

Proportionate Sharing Of Teenage Pregnancies among Women Delivering In Services Hospital Lahore

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ABSTRACT:

Teenage pregnancy is defined as pregnancy in females below 20 years of age. The age of mother is determined by easily verified date of delivery and not by the estimated date of conception. About 11% of all births worldwide are given by teenage mothers of age between 15-19 years. The 2014 World Health Statistics indicates that the average global birth rate among 15 to 19 year olds is 49 per 1000 girls. Complications during pregnancy and child birth are the second highest cause of death of girls between 15-19 years of age globally. The contributing factors in teenage pregnancy includes lack of parental guidance, most people evade their children from talking about sex.

Adolescent sexual behavior, among the adolescents, is another major factor resulting in teenage pregnancies. Another important factor is low use rate of contraceptives. This may be related to less education awareness about contraception and less access to contraceptives. In addition to complications of having a child, teenage mothers also face social problems such as poverty and community support. Child marriages are common in Pakistan although they are prohibited by law. This is a major cause of teenage pregnancy in Pakistan. The issue of proportionate sharing of teenage pregnancies among overall women delivering is very important in order to control their adverse outcomes and to

improve maternal health. In Pakistan, due to paucity of research in this area, there are various gaps in knowledge regarding this issue. This study was conducted to highlight the current scenario of teenage pregnancies in a tertiary care hospital of metropolitan city of Pakistan.

Objectives:

- To assess the proportionate sharing of teenage pregnancies among women delivering in gynecology wards, Services Hospital, Lahore.
- To assess the sociodemographic profile of teenage women under study.

Study Design:

This was a case series study.

Study Setting:

Study was performed at Gynecology units of Services Hospital Lahore. This is an 1135 bed tertiary care referral teaching hospital in the center of Lahore city providing health care services to the public.

Study Subjects:

All the pregnant women delivering in the Gynecology units Services Hospital Lahore, during the study period.

Method:

All the women delivering in gynecology wards of Services Hospital Lahore during the study period were counted and a semi structured questionnaire was used, one to one interview was done from all the teenage pregnant women who conceived before their 20th birthday and, delivered in gynecology units Services Hospital Lahore during this period.

Results:

The research was done in Gynecology wards of Services Hospital Lahore during the month of May 2017. 44 women from a total of 171 being delivered were less than age of 20 years at the time of conception. Thus, 25.73% of the women delivering in gynecology wards i.e. 1/4rd of the proportion were made by teenagers. Of the 44 girls, 54.5% had willful marriage. About 54% were married within families, showing the fact that family supported the marriage at this age. 61.4% girls were primigravida while 38.6% were

multigravida. 90% girls were willing to become pregnant. 81.80% of these girls had never used any method of contraception. 90.9% girls were housewives while other 10.1 % had either temporary jobs or very less paid jobs. Educational status showed that 65.6% were under matric and only 6% were graduate. 59% of girls had single earning hand in family. 90% of the girls had supportive partner while 10% did not.

Conclusion:

It is concluded that , one fourth of proportion was made by teenage pregnancies among overall women delivered here. About half of them (54%) had willful marriages. Majority (61.4%) of them were primigravida while 38.6% were multigravida. A major number of teenage girls (90%) were willing to become pregnant. More than half of girls belonged to lower socioeconomic groups. Most of the girls were less educated.

Keywords: **teenage pregnancies, case-series study.**

INTRODUCTION

Pregnancy is known as gravidity or gestation is the time during which one or more offspring develops inside a woman. [1] Teenage is young person whose age falls within range from 13 - 19 years. [2] Adolescence is the name for the transition period from childhood to adulthood. [3]

A female can become pregnant after she has begun to ovulate which can be before her first menstrual period but usually occurs after menarche. The age of mother is determined by easily verified date of delivery and not by the estimated date of conception. Consequently, statistics do not include pregnancies that began in women aged 19 years and ends after women's 20th birthday. [4]

About 16 million women 15-19 years old give birth each year, about 11% of all births worldwide. 95% of these births occur in low and middle-income countries. The average birth rate in middle-income countries is more than twice as high as that in high- income countries with the rate in low income being five times as high. [5]

The 2014 World Health Statistics indicate that the average global birth rate among 15 to 19 year olds is 49 per 1000 girls. Country rates range from 1 to 299 births per 1000 girls, with the highest rates in sub-Saharan Africa. Adolescent pregnancy remains a major contributor to maternal and child mortality, and to the cycle of ill-health and poverty. Complications during pregnancy and childbirth are the second cause of death for 15-19 year-old girls globally. Every year, some 3 million girls aged 15 to 19 undergo unsafe abortions.[6]

The contributing factors involving teenage pregnancies include the Lack of parental guidance, most people evade their children from talking about sex. In some cases, teenage mothers are not well educated about sex before getting pregnant and thus this leads to lack of communication between the parents and the children. Adolescent sexual behavior, among the adolescents, peer pressure is a major factor that encourages the

teenage boys and girls to indulge in sexual activities. Early dating, as early as 12 years of age, is another factor that contributes to teen pregnancy. Inappropriate information of safe sex exploitation by older men, are other major factors that contributes to pregnancy among the teenagers.

