Baseline Household Survey

Jhelum

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Population Council

PAIMAN
Pakistan Initiative for Mothers and Newborns

Pakistan Initiative for Mothers and Newborns (PAIMAN)

Jhelum

Baseline Household Survey

Population Council

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For inquiries, please contact:

Population Council
#7, Street 62, F-6/3, Islamabad, Pakistan
Tel: 92 51 2277439
Fax: 92 51 2821401
Email: info@pcpak.org
web: http://www.popcouncil.org

Layout & Design : Ali Ammad
Printed by: Crystal Printers , Islamabad

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Acknowledgments

The PAIMAN Baseline Household Survey is a collaborative effort involving many partners, and will be the foundation of the PAIMAN project as a whole. Firstly, we would like to acknowledge our major partners. The United States Agency for International Development (USAID), in particular Mr. Chris McDermott, made funding available for this activity. Dr. Nabeela Ali, Chief of Party for PAIMAN, encouraged the study in general, and greatly facilitated the partnership between the Population Council and NIPS. The role of NIPS was supported under a separate agreement with PAIMAN. The comments, suggestions and feedback received from PAIMAN partners with regard to the design of this activity greatly contributed towards the success of the household survey.

The National Institute of Population Studies (NIPS)ably carried out the fieldwork for this study and were responsible for the completion of a clean dataset. We would like to appreciate the efforts of the Executive Director, Dr. Saeed Shafqat; and the Director Mr. Mahboob Sultan for the execution of the fieldwork; Computer Programmer, Mr. Fateh-ud-din, who managed the entry and cleaning of the data and the numerous NIPS staff members who carried out the study.

The Population Council was primarily responsible for designing the study, overseeing the data collection, analysis of data, and writing the reports. Dr. Arshad Mahmood, Director of Monitoring and Evaluation for PAIMAN, used his capable technical and managerial skills to oversee the entire study with enthusiasm and energy. Mr. Peter Miller, Deputy Country Director, contributed substantially in the design phase, and Dr. Zeba Sathar and Mr. Miller contributed towards the report preparation.

The essential work of the study was carried out by several Council staff members at all phases. During the design and pre-testing phases, we would particularly like to acknowledge Shagufta Naheed, Bushra Bano, Irfan Masood, Tayyaba Gul, and Saima Pervaiz for monitoring field work and ensuring quality data collection in the field. Saman Naz and Muhammad Ashraf assisted in preparing graphs and tables as well as with the writing process. Dr. Arshad Mahmood and Reem Khan jointly prepared the first draft of the baseline survey report, which served as the template for all ten district reports. Shafique Arif, Azeema Faizunisa and Nadia Abid also contributed to the report writing and reviewing process. Reem Khan completed the initial editing, Mehdi Ali Khan designed their layout, Ali Ammad formatted and Ms. Mary DeSouza proof read the district reports.

Finally, we must express our gratitude to the women of Jhelum, who gave their time freely and cooperated with us in order to make this study possible. We hope to repay them by using the information obtained from them to improve maternal and neonatal health services in the district of Jhelum.

Chapter 1

Introduction

Background

The Pakistan Initiative for Mothers and Newborns (PAIMAN) is a five-year project funded by the United States Agency for International Development (USAID). PAIMAN is committed to assisting the Government of Pakistan (GoP) in its attempt to implement the full spectrum of interventions necessary to address maternal and neonatal health (MNH) issues.

The consortium is led by John Snow Incorporated (JSI), with partners from Pakistani and international organizations including Aga Khan University, Contech, Greenstar Social Marketing, Johns Hopkins University Center for Communication Program (JHU), PAVHNA, Population Council and Save the Children USA.

USAID has provided a grant to implement PAIMAN in 10 districts of Pakistan's four provinces. These districts are: Rawalpindi, Jhelum, Khanewal, and DG Khan in Punjab; Dadu and Sukkur in Sindh; Jafarabad and Lasbela in Balochistan; and Upper Dir and Buner in the North West Frontier Province. The goal of the project is to reduce maternal, newborn and child mortality in Pakistan. The project is based on the "Pathway to Care and Survival" framework. The five major strategic objectives are to:

1) Increase awareness and promote positive maternal and neonatal health behaviors
2) Increase access (including essential obstetric care) to and community involvement in maternal and child health services, while ensuring that services are successfully delivered through health and ancillary health services
3) Improve service quality in both the public and private sectors, particularly related to management of obstetrical complications
4) Increase the capacity of Maternal and Newborn Health (MNH) managers and care providers
5) Improve the management and integration of services at all levels

The PAIMAN Project will promote skilled attendants as the long-term goal for all deliveries in Pakistan while acknowledging that maternal and neonatal health outcomes are influenced by factors other than health care. The PAIMAN Project calls for a multi-pronged and integrated strategic approach, combining individual health care with public health and community-based interventions.

To ensure that the success of PAIMAN is properly ascertained, and that the appropriate lessons are learned, PAIMAN has developed a Monitoring and Evaluation Plan. Included in this plan is the establishment of baseline measures for a set of indicators which will be used to evaluate the success of the project. This baseline report explores the level of knowledge of, as well as the attitudes and behaviors towards, maternal and newborn health in the Jhelum district. The specific objectives of the baseline survey were as follows:

Objectives

- To measure the Intermediate Result 7 indicators necessary as part of PAIMAN's obligation to USAID.
- To measure PAIMAN indicators for which household survey data are appropriate for measurement, and for which sample sizes are feasible.
- To obtain information on maternal and neonatal health along with related issues, which may be of use to district Departments of Health for health management purposes.
- To obtain information needed for the detailed design of the PAIMAN project and, in particular, behavior change communication, public/private partnerships, and health systems strengthening.

Methodology

Study Population

PAIMAN is primarily a district-level project, intended to improve the health of all pregnant women, women with neonatal children, as well as all neonates of the district over the course of the project. To this end, the study covers community residents – notably mothers and prospective mothers – in order to understand and measure general knowledge and practice in relation to pregnancy, delivery, obstetric and neonatal emergencies etc. Hence, the study population for the baseline includes all currently married women of reproductive age (15-49 years) living in the selected districts. More specifically, it includes women who have experienced a pregnancy during the last three years.

Sample Design

The sampling design adopted for the survey is a stratified, systematic sample of households. The universe consists of all urban and rural areas of the district. The numbers of blocks selected in urban areas, along with the number of villages selected in rural areas, are presented in table 1.1. The selection procedure for is described below:

Table 1.1: Number of blocks/villages and households selected for the sample population

Area	Number of Sample Blocks/Villages	Number of Households Selected
Urban	11	264
Rural	29	696
Total	40	960

Urban Sample

The Enumeration Circle was the smallest unit available in the 1998 Population District Census Reports as demarcated by the Population Census organizations. The required numbers of enumeration blocks were selected with probability proportional to size (number of circles). The maps of these circles were obtained from the Population Census Organization. The circles were already divided into blocks of approximately 250-300 households depending upon the number of households in each circle. Later, blocks were randomly selected with probability proportional to size from the list of total blocks in that circle. The listing of each block was then updated by the enumeration teams before selecting the sampled households. A fixed number of 24 households have been drawn from each sample enumeration block by using systematic random technique.

Rural Sample

The 1998 Population Census list of villages was used as the sampling frame for the selection of the rural sample. Villages in rural areas have been treated as primary sampling units (PSU). Sample PSUs have been selected with probability proportional to size (number of households). Households within the sample PSUs were considered secondary sampling units. The enumeration teams then updated the listing of each village before selecting the sampled households. A fixed number of 24 households have been drawn from each sample enumeration village by the systematic random technique.

Questionnaire Design

The questionnaire has been developed by the Population Council, based on a combination of current general Demographic and Health Survey methodologies, along with the questionnaire developed by the Population Council for the Safe Motherhood Applied Research and Training (SMART) Project. The questionnaires contain data sufficient to estimate all PAIMAN indicators.

Information on the following is included in the questionnaires:

- Households Information
- Socio-economic status of women
- Fertility, pregnancy history and reproductive intentions
- Attitude towards, as well as knowledge and practice of, contraceptive methods
- Attitude towards pregnancy, delivery and the postpartum period
- Current birth preparedness/complications readiness (BP/CR) and knowledge of newborn care
- Current birth practices
- Health seeking behaviors
- Future BP/CR intentions
- Personal beliefs regarding pregnancy, delivery and the postpartum period
- Common perceptions pertaining to women who are pregnant, delivering or in their postpartum period
- Facilities regarding BP/CR available in the community
- Factors that facilitate or hinder behaviors related to BP/CR
- Media habits

Pre-testing of Questionnaires

The questionnaires were reviewed by the PAIMAN's M&E thematic group as well as by other interested stakeholders, and were pre-tested in non-PAIMAN districts. The main objective of the pre-testing was to examine the suitability and effectiveness of questions in eliciting adequate responses, and to find out if there were any linguistic problems faced either by interviewers or by respondents.

Finally, the pre-testing also helped determine the approximate time required to complete a questionnaire. The pre-tests were carried out by the Population Council's female staff members, who recorded their experiences with regard to each question. These records were then used to revise and finalize the questionnaire.

Hiring of Interviewers and Supervisors

Since the respondents in the baseline were to be MWRA and married men, it was decided that female interviewers would be used to interview women and male interviewers for men. Based on the constitution of each team, the required number of female interviewers were hired by NIPS according to its own internal procedures.

Training of Interviewers and Supervisors

The quality of training received by interviewers is reflected in the quality of data they record. In order to ensure that interviews were of a high and uniform quality and that interviewers understood the definitions and concepts behind the language of the questions, training was conducted by the Population Council in collaboration with NIPS. The training took place in Islamabad over a two week period, and interviewers were trained with regard to survey procedures. Interviewers visited 3-4 households to conduct practice interviews;

It was very important for the interviewers to thoroughly understand the methodology and statistical importance of the sampled households. Training regarding the importance of the criterion for the selection of primary sampling units, mapping and listing procedure, sample selection, field operation procedures, as well as the selection of the particular households and respondents was also provided by experts.

Data Entry and Edit Procedures

Data processing was started from the field level with the checking of the questionnaires. Each team leader completed on-the-spot checks and preliminary editing of questionnaires during the enumeration period. Editing instructions were provided to the team leaders, and emphasis was laid on the importance of completing each questionnaire, correctly identifying each eligible respondent, and the completeness of household composition.

Quality Assurance

To ensure the quality of the data, Population Council staff monitored the fieldwork accompanying the field teams. While supervising the fieldwork, the Population Council supervisory staff was also available to provide on-the-spot guidance to interviewers in the event that any part of the questionnaire was unclear to them. This ensured the completeness and accuracy of each questionnaire.

Chapter 2

Socioeconomic and Demographic Characteristics

This chapter presents the demographic and socioeconomic characteristics of the population in the sampled households of Jhelum. Information was collected on some demographic and socioeconomic characteristics such as the condition of the households, including the source of drinking water, sanitation facilities, building materials, and possession of household durable goods. This information on the characteristics of the households is essential for the interpretation of survey findings. The definition of the household used for the baseline survey was "a person or a group of persons, related or unrelated, who live together in the same dwelling unit and share a common source of food".

Urban/Rural Sample Population

Table 2.1 shows the number of households selected in both urban and rural areas of Jhelum, as well as the interview completion status. A total sample of 960 households was selected from Jhelum; these number included 73 percent households from rural and 27 percent from urban Jhelum.

Table 2.1 indicates a higher interview completion rate in rural areas as compared to urban areas. However 944 of the households selected (98 percent approximately) participated in the interview and only 12 of the households (1.3 percent) refused to share their information. This may have been due to lack of knowledge on behalf of the respondents, or perhaps due to the fact that women were not willing or permitted to share sensitive information with interviewers.

Table 2.1: Interview completion status

Result	Rural		Urban		Total	
	Percent	Number	Percent	Number	Percent	Number
Completed	99.0	689	96.6	255	98.3	944
Incomplete	0.1	1	0.4	1	0.2	2
Refused	0.7	5	2.7	7	1.3	12
Others	0.1	1	0.4	1	0.2	2
Total	100.0	696	100.0	264	100.0	960

Languages Spoken

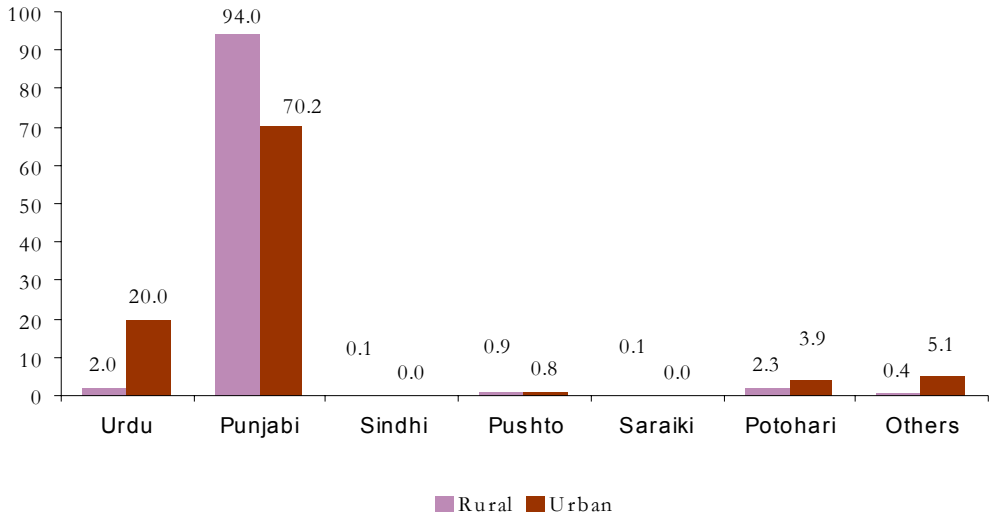
Table 2.2 outlines the languages mainly spoken in households in both urban and rural areas for the district of Jhelum. An overall picture of the ethnic and linguistic pattern of the district becomes clear by determining the languages spoken in the households.

Table 2.2: Language spoken in the households

Language	Rural		Urban		Total	
	Percent	Number	Percent	Number	Percent	Number
Urdu	2.0	14	20.0	51	6.9	65
Punjabi	94.0	648	70.2	179	87.6	827
Sindhi	0.1	1			0.1	1
Pushto	0.9	6	0.8	2	0.8	8
Saraiki	0.1	1			0.1	1
Potohari	2.3	16	3.9	10	2.8	26
Others	0.4	3	5.1	13	1.7	16
Total	100.0	689	100.0	255	100.0	944

In rural areas, 94 percent of the population speaks Punjabi, while only 2 percent speak Urdu. In urban areas however, the linguistic pattern is slightly different, as Punjabi is spoken by 70 percent of the population, while Urdu is spoken by 20 percent.

Figure 2.1: Languages spoken



Population Composition

Table 2.3 shows the population in the baseline survey in regards to age and sex composition. Age and sex are important demographic variables and are the primary basis of demographic analysis. They are also important variables in the study of reproductive health, mortality and fertility.

The distribution of population shows a sex ratio of 100 which is the same as established in the 1998 Population Census. According to table 2.3, more than one-third (35.4 percent) of the population is less than 15 years of age, a trend that has occurred due to persistently high fertility rates in the recent past. The proportion of children under 15 years, and adults of 65 years and over is about 41 percent, indicating a high dependency ratio in the district of Jhelum. The data obtained also indicates that there are more females than males in the 30 to 34 and 35 to 39 year age groups. This may be due to fact that the males of this age group migrate to other districts/cities in search of employment.

Table 2.3: Age-sex distribution of population

Age	Males		Females		Both Sexes	
Group	Number	Percent	Number	Percent	Number	Percent
Less than 5	372	11.7	342	10.8	714	11.3
5-9	382	12.0	355	11.2	737	11.6
10-14	425	13.4	367	11.6	792	12.5
15-19	352	11.1	389	12.3	741	11.7
20-24	299	9.4	342	10.8	641	10.1
25-29	227	7.2	248	7.8	475	7.5
30-34	171	5.4	210	6.6	381	6.0
35-39	169	5.3	183	5.8	352	5.5
40-44	172	5.4	148	4.7	320	5.0
45-49	128	4.0	121	3.8	249	3.9
50-54	117	3.7	135	4.3	252	4.0
55-59	93	2.9	97	3.1	190	3.0
60-64	85	2.7	76	2.4	161	2.5
65 and older	179	5.6	159	5.0	338	5.3
Total	3171	100.0	3172	100.0	6343	100.0

Marital Status

This survey collected information on the marital status of all household members of more than 15 years of age. Table 2.4 presents the comparison of the baseline results with the 1998 Population Census results. It clearly shows that while overall results for males are similar to the 1998 Population Census results, there is a slight variation in the data obtained for females. This variation may be due to the increasing trend of delaying the age at marriage for women. Nevertheless, women still tend to get married earlier than men, and also show more signs of early widowhood than men. This observation has not changed since the 1998 Population Census.

Table 2.4: Household population by age (15 years and above), sex and marital status

	Males			Females		
Age Group	Never Married	Currently Married	Widow/ Divorced	Never Married	Currently Married	Widow/ Divorced
15-19	97.4	2.6	0	93.3	6.7	0
20-24	88.2	10.8	1	64.2	34.9	0.9
25-29	54.6	44.5	0.9	25.1	72	2.9
30-34	18.8	80.6	0.6	10	86.6	3.3
35-39	7.8	92.2	0	3.3	91.2	5.5
40-44	0.6	97.6	1.8	2.1	87.5	10.4
45-49	7.1	92.9	0	1.7	83.3	15
50-54	1.7	93	5.2	1.5	79.2	19.2
55-59	2.2	89.1	8.7	2.1	77.1	20.8
60-64	1.2	89.4	9.4	1.3	46.7	52
65 and older	1.1	83.7	15.2	2.5	33.8	63.7
Total	39.9	57.1	2.9	32.8	55.5	11.7
Population Census1998						
15-19	97.3	2.5	0.2	87.3	12.3	0.4
20-24	81.6	18	0.4	49.1	49.9	0.9
25-29	46.4	52.9	0.6	19.6	78.4	1.9
30-34	19.8	78.9	1.3	8.2	88.4	3.4
35-39	9.1	89.2	1.7	4.6	90.1	5.3
40-44	5.5	91.8	2.7	3.7	88	8.3
45-49	4.6	91.4	3.9	2.7	84.6	12.7
50-54	4.5	89.3	6.2	2.9	77.9	19.2
55-59	3.9	86.9	9.2	2.5	70.3	27.2
60-64	4.4	83.6	12	3.2	58.1	38.6
65 and older	3.8	72.7	23.5	4.4	35.5	92.8
Total	38.6	57.1	4.3	26.9	61.8	6.9

Education Attainment

Overall in Jhelum, 11 percent of males (10 years and above) do not go to school compared to 32 percent of females. Although more women never go to school compared to men, women aged 15 to 24 are far ahead of their counterparts for more than 11 years of schooling (26.2 percent for males and 37.3 percent for females). This would suggest that when females start going to school, a higher proportion complete their college education compared to males in recent years. While there are large differences in the educational attainment between males and females in older ages, the gap in educational attainment is getting smaller among the youngest age cohort. This may be due to an increase in educational and schooling facilities in both rural and urban areas, especially for women.

Table 2.5: Household population by age (10 years and above), sex and educational level

Age Group	No Schooling	1-5 Years	6-10 Years	11 and More years	Total
Males					
10-14	3.1	64.9	32.0	0.0	425
15-19	5.1	19.3	67.0	8.5	352
20-24	8.4	12.7	61.2	17.7	299
25-29	4.8	14.5	59.9	20.7	227
30-34	12.3	7.6	59.6	20.5	171
35-39	11.8	17.8	55.6	14.8	169
40-44	14.5	13.4	62.8	9.3	172
45-49	20.3	10.2	55.5	14.1	128
50-54	29.9	15.4	43.6	11.1	117
55-59	39.8	20.4	28.0	11.8	93
60-64	34.1	12.9	47.1	5.9	85
65 and older	45.3	14.5	38.0	2.2	179
Total	14.1	23.5	51.8	10.6	2417
Females					
10-14	7.4	62.4	30.2	0.0	389
15-19	9.8	19.5	59.1	11.6	342
20-24	10.8	26.3	37.1	25.7	248
25-29	20.2	24.2	35.5	20.2	210
30-34	32.9	29.0	25.7	12.4	183
35-39	44.8	29.0	21.3	4.9	148
40-44	47.3	29.7	19.6	3.4	121
45-49	55.4	25.6	14.0	5.0	135
50-54	63.0	25.9	9.6	1.5	97
55-59	79.4	12.4	5.2	3.1	76
60-64	84.2	14.5	1.3	0.0	159
65 and older	89.3	8.2	1.9	0.6	158
Total	32.6	28.9	29.0	9.5	2266

Housing Characteristics

Source of Drinking Water

In order to obtain a clear understanding of the living conditions of the population, it was necessary to record the source of drinking water available to respondents and their families. A conclusion in regards to the household's socio-economic status and hygiene levels can be drawn once the source of drinking water is identified.

The information in Table 2.6 indicates that in urban areas, 56 percent of the households had access to tap water inside their homes, while only about 7 percent in rural areas had the same privilege. Nearly 70 percent of the respondents in rural areas cited motorized hand pumps as their main source of drinking water. While the purity of tap water may be questionable, the risk of contracting water-based diseases and/or infections is far greater when the water supply comes from an open source such as a well or hand pump.

