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Factors Affecting Women's Reproductive Health in Punjab (A Study of District Faisalabad & District Multan)

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Abstract: Women's health status is affected by complex biological, social and cultural factors, which are interrelated and only can be addressed in a comprehensive manner. Reproductive health is determined not only by the quality and availability of health care, but also by socio-economic development levels, lifestyles and women's position in society. Women health is compromised not by lack of medical knowledge, but by infringement on women's human rights including reproductive health rights. Poor women, who lack adequate food, basic health care, or modern contraception, suffer grave consequences for reproductive health. A woman who is malnourished and in poor health runs much greater risks in reproductive health issues and usually suffers without proper treatment and dies in most of cases. The aim of the present study to find out the factors affecting women's reproductive health in Punjab. Multistage sampling techniques were used for data collection. At the first stage two Districts i.e. Faisalabad and Multan of Punjab province were selected randomly. At the second stage four tehsils, two from each district (Tehsil Faisalabad and Tehsil Jaranwala from District Faisalabad and Tehsil Multan and Tehsil Shujabad from District Multan) were selected randomly from the selected districts, than 12 localities, three from each tehsil (Chak No. 59/JB, 30/JB & 31/JB from Tehsil Faisalabad, Chak No. 60/GB, 55/GB & 54/GB from Tehsil Jaranwala and Khokhran, Mithal Shah and Gondian from Tehsil Shujabad and Ghalu, Sanhbai and Hasnabad from Tehsil Multan) were selected randomly. A sample of 300 respondents (25 from each locality) selected purposively. It was found that majority of the respondents were eating vegetables and less than a half of them were drinking milk on daily basis. It is clear from the findings that the respondents had many health problems i.e. headache (61.7%), high blood pressure (60.3%), back pain (54.7%), swelling on different body parts (41.3%), irregular menses (33.0%), hand, facial swelling (32.7%), urinary complications (28.3%), cramps and abdominal pain (26.7%), vaginal bleeding (25.0%) and some of them had anemia and heavy bleeding. Less than a half of the respondents (45.0%) used any contraceptive method and one-fourth of them were observed its side effects. Bi-variate analysis shows that education, income and age at marriage were positively associated with reproductive health status and age and total no. of pregnancies were negatively associated with reproductive health status. There is a dire need to improve the health facilities available at government Health Centers especially at BHUs to address the reproductive health problems that will surely improve women's health status.

Keywords: Reproductive health status, health problem, factor.

INTRODUCTION

Reproductive fitness and a healthy sexual union and relationship are vital in marriage and in bonding a family collectively. Unluckily, sexually transmitted diseases (STDs), comprising HIV/AIDS, are a progressively more common risk to a healthy marital relation. Extramarital relationships of husband multiply the threat of disease that not only may contaminate him but also he may bring disease home that could also take life of his wife. Probably men are twofold as women to infect their partners. Young females who are forced into sexual union by their husbands may have limited options to save themselves against transmittable diseases, may also find it difficult to leave an obnoxious association and may not have resource to get lawful protection [1]. Generally, biologically women are more prone to transmittable diseases. In addition, many women do not know the manner of STDs/HIV transmission and many are in refutation about their partner's extramarital sexual unions and relations. Finally, most women do not have the power to deny sexual advancement to their husbands or partners, or to insist they use any reproductive health method.

In Pakistan, the status of maternal wellbeing is poor. An expected 30,000 ladies kick the bucket every year due to pregnancy related entanglements and late gauges demonstrate around 500/100,000 live conception. Yet in actuality it might be higher in light of under enlistment of passings and unlucky deficiency of the reason for death data [2]. The healthful and demographic overviews, directed amid last few years, show amazingly poor state of female and tyke nourishment. National sustenance overview 2002-03 reported a high pervasiveness of ailing health in pregnant ladies with particular insufficiencies of protein, vitality, iron, iodine and zinc in the eating methodology of pregnant ladies [3].

Pakistan's total health expenditure is 0.35 % of its GDP [4]. Private out-of-pocket or self-financing of healthcare is the largest source of financing for health care in Pakistan. The general government expenditure on health is 27% of the total health expenditure while the out-of-pocket expenditure is 63% of the total health expenditure which is a very high percentage [5]. Paucity of government funds leads to poor quality services in public health units and gradual emergence of private health service providers.

