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## Utilization of Antenatal Services in Married Women of Reproductive Age (15-49 Years) and Their Autonomy at Household Level in Bahawalpur (City)

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(lower Socio-economic group) of Bahawalpur city.

### ABSTRACT

Autonomy means freedom to act or function independently. It is the capacity to make an informed unclear decision without the involvement of another system or operator.

#### Objective:

The objective of the study will be to:-

1. Determine the frequency of women's autonomy> at household level
2. Asses the utilization of antenatal services in married women of reproductive age (I 5-49 years) of Bahawalpur City.

#### Materials and Methods:

##### Study Design:

Cross sectional descriptive study.

##### Study Setting:

On judgmental basis Satellite town (Upper socio— economic group) and Shandrah

##### Duration:

Study was conducted from May10,2016 to July15, 2016.

##### Sample Size:

Level of confidence 95%.

Precision required 5%.

Anticipated population proportion (Least) women having high level of autonomy = 25%<sup>4</sup>.

Sample size calculated by using WHO software provided by CPSP for the purpose is 200.

##### Ethical Issues:

Informed consent will be taken from all participants. Researcher will bear expenses.

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**Sampling Technique:**

On judgmental basis Bahawalpur city is divided into upper and lower socioeconomic groups. One area from upper socioeconomic group out of total 09 and one from lower socio economic group out of total 13 selected by simple random sampling is Satellite Town and Shandrah respectively. There are 2346 houses in Satellite Town and 3211 in Shandrah as proportion of reproductive age group women is not known in these areas we will assume one woman of reproductive age in each household. Out of these two areas 285 women eligible for the study will be drawn by systematic random sampling on household basis in proportionate manner

i.e. 120 from Satellite town and 165 from Shandrah. All the houses will be numbered from 1-2346 and 1-3211 in satellite town and Shandrah respectively by researcher with the help of person from union council. First house will be selected by simple random sampling and every 19<sup>th</sup> house in Satellite town and Shandrah will be taken till completion of sample. From each household a woman fulfilling the inclusion criteria will be included in the study.

If any house will be found locked then the next house on the right side will be taken, similarly if eligible women not found in any house next house on right side will be taken. In case of more than one eligible respondent in one house younger one will be preferred.

**Inclusion Criteria:**

All the women of reproductive age (15-49 years) having at least one alive child less than one year of age irrespective of current pregnancy.

If women have more than one child alive then we will ask about antenatal care regarding last pregnancy.

**Exclusion Criteria:**

Not willing to be included in the study.

**Data Collection:**

Data will be collected through preformed pretested questionnaire that comprises of two parts. Part-I includes demographic variables as age, education, family income, number of live children and part-II consists of study variables i.e. women autonomy and utilization of antenatal services.

**Data Analysis:**

Data will be entered and analyzed by using statistical package for social sciences (SPSS) version 17.0. Mean and standard deviation will be calculated For numerical data like age. Frequencies and percentages will be calculated for qualitative variables i.e. women's autonomy (high, medium, low) and utilization of antenatal services (poor, fair, good). Stratification will be done according to age, women's education, Husband's education. Occupation of women monthly family income, type of family and

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number of living children and number of living sons. Chi square test will be applied to see any statistical difference between groups if existed. P value  $\leq 0.05$  will be taken as significant.

### Results:

In a study we took a sample of 200 women of reproductive age group. Overall autonomy of women was found to be 31.5% (high autonomy), 42.5% (medium autonomy) & 26% (low autonomy). In a study we found that increase in age autonomy increased, women belonging to age group 20-24 years have high autonomy (43%) where as women of 15-19 years had low autonomy (42%).

Regarding education autonomy increased with rise in education. Among uneducated women 19% were high autonomous, among secondary 45%, & above secondary 65% respectively.

In a study about 60% women from rural areas have medium autonomy 48.3% where as high autonomy was seen 46.25% in remaining 40% urban resident.

In a study 85% were unemployed and among them high autonomy was 30% were 40% high autonomy was found in employed.

In a study 15.5% respondents did not use antenatal services. 46.56% had poor, 21.30% had fair and 33.13 had good antenatal services.

In a study antenatal care increased with age and education as in age group 30-35 years (17) women had good antenatal care utilization. Women having education above secondary showed minimum 54% good utilization of antenatal care.

In a study resident of rural areas had 53% poor, whereas of urban areas 54% good utilization respectively.

In a study respondents of extended families had 44% poor, & that of small families had 41% good utilization respectively.

### Conclusion:



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Most of the women had medium autonomy. Autonomy increased with increasing age, employment, education, increased duration of marriage, number of children, urban residence & family income.

Most of the women used antenatal services but among them most had poor utilization.

Factor responsible for better utilization were increasing age, education,

Urban residence, employment, duration of marriage, family income and type of family.

### Introduction

Autonomy means freedom to act or function independently. It is the capacity to make an unlimited unclear decision without the involvement of another system or operator. Recently women's autonomy and its association with reproductive health and behavior have emerged as a vocal point of investigation and intervention around the world particularly since the Cairo International Conference on population and development (ICPD) women's role has been a priority area not only for sustainable development but also reproductive health.

Recently a number of studies have been carried out which examines women's autonomy in various fields of life and also in relation to antenatal services and health outcome. Most of these studies found relationship between various aspects of autonomy and reproductive health seeking behavior. It is found that women with greater freedom of movement are more likely to receive antenatal care. Women autonomy is also very important factor in determining the rate of development of a country.

Autonomy is an individual aspect of power. Educated women have more control over resources and they play a very important role in economic activities. Educated women having more awareness about their rights have better communication with their husbands. A number of factors contribute to make them more autonomous and more independent in decision making at household level. A study conducted in Pakistan found women's autonomy to be an important explanatory factor in child's survival. The socio-economic and demographic status of women is the best

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predictors of women's autonomy. Some of studies have analyzed the causes of under-utilization of maternal health services and identified both quality and cost of care as important influencing factors. Maternal age and poverty have also been found to be important determinants of health care used.

Women are about half of the world's population and other half directly or indirectly depends upon them. In developing world women empowerment is considered a multidimensional concept and is determined by socioeconomic factors and cultural norms. The concept of women empowerment was introduced at the international women conference at Nairobi in 19135. During the last two decades women empowerment becomes a popular issue.'

Antenatal and postnatal services are important tool to decrease maternal and neonatal morbidity and mortality. Antenatal care is a proactive approach to avoid the potential complications during the course of pregnancy and delivery. It is very important for the mother to visit the health care unit for prenatal care regardless they feel any complication or not. Maternal health care services are important for health and safety of both mother and infant during pregnancy, delivery and postnatal period.

