



CODEN [USA]: IAJ PBB

ISSN: 2349-7750

**INDO AMERICAN JOURNAL OF
PHARMACEUTICAL SCIENCES**<http://doi.org/10.5281/zenodo.1243871>Available online at: <http://www.iajps.com>

Research Article

**WOMEN'S AUTONOMY AND USE OF ANTENATAL
SERVICES IN URBAN SLUMS QUAID-E-AZAM MEDICAL
COLLEGE BAHAWALPUR**¹Sadia Kanwal, ²Sobia Kanwal, ³Abnas Kousar, ⁴Abdul Basit¹QAMC Bahawalpur²PMC Faisalabad³RHC Wahndo,⁴Health Services Academy Islamabad**Abstract:**

Introduction: *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: *Determine the frequency of women's autonomy at household level. Assess the utilization of antenatal services in married women of reproductive age (15 – 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 Shahdara (lower socio-economic group) of Bahawalpur city.*

Duration: *Study was conducted from May 10, 2015 to July 15, 2015.*

Methodology:

Study Design: *Cross-sectional descriptive study.*

Study Setting: *On judgmental basis Satellite town (Upper socio-economic group) and Shahdara (lower socio-economic group) of Bahawalpur city.*

Duration: *Study was conducted from May 10, 2015 to July 15, 2015.*

Data Analysis:

Data will be entered and analyzed by using statistical package for social sciences (SPSS) version 21.0. Mean and standard deviation will be calculated for numerical data like age. Frequencies and percentages will be calculated for qualitative variables that is women's autonomy (high, medium, low) and utilization of antenatal services (poor, fair, good).

Corresponding author:**Sadia Kanwal,**

QAMC

Bahawalpur

QR code



Please cite this article in press Sadia Kanwal et al., *Women's Autonomy and Use of Antenatal Services in Urban Slums Quaid-E-Azam Medical College Bahawalpur, Indo Am. J. P. Sci, 2018; 05(05).*

INTRODUCTION:

Autonomy means freedom to act of function independently. It is the capacity to make an informed 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 [1].

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 are the best predictors of women's autonomy. Some of studies have analyzed the cause of underutilization 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 healthcare used [2].

Literature Review:

Association between measures of empowerment and inadequate utilization of antenatal care among the 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 of antenatal care and almost one third of those received no ANC at all. The most commonly reason for no ANC utilization included no 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 [1].

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 [2].

A study was conducted having a sample of 138 married women from four villages of tehsil Sambrial Sialkot about women autonomy & their role in decision making power at house hold level. Percentage of women with low autonomy was 18.11% while with medium & low 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 [3].

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 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 in to decision making, women with a secondary and higher education, living in urban areas, from richest household and women with exposure to media or more likely than others to participate in decision making at household level [6].

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 21.0. Mean and standard deviation will be calculated for numerical data like age. Frequencies and percentages will be calculated for qualitative variables that is 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 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 < 0.05 will be taken as significant.

Table – 1: Age Distribution of Respondents

Age (Years)	Frequency	Percentage
15 - 19	7	3.5
20 - 24	37	18.5
25 - 29	68	34
30 - 34	72	36
35 - 49	16	8
Total	200	100

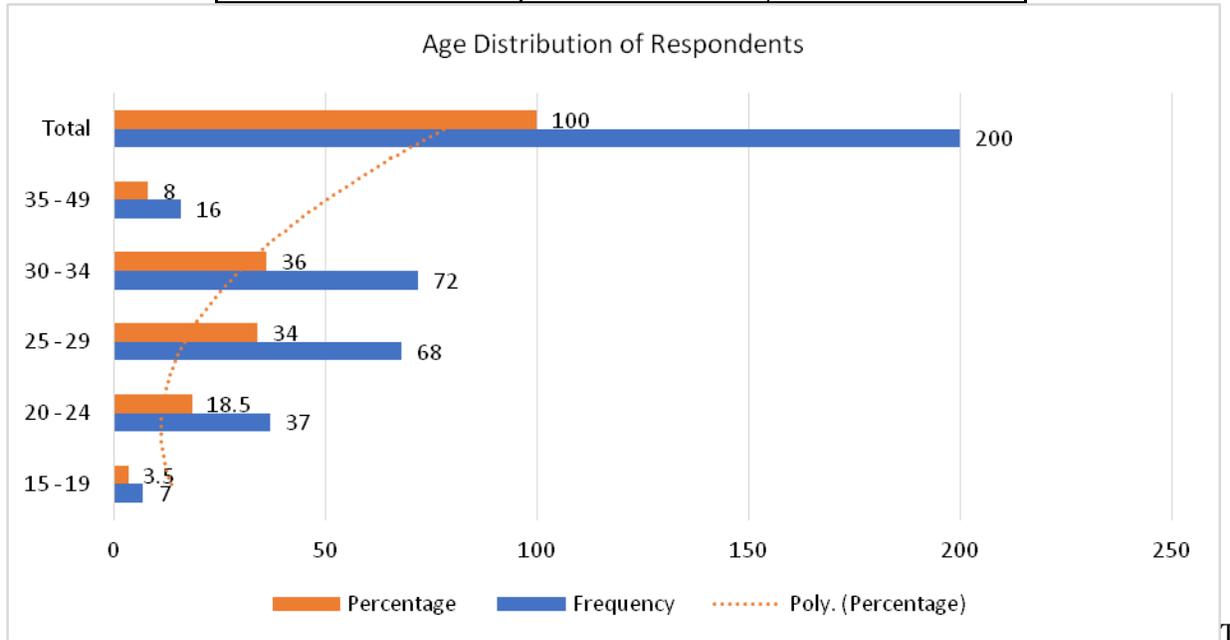


Table – 2: Education Level of Respondents

Female Education	Frequency	Percentage
Uneducated	94	48
Up to Primary	36	18
Up to Secondary	44	22
Above	26	13
Total	200	100

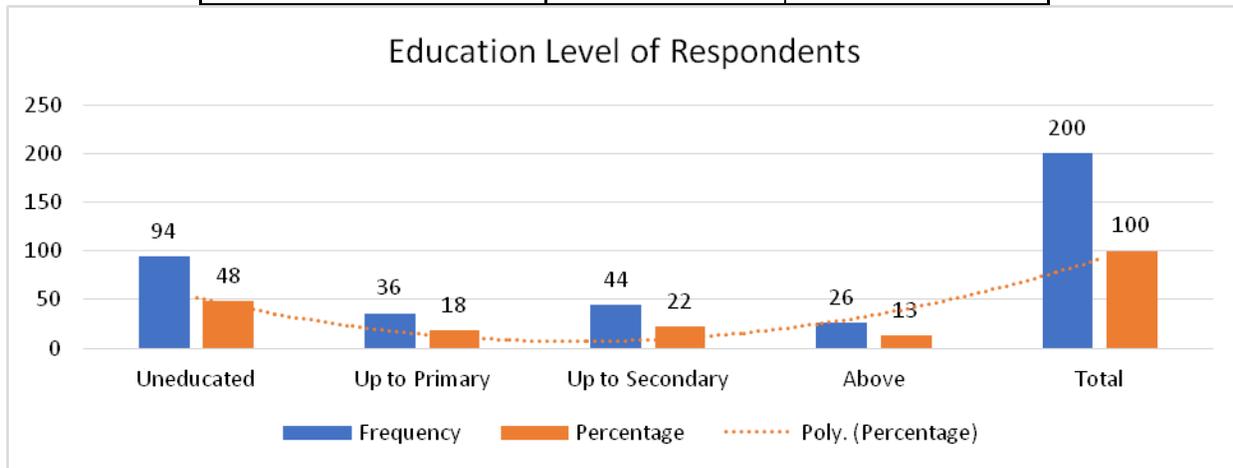


Table – 3: Education Level of Husband of Respondents

Husband Education	Total	Percentage
Un-educated	70	35
Up to Primary	32	16
Up to Secondary	59	29.5
Up to Graduation	26	13
Above Graduation	13	6.5
Total	200	100

