# Integrated Reproductive and Sexual Health and Family Planning Project for Adolescent Girls and Young Married Women in Urban Slums of Pune City

Protection of young married women from the adverse consequences of early marriage

**Baseline Study Report – 2015** 

Prepared by Institute of Health Management, Pachod



Integrated reproductive and sexual health and family planning project for adolescent girls and young married women in urban slums of Pune city

Introduction, Research Objectives, Study Design and Methodology



#### Introduction:

Institute of Health Management, Pachod (IHMP) implemented a life skills education project from 1998 to 2006, with support from the Ford Foundation and Rockefeller Foundation. The key outcome of this project was a delay in age at marriage. The project was evaluated by the International Centre for Research on Women (ICRW). The Institute was invited to present the findings of this project at the 31<sup>st</sup> Annual Global Health Council Conference in June 2004. IHMP received the Investing in Women Award for Innovation for this project from ICRW in 2006.

IHMP-AGRT has been implementing a project to delay age at first conception and avert the adverse consequences of early motherhood in rural Maharashtra since 2003, with support from the MacArthur Foundation. In 2006, the project was evaluated and the findings were presented at the Fourth Asia Pacific Conference on Reproductive and Sexual Health and Rights, held in October 2007, in Hyderabad. From 2008 to 2011, the project interventions were scaled up through a coalition of NGOs in 5 districts of Maharashtra. The scaled up project was evaluated by Gokhale Institute of Politics and Economics, Pune and New Concepts, Delhi. The outcomes of the scaled up project were similar to the pilot project. In 2010, the five intervention components of the model were simplified and adapted to enable their implementation in the public health sector. National Rural Health Mission (NRHM) funds were leveraged and the interventions were successfully mainstreamed with Reproductive and Child Health (RCH) in one block with 250,000 population. IHMP-AGRT received the Dasra award for this project in 2013.

Based on this experience, IHMP is being implementing an integrated program aimed at a. empowering unmarried girls, b. addressing the consequences of early conception - with the aim of demonstrating a synergistic and sustainable impact on the RSH of unmarried and married adolescent girls in urban slums of Pune City.

The specific objectives of the intervention for young married women are;

- 1. To increase the proportion of young married women having 1<sup>st</sup> child birth after 19 years
- 2. To increase the proportion of young women using contraceptives for spacing
- 3. To increase proportion of young married women receiving minimal, standard, antenatal and postnatal care
- 4. To increase the proportion of young married women taking treatment for maternal morbidity
- 5. To demonstrate a measurable reduction in maternal morbidity (ante, intra and post natal morbidity) and RTIs / STIs in married adolescent girls.
- 6. To reduce the prevalence of LBW babies among married adolescent girls

#### **Research objective:**

To collect the baseline information for an intervention for young married women to be implemented in the 10 slums under ward no 43 of Hadpasar area covering 20,000 urban

poor population of the Pune city. The direct beneficiaries will be the young married women <=24 years of age & their husbands this area.

The broad objective of the baseline study is to obtain information on the prevalence and predictors of certain parameters for project area. The baseline information will be used for management and evaluation of the intervention, and to find out the unexplored research areas.

## **Specific objectives of baseline study:**

- To study the utilization of antenatal care services by young married women of age <=24 years
- To study the utilization of postnatal care services among young married women of age <=24 years
- To identify the prevalence of maternal and neonatal morbidity among young married women of age <=24 years
- To identify factors associated with maternal and neonatal morbidity young married women of age <=24 years
- To study the treatment seeking behaviour for maternal and neonatal morbidity among young married women of age <=24 years
- To identify the prevalence of low birth weight babies
- To identify the prevalence of use of family planning methods among young married women of age <=24 years

#### **Study Design and Methodology**

#### **Study Design:**

This study was conducted in 20 slums under ward no 43 and ward no 90 of Hadpasar area of Pune city A quasi-experimental study design has been adopted with pre-post test in both the study and control groups.

Study area – Slums under ward no 43, Hadpasar area, Pune city Control area – Slums under ward no 90, Hadpasar area, Pune city

#### Sample of married adolescent girls of age <=19:

A complete census of households was carried out to list out all the permanent resident married adolescent girls of age <=19 from study and control area. All the married adolescent girls were contacted and interviewed. 156 married adolescent girls form study area and 116 married adolescent girls from control area were contacted and interviewed.

## Sample of young married women of age 20-24 years:

**Sampling unit:** Young married women of age 20-24 years from study and control area.

**Inclusion criteria for study respondents:** All the permanent resident young married women of age 20-24 years were listed out and included in the sampling frame

**Sampling frame** – Slums in the study and control area were mapped, and a complete census was conducted in each. All the young married women of age 20-24 years in each slum were listed, and their house location was mapped for future reference. The sampling frame consisted of all young married women of age 20-24 years.

## **Sample Size:**

Primary outcome - Utilization of minimum standard antenatal care (registered within 12 weeks of pregnancy, received three AN check ups, 2 TT injections, consumed 90 & more IFA tablets during pregnancy)

To detect a 10% increase in utilization of minimum standard antenatal care services over three years, assuming an alpha of 0.05 and using a two-sided test to achieve 80 percent power, it was determined that a sample size of 160 would be needed at each site. (Fleiss et al, 2003).

The sample size is 160 young married women of age 20-24 years each from study and control area. To avoid replacement against non-covered individuals and to reduce the non-response error a random sample of 200 young married women of age 20-24 years from the study area and a random sample of 200 young married women of age 20-24 years from non-intervention area was taken.

#### **Method of data collection - Interview Schedule:**

A uniform pre-coded interview schedule was designed for the data collection. The interview schedule was designed in Marathi, and pre-tested by the IHMP staff through 9 interviews completed in three slums from the other PUHC area. Based on the pre-test, appropriate modifications were made in the interview schedule, which was then used to collect information from young married women <=24 years.

Interview schedule included questions on socio-demographic profile, exposure to mass media, reproductive history, service utilization for maternal care, maternal morbidity, treatment seeking for maternal morbidity, use of contraceptives, reproductive morbidity, knowledge of MNH and reproductive health, domestic violence, utilization of primary level care services and exposure to BCC activities.

## **Data Collection and Processing**

A total of 7 female investigators and four supervisors were recruited based on their previous experience of data collection.

Investigators were trained for 4 days at IHMP, Pune Centre from 2<sup>nd</sup> to 4<sup>th</sup> February, 2015. Investigators were trained in the skills of interviewing, how to conduct oneself in the field and how to fill questionnaires. Explanation was also given about each question in the questionnaire. The main emphasis of the training was to impart practical skills to each person interviewing and filling the questionnaires. This was done with the help of dummy interviews, role plays and actual interviews in a slum not included in the Project.

After ensuring that each investigator could conduct interviews and fill the questionnaires satisfactorily, the actual baseline data collection was initiated on 5<sup>th</sup> February 2015. Data collection team included seven female investigators, four supervisors, one researcher for quality control.

The baseline data collection was completed on 19<sup>th</sup> February 2015. A total of 272 married adolescent girls (156 from study area and 116 from control area) were interviewed. Out of 400 sampled young married women of age 20-24 years from study and control area, 379 (171 from study area & 208 from control area) were interviewed.

A total of 651 young married women of age <=24 (327 from study area and 324 from control area) were interviewed.

Data quality assurance: During data collection at the slum level, supervisor observed at least one interview of each investigator every day. At IHMP, Pune office the filled-in questionnaires was checked by the researcher. Manual data analysis for data quality assurance was done regularly. Based on findings of the supervisor, feedback was given to data collection team regularly to standardize data quality.

#### **Data entry and cleaning:**

Data was entered using a program developed in 'Epi data'. A data entry clerk entered data from each questionnaire, and a second data entry clerk checked the entries. After the data was entered, it was cleaned and analyzed using STATA

Integrated reproductive and sexual health and family planning project for adolescent girls and young married women in urban slums of Pune city

Section I: Socio-demographic characteristics of the respondent



# Section I: Socio-demographic characteristics of the respondent

This section comprised of questions about socio-demographic characteristics of the respondent and her husband. It covered their personal and family characteristics: type of family (joint or nuclear), religion, socio-economic, and exposure to mass media.

A total of 327 young married women of age <=24 years from study area and 324 from the control area were interviewed.

#### **Characteristics of young married women:**

Personal information on current age, level of education, and type of occupation was obtained. Mean current age of the respondents from study area was 19.97 years and mean current age of the respondents from control area was 20.58 years. Significantly high proportions of the married adolescent girls of age <=19 years were found in the study area (47.7%) as compared to control area (35.8%) (p=0.002). (Refer Table 1.1)

In terms of education, in the study area, 13.8 percent respondents were not having any formal education, 35.5 percent were educated up to the seventh standard, 46.5 percent were educated till 8<sup>th</sup> -12<sup>th</sup> standard, and 4.3 percent were educated till 13<sup>th</sup> - 15<sup>th</sup> standard. Whereas in the control area, 9.3 were not having any formal education, 32.1 percent were educated up to seventh standard, 55.3 percent were educated till 8<sup>th</sup> -12<sup>th</sup> standard, and 3.4 percent were educated till 13<sup>th</sup> - 15<sup>th</sup> standard. (Refer Table 1.1)

In the study area, 91.4 percent of the respondents were housewives and 8.6 percent reported to be working outside of the home. 94.7 percent of the respondents from control area were housewives and 5.2 percent reported to be working outside of the home. (Refer Table 1.1)

No significant difference was observed in the level of education and occupation of the respondents except the current age of the respondent between study and control area.

Table 1.1: Characteristics of young married women

Characteristics	Category	Study area (n=327) %	Control area (n=324) %	p value
	13-19 years	47.7	35.8	0.002
Current age of the respondent –	20-24years	52.3	64.2	
in completed years	Mean age	19.97	20.58	
	SD	2.45	2.53	
Level of education	Nil	13.8	09.3	0.102
	1-7 <sup>th</sup> std	35.5	32.1	0.102

		Study	Control	
Characteristics	Category	area	area	p value
Characteristics	Category	(n=327)	(n=324)	p varue
		%	%	
	8 <sup>th</sup> -12 <sup>th</sup> std	46.5	55.3	
	13 <sup>th</sup> -15 <sup>th</sup> std	04.3	03.4	
	House wife	91.4	94.7	na
Occupation of the respondent	Labourer/Maid	05.2	03.7	
	Others	03.4	01.5	
Working outside home	Yes	91.4	94.7	0.095
	No	08.6	05.3	0.095

## **Characteristics of the respondents' husbands:**

This set of questions was asked to only young married women living with their husbands.

In the study area, the mean age of the husband at the time of the survey was reported to be around 25.64 years. In terms of education, 7.4 percent of the husbands were illiterate, 24.1 percent had completed till 1<sup>st</sup>-7<sup>th</sup> standard, 58.8 percent had completed 8<sup>th</sup>-12<sup>th</sup> standard, and 9.6 percent had completed 13<sup>th</sup>-17<sup>th</sup> standard.