In developing countries the utilization of prenatal health care services is influenced by socio-demographic factors like education level of wife and husband and knowledge of husband for antenatal care practices with their relevant importances

As per the recommendation of WHO for the antenatal visit, every mother should have four antenatal visits during the pregnancy period for the safe delivery. On an average at the world level, 55% mothers follow the recommendation for WHO and go for four or more antenatal visits. The situation of low income countries is different from developed countries and in the low income countries only 37% of the mothers go for 4 or more antenatal visits [WHO 2013]. In developing countries the availability and utilization of maternal health care services is improving at different rates but still need improvement.'

Education makes a woman updated with the types and importance of modern maternal health care services. Less educated women had lesser tendency of utilization of antenatal care and delivery care services. In Pakistan it was found that there was a positive relationship between mother's education and utilization of maternal health care services. In educated mothers the rate of utilization of antenatal and delivery services was significantly higher than the mothers who were either illiterate or had less education. Other factors affecting

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utilization of services are employment, socioeconomic status, residence and duration of marriage.<sup>7</sup> In Pakistan there is a greater disparity between men and women in the field of education, unemployment, political participation, decision making, controlling the resources and job opportunities.

The third goal of millennium development urges the achievement of gender equality and woman's empowerment. Women empowerment is also required for rapid achievement of other millennium goals such as improving maternal health, reducing child mortality, achieving universal primary education and reducing poverty. Exploring the empowerment status of woman is complex phenomenon especially within the multicultural and regional society of Pakistan? Millennium developmental goal-5 aims to reduce maternal mortality ratio by 75% between 1990 and 2015 and achieve universal reproductive health services for women by 2015. Everyday about 800 women die due to pregnancy related complications worldwide and 90% of them occur in low and middle income countries. In Pakistan Maternal Mortality Ratio has reduced from 330/100,000 live births in 1995 to 250/100,000 live births in 2013 but still it is about 300/100,000 live births in Bahawalpur despite of efforts by public and government setup. Keeping in view the situation this study is designed to evaluate the effect of women autonomy on use of antenatal services so that policies and

programs should be developed to improve the utilization of antenatal health services and ultimately reduction of maternal mortality in Bahawalpur City.

### Objective:

The objective of the study will be to:-

1. Determine the frequency of women's autonomy at household level
2. Assess the utilization of antenatal services in married women of reproductive age (15-49 years) of Bahawalpur City.

### Operationalization

Women autonomy will be assessed by asking questions on five aspects

- I. Freedom to spend money is judged by asking questions regarding
  - a) Purchase of household things
  - b) Purchase of clothing of children
  - c) Spend money on her
2. Decision about family size is judged by asking questions regarding
  - a) Use of contraception
  - b) Decision about number of children
  - c) Gap between children
3. Freedom regarding relatives and friends is judged by asking questions regarding

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- a) Visit them by asking/informing husband.
  - b) Gifting them.
  - c) Their visit or stay in home
4. Consultation for schooling of children is judged by asking questions regarding.
- a) Selection of school
  - b) Age of admission
  - c) Participation in parents teacher meeting
5. Freedom of expressing views is judged by asking questions regarding
- a) Decisions in domestic affairs
  - b) To vote
  - c) Discussion about relatives

Response of each question was divided into two categories and each category was scored as Yes = 2 and No = 1. The composite score of each respondent will be in between 15-30.

If the women had score 1.5 it will be taken as women had No autonomy at all.

The women's autonomy on the basis of composite score will be divided into three categories, the score in between 16-20 = low, 20-25 medium and  $\geq 26$  will be taken as high.

#### Antenatal Services Utilization:

Antenatal services utilization will be categorised on the basis of antenatal visits if everything was normal during pregnancy.

<b>Non-utilization</b>	No antenatal visit
<b>Poor utilization</b>	1 -3 antenatal visits
<b>Fair utilization</b>	4 antenatal visits
<b>Good utilization</b>	$\geq 5$ antenatal visits

#### Literature Review

Association between measures of empowerment and inadequate utilization of antenatal care among women of Ghana was examined in cross sectional study on 418 pregnant and in a relationship in past 12 months. Approximately 26% of sample received inadequate antenatal care and almost one third of those received no ANC at all. The most commonly reason for no ANC utilization included not believing it was necessary (50%) and not being able to afford care (27%).

Empowerment measures were age, marital status, education, religion, wealth, residence, general health and total number of children.'

A cross sectional study using data from a nationally representative chart of non-pregnant women in Ghana who had been pregnant and involved in a relationship within the last 12 months to women with at least some formal education received improved reproductive health services.

A study was conducted having a sample of 138 married women form four villages of tehsil Sambrial Sialkot about woman autonomy & their role in decision making



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power at household level. Percentage of women with low autonomy was 18.11% while with medium & high were 33.33% and 43.55% respectively. Autonomy of women has great link with education,

age, access to resources & communication with their husband as well .

A cross sectional study was done in Model town A Bahawalpur to assess the descriptive effect of education and duration of marriage on women empowerment at household level. Sample size was "378". It was simple random sampling women empowerment was done by asking ten questions. Response was divided into three categories. Composite score was "30".

Score in-between 1 to 10 level was low, 11-20 was medium and 21-30 was high empowerment.

Among the illiterate group 8% high level of empowerment, in primary/middle group 33%, in 3<sup>rd</sup>

group respondents were highly empowered. Education was highly associated with women empowerment at house hold level ( $P < 0.00000$ ). In a group of marriage duration  $\leq 5$  years "16.3%" women had high level of empowerment as compared to 15.7% in 6-10, 45% in 11-15 years and 53% in  $\geq 16$  years. Overall research showed that significant association between education marriage duration and women's empowerment at household level.

To understand the health seeking behavior of adolescent women in Bangladesh with respect to the use of maternal health services, a study was done with a sample of 1728 participants. Results showed that adolescent women with secondary or higher education and women with primary education were 2.2 and 1.4 times respectively more likely to receive ANC visits than women with no education. Adolescent women residing in urban areas were almost

twice as likely as to receive ANC than those residing in rural areas. The use of ANC by adolescent women belonging to household of the rich class was 12% higher than those belonging to low class. The use by adolescent mothers who had overall higher autonomy were 1.92 times more likely to receive sufficient ANC so mother who had few overall autonomy.

