You have been asked details from history of diseases (i.e. infections of urinary tract, heart diseases and similar)	22.2	9.5	8.2	18.0	42.1
You underwent physical examination (i.e. eye examination, body examination.).	65.9	8.8	6.7	8.1	10.5
You have been given health advice from healthcare personnel on pregnancy related condition.	16.5	7.4	5.6	26.5	44.1
In examination room there were optimal conditions (electricity, lack of humidity, sufficient light and sufficient serenity).	1.8	5.2	2.6	21.7	68.7
In the room where you were examined there was optimal hygiene.	1.4	4.2	2.0	21.3	71.0
In waiting room there was enough space for resting/sitting for all that were waiting.	2.4	9.6	3.3	21.1	63.5
In waiting room they was optimal hygiene.	1.5	6.4	3.4	22.2	66.4
In institutions there were sufficient instructions for orienting, or it was a responsible person that gave instructions for waiting in line.	16.1	6.0	5.8	20.1	52.1
During stay in institution you haven't smelled any unpleasant smells.	35.1	17.1	6.5	13.8	27.6

Table 3.2.6 Quality of antenatal services (2)

Lack of patients' orientation at the healthcare institutions was present because respondents reported that in 16.1 Percent of the cases in healthcare institutions there were no sufficient instructions available for orientation, or there was no person in charge that gave instructions to parties. More worrying is the fact that 35.1 Percent of respondents reported that during their stay at institutions they smelled unpleasant smells.

3.3. Access to services and other issues related to use of antenatal care services

From Figure 3.3.1 can be seen that a large part of population lives in a location that is more than 3 km away from primary healthcare institution. Better situation is only in Prishtina / Priština, where this category is presented with only 30 Percent. In Ferizaj / Uroševac and Gjakova / Đakovica this number is larger and is about 60 Percent.

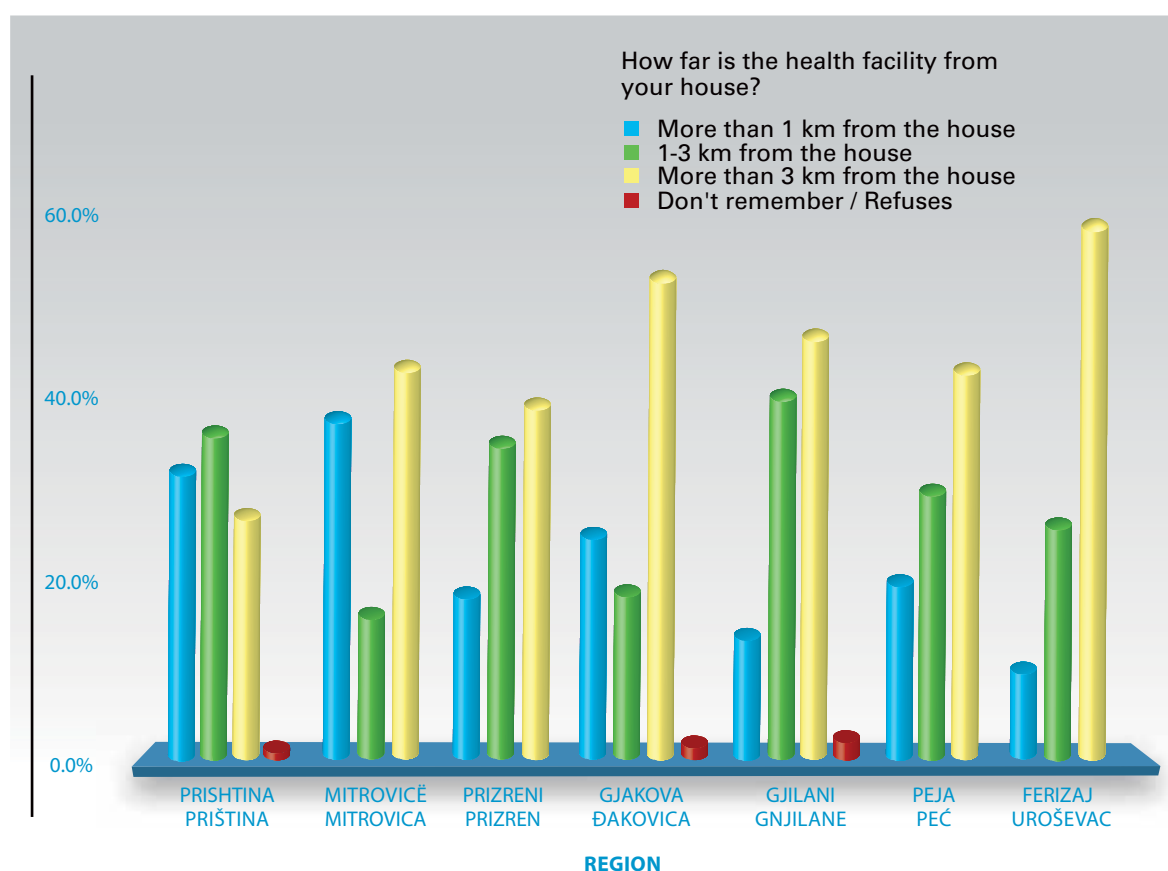


Figure 3.3.1 Distance of healthcare institution from the living place –home

Dealing with travel expenses is an obvious problem (Figure 3.3.2). From 30 Percent in Mitrovicë / Mitrovica till 55 Percent in Ferizaj / Uroševac of interviewed women reported that they can partially deal with transport expenses linked with use of antenatal care services, while from 10 Percent to 18 Percent declare that they couldn't cope with the expenses. Payment of medical visits (Figure 3.3.3) is on average 15 Euros per visit. Average payment is higher in Prizren / Prizren and Peja / Peć region.