Table 2.6: Main source of drinking water

Source	Rural		Urban		Total	
	Percent	Number	Percent	Number	Percent	Number
Govt. supply (tap water inside)	6.8	47	56.1	143	20.1	190
Govt. supply (communal)	6.1	42	1.6	4	4.9	46
Motorized/hand pump (inside)	59.2	408	18.8	48	48.3	456
Motorized/hand pump (outside)	10.4	72	5.1	13	9.0	85
Well (inside)	8.1	56	10.2	26	8.7	82
Well (outside)	8.7	60	5.5	14	7.8	74
Tube-well	0.3	2			0.2	2
Others	0.3	2	2.7	7	1.0	9
Total	100.0	689	100.0	255	100.0	944

Toilet Facilities

The type of toilet facility available is yet another important indicator of household socio-economic status, as well as of hygiene/sanitation levels. Similar to the source of drinking water, households lacking hygienic toilet facilities have a higher risk of disease and infection, which in turn puts the health of newborn children, as well as their mothers, at risk.

Table 2.7 indicates that the percentage of households using a flush system connected to a septic tank are almost the same in both rural and urban areas (42.8 and 42.4 respectively). About 12 percent of the households in rural areas have access to a flush to sewerage system; while in urban areas 36 percent have the same privilege.

Table 2.7: Type of toilet facility used by household members

Toilet facility	Rural		Urban		Total	
	Percent	Number	Percent	Number	Percent	Number
Flush to sewerage	11.8	81	35.7	91	18.2	172
Flush connected to septic tank	42.8	295	42.4	108	42.7	403
Flush connected to open drain	0.1	1	0.4	1	0.2	2
Raised latrine	0.3	2			0.2	2
Pit latrine	7.4	51	16.5	42	9.9	93
In fields	37.4	258	5.1	13	28.7	271
Others	0.1	1			0.1	1
Total	100.0	689	100.0	255	100.0	944

In rural Jhelum, more than 37 percent of the respondents indicate that they have no toilet facility and instead use fields. On the other hand, only 5 percent of the households surveyed in urban Jhelum indicated the use of fields due to lack of access to a toilet facility.

Fuel Used for Cooking

Fossil fuel is hazardous for health and is an important source of environmental pollution. More than two-thirds of the households of district Jhelum use fossil fuel (wood, dung, coal) for cooking. This proportion is even higher in rural Jhelum. A question regarding the type of fuel being used in household kitchens was also asked in the survey. There are substantial urban-rural differentials indicated by type of cooking fuel. Table 2.8 reveals that three quarters (76.3 percent) of the households in rural areas use firewood for cooking, while 47.5 percent of the households in urban Jhelum use natural gas for the same purpose. Gas cylinders are also used as fuel in both rural and urban areas of Jhelum (17.4 and 27 percent respectively).

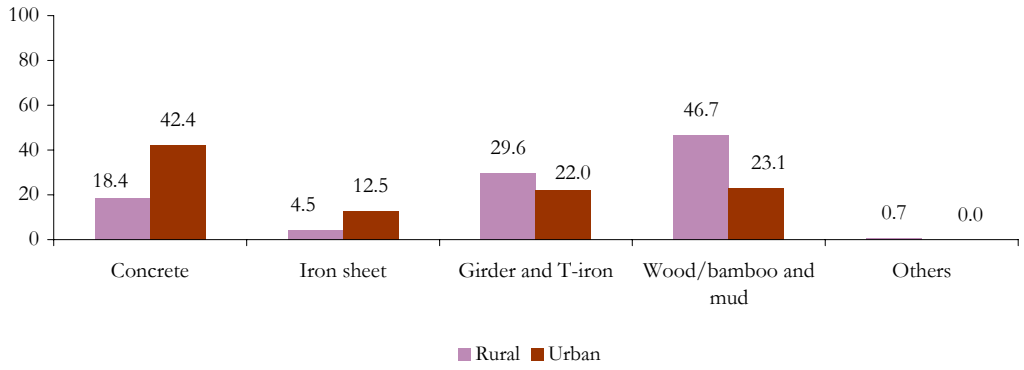
Table 2.8: Main type of fuel used for cooking

Type of fuel	Rural		Urban		Total	
	Percent	Number	Percent	Number	Percent	Number
Fire wood	76.3	526	24.3	62	62.3	588
Kerosene oil	0.3	2	1.2	3	0.5	5
Gas cylinder	17.4	120	26.7	68	19.9	188
Natural gas (Sui gas)			47.5	121	12.8	121
Dry dung	5.8	40	0.4	1	4.3	41
Charcoal/coal	0.1	1			0.1	1
Total	100.0	689	100.0	255	100.0	944

Materials used for the Roof

The materials used for the roof and walls of a household are major indicators of the socio-economic status of that household, as well as the living standards of the people residing there. The more secure the materials, the higher the level of comfort and living standard for residents, and the lower the risk of disease and infection.

Figure2.2: Material used for construction of roof



According to figure 2.2, 18.4 percent of the households in rural areas had roofs made of concrete, as opposed to 42.4 percent in urban areas. In rural areas, however, 46.7 percent of the population live in homes made of wood bamboo and mud, while only 23.1 percent of their counterparts in urban areas had roofs made of the same materials. Girder and T-iron are also widely used in both rural and urban Jhelum (30 percent and 22 percent respectively). Therefore, the results would suggest that the housing conditions are slightly better in urban Jhelum than in rural Jhelum.

Number of Rooms for Sleeping

The number of separate rooms available for sleeping in each household is an important indicator of sanitation and hygiene levels. Overcrowding in households may lead to the spread of infection and disease, which puts the lives of expectant mothers and of their newborn children at risk. The information presented in table 2.9 shows that the percentage of households that have only one room for sleeping is same (17 percent) for both urban and rural Jhelum. It also shows that majority of people (60.9 percent) in district Jhelum are residing in homes having one or two rooms.

Almost half (48.6 percent) of the households in rural Jhelum have two rooms for the purpose of sleeping, whereas in urban areas one-third (33 percent) households have the same privilege. In rural Jhelum, only 4 percent households have five or more rooms for sleeping, compared to more than 12 percent in urban Jhelum. Findings also show that in urban areas 3 persons are living per room compared to 3.2 persons in rural areas.

Table 2.9: Number of rooms used for sleeping by place of residence

Number of rooms	Rural		Urban		Total	
	Percent	Number	Percent	Number	Percent	Number
1	16.5	114	16.9	43	16.6	157
2	48.6	335	32.5	83	44.3	418
3	20.2	139	27.8	71	22.2	210
4	10.3	71	10.6	27	10.4	98
5+	4.4	30	12.2	31	6.5	61
Total	100.0	689	100.0	255	100.0	944

Household Possessions

Household possessions are perhaps one of the most effective ways of determining socio-economic status in a household. Often, it is easier to obtain information in regards to household possessions than to ask of details of household income, which respondents may be less willing to provide for various reasons.

The list of household possessions in Table 2.10 are setting-specific and will therefore be quite accurate in determining the socio-economic status of the households. The presence of durable goods in the household, such as radio, television, telephone, refrigerator, motorcycle, and private car, is another indicator of the household's socioeconomic status. Moreover, particular goods have specific benefits; for example, the ownership of a radio or television is a measure of access to mass media and exposure to innovative ideas; telephone ownership measures access to an efficient means of communication; refrigerator ownership prolongs the wholesomeness of foods; and ownership of private transport allows greater access to many services away from the local area.

Table 2.10: Ownership of household commodities/land

Household items	Rural	Urban	Total	
			Percent	Number
Electric iron	87.8	95.3	89.8	848
Electric fan	95.6	99.2	96.6	912
Sewing machine	75.9	87.8	79.1	747
Radio or cassette player	53.7	65.1	56.8	536
Chair/table	83.6	93.3	86.2	814
Television	63.1	87.1	69.6	657
Telephone/clock	42.2	65.9	48.6	459
Watch/clock	88.5	96.1	90.6	855
VCR/VCP/VCD/CD player	13.6	28.6	17.7	167
Refrigerator/deep freezer	46.2	71.0	52.9	499
Air cooler	14.1	35.3	19.8	187
Air conditioner	1.9	9.4	3.9	37
Computer	3.9	18.8	7.9	75
Bicycle	38.5	35.7	37.7	356
Motorcycle	12.6	20.4	14.7	139
Car/jeep	2.2	7.1	3.5	33
Tractor/truck	2.6	1.6	2.3	22
Ownership of agriculture land by HH	45.1	12.9	36.4	344
Agriculture major source of livelihood	18.0	3.5	14.1	133

Many urban and rural households own common household possessions such as electric fans, irons and clocks etc. However, table 2.10 suggests that the possession of items such as televisions, VCR/VCP/VCD/CD players, refrigerators, air conditioners etc. is substantially higher in the urban areas of Jhelum. Bicycles are the only household possession for which rural households had a higher percentage than their urban counterparts (38.5 percent and 35.7percent respectively). Table 2.10 also reveals that 45 percent of the rural households own agriculture land compared to 13 percent of the households in urban areas. According to the findings, agriculture is the major source of livelihood for only 18 percent of the households in rural Jhelum, compared to even less (3.5 percent) in urban areas.

Ownership of the House

Table 2.11 indicates the ownership of the houses in which the respondents lived. Less than 95 percent of the rural respondents live in homes that they own, compared to 75 percent of their urban counterparts. In urban areas, 17.3 percent of the respondents live in rented houses, while only 2.3 percent of the respondents in rural areas made the same claim. Finally, 3.5 percent of the respondents in rural areas and 4.3 percent in urban areas indicated that they live in rent-free accommodations.

Table 2.11: Status of ownership of house

Status	Rural		Urban		Total	
	Percent	Number	Percent	Number	Percent	Number
Owner occupied	94.2	649	74.5	190	88.9	839
Rented	2.3	16	17.3	44	6.4	60
Rent free	3.5	24	4.3	11	3.7	35
Others			3.9	10	1.1	10
Total	100.0	689	100.0	255	100.0	944

Chapter 3

Background Characteristics of Married Women of Reproductive Age

Information regarding the basic background characteristics of respondents is essential for the interpretation of results. This chapter describes the basic background characteristics including age, education level, and place of residence of the respondents. It also describes detailed information on the educational status of respondents and their husbands, literacy levels, and exposure to mass media. Only currently married women aged 15-49 were interviewed in this portion of the survey.

Women's Characteristics

Age Distribution of Married Women:

Table 3.1 indicates the number of married women of reproductive age in each age group for the households surveyed. In both rural and urban areas, the highest number of women are in the 30 to 34 years age group, whereas the lowest number are in the 15 to 19 year age group. The percentage of married women aged 20 to 24 are considerably more in the rural areas of Jhelum, sitting at about 13.2 percent, than in the urban centers where only 8.8 percent women of the same age group are married. Overall, the estimated mean age of married women of reproductive age is 35.3 years.

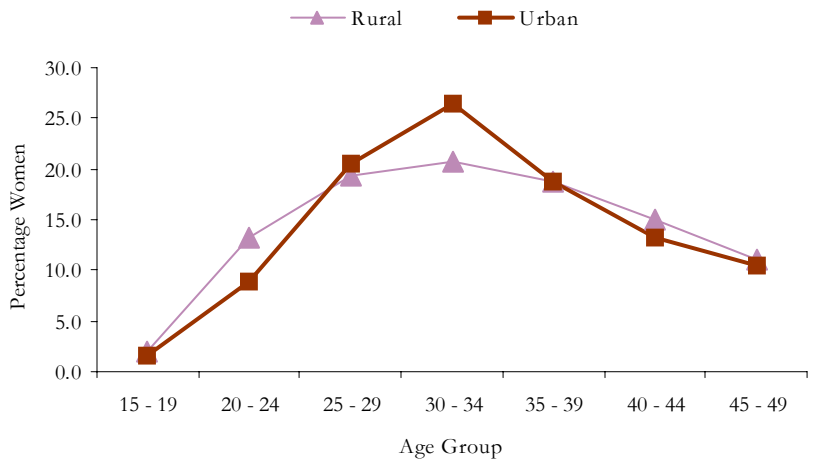
Table 3.1 also reveals that more than 47 percent of the women interviewed in Jhelum got married before the age of twenty. However, more than 8 percent in rural and less than 13 percent in urban areas got married after the age of 25 years. Overall, the reported mean age at marriage in Jhelum is 18.8 years.

Figure 3.1 gives a visual depiction of the age distribution among married women in rural and urban areas. It can be seen that until the age of 29, the percentage of married women in urban areas is less than the percentage of married women in rural areas. However, in the 30 to 34 year old age cohort, more women are married in urban areas than in rural areas of Jhelum.

Table 3.1: Current age and age at marriage

Background profile		Rural		Urban		Total	
		Percent	Number	Percent	Number	Percent	Number
Age of respondent	15 - 19	1.9	10	1.7	3	1.8	13
	20 - 24	13.2	69	8.8	16	12.1	85
	25 - 29	19.3	101	20.4	37	19.6	138
	30 - 34	20.8	109	26.5	48	22.3	157
	35 - 39	18.7	98	18.8	34	18.7	132
	40 - 44	15.1	79	13.3	24	14.6	103
	45 - 49	11.1	58	10.5	19	10.9	77
Age at marriage	< 15	7.3	38	6.6	12	7.1	50
	15 - 19	46.8	245	47	85	46.8	330
	20 - 24	37.6	197	33.7	61	36.6	258
	25 +	8.4	44	12.7	23	9.5	67

Figure 3.1: Age distribution



Education/Literacy level

The level of education obtained by a woman can be a good indicator of her status in society as well as the independent decision-making power available to her. It is presumed that the higher the level of education obtained by a woman, the more say she has in matters concerning her health and that of her children. In regards to maternal health, a higher literacy rate in women can result in an increased use of contraceptives, higher awareness of complications during and after pregnancy, a strong understanding of neonatal and newborn health, and finally a more complete understanding of safe birth practices.

Table 3.2 : Education level and literacy of married women and their husbands

Background profile		Rural		Urban		Total	
		Percent	Number	Percent	Number	Percent	Number
Level of education	No education	38.2	200	27.6	50	35.5	250
	Up to primary	32.4	170	23.2	42	30.1	212
	Up to middle	10.5	55	16.6	30	12.1	85
	Up to secondary	13.9	73	18.2	33	15.0	106
	Secondary +	5.0	26	14.4	26	7.4	52
Respondent's literacy	Literate	55.5	291	69.1	125	59.0	416
	Illiterate	44.5	233	30.9	56	41.0	289
Husband's Level of education	No education	14.3	75	16.6	30	14.9	105
	Up to primary	12.6	66	18.2	33	14.0	99
	Up to middle	23.1	121	19.3	35	22.1	156
	Up to secondary	37.4	196	29.3	53	35.3	249
	Secondary +	12.2	64	16.0	29	13.2	93
	Don't know	0.4	2	0.6	1	0.4	3
Husband's literacy	Literate	86.1	451	83.4	151	85.4	602
	Illiterate	13.9	73	16.6	30	14.6	103

It has also been shown that the mortality rates among children with mothers who have six or more years of education are considerably lower than the mortality rates among children with uneducated mothers (Martin, 1983). Educated women are more likely to recognize signs of illness in their children, actively seek assistance from a doctor, and administer the treatment in the manner required. Educated women are also more likely to return to a doctor in the event that the treatment administered failed to take effect. Therefore, the proactive nature of educated women with regard to the health of their children lowers the morbidity and mortality rates of infants and young children.

The level of education of fathers also affects the mortality rates amongst children. This is partly an indication of socio-economic level, as typically the more education the father of a child has, the higher his socio-economic status and standard of living are likely to be. However, the effect educated fathers have on the mortality rates of children is lower than the effect educated mothers have (Mahmood, 1992).

The ability to read is an important personal asset allowing women and their husbands increased access to various opportunities. By gathering information regarding the distribution of literacy among the respondents surveyed, maternal and newborn health communicators are better able to reach their target population with their messages. According to table 3.2, 56 percent of the women interviewed in rural Jhelum are literate, compared to 86 percent of their husbands. In urban Jhelum however, the disparity between male and female literacy rates are not as extreme. Here, 69 percent of the women interviewed and 83 percent of their husbands are literate. Slightly more than 38 percent of the women in urban Jhelum stated that they had never received any formal education compared to 28 percent in urban areas. In the urban areas, almost 14 percent of the married women and 16 percent of their husbands received more than secondary level education, whereas in rural areas, only 5 percent of

married women and 12 percent of their husbands were in the same position as their urban counterparts.

Children Ever Born and Living

Table 3.3 presents the distribution of married women by the number of children ever born (CEB). Overall, in the district of Jhelum about two-thirds of married women have three or more children, while the remaining one-third have two or less children. Table 3.3 also shows the mean number of children ever born and the mean number of surviving children for each five-year age group. It is observed that in the district of Jhelum, on average, 3.7 children are born of which only 3.3 children survive. This shows that an average of 0.4 children to every woman do not survive. When these results are compared with 1998 population census results, some changes can be noted. The overall average number of children ever born has declined from 4 to 3.7, whereas the number of living children has also declined from 3.4 to 3.3.

According to the table 3.3, 68 percent of the married women in the 40 to 44 years age group have more than five children, while 5 percent of the women in the same age group have one to two children. This shows that only a small proportion of married women have 1-2 children by the end of their reproductive age.

Table 3.3: Percentage distribution of married women by number of children ever born, mean number of children ever born, living children and age group, compared to the 1998 Population census

	Number of Children Ever Born					No. of	Mean No. of Children			
Age	0	1-2	3-4	5 or	Total	Women	PAIMAN Baseline		1998 Population Census	
Group				More			Ever born	Living	Ever born	Living
15 - 19	61.5	38.5	0.0	0.0	100	13	0.5	0.5	1.3	0.8
20 - 24	32.9	47.1	18.8	1.2	100	85	1.4	1.2	2.0	1.4
25 - 29	18.8	37.7	34.8	8.7	100	138	2.3	2.0	3.0	2.4
30 - 34	5.7	17.2	42.7	34.4	100	157	3.8	3.4	4.1	3.4
35 - 39	3.0	12.1	41.7	43.2	100	132	4.5	4.1	5.0	4.3
40 - 44	3.9	4.9	23.3	68.0	100	103	5.4	4.9	5.5	4.8
45 - 49	3.9	10.4	19.5	66.2	100	77	5.2	4.6	5.5	4.8
Total	11.6	21.7	31.9	34.8	100	705	3.7	3.3	4.0	3.4

Preceding Birth Interval

The length of the preceding birth interval is very important, as it directly affects the health of both mother and child. A mother with repeated pregnancies, especially at short intervals, does not have sufficient time for recovery, both physically and nutritionally, and is therefore more likely to have pregnancy losses and babies of a lower birth weight. Table 3.4 shows that less than 20 percent of women had their last birth occur at an interval of less than 19 months, while 19 percent had a 19-24 month interval, along with 33 percent who had a 25-36 month interval between their last two births.

Table 3.4: Percentage distribution of married women by length of preceding birth interval

Length of Preceding Birth Interval	Number	Percent
Less than 12 Months	3	1.2
13-18 Months	48	18.5
19-24 Months	50	19.3
25-36 Months	85	32.8
More than 36 Months	73	28.2
Total	259	100

Access to Information

In the baseline survey, respondents were asked several questions regarding access and exposure to television, radio and newspapers. One of the main objectives of the baseline survey is to determine the knowledge of married women on different maternal and newborn health issues and the source of that knowledge. This information is useful in determining which media channels should be employed in the dissemination of maternal and newborn health information to target audiences. Moreover, it is important to measure the likelihood of reaching target audiences, as well as to determine which media channels are most effective when it comes to reaching that target audience.

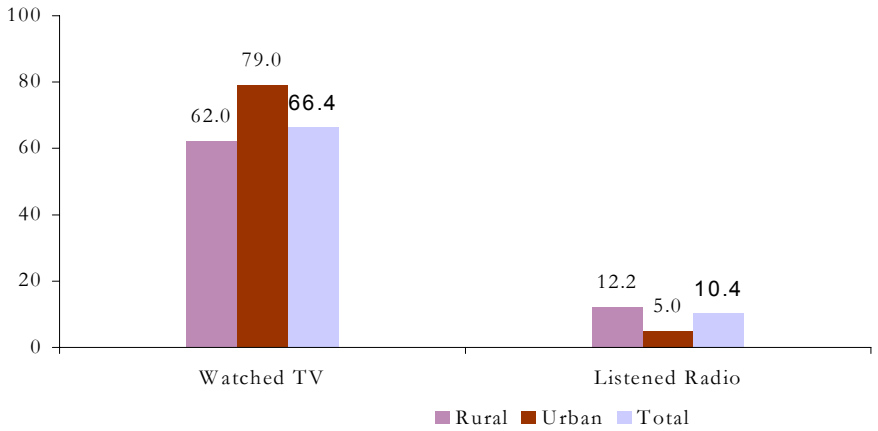
Access to Media (Television, Radio and Newspaper)

Mass media is regularly used to campaign various issues, including those related to the health of mothers and newborns. In the past, radio was the most popular form of communication (Syed, 1979). However, according to the survey findings, television has become a more popular source of information.