Reproductive rights are human rights and originate from the identification that all individuals have the right to make decisions free of discrimination, compulsion and coercion. The most important among these are the right to freely and sensibly decide the total number, timing and spacing of one's children and to encompass the ways to do so and the right to the utmost standard of sexual and reproductive health. This also involves the right of all individuals especially women to protect them from unintended pregnancy, pregnancy related diseases, sexually transmitted infections—including HIV, infertility and sexual dysfunction [6].

Reproductive health can be achieved and sustained, if the reproductive health rights of all persons must be accepted, protected and satisfied. Reproductive health is the state of physical, emotional, mental and social well-being linked with sexual activities; possibility of having gratifying and safe sexual experience which is free of compulsion, discrimination and aggression. Present study is focused the factors affecting women reproductive health in province Punjab.

Objective

- To study the socio-economic characteristics of the sampled women.
- To find out the factors affecting women reproductive health
- To suggest some policy measure on the issue.

METHODOLOGY

The aim of the present study to find out the effects of malnutrition on women reproductive health in Punjab. Multistage sampling techniques were used for data collection. At the first stage two Districts i.e. Faisalabad and Multan of Punjab province were selected randomly. At the second stage four tehsils, two from each district (Tehsil Faisalabad and Tehsil Jaranwala from District Faisalabad and Tehsil Multan and Tehsil Shujabad from District Multan) were selected randomly from the selected districts, than 12 localities, three from each tehsil (Chak No. 59/JB, 30/JB & 31/JB from Tehsil Faisalabad, Chak No. 60/GB, 55/GB & 54/GB from Tehsil Jaranwala and Khokhran, Mithal Shah and Gondian from Tehsil Shujabad and Ghalu, Sanhbai and Hasnabad from Tehsil Multan) were selected randomly. A sample of 300 respondents (25 from each locality) selected purposively.

Data were collected with the help of a well-designed interview schedule. Descriptive and inferential statistical techniques were used for data analysis.

RESULTS AND DISCUSSION

Table 1 indicates that 31.7 percent of the respondents had up to 30 years of age, while 36.0 percent of them had 31-40 years of age and 32.3 percent of them had above 40 years of age.

Table 2 reveals that only 15.0 percent were illiterate, while about one-third i.e. 33.7 percent of the respondents had primary-middle level education, about one-fourth i.e. 26.7 percent of them were matric passed and 24.7 percent of them had above matric level.

Table 3 reflects that about one-forth i.e. 25.0 percent of the respondents had up to Rs. 15000 monthly income from all sources, while a major proportion i.e. 42.3 percent of the respondents had Rs. 15001-30000 monthly family income and about one-third i.e. 32.7 percent of them had above Rs. 30000 monthly income from all sources.

Simkhada et *al.* [7] identified and analyzed the main factors affecting the utilization of maternal health services in developing countries. Antenatal care is a key strategy for reducing maternal mortality, but millions of women in developing countries do not receive it. It was found that commonly identified the following factors affecting antenatal care uptake: maternal education, husband's education, marital status, availability, cost, household income, women's employment, media exposure and having a history of obstetric complications.

Above table also shows that 39.2 percent of the respondents had less than 20 years of age at the time of their marriage, while 32.3 percent of them had 20-22 years age at marriage and 28.3 percent of them had

above 22 years of age at marriage. Mean age at marriage was 22.50 years with standard deviation was 2.68 years. Above findings show that age at marriage was low in the selected area. Because Islam refers to marry in early age. Some of the families follow this rule restricts. So they marry their children in early age. Another reason is availability of suitable proposal. Some people marry their children in early age due to family pressure. It is well documented fact that young age at marriage for women has reproductive and physical health complications like abortion and lower birth weight babies.

According to APWA [8], high preference for son early marriages in rural set up, high fertility rate, poor delivery method and place and poor antenatal and postnatal services are the factors associates with above mentioned issues.

Table 1 further reveals that about one-third i.e. 30.3 percent of the respondents had up to 10 years duration of marriage, while 35.7 percent of them had 11-15 years duration and 34.0 percent of them had above 15 years duration of marriage.

In our male dominated society mostly women are restricted to move in society because in South Asia region women find themselves in subordinate positions. Women socially, culturally, and economically dependent on men. Women are also largely excluded from making decisions, have limited access to and control over resources, are restricted in their mobility, and are often under threat of violence from male relatives [9]. Table 8 reveals that a majority i.e. 74.7 percent of the respondents were housewives, while 25.3 percent of them were working women. Shields [10] pointed out that professional women have high rates of consultation with health care providers and give attention to diet.