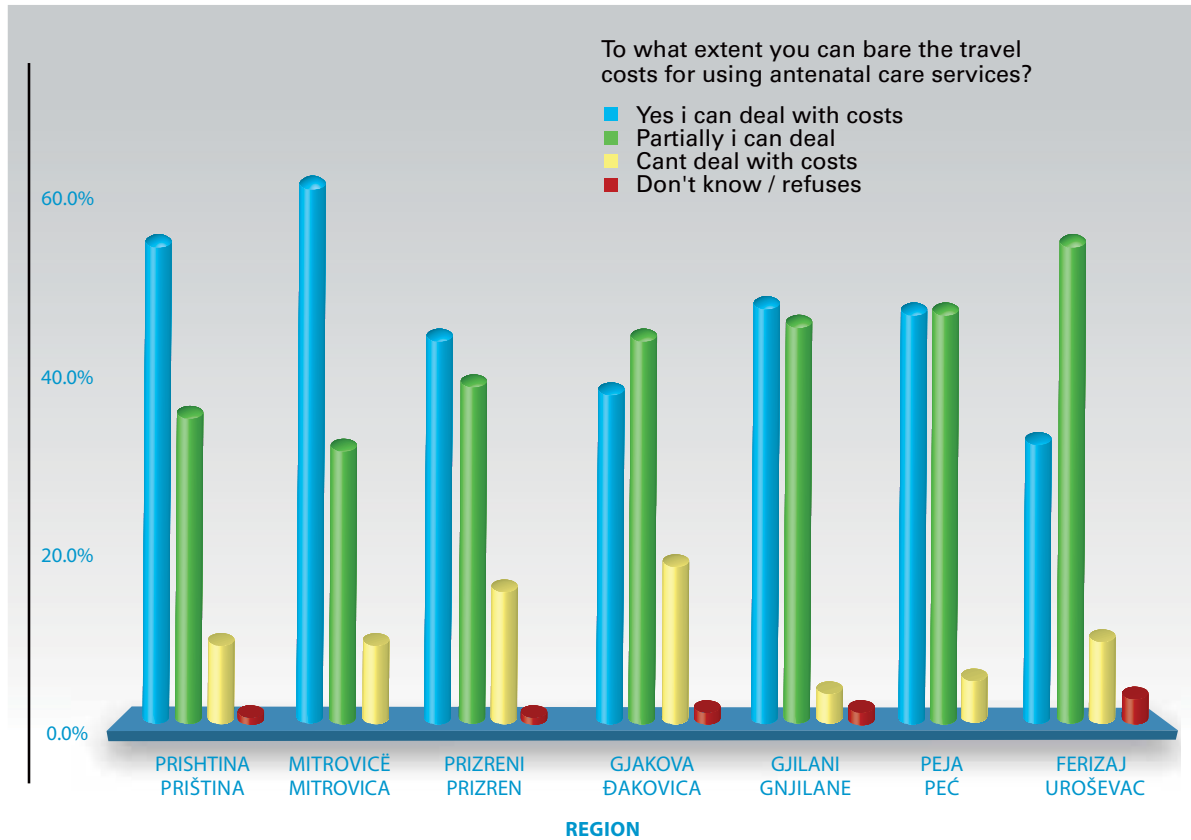


Figure 3.3.2 Dealing with transport expenses

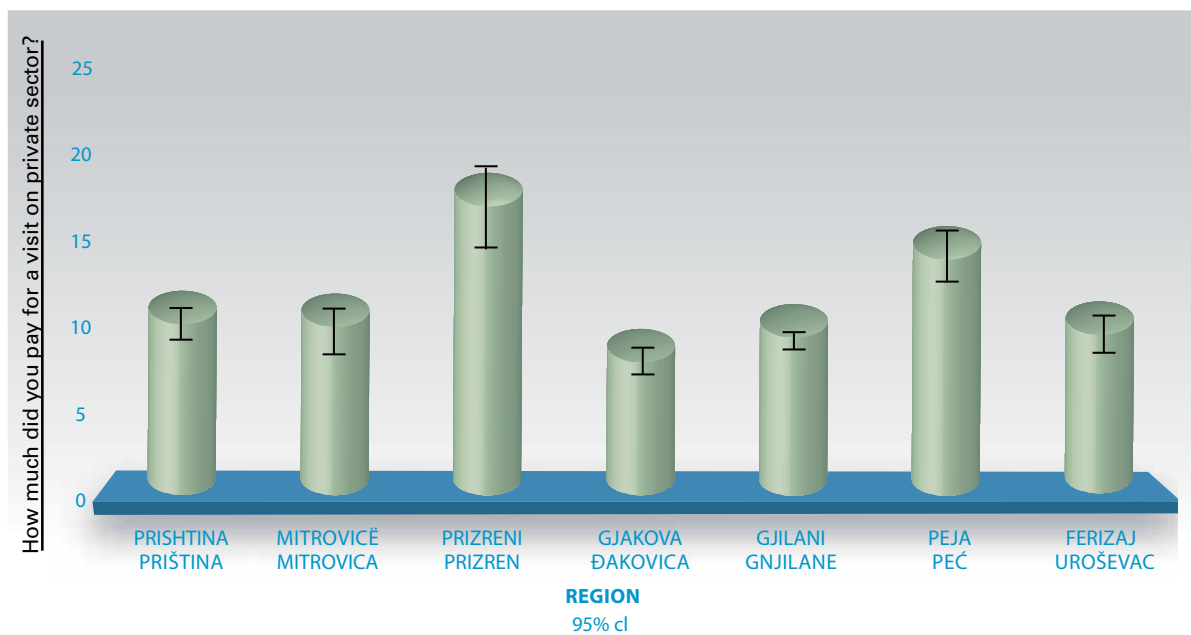


Figure 3.3.3 Average of payment for antenatal visit in private sector (in Euro)

From analysis of social/cultural factors there is still high percentage (15 to 45 Percent depending from the region) of cases where the decision for antenatal visits is made by someone else instead of pregnant women (mostly spouse) and this is presented in Figure 3.3.4.

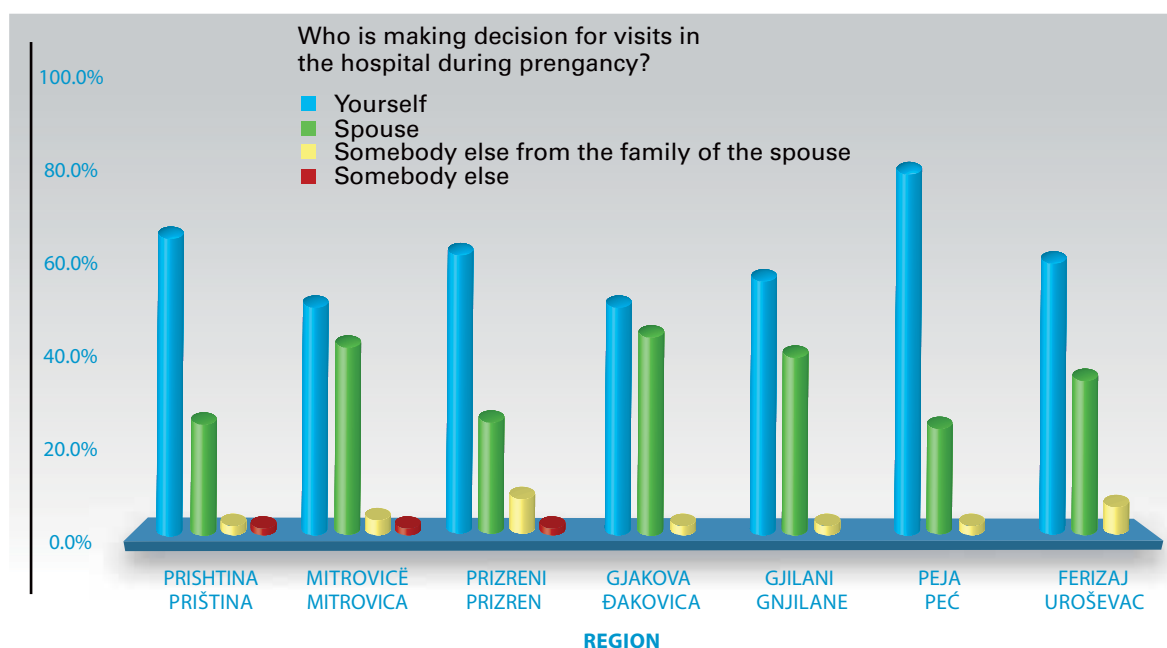


Figure 3.3.4 Who is making decision for antenatal visits

Whereas in the Figure 3.3.5 you can see that in most of the cases women are accompanied by their spouses during medical visits. This fluctuates from 70 Percent Mitrovicë / Mitrovica to 90 Percent in Gjiilan / Gnjilane.

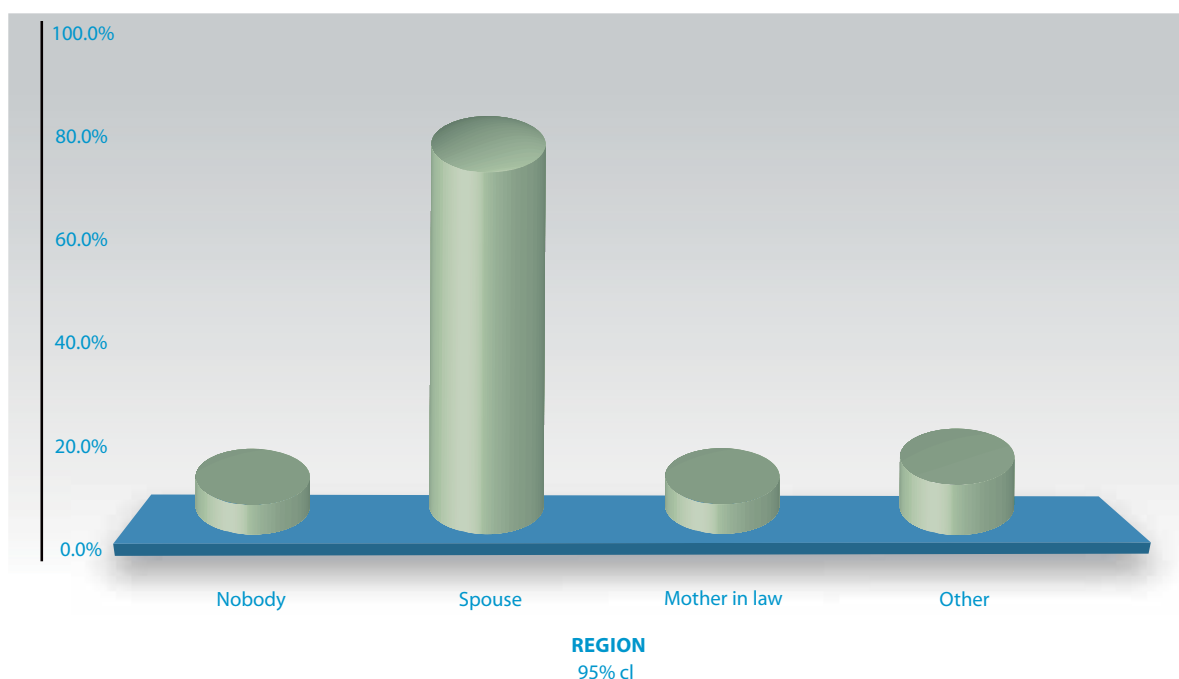


Figure 3.3.5 Accompanying person of pregnant women during antenatal visits

		Is there any personal reason that stops you from using antenatal services?			Is there any family reason that stops you from using antenatal services?			Is there any social/cultural reason that stops you from using antenatal services?			Is there any religious reason that stops you from using antenatal services?		
		Yes (%)	No (%)	Don't know/Refuses (%)	Yes (%)	No (%)	Don't know/Refuses (%)	Yes (%)	No (%)	Don't know/Refuses (%)	Yes (%)	No (%)	Don't know/Refuses (%)
Region	Prishtina / Priština	2.6	97.4	.0	1.9	97.8	.3	.6	99.0	.3	1.3	96.8	1.9
	Mitrovicë / Mitrovica	13.4	86.6	.0	4.5	95.5	.0	3.6	96.4	.0	3.6	95.5	.9
	Prizren / Prizren	9.4	90.6	.0	1.6	98.4	.0	.8	99.2	.0	1.6	97.7	.8
	Gjakova / Đakovica	2.7	93.8	3.6	.0	95.5	4.5	.0	94.6	5.4	.9	95.5	3.6
	Gjilan / Gnjilane	3.1	94.8	2.1	2.1	95.8	2.1	3.1	93.8	3.1	3.1	93.8	3.1
	Peja / Peć	.8	98.4	.8	1.6	98.4	.0	.0	100.0	.0	1.6	98.4	.0
	Ferizaj / Uroševac	3.6	96.4	.0	.9	99.1	.0	.9	99.1	.0	.9	99.1	.0
Total		4.6%	94.7	.7	1.8	97.4	.8	1.1	97.9	1.0	1.7	96.8	1.5

Table 3.3.1 Analysis of socio-cultural barriers in antenatal services

Further analysis of social causes didn't reveal any other major issue. In 4.6 Percent of the cases there have been reported personal reasons that stopped woman to use antenatal services (Table 3.3.1). A bit more emphasized this aspect was present in Mitrovicë / Mitrovica with 13.4 Percent and Prizren / Prizren with 9.4 Percent.