The various occupations of the husbands as reported by the respondents were as follows: In study area, unskilled worker/laborer -24.7 percent, skilled worker -23.8 percent, owned a business -11.2 percent, auto rickshaw/car driver -8.9 percent, employee at a private company -28.2 percent, government employee -3.1 percent. (Refer Table 1.2).

In the control area, the mean age of the husband at the time of the survey was reported to be around 26.25 years. In terms of education, 6.9 percent of the husbands were illiterate, 24.6 percent had completed till 1<sup>st</sup>-7<sup>th</sup> standard, 60.6 percent had completed 8<sup>th</sup>-12<sup>th</sup> standard, and 7.9 percent had completed 13<sup>th</sup>-17<sup>th</sup> standard. (Refer Table 1.2)

The various occupations of the husbands as reported by the respondents from control area were as follows: unskilled worker/laborer – 26.2 percent, skilled worker – 22.4 percent, owned a business – 6.6 percent, auto rickshaw/car driver – 17.9 percent, employee at a private company – 23.9 percent, government/bank employee – 2.5 percent. (Refer Table 1.2).

No significant difference was observed in the husbands' characteristics between study and control area except occupation. Significantly high proportion of husbands engaged in petty business from the study area as compared to control area.

Table 1.2: Husbands characteristics

		Study	Control	
Characteristics	Catagory	area	area	p value
Characteristics	Category	(n=323)	(n=317)	p value
		%	%	
Husbands current age – in completed years	18-24 years	35.6	29.0	0.075
	25 & above years	64.4	71.0	0.073
	Mean age	25.64	26.25	
	SD	3.10	3.30	
	Nil	07.4	06.9	
Husbands level of education	1-7 <sup>th</sup> std	24.1	24.6	0.877
Husbands level of education	8 <sup>th</sup> -12 <sup>th</sup> std	58.8	60.6	
	13 <sup>th</sup> -17 <sup>th</sup> std	09.6	07.9	
	Petty business at slum level	11.2	06.6	
	Skilled work	23.8	22.4	
Hyshands assumation	Unskilled work	24.7	26.2	0.011
Husbands occupation	Service – company	28.2	23.9	0.011
	Service – govt/bank	03.1	02.5	
	Auto rickshaw/car driver	08.9	17.9	
	Unemployed	0.00	00.3	

#### **Household characteristics:**

Table 1.3 delineates information on household characteristics. 63.9 percent young married women from study area were staying in a joint family whereas 65.6 percent staying in a joint family from control area. About half (50.1%) young married women from study area were living with their mother in law and around 57.5 percent from control area were living with their mother in law. (Refer Table 1.3)

A significantly high proportion of the respondents (83.7%) from study area were Hindu as compared to control area (62.1%), 26.8 percent respondents from control area were Muslim as compared to 11.6 percent from study area. (Refer Table 1.3)

When asked about the number of rooms in the house, 46.2 percent from study area and 45.1 percent from control area reported to have one room, 18.6 percent from study area and 14.5 percent from control area reported three and more rooms. (Refer Table 1.3)

The average monthly income of family in study area is about Rs. 13906.67 whereas in control area it is Rs. 16118.52.

Significantly high proportions of the respondents belonged to Muslim religion in the control area as compared to the respondents from study area. No significant difference is observed in type of family, number of rooms, number of earning members between study and control area.

Table 1.3: Household characteristics

Characteristics	Category	Study area (n=327) %	Control area (n=324) %	p value
	N 1	26.1	24.4	
Family type	Nuclear	36.1	34.4	0.646
	Joint	63.9	65.6	
Living with mothers in law	Yes	50.1	57.5	0.061
	Hindu	83.7	62.1	0.000
	Muslim	11.6	26.8	
Religion	Buddha	03.4	07.2	
	Others (Christian, Sikh, Jain)	01.3	03.9	
Number of rooms in the	One	46.2	45.1	
Number of rooms in the household	Two	35.2	40.4	0.232
nousehold	Three & more	18.6	14.5	
Number of earning members	One	39.4	41.4	
	Two	33.3	30.9	0.789
	Three+	27.2	27.8	
Monthly income (in Rs)	Average (in Rs)	13906.67	16118.52	

#### **Exposure to mass media:**

It was important to determine the extent of exposure of the respondents to the mass media, as this mass media can be used as a means of Behavior Change Communication (BCC). Exposure to radio, television and news paper was included in the mass media.

It was reported that only 6.4 percent respondents from study area and 3.7 percent from control area were listening to the radio daily. A vast majority (88.9% from study area and 91.7% from control area) never listen to a radio. (Refer Table 1.4)

Almost 73.4 percent from study area and 80.3 percent from control area were watching television every day, while 16.8 percent from study area and 11.4 percent from control area reported that they never watch television. (Refer Table 1.4)

A vast majority (83.8% from study area & 88.6% from control area) reported that they never read a newspaper. (Refer Table 1.4)

Around 45.3 percent of young married women from study area and 47.5 percent from control area reported possessing a mobile phone. A vast majority (more than 90%) of the respondents from both the areas reported that their husband possessing a mobile phone.

However only 6.8 percent of respondents from study area and 3.9 percent from control area reported that they have ever received health related SMS on their mobile. (Refer Table 1.4)

No significant difference is observed in exposure to mass media between the respondents from study area and control area. Majority of the respondents from both the areas watching TV regularly compared to the listening radio or reading newspaper.

Table 1.4: Exposure to mass media

Characteristics	Category	Study area (n=327)	Control area (n=324)	p value
Listen Radio in last month	Never (0-6 days) Occasionally (7-20 days) Daily (21-30 days)	88.9 04.6 06.4	91.7 04.3 03.7	0.286
Watch TV in last month	Never (0-6 days) Occasionally (7-20 days) Daily (21-30 days)	16.8 09.8 73.4	11.4 08.3 80.3	0.094
Read newspaper in last month	Never (0-6 days) Occasionally (7-20 days) Daily (21-30 days)	83.8 09.2 07.0	88.6 06.2 05.3	0.203
Possessing a mobile phone	Yes	45.3	47.5	0.561
Received any health related message from you mobile	Received via sms  Received via phone call	06.8	03.9	0.267
Husband possess a mobile phone	Yes	91.1	90.1	0.659

Integrated reproductive and sexual health and family planning project for adolescent girls and young married women in urban slums of Pune city

**Section II: Reproductive history** 



# **Section II: Reproductive history**

This section contains information on age at menarche, age at marriage and age at first conception.

Table 2.1 provides information on age at menarche. The mean age at menarche for study sample was 12.85 years (SD 1.094) and for control sample was 12.79 years (SD 1.02).

The mean age at marriage in study sample was 16.76 years (SD 2.05) and 16.78 years (SD 2.02) for control sample. The median age at marriage of study as well as for control sample was 17 years. (Refer Table 2.1)

The distribution of young married women by age at marriage is presented in Table 2.1 Around 81.4 percent of the respondents from study area and 83.3 percent from control area reported that they got married at or before 18 years of age.

Median age at first conception was 17.58 years for study area and 17.41 years for the control area. A substantially high proportion of the respondents from the both areas (83.3% from study area & 84.0% from control area) had their first conception before the age of 19 years. (Refer Table 2.1)

A large proportion of young married women aged 20-24 from both the areas (71.3% from study area and 73.8% from control area) got married before the legal minimum age of 18.

No significant difference in age at menarche, age at marriage and first conception is observed between study area and control area samples. Age at marriage and first conception was found to be low.

Table 2.1: Age at menarche, age at marriage & age at first conception

Characteristics	Category	Study area (n=327) %	Control area (n=324) %	p value
	74	10.05	10.70	0.427
Age at menarche	Mean age	12.85	12.79	0.427
	1.5	260	260	
	<=15 years	26.9	26.8	0.784
Ago at marriage in completed	16-18 years	54.4	56.5	
Age at marriage – in completed	19+ years	18.6	16.7	
years	Mean	16.76	16.78	
	Median	17.0	17.0	
Age at first conception – in completed years	13-14 years	07.8	09.6	0.823
	15-16 years	23.7	25.3	
completed years	17-19 years	51.8	49.1	

		Study	Control	
Characteristics	Category	area		p value
	Culogory	(n=327)	(n=324)	p varae
		%	%	
	20-24 years	16.7	16.0	
	Mean	17.56	17.49	
	Median	17.58	17.41	

## **General reproductive health information of the respondents:**

This section contains information on total pregnancies, live births, still births and abortions.

Out of 327 young married women from study area 270 respondents had experienced at least one conception, 57 women had not conceived when the study was conducted.

Out of 324 young married women from control area 281 respondents had experienced at least one conception, 43 women had not conceived when the study was conducted.

The distribution of young married women by the number of pregnancies is presented in the Table 2.2: About 35.8 percent girls from study area and 32.1 percent from control area had conceived once, 26.6 percent from study area and 32.7 percent from control area had become pregnant twice, 14.4 percent from study area and 17.3 percent from control area had three pregnancies, and 5.7 percent from study area and comparatively low i.e. 4.6 percent from control area had experienced 4 or more conception.

In study area, 6.2 percent of the respondents reported not having a single live birth, 51.8 percent reported at least one live birth, 31.3 percent reported two live births, 9.9 percent reported three live births and 0.8 percent reported four or more live births. (Refer Table 2.2)

In control area, 5.9 percent of the respondents reported not having a single live birth, 41.7 percent reported at least one live birth, 38.2 percent reported two live births, 12.6 percent reported three live births and 1.6 percent reported four or more live births. (Refer Table 2.2)

In study area, the proportion of respondents reporting one abortion was 18.5 percent; that reporting two abortions was 6.2 percent, while that reporting three & more abortions was 1.2 percent. (Refer Table 2.2)

In control area, the proportion of respondents reporting one abortion was 18.1 percent; that reporting two abortions was 5.1 percent, while that reporting three & more abortions was 0.4 percent. (Refer Table 2.2)

Table 2.2: Number of pregnancies, number of live births, number of still births, number of abortions

Characteristics	Category	Study area (n=327)	Control area (n=324)	p value
		%	%	
	0	17.4	13.3	
	1	35.8	32.1	
	2	26.6	32.7	
Number of pregnancies	3	14.4	17.3	
	4	03.9	02.8	
	5	00.9	01.8	
	6	00.9	0.00	
	0	06.2	05.9	
	1	51.8	41.7	
Total number of live births	2	31.3	38.2	
	3	09.9	12.6	
	4 & more	00.8	01.6	
	0	96.7	98.0	
Total number of still births	1	02.9	01.9	
	2	00.4	0.00	
	0	74.1	76.4	
	1	18.5	18.1	
Total number of abortions	2	06.2	05.1	
	3-4	01.2	00.4	

# Interval between marriage & first conception in months:

For study area the average interval between marriage and first conception was 10.94 months with a standard deviation of 13.47, while the median was 5 months. For control area the average interval between marriage and first conception was 8.97 months with a standard deviation of 12.87, while the median was 4 months.

Three categories were made to determine the variation in the interval between marriage and first conception by area. The first category was less than or equal to 11 months, second was 12 to 23 months while the third was more than 24 months. The results are presented in Table 2.3 & Table 2.4: Almost 67 percent respondents from study area conceived within 11 months after marriage compared to 76 percent from control area.