Table 2 shows that 39.2 percent of the respondents had less than 20 years of age at the time of their marriage, while 32.3 percent of them had 20-22 years age at marriage and 28.3 percent of them had above 22 years of age at marriage. Mean age at marriage was 22.50 years with standard deviation was 2.68 years. Above findings show that age at marriage was low in the selected area. Because Islam refers to marry in early age. Some of the families follow this rule restrictly. So they marry their children in early age. Another reason is availability of suitable proposal. Some people marry their children in early age due to family pressure. It is well documented fact that young age at marriage for women has reproductive and physical health complications like abortion and lower birth weight babies.

According to APWA [8], high preference for son early marriages in rural set up, high fertility rate, poor delivery method and place and poor antenatal and postnatal services are the factors associates with above mentioned issues.

Table 3 reveals that about one-third i.e. 30.3 percent of the respondents had up to 10 years duration of marriage, while 35.7 percent of them had 11-15 years duration and 34.0 percent of them had above 15 years duration of marriage.

Table 4 shows that about one-fourth i.e. 25.0 percent of the respondents had up to 3 years age difference between husband and wife, 52.7 percent of them had 4-5 years age difference and 22.3 percent of them had above 5 years age difference between husband and wife.

Table 5 reveals that 16.7 percent of the respondents' husbands were illiterate, while 15.0 percent of the respondents' husbands had education primary-middle level, while about one-fourth i.e. 25.0 percent of them were matriculated and most of the respondents' husbands i.e. 45.3 percent had above matric level of education.

Family is a group of intimate individuals emotionally involved and blood related marriage or adoption responsible for the education of the children living together. Normally, family type in all countries varies depending upon their style of living and culture. In Pakistan there are three types of families' nuclear, joint and extended but most common form of families are joint and nuclear [11]. Sachin and Rege [12] stated that the main reasons for inadequate utilization of maternal health services were financial; unawareness about maternal health services, place of delivery was associated with the type of the family. Traditional practices were the most common reason for conducting the deliveries at home.

Study shows that 40.0 percent of the respondents were living in nuclear family system, while a majority i.e. 60.0 percent of the respondents was living in joint family system.

Table 7 reveals that more than one-third i.e. 37.3 percent of the respondents were born 1-2 children, while 37.0 percent of them were born 3-4 children and 25.7 percent of them were born above 4 children. According to the Batool [9], in Pakistan the basic aim of marriage is to bear the children. This thinking is depends upon on socio-cultural beliefs. In Pakistani society woman's position gets stronger when she gets pregnant and gives birth to a child particularly a boy child.

Table 8 indicates 36.7% of the respondents had 1-2 children, a major proportion i.e. 43.3 percent of the respondents had 3-4 children, while 20.0 percent of them had five and above children.

Table 9 presents the health/reproductive health problems faced by the respondents. Table shows that 61.7 percent of them had headache problem, while 41.3 percent of them had swelling on different body parts, 54.7 percent of them were suffering back pain problem. About one-third i.e. 33.7 percent of them were suffering from fever, 18.3 percent of them had heavy bleeding problem, 33.0 percent of them faced irregular menses problem, 9.7 percent of them had breast problem and 12.7 percent of them had miscarriage problem. Similarly respondents had many problems i.e. vaginal bleeding (25.0%), hand, facial swelling (32.7%), Anemia (10%), severe anemia (8.3%), high BP (65.3%), cramps and abdominal pain (26.7%) and urinary complications (28.3%).

Table 10 indicates that 45.0 percent of the respondents were using any contraceptive method, while 55.0 percent of them never used any contraceptive method.

Table 11 indicates that 3.7 percent of the respondents used tubectomy method, 8.0 percent of them adopted IUD method and 6.3 percent of the respondents used injection for family planning. About 15.0 percent of the respondents used condom, 7.0 percent of them used oral pills, 2.3 percent of them adopted withdrawal method and 2.0 percent of them adopted female sterilization contraceptive methods.

Table 12 depicts that about one-fourth i.e. 24.7 percent of the respondents were observed side effect of contraceptive services, whereas 20.3 percent of them had no side effect of contraceptive services.

Table 13 shows that 11.7 percent of the respondents had bleeding problem due to using family planning methods, while 12.0 percent of them had loss in weight, 14.3 percent of them had swelling/rash and 14.0 percent of the respondents experienced heavy menses due to family planning.