On the other hand only 1.8 Percent of respondents reported that there are family reasons preventing the women to use antenatal services. 1.1 Percent of respondents reported existence of social/cultural reason that stopped them from using antenatal services and only 1.7 Percent of respondents reported presence of religious reason that stopped them to use antenatal services.

3.4. Level of information among pregnant women

Level of information among pregnant women is presented in figures below. From Figure 3.4.1 can be seen the preference for visits during pregnancy from respondents. High percentage of women reported that 1 to 4 visits are enough.

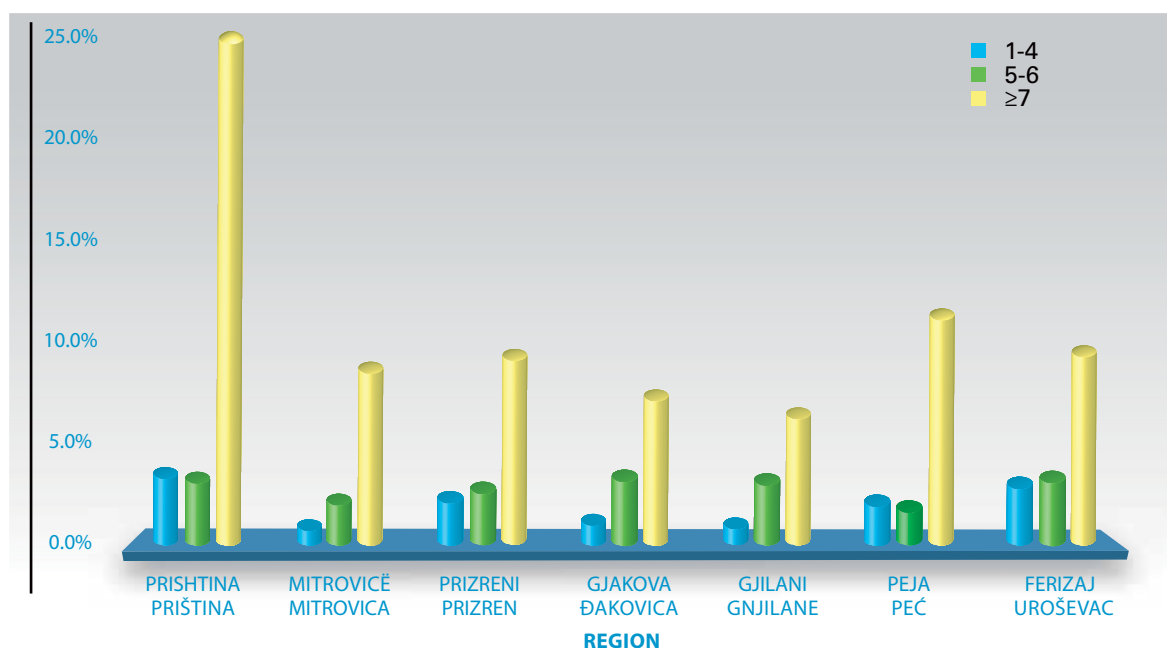


Figure 3.4.1 How many times you think you need to visit a doctor?

Figure 3.4.2 represents knowledge of woman in relation to signs of complications during pregnancy that they should be aware of and should seek immediate help from a physician. In figure can be seen that around 15 Percent of woman thought blood pressure is the key reason for seeking physicians help, around 30 Percent of respondents thought different pains should be reason to seek physicians help, while 40 Percent of woman that answered this question thought bleeding is a serious enough sign for medical problem to seek for physicians help.

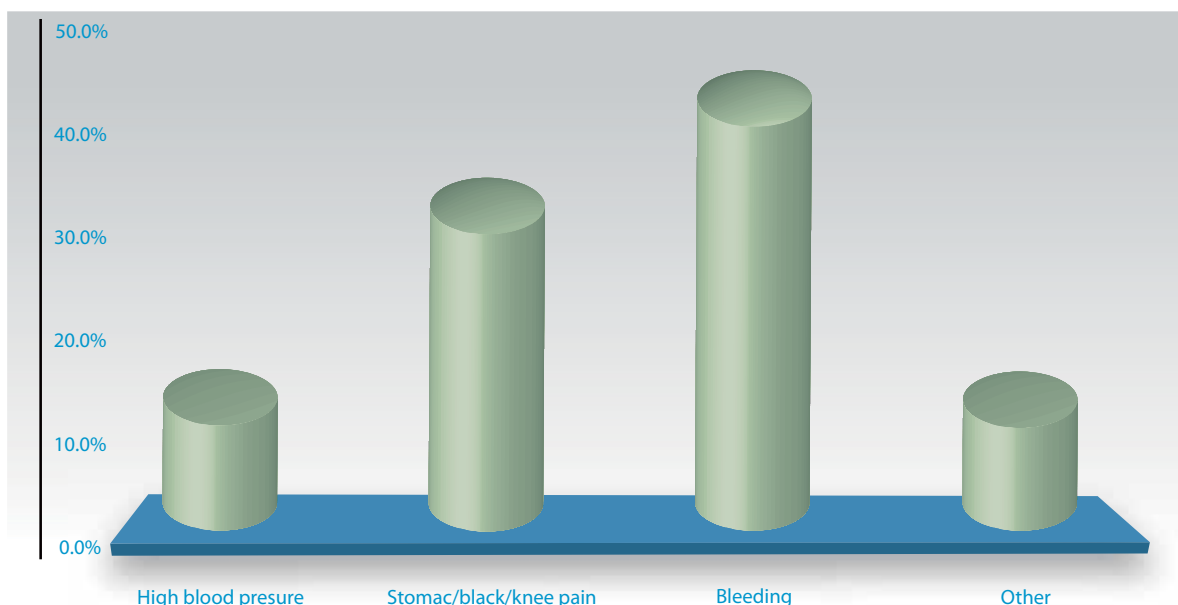


Figure 3.4.2 In which cases you need to go immediately to doctor? Which are dangerous signs?

Figure 3.4.3 and Figure 3.4.4 represent views of woman regarding duration of breastfeeding, and the diet preferences by woman during pregnancy period. Respondents believed that breastfeeding should last for 13 months (Figure 3.4.3). Over 65 Percent of respondents reported that don't need to apply any restrictions in food consumption (Figure 3.4.4) and only about 27 Percent were aware that they need to have any diet.