Figure 3.2 visually depicts the percentage of women who watch television in the district of Jhelum. According to the data obtained, a higher percentage of women watch television in urban Jhelum compared to their counterparts in rural areas.

More than three quarters (79 percent) of the women in urban areas watch TV, compared to less than two-thirds (62 percent) for rural areas. Also, the percentage of women who rarely watch television is higher for rural areas than urban ones.

Figure 3.2: Percentage of women who watch television or listen to radio



Women in urban areas have more access to television, which is synonymous with access to information. This may be due to the fact that more women in urban areas have a higher education, a greater socio-economic status and therefore greater decision-making power. Furthermore, access to television also gives them greater decision-making power through the supply of information. When asked where they watch television, a majority of the respondents in both urban (98.6 percent) and rural areas (93.5 percent) indicated that they have access to a television at home (table 3.5). Therefore, the home is the most common place where married women watch television.

Table 3.5: Place where respondent usually watches television

Place	Rural		Urban		Total	
	Percent	Number	Percent	Number	Percent	Number
At home	93.5	304	98.6	141	95.1	445
At relative's house	5.8	19	1.4	2	4.5	21
At neighbor's house	0.6	2			0.4	2
Total	100.0	325	100.0	143	100.0	468

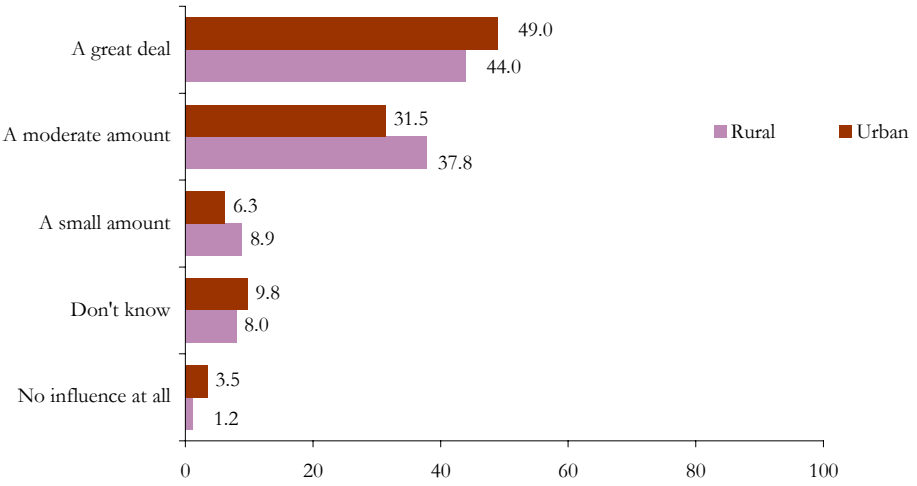
After asking respondents whether or not they have access to a television, it was necessary to determine how often they watch TV. In Table 3.6, 66 percent of the women in rural Jhelum and 76 percent in urban Jhelum indicated that they are daily viewers of television, while 27 percent in rural Jhelum and 17 percent in urban Jhelum indicated that they rarely watch television.

Table 3.6: Frequency of watching television

Frequency	Rural		Urban		Total	
	Percent	Number	Percent	Number	Percent	Number
Almost daily	65.5	213	75.5	108	68.6	321
At least once a week	6.5	21	7.7	11	6.8	32
At least once a month	0.9	3			0.6	3
Rarely	27.1	88	16.8	24	23.9	112
Total	100.0	325	100.0	143	100.0	468

When asked if they believe television has an impact on the health behavior of women, nearly half (49 percent) the respondents in urban Jhelum, and 44 percent in rural Jhelum felt television is very influential. A very small proportion of the population believed television has no influence at all on people's behaviors.

Figure 3.3: Influence of television programs on the health behaviors of people



Radio

Like television, radio is also a tool through which messages may be relayed to a relatively large audience. However, Figure 3.2 appears to indicate that from the respondents interviewed, a majority from both rural and urban Jhelum do not listen to the radio. It can therefore be determined that radio is not the most effective means of communication for the purpose of women's health and newborn care.

Even among the respondents that have access to a radio, a nearly equal percentage (53.4 percent) in both rural and urban indicated that they listen to the radio on a daily basis. Therefore, it becomes clear that the audience available through radio is limited. This may be due to the increased use of television in many areas, which would lead to a decrease in the number of people who listen to the radio.

Table 3.7: Frequency of listening to radio

Frequency	Rural		Urban		Total	
	Percent	Number	Percent	Number	Percent	Number
Almost daily	53.1	34	55.6	5	53.4	39
At least once a week	14.1	9	11.1	1	13.7	10
Rarely	32.8	21	33.3	3	32.9	24
Total	100.0	64	100.0	9	100.0	73

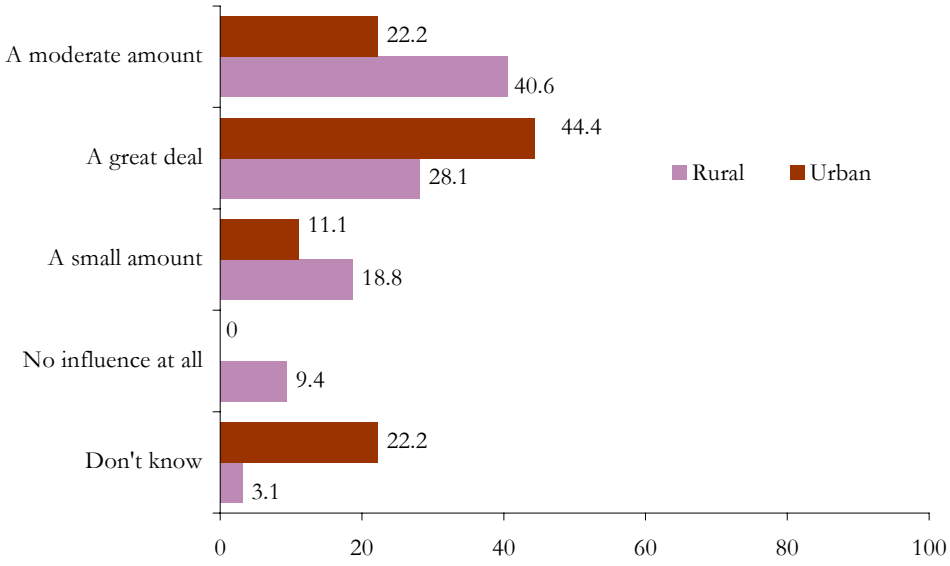
However, most of the respondents who indicated that they listen to the radio also indicated that they have access to radios in their homes. In rural Jhelum, 3 percent of the women interviewed listen to the radio at a neighbor's house.

Table 3.8: Place where respondent listens to the radio

Place	Rural		Urban		Total	
	Percent	Number	Percent	Number	Percent	Number
At home	96.9	62	100.0	9	97.3	71
At neighbor's house	3.1	2			2.7	2
Total	100.0	64	100.0	9	100.0	73

Figure 3.4 indicates the influence radio has on the health behaviors of people. About 44 percent of those who own radios in urban Jhelum indicated that radios have a great deal of influence on the health behaviors of people, whereas 11 percent stated that radio has only a small amount of influence. In rural Jhelum, about 28 percent of the respondents with access to a radio indicated that radio is very influential, where almost 10 percent stated that it has no influence at all.

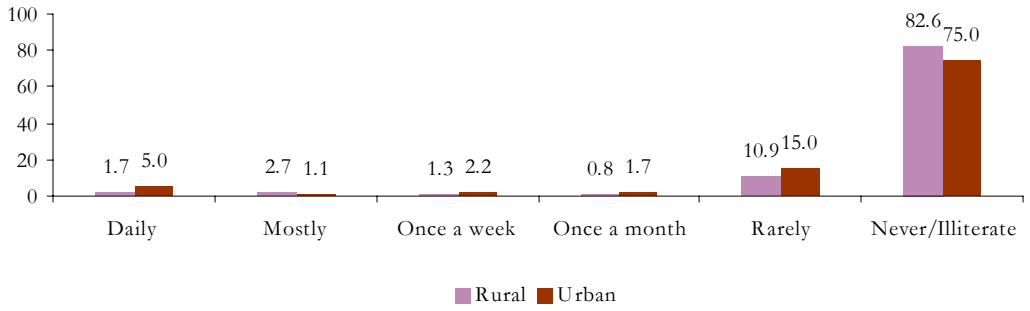
Figure 3.4: Influence of radio on the health behaviors



Newspapers

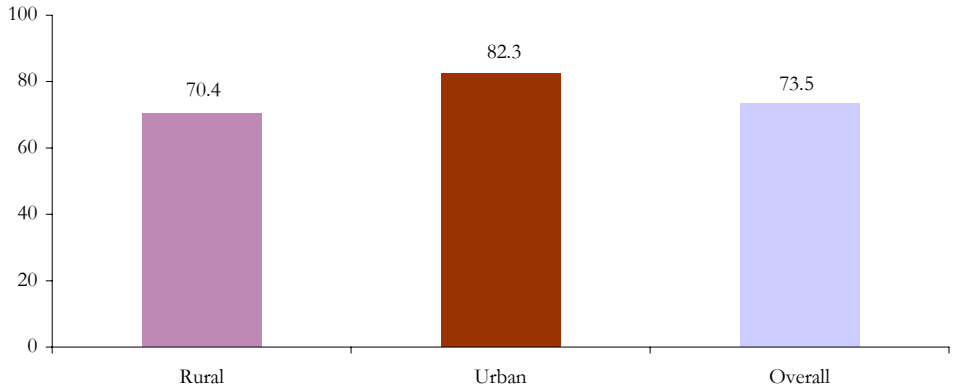
The results obtained for the percentage of women interviewed that read the newspaper on a daily basis were very low. As outlined in Figure 3.5, almost 83 percent of the population of rural Jhelum indicated that they never read the newspaper. Less than 2 percent stated that they read the newspaper everyday, whereas about 11 percent indicated that they rarely read the newspaper.

Figure 3.5: Frequency of reading newspaper



The results for urban Jhelum are only slightly better, three quarters (75 percent) of the women indicated that they never read the newspaper, while another 15 percent stated that they rarely read the newspaper. Only 5 percent indicated that they read the paper on a daily basis. Therefore, it becomes clear that promoting any messages through newspapers would be inefficient, as a majority of the target population is either illiterate or never reads the newspaper.

Figure 3.6: Exposure to mass media (radio, television or newspaper)

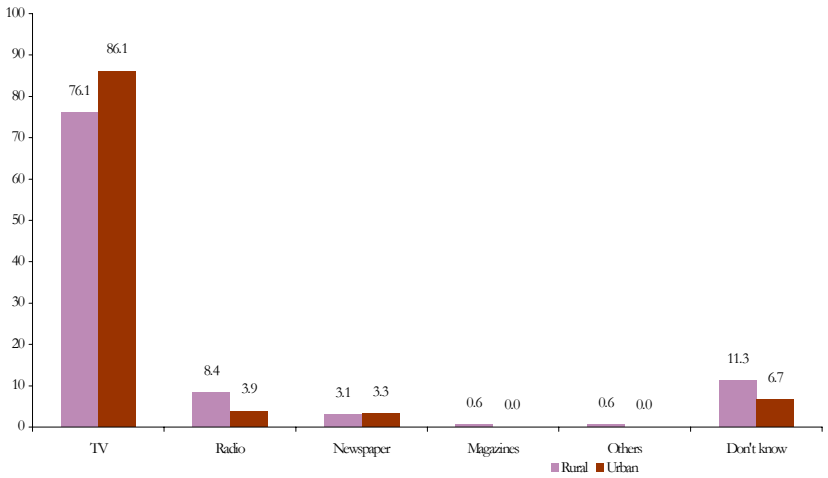


According to the figure 3.6, about three quarters (73.5 percent) of the women in the district of Jhelum have access to some sort of media; whether it is television, radio or newspapers. While it may seem relatively easy to reach this large portion of women through one of the three main media channels, there are some obstacles in the way, including the lack of decision-making power for women and the infrequency of access to media. The 26 percent of the population that does not have access to any sort of media must also be reached. In order to do this, a more grassroots method must be adopted

through which the rest of the population of the district is educated. These grassroots efforts may include interpersonal communication through community workers, community gatherings, speeches and health education sessions.

According to the figures 3.7, a large portion of the people interviewed in both urban and rural areas believe that television is the most trustworthy form of media (86 percent and 76 percent respectively). The percentages for radio as the most trustworthy form of media are much lower (8 percent and 4 percent for rural and urban areas respectively). In 1975, radio was the most popular form of mass communication (Syed, 1979), whereas in recent years television has assumed that position. In fact, according to UNESCO, global access to television is increasing rapidly, especially in developing countries. For example, in 1965 only about five percent of the world's television sets were in developing countries. By 1997 however, the number of television sets in developing countries rose to 52 percent (www.unesco.org). This data would suggest that access to television in the developing world has increased, bringing with it a "globalizing effect". As a result, many feel that television brings them trustworthy information and news.

Figure 3.7: Most trustworthy form of media

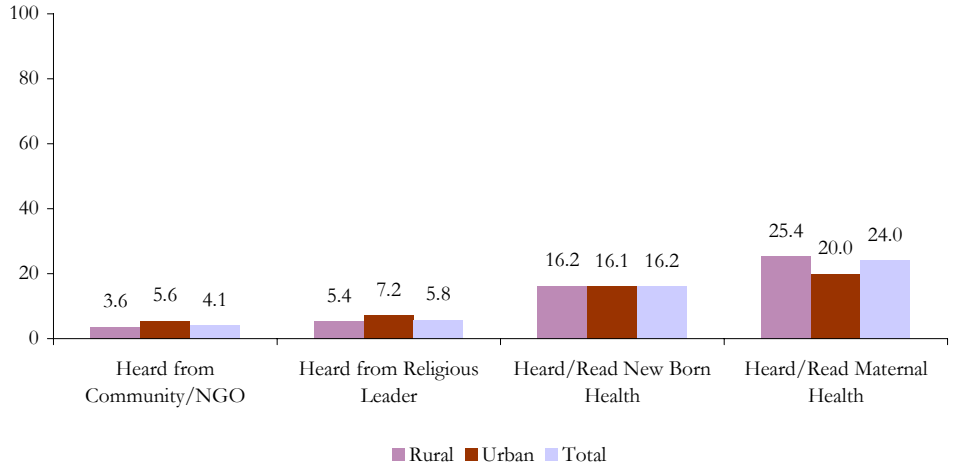


Therefore, perhaps the most efficient way to educate the married women of Jhelum in regards to maternal and neonatal health is through television, as well as through a more grassroots, community-based approach.

Information/Education through Media

Before moving on to questions regarding attitudes towards pregnancy, delivery and the postpartum period, respondents were asked to comment on whether or not they had heard/read anything about maternal and newborn mortality within the past three months. Figure 3.8 presents the responses given.

Figure 3.8: *Percentage of married women who had heard/read maternal and newborn messages during the last 3 months*



Less than a quarter (24 percent) of the married women interviewed in the district of Jhelum had heard/read about maternal health within the last three months prior to the survey. The remaining three quarters (76 percent) of the women had neither heard nor read anything regarding this matter.

Similarly, only 16 percent of the married women in both urban and rural Jhelum had heard/read about newborn health during the same time period. It appears that fewer people were exposed to the topic of infant health than to the topic of maternal health. However, it is clear that a very large portion of the population is not exposed to any messages at all regarding maternal and newborn health on a frequent basis.

Furthermore, respondents were asked if they had heard religious leaders and community/NGO workers speak about health care in the last three months.

In rural Jhelum, nearly 5 percent of the population stated that they had heard a religious leader speak about maternal and newborn health, and about 7 percent in urban areas indicated the same thing. However, in both urban and rural Jhelum, only about 4 percent of the population stated that they had heard a community/NGO worker speak about maternal and newborn health.

It becomes evident from the data that the proportion of married women who had heard anything about maternal or newborn health is very low for both urban and rural areas, indicating the absence of proactive education and awareness in many areas of Jhelum. Hence, it would be a challenge for the PAIMAN team to reach these women in both urban and rural areas, and convey messages regarding maternal and newborn health.

Chapter 4

Knowledge of Safe Motherhood, Birth Preparedness and Community Resources

This chapter explores the level of understanding women have of safe motherhood practices, birth preparedness, and the use of community resources. It examines the level of health awareness women in the district possess, and thus provides an explanation for the maternal and newborn mortality rates. Respondents were asked questions regarding knowledge of complications during pregnancy, delivery, the postpartum period, and newborn health. They were also asked about the community resources available to them within their respective communities. This chapter presents these findings.

Knowledge of Danger Signs

Knowledge of Danger Signs during Pregnancy

Figure 4.1 outlines the various complications that may occur during pregnancy. Respondents were asked to indicate which complications they believe are dangerous and require medical attention. Surprisingly, a very small percentage believe that most complications require a doctor's care, and only agreed that medical attention should be provided after being prompted.

The most known complication among married women in urban areas is high blood pressure. More than one-third (34.3 percent) of the respondents in urban areas know about high blood pressure, whereas 23 percent of the respondents in rural areas are aware of this danger sign. Approximately 30 percent of the women in urban areas know about heavy vaginal bleeding as danger signs during pregnancy. Upon analysis of these answers, it becomes evident that many women do not have a basic understanding of the complications that may arise during pregnancy, and may therefore fail to take action. Moreover, many may assume that the above-mentioned complications are part of the pregnancy process. Figure 4.2 presents some surprising results; according to the data, a higher percentage of women in rural Jhelum know three or more danger signs during pregnancy than their counterparts in urban Jhelum (24 percent versus 21 percent). A sizable portion (34 percent in rural and 37 percent in urban) of the women do not know of a single complication or danger sign during pregnancy.

Figure 4.1: Knowledge of danger signs during pregnancy, which require medical attention

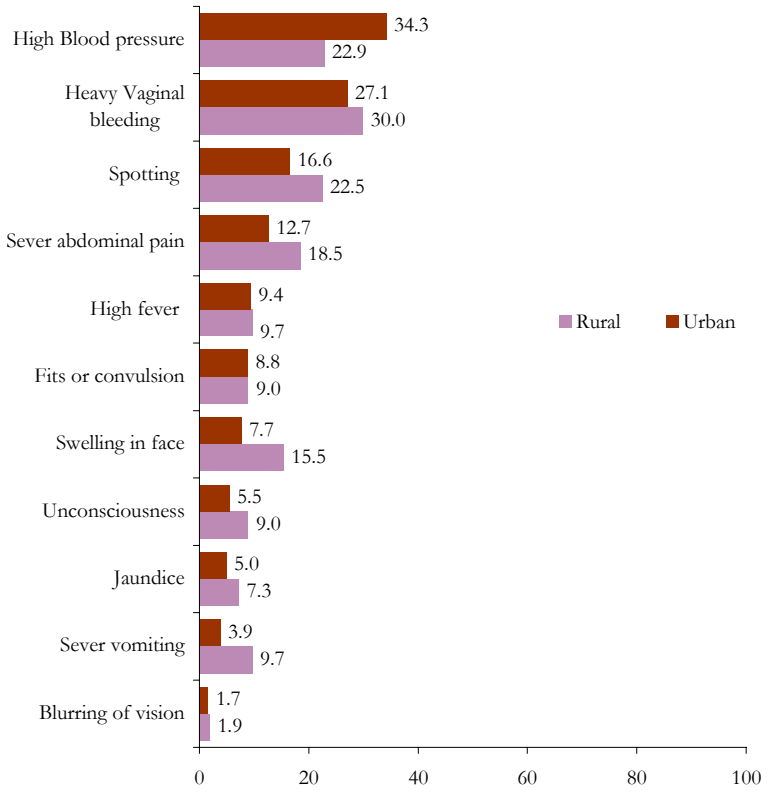
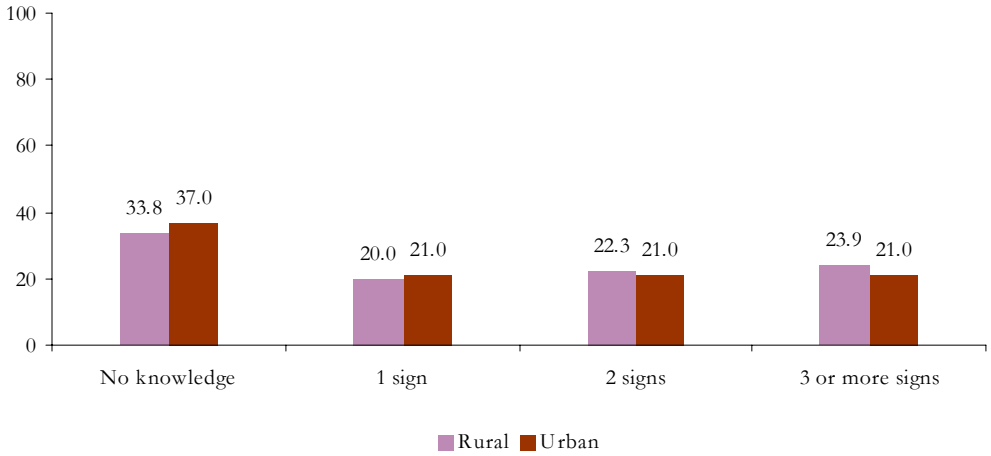


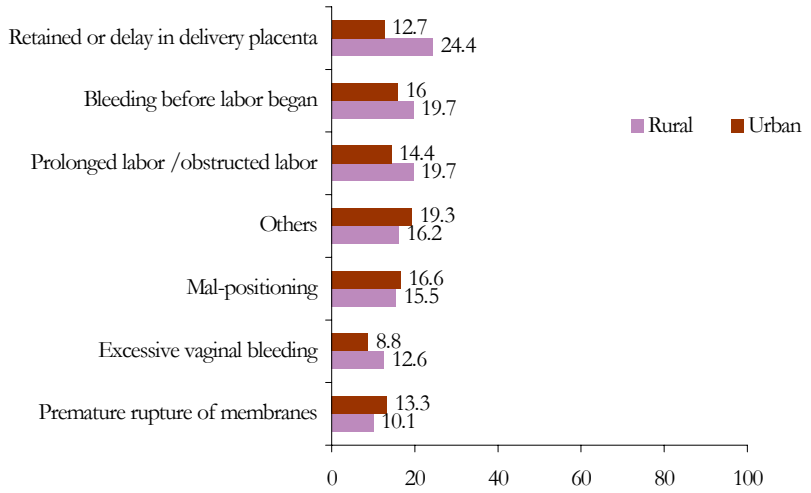
Figure 4.2: Percentage distribution of women by knowledge of the number of danger signs of pregnancy



Knowledge of Danger Signs during Childbirth/Delivery

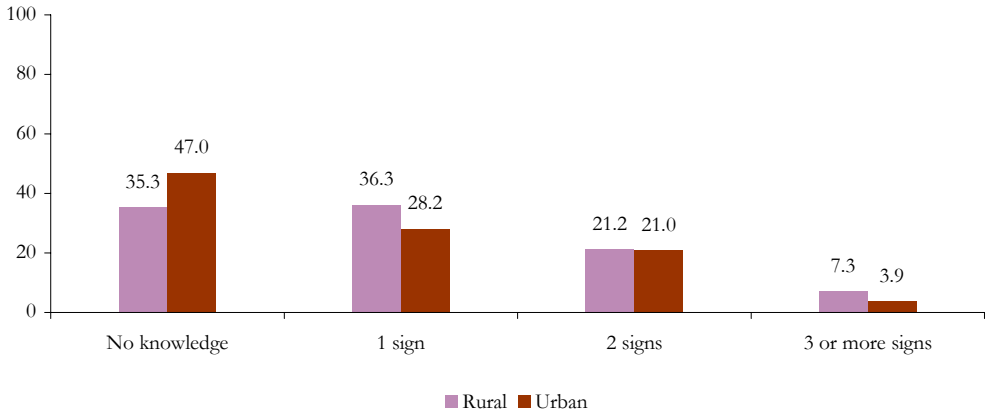
Many women are not aware of the different complications that may arise during delivery. As a result, many women are not taken to a hospital in the event that such a complication should occur. Figure 4.3 depicts the level of the respondents' understanding of complications during delivery. In rural areas, the results demonstrate highest awareness levels for "retained placenta/delay in the delivery of placenta" (24.4 percent) followed by "bleeding before labor began" and "prolonged labor (more than 12 hours)/obstructed labor" (both 19.7 percent). The data obtained would suggest that women in rural areas have a slightly better understanding of the danger signs that may occur during delivery.