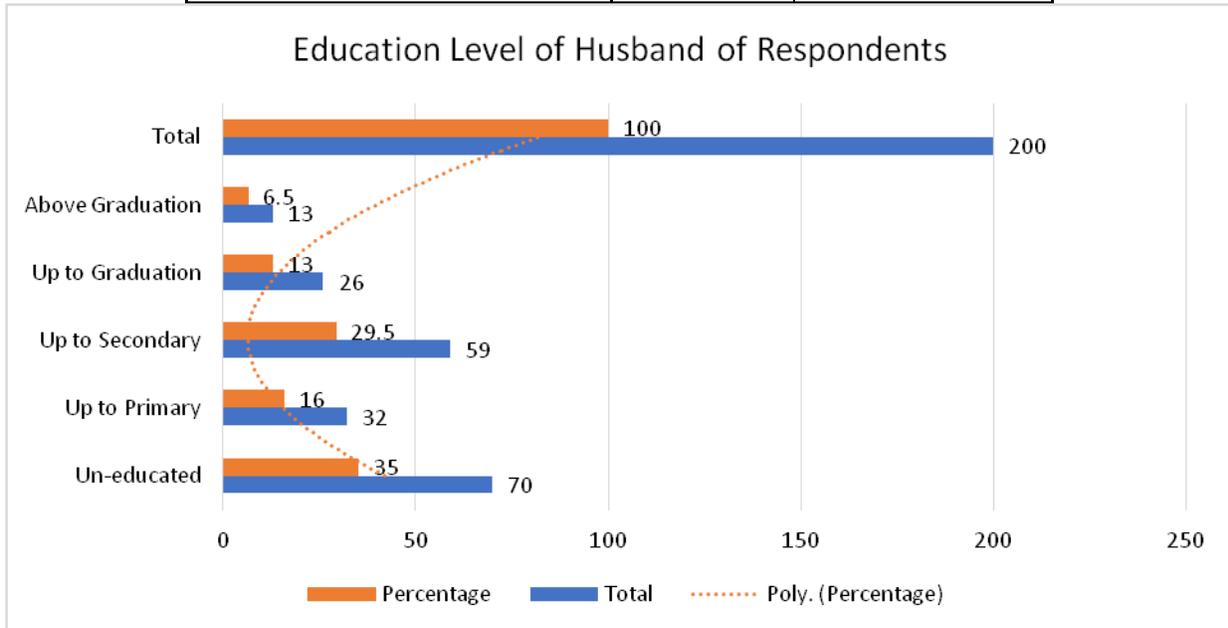


Table – 4: Working Status of Respondents

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

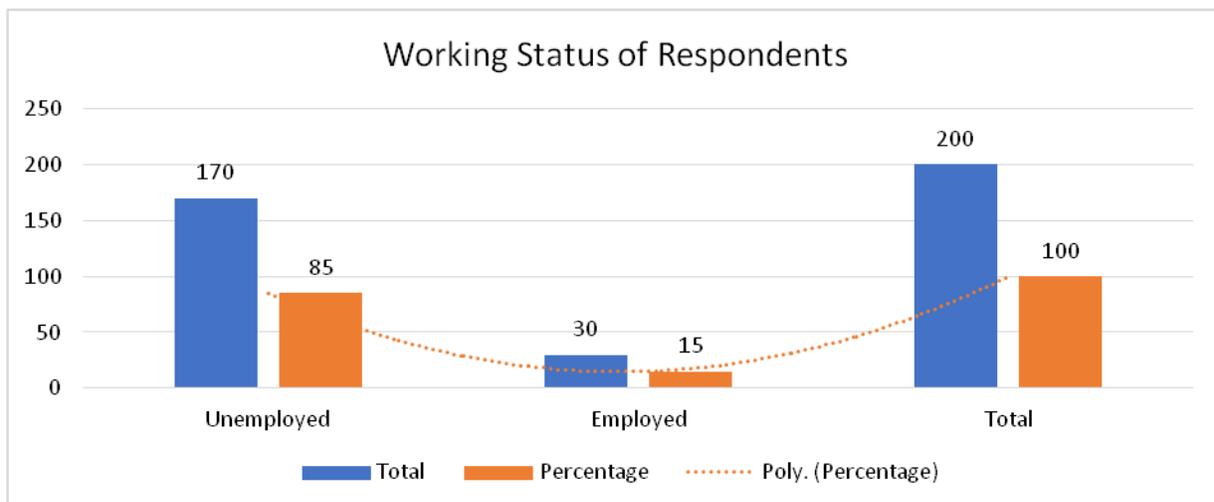


Table – 5: Residence of Respondents

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

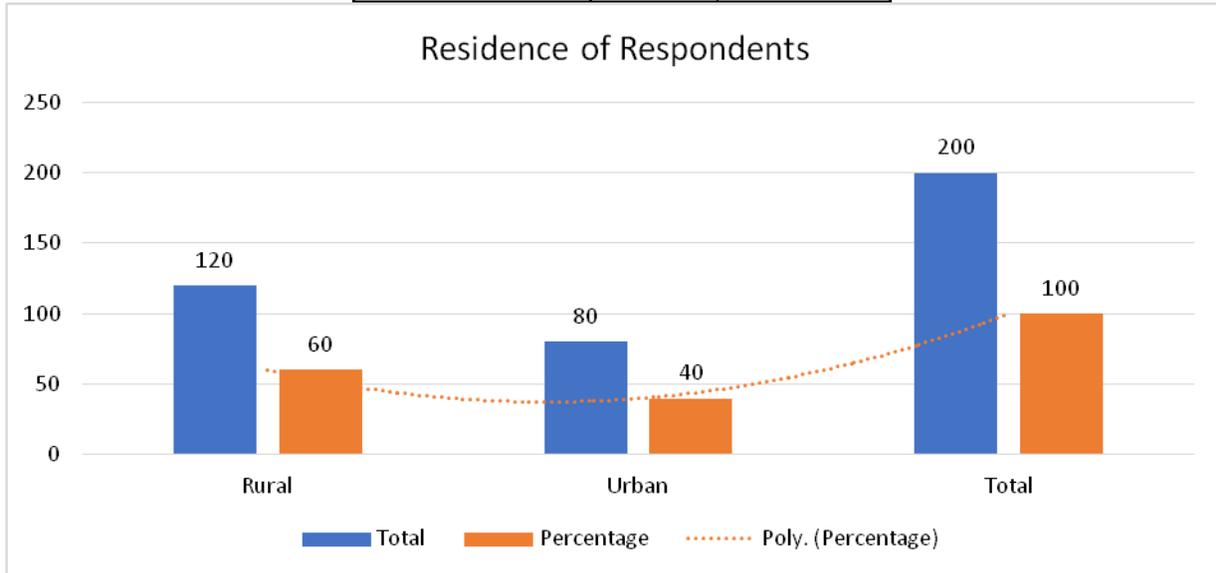


Table – 6: Duration of Marriage of Respondents

Duration of Marriage	Total	Percentage
1 to 5 Years	51	25.5
6 to 10 Years	83	41.5
Above 10 Years	66	33
Total	200	100

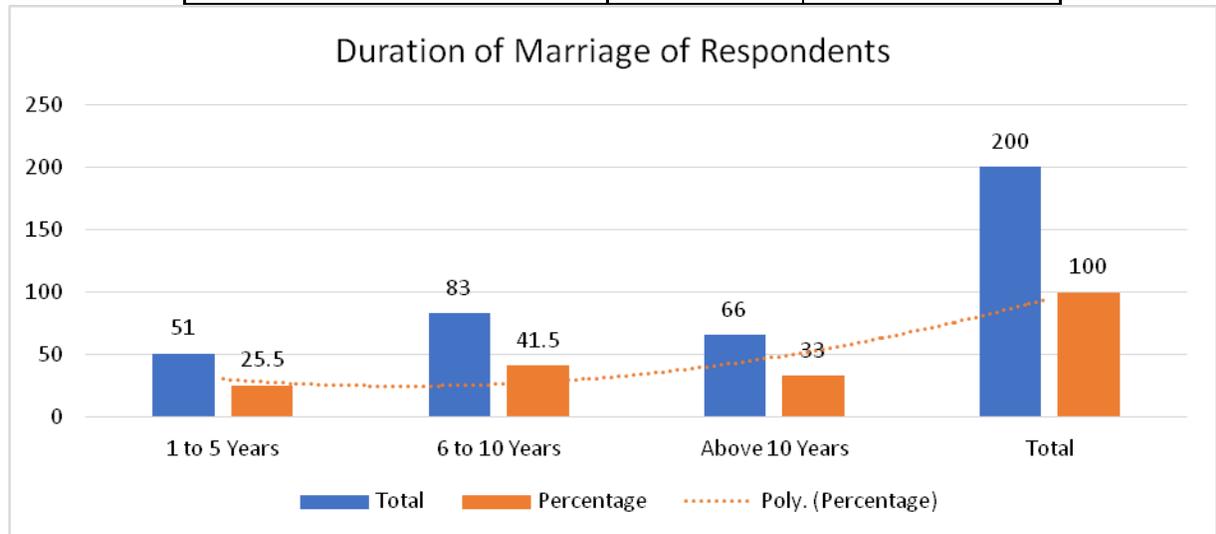


Table – 7: No of Living Children of Respondents

No of Living Children	Frequency	Percentage
1 to 3	116	58
4 to 6	75	37.5
Above 6	9	4.5
Total	200	100