A study done to investigate the women's autonomy and health care seeking behavior in ETHIOPIA 2013 showed that only 12% of women made 4 or more ANC visits for their most recent birth. While 72% of women made no ANC visits and 16% made one to three visits. While women's participation in household decision making attitude towards wife beating, attitude towards refusing sex with her husband and whether getting permission to seek medical care was a big problem. About 44% of women participated into decision making. Women with a secondary and higher education. Living in



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urban areas, from richest household and women with exposure to media are more likely than others to participate in decision making at household level.

Study was conducted in Vietnam during 2012 antenatal care among rural and urban areas. A sample of 2132 pregnant women from rural and urban areas was taken. It was found that 15.2% in rural and 78.3% in urban resident. Another comparative study with two comprising totally 2132 pregnant women were forward in two health and demographic surveillance sites.

one rural and one urban in province. VEITNAAM using structural question are until delivery. Almost all women reported some use of ANC. While the average number of visits was lower in rural setting (4.4) than urban (7.7). In rural areas 77.2% of women had at least 3 visits and 69.1% attended ANC during the 1<sup>st</sup> trimester. The corresponding percentage for urban women were 97.2% and 97.2%

A cross sectional study on factors affecting the utilization of antenatal care in Kham

District, Xengkhouang Province, Lao, P&R. The aim of this study was to identify the socio-

Demographic characteristics. Knowledge, attitude and accessibility factors related to the utilization of antenatal care (ANC) Service among pregnant women in the Kham District, Laos.

A total of 310 married women of reproductive age who had of at least one child and had delivered the last child within two years from the date of collection were interviewed using structured questionnaires. To examine the predictors of AHS utilization, odds ratio (OR) and 95% confidence intervals (CI) were estimated through a logistic regression model.

The results showed that about 53.9% of mothers did not receive any ANC services. Reasons were no time (93.4%), not necessary (83.8%), feeling embarrassed (74.3%) and living far away from the ANC facility (71.3%). We found that significant predictors of ANC utilization ( $p$ -value < 0.05) were: level Of education (OR = 6.8, 95% CI = 2.7 -16.9), Income (OR = 6.9, 95% CI ra 1.2 -5.7) Knowledge (OR = 6.5, 95% CI = 1.2 — 5.7), Attitude (OR = 3.0, 95% CI = 1.3 — 7.1), Distance (OR = 2.9 ,95% CI = 1.1 — 7.6). Availability of public transportation (OR = 4.5, 95% CI = 2.1 — 10.4), Cost of transportation (OR = 2.5, 95% CI = 2.1 — 10.4) and Cost of service (OR = 4.6, 95% CI = 2.2 —9.6)

A study was conducted to access women's autonomy and maternal health utilization in Nepal having sample of 4148 women who had given birth to a baby within 5 year preceding the women had  $\leq 3$  and  $\geq 3$  ANC visits respectively. Women's overall autonomy was low (35.1%), medium (40.2%) and high (24.7%). Women with

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autonomy in their health care in household purchases

in spending money earned by husband were more likely to have more than 3 ANC visits. Utilizations of maternal health care services was found positively associated with education, urban residence, age, economic status and paid occupation.

To explore the link between women household position and their autonomy in decision making study conducted in Nepal (2010) used the data of Nepal demographic health survey %Heil consisted of total 8257 married women between 15-49 years of age. Women autonomy in decision making in different aspects like purchase of daily household need associated with age (−% for 45-49 age and 18% for 15-19 years) employment (54% for unemployed and 77.4% for employed for cash) and no. of children 23% for women with no child to 70.3% for women with

5 [children].

Gargi Dais's (2012) study revealed the relationship of autonomy and residents of Odisha district India among 225 tribal women. The findings showed high decision making role at household level among tribal women. The figures illustrated that about 50.84% of tribal women had high 47.54% fell in rang of medicine and only 1.65% had low range of autonomy general home affairs.

A community based cross sectional study was conducted in south cast Ethiopia in 2011.706 women were selected with stratified sampling technique and less than half of them(41.4%) had higher autonomy regarding their own and children health. Household income, nuclear family, knowledge and favorable attitude towards maternal and child health care were associated with increased autonomy.

A study in Gujrat aimed at exploring the relationship between women autonomy and maternal health care utilization. The target population was 104 married women. Study findings showed that women education and nuclear family was positively associated with their autonomy and health care utilization.

Pushpa, pankaj and Belwal (2014) had analyzed the factors affecting the empowerment in Himalaya with sample size of 150 pregnant women's age, education, caste, nature of Family, family income inter claim with medicine and autonomy in decision making were the study variables, Data analysis showed that 40%, 44.7% and 15.3% women had low, medium and high empowerment. Respectively. Study was conducted in Pattri union council of Thal Magasi District with both qualitative and quantitative methodologies. Sample size was 513 pregnant women.85.6% never had antenatal care. 14.1% had I ANC. 60% even had complications regarding pregnancy but never had ANC. While those having fewer

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children had more ANC. This research found that knowledge about ANC, attitudes towards government health facilities; education, income and perceived problems and complication during pregnancy were important factors that influence utilization of ANC Services. A total of 1370 women with a mean age of 27 years participated in study in south western Ethiopia with regard to maternal health care utilization. 42% had used antenatal care.

Women who participated in house hold decision making were 36% more likely to had used ANC as compared to those who had not participated in household decision, education and residence were also highly associated with ANC utilization. Study was based on representative sample of 211 married female respondents who had passed a period of 6 weeks after their child birth. In that study both the dimension of women's autonomy and maternal health care were analyzed through sub-indicators. Among the key indicators of women's autonomy education, household decision making, control over finance and freedom of movement was inbounded while maternal health care indicators are prenatal care, postnatal care and care taken by respondents at the time of delivery. A cross sectional study was conducted in community living in Midiany division of Siya Coutry, Kenya. Sample of 403 mothers of children under three years old was taken. Variables of interest were ANC, parity, distance from health facility and women autonomy.

Majority 378(93.8%) of respondents had at least 1 Antenatal visit during last pregnancy. 196 (51.9%) had 4

ANC during last pregnancy. Whereas 182 (45.2%) had less than 4 ANC visit. About 248(65.6%) respondents started ANC visit during first trimester Mother with one child had twice higher chance of at least 4 ANC visits than those having more than 1 child.

A study -Reproductive health care utilization matters'?" 2012 Analyses were based on response of 1778 currently married women aged 15-24 years living with atleast 0-35 month old child results showed that young women who had a higher level of overall autonomy were more likely to receive sufficient ANC (A012 adjusted odds ratio = 1.64: 95% CI = 1.17 - 2.23). A cross sectional survey was conducted in the community of Nurpur Shahan, Islamabad Pakistan in January, 2011 using a structured questionnaire. Included were 390 women of reproduction age who were questioned about their knowledge of antenatal care and its utilization. The frequency of utilization of antenatal care was (84.4%). Among those who never used the antenatal care, permission to use the facility and ignorance were the main reasons.