Figure 4.3: Percentage distribution of respondents who had knowledge about complications during delivery



According to figure 4.4, 47 percent of the women in urban Jhelum have no knowledge of the danger signs with may appear during delivery, while 35.3 percent of their rural counterparts are in the same position. More than 7 percent of the women in rural Jhelum know of three or more danger signs, compared to only 4 percent of the women in urban Jhelum.

Figure 4.4: Percentage distribution of women by knowledge of number of danger signs of delivery



Knowledge of Danger Signs during the Postpartum Period

In the baseline survey, the postpartum period is defined as the 40 days after childbirth. Postpartum hemorrhage is the most significant cause of maternal morality in developing countries. In the district of Jhelum, only one-third (33.6 percent) of the women interviewed in rural and 30 percent in urban areas recognize excessive vaginal bleeding as a danger sign during the postpartum period (figure 4.5).

Figure 4.5: Percentage of married women who had knowledge about complication during postpartum period

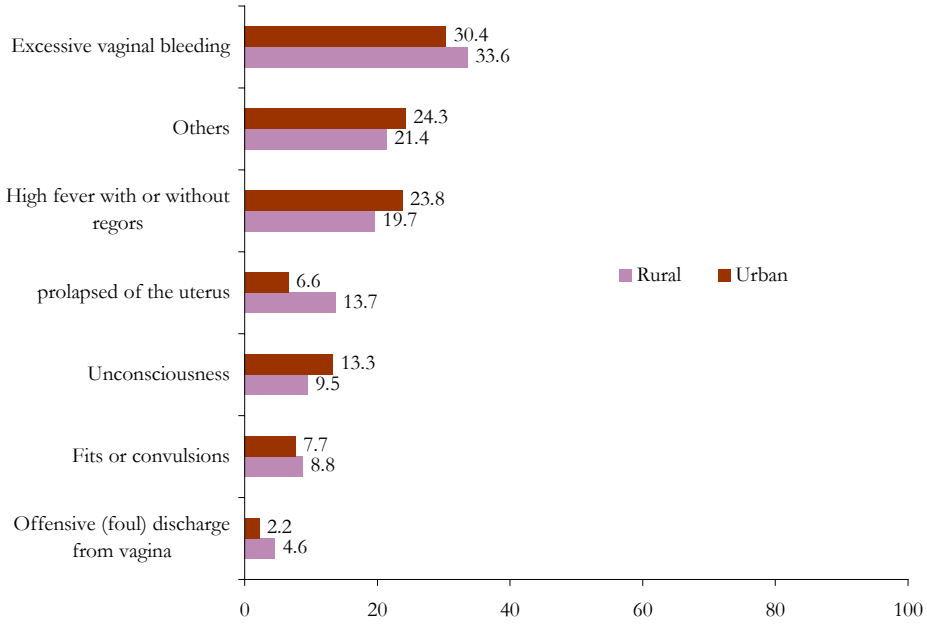
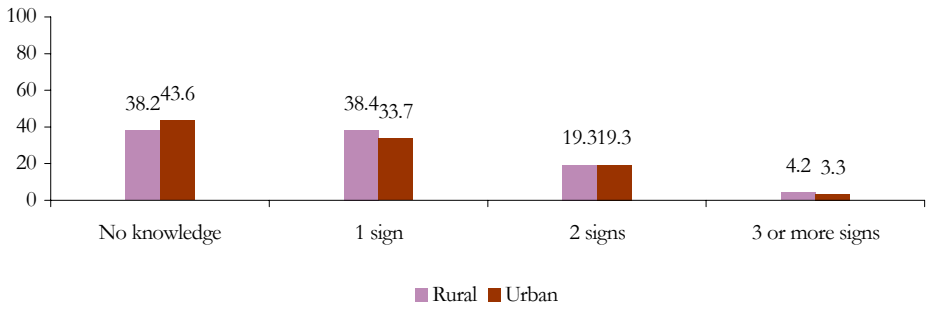


Figure 4.6 shows that about 44 percent of the women in urban areas and 38.2 percent in rural areas have no knowledge of danger signs during delivery, while only 4.2 and 3.3 percent in urban and rural Jhelum respectively know of three or more signs. Again, this calls for some innovative approaches to make communities knowledgeable regarding the danger signs which may arise during the postpartum period. If mothers are not medically fit and completely healthy during the postpartum period, they are unlikely to take adequate care of their newborns.

Figure 4.6: Percentage distribution of women by number of known danger signs of postpartum period



Knowledge of Danger Signs in the Newborn

While many women may not seek medical attention when it comes to their own health due to a lack of awareness, doing so with a newborn may be detrimental. Unfortunately, many women are unaware of the danger signs that may appear in newborns, especially in the first seven days after delivery. Figure 4.7 outlines the percentage of respondents who believe that each complication listed requires medical attention. About 32 percent of the respondents in rural Jhelum believe "blue skin color" is a danger sign, while only 21.5 percent of the urban respondents feel the same way. In rural Jhelum, "yellow skin color/jaundice" is perceived as a complication by about 29 percent of the respondents, while 23 percent believe that "a weak cry" is a danger sign.

According to figure 4.8, it is once again evident that women in rural Jhelum appear to have a better understanding of the danger signs in the newborns than their counterparts in urban Jhelum. Of the women surveyed in rural areas, 28 percent know of three or more danger signs in newborns, while only 25 percent are in the same position in urban areas.

Figure 4.7: Percentage distribution of respondents who had knowledge about danger signs in newborns

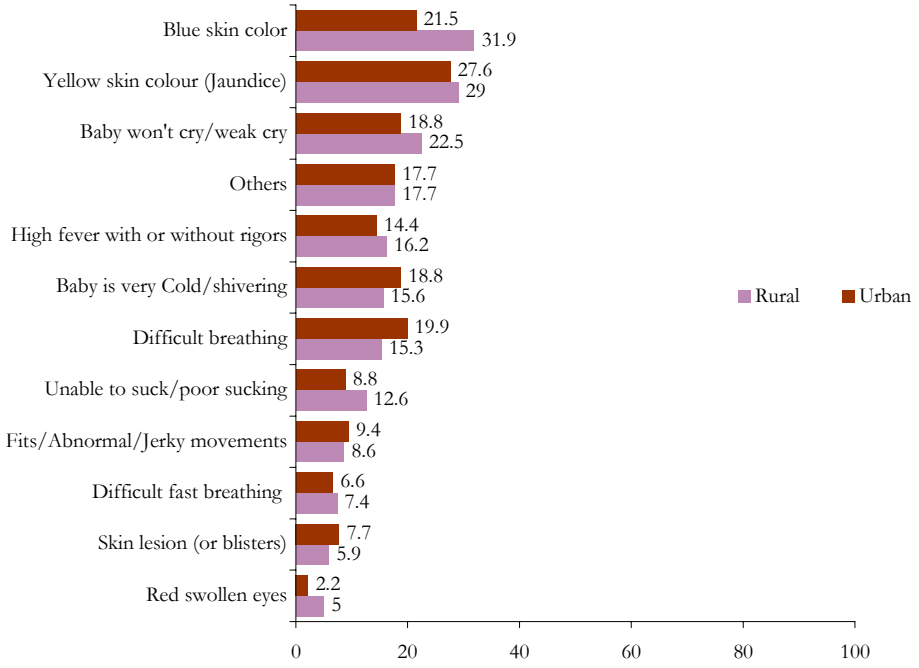
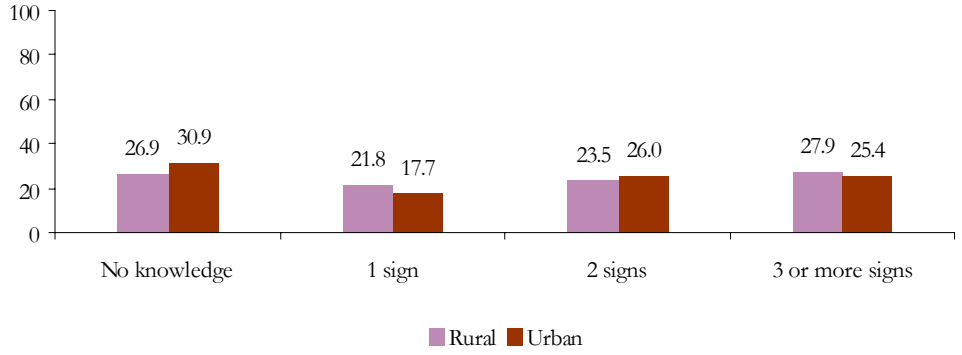


Figure 4.8: *Percentage distribution of women by knowledge of the number of danger signs in a newborn at birth*

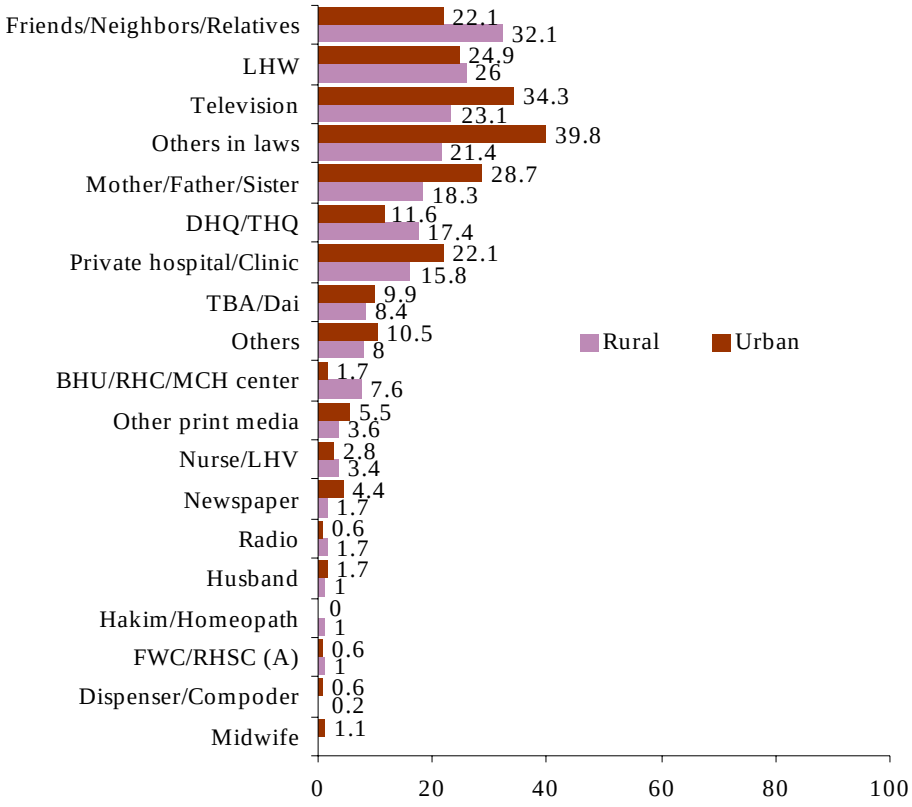


Source of Information Regarding Danger Signs:

Finally, respondents were asked to name the source from which they obtain their information regarding pregnancy, delivery, the postpartum period and newborn health. About 32 percent and 22 percent in rural and urban Jhelum respectively indicated that they obtain their information from friends, neighbors or relatives. More than a quarter (26 percent and 25 percent in rural and urban areas respectively) indicated that they acquire this information from Lady Health Workers, while 23 percent and 34 percent in rural and urban Jhelum receive their information from television. A very large proportion of the population (21 percent and 40 percent in rural and urban areas respectively) said they receive their information from their in-laws. District/Tehsil Headquarter Hospitals are also a source of information for a sizable portion of the population. A reasonable proportion of urban (22 percent) and rural (16 percent) respondents reported that they received the information regarding these complications from private hospitals/clinic.

The fact that most respondents indicated that they obtain information about pregnancy through in-laws, family members and friends suggests that many women may not be getting accurate information. Furthermore, many women are not receiving reliable information regarding antenatal and postnatal health from a doctor's perspective.

Figure 4.9: Source of information regarding danger signs during pregnancy



Knowledge of Community Schemes for the Welfare of Women and Newborns

In addition to being asked questions regarding the knowledge of danger signs, married women were asked whether they were aware of any existing schemes in their respective communities designed to help women have a safe childbirth, while also providing basic education regarding newborn care. The baseline focused on schemes pertaining to transportation, blood arrangements and funding, all services which ensure that there are no delays at the time of childbirth. Arrangement of transport to a health facility is a major cause of delay, which can lead to maternal and newborn mortality; therefore the timely arrangement of transport is necessary to eliminate that delay. Unfortunately, many households are unable to make such an arrangement due to the lack of transport facilities in their communities.

Table 4.1: Knowledge of existence and importance of transport, blood and finances by the community at the time of delivery

Committee Services	Rural		Urban		Total	
	Percent	Number	Percent	Number	Percent	Number
Existence of transport by the community at time of delivery	1.3	7	1.1	2	1.3	9
Importance of community provided transport facility as perceived by respondents	99.6	522	100.0	181	99.7	703
Existence of blood by the community at time of delivery	0.6	3			0.4	3
Importance of community provided blood facility as perceived by respondents	99.4	521	99.4	180	99.4	701
Existence of money by community at the time of delivery	0.4	2	0.6	1	0.4	3
Importance of community provided money facility as perceived by respondents	98.9	518	99.4	180	99.0	698
Total	100	524	100	181	100	705

According to table 4.1, over 99 percent of the women believe that it is important to have arrangements for transport, money and blood in a community at the time of delivery despite the fact that most communities do not have these arrangement. This is a major obstacle to safe birth practices, as women who want to seek assistance from health professionals are forced to deliver at home. Hence, innovative initiatives are needed to establish such schemes at the community level.

Chapter 5

Attitudes Towards Pregnancy, Delivery and the Postpartum Period

This chapter explores the attitudes of married women towards pregnancy, delivery and the postpartum period. Determining these attitudes and beliefs is important for designing strategies that bring about a change in traditional thinking.

Attitudes Towards Age at Marriage

In response to the question of whether or not women should get married soon after puberty, the responses yielded by rural and urban women were slightly different. Forty-two percent in rural Jhelum believe that women should get married soon after puberty, while 30 percent of the respondents in urban areas have the same sentiments. A deeper look into this issue shows that many families do not value girls' education, and place greater emphasis on marriage. As a result, women are married at an early age and often do not have the opportunity to obtain any education whatsoever. There is also a link between the amount of education obtained by women and the fertility rate of a country (Sathar *et al*, 1988). The younger the age at marriage, the greater the exposure to childbearing

Attitudes Towards Antenatal Care

Women in both urban and rural areas of Jhelum were asked if they believed pregnant women require antenatal check-ups. Overall, prenatal care provides an opportunity to offer preventative care that will benefit the newborn as well as the mother. Prenatal care allows women to learn about hygiene, the benefits of breastfeeding, nutrition and general health (Mahmood, 2002). A vast majority (96 percent) of the women in Jhelum felt that antenatal care must be sought, while only about 3 percent thought it unnecessary. Therefore, it becomes quite clear that while many women do want to receive antenatal check-ups, and feel that it is a necessity, many are not able to access this service. Table 5.1 outlines the percentage of respondents who felt that antenatal check-ups are either necessary or not necessary by place of residence.

Table 5.1: Importance of antenatal check-ups

	Rural		Urban		Total	
Have antenatal check-up	Percent	Number	Percent	Number	Percent	Number
Yes	94.5	495	98.3	178	95.5	673
No	3.4	18	1.1	2	2.8	20
Don't know	2.1	11	0.6	1	1.7	12
Total	100.0	524	100.0	181	100.0	705

Antenatal care also encourages mothers to be more aware of their own health as well as the health of their babies (Hollander, 2004, pp 45). When asked to state the responses regarding the month in which antenatal care should be received, the answers and opinions varied as given in table 5.2.

Table 5.2: Month of pregnancy when women should obtain antenatal care

Month	Rural		Urban		Total	
	Percent	Number	Percent	Number	Percent	Number
1	18.0	89	12.9	23	16.6	112
2	26.7	132	14.6	26	23.5	158
3	21.2	105	17.4	31	20.2	136
4	7.1	35	6.2	11	6.8	46
5	6.7	33	6.2	11	6.5	44
6	1.4	7	2.2	4	1.6	11
7	3.2	16	0.6	1	2.5	17
8	0.8	4			0.6	4
As soon as possible after pregnancy	8.7	43	16.3	29	10.7	72
When check-up is needed	3.6	18	20.2	36	8.0	54
Don't know	2.6	13	3.4	6	2.8	19
Total	100.0	495	100.0	178	100.0	673

Most women (60 percent) interviewed believe that an antenatal check-up should occur in the first three months of the pregnancy. About 11 percent stated that women should go for an antenatal check-up as soon as possible after pregnancy, while 8 percent indicated that antenatal care should be accessed only when it is needed.

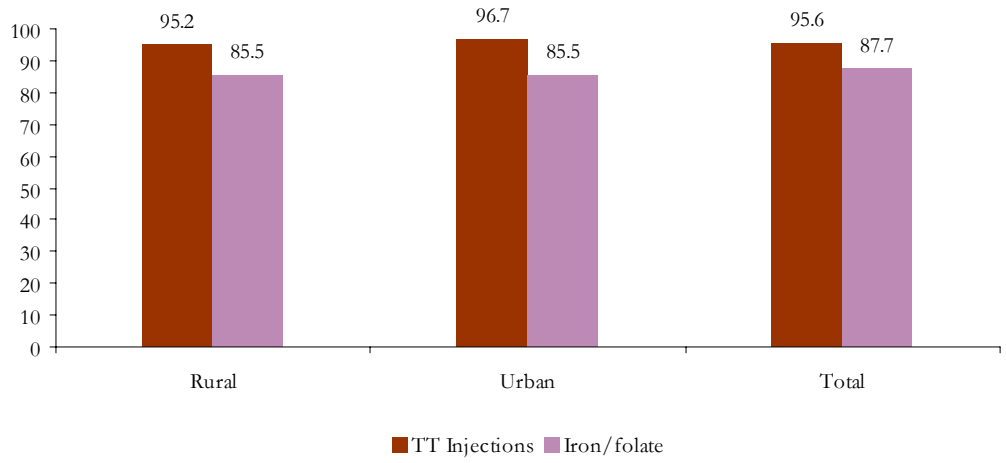
As mentioned earlier, a majority of the women interviewed indicated that they are in favor of antenatal care. Table 5.3 shows the number of antenatal visits a woman thinks are necessary. The majority of women believe that three (22 percent) to four (20 percent) antenatal care check-ups are enough for an expectant woman. More than 10 percent believe that nine or more antenatal check ups should be received; while 16 percent respondents feel that antenatal check-ups should only be performed when needed. This gives rise to the question of access to antenatal care and the obstacles that might stand in the way. Tradition and a lack of transport and finances may stand in the way.