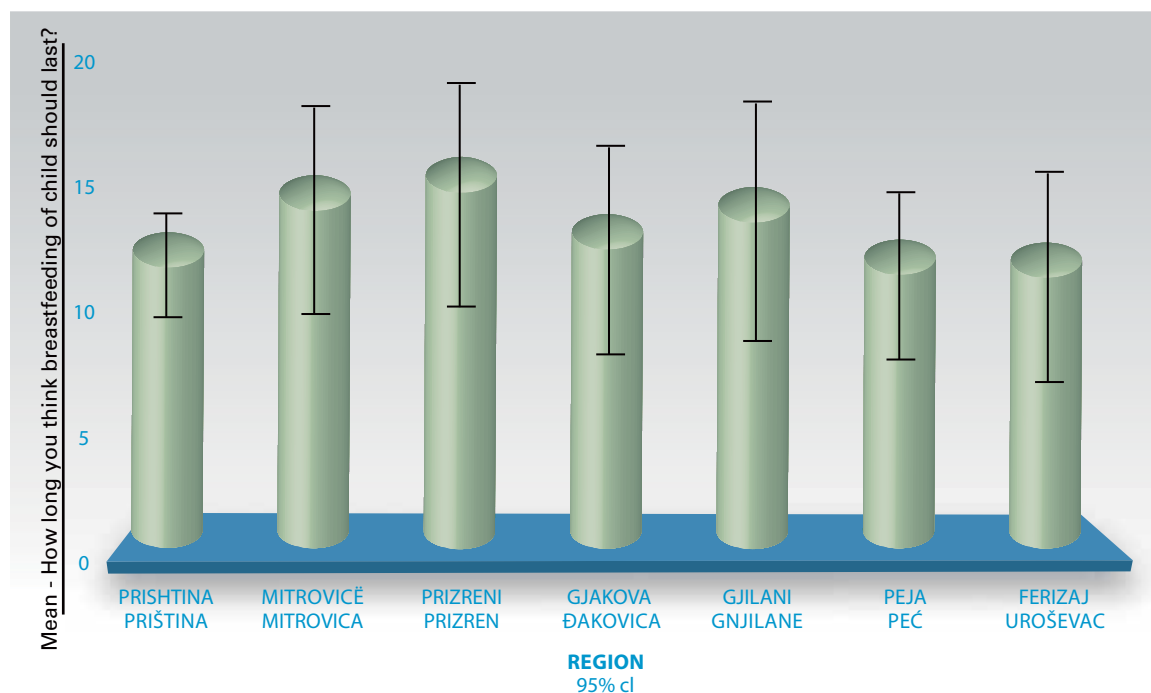


Figure 3.4.3 Knowledge about duration of breastfeeding

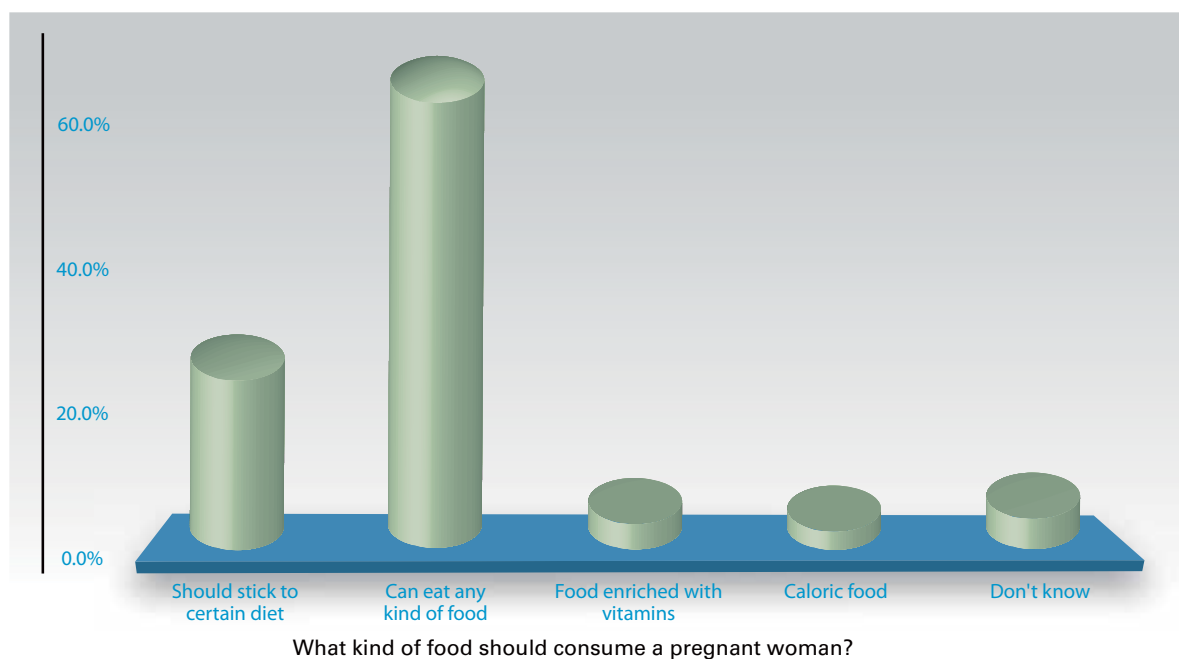


Figure 3.4.4 Knowledge about personal diet during pregnancy

Folic Acid		18.4%
Iron supplements		26.7%
I've consumed medicaments for other diseases		8.4%
Don't know what medication I took		3.7%

Table 3.4.1 Analysis of consumption, of folic acid, iron supplements and other medicaments

	Yes (%)	No (%)
Tobacco	12.9	87.1
Alcohol	.1	99.9
Narcotics	.0	100.0

Table 3.4.2 Have you consumed narcotics/alcohol during pregnancy?

Only 18.4 Percent of woman used folic acid during pregnancy, as preventive measure for preventing the neural tube defects of the embryo/fetus (Table 3.4.1), and 26.7 Percent used iron supplements as preventive measure for anaemia in last months of pregnancy. 8.4 Percent of respondents used other medication for treatment of other diseases. 12.9 Percent of woman confirmed smoking (Table 3.4.2), while the use of alcohol and narcotics during pregnancy was almost inexistent.

3.5 Reproductive health

In special focus during study was reproductive health consultation during antenatal visits. In Figure 3.5.1 you can see a high percentage (about 70 Percent) of women didn't get any advice concerning reproductive health during pregnancy. If regions are compared, situation is less favorable in Ferizaj / Uroševac (only about 10 Percent of women were advised), then in Gjilan / Gnjilane, Gjakova / Đakovica and Prizren / Prizren (only about 20 Percent of women were advised). Figure 3.5.2 confirmed that gynaecologist is healthcare professional that (over 60 Percent) advised women regarding their reproductive health.

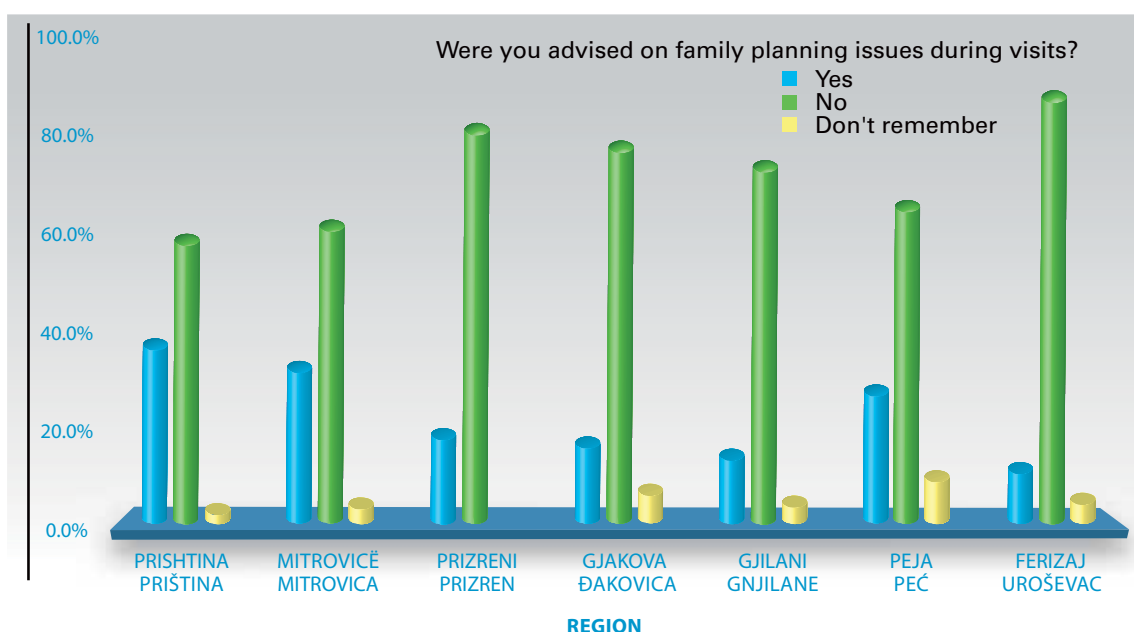


Figure 3.5.1 Advising on reproductive health during antenatal visits

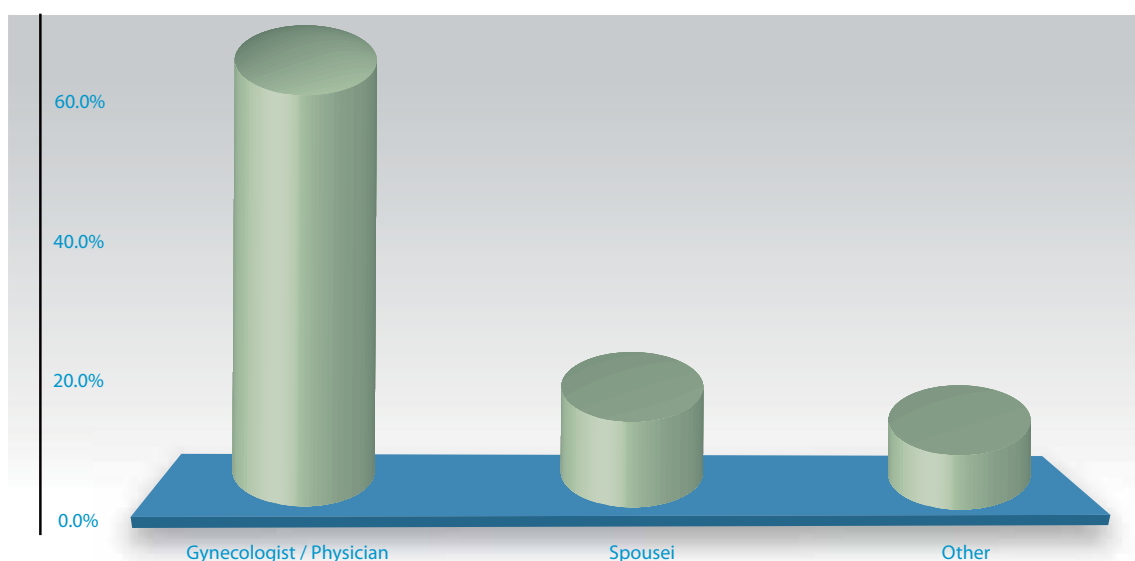


Figure 3.5.2 Who gives advice for reproductive health during antenatal visits

In Tables 3.5.1 and 3.5.2 can be seen that significant number of women haven't had sufficient break period between the two pregnancies. 16.2 Percent of women that answered this question paused less than 2 years between the two births and 26.6 Percent of women had a break of less than two years in last two pregnancies (26.6 Percent).