Rape, sexual exploitations etc. also takes place that leads to unwanted pregnancy among teenage girls. Socioeconomic factors, teenage girls who belong to the poor families are more likely to become pregnant. Researchers have found that even in the developed countries teenage pregnancy occurs most commonly in people with lower social status. [7] Another important factor is the low use rate of contraception. Although knowledge and use of contraception has been increasing globally, many teenagers have inadequate protection against pregnancy and contraception among teenagers is still very low. This may be related to less education awareness about contraception and less access to contraceptives and emergency contraception. [8]

Problems other than the age of the mother, such as poverty and social support also affect the outcome. It is important that teenage mothers can rely on the family and the state to help them cope, and educate their child. Teenage parents who can rely on family and community support, social services and child-care support are more likely to continue their education and get higher paying jobs as they progress with their education.[9]

Many studies have consistently reported that teenage pregnancies were at increased risk for pre-term delivery and low birth weight. Young maternal age is probably a marker of one or more maternal risk factors associated with adverse birth outcomes. [10]

Industrialized and developed countries have distinctly different rates of teenage pregnancy. In developed regions, such as United States, Canada, Western Europe, Australia, New Zealand and Israel teen parents tend to be unmarried and adolescent pregnancy is seen as a social issue. By contrast, teenage parents in developing

regions such as Africa, Asia, Eastern Europe, and Latin America are often married and their pregnancies are welcomed by family and society. [11]

Among high-income countries USA has 41.2, Australia has 16.5, Canada has 14.0, Israel has 14.0 while in low-income countries India has 86.3, Bangladesh has 78.9, Afghanistan has 218.7 adolescent birth rate given by UN Statistics Division from 2005-2010 per 1,000 women 15-19 years old. [11] Although teen pregnancy rates have declined considerably over the past few decades in the United States and in most of the other 20 countries with complete statistics, the teen pregnancy rate is still highest in the United States (57 per 1,000 15–19-year-olds), followed by New Zealand (51) and England and Wales (47).[12] The proportion of births that take place during adolescence is about 2% in China, 18% in Latin America and the Caribbean and more than 50% in sub-Saharan Africa. [13]

The highest rate of teenage pregnancy in the world — 143 per

1,000 girls aged 15–19 years — is in sub-Saharan Africa.[14] Women in Africa, in general, get married at much earlier ages than women elsewhere — leading to earlier pregnancies. In Nigeria, according to the Health and Demographic Survey in 1992, 47% of women aged 20–24 were married before 15 and 87% before 18. 53% of those surveyed also had given birth to a child before the age of 18.[15]

In the Indian subcontinent, premarital sex is uncommon, but early marriage sometimes means adolescent pregnancy. The rate of early marriage is higher in rural regions than it is in urbanized areas. Fertility rates in South Asia range from 71 to 119 births a trend towards increasing age at marriage for both sexes. According to the World Health Organization, in several Asian countries including Bangladesh and Indonesia, a large proportion (26-37%) of deaths among female adolescents can be attributed to maternal causes.[16] In some countries, such as Italy and Spain, the rate of adolescent

pregnancy is low (6 births per 1,000 women aged 15–19 in 2002 in both countries).[17] These two countries also have low abortion rates (lower than Sweden and the other Nordic countries) and their teenage pregnancy rates are among the lowest in Europe.[18]

According to UN Statistics division , Live birth in 2005 in Pakistan the teenage birthrate per 1000 women of age 15 - 19 (below 20) was 20.3. [19] Due to poverty and limited income sources, parents tend to marry their daughters at early ages. Generally these young girls are expected to become pregnant soon after marriage in order to prove their fertility. In a study held in tertiary care hospitals of Sindh it is reported that these teenage pregnancies have been reported to be at a higher risk of developing severe anemia and are more likely to have an instrumental delivery than non-teenagers. [20]

Child marriages are common traditional practices in Pakistan even though the law prohibits marriage below 16 years for women and 18

years for men. [21] Generally these young girls are expected to become pregnant soon after marriage in order to prove their fertility. According to the latest Pakistan Demographic and Health Survey (PDHS), 40% of women are married by the age of 18 years. However, the proportion of teenagers who have begun childbearing has gone down from about 16% in 1990-91 to 9% in 2007.[22]The evidence which is available about the outcome of teenage pregnancy is conflicting to say the least. Teenage pregnancies have been reported to be associated with an adverse obstetric outcome. There are studies which have attributed the poor pregnancy outcome of teenage pregnancy to low socioeconomic status, illiteracy, lack of antenatal care, social support and contraception rather than to maternal age.[23]

Being a young mother often affects education. Teen mothers are more likely to drop out of high school. One study in 2001 found that women who gave birth during their teens

completed secondary-level schooling 10–12% as often and pursued post-secondary education 14–29% as often as women who waited until age 30.[24]

Compared with mothers aged 20-24 years, adjusted risks of neonatal and post neonatal mortality were significantly increased among mothers aged 13-15 years (odds ratios = 2.7 and 2.6, respectively) and among those aged 16-17 years (odds ratios = 1.4 and 2.0, respectively), while mothers aged 18-19 years had a significant increase in risk of post neonatal mortality only (odds ratio = 1.4). Rates of very preterm birth (< or = 32 weeks), according to maternal age, were: 13-15 years, 5.9%; 16-17 years, 2.5%; 18-19 years, 1.7%; and 20-24 years, 1.1%. The high rates of very preterm birth among young teenagers almost entirely explained the increased risk of neonatal mortality in this group.[25] The issue of proportionate sharing of teenage pregnancies among overall women delivering is very important in order to control their adverse outcomes and to improve the quality

of maternal health. In Pakistan, due to paucity of research in this area, there are various gaps in the knowledge of proportionate sharing of teenage pregnancies among overall women delivering. This study will help to highlight the current scenario of the teenage pregnancies in a tertiary care hospital of metropolitan city of Pakistan and will provide a baseline for further studies.