In study area, significantly high proportion of the married adolescent girls of age <=19 (76.2%) conceived within 11 months after marriage as compared to young married women of age 20-24 years (60.8%). (p=0.016) (Refer Table 2.3)

In control area, significantly high proportion of the married adolescent girls of age <=19 (88.4%) conceived within 11 months after marriage as compared to young married women of age 20-24 years (70.8%). (p=0.001) (Refer Table 2.4)

Table 2.3: Interval between marriage and first conception – study area

Characteristics	Category	MAGs 13-19 years	YMW – 20-24 years	All women <=24 years
	<= 11 months	76.2	60.8	67.0
	12-23 months	15.6	19.9	18.2
Interval between marriage and	24 & more months	08.3	19.3	14.8
first conception – in months				
	Average – mean	07.5	13.27	10.94
	Median	04.0	07.0	05.0
	n	109	161	270

Table 2.4: Interval between marriage and first conception – control area

Characteristics	Category	MAGs 13-19 years	YMW – 20-24 years	All women <=24 years
	<= 11 months	88.4	70.8	76.2
	12-23 months	11.6	18.5	16.4
Interval between marriage and	24 & more months	0.00	10.8	07.5
first conception – in months				
	Average – mean	05.13	10.67	08.97
	Median	03.0	06.0	04.0
	n	86	195	281

## **Outcome of pregnancy:**

In study area sample, total 456 pregnancies were reported at the time of survey out of which 359 live births, 85 abortions and 9 still births were reported. Three young married women reported twins.

In control area sample, total 493 pregnancies were reported at the time of survey out of which 415 live births, 75 abortions and 5 still births were reported. Two young married women reported twins.

## **Current pregnancy:**

In study area, out of 327 respondents, 24.4 percent young married women were pregnant at the time of the survey. 39.4 percent of currently pregnant young married mothers were in the third trimester of pregnancy followed by second trimester (37.9%) and first trimester (22.7%). (Refer Table 2.5)

In control area, out of 324 respondents, 20.3 percent young married women were pregnant at the time of the survey. Most (43.8%) percent of currently pregnant young married mothers were in the second trimester of pregnancy followed by third trimester (29.8%) and first trimester (26.3%). (Refer Table 2.5)

1 out of 5 young married women of age <=24 were currently pregnant at the time of survey.

Table 2.5: Young married women pregnant at the time of survey

Characteristics	Category	Study area (n=327) %	Control area (n=324) %	p value
Currently pregnant	Yes	24.4	20.3	0.241
	First trimester (1-3 month)	22.7	26.3	
Month of gestation	Second trimester (4-6 month)	37.9	43.8	
	Third trimester (7-9 month)	39.4	29.8	

Integrated reproductive and sexual health and family planning project for adolescent girls and young married women in urban slums of Pune city

**Section III: Maternal Health** 



## **Section III: Maternal Health**

#### **Antenatal care:**

This section comprises information regarding antenatal care in the last pregnancy: confirmation of pregnancy, registration for antenatal services, antenatal examinations, TT immunization and consumption of IFA tablets, danger signs and treatment seeking behaviours.

Data on maternal and neonatal health were collected from young married women having children less or equal to three years of age. In study area, out of 327 young married women of age<=24 years, 196 women having children less or equal to three years of age. Whereas in control area, out of 324 young married women of age <=24 years, 197 women having children less than or equal to three years of age.

## **Confirmation of pregnancy:**

Table 3.1 describes the various methods used by the respondents to confirm their pregnancy: 1.5 percent respondents each from both the area reported that they had undergone an abdominal examination, 96.9 percent from study area and 93.9 percent from control area reported doing a urine pregnancy test and 1.5 percent from study area and 4.6 percent from the control area reported sonography.

The proportion of respondents who reported that they had gone to a private hospital to confirm the pregnancy was 63.8 percent for the study area and 70.1 percent for the control area. A substantially low proportion of respondents reported (4.6% from study area, 2.5% from control area) that they had gone to the primary urban health centre to confirm the pregnancy. Around 15.3 percent respondents from the study area and 14.7 percent from control area reported that they done urine pregnancy test at home. (Refer Table 3.1)

The majority of respondents from both the areas reported that they had got their pregnancy confirmed by urine pregnancy testing and they had gone to private hospital.

Table 3.1: Pregnancy confirmation

Characteristics	Category	Study area (n=196) %	Control area (n=197) %	p value
	Abdominal check-up	01.5	01.5	
What did you do to check whether you were pregnant?	Urine pregnancy test (UPT)	96.9	93.9	0.216
	Sonography	01.5	04.6	

		Study	Control	
Characteristics	Category	area	area	p value
	Category	(n=196)	(n=197)	p varue
		%	%	
	Outreach clinics	01.0	0.00	
	Primary urban health	04.6	02.5	
Where did you get yourself	centre	04.0	02.3	
checked up/tested to determine	Other PMC hospital	12.8	03.1	
whether you were pregnant?	Sasoon Hospital	02.5	09.1	
(Specify the service provider.)	Private clinic	63.8	70.1	
	Using UPT kit at home	15.3	14.7	
	Not examined	0.00	00.5	

#### **Registration for antenatal care services:**

Table 3.2 summarizes the proportions of the respondents registered for antenatal services within 12 weeks and beyond 12 weeks: 60.2 percent of the respondents from study area reported that they had registered for antenatal services within 12 weeks of pregnancy in the last pregnancy; this compared to 55.8 percent for the control area. 34.7 percent from study area reported that they had registered after three months in the last pregnancy; this compared to 41.1 percent from the control area. (Refer Table 3.2).

Among those who got themselves registered for antenatal care, 11.8 percent from the study area and 5.8 percent from the control area reported the primary urban health centre as their place of registration. Significantly high proportion of the respondents (57.1%) from control area reported that they registered at the private clinics as compared to 32.8 percent from the study area. A substantial proportion of the respondents (41.4% Vs 21.5%) from the study area got registered for antenatal care at the government facilities other than primary urban health centre as compared to control area. (Refer Table 3.2)

No significant difference is observed in registration for antenatal care services within 12 of pregnancy between study and control area. Low proportions of the respondents from both the areas were registered at primary urban health centre or at outreach clinics. In study area, majority of the respondents got registered for antenatal care services at government facilities other than PUHC followed by private clinics whereas in the control area majority of the respondents got registered at private clinics followed by government hospitals other than PUHC.

Table 3.2: Registration for antenatal care services

Characteristics	Category	Study area (n=196) %	Control area (n=197) %	p value

Characteristics	Category	Study area	Control area	p value
Characteristics	Category	(n=196)	(n=197)	p varue
		%	%	
When did you get your	<=12 weeks	60.2	55.8	
When did you get your antenatal registration done?	After 12 weeks	34.7	41.1	0.299
antenatar registration done:	Not registered	05.1	03.1	
	Outreach clinics	02.7	0.00	0.000
	Primary urban health centre (PUHC)	11.8	05.8	
Place of antenatal registration	Other Govt hosp	41.4	21.5	
_	Sasoon hospital	11.3	15.7	
	Private clinic	32.8	57.1	
	n	186	191	
Received AN card at the time	Yes	82.8	95.8	0.000
of registration	No	17.2	04.2	

## **Utilization of antenatal care services:**

#### **Antenatal examinations:**

27.6 percent married adolescent girls from study area received fewer than 4 antenatal examinations and 28.4 percent received fewer than 4 antenatal checkups from control area. The proportion of young married women who were examined 5 or more times in study area is 72.4 percent and 71.6 percent in control area. (Refer Table 3.3)

No significant difference is observed in utilization of antenatal check-ups by the pregnant young married mothers between study and control area. (p=0.847)

Table 3.3: Number of antenatal check-ups received during pregnancy

Characteristics	Category	Study area (n=196) %	Control area (n=197) %	p value
Number of antenatal check ups received by the pregnant mother during last pregnancy	Less or equal to four check ups	27.6	28.4	0.847
	Five and more check ups	72.4	71.6	0.047

## Number of times weighed during pregnancy:

About 58.2 percent young married women from study area and 67.0 percent from control area were weighed more than five times during the antenatal period. (Refer Table 3.4)

No significant difference is observed in proportion of young married women weighed during their last pregnancy between study and control area. (p=0.070)

Table 3.4: Number of times weighed during pregnancy

		Study	Control	
Characteristics	Category	area	area	p value
Characteristics	Category	(n=196)	(n=197)	p varue
		%	%	
Number of times weighed	Less or equal to four	41.8	33.0	
Number of times weighed				0.070
during last pregnancy	Five and more	58.2	67.0	

## **Abdominal check up:**

Abdominal examination was done at least one to four times during antenatal check-ups for 29.6 percent young married women from study area and 28.9 percent from control area. 70.4 percent mothers from study area and 71.1 percent from control area had 5 and more times abdominal examinations during pregnancy. (Refer Table 3.5)

Table 3.5: Number of times abdominal check-ups done during pregnancy

Characteristics	Category	Study area (n=196)	Control area (n=197)	p value
		%	%	
Number of times abdominal	Less or equal to four	29.6	28.9	0.006
check ups done during last pregnancy	Five and more	70.4	71.1	0.886

## Checking for signs of anemia and swelling over feet:

Low proportion of the respondents from both the areas (38.8% from study area and 41.1% from control area) had 5 and more examinations for signs of anemia. (Refer Table 3.6)

A little more than half of the respondents from both the areas (58.7% from study area and 57.8% from control area) had five and more examinations for swelling over feet during the last pregnancy. (Refer Table 3.6)

21.9 percent respondents from the study area and 30.9 percent from the control area had three and more urine examinations, whereas 11.2 percent from the study area and 14.7 percent from control area reported that that they have not even a single time examined for urine. (Refer Table 3.6)

No significant difference is observed in examining signs and symptoms of anemia, ankle oedema during antenatal care between study and control area.

Table 3.6: Number of times checked for signs of anemia, swelling over feet and urine test during pregnancy

Characteristics	Category	Study area (n=196) %	Control area (n=197) %	p value
Number of times examined for signs of anemia (sever paleness	Less or equal to four	61.2	58.9	0.626
of color in the conjunctiva, nails and tongue) during last pregnancy	Five and more	38.8	41.1	0.636
Number of times examined for	Less or equal to four	41.3	42.1	0.871
swelling over feet during last pregnancy	Five and more	58.7	57.8	0.671
	None	11.2	14.7	
Number of times urine test	Once	34.7	26.9	0.085
done during pregnancy	Twice	32.1	27.4	
	Three & more times	21.9	30.9	

## Number of times blood pressure was taken up during pregnancy:

Significant difference observed in BP examination during antenatal examination between the study and control sample (p=0.010). High proportion of young married women from control area (71.1%) had their blood pressure checked five and more times during the antenatal period as compared to study area (58.7%). (Refer Table 3.7)

Table 3.7: Number of times BP was taken during pregnancy

		Study	Control	
Characteristics	Category	area (n=196)	area (n=197)	p value
		%	%	

Number of times blood pressure checked during last	Less or equal to four	41.3	28.9	0.010
pregnancy restrict the pregnancy	Five and more	58.7	71.1	0.010

#### Number of times ultrasound test done:

The proportion of respondents from the study area who reported having had a sonography done at least three times in the last pregnancy was 62.2 percent; as compared to 67.1 percent who did so in the previous pregnancy from control area. (Refer Table 3.8)

On an average ultrasound test was done for three times during pregnancy by the pregnant mother. No significant difference is observed in number of times ultrasound test done during pregnancy by the pregnant mother between study and control area.