	Region	Less than 2 yrs		2 yrs and more	
		N	%	N	%
	Prishtina / Priština	37	16.7	184	83.3
	Mitrovicë / Mitrovica	20	27.0	54	73.0
	Prizren / Prizren	10	10.4	86	89.6
	Gjakova / Đakovica	12	14.1	73	85.9
	Gjilan / Gnjilane	11	15.7	59	84.3
	Peja / Peć	17	16.0	89	84.0
	Ferizaj / Uroševac	13	14.9	74	85.1
	Total	120	16.2	619	83.8

Table 3.5.1 Distance between two births

	Region	Less than 2 yrs		2 yrs and more	
		N	%	N	%
	Prishtina / Priština	68	28.5	171	71.5
	Mitrovicë / Mitrovica	15	18.1	68	81.9
	Prizren / Prizren	25	24.3	78	75.7
	Gjakova / Đakovica	26	28.3	66	71.7
	Gjilan / Gnjilane	33	45.8	39	54.2
	Peja / Peć	20	18.9	86	81.1
	Ferizaj / Uroševac	23	24.7	70	75.3
	Total	210	26.6	578	73.4

Table 3.5.2 Distance between two pregnancies

3.6 Perception of the quality of services from healthcare professionals – focus groups

Quality of services - In Mitrovicë / Mitrovica, maternity ward functions within Main Family Medicine Centre (MFMC) as result of political situation in the city. Working space is very limited making impossible that medical visits have sufficient duration. In Prizren / Prizren as well there is no sufficient space, hereupon exist 13 rooms of obstetric ward, while there are about 4000 births per year in maternity. There is no space for treatment of certain pathologies and at the same time doctors think its absurd the fact that utilization of hospital beds is claimed as low from others (officials from Ministry and international agencies). Despite this there is a satisfactory level of hygiene in most of regional hospitals. For example in Mitrovicë / Mitrovica this is verified with the fact that every 6 months sanitary analysis is conducted and the institution possess regular sanitary booklet. The same phenomenon was noted in Prizren / Prizren where there are no complaints about hygiene equipment despite other complaints.

Patients usually don't wait long at healthcare institution (which was verified by the women's survey). During clinical examination the privacy is taken care. In Gjakova / Đakovica a wide spectrum of services is offered but however laboratory tests aren't conducted in the hospital. Tests are done in private laboratories, and even there you can't find a complete spectrum of laboratory services. Commitment of doctors is maximal although there is limited equipment for offering of healthcare services. During discussions with doctors, doubts where share in regard to whether the medical procedures were really carried out in the right manner and it was emphasized the lack of auditing system for work of physicians that results with the lack of standards in clinical work and failures in offering proper antenatal healthcare services. In Mitrovicë / Mitrovica ultrasound examination is done mainly in private institutions with the purpose of determining the gender of the fetus. There are cases when patients get up to 8 ultrasound checks, while at the same time the measurement of blood pressure hasn't been performed. For more, there is no adequate distribution of work among physicians. In one side you have pregnant women that wait for services at gynaecologists, while in the other hand family doctors are not that much engaged in offering antenatal services (that matches with the results of the survey). In Prizren / Prizren, supply with pharmacies is very poor, as one of participants in focus groups outlined. There is continuous talk about this problem however the physicians still face situations when they do not have gloves for examination and other basic supply necessary for daily work. There are cases when elevator doesn't work and pregnant women need to be carried out by the personnel through the floors of hospital. There are also cases when central heating during winter doesn't function regularly and there are electricity cuts due to restrictions country wide. Rhogam is absent for weeks because it's not in the list of essential medications. It also can't be found in private sector. Pregnant women need to travel through Kosovo and Macedonia to find the medicament. There are cases when elementary means for communication i.e. telephone don't function.

Information of women - There are often cases when pregnant women come without pregnancy booklet during antenatal visits and doctors instruct them continuously to do the opposite. This is of importance because notebook is one of the means that is supposed to enable better care and makes physician better aware of the whole history of care during the entire course of pregnancy. In Mitrovicë / Mitrovica there are no spaces for counselling of woman in regard to their health during pregnancy because two institutions use the same object (hospital and main family medicine cen-

tre). Pregnant women tend to inform each other about new health condition and they don't get a lot of information from healthcare professionals. On the other side there are pregnant women that use internet, as well as woman that are informed from other sources, but at the same time doctors find women that have no information/idea regarding their new health condition. However pregnant women are more prepared and informed comparing with previous periods (before the war). There are not as many complicated cases and mothers are more aware then before regarding eating habits and at the same time there is more planning and preparation regarding their pregnancy. Physicians report massive smoking among pregnant women, which was partially confirmed in the survey. In Gjakova / Đakovica there is no counselling room for women and physicians don't have time to offer health education because of numerous commitments and lack of personnel. In Prizren / Prizren except from healthcare professionals, education of women is also done through activities of civil society. Women that come from Malisheva region have obvious deficiency in health education. Around 20 Percent of women come at the end of pregnancy, respectively ninth month. Ultrasound examination has become an obsession and every three weeks pregnant women come to attend such examination. During the day there are around 60 such visits. In Malisheva there is a person that deals with counselling, but his services are required very little. In Gjiilan / Gnjilane there is counselling centre for mothers, and its functioning.

Regulation of antenatal healthcare services – Pregnancy booklet is considered as the proper step for improvement of the health of mother and child. However functioning of this mechanism is deficient in a high level and this was confirmed in every focus group. In all centres there is knowledge for existence of protocols for antenatal care that are developed by Kosovo Obstetric and Gynaecology Association but again is confirmed that in practice protocols aren't being applied. A physician in Peja / Peć explained this with the lack of discipline among physicians and lack of mechanisms for enforcement of protocols.

Another observed phenomenon is the fact that despite increased number of gynaecologists' there is an obvious deficiency in their sub specialization and continual education. Most of young professionals weren't able to learn much during education process in the Medical Faculty and UCCK. For more doctors don't have much of scientific experience and knowledge on more advanced procedures. I.e. amniocentesis is performed sporadically from physicians that learn this elsewhere or during the work with a senior physician. Physicians cannot cope to finance themselves for continual training, and if they do decide to do so, they do that on individual basis. Lack of profile has different consequences. I.e. in Prizren / Prizren there is no cytologist and therefore no services in that field. As result sample has to be taken at hospital in order to be analyzed in private institutions. The medical staff is not trained properly to perform colposcopy. On the other hand physicians perform ultrasound examination although they don't possess deeper knowledge on doing that. In Gjakova / Đakovica, physicians confirm that there are well trained as physicians that have participated in symposia and congresses at international, but however they do confirm that there is deficiency in specialization of department and physicians. Financing of continual education is usually done on individual basis and without institutional support. Things are centralized at central level and benefits and information that arrive to physicians at regional hospitals remain low.

Equipment and its deficiency was emphasized number of times during discussions in focus groups. But sometimes as it was elaborated in more detail, it was clear that the deficiency was related to more advanced equipment rather than basic (necessary) one.

One interesting point of discussion occurred in Gjakova / Đakovica and Gjiilan / Gnjilane regarding the need for centralization of healthcare data, which at the moment is one of the main problems that prevents proper functioning of an efficient system of antenatal care. This is linked with lack of technical infrastructure, then with deficiency in standardization of data registration from medical staff, discipline in registering of data as well as lack of capacity in managing such process. Malfunction of such system makes impossible evaluation of work in departments and institutions. Information system developed by the Ministry of health and European Agency for Reconstruction was reported inadequate and dysfunctional. An additional situation that makes difficult the functioning of this system is related to the lack of support by management in use of this system and lack of interest in using the same to evaluate the performance individual physicians.

Another disturbing element is the existence of scepticism regarding the initiatives for improving situation regarding provision of antenatal care in Kosovo. One doctor said that “we discussed it before... but still nothing has been undertaken...”

Inadequate referral system of pregnant women in healthcare institutions is additional complaint coming from physicians working in regional hospitals. In Gjakova / Đakovica physicians emphasized that because there are too many pregnant women arriving from other regions, their regional centre cannot perform successfully as they receive pregnant women they didn't monitor before. At the same time they spoke about their success regarding referral of pregnant women at the Obstetrics and Gynaecological Clinic in Prishtina / Priština, explaining that the lowest number of referral to UCK comes from regional centre in Gjakova / Đakovica. However it's confirmed that there is no clear instructions on how should work the referral system of patients through different levels of health care system. Referral itself happens very spontaneously and there is no intervention from the responsible authorities in regulation of the issue. In Prizren / Prizren on the other hand it was confirmed that there is lack of family doctors and general physicians. There is no patronage system as it has existed before during the socialist system and this in high levels bans education of women for using of antenatal services and at the same time contributes to inadequate referral of the patients. Because the system is not well organized, additional expenses for patients are caused. Service in rural areas is very weak and “everything” is referred to the hospital. What loads the physicians burden even more is the fact that patients come from different regions without any analysis or information that would enable physicians to consider history of pregnancy.

The antenatal care depends from many parts of the health care system and especially from family physicians, said a physician in Peja / Peć focus group. Family physicians despite many initiatives to advance their role still remain in the role of general physician. It's interesting fact that in Peja / Peć and Gjiilan / Gnjilane there was quite apparent criticism toward the role of family physicians and the implementation of specialization of family physicians as well as physicians that are awarded with these specialization programs.

4. Conclusions and recommendations

Study on antenatal care highlights and illustrates in detail some of main issues and concerns regarding provision of antenatal services in Kosovo. In addition to results from the survey of women, discussions with healthcare professionals from 6 region confirmed many problems regarding organization, provision and quality of antenatal healthcare services. Generally there still exists lack of organization of services and disbalance in use of healthcare services in different levels of healthcare system as well different sectors (private/public). For more, it's more than clear that strategies as well as certain health policies are not being implemented. Concrete case is partial use of pregnancy booklet as well as use of protocols for antenatal care. Individual performance of physicians continues to be low if compared with previous studies especially when it's related to communication skills, health consultation, performing of medical examination as well as counseling related to reproductive health. Among positive aspects emphasized in the study are the state of infrastructure and hygiene, which were highly evaluated by women that used antenatal services. It's interesting that despite this, physicians and leaders of institutions talk about and present among key needs the supply with modern equipment, while in other hand according to study the main problems are related to organization of antenatal care, better use of existent resources, and lack of implementation of adopted health policies. Although it's true that some of lab tests cannot be carried out with the equipment in public health system, this doesn't make the lack of modern equipments as the most immediate need. On the other hand the overall situation in healthcare system is reflecting strongly in antenatal healthcare system. It directly reflect on problems with supply with medicines and basic medical equipment, lack of managerial capacities for implementation of health policies, lack of decision making on the basis of cost-effectiveness as well as on organization of healthcare system. Deficient organization of healthcare professionals in organizations and associations of physicians hampers the potential of professionals to lobby and advocate effectively for working standards in health sector and support for provision of antenatal services. Health information system is non efficient and produces questionable data regarding functioning of antenatal care. There is weak system for regular health education of patients despite some good practices in different healthcare centres. This study has used variables similar to other research studies realized through the world i.e.: by WHO, Demographic Health Surveys and it presents potential comparable value with other studies.