Table-1: Socio-economic and demographic characteristics of the respondents (n = 300)

Age of the respondents (in years)	**Frequency**	**Percentage**
Up to 30	95	31.7
31-40	108	36.0
Above 40	97	32.3
Education of the respondents		
Illiterate	45	15.0
Primary-Middle	101	33.7
Matric	80	26.7
Above matric	74	24.7
Monthly income from all sources		
Upto 15000	75	25.0
15001-30000	127	42.3
Above 30000	98	32.7
Age at marriage (in years)		
Less than 20	118	39.3
20-22	97	32.3
Above 22	85	28.3
	Mean = 22.50	Std. Dev. = 2.68
Duration of marriage (in years)		
Up to 10	91	30.3
11-15	107	35.7
Above 15	102	34.0
Occupational status		
Housewife	224	74.7
Working woman	76	25.3

Table-2: Distribution of the respondents according to their age at marriage

Age at marriage (in years)	Frequency	Percentage
Less than 20	118	39.3
20-22	97	32.3
Above 22	85	28.3
Total	300	100.0

Mean = 22.50 Std. Dev. = 2.68

Table-3: Distribution of the respondents according to the duration of marriage

Duration of marriage (in years)	Frequency	Percentage
Up to 10	91	30.3
11-15	107	35.7
Above 15	102	34.0
Total	300	100.0

Table-4: Distribution of the respondents according to their age difference between husband and wife

Age difference (in years)	Frequency	Percentage
Up to 3	75	25.0
4-5	158	52.7
Above 5	67	22.3
Total	300	100.0

Table-5: Distribution of the respondents according to their husband's education

Husband's education	Frequency	Percentage
Illiterate	50	16.7
Primary-Middle	45	15.0
Matric	75	25.0
Above matric	130	43.3
Total	130	100.0

Table-6: Distribution of the respondents according to their type of family

Type of family	Frequency	Percentage
Nuclear	120	40.0
Joint	180	60.0
Total	300	100.0

Table-7: Distribution of the respondents according to born total no. of children

Total born children	Frequency	Percentage
1-2	112	37.3
3-4	111	37.0
Above 4	77	25.7
Total	300	100.0

Table-8: Distribution of the respondents according to their total children

Total children	Frequency	Percentage
1-2	110	36.7
3-4	130	43.3
5 and above	60	20.0
Total	300	100.0

Table-9: Distribution of the respondents according to their health/ reproductive health problems

Health problems	Yes		No		Total	
	F.	%	F.	%	F.	%
Headache	185	61.7	115	38.3	300	100.0
Swelling on different body parts	124	41.3	176	58.7	300	100.0
Back pain	164	54.7	136	45.3	300	100.0
Fever	101	33.7	199	66.3	300	100.0
Heavy bleeding	55	18.3	245	81.7	300	100.0
Irregular menses	99	33.0	201	67.0	300	100.0
Breast problems	29	9.7	271	90.3	300	100.0
Miscarriage	38	12.7	262	87.3	300	100.0
Vaginal bleeding	75	25.0	225	75.0	300	100.0
Hand, Facial swelling	98	32.7	202	67.3	300	100.0
Anemia	30	10.0	270	90.0	300	100.0
Severe anemia	24	8.0	276	92.0	300	100.0
High blood pressure	181	60.3	119	39.7	300	100.0
Cramps and abdominal pain	80	26.7	220	73.3	300	100.0
Urinary complications	85	28.3	215	71.7	300	100.0

Table-10: Distribution of the respondents according to using any contraceptive method

Using any contraceptive method	Frequency	Percentage
Yes	135	45.0
No	165	55.0
Total	300	100.0

Table-11: Distribution of the respondents according to type of contraceptive method they used

Methods	Frequency	Percentage
Tubectomy	11	3.7
IUD	24	8.0
Injection	19	6.3
Condom	45	15.0
Oral pills	21	7.0
Withdrawal	7	2.3
Female sterilization	6	2.0
Any other	2	0.7
NA (never used)	165	55.0
Total	300	100.0

Table-12: Distribution of the respondents according to feel any side effect of contraceptive services

Side effect	**Frequency**	**Percentage**
Yes	74	24.7
No	61	20.3
NA (Not using)	165	55.0
Total	300	100.0

Table-13: Distribution of the respondents according to the type of side effect of family planning method (n = 300)