Table 5.3: Number of antenatal visits considered necessary by respondents

Number	Rural		Urban		Total	
	Percent	Number	Percent	Number	Percent	Number
1	0.2	1	0.6	1	0.3	2
2	6.3	31	1.7	3	5.1	34
3	25.7	127	12.9	23	22.3	150
4	20.2	100	19.7	35	20.1	135
5	8.9	44	7.3	13	8.5	57
6	5.7	28	12.4	22	7.4	50
7	5.1	25	3.4	6	4.6	31
8	4.4	22	3.4	6	4.2	28
9+	8.5	42	15.2	27	10.3	69
When check-up is needed	13.9	69	21.9	39	16.0	108
Don't know	1.2	6	1.7	3	1.3	9
Total	100.0	495	100.0	178	100.0	673

According to the figure 5.1, 95 percent and 97 percent of the respondents in rural and urban Jhelum respectively believe that TT injections are necessary during pregnancy. The proportion of women who fail to realize the importance of iron/folate supplements during pregnancy is quite high. Approximately 12 percent of the women in Jhelum believe iron/folate supplements are unnecessary during pregnancy.

Figure 5.1: Percentage of married women who thought it necessary to receive TT shots and take iron/folate tablets during pregnancy



Attitudes Towards Delivery

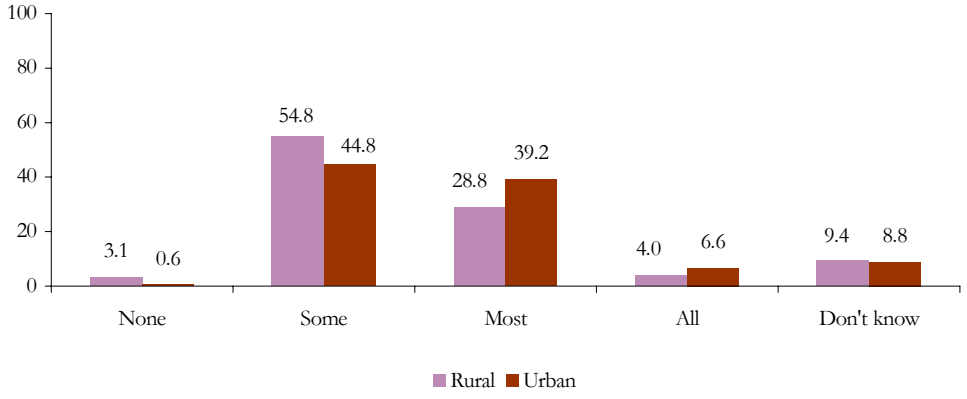
Many families prefer the traditional practice of employing Traditional Birth Attendants (TBAs) or Dais to assist with deliveries. These TBAs/Dais have vast experience but no formal training, and therefore do not qualify as skilled birth attendants. However, many families do not realize the impact a lack of training can have on childbirth and chose to opt for TBAs over skilled birth attendants. Table 5.4 reveals that 94 percent of the respondents interviewed in rural areas, along with 97 percent in urban Jhelum believe that delivery services should be provided by a SBA.

Table 5.4: Respondents who believe that women should receive delivery services from health professional

Number	Rural		Urban		Total	
	Percent	Number	Percent	Number	Percent	Number
Yes	93.9	492	97.2	175	94.7	667
No	4.2	22	1.7	3	3.6	25
Don't know	1.9	10	1.1	2	1.7	12
Total	100.0	524	100.0	180	100.0	704

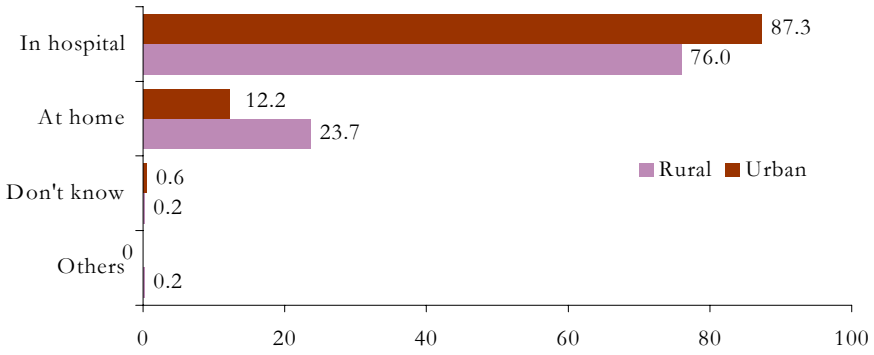
Figure 5.2 depicts the responses of the women interviewed when asked to indicate the number of women in their communities who obtain delivery services from health professionals. Almost 55 percent of the women interviewed in urban areas, as well as 45 percent in rural areas indicated that only some of the women in their communities seek the assistance of a health professional at the time of delivery. Only 4 percent and 6.6 percent of the respondents in rural and urban areas respectively indicated that all of the women in their community receive delivery services from skilled birth attendants.

Figure 5.2: Percentage of respondents who believe women in their community obtain delivery services from SBAs



As seen in figure 5.3, when asked where they would like to have their next delivery take place, a majority of the women in both rural and urban Jhelum appear to be in favor of giving birth in hospitals (76 percent and 87 percent respectively), whereas nearly 24 percent in rural areas and 12 percent in urban areas said that a delivery should take place at home.

Figure 5.3: Perception of respondent regarding place of delivery



One possible reason for why some women still want to deliver at home is that they are unable to make major decisions independently and must rely on their husbands or in-laws. Respondents were asked to indicate the person in their communities who should take charge of a pregnant woman, and should be responsible for making important decisions regarding her health. According to table 5.5, a majority of the respondents surveyed believe that a woman's husband should be the one who takes care of her and makes decisions regarding her health during pregnancy. In rural Jhelum, 25 percent feel that family members should take care of pregnant women and make important decisions for her, while 18 percent feel the same way in urban Jhelum. Finally, about 12 percent of the respondents surveyed in both urban and rural areas believe that a pregnant woman must be allowed to take care of herself and to make decisions which affect her health.

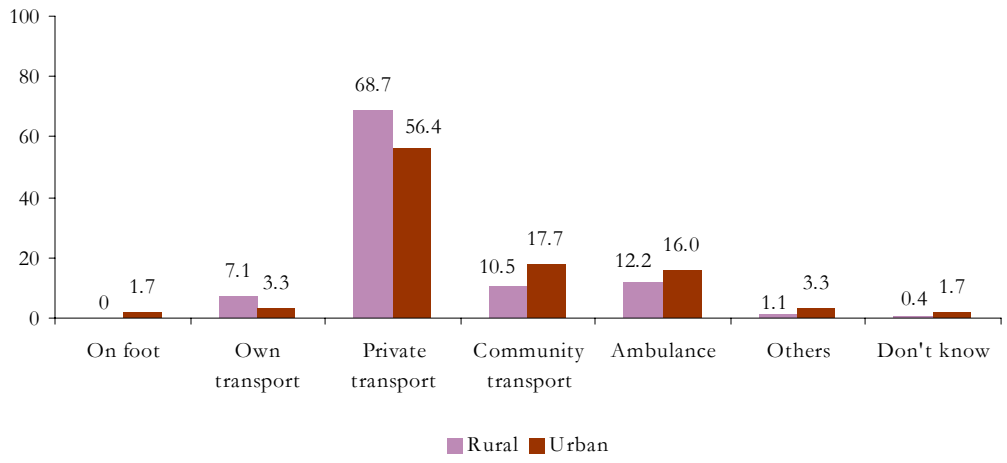
Table 5.5: Person who should make decisions regarding the health of a pregnant women

Person	Rural		Urban		Total	
	Percent	Number	Percent	Number	Percent	Number
Pregnant woman	11.5	60	11.6	21	11.5	81
Husband	58.6	307	61.9	112	59.4	419
Other family members	25.0	131	18.2	33	23.3	164
Friend/neighbor/relative	0.4	2			0.3	2
TBA/Dai	2.1	11	2.2	4	2.1	15
Others	2.3	12	5.5	10	3.1	22
Don't know	0.2	1	0.6	1	0.3	2
Total	100.0	524	100.0	181	100.0	705

Table 5.5 also indicates how family members often have a major impact on the decisions made regarding the health of an expectant mother. Since women are largely not allowed to make their own decisions, they are often unable to seek medical care even when they need to, and often do not make decisions such as those regarding the location of delivery. Therefore, while many women may like to get assistance from a heath professional, most are unable to do so due to a lack of decision-making power.

Finally, respondents were asked to indicate the mode of transportation they plan to use in order to reach a health facility at the time of delivery. Most of the women surveyed in both rural (68.7 percent) and urban (56.4 percent) Jhelum plan to use private transport at the time of delivery. Only 7 percent of the respondents in rural Jhelum and 3 percent in urban areas indicated that they have their own transport, which they would use to reach a health facility. In urban Jhelum, approximately 2 percent of the women indicated that they plan to walk to a health facility at the time of delivery.

Figure 5.4: Percentage of married women by mode of transport they would use to reach a health facility



Attitudes Towards Postpartum and Neonatal Care

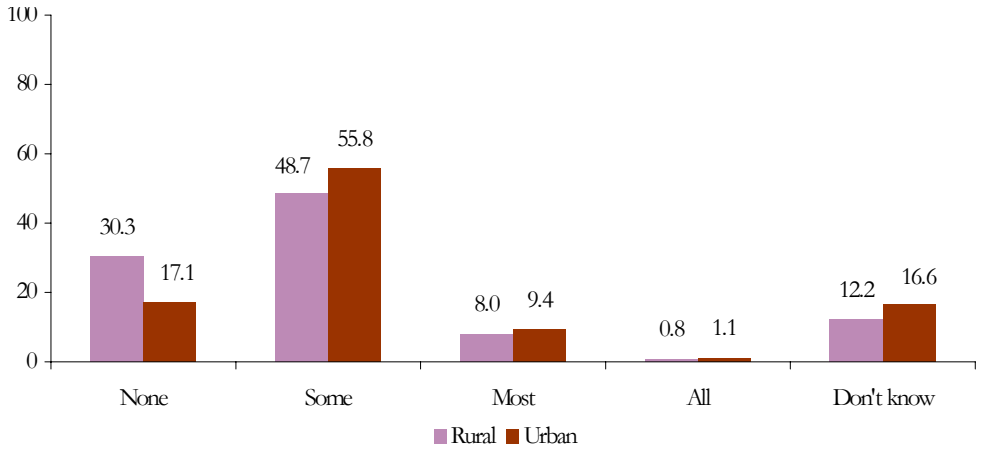
The importance of postnatal care is often undervalued. Postnatal care ensures that both mother and newborn are in good health, and monitors the recovery process of new mothers. However, when asked if women require postnatal care, more than half of the respondents in the district of Jhelum indicated that postnatal care is necessary, while the rest were either unaware of the importance of postnatal care or thought it unnecessary. Surprisingly, the percentage of those who did not feel postnatal care is necessary is higher for urban centers than rural areas.

Table 5.6: Necessity of postnatal care

	Rural		Urban		Total	
Need postnatal	Percent	Number	Percent	Number	Percent	Number
Yes	52.1	273	50.3	91	51.6	364
No	40.8	214	43.6	79	41.6	293
Don't know	7.1	37	6.1	11	6.8	48
Total	100.0	524	100.0	181	100.0	705

Furthermore, in both rural and urban areas of Jhelum, most of the respondents believe that only some of the women from their community go for postnatal check-ups. According to figure 5.5, a sizable portion of the population believes that none of the women in their community receive postnatal care, thus putting their health at serious risk. Only about 1 percent of the interviewed women believe that all women in the community receive postnatal care.

Figure 5.5: Number of women who obtain postnatal care in the community



Coverage of Lady Health Workers

Women were asked if a Lady Health Worker (LHW) had been to their community. According to table 5.7, nearly 85 percent of the women in rural Jhelum claimed that an LHW had visited their community, whereas more than 83 percent made the same claim in urban areas.

Table 5.7: Presence of lady health worker in the community

Has LHW in the area	Rural		Urban		Total	
	Percent	Number	Percent	Number	Percent	Number
Yes	84.7	444	83.4	151	84.4	595
No	11.1	58	13.8	25	11.8	83
Respondent herself is LHW	1.5	8	1.1	2	1.4	10
Don't know	2.7	14	1.7	3	2.4	17
Total	100.0	524	100.0	181	100.0	705

Amongst those who indicated the presence of the LHW in their community, 72 percent in rural Jhelum and 76 percent women in urban Jhelum reported that a LHW had been to their house during the last three months.

Table 5.8: LHW ever visited home during last three months by place of residence

Ever visited	Rural		Urban		Total	
	Percent	Number	Percent	Number	Percent	Number
Yes	72.1	320	76.2	115	73.1	435
No	27.9	124	23.8	36	26.9	160
Total	100.0	444	100.0	151	100.0	595

Chapter 6

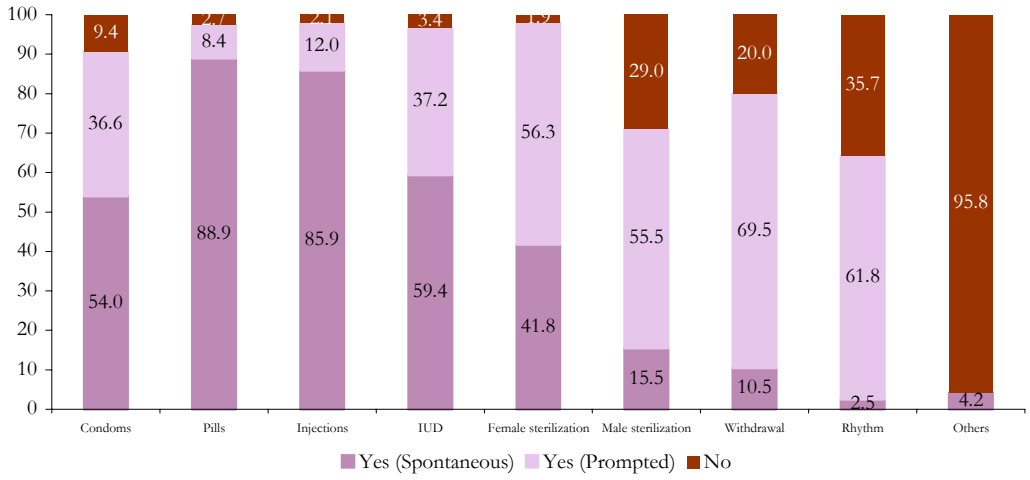
Contraceptive Knowledge and Use

Respondents were asked to name the ways in which a couple could delay or avoid a pregnancy. If the respondent did not spontaneously mention a particular method, the interviewer described different methods and asked the respondent to indicate if she recognized them. In the questionnaire, descriptions were included for six modern contraceptive methods and two traditional methods.

Knowledge of Contraceptive Methods

Many women are unaware of the different types of contraceptives that may be used to either delay or prevent pregnancy. Knowledge of contraception is an important step towards reproductive choice.

Figure 6.1: Percentage of married women by knowledge of specific contraceptive method - rural Jhelum

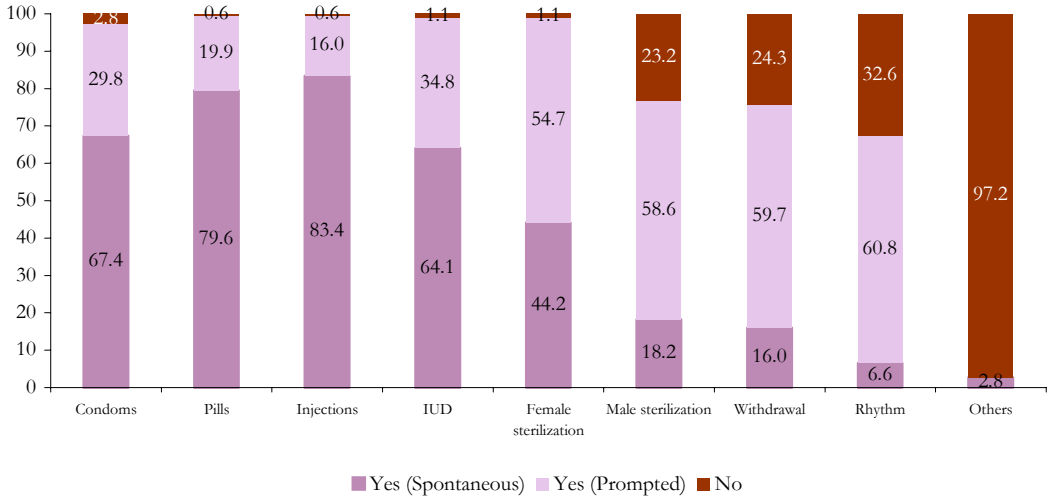


According to figure 6.1, pills (89 percent) and injections (86 percent) are the most widely known contraceptive methods amongst respondents in rural Jhelum. A sizable portion of the women also know of IUD (59.4 percent), condoms (54 percent) and female sterilization (41.8 percent).

Similarly in urban Jhelum injections (83.4 percent) and pills (79.6 percent) are the most widely known contraceptive methods, along with condoms (67.4 percent), IUD (64.1 percent) and female sterilization (44.2 percent). Fewer women had heard of male sterilization, withdrawal and rhythm both

in rural and urban Jhelum. However, after prompting, most of the women recognized these family planning methods.

Figure 6.2: Percentage of married women by knowledge of specific contraceptive method – urban Jhelum



Ever Use of Contraception

When asked if they have ever used any form of contraception, a majority of respondents indicated that they have used condoms (27 percent), followed by withdrawal (23.4 percent) and pills (18 percent). Male sterilization is almost non-existent in Jhelum, as only 0.2 percent of the women in rural Jhelum and none in urban reported the ever use of male sterilization. Overall, more than 60 percent of married women have ever used any contraceptive method in Jhelum; 59 percent in rural and 65 percent in urban areas.

Table 6.1: Ever use of specific contraceptive method

Contraceptive method	Place of residence		Total	
	Rural	Urban	Percentage	Number
Any method	59.2	64.6	60.6	427
Condoms	24.4	34.8	27.1	191
Pills	17.0	21.0	18.0	127
Injections	17.0	17.7	17.2	121
IUD	10.5	24.3	14.0	99
Female sterilization	11.6	8.3	10.8	77
Male sterilization	0.2	0.0	0.1	1
Withdrawal	23.5	23.2	23.4	165
Rhythm	7.4	7.2	7.4	52

Current Use of Contraceptive Methods

Contraceptive prevalence is defined as the proportion of currently married women aged 15-49 years who were using some method of family planning at the time of the survey. Overall, 42 percent of the married women surveyed said that they use some form of contraception. Amongst the users, 70 percent are using modern methods, while the remaining 30 percent indicated the use of traditional methods. The method most widely being used in the district of Jhelum is female sterilization (10.8 percent), followed by condoms (10.4 percent).

Table 6.2: Current use of specific contraceptive method

Contraceptive Method	Rural	Urban	All
Any method	40.1	48.1	42.1
Any modern method	27.7	34.8	29.5
Any traditional method	12.4	13.3	12.6
Condom	9.2	13.8	10.4
Pill	0.8	4.4	1.7
Injectables	2.9	3.3	3.0
IUD	3.1	5.0	3.5
Female Sterilization	11.6	8.3	10.8
Male Sterilization	0.2		0.1
Withdrawal	11.5	11.0	11.3
Rhythm	1.0	2.2	1.3
Other	0.2		0.1
Not currently using	59.7	51.9	57.7
Number	524	181	705

Source of Contraceptive Supplies

Respondents were then asked where they obtained their method of contraception. Table 6.3 shows the distribution of current users by most recent source of contraception. By examining the data provided, it can be concluded that respondents are more likely to get their contraception from the government sources than the private sources.

In rural areas, about 29 percent of the respondents indicated that they obtained their contraception from DHQ/THQ; while about 18 percent of the respondents in urban areas reported the same source of contraception. LHWs were the next most commonly cited source of contraception, as 21 percent of the respondents in rural and 18 percent in urban areas obtained their contraceptive supplies from LHWs. Private clinic/hospitals are a source of contraception to 17 percent and 14 percent of the respondents in rural and urban Jhelum, respectively. Approximately 10 percent in rural Jhelum stated that they obtained contraceptives at a medical store, whereas 11 percent stated the same in urban Jhelum. Since medical stores are more easily accessible in urban centers than in rural districts, more respondents in urban areas are able to obtain contraception from this source.