According to the study illiterate respondents had low (34.7%), medium (41.8%) and high (23.5%) antenatal services, up to middle respondents had low (10.9%), medium (56.9). & high (32.2%) antenatal services,

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Matriculated respondents had antenatal services low (5.9%).

Medium (39.5%) & high (54.6%). Above matriculation educated respondents had low (6%). Medium (32.5%) & high (61.4%) antenatal services.

This result shows there is a highly significant association between education of the respondents and the utilization of antenatal care services. Mothers with high degree of literacy were more likely to avail antenatal and delivery services than those with low degree literacy. There was also a strong positive association between husband's education and the utilization of antenatal care services, respondents having illiterate husbands had low (44.5%), medium (38.2%) & high (17.3%) antenatal services. Respondents having up to middle educated husbands had low (18.8%), medium (48.5%) & high (32.7%) antenatal services. Respondents having matriculated husbands had antenatal services low (8.8%), medium (44.8%) & high (46.4%) respondents having husbands intermediate had low (3.8%), medium (47.3%) and high (48.9%) antenatal services. This showed that wives of well educated husbands were more likely to utilize antenatal care than wives of less educated or illiterate husbands.

A survey designed to access the utilization of antenatal care among pregnant women of urban slums of Dhaka City. Bangladesh

showed that among the respondents 64.3% of women received ANC last pregnancy.

## Methodology

### Study Design:

Cross sectional descriptive study.

### Study Setting:

On judgmental basis Satellite town (Upper socio-economic group) and Shahdrah (lower Socio-economic group) of Bahawalpur City.

### Duration:

Study was conducted from May 10 2016 to July15, 2016.

### Sample Size:

Level of confidence 95%

Precision required 5%.

Anticipated population proportion (Least) women having high level of autonomy = 25%

Sample size calculated by using WHO software provided by CPSP for the purpose is 200.

### Ethical Issues:

Informed consent will be taken from all participants. Researcher will bear expenses.

### Sampling Technique:

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One area from upper socioeconomic group out of total 09 and one from lower socioeconomic group out of total 13 selected by simple random sampling in Satellite Town and Shandrah respectively. There are 2346 houses in Satellite Town and 3211 in Shandra, as proportion of reproductive age group women is not known in these areas we will assume one woman of reproductive age in each household. Out of these two areas 285 women eligible for the study will be drawn by systematic random sampling on household basis in proportionate manner i.e. 120 from Satellite town and 165 from Shandrah. All the houses will be numbered from I - 1346 and 1-321 I in Satellite town and Shandrah respectively by researcher with the help of person from union counsel. First house will be selected by simple random sampling and every

19<sup>th</sup> house in satellite town and Shandrah will be taken till completion of sample. From each household a woman fulfilling the inclusion criteria will be included in the study. If any house will be found locked then the next house on the right side will be taken, similarly if eligible women not found in any house next house on right side will be taken. In case of more than one eligible respondent in one house younger one will be preferred.

#### **Inclusion Criteria:**

All the women of reproductive age (15-49 years) having at least one alive child less than one year of age irrespective of current pregnancy.

If women have more than one child alive then we will ask about antenatal care regarding last pregnancy.

#### **Exclusion Criteria:**

Not willing to be included in the study.

#### **Data Collection:**

Data will be collected through preformed pretested questionnaire that comprises of two parts. Part-1 includes demographic variables as age, education, family income, number of live children and part-11 consists of study variables i.e. women autonomy and utilization of antenatal services.

#### **Data Analysis:**

Data will be entered and analyzed by using statistical package for social sciences (SPSS) version 17.0. Mean and standard deviation will be calculated for numerical data like age.

Frequencies and percentages will be calculated for qualitative variables i.e. women's autonomy

(high, medium, low) and utilization of antenatal services (poor, fair, good). Stratification will be done according to age,

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Age (years)	Frequency	Percentage
15-19	07	3.5%
20-24	37	18.5%
25-29	68	34%
30-35	72	36%
35-49	16	8%
Total	200	100%

women's education, Husband's education, occupation of women, monthly family income, type of family and number of living children and number of living sons. Chi square test will be applied to see any statistical difference between groups if existed. P value  $\leq 0.05$  will be taken as significant.

**Table 1: Age Distribution of Respondents**

**Table 2: Education Level of Respondents**

Female Education	Frequency	Percentage
Undulation	94	48%
Up to Primary	36	18%

Up to Secondary	44	22%
Above	26	13%
Total	200	100%

**Table 3: Education Level of Husband of Respondents**

Husband Education	Total	Percentage
Uneducated	70	35%
Upto Primary	32	16%
Upto Secondary	59	29.5%
Upto Graduation	26	13%
Above Graduation	13	6.5%
Total	200	100%

**Table 4: Working status of Respondents**

Female Employment	Total	Percentage
Unemployed	170	85%
Employed	30	15%
Total	200	100%

**Table 5: Residence of Respondents**

Residence	Total	Percentage
Rural	120	60%
Urban	80	40%
Total	200	100%



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**Table 6: Duration of Marriage of Respondents**

Duration Of Marriage	Total	Percentage
1-5 Years	51	25.5%
6-10 Years	83	41.5%
Total	200	100%

**Table No-7: Living Children of Respondents**

No. of living children	Frequency	Percentage
1-3	116	58%
4-6	75	37.5%
Above 6	9	4.5%
Total	200	100%

**Table 8: Number of Sons of Respondents**

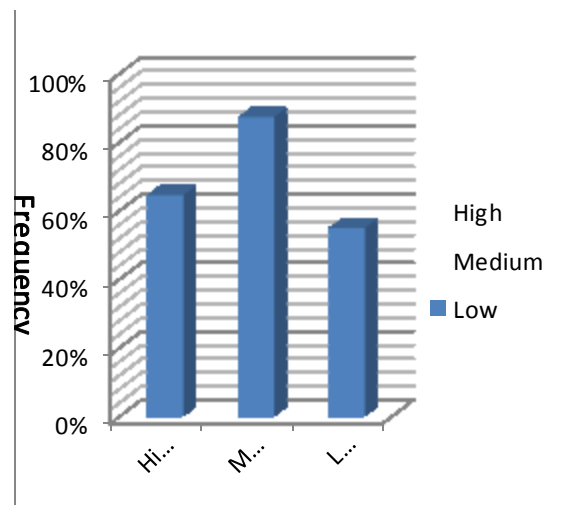
No. of Sons	Frequency	Percentage
0	21	10.5%
1-3	165	82.5%
Above 3	14	7%
Total	200	100%