Literature Review

Teenage pregnancies have been a major issue in the community since a very long time. It is a major contributing factor in the maternal mortality rate. Teenage girls are mostly unaware of the consequences both medically and economically of the pregnancy. Health, Education, Social and Economic issues all play a part in the upbringing of the teenage pregnancies. Many researches are done in order to study the proportionate sharing of teenage pregnancies, their health related issues and their sociodemographics. And many have been proved fruitful

in proving the fact that women who become pregnant in their teenage face more problems than those in adulthood.

Charles E. Basch, Richard March Hoe Professor of Health and Education studied the prevalence and disparities of teen pregnancy among school-aged urban minority youth, causal pathways through which nonmarital teen births adversely affects academic achievement, and proven or promising approaches for schools to address this problem. Published their research on 16 September 2011, and the findings revealed that in 2006, the birth rate among 15- to 17-year-old non-Hispanic Blacks (36.1 per 1000) was more than three times as high, and the birth rate among Hispanics (47.9 per 1000) was more than four times as high as the birth rate among non-Hispanic Whites (11.8 per 1000). Compared with women who delay childbearing until age 30, teen mothers' education is estimated to be approximately 2 years shorter. Teen mothers are 10–12% less likely to complete high school and have 14–29% lower odds

of attending college. School-based programs have the potential to help teens acquire the knowledge and skills needed to postpone sex, practice safer sex, avoid unintended pregnancy, and if pregnant, to complete high school and pursue postsecondary education. Nonmarital teen births are highly and disproportionately prevalent among school-aged urban minority youth, have a negative impact on educational attainment, and effective practices are available for schools to address this problem. Teen pregnancy exerts an important influence on educational attainment among urban minority youth. Decisions about what will be taught should be informed by empirical data documenting the effectiveness of alternative approaches. [26] D. R. Acharya, Epidemiology Group, Section of Population Health, Institute of Applied Health Science, Foresterhill, University of Aberdeen studied the factors associated with teenage pregnancies and the results showed that out of the seven countries in South Asia, most of the studies were related to Nepal,

Bangladesh, India and Sri Lanka. Socio-economic factors, low educational attainment, cultural and family structure were all consistently identified as risk factors for teenage pregnancy. Majority of teenage girls are reported with basic knowledge on sexual health however, very few of them have used the knowledge into practice. Both social and medical consequences of teenage pregnancies are reported consistently along the most of the studies. Utilization of health services, which is a protective factor, remains low and consistent. However, teenagers agreed to delay the indexed pregnancy if they would know its consequences. Conclusions: In South Asia, many risk factors are a part of socio-economic and cultural influences. This systematic review is limited by the amount and the quality of papers published on factors associated with teenage pregnancy. In particular, future research in South Asian countries is needed with standardized measures and methodologies to gain an insight into observed variations in pregnancy

rates.[27,28]

Jessica R. Rosenstock, MD, Jeffrey F. Peipert, MD, PhD, Tessa Madden, MD, MPH, Qihong Zhao, MS, and Gina M. Secura, PhD, MPH examined the effect of age on continuation rates of reversible contraceptive methods among teenagers and young women aged 14–19 years and women aged 20–25 years, compared to women older than 25 years of age. Twelve-month continuation of long-acting reversible contraceptive (LARC) methods was over 75% for all age groups. Teenagers and young women aged 14–19 years using LARC methods had slightly lower continuation rates (81%) than older women (85–86%), but this did not reach statistical or clinical significance. Compared to women older than 25 years of age, teenagers and women aged 14–19 years had lower continuation rates for non-LARC methods (44% v. 53%; HRadj 1.32, 95% CI 1.02–1.73). The teenagers and young women aged 14–19 years were less likely to be satisfied with non-LARC methods (42% v. 51%; RRadj 0.80, 95% CI 0.65–0.98), but not LARC methods

(75% v. 83%; RR 0.94, 95% CI 0.88–1.01) when compared to women over 25 years of age; however, the differences were small. [29]

Douglas Kirby PhD Published online: 22 Feb 2013 Research Findings on Programs to Reduce Teen Pregnancy and stated that in 1997 at that time, with only a few exceptions, most studies assessing the impact of programs to reduce teen sexual risk-taking failed either to measure or to find sustained long-term impact on behavior. Now, 4 years later, the research findings are definitely more positive, and there are at least five important reasons to be more optimistic that we can craft programs that help to reduce teen pregnancy. First, teen pregnancy, abortion, and birth rates began to decrease about 1991 and have continued to decline every year since then. Second, larger, more rigorous studies of some sex and HIV education programs have found sustained positive effects on behavior for as long as 3 years. Third, there is now good evidence that one program that combines both sexuality education

and youth development (i.e., the Children's Aid Society—Carrera Program) can reduce pregnancies for as long as 3 years. Fourth, both service learning programs (i.e., voluntary community service with group discussions and reflection) and sex and HIV education programs (i.e., Reducing the Risk) have been found to reduce sexual risk-taking or pregnancy in several settings by independent research teams. Fifth, there is emerging evidence that some shorter, more modest clinic interventions involving educational materials coupled with one-on-one counseling may increase contraceptive use. Given the stronger and more consistent research findings demonstrating program effectiveness. **[30]**