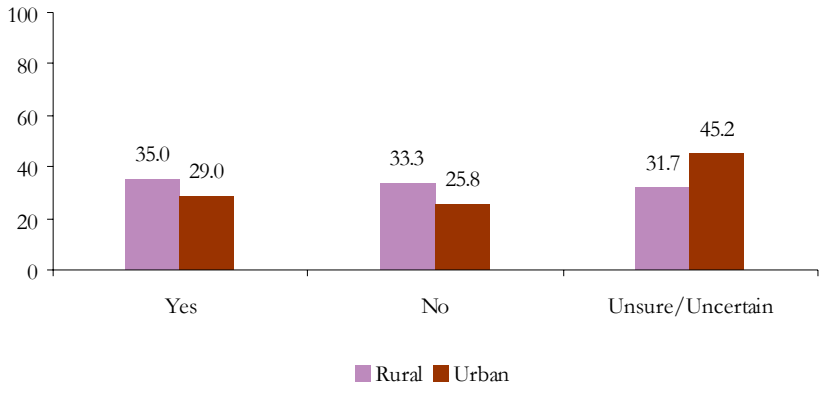
Table 6.3: Distribution of contraceptive users by source of supply

Source/Place	Rural		Urban		Total	
	Percent	Number	Percent	Number	Percent	Number
LHW	20.7	30	17.5	11	19.7	41
TBA/dai			4.8	3	1.4	3
BHU/RHC/MCH center	10.3	15	1.6	1	7.7	16
DHQ/THQ	29.0	42	17.5	11	25.5	53
Private clinic/hospital	16.6	24	14.3	9	15.9	33
Nurse/LHV	1.4	2			1.0	2
FWC/RHSA	2.8	4	11.1	7	5.3	11
Mobile team			1.6	1	0.5	1
Medical store	9.7	14	11.1	7	10.1	21
General store/shop	5.5	8	9.5	6	6.7	14
Other	2.8	4	1.6	1	2.4	5
Don't know	1.4	2	9.5	6	3.8	8
Total	100.0	145	100.0	63	100.0	208

Intentions of Future Use

When the non-users of family planning methods were asked if they would like to use family planning methods in the future, the answers obtained were quite interesting. In rural Jhelum 33 percent of the respondents indicated that they do not want to use contraception, while about 32 percent were unsure about their future intensions regarding contraception use. More than one-third (35 percent) were willing to use contraception in the future. In urban Jhelum, nearly half (45 percent) of the respondents are not sure about their intensions for future use, whereas 26 percent indicated that they would not use any contraception. Surprisingly, fewer women in urban Jhelum are willing to use contraceptive methods than in rural Jhelum, with only 29 percent indicating that they would do so in the future.

Figure 6.3: Percentage of married women by future intention to use contraceptives



Chapter 7

Behavior Regarding Maternal and Newborn Health

Many of the women who were interviewed were currently pregnant. However, some women, especially those in the early stages of pregnancy, had not yet experienced the full range of events that take place over the nine-month gestational period. Women who had recently given birth were able to provide a full range of information on these events, and thus constitute an important part of the sample population in terms of understanding the attitudes and behavior concerning maternal and newborn health. This chapter pertains to the respondent's last pregnancy, given that it was within the past three years. Respondents were asked several questions regarding their experience during their last pregnancy including antenatal and delivery care, complications during pregnancy and delivery, postnatal care, and problems in accessing health care.

Information on antenatal care, delivery services and postnatal care is of great value in identifying subgroups of women who do not utilize such services, and it is useful in planning for future improvements in the services. Delivery services are described according to the person assisting and the rate of caesarean section. Information on postnatal care was collected for women who did not give birth in a health facility. It describes the time since delivery when postnatal care was received.

Gestational Age

The respondents were asked to indicate gestational age at the time at which the pregnancy ended. Table 7.1 shows that 90 percent of live births occurred after the ninth month of pregnancy, whereas 10 percent ended after just eight months. Most of the abortions (both spontaneous or induced) reportedly occurred in the first trimester of pregnancy whereas still births occurred in the third trimester of the pregnancy period.

Table 7.1: Pregnancy outcome by gestational age

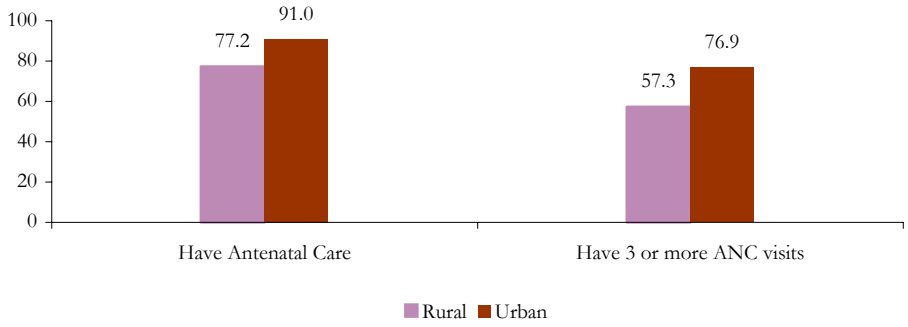
	Outcome of last pregnancy			
Gestational age when pregnancy ended	Live birth	Still birth	Spontaneous abortion	Induced abortion
First Trimester of Pregnancy			83.3	87.5
Second Trimester of Pregnancy			16.7	12.5
7	0.4	25		
8	9.5			
9	90.1	75		
Total	100	100	100	100
Number of cases	284	8	24	8

Antenatal Care

In this survey, antenatal care is defined according to the type of provider, the number of visits made, and the stage of pregnancy at the time of the first visit, including whether or not tetanus toxoid injection and iron/folate tablets were received. The survey also includes questions regarding the antenatal care received by the respondent during the last pregnancy.

According to Figure 7.1, over 77 percent of the pregnant women in rural Jhelum went for antenatal check-ups compared to 91 percent of the pregnant women in urban. Around 77 percent of the pregnant women in urban and 57 percent in rural areas had 3 or more ANC visits for their last pregnancy

Figure 7.1: Percentage of respondents who obtained antenatal care



According to table 7.2, of those who went for antenatal care services, about 64 percent went for their first antenatal checkup during the first trimester, more than 25 percent went during their second trimester and the rest had their first antenatal visits in the third trimester.

Table 7.2: Gestational age at first antenatal check-up/ number of antenatal check-ups obtained

Check-ups		Rural		Urban		Total	
		Percent	Number	Percent	Number	Percent	Number
Gestational age of pregnancy at first antenatal care	0	0.5	1	5.6	4	1.9	5
	1	14.7	28	18.3	13	15.7	41
	2	25.3	48	22.5	16	24.5	64
	3	20.5	39	23.9	17	21.5	56
	4	11.6	22	18.3	13	13.4	35
	5	8.4	16	1.4	1	6.5	17
	6	5.8	11	4.2	3	5.4	14
	7	6.8	13	2.8	2	5.7	15
	8	3.7	7	1.4	1	3.1	8
	9			1.4	1	0.4	1
	Don't know	2.6	5			1.9	5
No. of antenatal check-ups during pregnancy	0	0.5	1			0.4	1
	1	13.2	25	1.4	1	10	26
	2	12.1	23	14.1	10	12.6	33
	3	16.3	31	9.9	7	14.6	38
	4	14.7	28	21.1	15	16.5	43
	5	5.3	10	11.3	8	6.9	18
	6	9.5	18	11.3	8	10	26
	7	4.2	8	4.2	3	4.2	11
	8	8.9	17	4.2	3	7.7	20
	9+	15.3	29	22.5	16	17.5	45
Total		100	190	100	71	100	261

Figure 7.2: Persons accompanying pregnant women to antenatal check-ups

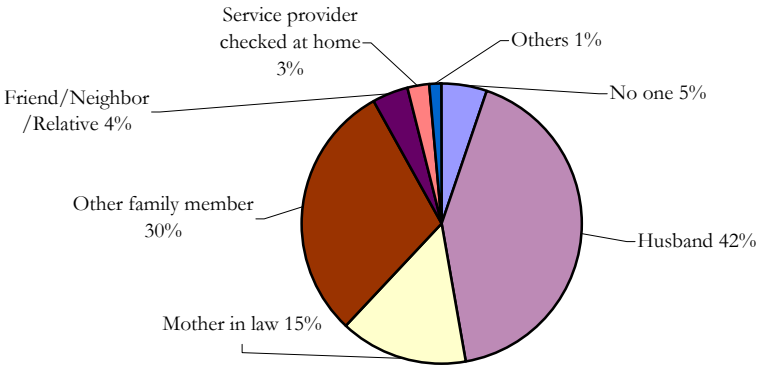


Figure 7.2 shows that most of the women who went for ANC were accompanied by their husbands (42 percent), followed by other family members (30 percent), and mothers in law (15 percent). There were also 5 percent of married women who did not take anyone with them for their ANC visits.

Components of Antenatal Care

In Pakistan, it is recommended that every pregnant woman receive the following services: height and weight measurements, blood pressure measurement, iron tablets, tetanus toxoid immunization, and an abdominal examination. In any antenatal care visit, a woman should be informed of the danger signs of pregnancy, have her weight measured, and provide blood and urine samples for testing. Antenatal care can improve certain outcomes through the detection and management of, and/or referral for possible complications. Antenatal care may improve birth weight and can also prevent, identify and treat iron deficiency and anemia in pregnant mothers.

Figure 7.3 shows the services most often received during antenatal care visits. A majority of the pregnant women were asked about their last menses period (93 percent in both rural and urban Jhelum). About 79 percent in urban and 82 percent in rural Jhelum had their blood pressure measured. About 83 percent of the pregnant women in rural Jhelum and 68 percent in urban Jhelum were tested/referred for anemia. As anemia is a common condition during pregnancy and can cause serious harm if unchecked, it is surprising that a large proportion of women in rural areas were not tested. For this reason, it is surprising that a large number of women in urban areas were not tested for anemia during their antenatal visit. Less than three-fifths (58 percent in urban and 57 percent in rural) of the women had their weight measured. About half (49.3 percent) of the women were tested/referred for blood tests in urban Jhelum, while in rural Jhelum figures are slightly higher, sitting at 63 percent.

Figure 7.3: Services performed/ questions asked during antenatal check-up

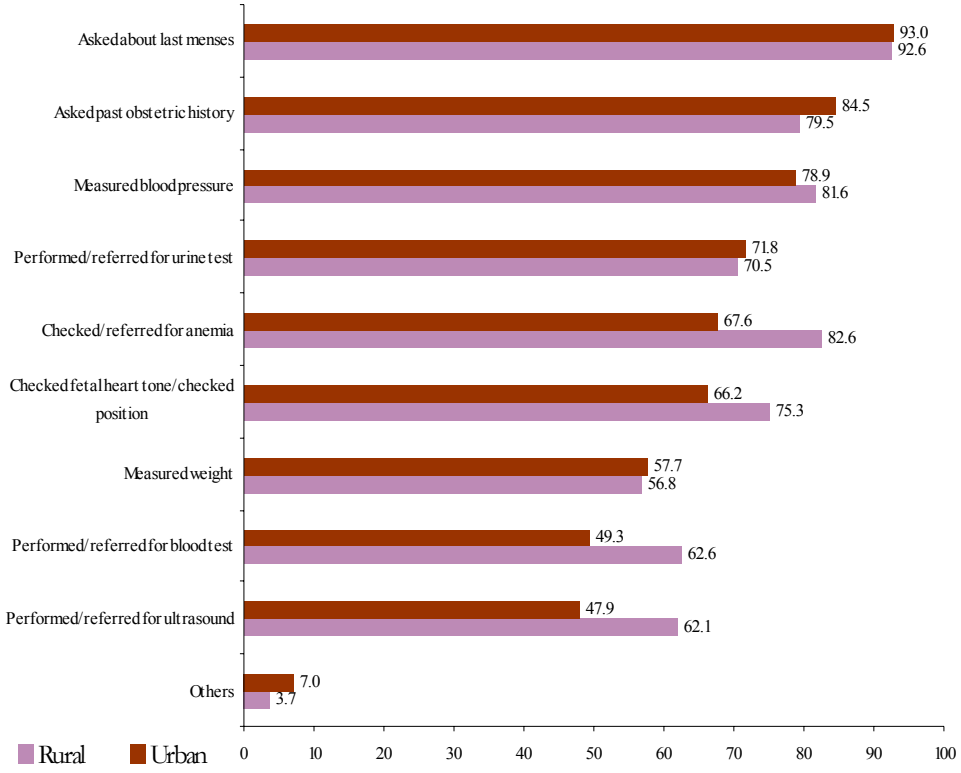
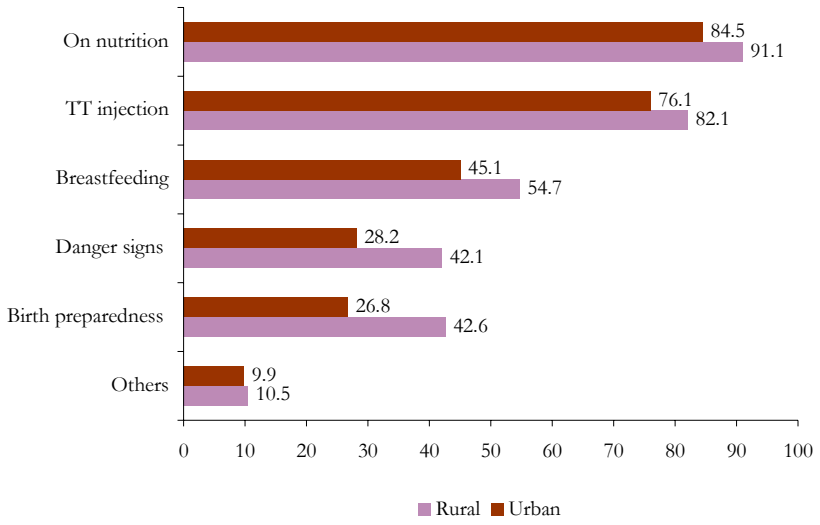


Figure 7.4: Percentage of pregnant women by issues discussed during antenatal check-up



According to figure 7.4, most of the women (91 percent in rural areas and 85 percent in urban areas) were advised about nutrition-related issues during their antenatal check-up. Three quarters (76.1 percent) and four-fifths (82.1 percent) of the women in urban and rural Jhelum respectively, were advised to take TT injections; while only 42 percent and 28 percent in rural and urban Jhelum respectively were briefed about the danger signs during pregnancy.

TT Injections and Iron/Folate Tablets

Respondents were also asked to state whether they took iron and folate supplements and received TT shots during their last pregnancy. In Pakistan, the immunization of pregnant women is enforced by a program coordinated by the Expanded Program on Immunization (EPI) and the Maternal and Child Health Care (MCH) departments at the district level. The program recommends that women receive two tetanus toxoid (TT) injections during their first pregnancy. Booster injections are given once during each subsequent pregnancy to maintain full protection. In recent years, TT immunization has also been given to women before marriage, so that any pregnancy occurring within three years of their marriage would be protected against tetanus.

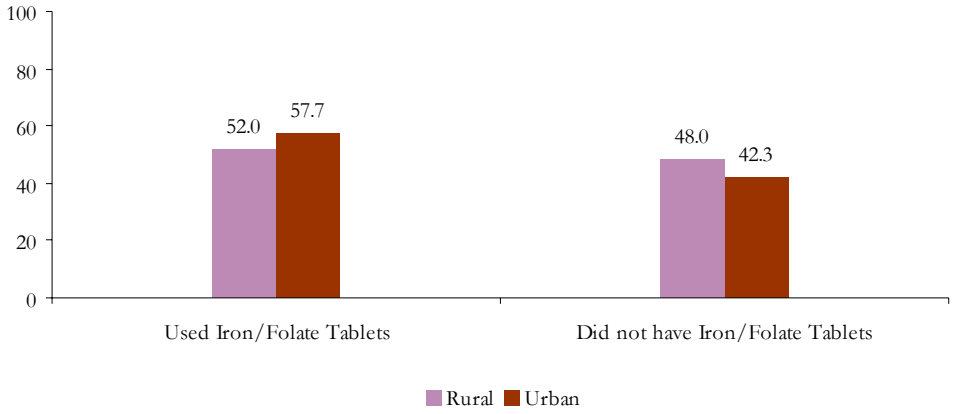
Figure 7.5: Percentage of married women by status of TT injections received during last pregnancy

The baseline findings show that 81 percent of the urban respondents received at least one TT shot during their last pregnancy, while 76 percent in rural Jhelum made the same claim. Moreover, 65 percent of the pregnant women of rural areas and 64 percent of urban areas had 2 or more TT shots.

Figure 7.6 also shows that about 58 percent in urban areas and 52 percent women in rural areas took iron/folate tablets during the course of their pregnancy. However, a large portion of both rural (48 percent) and urban (42 percent) respondents indicated that they took no iron or folate supplements during their pregnancy.

Lack of education and awareness may be the main reasons why many pregnant women fail to take iron/folate supplements and receive TT vaccinations. Also women may not have the decision-making power to obtain these supplements and vaccinations and may be dependent upon husbands or family members/in-laws to make these important decisions for them. However, lack of services could also be an important reason for this practice.

Figure 7.6: Percentage of married women by status of iron/folate tablets taken during the last pregnancy



Experience of Complications and Birth Preparedness

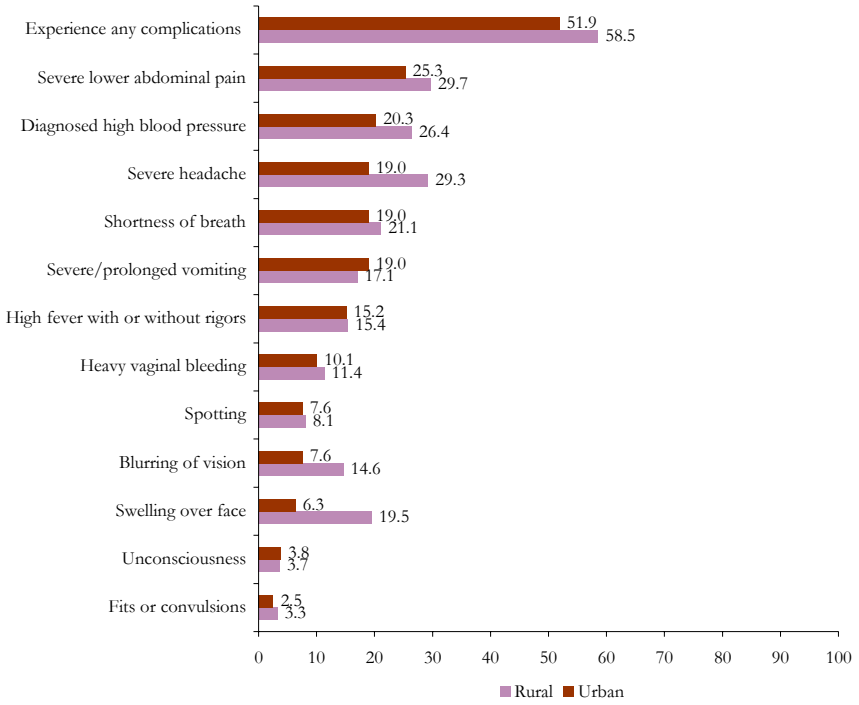
Complications During Pregnancy

To identify complications associated with pregnancy, women were asked about certain signs and symptoms that they had experienced during their last pregnancy within the past three years. About three-fifths of the married women interviewed indicated that they did in fact experience some type of complication during pregnancy.

The percentage of married women who experienced complications during their last pregnancy was higher in rural areas than in urban areas of Jhelum. This may be due to the fact that women in rural areas are less aware when it comes to antenatal care and may therefore fail to obtain proper care during pregnancy. As a result, they may experience more complications.

Figure 7.7 shows that during their last pregnancy, 59 percent and 52 percent of the women in rural and urban Jhelum respectively experienced some kind of complications. Severe lower abdominal pain was reported by 30 percent of the respondents in rural areas and by 25 percent of the respondents in urban areas. It is observed that women in rural Jhelum were twice as likely to report blurring of vision and three times more likely to report swelling of the face than their urban counterparts. Similarly, more respondents from rural areas reported experiencing high blood pressure (26 percent) and headache (29 percent) when compared to urban respondents (20 and 19 percent respectively).

Figure 7.7: Percentage of married women who experienced complications during their last pregnancy

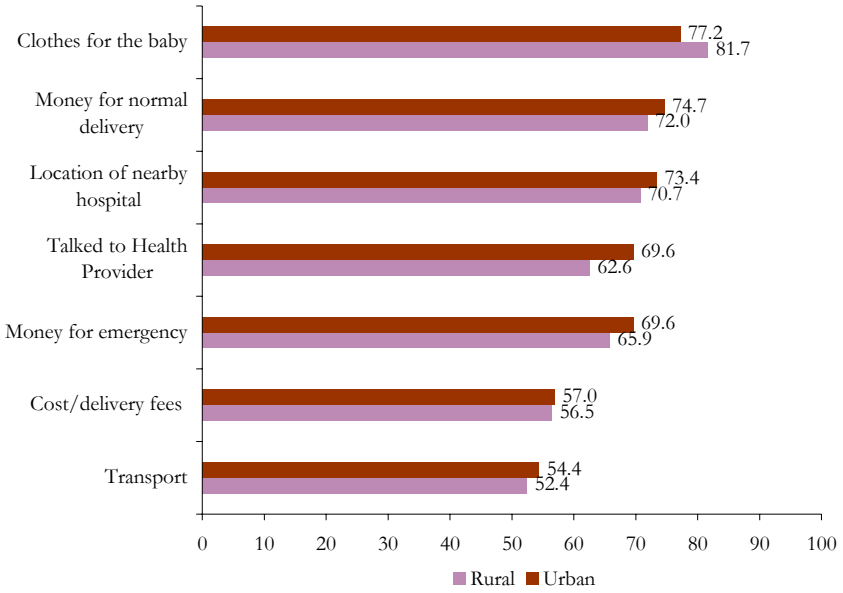


Preparedness for Childbirth

To ensure the safety of the mother and newborn at the time of delivery, certain preparations need to be made. These include deciding who is going to assist in the delivery, where the delivery is going to take place, how the woman is going to get to the place of delivery, and how much the delivery is going to cost. Delivery services, especially emergency obstetric care, are critical for pregnant women. Emergency care is important in the event that a pregnant mother experiences obstructed labor, pregnancy-induced hypertension, eclampsia or severe untreated anemia. Obstructed or prolonged labor is one of the more serious complications that can cause maternal death. Obstetric care can also prevent or treat complications that affect the neonate, such as birth asphyxia.