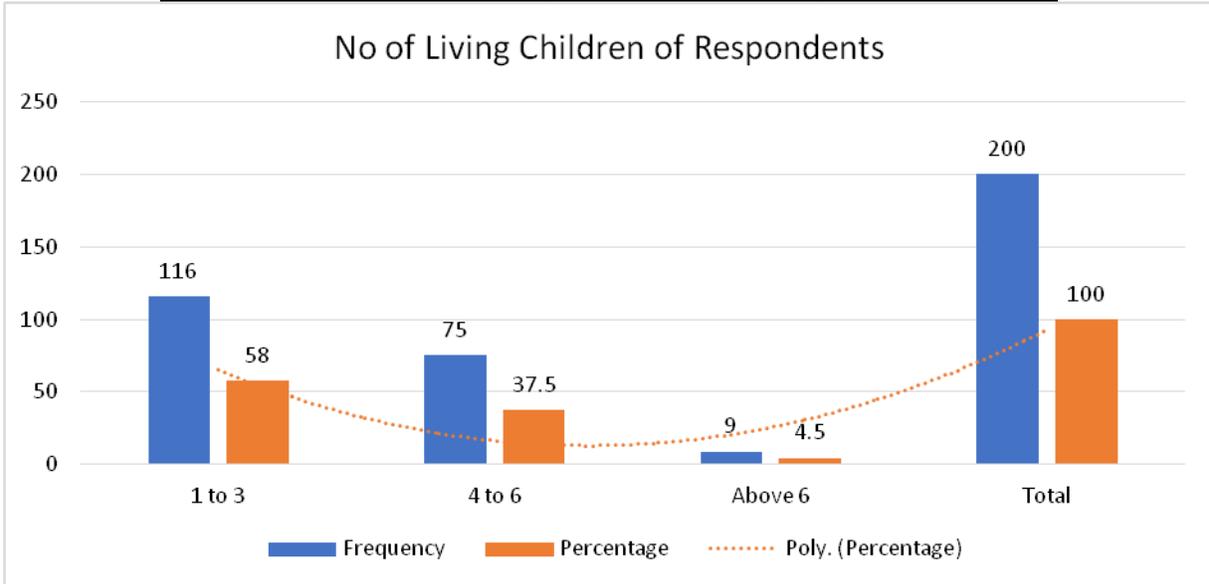


Table – 8: Number of Sons of Respondents

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

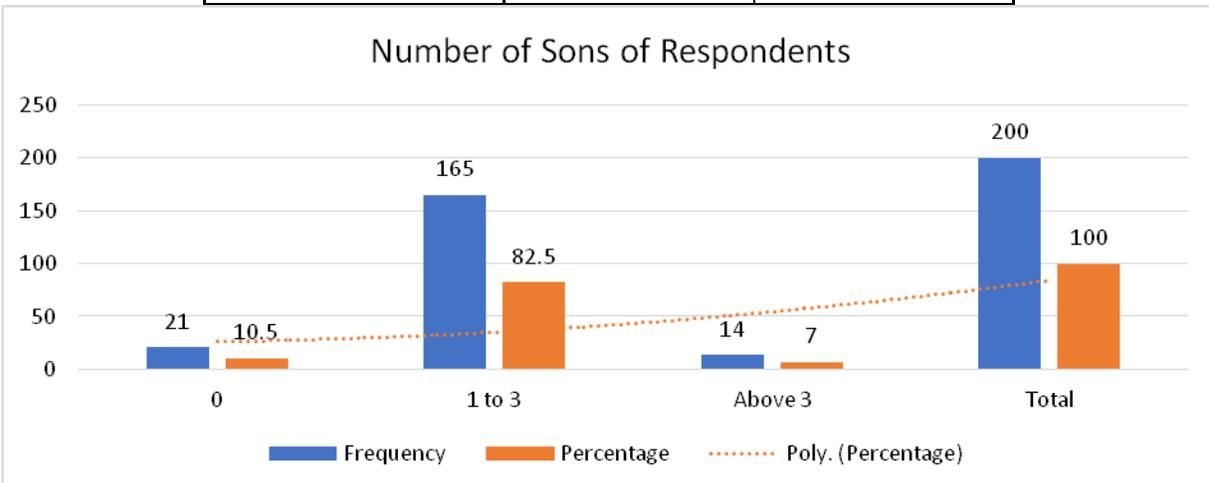


Table – 9: Family Income of Respondents

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

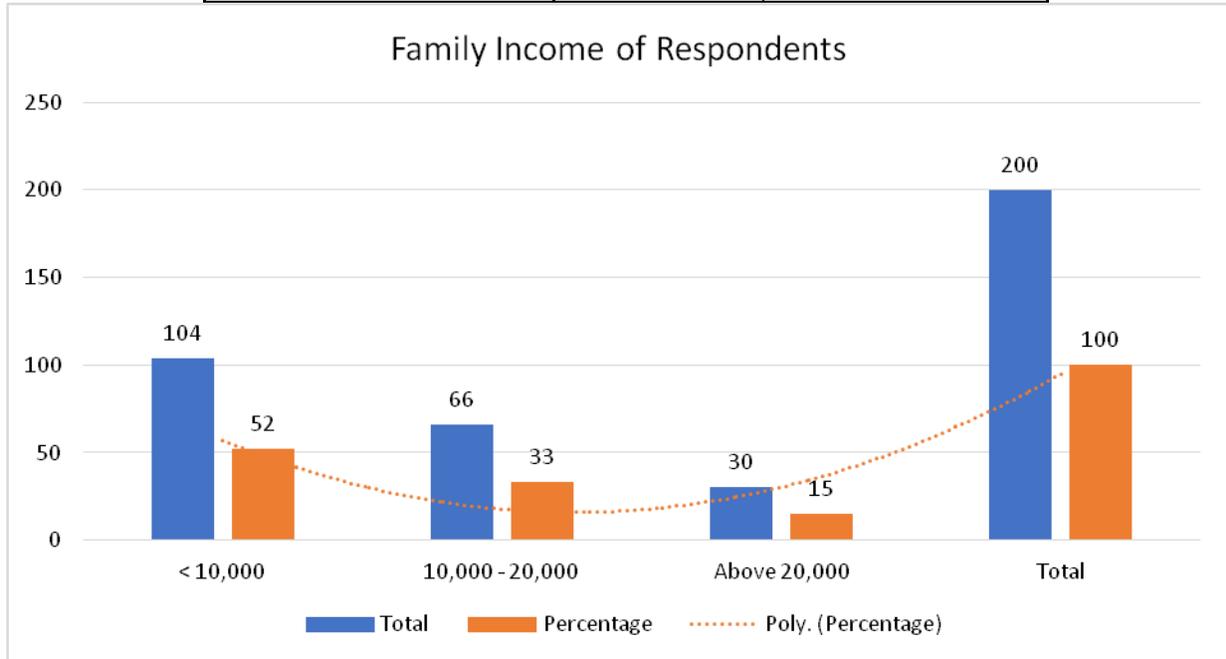
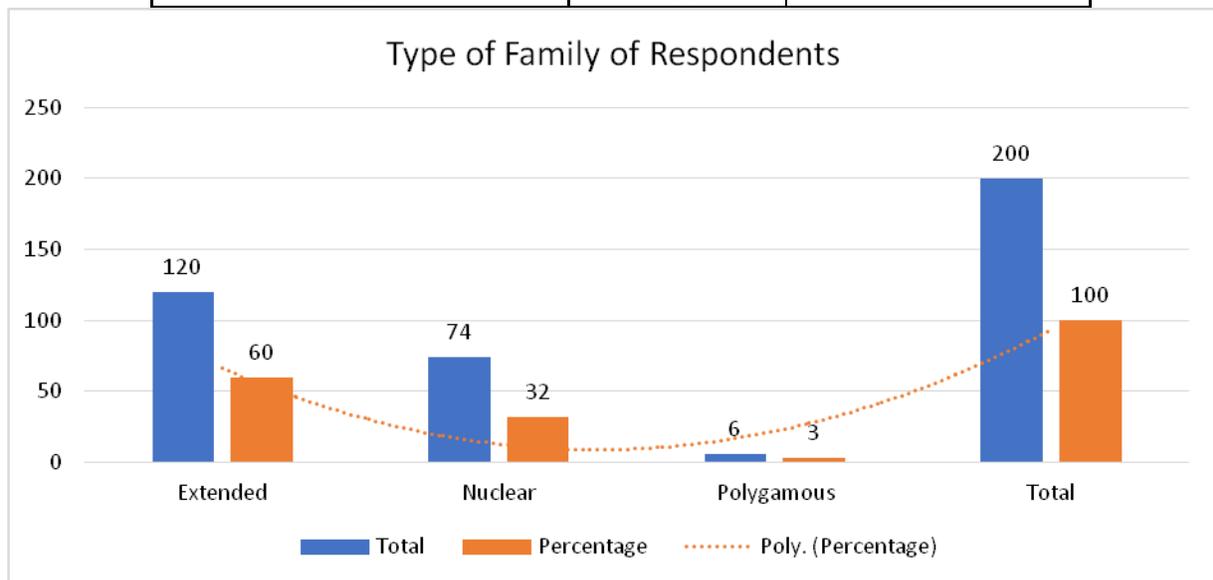


Table – 10: Type of Family of Respondents

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



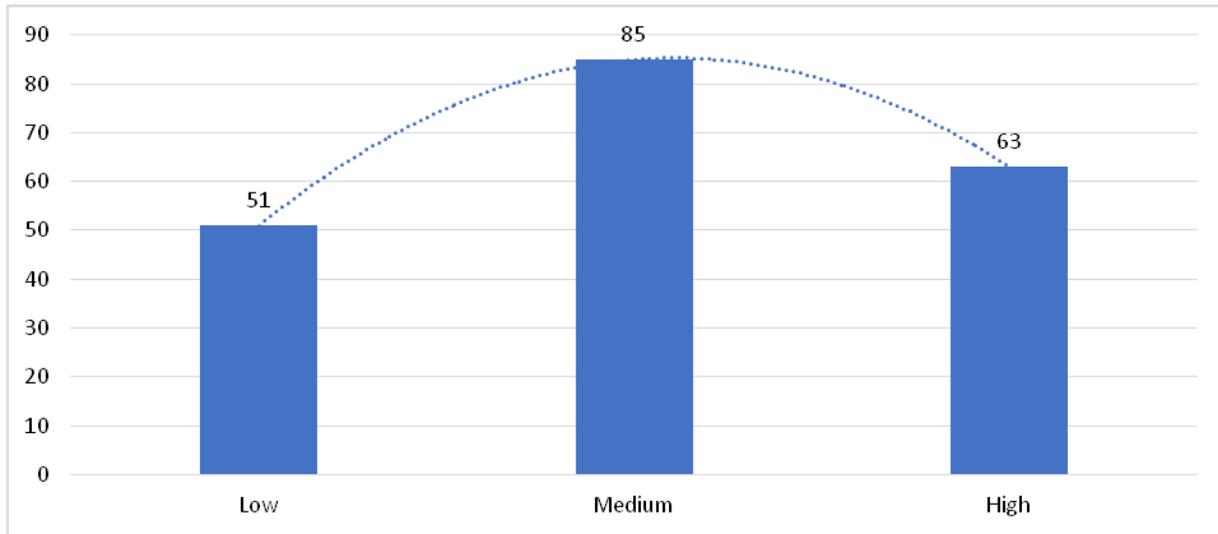


Figure – 1: Level of Autonomy of Respondents

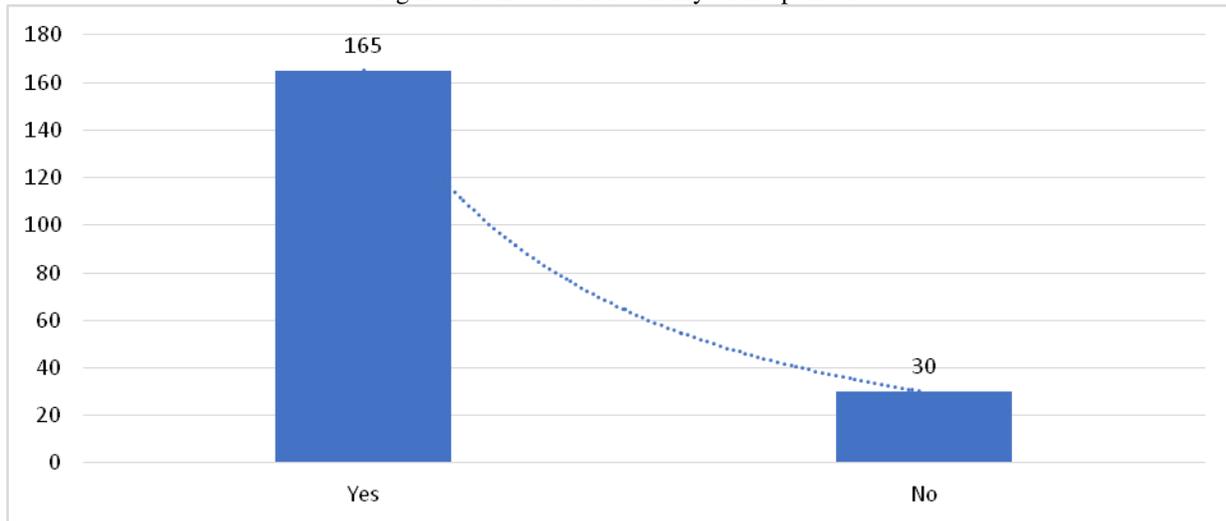


Figure No – 2: Antenatal Use Among Respondents

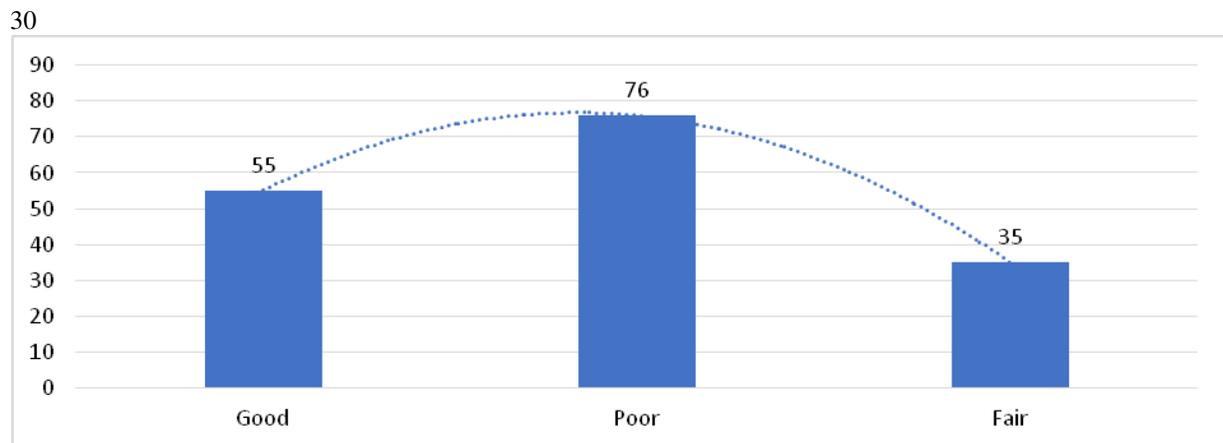


Figure No – 3: Distribution of Antenatal Care Among Respondents

Table – 11: Women’s Autonomy and Age of Respondents

Age (Years)	Total	High	Medium	Low
15 to 19	7	1	3	3
20 to 24	37	16	13	8
25 to 29	68	17	31	20
30 to 34	72	27	28	17
35 to 49	16	5	5	6
Total	200	66	80	54