Acharya Dev Raj, Bhatta rai Rabi, Poobalan Amudh, Avan Teijlingen Edwin, Chapman Glyn Publication Date: 2010-03, studied the factors associated with teenage pregnancy in South Asia by systematically searching MEDLINE, EMBASE and CINAHL database (1996 to April 2007). And their results showed that Out of the seven countries in South

Asia, most of the studies were related to Nepal, Bangladesh, India and Sri Lanka. Socio-economic factors, low educational attainment, cultural and family structure were all consistently identified as risk factors for teenage pregnancy. Majority of teenage girls are reported with basic knowledge on sexual health however, very few of them have used the knowledge into practice. Both social and medical consequences of teenage pregnancies are reported consistently along the most of the studies. Utilization of health services, which is a protective factor, remains low and consistent. However, teenagers agreed to delay the indexed pregnancy if they would know its consequences. In South Asia, many risk factors are a part of socio-economic and cultural influences. This systematic review is limited by the amount and the quality of papers published on factors associated with teenage pregnancy. In particular, future research in South Asian countries is needed with standardized measures and methodologies to gain an insight into

observed variations in pregnancy rates. [31]

Alison M. Fraser, M.S.P.H., John E. Brockett, M.P.H., and R.H. Ward, Ph.D., in April 27, 1998. Carried out a research on association of Young Maternal Age with Adverse Reproductive Outcomes and their studies revealed among white married mothers with educational levels appropriate for their ages who received adequate prenatal care, younger teenage mothers (13 to 17 years of age) had a significantly higher risk ($P < 0.001$) than mothers who were 20 to 24 years of age of delivering an infant who had low birth weight (relative risk, 1.7; 95 percent confidence interval, 1.5 to 2.0), who was delivered prematurely (relative risk, 1.9; 95 percent confidence interval, 1.7 to 2.1), or who was small for gestational age (relative risk, 1.3; 95 percent confidence interval, 1.2 to 1.4). Older teenage mothers (18 or 19 years of age) also had a significant increase in these risks. Even though sociodemographic variables associated with teenage pregnancy increase the risk of adverse

outcomes, the relative risk remained significantly elevated for both younger and older teenage mothers after adjustment for marital status, level of education, and adequacy of prenatal care.

In a study of mothers 13 to 24 years old who had the characteristics of most white, middle-class Americans, a younger age conferred an increased risk of adverse pregnancy outcomes that was independent of important confounding sociodemographic factors. [32]

AMBER TUFAIL, HALEEMA A. HASHMI, Department of Obstetrics & Gynecology, Baqai Medical University, Karachi. Carried out prospective cross sectional study from January to October 2006. Their subjects were One hundred and fifty pregnant women. The women were divided into two groups; Group-A comprised of 75 young females aged less than 19 years, while Group-B comprised of 75 women aged 20-30 years, which was used as a control. A comparison was done between the two groups regarding maternal and perinatal outcome. Observations were recorded using a predesigned

research preformat. Statistical analysis was performed using SPSS package for windows version 12.0. Results were compared using Chi-square test by keeping the p-value of <0.05 as significant. The results revealed that the frequency of births amongst teenagers (Group-A) was 11.09%. Women belonging to Group-A had a lower gestational age at delivery than Group-B (36.81±3.21 vs. 37.32±1.80 weeks) and a higher preterm delivery rate (17.3% vs. 5.3%, p-value 0.02). The incidence of anaemia (46.6% vs. 20%), urinary tract infection (40% vs. 20%, p-value 0.008), pre-eclampsia (16% vs. 1.6%, p-value 0.001) and intra-uterine growth retardation (5.3% vs. 0%, p-value 0.043) was more in Group-A as compared to Group-B. Caesarean section was the major route of delivery in Group-A (34.6% vs. 10.6%. More neonates in Group-A were low for birth weight (32% vs. 12%, p-value 0.003), and were prone to more morbidities in early neonatal life (20% vs. 4%, p-value 0.003) necessitating admission to the neonatal care unit.

Teenage pregnancy is associated with increased risk to the mother like anemia, urinary tract infection, pregnancy induced hypertension and operative delivery. There are also increased risks of low birth weight, intra-uterine growth retardation, prematurity and admission to the neonatal intensive care units.[33] Dr. Babar Tasneem Sheikh Senior Instructor Health Systems Division, Department of Community Health Sciences, Aga Khan University, Karachi, Pakistan. Published: 6 July 2009 research work showing a reproductive health survey of adolescents and young adults in Pakistan. The rationale of the study was the sexual and reproductive health (SRH) needs of adolescents have increased over the last few years, but are largely unmet. Lack of involvement of youth in the programs and limitations of the mass media in a conservative milieu are some of the issues. Our objectives were to assess the baseline SRH knowledge and to suggest interventions based on needs with regard to SRH promotion, so that the level of existing services could be upgraded.