Respondents were asked if they had made necessary arrangements regarding transport, money, blood, and location of the nearest hospital, as well as clothes for the newborn baby. The findings given in figure 7.8 indicate that a large percentage of women appear to have made all the necessary arrangements for the time of delivery. Nearly three quarters (73 percent in urban and 71 percent in rural) of the married women knew the location of a nearby hospital, while 70 percent and 63 percent in urban and rural Jhelum respectively, had consulted a health provider. About three-quarters (75 percent and 72 percent) in both rural and urban Jhelum indicated that they had arranged the money for normal delivery fees. However, only about half of the respondents indicated that they had made arrangements for transport.

Figure 7.8: Percentage of married women who made arrangements for their last delivery



Delivery Characteristics

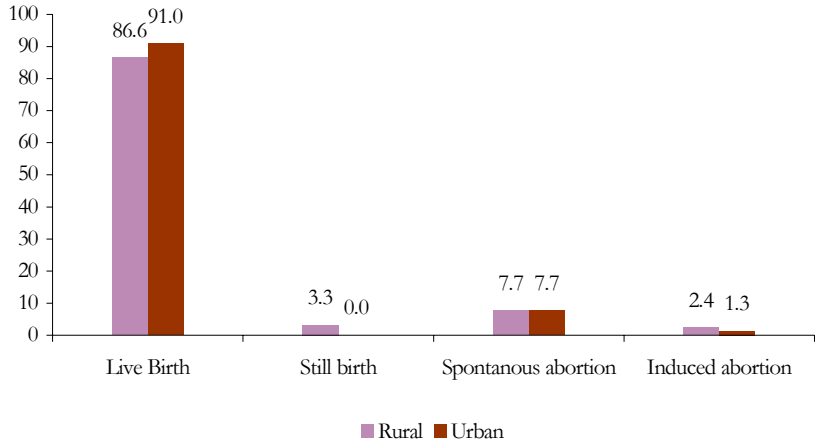
When asked about the characteristics of their last delivery, 71 percent of the respondents in rural Jhelum and 59 percent in urban Jhelum stated that they had normal vaginal deliveries. There were more assisted vaginal deliveries in urban Jhelum than in rural Jhelum (14 and 10 percent respectively), while caesarean section deliveries were twice as likely to occur in urban areas than in rural ones (table 7.3).

Table 7.3: Status of last delivery

Status	Rural		Urban		Total	
	Percent	Number	Percent	Number	Percent	Number
Normal vaginal delivery	70.7	174	59.0	46	67.9	220
Assisted vaginal delivery	9.8	24	14.1	11	10.8	35
Caesarean section	9.3	23	17.9	14	11.4	37
Spontaneous abortion	7.7	19	7.7	6	7.7	25
Induced abortion	2.4	6	1.3	1	2.2	7
Total	100.0	246	100.0	78	100.0	324

Respondents were also asked to indicate the outcome of their last pregnancy. The responses are presented in figure 7.9. In urban areas, 91 percent of the pregnancies ended in live births, while the figure was 87 percent in rural areas. As well, in rural areas 3.3 percent of the pregnancies ended in stillbirths. The percentage of induced abortions is lower than the percentage obtained for spontaneous abortions. This difference may be due to the fact that spontaneous abortions are more socially acceptable than induced ones and induced abortions may therefore be misreported by women.

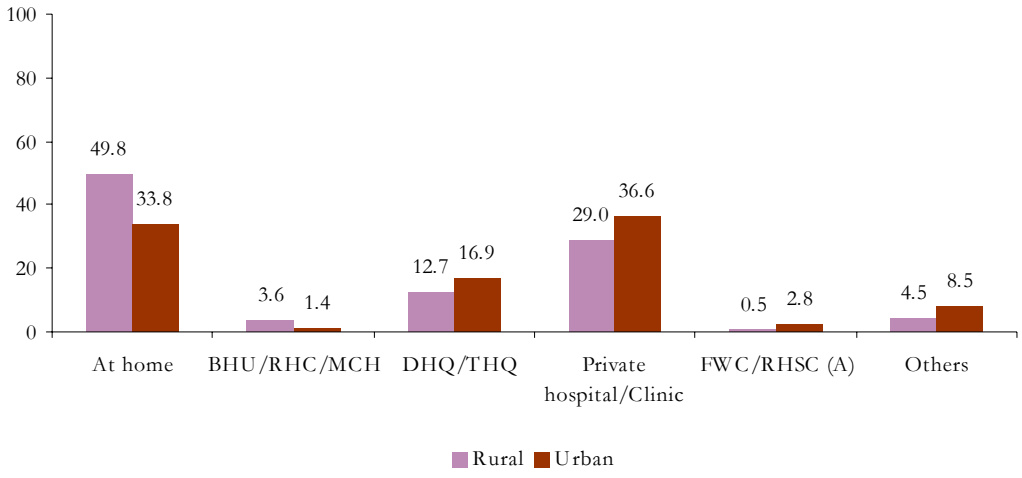
Figure 7.9: Outcome of last pregnancy



Place of Delivery

About half (49.8 percent) of the women in urban Jhelum, and one-third (33.8 percent) in rural Jhelum delivered their babies at home. Figure 7.10 also shows that almost one-third (36.6 percent) of the deliveries in urban areas were conducted at private clinics/hospitals whereas only one-fifth (21 percent) were conducted at government health facilities. Financial constraints may be the leading cause for women delivering at home and without a health professional, in spite of their desire to deliver their babies at a health facility. Also, women may not be allowed to deliver at a health facility by their husbands, in-laws or family members.

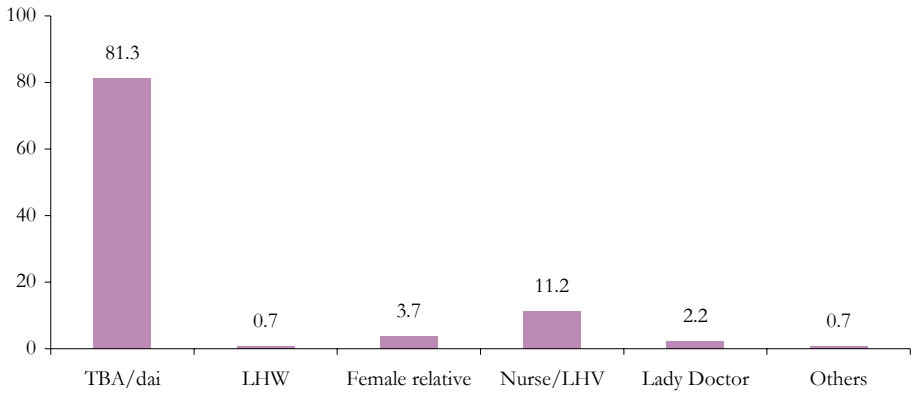
Figure 7.10:: Place of delivery



Assistance During Delivery

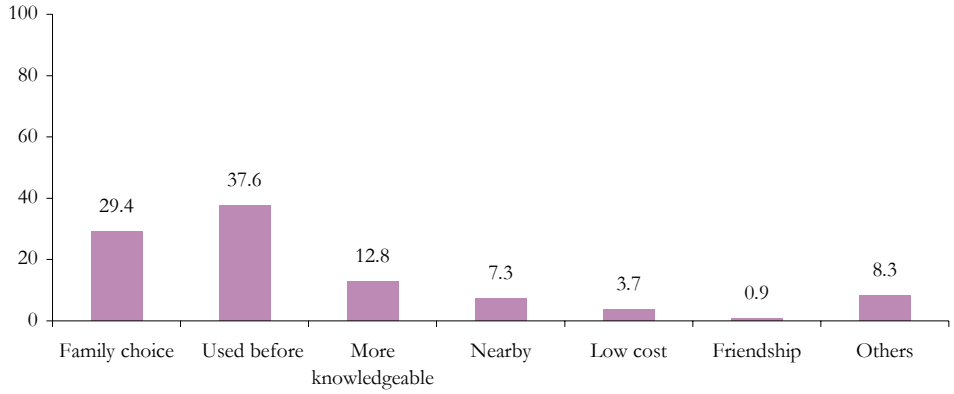
According to figure 7.11, more than 81 percent of the women who delivered at home were assisted by a TBA or Dai, while lady doctors assisted only 2.2 percent of the deliveries. Less than one percent (0.7 percent) of the deliveries in the district of Jhelum were also assisted by LHWs.

Figure 7.11: Percentage of married women who delivered their last child at home by type of delivery attendant



Respondents were asked to indicate their main reason for choosing a TBA/Dai to assist with their deliveries. According to figure 7.12, about 38 percent stated that they chose a TBA/Dai to assist with their delivery as they had previously used her services. Family choice was the reported reason for about 29 percent of the women, while about 13 percent believed that TBAs/Dais were more knowledgeable. Approximately 7 percent cited geographical proximity as their main reason, while 4 percent indicated that affordability was the determining factor.

Figure 7.12: Main reason for using a TBA/dai to assist with the last delivery



Clean Delivery Practices

Most of the women in urban and rural Jhelum indicated that their delivery attendant washed her hands prior to conducting the delivery. However, nearly 2 percent of the respondents in rural Jhelum indicated that their delivery attendant did not wash her hands prior to delivery.

Cord cutting methods and instruments were also inquired about in order to determine how hygienic the place and methods of delivery were. About 68 percent of the married women in rural Jhelum and more than 42 percent of the married women in urban Jhelum stated that their TBAs did use a new blade for cutting the cord while assisting with deliveries. It is important to note that 22 percent of rural and 42 percent of urban women reported that "used blade or scissors/knife were used for cord cutting. This shows a malpractice having potential to cause tetanus or other infections. Figure 7.14 also shows that in the case of 82.7 percent in rural and 58.3 percent in urban deliveries, the cord was tied-up with new thread.

Figure 7.13: *Percentage of delivery attendants who reportedly washed their hands before conducting the delivery/ type of thread used to tied the cord*

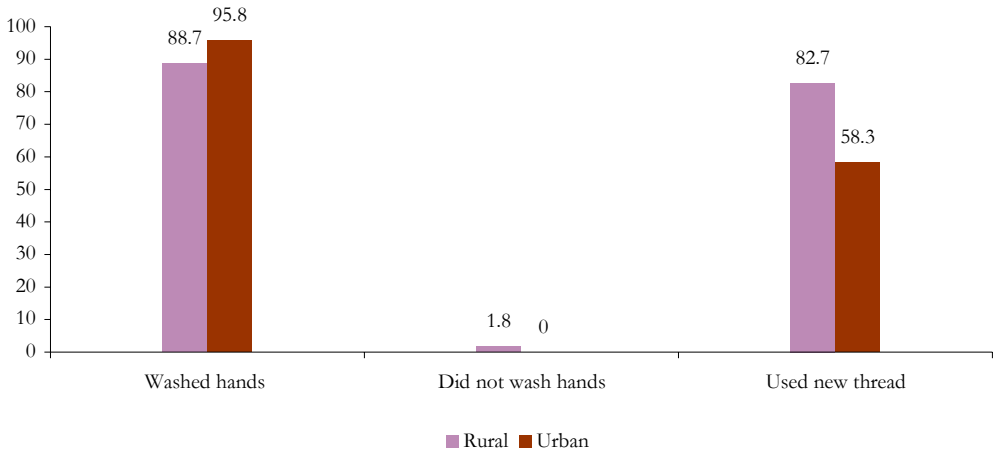
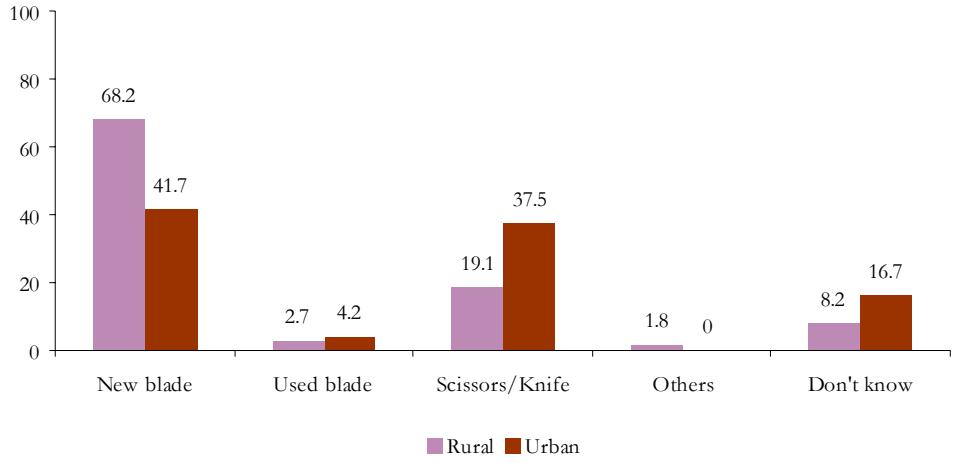


Figure 7.14: Percentage of delivery attendants who reported instruments used for cutting the cord



Complications During Childbirth

Respondents were asked to indicate the complications they experienced during childbirth. Seventeen percent of the respondents in rural areas indicated that they experienced excruciating abdominal pain during their last pregnancy, whereas only 9 percent in urban centers reported the same thing. Premature ruptures of membranes, excessive bleeding and prolonged labor were some other complications that were reported.

Table 7.4 : Type of complications experienced during the last delivery

Complications	Rural	Urban	Total	
			Percentage	Number
Prolonged/obstructed labor	6.5	3.8	5.8	19
Bleeding before labor began	3.3	2.5	3.1	10
Excruciating abnormal pain	16.7	8.9	14.8	48
Premature rupture of membranes	6.9	8.9	7.4	24
Delay in delivery of placenta/retained placenta	1.6	2.5	1.8	6
Excessively postpartum bleeding on day of deli./abort.	8.1	5.1	7.4	24
Tear in vagina, cervix or uterus	1.6	5.1	2.5	8
Prolapsed of the uterus	3.3	1.3	2.8	9
Fever	3.7		2.8	9
Abnormal position fetus	2.8	1.3	2.5	8

Decision Making Within Family

Delays in seeking care, in reaching adequate health facilities, and in receiving appropriate care at health facilities are recognized barriers to care for pregnant women. These factors may be especially pronounced for very young and older pregnant mothers. Timely and appropriate care provides an opportunity to prevent or manage the direct causes of maternal mortality such as hemorrhage, obstructed labor, infection, and hypertension disorders. It also reduces fetal and neonatal deaths related to obstetric complications. Table 7.5 shows that about one-third (33.3 percent) of the respondents in urban areas indicated that their husbands were the ones who made the decision to seek treatment for delivery-related complications compared to two-fifths (39.2 percent) in rural areas. In rural areas, only 20 percent of the respondents indicated that they themselves had the freedom to decide that they needed medical attention compared to 25 percent of the urban respondents. About 16 percent of the respondents in both areas reported that other family members made such decisions.

Availability of Transport

The mode of transport to a health facility was also an issue that was discussed during the survey. According to table 7.5, most respondents (41 percent in rural areas and 58 percent in urban areas) indicated that they used private/hired transport to reach health facilities. This indicate an importance of private transporters in the process of care seeking in case of complications during childbirth. Over 21 percent of the respondents in rural areas stated that they had a health provider visit their homes, while 11 percent in both areas stated that they had their own mode of transport with which they were able to reach a health facility.

Table 7.5: Person who made decision to seek health care/ mode of transport used to reach health facility

Measures taken		Rural		Urban		Total	
		Percent	Number	Percent	Number	Percent	Number
Person who made decision to seek health care	Self	19.6	10	25.0	3	20.6	13
	Husband	39.2	20	33.3	4	38.1	24
	Mother in law	15.7	8	8.3	1	14.3	9
	Other family member	15.7	8	16.7	2	15.9	10
	TBA/Dai	5.9	3	8.3	1	6.3	4
	Others	3.9	2	8.3	1	4.8	3
Mode of transport to reach health care service	Service provider visited at home	21.6	11			17.5	11
	On foot	3.9	2	8.3	1	4.8	3
	Own transport	11.8	6	8.3	1	11.1	7
	Private transport	41.2	21	58.3	7	44.4	28
	Community Transport	9.8	5	16.7	2	11.1	7
	Ambulance	5.9	3	8.3	1	6.3	4
	Others	5.9	3			4.8	3
Total		100.0	51	100.0	12	100.0	63

Most of the pregnant women in district Jhelum were able to reach the health facility within an hour for treatment. Less than one-third (30 percent) of pregnant women were able to reach the facility within 30 minutes. Another one-third (32 percent) reached within 15 minutes while 6 percent took 1-2 hours to reach the facility. Figure 7.15 shows the distribution of respondents by the time they took to reach the facility.

Figure 7.15: Time taken to reach the health facility for childbirth

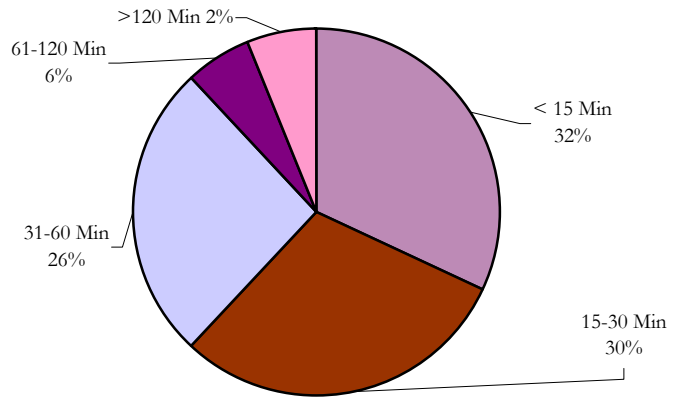
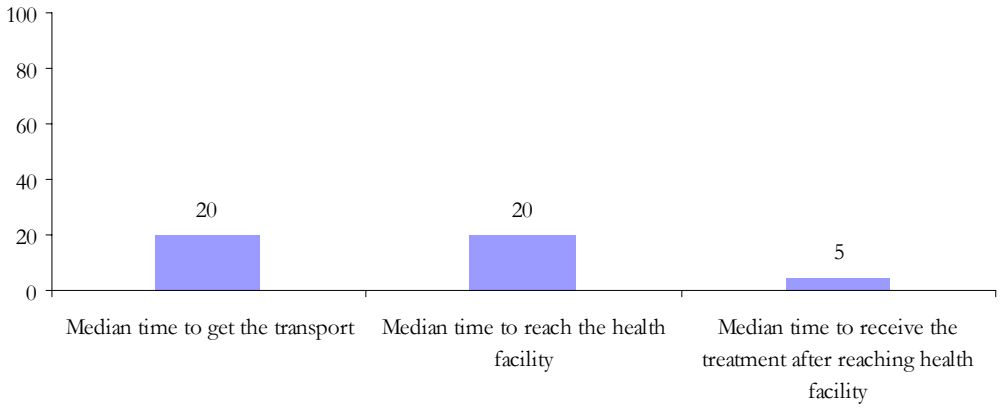


Figure 7.16 shows the median time taken at the time of delivery to acquire transport, reach a health facility and obtain treatment. In Jhelum, it takes an average of 20 minutes to acquire a mode of transport in order to get a pregnant woman to a health facility at the time of delivery. The reported time taken to reach a health facility after transport has been acquired, is also 20 minutes on average. Respondents indicated that the average waiting time upon reaching a health facility was approximately 5 minutes, in the district of Jhelum.

Figure 7.16: Average median time to get the transport, to reach the health facility and to obtain the treatment after reaching the facility



Postpartum Care

The postpartum period is a critical time for both the mother and the newborn. Respondents were asked about the quality and level of postpartum care they received after their last delivery. According to table 7.6, a large portion of the married women did not receive any postnatal check-ups after their last pregnancy. More than 70 percent of the women in rural areas did not receive any postnatal care, while 48 percent said the same in urban areas. Among those who did obtain postnatal care, only 9 percent went within 24 hours after the childbirth.

Table 7.6 also shows that about 14 percent of the respondents in rural Jhelum and 17 percent in urban Jhelum reported that they experienced complications during their postpartum period.

Table 7.6: History of postpartum care

History		Rural		Urban		Total	
		Percent	Number	Percent	Number	Percent	Number
Have a postnatal check-ups	Yes	15.4	34	12.7	9	14.7	43
	No	71.0	157	47.9	34	65.4	191
	Delivered in hospital	13.6	30	39.4	28	19.9	58
No. of days after delivery, have first check-up	Same day	8.8	3	11.1	1	9.3	4
Experience complications during postpartum period	Yes	13.8	34	16.7	13	14.5	47
	No	86.2	212	83.3	65	85.5	277

Newborn/Infant Care

The care provided to a newborn upon birth is crucial to the baby's health. Survey questions regarding initial infant and childcare help determine the cause of newborn morbidity and mortality.