**Table No 9: Family Income of Respondents**

Family Income	Total	Percentage
<10,000	104	52%
10,000-20,000	66	33%
Above 20,000	30	15%
Total	200	100%

**Table 10: Type of Family of Respondents**

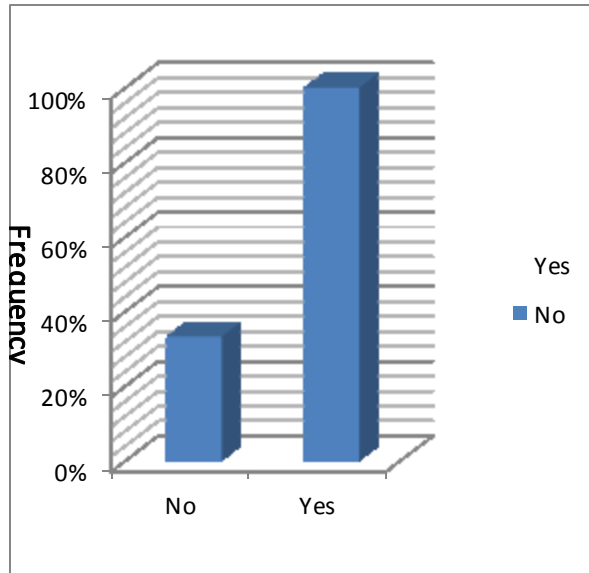
Type of Family	Total	Percentage
Extended	120	60%
Nuclear	74	32%
Polygamous	6	3%
Total	200	100%



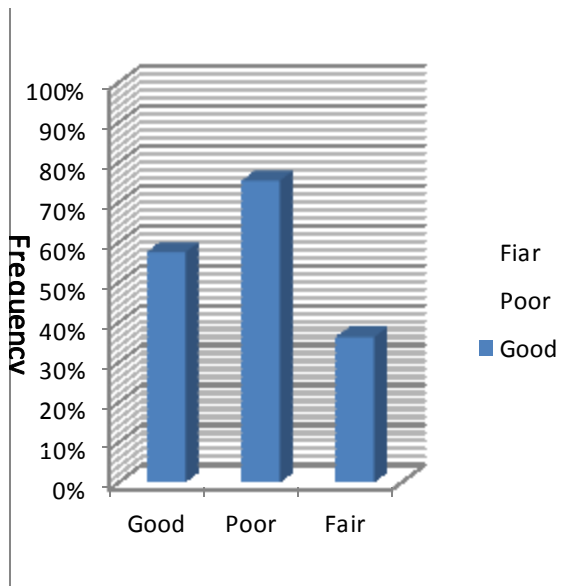
**Fig No. 1: Level of Autonomy of Respondents**



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**Fig No. 2: Antenatal Use among Respondents**



**Fig No.3: Distribution of antenatal care among respondents**

**Table No 11: Women's Autonomy and Age of Respondents**

Age	Total	High	Medium	Low
15-19 Yrs	07	1	3	3
20-24 Yrs	37	16	13	8
25-29 Yrs	68	17	31	20
30-35 Yrs	72	27	28	17
35-49 Yrs	16	05	05	6
Total	200	66	80	54

**Table No 12: Women's Autonomy and Educational Level of Respondentens**

Female Education	Total	High	Medium	Low
Undulation	94	18	43	33
Primary	36	7	20	9
Secondary	44	20	16	8
Above	26	17	07	2
Total	200	62	86	52

**Table no 13: Women's Autonomy and Working States Respondents.**

Female Employment	Total	High	Medium	Low

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Un Employed	170	51	73	46
Employed	30	12	12	6
Total	200	63	85	52

**Table No 14 : Women’s Autonomy and Education Level of Husband of Respondents.**

Husband Education	Total	High	Medium	Low
Uneducated	120	17	83	20
Up to Primary	32	7	15	10
Up to Secondary	59	17	27	15
Up to graduation	26	14	6	6
Above graduation	13	8	4	1
Total	200	63	135	52

**Table No 15: Women’s Autonomy and residence of Respondents**

Residence	Total	High	Medium	Low
Rural	120	26	58	36
Urban	80	37	27	16
Total	200	63	85	52

**Table No 16: Women’s Autonomy and Duration of Marriage of Respondents**

Duration Marriage	Total	High	Medium	Low
1-5 Years	51	18	18	15

06-10 Years	83	26	36	21
Above 10 Years	66	20	28	18
Total	200	64	82	54

**Table No 17; Women’s Autonomy and No. of Living children of Respondents**

No of Children	Total	High	Medium	Low
1-3	116	33	49	34
4-6	75	28	31	16
Above 6	9	2	5	2
Total	200	63	85	52

**Table No 18: Women’s Autonomy and no. of Sons of respondents**

No of Sons	Total	High	Medium	Low
No	21	4	8	5
1-3	165	50	71	44
Above 3	14	5	5	4
Total	200	63	84	53

**Table No 19: Women’s Autonomy and family income of Respondents**

Family Income	Total	High	Medium	Low
≤10000	104	23	51	30
10000-20000	66	25	26	15
Above 20000	30	17	8	5
Total	200	65	85	50

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**Table No 20: Women's Autonomy and Type of family of respondents**

Type of family	Total	High	Medium	Low
Extended	120	26	58	36
Nuclear	74	38	25	11
Polygamous	6	-	2	4
Total	200	64	85	51

**Table No 21: Use of Antenatal Services and Age Distribution of Respondents**

Age	Nil	Poor	Fair	Good	Total
15-19	0	3	1	3	7
20-24	3	11	10	13	37
25-29	14	27	11	16	68
30-35	15	22	18	17	72
Above 35	3	6	3	4	16
Total	35	69	43	53	200

**Table No 22: Use Antenatal Services and Education Level of respondents**

Education	Nil	Poor	Fair	Good	Total
Uneducated	23	50	13	08	94
Primary	3	14	07	12	36
Secondary	2	14	09	19	44
Above	1	2	09	14	26
Total	29	80	38	53	200

**Table No 23: Use of Antenatal Services and residence of respondents**

Residence	Nil	Poor	Fair	Good	Total
Rural	21	50	24	25	120
Urban	08	25	16	31	80
Total	29	75	40	56	200