Recommendations that derive from this study are as follows:

1. To strengthen and support office for mother and child health and reproductive health at MoH for coordination of programs, counselling groups, institutions, as well donor or implementation partners.
2. To consider as priority mother and child health, as well as to organize antenatal care services according to human, financial and capital resources.
3. To revise Strategy for Reproductive Health and compile Strategy for Child and Adolescents Health and Development.
4. To allocate financial means for mother's and child's health, in order to ensure sustainability in application of existent policies and to draft other necessary ones.
5. To compile concrete short term and middle term plans for antenatal care;
6. To plan and systemize professional medical resources while increasing the quality of knowledge and their experience during education and re-education.
7. To support, strengthen and systemize the programs regarding education for reproductive health of healthcare workers as well as health education of population in different ways.
8. To regulate and functionalize as soon as possible Health Information System as well as referral system.
9. To improve performance of institutions' management.
10. To initiate and support modules for further specialization of gynaecologists and obstetricians.
11. To perform a proper analysis of the system, level of mortality, existent resources for certain services.
12. To strengthen mechanisms that will increase number of antenatal visits in the first trimester of pregnancy.
13. To support increase of number of antenatal care visits and improvement of quality of visits.
14. To arrange longer medical (gynaecologic) visits and to shorten waiting time for visits.
15. To strengthen and improve role of family physicians and nurses in antenatal care.
16. To strengthen role of women in clinical decision-making when there a need for medical visit as well as for other health issues.
17. Medias to widen their programs regarding reproductive health, incorporating them in times that can be watched by most of population.
18. A more active role in organizing of existent professional associations of family doctors, gynaecologists and obstetricians as well as nurses and midwives.
19. To support health inspectorate and quality coordinators to monitor the work of health professionals.
20. To perform internal and external audits of the work of healthcare professionals and health institutions.

5. Literature

1. Health Policy for Kosovo. Department of Health and Social Welfare. Prishtina / Priština, 2001.
2. Perinatal Situation in Kosovo for years 2000 – 2007, MoH, KMChCC, NIPH, KOGA, KPA, UNICEF, UNFPA, WHO, FIGO
3. Promoting Effective Perinatal Care in the European Region, World Health Organization, 2000.
4. Sylva S, Gashi. A Promoting Effective Perinatal Care in Kosovo, Evaluation Report 2000-2001. World Health Organization and UNICEF, 2002
5. The demographic, social and reproductive health situation in Kosovo after the conflict in 1999. UNFPA, Office of Statistics in Kosovo and IOM, 2000.
6. Gloeb J. Perinatal health care situation in Kosovo: Past, present and future, UNFPA mission in Kosovo
7. Micro-nutrient status survey in Kosovo, NIPH, UNICEF and Institute for Food and Nutrition, 2002.
8. Kosovo poverty assessment report, The World Bank, 2005.
9. Reduction of maternal mortality: a joint WHO/UNFPA/UNICEF/World Bank statement, Geneva, World Health Organization, 1999.
10. Maine D. Safe motherhood programs: options and issues. New York, Columbia University, 1991.
11. Lilford RJ, Chard T. Problems and pitfalls of risk assessment in antenatal care. *British Journal of Obstetrics and Gynaecology*, 1983, 90:507-510.
12. Carroli G et al. for the WHO Antenatal Care Trial Research Group. WHO systematic review of randomised controlled trials of routine antenatal care. *The Lancet*, 2001, 357:1565-1570.
13. Villar J, Bergsjø P. Scientific basis for the content of routine antenatal care. I. Philosophy, recent studies and power to eliminate or alleviate adverse maternal outcomes. *Acta Obstetrica et Gynecologica Scandinavica*, 1997, 76:1-14.
14. Bergsjø P, Villar J. Scientific basis for the content of routine antenatal care. II. Power to eliminate or alleviate adverse newborn outcomes: some special conditions and examinations. *Acta Obstetrica et Gynecologica Scandinavica*, 1997, 76:15-25.
15. Rooney, C. Antenatal care and maternal health: how effective is it? A review of the evidence. WHO/MSM/92.4. Geneva, World Health Organization, 1992.
16. Carroli G, Rooney C, Villar J, WHO Programme to Map the Best Reproductive Health Practices. How effective is antenatal care in preventing mortality and serious morbidity? *Paediatric and Perinatal Epidemiology*, vol 15, suppl 1, January 2001.

17. Villar J et al. for the WHO Antenatal Care Trial Research Group. WHO antenatal care randomised trial for the evaluation of a new model of routine antenatal care. *The Lancet*, 2001, 357:1551-1564.
18. WHO antenatal care randomized trial: manual for the implementation of the new model. WHO/RHR/01.30. Geneva, World Health Organization, 2001.
19. Maternal mortality in 2000: Estimates Developed by WHO, UNICEF and UNFPA. Geneva, World Health Organization, 2003.
20. WHO Library Cataloguing-in-Publication Data Antenatal care in developing countries: promises, achievements and missed opportunities : an analysis of trends, levels and differentials, 1990-2001.
21. Prenatal care – trends. World Health Organization, 2003.
22. Byrne DL, Asmussen T, Freeman JH. Descriptive terms for women attending antenatal clinics: mother knows best? *British Journal of Obstetrics and Gynaecology*, 2000, 107:1233–1236.
23. Carroli G, Rooney C, Villar J. How effective is antenatal care in preventing maternal mortality and serious morbidity? *Paediatric and Perinatal Epidemiology*, 2001, 15 (Suppl. 1): 1–42.
24. The WHO Reproductive Health Library, No. 5. Geneva, World Health Organization, 2002.
25. Villar J et al. for the WHO Antenatal Care Trial Research Group. WHO antenatal care randomised trial for the evaluation of a new model of routine antenatal care. *The Lancet*, 2001, 357: 1551–1564.
26. Carroli G et al. for the WHO Antenatal Care Trial Research Group. WHO systematic review of randomised controlled trials of routine antenatal care. *The Lancet*, 2001, 357: 1565–1570.
27. Villar J et al. Patterns of routine antenatal care for low-risk pregnancy. *The Cochrane Library*, Issue No. 2. Oxford, Update Software, 2002.
28. Bergsjø P, Bréart G, Morabia A. Monitoring data and safety in the WHO Antenatal Care Trial. *Paediatric and Perinatal Epidemiology*, 1998, 12 (Suppl. 2): 156–164.
29. Piaggio G et al. The practice of antenatal care: comparing four study sites in different parts of the world participating in the WHO Antenatal Care Randomised Controlled Trial. *Paediatric and Perinatal Epidemiology*, 1998, 12 (Suppl. 2): 116–141.
30. Chalmers B, Mangiaterra V, Porter R. WHO principles of perinatal care: the essential antenatal, perinatal, and postpartum care course. *Birth*, 2001, 28:202–207.
31. 9. Villar J, Khan-Neelofur D. Patterns of routine antenatal care for low-risk pregnancy. *The*
32. 17. Tedstone AE, Duncanson N, Aviles M. Effectiveness of interventions to promote healthy feeding of infants under one year of age: a review. London, Health Education Authority, 1998.
33. What is the effectiveness of antenatal care? WHO Regional Office for Europe's Health Evidence Network (HEN) December 2005.
34. Monitoring Birth Preparedness and Complication Readiness: tools and indicators for maternal and newborn health. Baltimore, JHPIEGO, 2004:1–6

6. Annex

Annex 1 - Questionnaire

Survey on antenatal care services in Kosovo August 2008

Information for management

M-1. Identification number of respondent _ _ _ _

M-2. Starting code _ _ _

M-3. Month of interviewing

- | | | | |
|-------------|----------|--------------|--------------|
| 1. January | 4. April | 7. July | 10. October |
| 2. February | 5. May | 8. August | 11. November |
| 3. March | 6. June | 9. September | 12. December |

M-4. Data of interviewing _ _

M-5. Region

- | | | | |
|--------------------------|-----------------------|-----------------------|-----------------------|
| 1. Prishtina / Priština | 3. Prizren / Prizren | 5. Gjiilan / Gnjilane | 7. Ferizaj / Uroševac |
| 2. Mitrovica / Mitrovica | 4. Gjakova / Đakovica | 6. Peja / Peć | |