Table 3.8: Number of times ultrasound test done during pregnancy

Characteristics		Study	Control	
	Category	area	area	p value
	Surgery .	(n=196)	(n=197)	Р
		%	%	
Number of times ultrasound test done during pregnancy	None	07.1	04.1	
	Once	08.2	10.7	0.462
	Twice	22.4	18.3	0.402
	Three times	35.2	36.6	
	Four & more times	27.0	30.5	

## Testing for Hemoglobin and HIV during pregnancy:

20.4 percent respondents from study area and whereas a little more i.e. 30.5 percent from control area had a blood test to check levels of hemoglobin for three or more times during the last pregnancy. A vast majority of the respondents from both the areas (89.9% from study area and 95.4% from control area) had an HIV test done during the last pregnancy. (Refer Table 3.9)

Utilization of blood test to check levels of hemoglobin and for HIV is significantly high in control area as compared to study area.

Table 3.9: Number of times Hb tested, HIV testing during pregnancy

		Study	Control	
Characteristics	Category	area	area	p value
Characteristics	Category	(n=196)	(n=197)	p varae
		%	%	
Number of times Hb tested	None	07.6	03.5	0.000
	Once	40.8	22.3	
	Twice	31.1	43.6	
	Three times and more	20.4	30.5	
HIV test done during last pregnancy	Yes	89.9	95.4	0.033

## **Number of TT injections received during pregnancy:**

Two doses of tetanus toxoid vaccine given one month apart during early pregnancy are effective in preventing tetanus in both newborn and mother. Table 3.10 indicates that among registered mothers around 70.4 percent from the study area and 77.2 percent from control area received two TT injections.

Table 3.10: Number of TT injections taken during pregnancy

Characteristics	Category	Study area (n=196) %	Control area (n=197)	p value
Number of TT injections taken	None	07.1	04.6	
Number of TT injections taken during last pregnancy	One	22.4	18.3	0.278
	Two	70.4	77.2	

## Number of IFA tablets received and consumed during pregnancy:

It is recommended to a pregnant woman to have a daily tablet of iron and folic acid (IFA) for at least three months during the antenatal period. Significantly high proportion of mothers (85.8%) from control area had received the at least 90 IFA tablets during their last pregnancy as compared to 62.7 percent from the study area. (Refer Table 3.11)

Around 3-4 out of 10 registered mothers from study and control area consumed less than or 90 IFA tablets during their pregnancy period. 58.7 percent mothers from study area and 65.5 percent from control reported that they consumed more than 90 IFA tablets.

Significant difference observed in receipt of the IFA tablets during pregnancy (p=0.000), whereas no significant difference observed in consumption of IFA tablets during pregnancy between study and control area (p=0.164). (Refer Table 3.11)

Table 3.11: Number of IFA tablets received and consumed during pregnancy

Characteristics	Category	Study area (n=196) %	Control area (n=197) %	p value
Number of IFA tablets received	Less than 90 IFA tablets	37.2	14.2	0.000
during last pregnancy	90 or more IFA tablets	62.7	85.8	0.000
Number of IFA tablets	Less than 90 IFA tablets	41.3	34.5	
consumed during last	90 or more IFA tablets	58.7	65.5	0.164
pregnancy				

## Utilization of minimum standard antenatal care during pregnancy:

Minimum standard antenatal care includes: registration for antenatal care services within 12 weeks/3 months of pregnancy, 5 antenatal examinations, 2 TT injections, and consumption of at least 90 IFA tablets.

The proportion of respondents from the study area who reported that they had received 'minimum standard antenatal care' in the last pregnancy was 33.2 percent, whereas 35.0 percent did so in the previous pregnancy from control area. (Refer Table 3.12)

Place of antenatal care: In the study area, the majority of the respondents (52.1 percent) received antenatal care services from private hospitals in Hadpasar area, 13.4 percent from Cantonment hospital, 12.4 percent from B. J. Medical College, Pune, 14.5 percent had received from primary urban health centre.

In the control area, the majority of the respondents (57.5 percent) received antenatal care services from private hospitals in Hadpasar area, 15.7percent from Cantonment hospital, 16.2 percent from B. J. Medical College, Pune, 6.3 percent had received from primary urban health centre.

Utilization of minimum standard antenatal care is found to be low in both the areas. No significant difference is observed in the utilization of 'minimum standard antenatal care' in the last pregnancy between study and control area (p=0.697). (Refer Table 3.12)

The majority of the respondents from both the areas utilized antenatal care services from private hospitals followed by Cantonment hospital and B.J. Medical College, Pune. Utilization of primary urban health centre for antenatal care was found to be low in both the areas.

Table 3.12: Utilization of minimum standard antenatal care during pregnancy

Characteristics	Category	Study area (n=196) %	Control area (n=197) %	p value
Utilization of minimum standard antenatal care* during last pregnancy	Yes	33.2	35.0	0.697
	Primary urban health centre (PUHC)	14.5	06.3	
	Other Govt Hospital	06.5	03.7	
DI C I	Sasson Hospital	12.4	16.2	
Place of antenatal care	Cantonment hospital	13.4	15.7	
	Sane Guruji Hospital	20.9	29.8	
	Private clinics	31.2	27.7	
	n	186	191	

#### **Self reported symptoms of antenatal complication:**

Table 3.13 provides information about the prevalence of symptoms indicative of an antenatal complication: In the study area, reported prevalence of weakness was 33.7 percent, bleeding 3.6 percent, swelling of face or feet 17.9 percent, severe headache 6.1 percent, high BP 7.6 percent, severe pain in lower abdomen 9.7 percent, excessive vomiting 27.0 percent, reduced fetal movement 1.5 percent, watery discharge before onset of labor 5.1 percent and painful micturation 8.2 percent. (Refer Table 3.13)

In the control area, reported prevalence of weakness was 38.6 percent, bleeding 4.6 percent, swelling of face or feet 18.3 percent, severe headache 11.2 percent, high BP 9.6 percent, sever pain in lower abdomen 9.6 percent, excessive vomiting 34.5 percent, reduced fetal movement 2.5 percent, watery discharge before onset of labor 2.5 percent and painful micturation 15.7 percent. (Refer Table 3.13)

The prevalence of those who reporting at least one symptom indicative of an antenatal complication was 58.2 percent in the study area, and whereas in control area it was 60.4 percent. (Refer Table 3.13)

The vast majority of respondents (6 out of 10) from both the areas experienced at least one antenatal complication. No significant difference observed in the reported prevalence of any one complication during pregnancy between study and control samples.

Table 3.13: Self reported symptoms of antenatal complication

Indicator	Category	Study area (n=196) %	Control area (n=197) %	p value
Symptom of anemia - difficulty in breathing, weakness	Yes	33.7	38.6	0.311
	**	27.0	24.5	0.100
Excessive omitting	Yes	27.0	34.5	0.108
Swelling on feet or face	Yes	17.9	18.3	0.914
High blood pressure	Yes	07.6	09.6	0.483
Severe headache	Yes	06.1	11.2	0.075
Pain while passing urine	Yes	08.2	15.7	0.021
Bleeding	Yes	03.6	04.6	0.617
Sever pain in lower abdomen	Yes	09.7	09.6	0.987
Watery discharge before onset of labor	Yes	05.1	02.5	0.185
		0.1.5	00.7	0.450
Reduced fetal movement	Yes	01.5	02.5	0.479
Convulsions	Yes	00.0	00.00	na
Any one symptom of antenatal complications	Yes	58.2	60.4	0.651

## **Treatment for complications during pregnancy:**

During the survey young married woman who reported any one complication during pregnancy were asked if they had taken any treatment for the same.

Those who reported any one complication during pregnancy, 86.8 percent women from study area had taken treatment for the ante-natal complication while 90.7 percent women from control area had taken treatment for antenatal complication. (Refer Table 3.14)

Table 3.14 describes the place where the respondents were treated for symptoms of antenatal complications: in the study area, 33.4 percent reported going to the government facility, 45.4 percent reported seeking treatment at a private hospital, and 8.1 percent took

treatment from B.J. Medical College, Pune. In the control area, 60.2 percent reported seeking treatment at private hospitals/clinics, 13.9 percent took treatment from B. J. Medical College, Pune.

The respondents were asked about how long (in days) their treatment had lasted. The average duration reported by the respondents from study area was 39.5 days as compared to 46.8 days for control area in the last pregnancy. Of those who seek treatment, one out of four mothers from both the areas reportedly admitted at the hospital for the treatment of antenatal complications. (Refer Table 3.14)

The vast majority of those who experienced at least one antenatal complication from both the areas sought treatment for it.

Table 3.14: Treatment for antenatal complication

		Study	Control	
Indicator	Cotocom	area	area	l
	Category	(n=196)	(n=197)	p value
		%	%	
Taken treatment for symptoms	Yes	86.8	90.7	0.343
of antenatal complications	n	114	119	0.343
	Outreach clinics	01.0	0.00	
Place of treatment for antenatal	Primary urban health centre (PUHC)	06.1	02.8	
complications	Govt. hospitals other than PUHC	33.4	23.2	
	Sasoon hospital	08.1	13.9	
	Private hospital	45.4	60.2	
	n	99	108	
How long did the treatment last	Mean	39.5	46.8	0.268
(in days)?	n	99	108	
Were you admitted to a hospital	Yes	24.2	25.9	
for treatment?	n	99	108	
Number of days admitted in the	Mean	06.3	11.6	0.366
hospital	n	24	28	

#### Intra-natal care:

This section had questions related to intra natal care. Information was collected on place of delivery, care during delivery, complications and danger signs during delivery.