A cross-sectional survey was conducted in 20 villages of Lahore, in which 400 adolescents and young adults were interviewed using a semi-structured questionnaire. Respondents were equally divided in gender in all villages, using stratified random sampling. And the results revealed that adolescents and young adults do have some knowledge of SRH issues. Males are relatively more knowledgeable than females about puberty (M = 68%; F = 58%), pregnancy (M = 55%; F = 43%), family planning (M = 62%; F = 50%) and sexually transmitted infections (M = 56%; F = 44%). Yet, a large majority needs clarification on their concepts and perceptions. They believe that having sound SRH knowledge will promote mother & child health and family health. Peers, media and a family doctor could be the acceptable source of information on SRH. Life skills programs to increase unmarried girls' cognitive skills and young men's involvement in such programs are a must. Involving families and communities will enhance the effectiveness of

youth programs.[34] Nusrat Shah, Dileep Kumar Rohra, Samia Shuja, Nagina Fatima Liaqat, Nazir Ahmad Solangi, Kelash Kumar, Kapil Kumar, Kanya Lal Ahuja, Syed Iqbal Azam, Nusrat Khan conducted a case control study in three tertiary care hospitals of Sindh, Pakistan from September 2008 to November 2008. The data regarding obstetric outcome of all teenagers (13-19 years) delivering in the three hospitals was compared with that of selected non teenage women (20 to 35 years) taken as controls. Chi-square and students' t-test were applied with 0.05 as level of significance.

Teenage mothers were more likely to suffer from severe anemia (8% versus 4.3%; $p = 0.03$) and chorioamnionitis (2.8% vs 0.8%, $p = 0.01$) and their infants were more likely to suffer from post maturity (4.6% vs 1.8%, $P = 0.02$) and meconium aspiration syndrome (6.5% vs 2.4%, $p < 0.01$) compared to non-teenage mothers. On the other hand they were less likely to be overweight than the non-teenagers. Teenagers had instrumental

deliveries more often than non-teenagers (7.1% vs 2.2%, $p < 0.01$). The risk of preterm delivery, low birth weight infant, respiratory distress syndrome, fetal and perinatal death was not significantly different in the two groups. Teenage mothers are at a higher risk of developing severe anemia and chorioamnionitis. They are more likely to have an instrumental delivery than non-teenagers. Post maturity and meconium aspiration syndrome are the neonatal complications seen in infants born to teenage mothers.[35]

Sareer Badshah Email author, Linda Mason, Kenneth McKelvie, Roger Payne and Paulo JG Lisboa Published in 04 June 2008, Risk factors for low birth weight in the public-hospitals at Peshawar, NWFP-Pakistan and evaluated that the main geo-demographic risk factors for SGA identified in this study, controlling for gestational age of less than 37 weeks, are **maternal age**, nationality and consanguinity. Presentation with anemia and the history of previous abortion/miscarriage were also found

to be significant independent factors. The adjusted odds ratio for gestational age showed the largest effect in explaining the incidence of LBW. The next highest odds ratio was for maternal age below 20 years. The explanatory model included two pairwise interactions, for which the predicted incidence figures for LBW show an increase among the Tribal area with presentation of anemia, and among full term babies with their mothers having a previous history of abortion/miscarriage.

In addition to gestational age, specific factors related to geo-demographics (maternal age, consanguinity and nationality), maternal health (anemia) and pregnancy history (abortion/miscarriage) were significantly associated with the incidence of LBW observed at the four hospitals surveyed in Peshawar. These results indicate that cultural factors can adversely affect the incidence of SGA in this area of Pakistan. [36]

Khooshideh Maryam, Shahriari Ali

Department of Gynaecology, Department of Anaesthesiology carried out a retrospective cohort study was carried out, comparing primiparous pregnant teenager women aged 13-19 years, arranged in to two groups: low teens (< 16 years old) and high teens (17-19 years old), with primiparous women aged 20-29 years from January 2003 through January 2005 in Ali-ebne Abitaleb hospital of Zahedan, Iran. And the results of their study were Proportions of intrauterine growth retardation (IUGR) and preterm birth were highest among the infants of mothers aged 19 years or less compared with women aged 20-29 years ($P < 0.001$). Also IUGR and preterm births were highest among the infants of low teen mothers than high teen mothers ($P < 0.001$) . The incidence of caesarean section in low teens was higher than high teens ($P = 0.001$), but caesarean was not higher among mothers aged 19 years or less compared with women aged 20-29 years. There was no significant difference in pre eclampsia and placental abruption between all three groups, while

frequency of placenta previa was higher in teenage group than older gravidas ($P = 0.001$). [37] Petra Otterblad Olausson, Sven Cnattingius, Bengt Haglund First published: February 2009. Teenage pregnancies and risk of late fetal death and infant mortality. Objective was to estimate the effect of low maternal age on late fetal death and infant mortality and to estimate the extent of any increase in infant mortality attributable to higher rates of preterm birth among teenagers. It was a population-based cohort study Results were Compared with mothers aged ≥ 24 years, adjusted risks of neonatal and post neonatal mortality were significantly increased among mothers aged 13–15 years (odds ratios = 2.7 and 2.6, respectively) and among those aged 16–17 years (odds ratios = 1.4 and 2.0, respectively), while mothers aged 18–19 years had a significant increase in risk of post neonatal mortality only (odds ratio = 1.4). Rates of very preterm birth (≤ 32 weeks), according to maternal age, were: 13–15 years, 5.9%; 16–17 years, 2.5%; 18–19 years, 1.7%; and