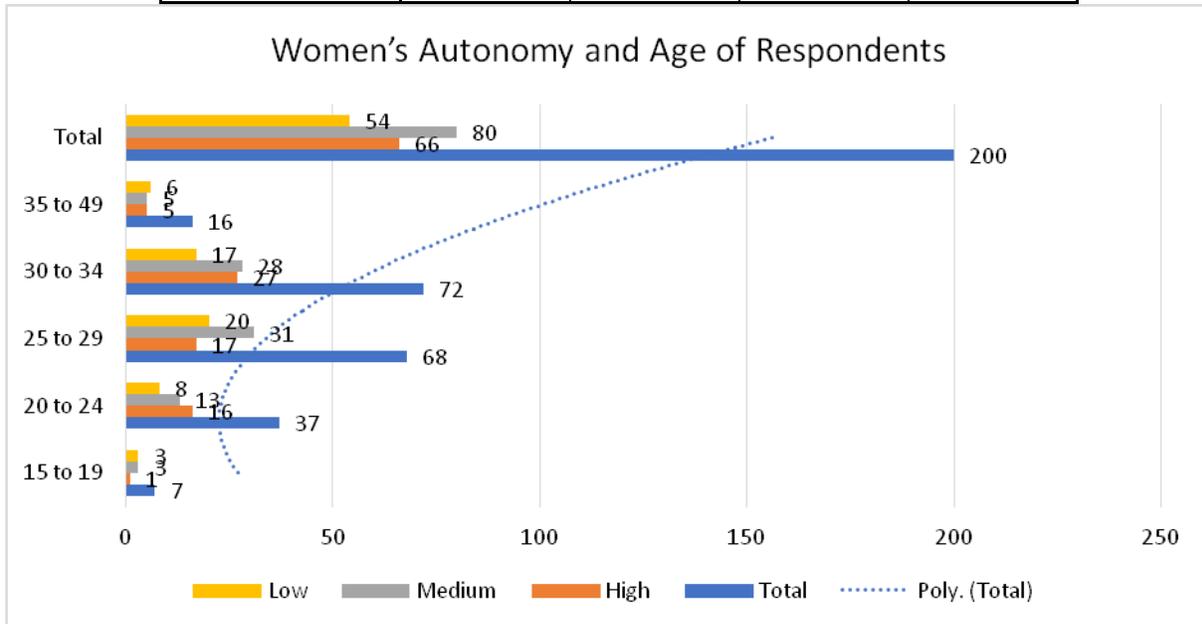


Table – 12: Women’s Autonomy and Educational Level of Respondents

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

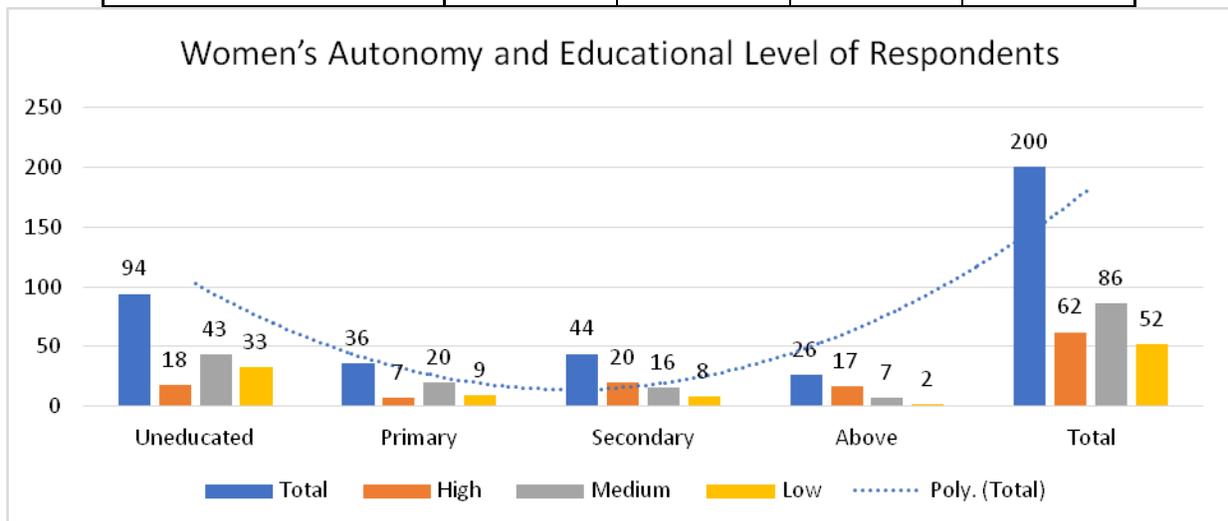


Table – 13: Women’s Autonomy and Working Status of Respondents

Female Employment	Total	High	Medium	Low
Unemployed	170	51	73	46
Employed	30	12	12	6
Total	200	63	85	52

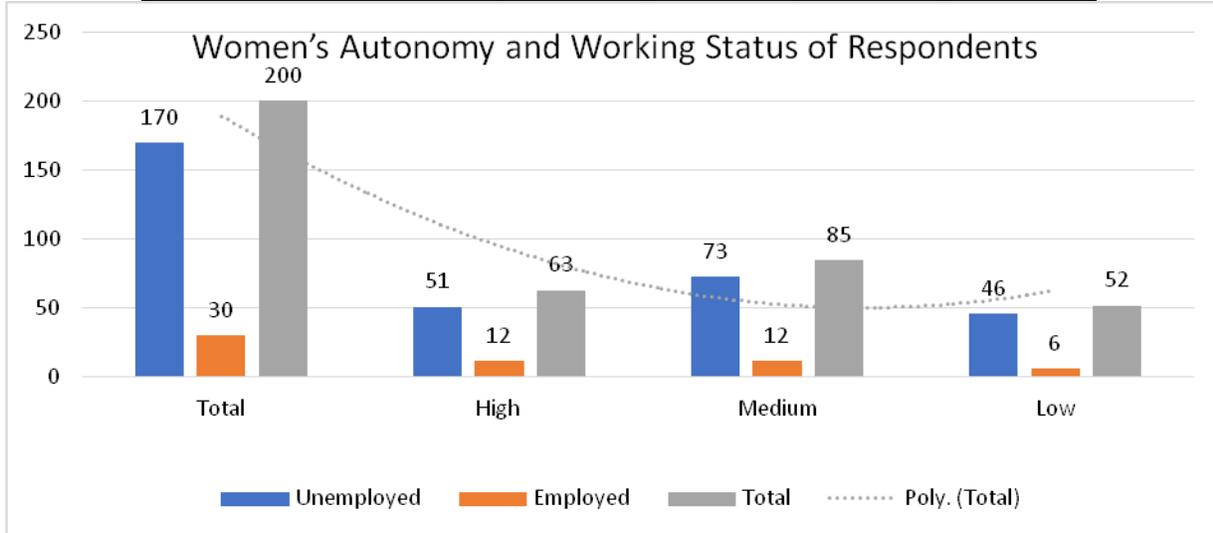


Table – 14: Women’s Autonomy and Education Level of Husband of Respondents

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

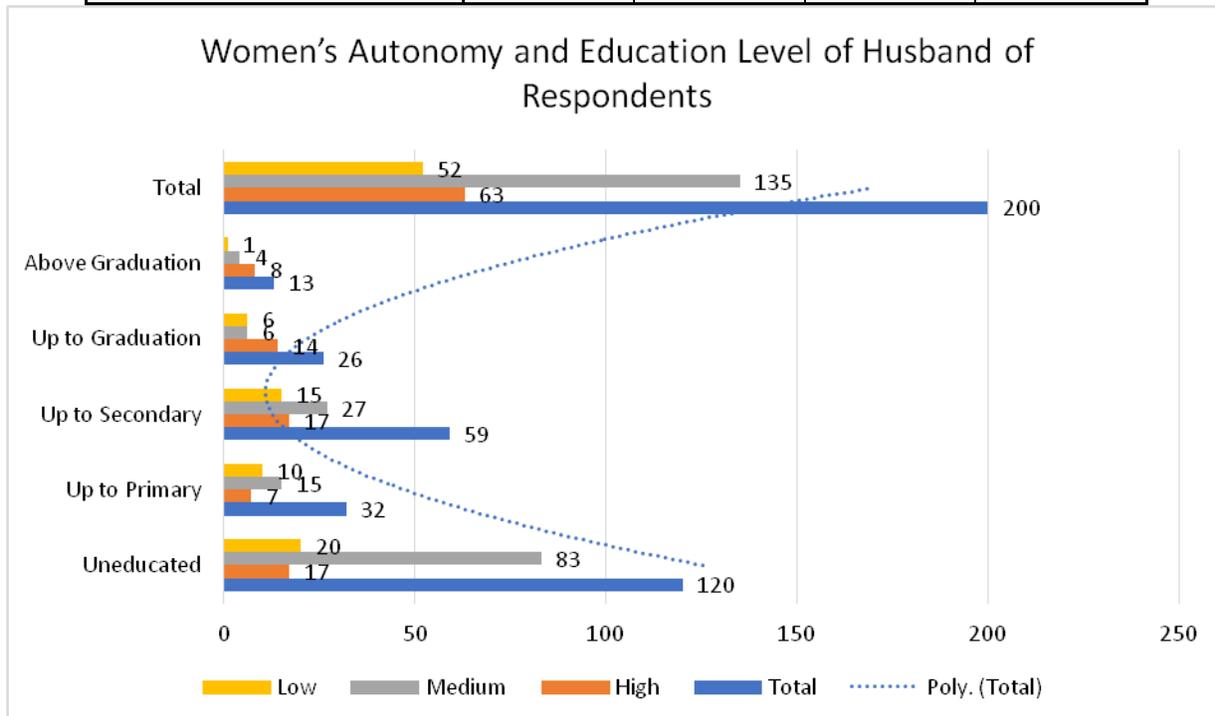


Table – 15: Women’s Autonomy and Residence of Respondents

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

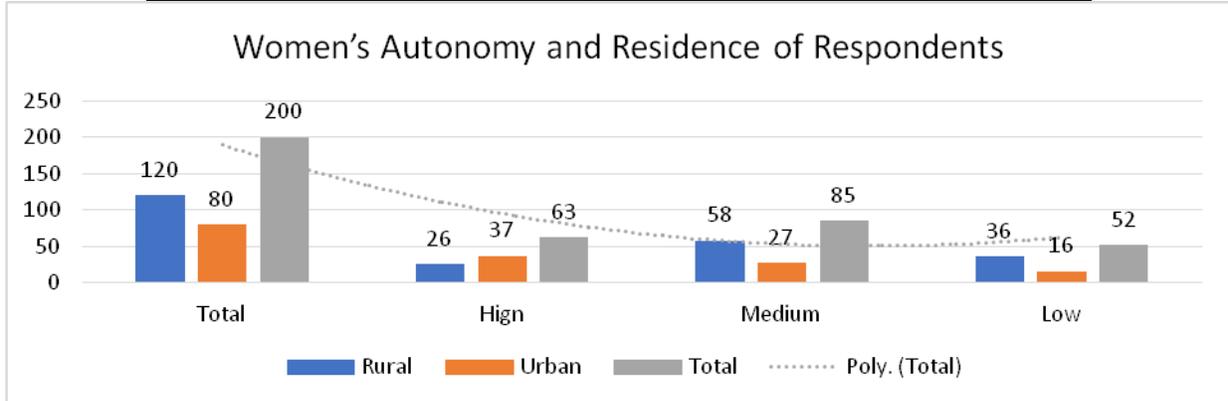


Table – 16: Women’s Autonomy and Duration of Marriage of Respondents

Duration of Marriage	Total	High	Medium	Low
1 to 5 Years	51	18	18	15
6 to 10 Years	83	26	36	21
Above 10 Years	66	20	28	18
Total	200	64	82	54