Around 8.2 percent of the respondents from study area and 6.6 percent from control area reported that they had preterm deliveries in their last pregnancy. A vast majority of the respondents from both the area (94.4% from study area and 96.4% from control area) reported that they had delivered in a hospital for the last pregnancy. (Refer Table 3.15)

In the study area, about 30.1 percent of the respondents reported that they had delivered at the government tertiary care hospital (Sasson Hospital / Command Hospital) in the last pregnancy, 21.4 percent reported that they had delivered at government hospitals at Pune/outside Pune, and a vast majority i.e. 42.8 percent had delivered in private hospital in the last pregnancy. (Refer Table 3.15)

In the control area, about 33.5 percent of the respondents reported that they had delivered at the government tertiary care hospital (Sasson Hospital / Command Hospital) in the last pregnancy, 12.2 percent reported that they had delivered at government hospitals at Pune/outside Pune, and a vast majority i.e. 50.7 percent had delivered in private hospital in the last pregnancy. (Refer Table 3.15)

Out of total deliveries conducted at home 81.8 percent from study area and 85.7 percent from control area were conducted by dai or relatives in both the study areas. A small proportion of deliveries 18.2 percent from study area and 14.3 percent from control area conducted at home were conducted under the supervision of a doctor or Govt. ANM respectively. (Refer Table 3.15)

Respondents were asked about the person who assisted them in their delivery at hospital. A doctor reportedly assisted 74.6 percent of the respondents from the study area in the last pregnancy and 93.7 percent respondents from control area in the last pregnancy. (Refer Table 3.15)

Respondents were asked about the duration of their stay in hospital. 44.8 percent respondents from the study area and 49.0 percent from the control area reported a stay of more than three days. (Refer Table 3.15)

76.5 percent of the respondents from the study area and 72.1 percent from control area reported that they had a normal delivery in the last pregnancy. About 21 percent respondents from both the areas reported having delivered by Caesarean section for the previous pregnancy. (Refer Table 3.15)

The vast majority of the respondents reported to have delivered in hospital rather than home. One out of five mothers had delivered by Caesarean section for the previous pregnancy.

Table 3.15: Intra-natal care

Indicator	Category	Study area (n=196)	Control area (n=197)	p value
Completed 9 months at the time	Yes	91.8	93.4	
of delivery	No	08.2	06.6	0.553
of don't ory	110	00.2	00.0	
	Home	05.6	03.6	
	Sasoon Hospital	18.9	19.3	
Place of delivery	Govt. Hospital outside Pune	21.4	12.2	0.161
j	Command Hospital	11.2	14.2	
	Sane Guruji Hospital	18.9	22.3	
	Private Hospital	23.9	28.4	
	-			
Dames and delivery of	Nurse/Doctor	18.2	14.3	na
Person conducted delivery at home	Other person	81.8	85.7	
nome	n	11	07	
Person conducted delivery at	Nurse	25.4	06.3	0.000
hospital	Doctor	74.6	93.7	0.000
nospitai	n	185	190	
	Less than 24 hours	02.7	03.2	
Number of days admitted in the	1-3 days	52.4	47.9	
hospital for delivery	4-6 days	21.6	23.7	0.853
liospital for delivery	7+ days	23.2	25.3	
	n	185	190	
	Normal	76.5	72.1	
Type of delivery	Caesarean	20.9	21.8	0.053
Type of delivery	Forceps	01.0	0.00	
	Use of injections	01.5	06.1	

# **Self reported complications during delivery:**

Out of all young married women who reported live birth as the pregnancy outcome. About half of the respondents (48.9% from study area and 55.3% from control area) reported to have at least one intra natal complication. No significant difference is observed in self reported prevalence of intra natal complication between study and control samples. (p=0.614). The complications reported were: large perineal tear,

obstructed/prolonged labor, excessive bleeding, did not get good contractions, contractions stopped prematurely. (Refer Table 3.16)

Table 3.16: Self reported complications during delivery

Indicator	Category	Study area (n=196)	Control area (n=197)	p value
Contractions stopped prematurely	Yes	12.8	20.3	0.044
Did not get good contractions	Yes	09.2	12.7	0.265
Obstructed/prolonged labour	Yes	07.6	10.7	0.302
Hand/cord prolapse	Yes	02.0	04.6	0.161
Meconium discharge	Yes	03.1	03.0	0.993
Decreased foetal movements	Yes	05.6	02.5	0.123
Severe headache	Yes	04.6	10.7	0.024
Excessive bleeding	Yes	13.8	07.1	0.031
Large perineal tear	Yes	23.9	27.4	0.436
Premature rupture of membrane	Yes	02.0	02.5	0.742
Any one symptom of intra-natal complication	Yes	48.9	55.3	0.208
Place of treatment for intra-natal complications	Same hospital Other hospital Did not take	95.8 02.1 02.1	98.2 00.9 00.9	0.614
	n	96	109	

#### Post natal care

Post-natal services are essential for the mother and new born as most maternal and neonatal mortality and morbidity takes place during this period. At least three post-natal visits are recommended within the first 28 days after birth.

#### **Post-natal services:**

During the survey young married women were asked if they received post natal services from the government ANM / private nurse in their slum. Only 1.5 percent young married women from study area and 1.0 percent from control area reported that they received services by the govt. ANM within 45 days after delivery.

42.3 percent delivered mothers from the study area and 48.2 percent from control area had visited hospital for post-natal care after delivery within 45 days. (Refer Table 3.17)

No significant difference is observed in postnatal care services provided by ANM to the delivered mothers between study and control area (p=0.469) (Refer Table 3.17)

Only 1.0 percent women reported that they had been visited at least once by the government ANM at home within 45 days after delivery. Utilization of post-natal care by the delivered mothers found to be very low in both the areas.

Table 3.17: Postnatal services received by the young married women

Indicator	Category	Study area (n=196)	Control area (n=197)	p value
Received home based post- natal care from Govt. ANM within 45 days after delivery	Yes	01.5	01.0	0.469
Received home based post- natal care from Private ANM within 45 days after delivery	Yes	00.5	00.0	na
Visited hospital for post-natal care after delivery within 45 days	Yes	42.3	48.2	0.242
Number of times taken post- natal care from hospital after delivery within 45 days	Once	62.6	60.0	
	Two times	26.5	27.4	0.913
	Three & more times	10.8	12.6	
derivery within 45 days	n			

## Prevalence of self reported symptoms of postnatal complications:

Table 3.18 provides information about the prevalence of symptoms indicative of an postnatal complication: In the study area, reported prevalence of symptoms of anemia was 26.0 percent, sever bleeding 4.6 percent, swelling of face 3.1 percent, breast engorgement 8.7 percent, fever 18.4 percent, pain in lower abdomen 6.1 percent, cracked nipples 6.6 percent, sever pain in legs 3.1 percent, and painful micturation 4.1 percent. (Refer Table 3.18)

In the control area, reported prevalence of symptoms of anemia was 25.9 percent, sever bleeding 7.6 percent, swelling of face 06.6 percent, breast engorgement 23.8 percent, fever 21.3 percent, foul smelling discharge 5.1 percent, pain in lower abdomen 16.2 percent, cracked nipples 7.6 percent, sever pain in legs 10.1 percent, and painful micturation 5.68 percent. (Refer Table 3.18)

Reported prevalence of any one postnatal complication was 43.4 percent for the study area, whereas it was 48.7 percent for the control area. (Refer Table 3.18)

The self reported prevalence anyone postnatal complication is high. No significant difference is observed in self reported prevalence of postnatal complications between study and control sample.

Table 3.18: Self reported symptoms of postnatal complications

Indicator	Category	Study area (n=196)	Control area (n=197)	p value
		70	70	
Sever bleeding	Yes	04.6	07.6	0.211
_				
Symptoms of anemia	Yes	26.0	25.9	0.976
Swelling on face	Yes	03.1	06.6	0.102
Swalling on logs	Yes	03.1	07.6	0.045
Swelling on legs	168	05.1	07.0	0.043
Breast engorgement	Yes	08.7	23.8	0.000
Fever	Yes	18.4	21.3	0.463
	105	10.1	21.5	0.102
Foul smelling discharge	Yes	00.0	05.1	na
Pain in abdomen	Yes	06.1	16.2	0.001
Cracked nipples	Yes	06.6	07.6	0.705

Indicator	Category	Study area (n=196)	Control area (n=197)	p value
Pain during urination	Yes	04.1	05.6	0.488
Sever pain in legs	Yes	03.1	10.1	0.005
Doesn't talk to anybody/sits alone	Yes	01.5	02.0	0.708
Any one symptom of postnatal complications	Yes	43.4	48.7	0.286

# Referral for treatment of postnatal complications

A vast majority of the respondents from study as well as control area said that they themselves identified the complications occurred within 45 days after delivery. A vast majority said that they have not received any referral for the treatment of postnatal complications from any health provider. (Refer Table 3.19)

Table 3.19: Referral for treatment of postnatal complications

Indicator	Category	Study area	Control area	p value
	Category	(n=196)	(n=197)	
		%	%	
	Self	94.1	91.7	
Person who identified the complications occurred within	Community health worker (CHW)	0.00	0.00	
45 days after delivery	ANM	02.4	01.0	
(Multiple answer)	Family members / relatives	03.5	07.3	
	n	85	96	
	Self	34.1	25.0	
Person who provide referral for treatment of PN complications to the mother	Community health worker (CHW)	00.0	0.00	
	ANM	02.3	03.1	
	Family members	60.0	61.4	
	Not received any referral	12.9	07.3	
	N	85	96	

### **Treatment for postnatal complications:**

Out of the young married women who reported post natal complications, 23.5 percent from study area and 16.7 percent from control area did not go for any treatment. The proportion that reportedly sought treatment within two days was 72.9 percent in the study area and 62.5 percent in the control area. (Refer Table 3.20)

Table 3.20 describes the place where the respondents were treated for symptoms of postnatal complications: in the study area, 30.8 percent reported going to the government facility, 9.2 percent reported government tertiary facility, and 58.5 percent reported seeking treatment at a private hospital. In the control area, 70.0 percent reported seeking treatment at private hospitals/clinics.

The respondents were asked about how long (in days) their treatment had lasted. 52.3 percent respondents from both the areas took the treatment at home for 7 & more days for postnatal complications. 60.0 percent of the respondents from study area and 48.7 percent from the control area said that their husband was present during treatment for PN complications. (Refer Table 3.20)

Table 3.20: Treatment for postnatal complications

			Study	Control	
Indicator	Category		area	area	p value
			(n=196) %	(n=197) %	
			/0	/0	
How long did it take you to	Within 24 hours		48.2	42.7	
	1-2 days		24.7	19.8	
seek treatment after you	After 3 days		03.5	20.8	0.006
became symptomatic?	Did not seek treatment		23.5	16.7	
- <i>-</i> 		n	85	96	
	Primary urban health centre (PUHC)		01.5	0.00	0.225
Place of treatment for postnatal	Govt Hospital		30.8	18.7	
complications	Sasson Hospital		09.2	11.3	0.235
	Private Hospital		58.5	70.0	
		n	65	80	
Number of days taken	<= 6 days		47.7	47.5	0.982
treatment at home	7 & more days		52.3	52.5	0.702
treatment at nome		n	65	80	
Number of days admitted in the	No		90.8	86.3	
hospital for treatment	1-2 days		03.1	06.3	0.630
nospital for treatment	3 & more days		06.2	07.5	

		Study	Control	
Indicator	Category	area	area	p value
marator	caregory	(n=196)	(n=197)	p varae
		%	%	
	n	65	80	
Husband present during treatment for PN complication	Yes	60.0	48.7	0.177
at the hospital				

#### Neo-natal care

This section includes initiation of breast feeding, birth weight, thermal care, neonatal complications and treatment seeking behaviour.

#### **Breastfeeding and thermal care:**

Table 3.21 outlines the proportion of respondents who actually fed their newborns colostrum: the vast majority of the respondents from both the area said that they gave their newborns colostrum as the first feed after birth.