20–24 years, 1.1%. The high rates of very preterm birth among young teenagers almost entirely explained the increased risk of neonatal mortality in this group. Hence concluding the increased risks of neonatal and post neonatal mortality among young teenagers may be related to biological immaturity. The increase in risk of neonatal mortality is largely explained by increased rates of very preterm birth.[38] Adolescent Pregnancies: The case of Pakistan by Kiran Mubeen, Marina Baig, Published 2016. A study was conducted on a sub-set of 1526 ever married women, between 20 and 24 years of age, who were a part of a larger study of 10,023 women, were asked about their ages at marriage. The study revealed that the mean age of marriage was 17.52 ± 2.68 years; 5% got married when under 14 years of age; around 18.5% between the age of 14-16 years, and 26.4% got married at around 18 years of age. Of those who got married earlier, most (57.6 %) had had no formal education and resided in rural areas (70%). However, even after adjusting

for social equity indicators, a history of early marriage was significantly associated with poor fertility outcomes. These findings are alarming for Pakistan because, despite the lower prevalence of adolescent pregnancies than Bangladesh and Nepal, Pakistan's fertility indicators that is higher fertility rate and lower contraceptive prevalence rate, are less favorable as compared to these countries. Pakistan has a very high number of adolescents, nearly 40 million, that makes up 22.3% of the total population, as compared to only 16% in the USA and Japan. It has always been difficult to estimate the death rate associated with adolescent pregnancies because of the underreporting of criminal abortions and the legal restrictions that prohibit abortions. The minimum legal age for marriage in Pakistan is 18 years for males and 16 years for females, except in the Sindh province, which has increased the legal age of females to 18 years. Thirty five percent of the females are married by the age of 18 years and eight percent of the girls deliver their first

child before the age 15. The proportion of adolescent births differs across the provinces; the highest proportion of adolescent births is in Khyber Pukhtoon Khuan (10.3%) and the lowest rate is in Gilgit Baltistan (6.5%). Concluding that teenage pregnancies can be a major threat for the growth and development of the upcoming generation. It can have devastating health, economic, and social implications for individuals, families, and the entire country. Pakistan needs to strengthen female child education to support their empowerment, and to limit their exposure to early marriages. School and community health programs must target adolescents and their parents, regarding awareness about SRH and the disadvantages of early marriages. Education at the rural community level should be promoted. It is important to promote an understanding that menarche does not signify readiness for marriage, and that this can have fatal outcomes for women later in their lives. Simultaneously, laws also need revision to provide legal and

financial protection for women if they want to refuse marriage. Social and health services need to identify the population that are vulnerable to early marriage; the role of nurses and midwives is crucial in identifying these cases and generating referrals according to their needs. Furthermore, the involvement of males should not be ignored at any level. Their education about these issues should also be prioritized, and frontline providers need to consider their involvement to sensitize them to these issues. Finally, all these competencies must be included in the midwifery curricula to enhance the role of midwives in preventing adolescent pregnancies and in supporting adolescent parents in their healthy transition to parenthood. These efforts are very important for improving maternal and child health. They can also contribute to reducing poverty, promoting gender equality, and the empowerment of women because they can improve the ability of girls to remain in school and become economically independent members of society. [39]

Understanding of Puberty and related Health Problems among Female Adolescents in Karachi, Pakistan by Tazeen Saeed Ali, Parveen Azam Ali, Humaira Waheed, Azam Ali Memon. Published : January 2013. Research revealed that Sixty six percent (66%) of the participants were aware of the names of reproductive organs. Majority of the participants received information related to sexuality from their mothers. Sixty seven percent (67%) of the participants did not know about self breast examination. Cable and internet were cited as a major source of puberty and sexual health related information.

The study concluded that there is a lack of knowledge related to puberty and related health problems among female adolescents. This study recommends that the adolescents should be provided with health education before and during their puberty period to make them confident in dealing with their body changes during puberty effectively. [40]

Santhya, K.G. Proposed - Early

marriage and sexual and reproductive health vulnerabilities of young women: a synthesis of recent evidence from developing countries in October 2011. Purpose of the study was to review current evidence on the links between early marriage and health-related outcomes for young women and their children. And findings showed that ' Every third young woman in the developing countries excluding China continues to marry as a child, that is before age 18. Recent studies reiterate the adverse health consequences of early marriage among young women and their children even after a host of confounding factors are controlled. The current evidence is conclusive with regard to many indicators: unintended pregnancy, pregnancy-related complications, preterm delivery, delivery of low birth weight babies, fetal mortality and violence within marriage. However, findings present a mixed picture with regard to many other indicators, the risk of HIV and the risk of neonatal, infant and early childhood mortality, for example.' [41]

Susan Mayor, Published online, Pregnancy and childbirth are leading causes of death in teenage girls in developing countries, in May 2008. Complications from pregnancy and childbirth are the leading cause of death in young women aged 15 to 19 in developing countries, warned a report published last week. An estimated 70 000 adolescent mothers die each year because they have children before they are physically ready for parenthood, the report says.says.[42]