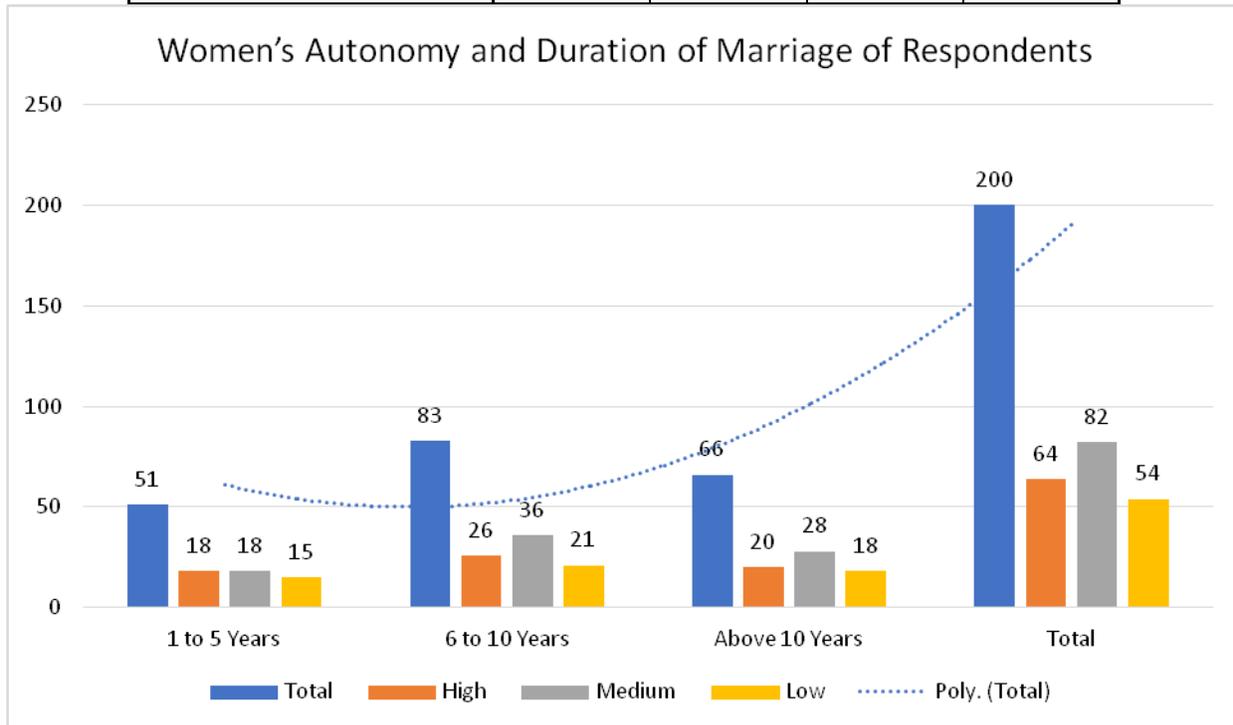


Table – 17: Women’s Autonomy and No of Living Children of Respondents

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

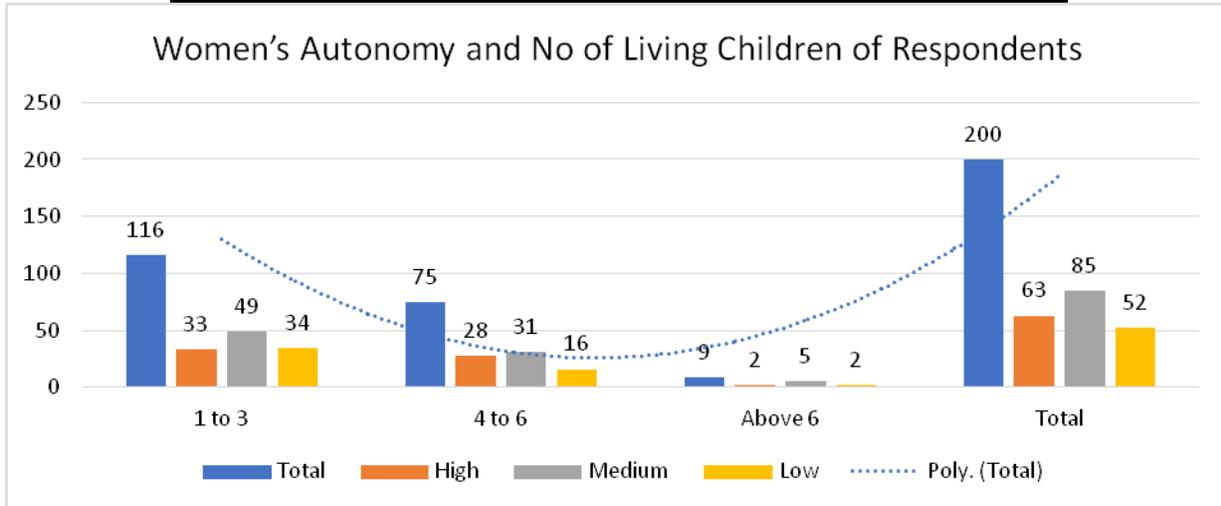


Table – 18: Women’s Autonomy and No. of Sons of Respondents

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

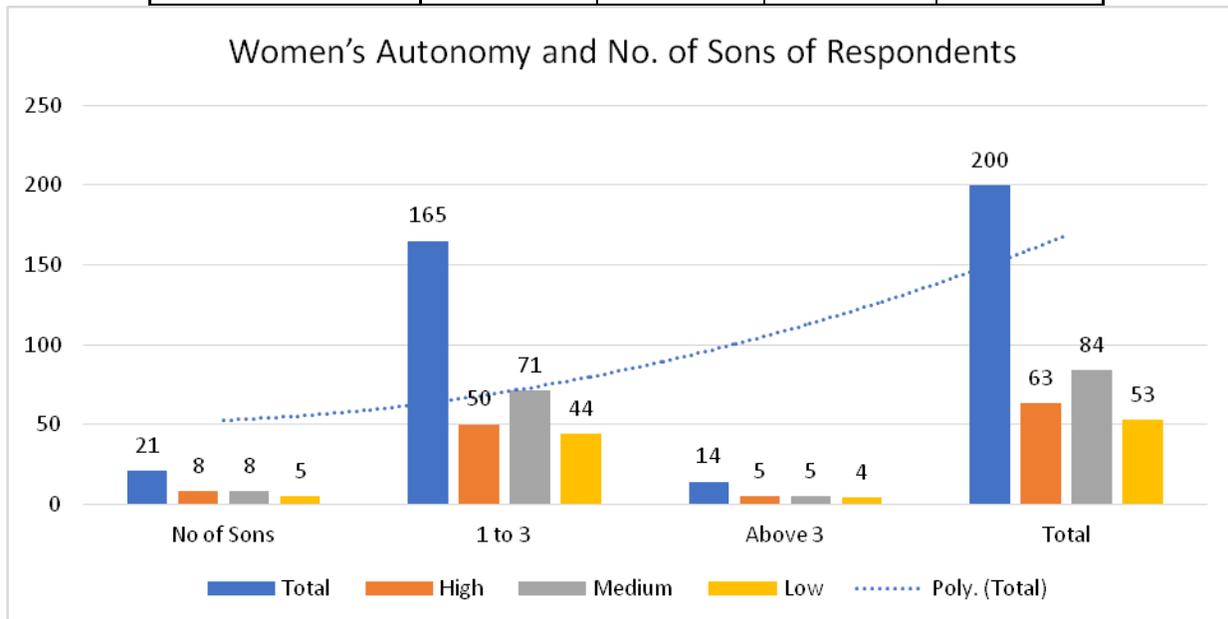


Table – 19: Women’s Autonomy and Family Income of Respondents

Family Income	Total	High	Medium	Low
≤ 10,000	104	23	51	30
10,000 - 20,000	66	25	26	15
Above 20,000	30	17	8	5
Total	200	65	85	50

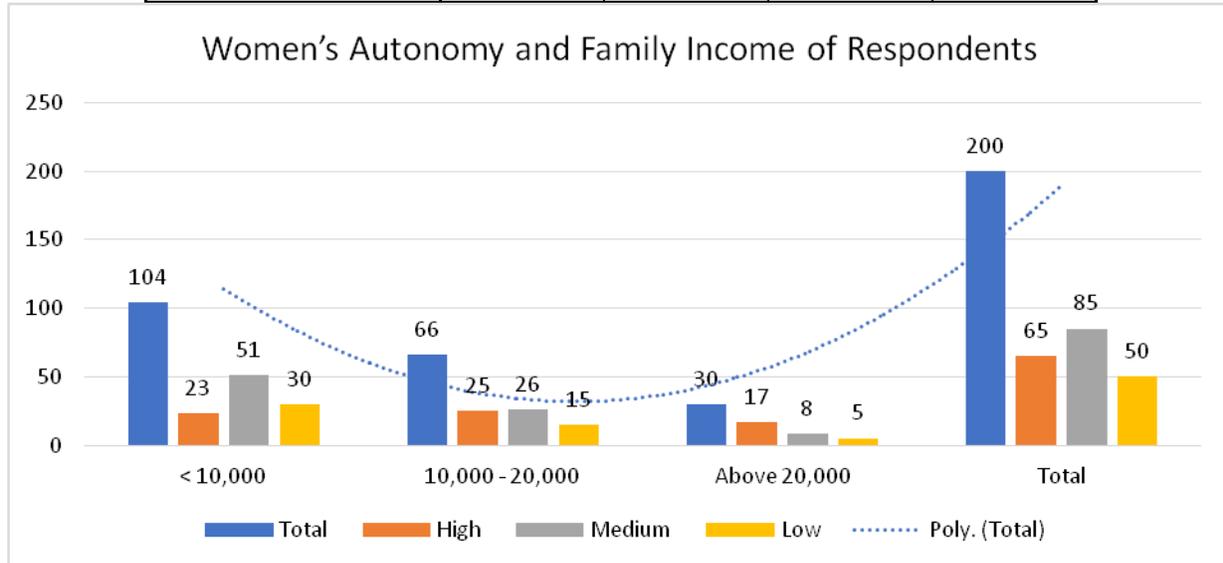


Table – 20: Women’s Autonomy and Type of Family of Respondents

Type of Family	Total	High	Medium	Low
Extended	120	26	58	36
Nuclear	74	38	25	11
Polygamous	6	0	2	4
Total	200	64	85	51