In the study area, the majority of the respondents (65.8%) said that they gave their newborns colostrum as the first feed after birth, 7.6 percent gave Sugar water, 22.0 percent gave top milk, 2.5 gave honey, and 2.0 percent gave tea/water as the first feed to their newborn after birth.

In the control area, the majority of the respondents (62.2%) said that they gave their newborns colostrum as the first feed after birth, 3.1 percent gave Sugar water, 19.3 percent gave top milk, 12.2 gave honey, and 3. 2 percent gave other feed e.g. water/Guti/Castrol oil as the first feed to their newborn after birth.

Table 3.21 describes how soon after birth the respondent breastfed their newborns: 35.2 percent from the study area and comparatively high proportion 54.8 percent from the control area reported that they initiated breastfeeding within one hour after birth, 42.8 percent from the study area and 29.4 percent from the control area said one to twenty four hours after birth.

Two out of three respondents said that they gave their newborns colostrums as the first feed after birth. Significantly high proportion of the respondents from the control area began to breastfeed their newborns within one hour of birth of the baby.

Table 3.21: Breastfeeding

Indicator	Category	Study area (n=196)	Control area (n=197)	p value
What did you give your baby as the first feed after birth?	Colostrums	65.8	62.2	0.485
Harry same after high did you	Within 1 hour after birth	35.2	54.8	
How soon after birth did you	1 to 24 hours after birth	42.8	29.4	
begin to breastfeed your newborn?	After 24 hours	19.4	13.2	
	Not fed	02.5	02.5	

### Birth weight of children born to young married women:

Weight of the baby is to be taken soon after birth or within 24 hours after birth. This is needed to understand the nutritional and health status of the baby. Also, it helps to know whether the baby is of low birth weight or not. If the baby's weight is below 2.5 kg, it requires special care.

Data were sought on the proportion of respondents whose babies were weighed within 24 hours and those whose babies were weighed after 24 hours of birth. A vast majority (91.8% from study area and 97.5% form control area) of the newborns from study and control area were weighed on the day of delivery. (Refer Table 3.22)

Since most of the respondents had delivered in a hospital, a majority (above 90%) of the respondents reported that either a nurse or a doctor took the birth weight. (Refer Table 3.22)

33.8 percent of the respondents from study area & 30.7 percent from the control area who had weighed their babies at birth reported that their babies were of low birth weight, (i.e., less than 2500gm), whereas 66.2 percent from study area and 69.3 percent from control area reported birth weight of more than or equal to 2500gm, i.e., indicating a normal birth weight. (Refer Table 3.22)

The vast majority of the respondents got their baby weighed within 24 hours of birth. One out of three of the babies born were reportedly of low birth weight.

Table 3.22: Birth weight

		Study	Control	
Indicator	Cotogory	area	area	n voluo
mulcator	Category	(n=196)	(n=197)	p value
		%	%	
	Within 24 hours after birth	91.8	97.5	
How soon after birth was the baby weighed? (In hours)	After 24 hours	04.1	01.5	0.067
	Not weighed	03.6	00.5	0.007
	Don't remember	00.5	00.5	
	Govt. ANM	52.7	50.5	
	Private ANM	19.4	19.8	0.099
	Govt Doctor	18.3	16.2	
Who weighed the baby?	Private Doctor	06.1	13.0	
	Others	01.7	0.00	
	Cant say	01.7	00.5	
	n	180	192	
	Low birth weight - <2.5 kg	33.8	30.7	
Weight of the baby at the time of birth	Normal birth weight - >= 2.5 kg	66.2	69.3	0.579
	n	180	192	
Have record of birth weight	Yes	77.8	97.4	0.000

### Neonatal complications (complications within the first 28 days of life):

Table 3.23 sets out the various complications that the respondents' newborns experienced: In the study area, 58.7 percent of newborns reportedly did not experience any complications. 5.1 percent reported limp/blue/pale at the time of birth,5.6 percent reportedly had difficulty in breathing, 1.5 percent reported hypothermia, 4.6 percent were unable to suckle, 2.5 percent suffered from infected and inflamed eyes, 8.7 percent reportedly had fever, 25.5 percent reportedly low birth weight, 1.5 percent had an infection of the cord stump (the area was inflamed and purulent), 1.0 percent reportedly had thick white coating at tongue, and 1.0 percent reportedly did not pass urine & stools within 24 hours of birth.

In the control area, 69.1 percent of newborns reportedly did not experience any complications. 3.5 percent reported limp/blue/pale at the time of birth, 6.1 percent reportedly had difficulty in breathing, 1.5 percent reported hypothermia, 5.6 percent were unable to suckle, 4.1 percent suffered from infected and inflamed eyes, 7.6 percent reportedly had fever, 14.7 percent reportedly low birth weight, 3.1 percent had an infection of the cord stump (the area was inflamed and purulent), and 3.1 percent reportedly had thick white coating at tongue. (Refer Table 3.23)

Prevalence of self reported symptoms of neonatal complications observed significantly high in the study area (41.3%) compared to control area (30.9%) (p=0.033).

Table 3.23: Any one symptom of neonatal complication

Indicator	Category	Study area (n=196)	Control area (n=197)	p value
Limp/blue/pale at the time of birth	Yes	05.1	03.5	0.450
Difficulty in breathing	Yes	05.6	06.1	0.840
Convulsions	Yes	00.5	01.0	0.568
Colour of the skin is bluish instead of pinkish	Yes	02.1	02.5	0.742
Body is cold (hypothermic)	Yes	01.5	01.5	0.995
Birth weight is less than 2.5 kg	Yes	25.5	14.7	0.008
Baby has a congenital defect or abnormality	Yes	00.5	01.0	0.565
Depressed fontanels	Yes	00.5	03.5	0.033
Baby has fever	Yes	08.7	07.6	0.701
Eyes are encrusted with discharge	Yes	02.5	04.1	0.403
Tongue has a thick white coating	Yes	01.0	03.1	0.155
Baby is unable to suckle	Yes	04.6	05.6	0.655
Area around cord stump appears inflamed and discharge from the cord stump	Yes	01.5	03.1	0.315
Baby does not pass urine or stool within 24 hours	Yes	01.0	00.0	na

		Study	Control	
Indicator	Category	area (n=196)	area (n=197)	p value
		(II=190) %	` '	
		%0	%	
Any one symptom of neonatal complication	Yes	41.3	30.9	0.033

### Treatment utilization for neo-natal complications

In study area, a total 81 respondents reported at least one neonatal complication. Out of these, 59.3 percent took the neonate for treatment within 24 hours, 14.8 percent took after 24 hours of the onset of the symptoms, whereas about 25.9 percent did not seek any treatment. (Refer Table 3.24)

In control area, a total 61 respondents reported at least one neonatal complication. Out of these, 55.7 percent took the neonate for treatment within 24 hours, 23 percent took after 24 hours of the onset of the symptoms, whereas about 21.3 percent did not seek any treatment. (Refer Table 3.24)

Table 3.24 describes the place where the neonates were treated for symptoms of neonatal complications: in the study area, 28.3 percent reported going to the government primary or secondary facility, 20.0 percent reported government tertiary faculty, whereas 51.7 percent reported seeking treatment at a private hospital. In the control area, 56.3 percent reported seeking treatment at private hospitals/clinics.

The respondents were asked about how long (in days) their treatment had lasted. 56.7 percent from the study area took the treatment at home for 7 & more days whereas 52.1 percent from the control area took the treatment for 7 & more days for neonatal complications. 41.7 percent neonates from the study area and 39.6 percent from control area were admitted for three or more days at hospital for the treatment of neonatal complication. (Refer Table 3.24)

Table 3.24: Treatment for neonatal complications

Indicator		Study	Control	
	Catagory	area	area	p value
	Category	(n=196)	(n=197)	p varue
		%	%	
	Within 24 hours	59.3	55.7	0.245
How soon after the baby	1-2 days	04.9	14.7	
became symptomatic did you	After 3 days	09.9	08.2	
seek?	Did not seek treatment	25.9	21.3	
	n	81	61	

		Study	Control	
Indicator	Category	area	area	n value
Indicator	Category (	(n=196)	(n=197)	p value
		%	%	
	Govt. hospital	28.3	25.0	
Place of treatment for neonatal	Sasoon Hospital	20.0	18.7	
complications	Private hospital	51.7	56.3	
	n	60	48	
Number of days taken	<= 6 days	43.3	47.9	0.634
Number of days taken treatment at home	7 & more days	56.7	52.1	0.034
treatment at nome	n	60	48	
	No	53.3	45.8	
Number of days admitted in the	1-2 days	05.0	14.5	0.226
hospital for treatment	3 & more days	41.7	39.6	0.220
	n	60	48	

Integrated reproductive and sexual health and family planning project for adolescent girls and young married women in urban slums of Pune city

**Section IV: Family planning** 



# Section IV: Family planning

## Ever use of contraceptive among all married adolescent girls:

All the young married women were asked if they had ever used a contraceptive method. In study area, among young married women aged <=24 years, the most popular method was female sterilization (10.0%) followed by condom or Nirodh (8.8%), Contraceptive oral pill (7.0%), Intra Uterine Device (2.7%) and natural methods (1.8%). (Refer Table 4.1).

In control area, among young married women aged <=24 years, the most popular method was condom or *Nirodh* (13.6%) followed by female sterilization (12.0%), Contraceptive oral pill (7.7%), Intra Uterine Device (1.8%) and natural methods (1.5%). (Refer Table 4.1).

Table 4.1: Ever use of family planning methods - among all young married women

Variable	Category	Study area % (n=327)	Control area % (n=324)	p value
_				
Ever use of contraceptive oral pills	Yes	07.0	07.7	07.4
Ever use of condom/Nirodh	Yes	08.8	13.6	0.05
Ever use of Intra Uterine Device (IUD)	Yes	02.7	01.8	0.44
Device (10D)				
Ever use of natural methods	Yes	01.8	01.5	0.773
Female sterilization	Yes	10.1	12.0	0.429
Male sterilization	Yes	00.3	0.00	na

#### Current use of contraceptives among young married women:

In study area, of the 327 women who were interviewed, only 11.1 percent young married women reported that they were currently using contraceptives. Among women who were currently using family planning methods, 3.4 percent were using contraceptive pills, 5.8 percent condoms, 2.1 percent an intrauterine device. (Refer Table 4.2)

In control area, of the 324 women who were interviewed, only 13.9 percent young married women reported that they were currently using contraceptives. Among women

who were currently using family planning methods, 3.7 percent were using contraceptive pills, 7.4 percent condoms, 1.5 percent an intrauterine device. (Refer Table 4.2)

The prevalence of current use of any one contraceptive method is found to be low in study as well as control area. The decision regarding use of current contraceptives was taken by the couple.