Child Care Immediately after Birth

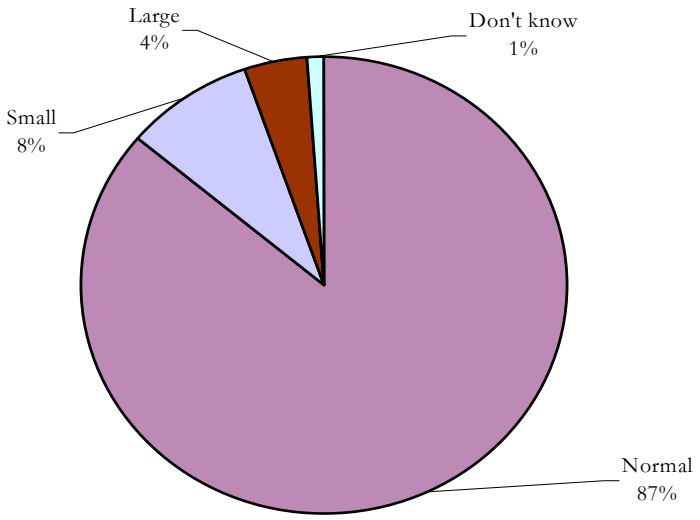
Respondents were asked where their child was placed immediately after delivery. While a sizeable respondents indicated that their newborns were placed with the mother immediately following delivery (20 percent in rural areas and 14 percent in urban areas), a large percentage indicated that their newborn was placed either on a piece of cloth or on a mattress. Since most babies are in fact delivered at home with the assistance of un-trained TBAs as discussed previously, the care provided to infants may not always be of good quality. Therefore, it is important to record the percentage of the women that are following harmful or unhealthy procedures in order to understand the root causes of newborn mortality.

Table 7.7: History of newborn care

History		Rural		Urban		Total	
		Percent	Number	Percent	Number	Percent	Number
Placed child immediately after delivery	On floor	12.2	26	7.0	5	10.9	31
	On mattress	28.2	60	39.4	28	31.0	88
	On a piece of cloth	22.5	48	16.9	12	21.1	60
	Put with the mother	19.7	42	14.1	10	18.3	52
	Others	10.3	22	12.7	9	10.9	31
	Don't know	7.0	15	9.9	7	7.7	22
Child dried up /cleaned before giving bath	Yes	94.4	201	93.0	66	94.0	267
	No	0.5	1	2.8	2	1.1	3
	Don't know	5.2	11	4.2	3	4.9	14

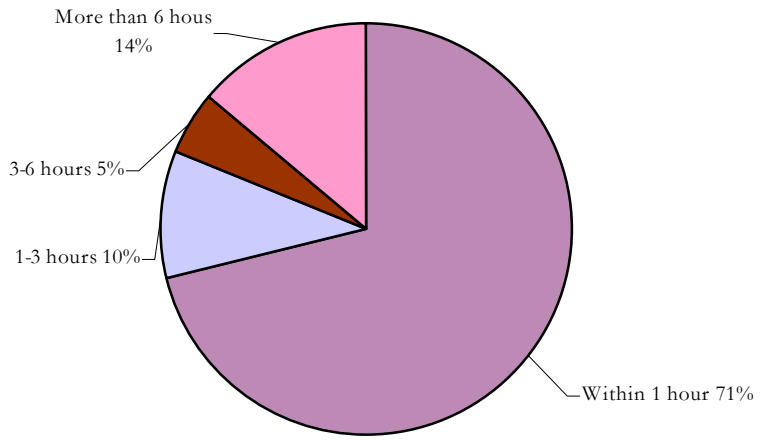
It is not very common to weigh a newborn where most of the births take place at home. For those women who did not weigh their newborns, a question was asked about the size of the baby at the time of birth. Figure 7.17 depicts the percentage distribution of babies by their size at birth. More than 87 percent of the mothers reported that the size of their babies at the time of birth was normal. Only 8 percent reported that their baby was smaller and 4 percent reported that their baby was bigger than normal size babies.

Figure 7.17: Percentage of newborns according to their size (small, normal and big) at birth



The question on the practice of bathing babies after childbirth was also asked to women who delivered their last child during three years preceding the survey and figure 7.18 shows the responses. Majority of women(71 percent) in district Jhelum gave bath to the newborn within 1 hours period as against the recommended 6 hours. Only 14 percent gave bath to their newborns within the recommended time.

Figure 7.18: Duration between the time of birth and the first bath given to a newborn

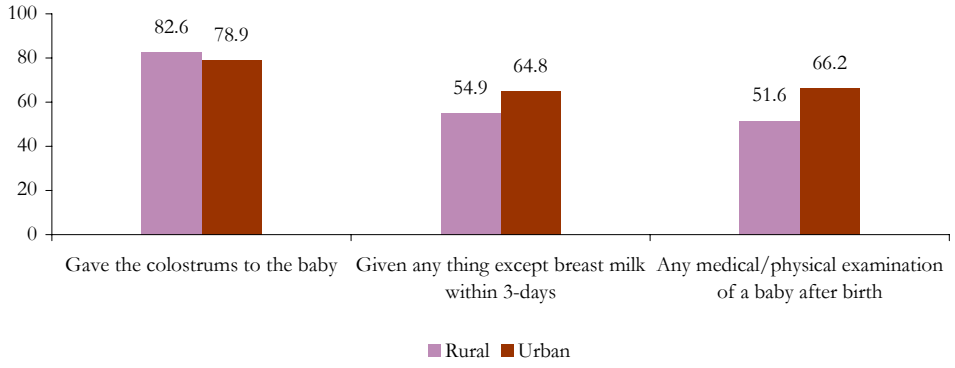


Colostrum and Breastfeeding

Respondents were also asked if they ever breastfed their infants. Over 92 percent in both urban and rural areas indicated that they did in fact breastfeed their child. However, the percentage of women who did not breastfeed was higher in urban centers than in rural areas. Approximately 5 percent of the rural population in Jhelum indicated that they did not breastfeed their child, compared to more than 8 percent in urban Jhelum.

Colostrum is another very important indicator of newborn health, and respondents were asked if they gave colostrum to their newborn babies. About four-fifths (83 and 79 percent) of the women in both rural and urban Jhelum indicated that they gave colostrum to their baby (figure 7.19). However, more women in urban areas did not give colostrum to their babies. Furthermore, a very large percentage of both urban and rural respondents provided their newborns with food supplements other than breast-milk within the first three days.

Figure 7.19: Newborn feeding and health indicators



Respondents were also asked if any physical and/or medical examinations were conducted on the newborn baby. Almost half the rural population and 34 percent of the urban population indicated

that they did not have any medical or physical examinations conducted on their newborn babies. A lack of physical and medical examinations after birth may result in complications being left undetected and untreated, which in turn could be harmful to the health of a newborn. Respondents were asked to recall any complications or symptoms they noted in their newborn soon after delivery. "Weak cry" and "difficult breathing" were the most widely reported danger signs in newborns soon after delivery. "Yellow skin/jaundice" along with "frequent watery stools" were the most commonly noted symptoms in newborns soon after delivery (figure 7.20) and within the first seven days of their birth (figure 7.21).

Figure 7.20: Percentage of newborns with danger signs/symptoms soon after deliver

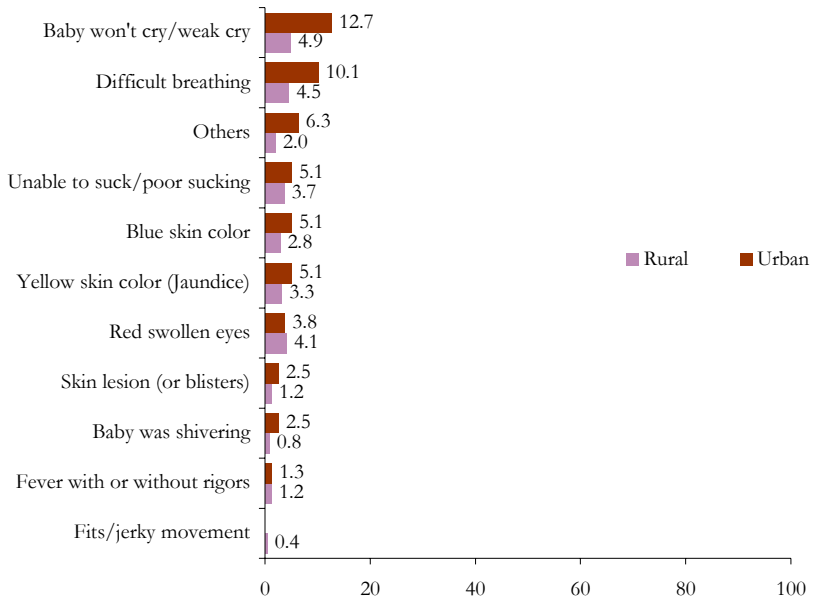
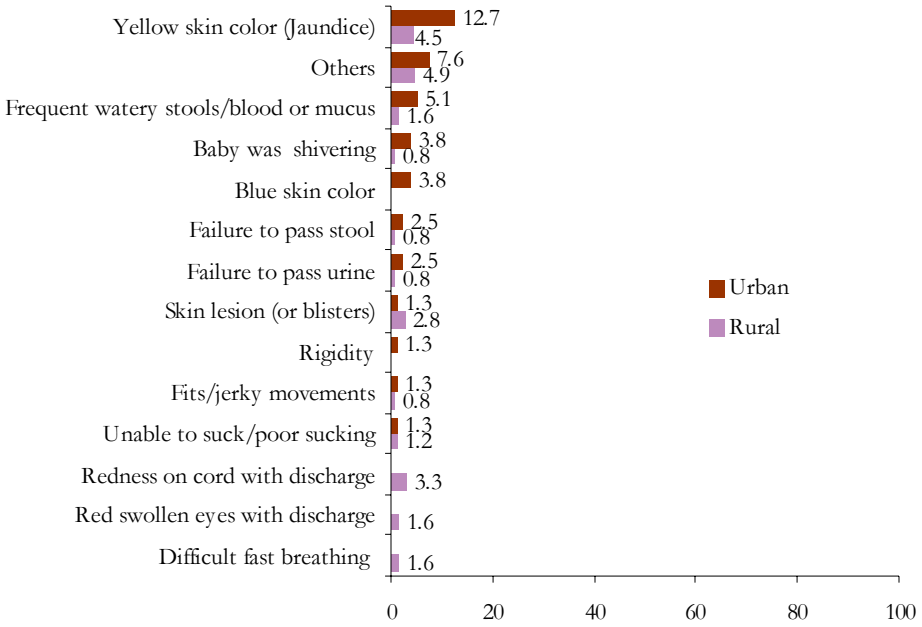
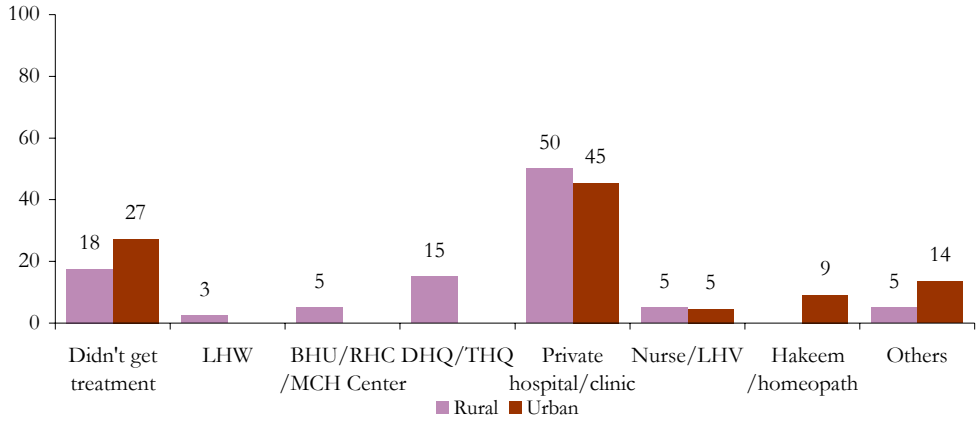


Figure 7.21: Percentage of newborns with danger signs within 7-days after delivery



Finally, respondents were asked to indicate the measures they took to get their newborn treated once the aforementioned symptoms were noted. Results are shown in figure 7.22. The highest percentage of women indicated that they took their newborn to a private clinic or hospital (50 percent in rural Jhelum and 45 percent in urban Jhelum), while 20 percent of the respondents from rural areas consulted some government health facility. However, a sizable portion of both urban and rural populations (18 and 27 percent respectively) failed to get any treatment at all. This may be due to a lack of financial resources required to seek assistance, or due to a lack of education, which would result in families failing to realize the magnitude of such complications, especially within the first seven days of birth.

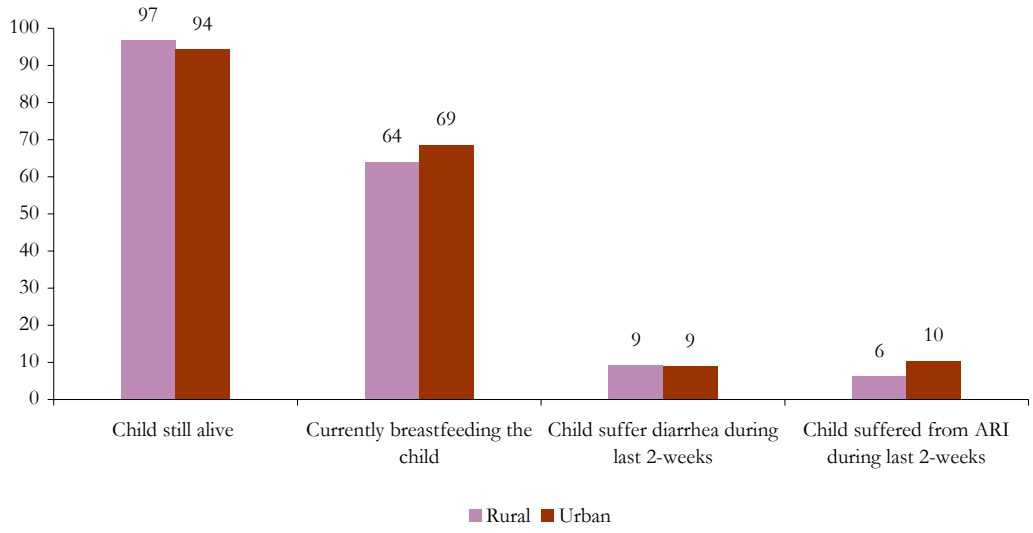
Figure 7.22: Place where treatment was sought for newborn complications



Finally, respondents were asked to indicate the status of health of their last child. Findings are presented in figure 7.23. Over 94 percent of the children in urban and 97 percent in rural were still alive. About two-thirds (64 percent in rural and 69 percent in urban) of the women were still breastfeeding their child at the time of the survey.

Nearly one-tenth (9 percent) of the respondents indicated that their children suffered from diarrhea within the last two weeks prior to the survey.

Figure 7.23: Status and health of last live birth



Chapter 8

Conclusions

The baseline household survey conducted in Jhelum is an essential tool in the process of understanding the different attitudes and misconceptions regarding pregnancy and neonatal care. Since PAIMAN is intended to improve the health of all pregnant women as well as their newborn children, it is important to understand the obstacles that stand in the way of good health. The baseline survey is based largely on the opinions and experiences of married women of reproductive age (MWRA), the information obtained is from the very individuals who are to be the primary recipients of the work carried out through PAIMAN.

The overall age-sex distribution shows a sex ratio of 100, which is the same as was established in the 1998 Population Census. The marital status clearly demonstrates a delay in the age at marriage for females, which is an improvement in the status of women compared to the 1998 Population Census. However, women still tend to get married earlier than men. Also according to the PAIMAN findings, there are on average 3.7 children ever born and 3.3 living children in the district of Jhelum.

Findings also show that a sizable portion of the population in the district of Jhelum has access to some sort of media; whether it is television, radio or newspapers. While it may seem relatively easy to reach this large portion of the population through one of the three main media channels, there are some obstacles that stand in the way including the lack of decision-making power for women and the infrequency of access to the media. As well, the 27 percent of the population that does not have access to any sort of media must also be reached. Even though television and radio were reported to have almost the same level of influence on the health behaviors of people, a majority of the women interviewed in both urban and rural areas believed that television is the trust-worthiest form of media.

Regarding antenatal care, an overwhelming majority believed it necessary for women to receive these antenatal check-ups, while only about three percent and one percent of the married women in rural and urban areas respectively felt it was not necessary. The findings show that more than 77 percent of all pregnant women in rural Jhelum, and 91 percent of the women in urban Jhelum went for an antenatal check-up during their last pregnancy. However, 57 percent of rural and 77 percent of urban married women went for at least 3 antenatal checkups. Findings show that all the major issues were discussed with a majority of the women during their antenatal visits. However, only 38 percent of the pregnant women were informed of the signs of pregnancy complications during the antenatal visits.

Respondents were asked to indicate which complications they believe are dangerous and require medical attention. Only a very small percentage believe that most complications require a doctor's care. Findings show that 24 percent of the married women in rural areas knew three or more danger

signs during pregnancy, compared to 21 percent in urban areas. The situation is aggravated for this segment of women who were unable to name a single sign of complications during pregnancy.

The findings show that over 76 percent of the married women in rural Jhelum and 81 percent in urban Jhelum indicated that they did in fact receive TT shots during their last pregnancy. A very large portion of the rural women (48 percent) and urban women (42 percent) indicated that they took no iron or folate supplements during their pregnancy.

Even though a majority of the women believe that services during childbirth should be obtained from a hospital, only about 46 percent of the women in rural areas and 58 percent for women in urban areas have had their babies delivered by SBAs. While it seems that many women in the district do have their babies delivered by SBAs, it may also be said that not all women are able to seek services from SBA even if they want to. One reason, which explains why some women still want to deliver at home, is that they are dependant upon their husbands or in-laws when it comes to major decisions. However, most of the respondents claimed that they had arranged for transport, money, and hospital fees etc. prior to the time of delivery, therefore eradicating any major delays.

Caesarean section deliveries were reported by 9.3 percent of rural and 17.9 percent of urban respondents. About 17 percent of the respondents in rural areas indicated that they experienced excruciatingly abnormal pain during their last delivery, whereas only 9 percent in urban centers reported the same. Premature ruptures of membranes, excessive bleeding and prolonged labor were other complications that were reported.

As in the case of pregnancy, many women are not aware of the complications that may arise during delivery. The baseline findings show that only 6 percent of the women recognize at least three danger signs during delivery. It becomes very difficult to save a pregnant woman who does not recognize danger signs during pregnancy, therefore failing to seek medical assistance in time. Deliveries can only be made safe if married women are educated regarding the danger signs, which may be noted during the delivery, so that they can decide when to seek treatment. Innovative approaches are therefore needed to make these communities more aware of issues regarding maternal and newborn health.

Although baseline survey findings indicate that excessive vaginal bleeding is the most known danger sign during the postpartum period, not all women were aware of this fact. Unfortunately, many women are unaware of danger signs that may appear in newborns, especially in the first seven days after delivery. The postpartum period is a critical time for mother and newborn. A very large portion of the married women did not receive any postnatal check-ups after their last pregnancy. More than 70 percent of the population in rural areas received no postnatal check-up, whereas the figure was 48 percent even in urban Jhelum. Among those who went for postnatal care, only 9 percent went within 24 hours after the childbirth.

A very large percentage in both urban and rural areas indicated that they received their pregnancy related information from their in-laws, family members, friends and television. About 26 percent of the rural married women indicated that a Lady Health Worker was the source of their information. Private hospitals and clinics were also a source of information for approximately 16 percent of the rural and 22 percent of the urban population in Jhelum. Married women in Jhelum often undervalue the importance of postnatal care. Surprisingly, the percentage of those who did not feel postnatal care was necessary was higher for rural areas than urban centers. Furthermore, in both urban and rural

areas of Jhelum, most respondents believed that only some women in their area received postnatal care.

Arrangement of transport to a health facility is a major cause of delay and can often lead to maternal and newborn mortality. It is very important to arrange transport ahead of time in order to eliminate that delay. Unfortunately, many households are unable to do so due to a lack of transportation in their communities. Most communities do not have any arrangement of transport, provision of blood and existence of finances for women at the time of need during delivery. This is a major obstacle to safe birth practices, as women are then forced to deliver at home, and may be exposed to infections and complications. Birth preparedness promotes the arrangement of such aspects.

Baseline results indicate that 42.3 percent of married women are using contraception in Jhelum. Furthermore, 29.6 percent of married women use modern methods, while 12.6 percent use traditional methods. Among modern methods, condoms (10.4 percent) and female sterilization (10.8 percent) are the most commonly used methods followed by IUD (3.5 percent). Withdrawal is being used by 11.3 percent of the married women in Jhelum.

The various sections of the survey allow for a comprehensive analysis of all areas concerned with maternal and infant health and well being. The separation of rural and urban areas makes it easier to compare results, and analyze the reasons behind the differences. The indicators obtained will be used to monitor and evaluate the success of the project upon completion.

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