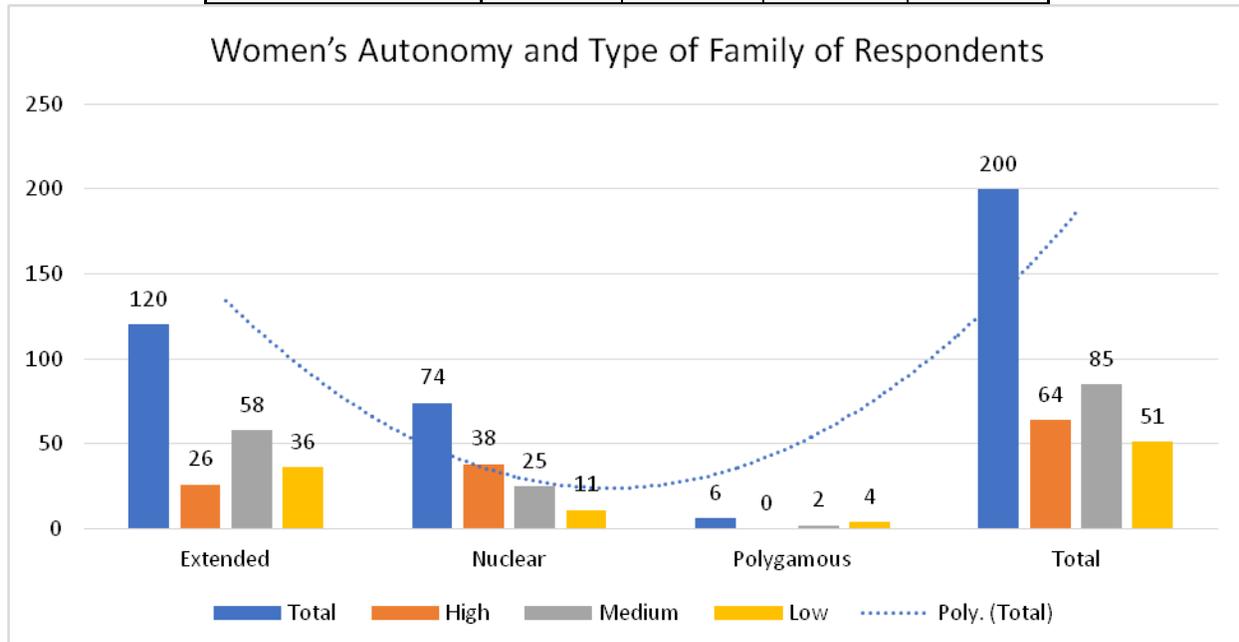


Table – 21: Use of Antenatal Services and Age Distribution of Respondents

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

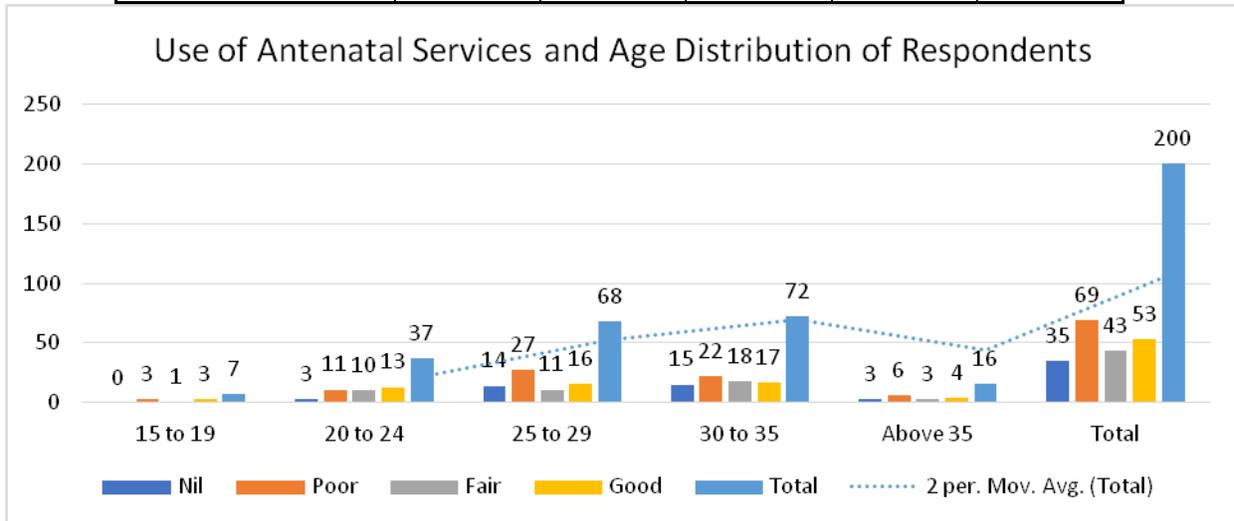


Table – 22: Use of Antenatal Services and Education Level of Respondents

Education	Nil	Poor	Fair	Good	Total
Uneducated	23	50	13	8	94
Primary	3	14	7	12	36
Secondary	2	14	9	19	44
Above	1	2	9	14	26
Total	29	80	38	53	200

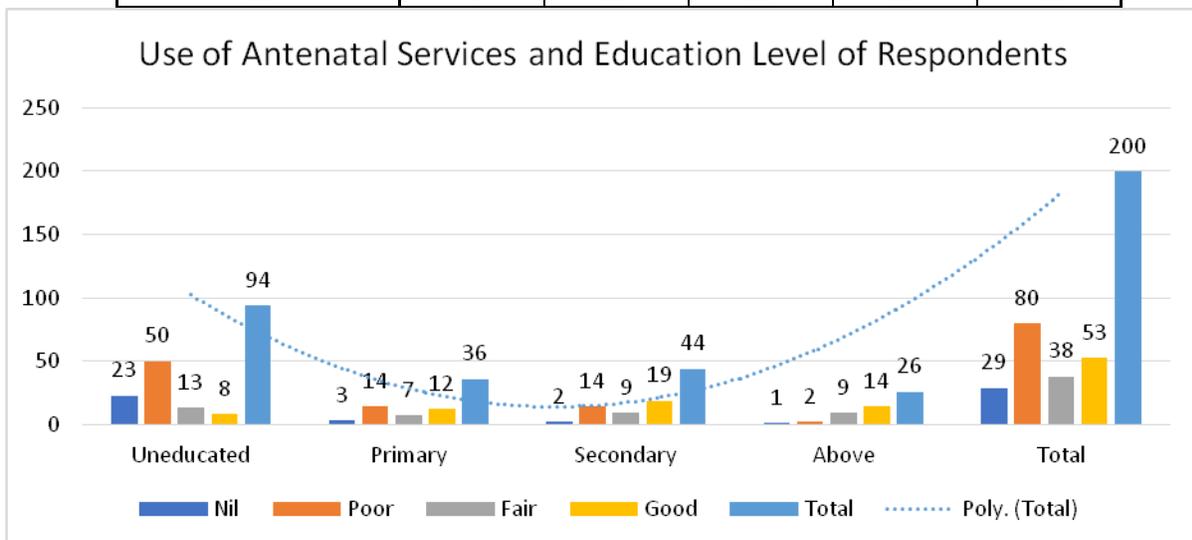


Table – 23: Use of Antenatal Services and Residence of Respondents

Residence	Nil	Poor	Fair	Good	Total
Rural	21	50	24	25	120
Urban	8	25	16	31	80
Total	29	75	40	56	200