Side effects	**Yes**		**No**		**NA**	
	F.	%	F.	%	F.	%
Bleeding	35	11.7	39	13.0	226	75.3
Weight loss	36	12.0	38	12.7	226	75.3
Swelling/ rash	43	14.3	31	10.3	226	75.3
Heavy menses	42	14.0	32	10.7	226	75.3

TESTING OF HYPOTHESES

Hypothesis 1

Age of the women will be associated with their reproductive health status

Table-14: Association between age of the respondents and their reproductive health status

Age (in years)	Reproductive health status			Total	
	Low	Medium	High		
Up to 30	10	18	67	95	
	10.5%	18.9%	70.5%	100.0%	
31-40	16	27	65	108	
	14.8%	25.0%	60.2%	100.0%	
Above 40	35	47	15	97	
	36.1%	48.5%	15.5%	100.0%	

Total	61	92	147	300	
	20.3%	30.7%	49.0%	100.0%	

Chi-square = 67.34 d.f. = 4 P-value = .000** Gamma = -.561
** = Highly significant

Table 14 represents the association between age of the respondents and their reproductive health status. The chi-square value (67.34) shows a highly significant association between age of the respondents and their reproductive health status. The gamma value shows a strong negative relationship between the variables. It means majority (70.5%) young age (up to 30) women had high level reproductive health status as compared to old age (above 40) respondents. So the hypothesis "Age of the women will be associated with their reproductive health status" is accepted.

Hypothesis 2

Education of the women will be associated with their reproductive health status

Table-15: Association between education of the respondents and their reproductive health status

Education of the respondents	Reproductive health status			Total	
	Low	Medium	High		
Illiterate	29	11	5	45	
	64.4%	24.4%	11.1%	100.0%	
Primary-Middle	5	42	54	101	
	5.0%	41.6%	53.5%	100.0%	
Matric	17	25	38	80	
	21.3%	31.3%	47.5%	100.0%	
Above matric	10	14	50	74	
	13.5%	18.9%	67.6%	100.0%	
Total	61	92	147	300	
	20.3%	30.7%	49.0%	100.0%	

Chi-square = 83.21 d.f. = 6 P-value = .000** Gamma = .369
** = Highly significant

Table 15 represents the association between education of the respondents and their reproductive health status. The chi-square value (83.21) shows a highly significant association between education of the respondents and their reproductive health status. The gamma value shows a strong positive relationship between the variables. It means majority (64.4%) of the illiterate respondents had low level reproductive health, on the other hand majority (67.6%) of the highly qualified (above matric) had high level reproductive health status. So the hypothesis "Education of the women will be associated with their reproductive health status" is accepted.

Hypothesis 3

Family income of the women will be associated with their reproductive health status

Table-16: Association between family income of the respondents and their reproductive health status

Family income	Reproductive health status			Total	
	Low	Medium	High		

Upto 15000	27	25	23	75	
	36.0%	33.3%	30.7%	100.0%	
15001-30000	18	37	72	127	
	14.2%	29.1%	56.7%	100.0%	
Above 30000	16	30	52	98	
	16.3%	30.6%	53.1%	100.0%	
Total	61	92	147	300	
	20.3%	30.7%	49.0%	100.0%	

Chi-square = 19.47 d.f. = 4 P-value = .001** Gamma = .244
** = Highly significant

Table 16 represents the association between family income of the respondents and their reproductive health status. The chi-square value (19.47) shows a highly significant association between family income of the respondents and their reproductive health status. The gamma value shows a strong positive relationship between the variables. It means majority of the low income (up to Rs. 15000) respondents had low (36.0%) to medium (33.3%) level reproductive health; on the other hand majority (53.1%) of the high income (above 30000) had high level reproductive health status. So the hypothesis "Family income of the women will be associated with their reproductive health status" is accepted.