Table 4.2: Current use of contraceptives among young married women

Variable	Category	Study area % (n=327)	Control area % (n=324)	p value
Current use of contraceptive oral pills	Yes	03.4	03.7	0.814
Current use of condom/nirodh	Yes	05.8	07.4	0.412
Current use of Intra Uterine Device (IUD)	Yes	02.1	01.5	0.571
Current use of contraceptive injections	Yes	00.0	00.3	na
Current use of natural methods	Yes	00.3	00.9	na
Current use of any one temporary contraceptive method	Yes	11.1	13.9	0.266
3371	Self	75.0	71.1	
Who took the decision regarding use of current contraceptive for delay	Husband	86.1	86.7	
	Other family members	02.7	04.4	
preganancy (Multiple Answer)	n	36	45	
_				

### Perception on use of family planning methods:

Table 4.3 provides data on the respondents' perception as to the proportion (out of 10) of women from their areas using temporary contraceptives: in study area, 21.1 percent reported none, 16.8 percent reported one to five women and only 3.7 percent reported 6 to 10 women. The proportion of women that not able to come up with an estimate was 58.4 percent.

In control area, 5.6 percent reported none, 17.8 percent reported one to five women and only 3.1 percent reported 6 to 10 women. The proportion of women that not able to come up with an estimate was 73.8 percent. (Refer Table 4.3)

Table 4.3 provides data on the respondents' perception as to the proportion (out of 10) of women from their areas using permanent family planning methods: In study area, 10.7 percent respondents perceived that 6-10 women (out of 10 women from their areas) were using permanent family planning methods, 37.6 percent reported 1-5 women and the proportion that was not able to come up with an estimate was 37.6 percent. (Refer Table 4.3)

In control area, 12.0 percent respondents perceived that 6-10 women (out of 10 women from their areas) were using permanent family planning methods, 42.6 percent reported 1-5 women and the proportion that was not able to come up with an estimate was 40.7 percent. (Refer Table 4.3)

Only 3 percent of respondents thought that a majority of the women in their community would be using temporary contraceptives. Thus, the perception of the social norm regarding this behaviour is still quite weak.

Table 4.3: Respondents' perception on use of family planning methods

Variable	Category	Study area %	Control area %	p value
		(n=327)	(n=324)	
Out of 10 neighboring households, how many women are using temporary FP methods	Nil	21.1	05.6	
	1-5 women	16.8	17.8	0.000
	6-10 women	03.7	03.1	
are using temporary 11 methods	Can't say	58.4	73.8	
Out of 10 neighboring	Nil	14.1	04.6	
	1-5 women	37.6	42.6	0.001
households, how many women are using permanent FP methods	6-10 women	10.7	12.0	0.001
	Can't say	37.6	40.7	

Integrated reproductive and sexual health and family planning project for adolescent girls and young married women in urban slums of Pune city

**Section V: Reproductive Health** 



## **Section V: Reproductive health**

This section includes information on self reported symptoms of urinary tract infection, reproductive tract infections, sexually transmitted infections and treatment seeking behaviour for the symptoms of reproductive health problems.

### Prevalence of self reported symptoms of urinary tract infections:

Young married women were asked questions related to symptoms of urinary tract infection, 5.5 percent women from study area and 9.3 percent from control are reported having had burning sensation or pain during urination. 5.2 percent women from study area and 4.6 from control area reported frequent micturation. (Refer Table 5.1)

Of the total women interviewed, 8.8 percent from study area and 11.1 percent from control area reported having had at least one symptom of UTI. Out of the women who reported any one symptom of urinary tract infection, 44 percent sought treatment for the symptoms of UTI. (Refer Table 5.1)

No significant difference observed in the reported prevalence of any one symptom of UTI between study and control area. 66 percent did not go for any treatment.

Table 5.1: Self reported symptoms of urinary tract infections – prevalence

Variable	Category	Study area % (n=327)	Control area % (n=324)	p value
Reported symptoms of UTI	Burning sensation/pain during urination	05.5	09.3	0.067
	Frequent micturation	05.2	04.6	0.737
Any one symptom of UTI	Yes	08.8	11.1	0.340
Treatment taken for symptoms	Yes	44.8	44.4	0.975
of UTI	n	29	36	

### Prevalence of any one self reported symptom of Reproductive Tract Infection:

The respondents were asked questions if they were suffering from like white discharge, itching in private parts, pain in lower abdomen and pain during intercourse, excessive pain/bleeding during menstruation, pain in lower back to get information on Reproductive Tract Infection. Reported prevalence of reproductive tract infection is slightly high in control area (31.5%) as compared to study area (24.8%) (p=0.057).

In study area, about 6.4 percent women reported white discharge, 4.9 percent itching in genitalia, 7.6 percent pain in lower abdomen, 5.5 percent pain during intercourse, and 15.6 percent lower back pain. Of the young married women who reported any one symptom of reproductive tract infection, little more than half (54.3%) did not go for treatment, 45.7 percent said that they got treated. (Refer Table 5.2)

In control area, about 8.0 percent women reported white discharge, 10.8 percent itching in genitalia, 7.7 percent pain in lower abdomen, 7.1 percent pain during intercourse, and 17.6 percent lower back pain. Of the young married women who reported any one symptom of reproductive tract infection, the majority (61.8%) did not go for treatment, 38.2 percent said that they got treated. (Refer Table 5.2)

The proportion of young married women who took treatment for the symptoms of RTI is low.

Table 5.2: Self reported symptoms of reproductive tract infections (RTIs) – prevalence

		Study	Control	
Variable	Category	area		p value
	2 3	%	%	1
		(n=327)	(n=324)	
	White discharge per vagina	06.4	08.0	0.430
	Itching in private parts	04.9	10.8	0.005
Deported symptoms of DTI	Pain in lower abdomen	07.6	07.7	0.973
Reported symptoms of RTI	Pain during sexual intercourse	05.5	07.1	0.402
	Low back ache	15.6	17.6	0.494
Any one symptom of RTI	Yes	24.8	31.5	0.057
Treatment taken for symptoms	Yes	45.7	38.2	0.310
of RTI	n	81	102	

#### Prevalence of self reported symptoms of Sexually Transmitted Infections:

Respondents were asked whether they were suffering from foul smelling discharge, purulent discharge, or pain / swelling in the inguinal area.

In study area, of the 327 young married women who were asked about symptoms of STI, 3.9 percent said they had one or more symptom of STI – 2.7 percent reported foul smelling discharge, 0.3 percent reported purulent discharge, 0.9 percent reported a vaginal ulcer, and 0.3 percent reported painful swelling in the inguinal region. (Refer Table 5.3)

In control area, of the 324 young married women who were asked about symptoms of STI, 3.1 percent said they had one or more symptom of STI -2.1 percent reported foul smelling discharge, and 0.9 percent reported a vaginal ulcer. (Refer Table 5.3)

Of the women who reported any one symptom of sexually transmitted infections, the majority (53.9% from study area and 70% from control area) did not go for treatment. (Refer Table 5.3)

Table 5.3: Self reported symptoms of sexually transmitted infections (STIs) – prevalence

Variable	Category	Study area % (n=327)	Control area % (n=324)	p value
	Foul smelling discharge per vagina	02.7	02.1	0.626
D	Purulent discharge per vagina	00.3	00.0	na
Reported symptoms of STI	Painful or painless ulcer in private parts	00.9	00.9	0.991
	Enlarged inguinal lymph nodes	00.3	00.0	na
Any one symptom of STI	Yes	03.9	03.1	0.539
Treatment taken for symptoms	Yes	46.1	30.0	0.431
of STI	n	13	10	

Integrated reproductive and sexual health and family planning project for adolescent girls and young married women in urban slums of Pune city

**Section VI: Domestic violence** 



### Section VI: Reported domestic violence

#### Reported physical violence by young married women

In order to assess the prevalence of domestic violence, all currently married young women of age<=24 years were asked whether they had been beaten or physically mistreated by their husband in the past twelve months.

When the question whether respondent was hit by her husband in past twelve months was asked about 22.9 percent young married women from study area and 17.0 percent from control area reported in the affirmative. No significant difference is observed in the reported physical violence between study & control samples (p=0.063). (Refer Table 6.1)

When the question was asked to young married women - how many times were you beaten by your husband in past one year? In study area, 72.9 percent reported that they were beaten one to three times, 9.5 percent women reported that they were beaten four to six times, 2.7 percent reported experiencing physical violence seven to eleven times, and 14.8 percent reported experiencing physical violence twelve and more times in past one year. (Refer Table 6.1)

In control area, 55.6 percent reported that they were beaten one to three times, 16.7 percent women reported that they were beaten four to six times and 22.2 percent reported experiencing physical violence twelve & more times in past one year. (Refer Table 6.1)

When the question whether respondent was hit by her husband in past one month was asked about 11.8 percent young married women from study area and 8.2 percent from control area reported in the affirmative. No significant difference is observed in the reported physical violence in the last month prior to survey between study & control samples (p=0.133). (Refer Table 6.1)

About 6.5 percent young married women from study area and 4.1 percent from control area reported that they were beaten by their husband in the last one week prior to the survey. (Refer Table 6.1)

About 2 out of 10 currently married young women experienced physical violence by their husband in the past twelve months.

Table 6.1: Proportion of young married women reported physical violence in the last 12 months

Variable	Category	Study area % (n=323)	Control area % (n=317)	p value
Physical violence by husband in the last 12 months	Yes	22.9	17.0	0.063
	One to three times	72.9	55.6	
Frequency of physical violence by husband in the last 12 months	Four to six times	09.5	16.7	
	Seven to eleven times	02.7	05.6	0.228
	Twelve & more	14.8	22.2	0.228
	Average	05.04	11.33	
	n	74	54	
Physical violence by husband in the last one month	Yes	11.8	08.2	0.133
	Nil	47.3	51.8	
Emaguanay of physical violence	One times	32.4	27.8	
Frequency of physical violence	Two times	12.6	09.3	0.655
by husband in the last one month		07.7	11.1	0.055
montn	Three & more times			
	n	74	54	
Physical violence by husband in the last one week	Yes	06.5	04.1	0.176

Integrated reproductive and sexual health and family planning project for adolescent girls and young married women in urban slums of Pune city

Section VII: Knowledge of reproductive health



## Section VII: Knowledge of reproductive health

Knowledge of reproductive health issues is a known determinant of reproductive health behaviours, particularly health seeking behaviours. In this section the respondents were asked questions on their knowledge about various reproductive health issues.

### Knowledge of anemia, components of antenatal care:

A question was asked to all of the respondents to assess their knowledge on main causes of anemia; responses were categorized as correct or incorrect: merely 4.6 percent respondents from the study area and 6.2 percent from control area had correct knowledge about causes of anemia. (Refer Table 7.1)

A substantially high proportion of the respondents from both the area (74.9% from study area and 80.3% from control area) said that women should go for first check-up if she missed periods within the first twelve weeks of pregnancy. (Refer Table 7.1)

In study area, 39.5 percent respondents correctly answered that a pregnant woman needs to consume at least 90 IFA tablets during the course of her pregnancy whereas 20.5 percent incorrectly answered that a woman need take up to 90 tablets. (Refer Table 7.1)

In control area, 58.9 percent respondents correctly answered that a pregnant woman needs to consume at least 90 IFA tablets during the course of her pregnancy whereas 16.7 percent incorrectly answered that a woman need take up to 90 tablets. (Refer Table 7.1)

No significant difference observed regarding knowledge of young married women about causes of anemia, antenatal registration and consumption of IFA tables during pregnancy between study and control area sample.