M-6. Select municipality

- | | | |
|---------------------------|--------------------------|---------------------------------|
| 1. Prishtina / Priština | 11. Klinë / Klina | 21. Ferizaj / Uroševac |
| 2. Mitrovica / Mitrovica | 12. Istog / Istok | 22. Kaçanik / Kačanik |
| 3. Gjiilan / Gnjilane | 13. Deçan / Dečani | 23. Fushë Kosova / Kosovo Polje |
| 4. Peja / Peć | 14. Dragash / Dragaš | 24. Obiliq / Obilić |
| 5. Prizren / Prizren | 15. Suhareka / Suva Reka | 25. Novobërda / Novo Brdo |
| 6. Gjakova / Đakovica | 16. Rahovec / Orahovac | 26. Zubin Potok / Zubin Potok |
| 7. Podujeva / Podujevo | 17. Vitia / Vitina | 27. Shtërpce / Štrpce |
| 8. Vushtrri / Vučitrn | 18. Kamenicë / Kamenica | 28. Zvečan / Zvečan |
| 9. Skenderaj / Srbica | 19. Lipjan / Lipljan | 29. Glllogovc / Glogovac |
| 10. Leposaviq / Leposavić | 20. Shtime / Štimlje | 30. Malisheva / Mališevo |

M-7. Place of residency

1. Rural residency
2. Urban residency / City
3. Prishtina / Priština

M-8. Date of interviewing

- | | | | |
|-------------|-----------|-------------|--------------|
| 1. Sunday | 2. Monday | 3. Tuesday | 4. Wednesday |
| 5. Thursday | 6. Friday | 7. Saturday | |

M-9. Code of interviewer ____**M-10. Interview is done on ...**

1. First visit?
2. Second visit?
3. Third visit?

M-11. Code of supervisor ____**M-12. Write time (24-hours time) when interview started:** ____ : ____**M-13. Write time (24-hours time) when interview ended:** ____ : ____**M-14. Duration of interview in minutes:** ____

(When interview lasted more than 99 minutes, it is written as 99)

M-15. Code of data operator ____

Start with sample procedure HERE:

1. After selection of house or apartment using randomization technique,
2. Present yourself. Good morning/Good afternoon/Good evening. My name is _____. I work for..... We are doing a research on quality and distribution of antenatal care services in Kosovo, and would like to interview a person from your family that was pregnant between the last 5 years (1.01.2004) in Kosovo. Answers of the research will be kept confidential, according to international standards on research.
3. If in your household there is more than one pregnant women, selection is done according to next birthday.

	<i>Initials of the name</i>	<i>Age</i>	<i>Birthday</i>
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____
4.	_____	_____	_____
5.	_____	_____	_____

1. *If the respondent is in house and obviously refuses questionnaire, or if any other family member hampers interviewing, in quite manner leave the house and go to the other house/apartment in continuity.*
2. *If respondent isn't at home, try to arrange a meeting for later on during the day or (in urban residencies) during the next coming days in the field. Write the most proper date and time for the respondent.*

Date: _____ *Time:* _____

Following questions request answers concerning you and your family

P-1. How old are you?	_ _ years	
P-2. What is your mother tongue?	1. Albanian 2. Serbian 3. Bosnian	4. Turk 5. Roma 6. Other: _____
P-3. What is your ethnicity?	1. Albanian 2. Serb 3. Bosnian	4. Turk 5. RAE 6. Other: _____
P-4. How many children do you have?	Number: _ _	Sons: _ _ Daughters: _ _
P-5. Please tell me how many members of the family you are in total, including yourself?	Number: _ _	
P-6. How many of them are under age 18?	Number: _ _	
P-7. How many pregnancies did you have until now?	Number: _ _	
P-8. What is your main profession?	1. Agriculture and similar work 2. Works related to industry 3. Construction work 4. Trade 5. Public services 6. Physical works 7. Accountant	8. Seller 9. Administrative work 10. Manager 11. Artist 12. Housewife 13. Unemployed 14. Healthcare worker 15. Other: _____
P-9. What is the highest level of education you received? <i>(Say approximately if the proper answer isn't possible)</i>	1. None 2. Elementary education, not finalized 3. Elementary education, finalized 4. High school education, not finalized	5. High school education, finalized 6. Higher education / faculty not finalized 7. Higher education/faculty finalized 8. Master /Doctorate
P-10. What is the monthly income of your family?	1. 0-50 euro 11. 501-550 euro 2. 51-100 euro 12. 551-600 euro 3. 101-150 euro 13. 601-650 euro 4. 151-200 euro 14. 651-700 euro 5. 201-250 euro 15. 701-750 euro	6. 251-300 euro 16. 751-800 euro 7. 301-350 euro 17. 801-1100 euro 8. 351-400 euro 18. 1101-1300 euro 9. 401-450 euro 19. 1301-1600 euro 10. 451-500 euro 20. 1601 + euro 99. Don't know / Refuses
P-11. Are you married?	1. Yes 2. Live with my partner 3. I am divorced / separated from husband 4. I am widow 5. No 6. Other: _____	

Now we would like to ask you about your last pregnancy?	
P-12a. Which year was your last pregnancy? WRITE THE YEAR of beginning of pregnancy	YEAR: __ _ _ _ _
P12b. How did pregnancy end?	1. Artificial abortion → Go to P-14 2. Spontaneous abortion → Go to P-14 3. Delivered living child born 4. Delivered dead child - before delivery / during delivery 5. Child died after the birth → Go to P-12c. 6. Currently pregnant
P-12c. If the child 'has died', what age:	AGE: _____
P-13. What weight the child was born?	_____ gram (g) _____ gram (g) _____ Gram (g) 99. Don't remember
P-14. Have you been consulted/served by somebody during this pregnancy? (Multiple answer) IF YES: Who did you visit? Who else? TRY TO IDENTIFY EVERY PERSON THAT WAS CONSULTED	Healthcare personnel 1. Gynaecologist / Obstetrician 2. Family doctor 3. Nurse 4. Midwife Other personnel 5. Traditional person that follow ups the delivery 6. Healthcare professional in the community 7. Other (specify) _____ 8. No. I have visited nobody
(Multiple answer) P-15. Where did you get those services? Somewhere Else? TRY TO IDENTIFY TYPE OF SOURCE OF SERVICES AND SELECT THE PROPER CODE IF YOU AREN'T ABLE TO DECIDE IF THE INSTITUTION IS PRIVATE OR PUBLIC THEN WRITE ITS NAME	At home 1. At your home 2. At somebody else's home Public sector 3. Public hospital 4. Family Medicine Centre / primary care 5. Other (specify) _____ Private sector 6. Private clinic 7. Private practice 8. Other (specify) _____
P-16. (If in P-15 are coded both 'Public' and 'Private') Which institution you used mostly during this pregnancy? Public or private?	Public → Go to P-17 Private
P-16a. How much did you pay for a visit in private sector?	_____ EURO
P-16b. How much have you paid for other services in private sector? READ OPTIONS	1. Ultrasound _____ EURO 2. Laboratory tests _____ EURO 9. Other (specify) _____
P-17. In which month of pregnancy you used for the first time antenatal care services?	__ _ Months 99. Don't remember
P-18. During your pregnancy how many times did you use antenatal care services?	__ _ times 99. Don't remember
P-19. How many times you think you need to visit a doctor during pregnancy?	__ _ times 99. Don't know
P-20. Have you been explained where you need to go in case of complications during pregnancy?	1. Yes 2. No 9. Don't remember
P-21. In which case you think you need to go immediately to doctor? Which are the dangerous signs?	_____ _____ _____

P-22. Have you been consulted to take iron supplements and folic acid during pregnancy?	1. Yes 2. No 9. Don't remember
P-23. Do you think that you need to take these medications and why?	1. Yes 2. No 9. Don't know → Go to P-25 P-24. Explanations (Because...) _____
P-25. Have you been examined gynaecological (internal control) during these visits?	1. Yes 2. No P-25a. If yes how many times? __ __ times 99. Don't remember/ Refuses
P-26. Was your abdomen examined (external control) during these visits (measurement of uterus height)?	1. Yes 2. No P-26a. If yes how many times? __ __ times 99. Don't remember/ Refuses
P-27. Was your blood pressure measured during these visits?	1. Yes 2. No P-27a. If yes how many times? __ __ times 99. Don't remember/ Refuses
P-28. Have you done blood tests during pregnancy?	1. Yes 2. No P-28a. If yes how many times? __ __ times 99. Don't remember/ Refuses
P-29a. Was your blood group determined?	1. Yes 2. No → Go to P-30
P-29b. If 'YES'. Do you know your blood group?	1. A Rh + 3. B Rh + 5. AB Rh + 7. O Rh + 2. A Rh - 4. B Rh - 6. AB Rh - 8. O Rh - 9. Don't know → Go to P-30
P-30. Have you made urine tests during these visits?	1. Yes 2. No P-30a. If yes how many times? __ __ times 99. Don't remember/ Refuses
P-31. Was your weight measured during these visits?	1. Yes 2. No P-31a. ? If yes how many times __ __ times 99. Don't remember/ Refuses
P-32. During visits has the healthcare worker conducted auscultation of the heart of fetus?	1. Yes 2. No P-32a. If yes how many times __ __ times 99. Don't remember/ Refuses
P-33. Have you had ultrasound examination during pregnancy?	1. Yes No P-33a. If yes how many times __ __ times 2. 99. Don't remember/ Refuses
P-34. During visits have you been advised with oral advises or educational materials concerning pregnancy and delivery?	1. Yes 2. No 9. Don't remember
P-35. During these visits have you been advised with oral advises or educational materials concerning pregnancy complications?	1. Yes 2. No 9. Don't remember
P-36. During these visits have you been advised verbally or with educational material concerning eating habits during pregnancy?	1. Yes 2. No 9. Don't remember
P-37. During these visits have you been advised verbally or with educational material in relation to the feeding of newborn?	1. Yes 2. No 9. Don't remember
P-38. How many months you think it's necessary to breastfeed the child?	1. _____ 99. Don't know
P-39. What kind of food should use a pregnant woman? READ THE OPTIONS	1. Should stick to certain diet 2. Could eat any kind of food 3. Other (specify) _____ 9. Don't know