**Table No 24: Use Antenatal Services and Duration of Marriage of respondents**

Duration of Marriage	Nil	Poor	Fair	Good	Total
1-5	5	16	14	16	51
6-10	6	43	11	23	83
Above 10	18	18	15	15	66
Total	29	77	40	54	200

**Table No 25: Use Antenatal Services and Working Status of respondents**

Employment	Nil	Poor	Fair	Good	Total
Unemployment	26	71	30	43	170
Employed	5	8	8	13	30
Total	31	79	38	56	200

**Table No 26: Use Antenatal Services and No. Of living Children of respondents**

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No of Children	Nil	Poor	Fair	Good	Total
1-3	12	45	24	35	116
4-6	12	32	12	19	75
Above 6	4	5	-	-	9
Total	30	82	36	54	200

**Table No 27: Use Antenatal Services and No. Sons of respondents**

No of Sons	Nil	Poor	Fair	Good	Total
0	4	10	4	3	21
1-3	22	63	31	49	165
Above 3	4	7	1	2	14
Total	30	80	36	54	200

**Table No 28: Use Antenatal Services and Family Income of respondents**

Family income	Nil	Poor	Fair	Good	Total
≤1000	19	47	16	22	104
10000-20000	8	25	13	20	66
Above 20000	3	8	6	13	30
Total	30	80	35	55	200

**Table No 29: Use Antenatal Services and Type of family.**

Type of family	Nil	Poor	Fair	Good	Total
Extended	14	53	30	23	120
Nuclear	13	24	7	30	74
Polygamou s	2	2	-	2	6
Total	29	79	37	55	200

**Results:**

In our study we took a sample of 200 women of reproductive age group. In the overall age distribution the respondents were divided into 5 groups 3.5% (07 respondents) belonged to age group 15-19 years .18 5% (37 respondents ) fall in the age category of 20-29 years .34%(68 respondents )belonged to 25-29 years .36%(72 respondents )belonged to 30-34 years and only 8% fall in the category 35-49 years .

In case of education, respondents were divided into 4 groups. 48% (94 respondents) Primary, 22% (44 respondents) to belonged to the uneducated class, 18% (36 respondents) to Secondary and 13% (26 respondents) above secondary. While analyzing the residence of the respondents it was found that 60% (120 respondents) belonged to the rural areas while 40% (80 respondents) lived in urban areas. In case of female employment 85% (170 respondents) were unemployed and 15% (30 respondents) were employed.

If we consider the family income then 52% (104 respondents) belonged to the category <10,000 Rs per month, 33% (66 respondents) fall in 11,000 to 20,000 Rs per

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month and 15% (30 respondents) belonged to the class above 20,000 Rs. per month. Type of family has been divided into 3 groups. 60% (120 respondents) belonged to the Extended family, 32% (74 respondents) belonged to nuclear family and 3% (6 respondents) belonged to polygamous family.

Taking into account overall autonomy of women It was found that 31.5% (63 respondents) showed high autonomy, 42.5% (85 respondents) had medium autonomy & 26% (52 respondents) had low autonomy.

In our study 15.5% (31 respondents) didn't utilize these services at all. 45.36% (77 respondents) showed poor ANC (antenatal care) utilization, 21.30% (36 respondents) showed fair and 33.13% (56 respondents) showed good ANC utilization

In our study we found that with increase in age. Autonomy increased. 37% of our study respondents belonged to 20-24 age group and showed high autonomy 43 % (16 out of 37). whereas 3.5% respondents belonged to 15-19 years age and showed low autonomy 42% (3 out of 7) Two third (70%) of respondents were from 25.35 year age and autonomy was found to be medium up to 46%.

In our study we found that with increasing level of education autonomy was on rise 48%. (94/200) of our respondents belonged to uneducated class, 22% to secondary

education and about 13 % respondents belonged to class above secondary. Among uneducated women 19 % (18/94) were found to be highly empowered, 45% (20/44) among secondary and 65% (17/26) women among above secondary level of education were found to be highly empowered.

In our study about 60% (120/200) women were from rural areas but had medium autonomy 48.3% (58/120) whereas high autonomy 46.25% (37/80) was seen in remaining 40% urban residents.

In our study respondents, 85% were unemployed and high autonomy was 30 % (51/170) whereas 30% respondents were employed and high autonomy was 40% (12/30)

Income is considered an important preceptor of woman's status within household and society. Field data revealed that income of 52% (104/200) respondents was up to .Rs10. 000 per month and high autonomy was 22% (23/104). While 15% (30/200) were in income bracket above Rs.20. 000 and high autonomy was 56% (17/30). This indicated that high autonomy was proportional to family income.

About 60% (120/200) of our respondents were from extended families with medium autonomy 48% (58/120) 32% (74/200) were from nuclear family with high autonomy 51 % (38/74) whereas only 3% (6/200) belonged to polygamous family showed lowest autonomy 67 % (4/6).

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Antenatal care (ANC) services are essential not only for pregnant ladies but also for checkup of development of their fetus. Our study field data the age group 15-19 years 3 respondents (7/200) showed good 43% (3/7) use of ANC services whereas the age bracket from 25-35 Years 70% (140/200) showed 42%(29) to 3 antenatal care visits 71% (49) to the hospitals and the age group above 35 years 8%(16/200) of total respondents showed poor use 380/ (6/16) of ANC services this indicated that with increasing age use of ANC services decreases.

Considering education into account, group belonging to primary education 18% (36/200) of total respondents showed poor 39% (14/36) utilization of ANC Service whereas in case of above secondary education 13% (26/200) respondents showed good 54% (14/26) use of ANC services. This showed with better education use of ANC services increased.

In our study 60% residents belonged to rural areas and had poor status 53% (50/94)

Regarding utilization of ANC services whereas urban residents 40% showed good 54% (14/26) use of ANC services .This indicated that urbanization lead to better use of ANC services.

More utilization of ANC services was seen in respondents that were employed 43% (100) as compared to unemployed

respondents 42%(17/70) who showed poor use of services.

Data analysis of our study showed that that income bracket up to Rs.1 0. 000 per month

(52% of all respondents) had poor utilization 45% (47) of ANC services whereas population with income above Rs.20, 000 per month (15% respondents) had good utilization 43 (13) of ANC services. This indicated that ANC services utilization improved with income.

Although majority 60% of our respondents belonged to extended family but their utilization of ANC services was poor 44% (53) as compared to nuclear type of families good 41 %(30) utilization of ANC services.