Fernando AlthabeEmail author, Janet L Moore, Luz Gibbons, Mabel Berrueta, Shivaprasad S Goudar, Elwyn Chomba, Richard J Derman, Archana Patel, Sarah Saleem, Omrana Pasha, Fabian Esamai, Ana Garces, Edward A Liechty, K Michael Hambidge, Nancy F Krebs, Patricia L Hibberd, Robert L Goldenberg, Marion Koso-Thomas, Waldemar A Carlo, Maria L Cafferata, Pierre Buekens and Elizabeth M McClure , in 2015, undertook a prospective, population-based multi-country research study of all pregnant women in defined geographic areas across 7 sites in

six low-middle income countries (Kenya, Zambia, India, Pakistan, Guatemala and Argentina). The study population for this analysis was restricted to women aged 24 years or less, who gave birth to infants of at least 20 weeks' gestation and 500g or more. We compared adverse pregnancy maternal and perinatal outcomes among pregnant adolescents 15-19 years, <15 years, and adults 20-24 years.

Results showed that a total of 269,273 women were enrolled from January 2010 to December 2013. Of all pregnancies 11.9% (32,097/269,273) were in adolescents 15-19 years, while 0.14% (370/269,273) occurred among girls <15 years. Pregnancy among adolescents 15-19 years ranged from 2% in Pakistan to 26% in Argentina, and adolescent pregnancies <15 year were only observed in sub-Saharan Africa and Latin America. Compared to adults, adolescents did not show increased risk of maternal adverse outcomes. Risks of preterm birth and LBW were

significantly higher among both early and older adolescents, with the highest risks observed in the <15 years group. Neonatal and perinatal mortality followed a similar trend in sub-Saharan Africa and Latin America, with the highest risk in early adolescents, although the differences in this age group were not significant. However, in South Asia the risks of neonatal and perinatal death were not different among adolescents 15-19 years compared to adults. This study suggests that pregnancy among adolescents is not associated with worse maternal outcomes, but is associated with worse perinatal outcomes, particularly in younger adolescents. However, this may not be the case in regions like South Asia where there are decreasing rates of adolescent pregnancies, concentrated among older adolescents. The increased risks observed among adolescents seems more likely to be associated with biological immaturity, than with socio-economic factors, inadequate antenatal or delivery care.[43]

Jivraj, Z. Nazzal Department of

Obstetrics and Gynaecology, Jessop Wing, Sheffield, UK, P. Davies & K. Selby studied the Obstetric outcome of teenage pregnancies from 2002 to 2008, was published 07th April 2010. Compared the obstetric outcome of 1,922 teenage pregnant women with a control population of 10,550 women aged 20–39 years. Results were that the teenage women had a significantly higher normal vaginal delivery rate (65% vs 45%; RR 1.44, 95% CI: 1.38–1.49; $p < 0.001$) and a lower operative delivery rate compared with control women (elective caesarean section: 1.7% vs 4.9%, RR 0.347, 95% CI: 0.25–0.49, $p < 0.001$; emergency caesarean section: 13.3% vs 22.9%, RR 0.58, 95% CI: 0.51–0.65, $p < 0.001$; instrumental delivery: 19.3% vs 26.3%, RR 0.73, 95% CI: 0.66–0.81, $p < 0.001$). There was no difference in the pre-term delivery rate or in the stillbirth rate between the two groups. When stratified further, there was no difference in the pre-term delivery rate and low birth weight rate between teenage mothers aged 13–17 years and those aged 17–19

years. Teenage pregnant women have better obstetric performance in terms of mode of delivery without an increased risk of stillbirth or prematurity compared with older women.[44]

S. H. Mahavarkar , C.K. Madhu & V.D. Mule made 'A comparative study of teenage pregnancy' published July 2009. Teenage pregnancy is a global problem and is considered a high-risk group, in spite of conflicting evidence. The objective was to compare obstetric outcomes of pregnancy in teenagers and older women.

This was a retrospective study of case records of pregnancies from August 2000 to July 2001. The study took place in the Government General Hospital, Sangli, India, a teaching hospital in rural India, with an annual delivery rate of over 3,500.

With the results revealing that 'A total of 386 teenage pregnancies were compared with pregnancies in 3,326 older women. Socioeconomic data, age, number of pregnancies, antenatal care and complications, mode of delivery, and neonatal

outcomes were considered. The incidence of teenage pregnancy in the study was 10%. A significant proportion of teenage pregnant mothers were in their first pregnancies. The teenage mothers were nearly three times more at risk of developing anaemia (OR = 2.83, 95% CI = 2.2–3.7, $p < 0.0001$) and delivering pre-term (OR = 2.97, 95% CI = 2.4–3.7, $p < 0.0001$). Teenage mothers were twice as likely to develop hypertensive problems in pregnancy (OR = 2.2, 95% CI = 1.5–3.2, $p < 0.0001$) and were more likely to deliver vaginally with no significant increase in the risk of assisted vaginal delivery or caesarean section. Young mothers were nearly twice at risk of delivering low birth weight babies (OR = 1.8, 95% CI = 1.5–2.2, $p < 0.0001$) and 50% less likely to have normal birth weight babies (OR = 0.5, 95% CI = 1.2–2.9, $p < 0.0001$).'
Concluding that teenage pregnancies are still a common occurrence in rural India in spite of various legislations and government programs and teenage pregnancy is a risk factor for poor obstetric

outcome in rural India. Cultural practices, poor socioeconomic conditions, low literacy rate and lack of awareness of the risks are some of the main contributory factors. Early booking, good care during pregnancy and delivery and proper utilization of contraceptive services can prevent the incidence and complications in this high-risk group.[45]