P-40. Have you been advised for family planning during these visits?	1. Yes P-40a. If yes from whom: _____ 2. No 99. Don't remember		
INTERVIEWER: Control P-4 , if respondent has more than one birth. P-41. What is the time distance between births?	_ _ yrs and _ _ months		
INTERVIEWER: Control P-7 , if respondent has had more than 1 pregnancy. P-42. What is the time distance between two pregnancies?	_ _ yrs and _ _ months		
P-43a. Have you used any family planning methods (contraception) after the birth/abort?	1. Yes 2. No → Move to P-44		
P-43b. If 'Yes': What have you used?	1. pills 3. spiral 5. traditional methods 2. condoms 4. injections		
P-44. What was the average of waiting for visit at the physician?	1. 1 – 10 minutes 9. Don't remember 2. 10 – 20 minutes 3. 20 – 30 minutes 4. More than 30 minutes		
P-45. What was the average length of the visit to the physician?	1. 1 – 10 minutes 2. 10 – 20 minutes 3. 20 – 30 minutes 4. More than 30 minutes 9. Don't remember		
P-46. Have you consumed any medication during pregnancy? IF YES CONTINUE WITH THE NEXT QUESTION	1. Yes 2. No 9. Don't remember		
P-47. What kind of medicines did you take? Spontaneous answer	1. Vitamins 2. Folic Acid 3. Iron supplements 4. Have consumed other medication for treating specific diseases 5. Don't know what kind of medication I have taken 6. Other (specify) _____		
P-48. Where you advised to carry out physical activities during these visits?	1. Yes 2. No 9. Don't remember		
P-49. Do you consume or you have consumed during pregnancy any of these:	1. Tobacco 2. Alcohol 3. Narcotics	Yes 1 1 1	No 2 2 2
P-50. Did you receive the notebook for pregnant woman? (Relevant from 1 January 2006)	1. Yes 2. No 9. Don't remember		

The following questions have to do with conditions in institutions you have visited.

P-51. Was there a waiting room available at institutions where you received services /consultations?	1. Yes 2. In some of them 3. No 9. Don't remember
P-52. Was examination space separated from the rest of working spaces?	1. Yes 2. In some of them 3. No 9. Don't remember
P-53. Was water for hand wash available at institutions where you asked services/consultations?	1. Yes 2. In some of them 3. No 9. Don't remember
P-54. Were restrooms with running water available at institutions where you asked services/consultations?	1. Yes 2. In some of them 3. No 9. Don't remember

Explain if it never happened, Rarely happened, Don't remember, Happened often or Always happened one of the following

	SHOW THE CARD	Never happened	Rarely happened	Don't remember	Happened often	Always happened
	P-55. Healthcare personnel offered you to sit in order you to feel comfortable.	1	2	3	4	5
	P-56. You have been heard carefully during conversation with healthcare personnel.	1	2	3	4	5
	P-57. You haven't been interrupted while explaining your problems.	1	2	3	4	5
	P-58. Healthcare staff was very polite.	1	2	3	4	5
	P-59. You were asked about problems and concerns regarding pregnancy.	1	2	3	4	5
	P-60. In examination and consultation room you had full privacy.	1	2	3	4	5
	P-61. You have been explained procedure before the examination started.	1	2	3	4	5
	P-62. You have been explained in details diagnosis and problems you could have during pregnancy from healthcare personnel.	1	2	3	4	5
	P-63. You have been explained on how you need to use preventive medication.	1	2	3	4	5
	P-64. You have been asked details from history of diseases (i.e. infections of urinary tract, heart diseases and similar)	1	2	3	4	5
	P-65. You underwent physical examination (i.e. eye examination, body examination.).	1	2	3	4	5
	P-66. You have been given health advice from healthcare personnel on pregnancy related condition.	1	2	3	4	5
	P-67. In examination room there were optimal conditions (electricity, lack of humidity, sufficient light and sufficient serenity).	1	2	3	4	5
	P-68. In the room where you were examined there was optimal hygiene.	1	2	3	4	5
	P-69. In waiting room there was enough space for resting/sitting for all that were waiting.	1	2	3	4	5
	P-70. In waiting room there was optimal hygiene.	1	2	3	4	5
	P-71. In institutions there were sufficient instructions for orienting, or it was a responsible person that gave instructions for waiting in line.	1	2	3	4	5
	P-72. During stay in institution you haven't smelled any unpleasant smells.	1	2	3	4	5

The following questions deal with access to primary care institutions	
P-73. How far is the health facility from the house?	1. Less than 1 km from the house 2. 1-3 km from the house 3. More than 3 km from the house 9. Don't know
P-74. To what extent you can cope with the travel costs occurring in relation to use of antenatal care services?	1. Yes I can 2. Partially I can 3. I can't 9. Don't know/refuses
P-75. Who takes the decision to make the visits at the health care facility?	1. Your self 2. Spouse 3. Somebody else from the family of the spouse 4. Somebody else (specify) _____
P-76. Who did accompany you during the visits?	1. Nobody 2. Spouse 3. Mother in law 4. Sister 5. Other (specify) _____
P-77. Is there any personal reason that stops you from using antenatal services?	1. Yes 2. No 9. Don't remember
P-78. Is there any family reason that stops you from using antenatal services?	1. Yes 2. No 9. Don't remember
P-79. Is there any social/cultural reason that stops you from using antenatal services?	1. Yes 2. No 9. Don't remember
P-80. Is there any religious reason that stops you from using antenatal services?	1. Yes 2. No 9. Don't remember
"THANKS FOR ANSWERING OUR QUESTIONS."	

Read the closing statement:

"Thank you for your time and consent to take place in this survey. Do you have any questions for me? In the following days my supervisor may contact you in order to evaluate the quality of my work and other questions related to interview. To ease this could you give me your phone number?"

Respondent Information:

Name: _____

Address: _____

Tel No. _____

Confirmation by interviewer:

"I confirm that I have carried out this interview in compliance with instructions on sample and survey given to me by"

Name: _____

Signature: _____

Date: _____

To be filled by supervisor:

M-16. Was the survey controlled?

1. Yes
2. No

M-17. Control method:

1. Direct supervision during interview
2. Control of person by supervisor
3. Phone control by supervisor
4. The survey has not been controlled

Annex 2 – Guidelines and questions for focus groups

The discussion is opened with presentation of the study.

Every participant of focus groups presents itself.

Start with general questions: What is the quality of antenatal care services offered by you?

Additional questions:

- In what month woman start to use antenatal care services?
- How many times during pregnancy antenatal care services are used?
- Are the pregnant woman advised on where to go in case of complications?
- Are the pregnant woman advised to take iron supplements and folic acid?
- Do you perform gynaecologic examination (internal examination) during these visits?
- Do you perform the external examination during these visits (measurement of the fundus uteri)?
- How often do you perform blood pressure measurement?
- How regularly you perform blood analysis?
- How regularly you perform urine sample analysis?
- How often the weight measurement is performed?
- Do you check regularly the fetus heart beats?
- How often the ultrasound examination is performed?
- Do you distribute education materials in relation to birth?
- Do you share with pregnant woman any oral advice or educational material related to complications of pregnancy?
- What is the average waiting for medical check?
- Has the notebook for pregnant woman distributed during these visits?

Continue with another topic by asking general question:

What do you think is the awareness of woman in relation to antenatal care?

Additional questions:

- Do woman consume tobacco, alcohol or narcotics during pregnancy?
- Do woman show interest in learning more about their new condition?
- What are the main sources of information?

Continue with another topic by asking a general question: How would you describe the work conditions in healthcare facilities within institutions related to provision of antenatal care services?

Additional questions:

- Is there any waiting space at health care facilities?
- Is the examination room separated from other working spaces?
- Are there restrooms with running water?
- Are there optimal conditions in the examination room (electricity, lack of humidity, daily light, serenity)?!
- Is there appropriate hygiene in the examination room?
- Is there enough sitting/resting space for everybody?
- Are there sufficient instructions for orientation of patients within health care facility?

Continue with another topic by asking a general question:

How you estimate your communication with patients? Or: How you treat the patients?

Additional questions:

- Women are offered to sit?!
- Women are listened carefully?!
- Women are not interrupted as they present their medical problems?!
- Do patients have full intimacy in the examination/consulting room?
- Do you explain the procedure to patients before starting with examination?
- How frequently you ask for history of previous diseases (i.e. infections, heart disease and similar)?
- How often do you perform physical examination (i.e. eye examination, body examination)?

Continue with another topic by asking a general question:

What are the main challenges in offering antenatal care?

Additional questions:

- How prepared you think you are in offering different antenatal care services?
- How much support you get from your institution?
- How much support and guidance you get from professional associations that you are member of?
- How would you describe the role of MoH in supporting your work?
- How is the antenatal care system organized?
- Are there any clearly defined protocols for antenatal care and are they used systematically?
- Is your continual medical education supported? By whom?

- To what extent are you specialized in treating different health problems during pregnancy?
- How would you describe the relations with colleagues from different professions (nurse, gynaecologists, family physician, etc)?

In the closing part of the discussion the participants should be exposed to some of the initial results of the survey.

The discussion is closed by asking the final comments from participants and finally by thanking them for participation and contribution.

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