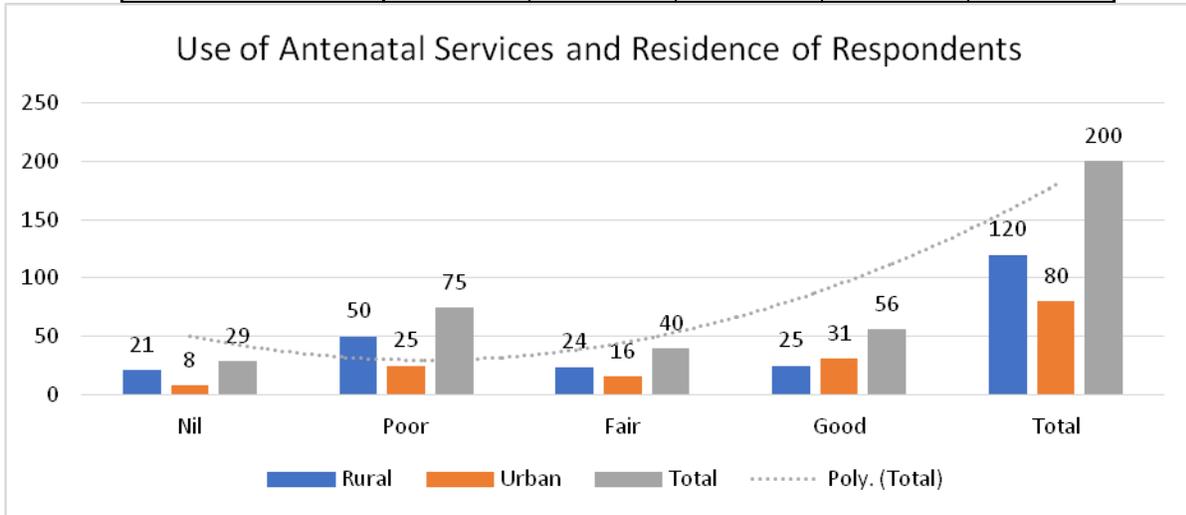


Table – 24: Use of Antenatal Services and Duration of Marriage of Respondents

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

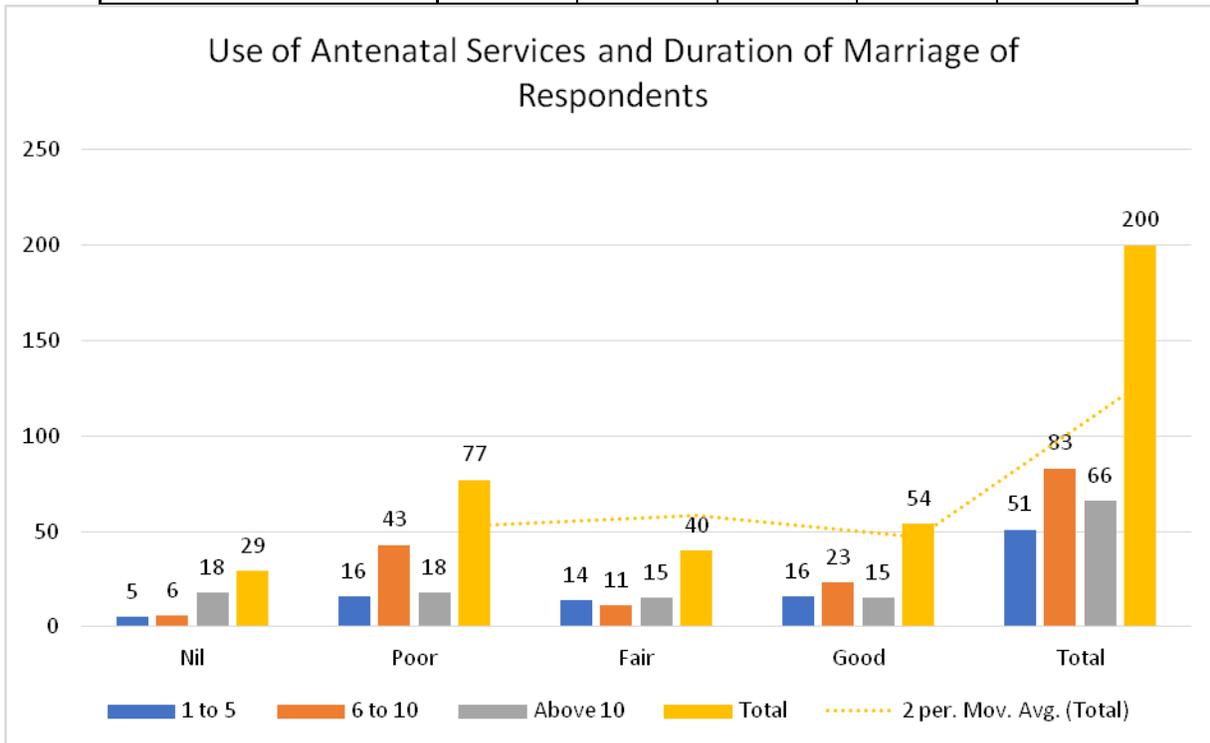


Table – 25: Use of Antenatal Services and Working Status of Respondents

Employment	Nil	Poor	Fair	Good	Total
Unemployed	26	71	30	43	170
Employed	5	8	4	13	30
Total	31	79	34	56	200

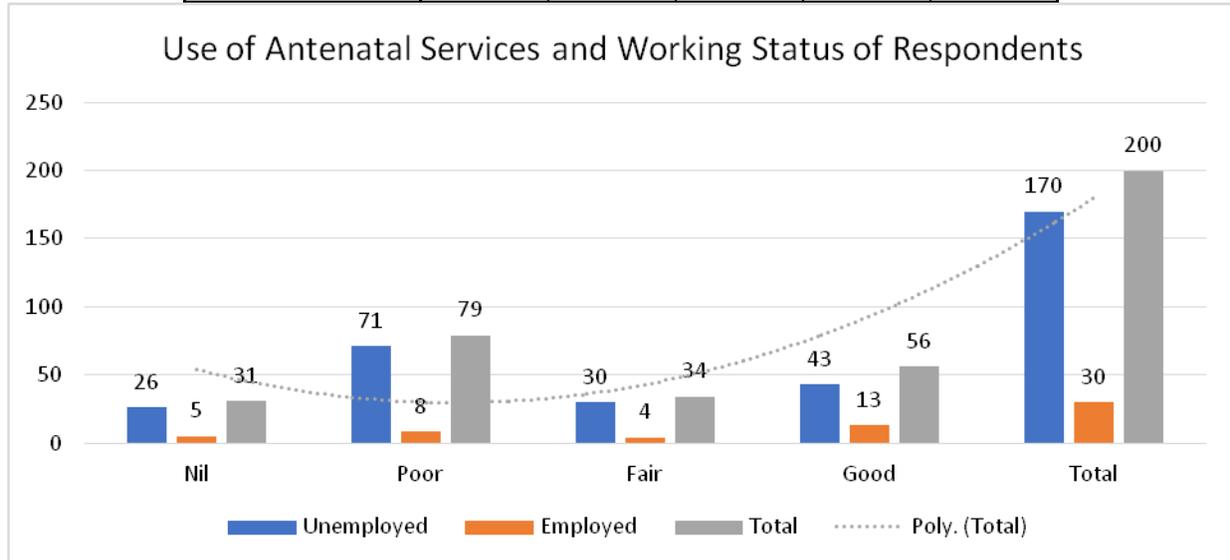


Table – 26: Use of Antenatal Services and No of Living Children of Respondents

No of Children	Nil	Poor	Fair	Good	Total
1 to 3	12	45	24	35	116
4 to 6	12	32	12	19	75
Above 6	4	5	0	0	9
Total	30	82	36	54	200

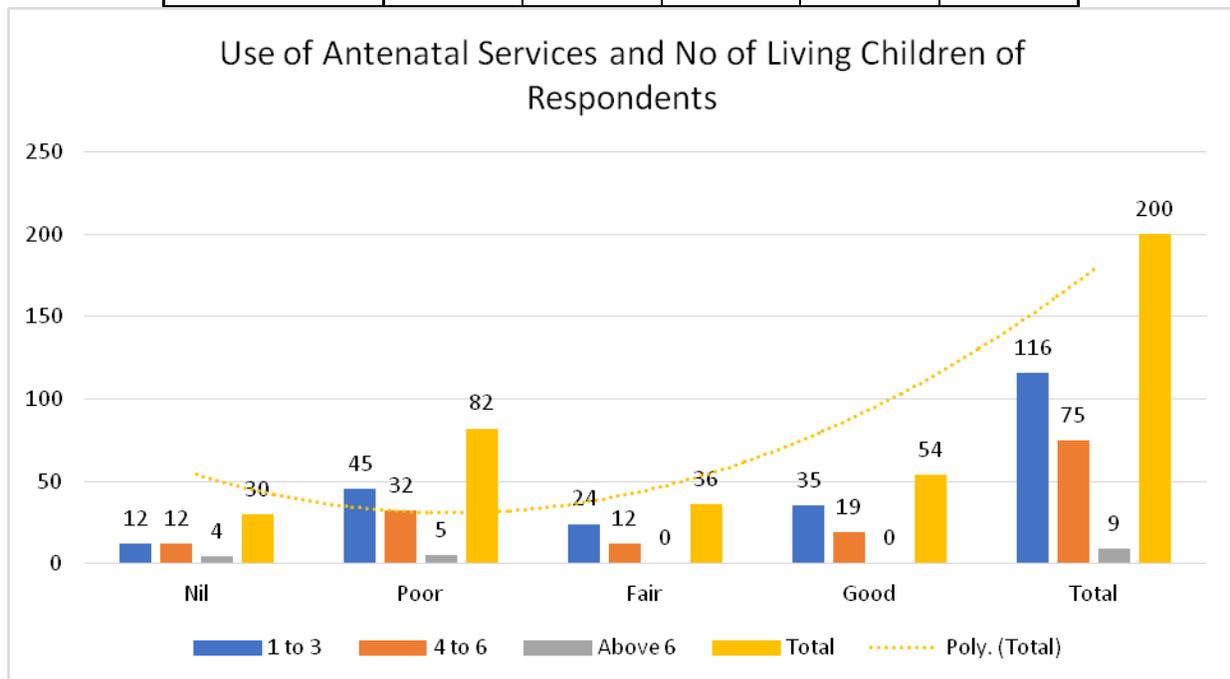


Table – 27: Use of Antenatal Services and No. of Sons of Respondents

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

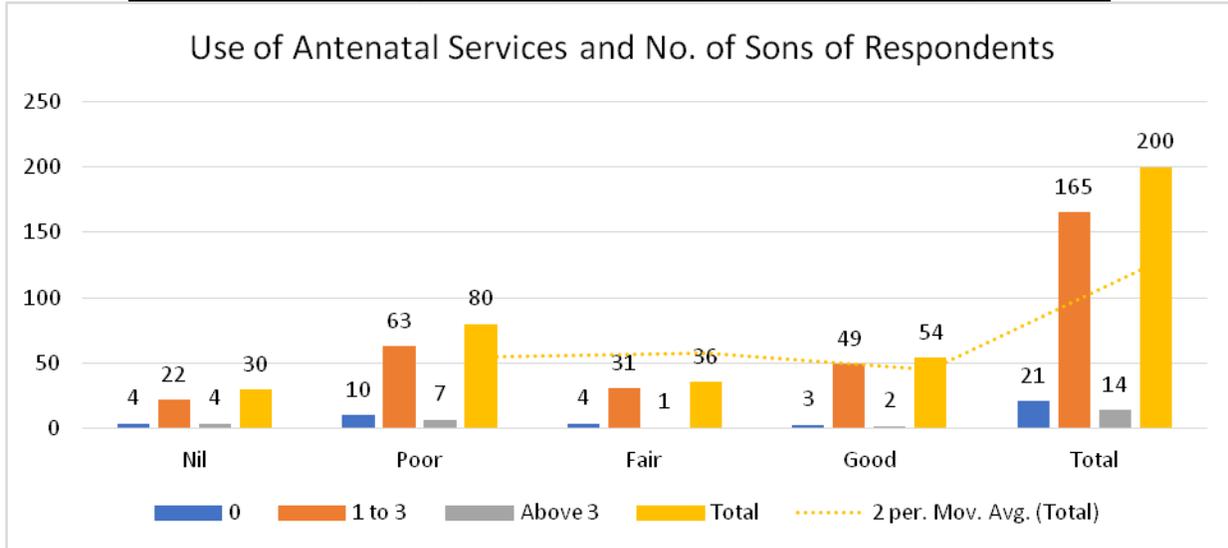


Table – 28: Use of Antenatal Services and Family Income of Respondents

Family Income	Nil	Poor	Fair	Good	Total
< 10,000	19	47	16	22	104
10,000 - 20,000	8	25	13	20	66
Above 20,000	3	8	6	13	30
Total	30	80	35	55	200