## Discussion

In our Study we took a sample of 200 women of reproductive age group. In the overall age destitution the respondents were divided in to 5 groups.3.5% (07 respondents) belong to age group 15-19 year, 18.5 %(37 respondents) fall in the age category 20-29 years. 34% (68 respondents) belonged to 25-29-years 36% (72 respondents) belong to 30-34years and only 8% fall in the category 35-49 years, Similar results were seen in the research of Sialkot (2013)according to which 5.8% of the respondents belonged to the age category of up to 25 years, 26.1% respondents fall in the age category of 26-30 years . 21.7% belonged to 36-40 years, 15.6 were under



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41-45 years of category and only 8.7% of the respondents belonged to the age category of 46 years and above. This comparison shows that major number of respondents belonged to the age group 25 to 35 years in both the studies. In case of education responds were divided into 4 groups. 48% (94 respondents) belong to uneducated class, 18% (36 respondents) to Primary, 22% (44 respondents) to secondary and 13% (26 respondents) above secondary. If we compare this with the study done in Ghana (2014) then 42.6% (188 respondents) belonged to the uneducated class, 15.16% (66 respondents) belonged to primary or less, 35.8% (134 respondents) Middle and 6.4% (28 respondents) fall in the category of secondary and above educational level. In both studies major number of respondents belonged to the uneducated class

While analyzing the residence of the respondents it was found that 60% (120 respondents) belonged to the rural areas while 40% (80 respondents) lived in urban areas. In the study carried out in Ethiopia (2013) it was seen that 89.4% (8107 respondents) belonged to the Rural areas whereas 10.6% (959) respondents belonged to the urban areas 'this comparison Show that majority of the respondents lived in rural areas.

In case of female employment 85% (170 respondents) were unemployed 15 % (30 respondents) were employed. In the study of

Ethiopia (2013) 75.3 % (6822 Respondents) were unemployed and 24.8%. (2244 respondents) were employed this shows that in both the studies the number of unemployed respondent were more.

If we consider the family income then 52% (104 respondents) belonged to the category <10,000 Rs per month 33% (66 respondents) fall in 10,000 to 20,000 Rs per month and 15% (30 respondents) belonged to the class above 20,000 Rs. per month. While in the study done in Sialkot (2013) 8.7% (12 respondents) belonged to the income of upto 10,000 Rs per month. 15.2% (21 respondents) fall in the category of 10001-20,000 Rs per month. 17.4% (24 respondents) belonged to the income bracket of 20001-30,000 Rs per month, 123 % (17 respondents) belonged to the income bracket 30001-40,000Rs.per month and 46.4 % (64 respondents) fall in the category 40001 to above Rs per month.

This is in contrast with our study according to which majority of the respondents belong to the class 1-10,000 Rs per month where as in Sialkot (2013) majority of the respondents belong to the class 40,000 Rs per month and above.

In our study type of family has been divided into 3 groups. 60% (120 respondents) belonged to the class extended, 32% (74 respondents) belonged to nuclear class and 3% (6 respondents) belonged to polygamous class. In the study done in Sialkot (2013)



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52.2% (72 respondents) belonged to the class nuclear whereas 17.4% (24 respondents) belonged to extended class. This is in contrast with our study as our major respondents belonged to the class nuclear whereas in Sialkot majority of the respondents belonged to the class nuclear.

Taking into account overall autonomy of women it was found that 31.5% (63 respondents) showed high autonomy, 42.5% (85 respondents) had medium autonomy and 26% (52 respondents) had low autonomy. If compared with the research done in Sialkot (2013) 55.79% (77 respondents) had high autonomy 31.15% (43 respondents) had medium autonomy & 47.36% (18 respondents) had low autonomy. This indicates that in our study most of the respondents had medium autonomy whereas in Sialkot most of them belonged to high autonomy.

In our study the overall utilization of antenatal care services is evaluated by the number of antenatal visits to the hospital by the pregnant respondents. 15.5% (31 respondents) didn't utilize these services at all, 45.56% (77 respondents) showed poor ANC (antenatal care) utilization, 21.30% (36 respondents) showed fair and 33.13% (56 respondents) showed good ANC utilization. As compared to the study done in ETHIOPIA (2013) 71.8% (4682 respondents) didn't use the ANC services at all, 16% (1081 respondents) showed poor whereas 11.8% (800 respondents) showed good ANC

utilization. This comparison shows that in our study more respondents belonged to poor utilization whereas in Ethiopia more respondents belonged to the class that didn't use ANC at all.

In our study we found that with increase in age, autonomy increased. 37% of our study respondents belonged to 20-24 age group and showed high autonomy 43% (16 out of 37), whereas 3.5% respondents belonged to 15-19 years age and showed low autonomy 42% (3 out of 7). Two third (70%) of respondents were from 25-35 year age and autonomy was found to be

Medium up to 46% study in Nepal (2010) Assessed women's autonomy by women's decision making power regarding purchase of daily house hold needs and visit to her relative and family the same two factors also used in our study. Decision making power gradually increased by age from 18% among women aged (15-19 Years) to 74 % in middle aged women (45-49 years) regarding daily purchase and from 20.1%-77.0% respondents respectively regarding visits and friends. In our study we found that with increasing level of education autonomy was on rise 48% (94/200) of our respondents belonged to uneducated class, 22% to secondary education and about 13% respondents belonged to class above secondary. Among uneducated women 19 % (18/94) were found to be highly empowered, 45 % (20/44) among secondary and 65% (17/26) women among above

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secondary level of education were found to be highly empowered. The similar positive relationship was found between two study variables i.e. education and women's empowerment in a study conducted by D.r Samina Badar et al. in Bahawapur (2014) empowered was positively related with education at household level where among illiterate group only 8% women were highly empowered as compared to 33.3% in primary /Middle 53.4 % in Matriculation /Intermediate and 80.3 % in Graduation or above, which concluded that education of women had a greater impact on their level empowerment. The empowerment of women in uneducated /illiterate group may be low because of the reason that they only accept whatever their partner decide for them but on the other hand education gives a new orientation to women and liberate.

In our study about 60% (120/200) women were from rural areas but had medium autonomy 48.3% (58/120) whereas high autonomy 46.25% (37/80) was seen in remaining 40% urban residents. Similar findings were noted in a study done by Yohannes Dibaba Wado where 89.4 % women were from rural areas and 10.6% women were from urban areas. Participation in decision making was 41% among rural and 64.8% among urban women. This showed that urban residents had more autonomy than residents of rural ones.

In our study respondents, 85% were unemployed and high autonomy was

30%(51/170), whereas 30% respondents were employed and high autonomy was 40% (12/30). Study conducted by Dabere Nigatuet al.(2014) showed high autonomy percentage of 76.9% among employed and 40% among non-employed woman. Positive association was also seen in study by Gargi Das in India (2012) where 60% of working women had high decisive power in comparison to 44% of unemployed females.