Hypothesis 3

No. of pregnancies will be associated with their reproductive health status

Table-17: Association between total no. of pregnancies of the respondents and their reproductive health status

Total no. of pregnancies	Reproductive health status			Total	
	Low	Medium	High		
Up to 2	14	22	76	112	
	12.5%	19.6%	67.9%	100.0%	
3-4	20	40	51	111	
	18.0%	36.0%	45.9%	100.0%	
Above 4	27	30	20	77	
	35.1%	39.0%	26.0%	100.0%	
Total	61	92	147	300	
	20.3%	30.7%	49.0%	100.0%	

Chi-square = 35.77 d.f. = 4 P-value = .000** Gamma = -.446
** = Highly significant

Table 17 represents the association between total no. of pregnancies of the respondents and their reproductive health status. The chi-square value (35.77) shows a highly significant association between total no. of pregnancies of the respondents and their reproductive health status. The gamma value shows a strong negative relationship between the variables. It means if the respondents had up to 2 pregnancies then their reproductive health status is good, on the other hand if the respondents had above 4 pregnancies then their health status is not good. So the hypothesis "No. of

pregnancies will be associated with their reproductive health status" is accepted.

Hypothesis 5

Age at marriage of the women will be associated with their reproductive health status

Table-18: Association between age at marriage of pregnancies of the respondents and their reproductive health status

Age at marriage (in years)	Reproductive health status			Total	
	Low	Medium	High		
Less than 20	29	42	47	118	
	24.6%	35.6%	39.8%	100.0%	
20-22	15	22	60	97	
	15.5%	22.7%	61.9%	100.0%	
Above 22	17	28	40	85	
	20.0%	32.9%	47.1%	100.0%	
Total	61	92	147	300	
	20.3%	30.7%	49.0%	100.0%	

Chi-square = 10.63 d.f. = 4 P-value = .031* Gamma = .116

* = Significant

Table 18 represents the association between age at marriage of pregnancies of the respondents and their reproductive health status. The chi-square value (10.63) shows a significant association between age at marriage of the respondents and their reproductive health status. The gamma value shows a positive relationship between the variables. It means if the respondents had low age at marriage then their health status is low as compared to if the respondents had more age at marriage (above 22). So the hypothesis "Age at marriage of the women will be associated with their reproductive health status" is accepted.

CONCLUSIONS

It was found that the respondents had many health problems i.e. headache, high blood pressure, back pain, swelling on different body parts, irregular menses, hand, facial swelling, urinary complications, cramps and abdominal pain, vaginal bleeding and some of them had anemia and heavy bleeding. Less than a half of the respondents used any contraceptive method and one-fourth of them were observed its side effects. Bi-variate analysis shows that education, income and age at marriage were positively associated with reproductive health status and age and total no. of pregnancies were negatively associated with reproductive health status. There is a dire need to improve the health facilities available at government Health Centers especially at BHUs to address the reproductive health problems that will surely improve women's health status.

REFERENCE

1. Maharaj, P., & Cleland, J. (2004). Condom Use Within Marital and Cohabiting Partnerships in KwaZulu-Natal, South Africa. *Studies in family planning*, *35*(2), 116-124.
2. WHO. (2007). Estimation of Maternal Mortality. UNICEF, UNFPA and the World Bank. Geneva. National Nutrition Survey, 2002-2003. Government of Pakistan. National Institute of Health, Islamabad, Pakistan.
3. Govt. of Pakistan. 2013. National Economic Survey of Pakistan 2012-2013. Ministry of Finance, Pakistan. Islamabad.
4. World Health Organization. (2012). WHO National Health Account Database: Pakistan.
5. Maharaj, P. (2000). Promoting male involvement in reproductive health. *Agenda*, *16*(44), 37-47.
6. Simkhada, B., Teijlingen, E. R. V., Porter, M., & Simkhada, P. (2008). Factors affecting the utilization of antenatal care in developing countries: systematic review of the literature. *Journal of advanced nursing*, *61*(3), 244-260.
7. APWA. (2002). Children. The Family and Health: What it takes to give children long life. The Singapore Workshop: Pakistan-Health Problems Children under 10 in Pakistan.
8. Batool, Z. (2010). *Socio-cultural factors affecting anemia and its effects on mother child health in the rural areas of district*

Faisalabad, Punjab, Pakistan (Doctoral dissertation, University of Agriculture, Faisalabad).

9. Shields, M., & Shooshtari, S. (2001). Determinants of self-perceived health. *Health Reports*, *13*(1), 35-52.
10. Acharya, D. R., Bell, J. S., Simkhada, P., van Teijlingen, E. R., & Regmi, P. R. (2010). Research Women's autonomy in household decision-making: a demographic study in Nepal.
11. Mumbare, S. S., & Rege, R. (2011). Ante natal care services utilization, delivery practices and factors affecting them in tribal area of North Maharashtra. *Indian journal of community medicine: official publication of Indian Association of Preventive & Social Medicine*, *36*(4), 287.