Most of the respondents were aware of the fact that registration for antenatal services needs to be done within 12 weeks of pregnancy.

Table 7.1: Knowledge of anemia and components of antenatal care

Question	Category	Study area % (n=327)	Control area % (n=324)	p value
What is the main cause of anemia	Correct answer	04.6	06.2	0.423
When should a woman go for	<=12 weeks	74.9	80.3	
first check-up if she missed	After 12 weeks	14.7	12.3	0.237
periods?	Don't know	10.4	07.4	

Question	Category	Study area % (n=327)	Control area % (n=324)	p value
How many IFA tablets should a pregnant woman consume during the course of her pregnancy?	<90 IFA tablets	20.5	16.7	
	90 & more tablets	39.5	58.9	0.000
	Don't know	40.1	24.4	

### **Awareness of the antenatal complications:**

Table 7.2 delineates the respondents' knowledge and perceptions regarding the danger signs that might be seen during pregnancy: In study area, 17.7 percent cited weakness and dizziness, 23.5 percent continuous nausea and vomiting, 5.8 percent bleeding, 11.0 percent swelling in face and legs, 3.1 percent convulsions/loss of consciousness, 5.5 percent severe headache, 7.9 percent high BP, 14.9 percent pain in the lower abdomen, 2.7 percent reduced fetal movements. 50.1 percent of the respondents reported that they didn't know. (Refer Table 7.2)

In control area, 42.9 percent cited weakness and dizziness, 63.8 percent continuous nausea and vomiting, 3.4 percent bleeding, 17.6 percent swelling in face and legs, 2.5 percent convulsions/loss of consciousness, 7.4 percent severe headache, 11.1 percent high BP, 17.9 percent pain in the lower abdomen, 2.1 percent reduced fetal movements. 16.7 percent of the respondents reported that they didn't know. (Refer Table 7.2)

High proportions of young married women from study area are not aware of any one symptom of antenatal complication as compared to control area.

Table 7.2: Awareness of the antenatal complications

Question	Category	Study area % (n=327)	Control area % (n=324)	p value
	Weakness and dizziness	17.7	42.9	
	Continuous nausea and vomiting	23.5	63.8	
Respondents aware of symptoms indicative of	Welling in tace teet	11.0	17.6	
symptoms indicative of antennal complications (Multiple answers)	Oblique or transverse lie, breech	00.6	00.3	
	High blood pressure	07.9	11.1	
	Severe head ache	05.5	07.4	
	Bleeding	05.8	03.4	

		Study	Control	
Question	Category	area	area	p value
	Culogory		%	p varae
		(n=327)	(n=324)	
	Reduced fetal movements	02.7	02.1	
	Burning sensation during urination	00.6	01.5	
	Severe pain in the lower abdomen	14.9	17.9	
	Convulsions	03.1	02.5	
	Don't know	50.1	16.7	

#### Awareness of the postnatal complications:

Table 7.3 outlines some of the signs and symptoms of postnatal complications as cited by the respondents: in the study area, 22.3 percent cited heavy bleeding, 12.6 percent said tenderness and pain in the lower abdomen, 6.1 percent fever, 0.6 percent foul-smelling discharge, 16.2 percent weakness & dizziness, 1.2 percent engorged breasts, 0.9 percent cracked nipples, 0.6 percent swelling over face, 2.7 percent swelling over feet, 1.8 percent burning sensation during urination, 6.7 severe pain in legs and 56.7 percent were not able to cite any complications.

In control area, 29.0 percent cited heavy bleeding, 25.2 percent said tenderness and pain in the lower abdomen, 7.4 percent fever, 0.6 percent foul-smelling discharge, 23.4 percent weakness & dizziness, 3.4 percent engorged breasts, 0.6 percent cracked nipples, 3.7 percent swelling over face, 5.2 percent swelling over feet, 3.4 percent burning sensation during urination, 7.7 severe pain in legs and 36.1 percent were not able to cite any complications. (Refer Table 7.3)

High proportions of young married women from study area are not aware of any one symptom indicative of postnatal complication as compared to control area. A substantial proportion of the respondents were aware of the following post natal complications – heavy vaginal bleeding, weakness and dizziness, tenderness and pain in lower abdomen.

Table 7.3: Awareness of the postnatal complications

Question	Category	Study area % (n=327)	Control area % (n=324)	p value
Respondents aware o	Heavy vaginal bleeding	22.3	29.0	
symptoms indicative o	Weakness and dizziness	16.2	23.4	
postnatal complications	Swelling over face	00.6	03.7	

		Study	Control	
Question	Category	area	area	p value
Question	Category	%	%	Prarae
		(n=327)	(n=324)	
	Swelling over feet	02.7	05.2	
(Multiple answers)	Engorged breast	01.2	03.4	
	Fever	06.1	07.4	
	Foul smelling discharge	00.6	00.6	
	Tenderness & pain in lower abdomen	12.6	25.2	
	Cracked nipples	00.9	00.6	
	Burning sensation during urination	01.8	03.4	
	Sever pain in legs	06.7	07.7	
	Don't know	56.7	36.1	

### Awareness of the neonatal complications:

Table 7.4 outlines some of the danger signs that indicate a complication in the neonate (i.e., within the first 28 days of life), as cited by the respondents: 27.8 percent of the respondents from the study area and 40.4 percent from control area cited the instance of the baby having a fever, 0.6 percent from study area and 0.3 percent from control area cited the baby being hypothermic, 2.1 percent from study area and 0.9 percent from control area spoke of the area around the cord stump being inflamed and discharge from the cord stump, 5.8 from study area and 4.9 percent from control area spoke of the baby being unable to suckle, and 1.2 percent from study area and 0.9 percent from control area cited the instance of the baby being unresponsive and not crying. (Refer Table 7.4)

The other danger signs indicative of neonatal complications were: birth weight less than 2.5 Kg (6.7% from study area and 3.7% from control area), eyes are encrusted with discharge (1.2% from study area & 0.9% from control area), baby does not pass urine or stool within 24 hours (5.5% from study area & 3.1% from control area). (Refer Table 7.4)

51.4 percent of the young married women from the study area and comparatively less 40.7 percent from control area were not able to provide an answer. (Refer Table 7.4)

High proportions of young married women from study area are not aware of any one symptom indicative of neonatal complication as compared to control area.

Table 7.4: Awareness of the neonatal complications

Question	Category	Study area % (n=327)	Control area % (n=324)	p value
	T 11.1 11.1 1	067	02.7	
	Low birth weight baby	06.7	03.7	
	Difficulty / irregularity in breathing at the time of birth	04.3	03.1	
	Baby is unresponsive and does not cry	01.2	00.9	
	Body is cold (hypothermic)	00.6	00.3	
	Congenital defect or abnormality	0.00	00.3	
Respondents aware of	Fever	27.8	40.4	
symptoms indicative of neonatal complications	Eyes are encrusted with discharge	01.2	00.9	
(Multiple answer)	Tongue has a thick white coating	0.00	0.00	
	Baby is unable to suckle	05.8	04.9	
	Area around cord stump appears inflamed and discharge from the cord stump	02.1	00.9	
	Baby does not pass urine or stool within 24 hours	05.5	03.1	
	Don't know	51.4	40.7	

### **Awareness of Family planning methods:**

About 64.2 percent of the respondents from study area and comparatively high i.e. 63.2 percent from control area correctly listed out at least one name of family planning method. 38.5 percent respondents from study area and comparatively high i.e. 46.3 percent from control area are aware of any two methods of family planning.

A little more than half (53.8% from study area and 60.5% from control area) percent young married women felt that a woman should have her first child when she completed her 20th birthday. (Refer Table 7.5)

A substantial proportion of the respondents (67.9% from study area and 68.8% from control area) felt that a woman should maintain a gap of at least 3 years between two children. (Refer Table 7.5)

Knowledge of family planning methods is significantly high among the respondents from control area as compared study area. No significant difference observed regarding perception on age at the first birth and spacing between two children among young married women from study and control area.

Table 7.5: Awareness of family planning methods

Question	Category	Study area % (n=327)	Control area % (n=324)	p value
Aware of minimum two FP methods	Knows one method	25.7	16.9	
	Knows two methods	38.5	46.3	0.017
	Don't know	35.8	36.7	
At which age should a woman	>=20 years	53.8	60.5	
have her first child in your	<=19 years	38.2	34.6	0.125
opinion?	Don't know	07.9	04.9	1
What should be the minimum	1-2 years	28.1	26.8	0.921
	>=3 years	67.9	68.8	
gap between two children?	Don't know	03.9	04.3	

Integrated reproductive and sexual health and family planning project for adolescent girls and young married women in urban slums of Pune city

Section VIII: Utilization of health services and BCC exposure



# Section VIII: Health services and BCC exposure

In this section questions on the respondents' perception on awareness, and utilization of services provided community health worker, outreach clinics and exposure to BCC activities were asked.

### Appointment of community health worker in the slum:

Only one respondent from the study area reported appointment of community health workers in her slum. No community health workers were appointed in the study as well as control area. (Refer Table 8.1)

Table 8.1: Appointment of CHW in the slum

Question		Study	Control	
	Category	area area	p value	
Question	Category	%	%	p varue
		(n=327)	(n=324)	
CHW appointed for the slum	Yes	00.6	0.00	

#### Attendance at outreach clinics at the slum level:

In study area, 2.6 percent of young married women said that during their last pregnancy outreach clinic for maternal health was organized and they attended all the clinics which were organized. However in control area only one young married woman said that during her last pregnancy outreach clinic for maternal health was organized and she attended all the clinics. (Refer Table 8.2)

Outreach services for provision of primary level maternal care are not available in the study and control slums.

Table 8.2: Attendance at outreach clinics at slum

Question	Category	Study area % (n=327)	Control area % (n=324)	p value
Number of outreach clinics	Nil	97.4	99.7	
organized in the slum during your last pregnancy	1-4	02.6	00.3	
Number of outreach clinics attended by the respondent during last pregnancy	No	97.4	99.7	
	1-4	02.6	00.3	

#### **Exposure to group BCC & print media:**

Merely 2.1 percent of the respondents from the study area and 4.9 percent from control area knew the BCC meetings which were held for young married women at the slum level in the last six months period prior to the survey.

All the young married women were asked if they had attended any group meetings at the slum level in the last six months. A very low proportion (1.3% from the study area and only 3.4% from the control area) said that they had attended a group meeting in their slum in the last six months. (Refer Table 8.3)

Only 0.6 percent of the respondents from the study area and 1.2 percent from the control area reported that they had received a pamphlet or some printed material on any health issue in the last six months prior to the survey. (Refer Table 8.3)

Exposure to group BCC meetings and print media is found to be low in the study as well as control area samples.

Table 8.3: Exposure to group BCC & print media

Question	Category	Study area % (n=327)	Control area % (n=324)	p value
BCC meetings for young married women held in the last six months	Yes	02.1	04.9	
Respondents attended BCC meeting in the last 6 months	Yes	01.5	03.4	
Any pamphlet on health received in the past 6 months	Yes	00.6	01.2	