Income is considered an important predictor of woman's status within household and society. Field data revealed that income of 52% (104/200) respondents was up to RS. 10,000 per month and high autonomy was 22% (23/104), while 15% (30/200) were in income bracket above Rs. 20,000 and high autonomy was 56% (17/30). This indicated that high autonomy was proportional to family income. Similar type of relationship between women's autonomy and family income was found in study of Pushpa Panwar (2014) where 10.2% of women were found to be highly empowered in income bracket of Rs.5000-10,000 and 32.1% in income bracket of above Rs. 10,000[14]. Taking wealth index into account, participation in decision making was 37.1% among poor, 41.1% middle and 51.6% among rich women of Ethiopia.

About 60%(120/200) of our respondents were from extended families with medium autonomy 48% (58/120),32% (74/200) were from nuclear family with high autonomy 51% (38/74) whereas only 3% (6/200)

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belonged to polygamous family and showed lowest autonomy 67% (4/6). A study was conducted by Sarfraz Khan et al. in 2010 where 51% of respondent Belonged to extended/join family system and 49% belonged to nuclear family. The difference in percentage of respondents belonging to specific family system might be due to difference in study setting. Regarding the total autonomy score mean rank among women of extended family was 37.12 and among nuclear families was 68.48. these results clearly showed that women living in nuclear families had much more autonomy than woman living in extended family system.

Antenatal care (ANC) services are essential not only for pregnant ladies bur also for check up of development of their fetus. Our study field data the age group 15-19 years, 3.5% of respondents (7/200) showed good 43% (3/7) use of ANC services whereas the age bracket from 25-35 years 70% (140/200) showed 42%(29) to 3 antenatal care visits 71% (49) to the hospitals and the age group above 35 years 8%(16/200) of total respondents showed poor use 38% (6/16) of ANC services this indicted that with increasing age use of ANC services decreases. This might be due to that fact that young girls were more conscious about their health during pregnancy. In contrast to this, study in Bangladesh (2015) showed that no. of visits made by woman married before 18 years of age was 14.5% lower than woman married after 18 years of age, and this was

because of physical immaturity, lack of education, false health beliefs and lack of power in decision making, but it was seen that adolescent women seek ANC services later than adults.

This was somewhat similar with finding of study in Ethiopia (2013) where 29.2% women between 20-34 years age group used ANC services while 25.9% women less than 20 years used ANC services [5]. The study in Nepal (2011) showed that largest group of women who had more than 3 ANC visits were of age group 20-29 years. The ANC use was higher.

Among middle age group of women [4]. Study in Indi showed that maximum ANC utilization was between 25-34 years age which was about 17.22%.

Considering education into account, group belonging to primary education 18% (36/200) of total respondents showed poor 39% (14/36) utilization of ANC services whereas in case of above secondary education 13% (26/200) respondents showed good 54% (14/26) use of ANC services. This showed with better education use of ANC services increased. Women education appeared to be a key determinant of receiving ANC services in a study done in Bangladesh (A.S.M Shahab Uddin et al.) where among 1728 participants, women with secondary education or above and women with primary education respectively received 2.2 and 1.4 times more ANC

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services than women with no education [4]. Similar results were found in a study in Vietnam (2012) where ANC utilization was on rise with education where ANC services utilization was 78.9% and 92.3% in high school and post high school education [7]. Respondents from study in India also showed that secondary or above education was associated (27.62%) increased utilization of ANC services.

Study in Ethiopia showed that ANC services utilization differed by education. Mothers with secondary or above education were much more likely to use ANC services (81%) than women with no education (22%) and women with primary education 40% [5]. It might be due to the fact that educated women were more likely to know about benefits of ANC services utilization while illiteracy was associated with increased chances of unemployment which lead to reduced financial resources and hence ANC services. In our study 60% residents belonged to rural areas and had poor status 53% (50/94) regarding utilization of ANC services whereas urban residents 40% showed good 54% (14/26).

Use of ANC services. This indicated that urbanization lead to better use of ANC services. Results of Vietnam (2011) research showed that urban women used much more ANC services than rural, where 97.2% urban and 77.2% rural women had at least 3 visits during pregnancy and health consultation among urban women was 4.2 times than

rural women and this was possibly due to lack of awareness about ANC services utilization among rural women.

ANC utilization showed substantial differences between urban and rural areas in Ethiopia where 72% urban women received ANC services compared with 24% of rural women and this might be due to the fact that health services provision in Ethiopia still had an urban bias, while Indian study showed that 27% urban respondents and 12% rural respondents used ANC.

Women employment is proportional to employment status of respondents. More utilization of ANC services was seen in respondents that were employed 43% (13/30) as compared to unemployed respondents 42% (17/70) who showed poor use of services. Poor utilization of ANC services was seen among unemployed women 25.9% (51/76) while 76.2% (15/96) of employed women used ANC services in Ethiopia (2013).

Data analysis of our study showed that income bracket up to Rs. 10,000 per month (52% of all respondents) had poor utilization 45% (47) of ANC services whereas population with income above Rs. 20,000 per month (15% respondents) had good utilization 43% (13) of ANC services. This indicated that ANC services utilization improved with income. Socioeconomic status also affected ANC services utilization in Ethiopia study (2013) where ANC

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services utilization was 59% in rich as compared to 13% in poor [5]. Similarly, in India women with higher wealth quintile were about 2 to 5 times more likely to utilize MCH services.

Although majority 60% of our respondents belonged to extended family but their utilization of ANC services was poor 44 (53) as compared to nuclear type of families with good 41% (30) utilization of ANC services.

### Conclusion

Most of the women had medium autonomy. Autonomy increased with increasing age, employment, education, increased duration marriage, number of children, and urban residence of family income.

Most of the women used the antenatal services but among them most had poor utilization. Factor responsible for better utilization were increasing age education, urban residence employment duration marriage, family income and type of family.

### Recommendations;

1. Women education should be focused.
2. Decrease urban – rural bias in reproductive health facilities.
3. Access of women to ANC services should be increased.

4. Awareness regarding ANC should be increased in women increased media exposure.
5. Promote male involvement in reproductive health services.
6. Government should make policies and plan to empower women, especially in rural areas.

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#### Grading criteria for Utilization:-

No utilization No antenatal visits

Poor 1-3 antenatal visits

Fair 4 antenatal visits

Good  $\geq$  5 antenatal visits