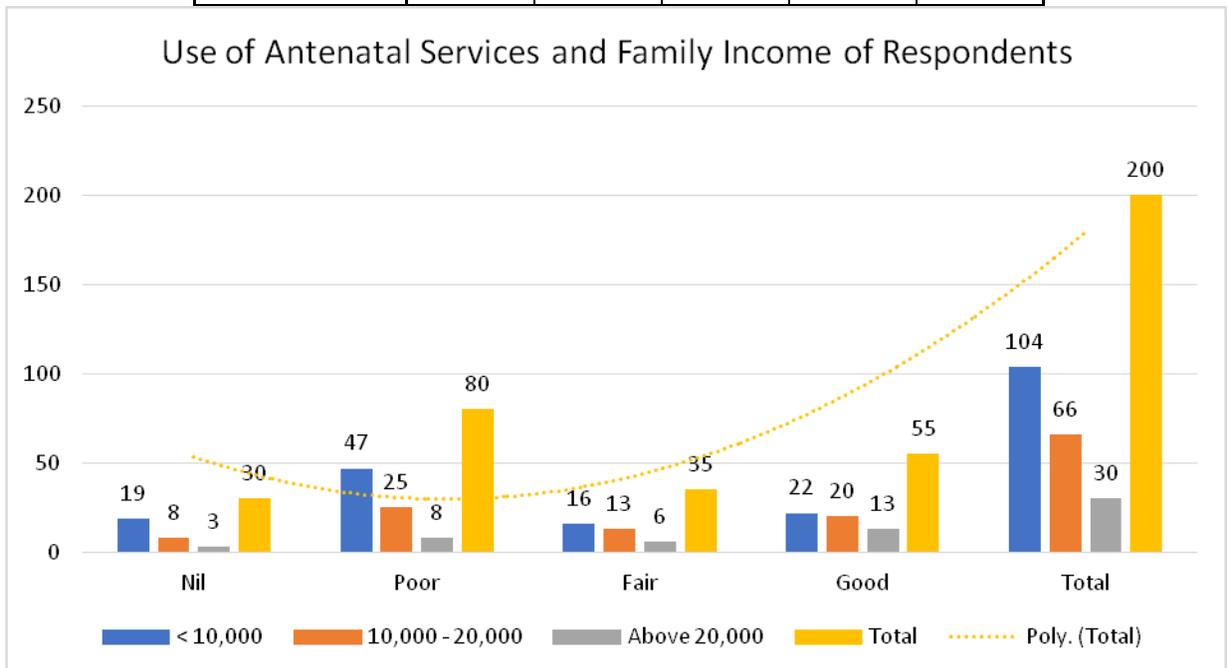
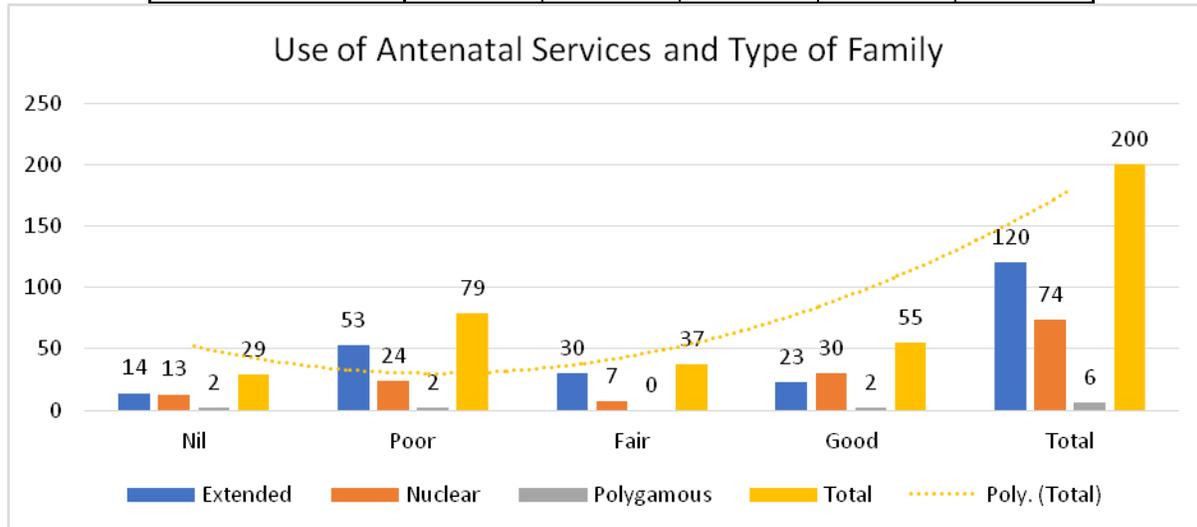


Table – 29: Use of Antenatal Services and Type of Family

Type of Family	Nil	Poor	Fair	Good	Total
Extended	14	53	30	23	120
Nuclear	13	24	7	30	74
Polygamous	2	2	0	2	6
Total	29	79	37	55	200



50

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 of 35 – 49 years.

In case of education, respondents were divided into 4 groups, 48% (94 respondents) belonged to the uneducated class, 18% (36 respondents) to primary, 22% (44 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 than 52% (104 respondents) belonged to the category < 10,000 Rs. Per month, 33% (66 respondents) fall in 11,000 to 20,000 Rs per 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 and 26% (52 respondents) had low autonomy. In our study 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. In our study we found that 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 years age and autonomy were 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 as 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 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 and showed lowest autonomy 67% (4 / 6).

Antenatal care (ZNC) 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, 3.5% 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 nil 42% (29) to 3 antenatal care visits 71% (49) to the hospital and the age group above 35 years 8% (16 / 200) of total respondents showed poor use 38% (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 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.

In our study 60% residents belonged to rural areas and had poor status 53% (50 / 94) regarding utilizing 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% (13 / 30) as compared to unemployed respondents 42% (17 / 70) who showed poor use of services.

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 respondents) of ANC services whereas population with income above Rs. 20,000 per month (15% respondents) had good utilization 43% (13 respondents) 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 respondents) as compared to nuclear type of families with 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 distribution, the respondents were divided into 5 groups. 3.5% (7 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 of 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, 15.9% were under 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 – 35 years in both the studies [2].

In case of education respondents were divided into 4 groups. 48% (94 respondents) belonged 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, 15.1% (66 respondents) belonged to primary or less, 35.8% (134 respondents) in 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 [1].

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 area whereas 10.6% (959 respondents) belonged to the urban areas. This comparison shows that majority the respondents lived in rural areas [5].

In case of female employment 85% (170 respondents) were unemployed and 15% (30 respondents) were employed. In the study of Ethiopia (2013) 75.3% (6822 respondents) were employed and 24.8% (2244 respondents) were unemployed. This shows that in both the studies the number of unemployed respondents were more [5].

If we consider the family income then 52% (104 respondents) belonged to the category < 10,000 Rs per months, 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, 12.3% (17 respondents) belonged to the income bracket 30001 – 40,000 Rs per month and 46.6% (64 respondents) fall in the category of 40001 to above Rs per month. This is in contrast with our study according to which majority of the respondents belong to the class of 1 – 10,000 Rs per month whereas in Sialkot (2013) majority of the respondents belong to the class 40,000 Rs per month and above [2].

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 unclear class and 3% (6 respondents) belonged to polygamous class. In the study done in Sialkot (2013) 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 extended whereas in Sialkot majority of the respondents belonged to the class nuclear [2].

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

Socioeconomic status also affected ANC service utilization in Ethiopian study (2013) where ANC services utilization was 59% in rich as compared to 13% in poor [5]. Similarly, in India women with higher wealth quintile were about 2 – 5 times more likely to utilize MCH services [9]. 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 of marriage, number of children, urban residence and family income. Most of the women used the antenatal services but among them most had poor utilization. Factors responsible for better utilization were increasing age, education, urban residence, employment, duration of marriage, family income and type of family.

REFERENCES:

1. Sipsma H, Oferi A, Canavan M, Udry C Bradley E. Empowerment and use of antenatal care among women in Ghana: a cross sectional study. *BioMed Central*. 2014; 14:364
2. Anwar B, Shoaib M, Javeds S. Women's autonomy and their role in decision making at household level A case of rural Sialkot, Pakistan. *World Applied Sciences Journals*. 2013; 23 (1): 129-36.
3. Badar S, Saeed MA, Yasmeen S, Hussain W, Ali M Islam R. Effect of education and duration of marriage on women empowerment at household level in Bahawalpur Pakistan. *Journal of Sheikh Zayed Medical College*. 2014; 5(1): 549-52.
4. Shahabuddin ASM, Delvaux T, Abouchadi S, Sarkar M Brouwere VD. Utilisation and Maternal Health Services among adolescent women in Bangladesh: A scoping review of literature. *Tropical Medicine and International Health*: 2015; 20(7)
5. Wado YD. Women's and Reproductive Healthcare Seeking Behavior in Ethiopia. *USAID DHS working paper*. 2013: 91.
6. Tran Tk, Gottvall K, Ngugen HD, Ascher H Petzold M, Factors associated with antenatal care adequacy in rural and urban contexts results from two health and demographic surveillance sites in Vietnam. *BioMed Central*. 2012; 12:40.
7. Tran TK, Nguyen CTK, Nguyen HD, Eriksson B, Bondjers G, Gottvall K. Urban-rural disparities in antenatal care utilization: a study of

- two cohorts of pregnant women of Veitnam. *BioMed Central*. 2011; 11:120.
- 66
8. Mahapatro SR, utilization of maternal and child health care services in India: Does women's autonomy matter?. *The Journal of family welfare*. 2012; 589 (1).
 9. Situ K.C. Women's autonomy and maternal healthcare utilization in Nepal. Master's Thesis 2013.
 10. Acharya D Bell S, Simkhada P, Tijlingen E, Regmi PR. Women's autonomy in household decision making; a demographic study in Nepal. *Reproductive Health*. 2010; 7:15.
 11. Das G, Autonomy and decision making role of Tribal women, a care study of Santos Hypur village in Sundergarh District of Odisha. Master's Thesis. 2012.
 12. Nigatu D, Gebremariam A, Abera M, Setegn T and Deribe K. Factors associated with women's autonomy regarding material and child health care utilization in Belzene; a community based cross-sectional study. *Bio Med Central*. 2014; 14:79.
 13. Khan S, Sajid MR, Iqbal S, The impact of women's autonomy on maternal health care utilization in rural Punjab. *Pakistan Journal of Social Issues* 2010; 2: 74 – 83.
 14. Panwar P, Bahuguna P, Belual O.K. Factors affecting empowerment of women in Garhwal Himalaya (a case study of Pawri Garhwal). *International Journal of Management Social Sciences*. 2014; 2 (9).
 15. Ghaffar A, Pongpanich S, Chapman R.S, Panza A, Mureed S, Ghaffar N, Provision and utilization of routine antenatal care in rural Baluchistan Province, Pakistan; A Survey of Knowledge, Attitude and Practices of pregnant women, *Journal of Applied Medical Sciences*, 2012; 1(1): 93 – 116.
 16. Wado YD, Afework MF and Hindin MJ, Pregnancy intention, women's autonomy and use of maternal health services in south western Ethiopia.
 17. Khan S, Zia ur Rehman, Muhayudian A, Chaudhry W, Fiaz FA, Badshah I, The impact of women's autonomy on the reproductive behavior in Gilgit Baltistan, Pakistan, *Penrea Journal* 2013; 75 (11).
 18. Asweto Co, Alouck JR, Obonyo CO and Ouma J.O. Maternal autonomy and distance to health care facility and ANC attendance; Findings from Madiany Division of Siaya Country, Kenya, *American Journal of Public health research*, 2014; 2 (4); 153 – 158.
 19. Sadiq N. Waheed Q, Hussain M, Rana AT Yousaf Z. Factors affecting the utilization of antenatal care among women of retrospective age in Nurpur Shaha. *Journal of Pakistan MEDcial Association*. 2011; 61 (6): 616 – 8.
 20. Akhtar N, Akhtar S, Zafar MI, Ali T. Impact of education on utilization of antenatal and post-natal services in Punjab, Pakistan. *Pakistan Journal of social sciences*. 2013; 33 (2); 463 – 70.
 21. Kabir P, Khan HIA. Utilization of antenatal care among pregnant women of urban slums of Dhaka city, Bangladesh, *IOSR Journal of Nursing and Health Sciences*. 2013; 2 (2).