Birth outcomes in teenage pregnancies by William Gilbert, Danielle Jandial, Nancy Field, Pamela Bigelow & Beate Danielsen. Published online: 07 Jul 2009. Studies showed that early (n=31232) and late teens (n=271470) demonstrated greater neonatal and infant mortality and major neonatal morbidities (delivery <37 weeks of gestation and birthweight <2500 g) when compared to pregnancies in the older control women (n=662752). Ethnicity adversely affected outcome with African-Americans of all ages having worse outcomes than whites. The higher rate of adverse obstetric outcomes among the teenage pregnancies occurred despite a

lower cesarean section rate and was consistent across all ethnic groups. When compared to women aged 20-29, all teen pregnancies were associated with higher rates of poor obstetric outcomes. Other factors besides teen pregnancy appear to be responsible for poor outcomes in certain ethnic groups.[46] Muazzam Nasrullah MD, Rubeena Zakar MD, Alexander Krämer MD studied Girl-Child Marriage and Its Association with Morbidity and Mortality of Children under 5 Years of Age in a Nationally-Representative Sample of Pakistan. Published Nov, 2013. Results showing Majority (74.5%) of births were from mothers aged <18 years. Marriage before age 18 years increased the likelihood of recent diarrhea among children born to young mothers (adjusted OR = 1.59; 95% CI: 1.18-2.14). Even though maternal child marriage was associated with infant mortality and mortality of children under 5 years of age in unadjusted models, association was lost in the adjusted models. And did not find a relation between girl-child marriage and low

birth weight infants, and ARI. [47] Chris Bonell studied Why is teenage pregnancy conceptualized as a social problem. Report published October, 2011.

To explore why teenage pregnancy is regarded by researchers from the USA and UK as a major social problem, a systematic review was conducted of published research on the social influences on teenage pregnancy. Papers published in the USA and UK between 1981 and 2000 were examined with respect to samples, social influences and outcomes.

UK studies often justified investigating teenage pregnancy in terms of health. Research from the USA more often viewed teenage pregnancy as problematic because of associated welfare expenditure. A few studies from the USA regarded teenage parenting as mediating the intergenerational transmission of poverty. Such studies often focused on Black and minority ethnic populations. Most research considered economic and cultural influences, with a bias in research from the USA on cultural factors, and

in the UK on economic factors. Overall, there were significant differences between research in the USA and UK. These may have arisen from a combination of political, religious and research design factors. [48]

Teenage pregnancy: risk factors for adverse perinatal outcome by L. Gortzak-Uzan, M. Hallak, F. Press, M. Katz & I. Shoham-Vardi Published online on 07 Jul 2009. Among a total of 11 496 patients, 600 (5.2%) were 16-17 years old, 2097 (18.2%) were 18-19 years old and the remaining 8799 (76.6%) were 20-24 years old. Bedouin ethnicity and lack of prenatal care were common in the youngest mothers. Rates of preterm delivery were 14.2%, 9.8% and 8.8% in the three age groups, respectively ($p < 0.05$). Rates of malformations, small for gestational age, LBW and very LBW were also significantly higher in the youngest mothers. Rates of pregnancy-induced hypertension, operative delivery and Cesarean delivery were not significantly different among the three age groups. A multivariate analysis on

LBW was performed to assess the unique contribution of young maternal age, adjusted for potential confounders. Adjusted ORs for LBW were 1.25 (95% CI 1.00-1.56) for maternal age < 18 years, 1.80 (95% CI 1.54-2.03) for Bedouin ethnicity, 2.57 (95% CI 2.14-3.07) for pregnancy-induced hypertension, 1.55 (95% CI 1.30-1.84) for lack of prenatal care and 4.09 (95% CI 3.2-5.2) for malformations. Concluding that teenage pregnancy was found to be associated with adverse outcome such as LBW, preterm delivery, small for gestational age and malformations. The risk for LBW was affected mainly by demographic factors (maternal ethnicity, lack of prenatal care) and medical factors (pregnancy-induced hypertension, malformations).[49]

Muazam Nasrullah Email author
Sana Muazzam Zulfiqar A. Bhutta
Anita Raj studied Girl Child Marriage and Its Effect on Fertility in Pakistan: Findings from Pakistan Demographic and Health Survey, 2006–2007. Published April 2104. Child marriage (before 18 years) is prevalent in

Pakistan, which disproportionately affects young girls in rural, low income and low education households. The study aims to determine the association between early marriage and high fertility and poor fertility health indicators among young women in Pakistan beyond those attributed to social vulnerabilities.

Nationally representative data from Pakistan Demographic and Health Survey, 2006–2007, a cross-sectional observational survey, were limited to ever-married women aged 20–24 years (n = 1,560; 15 % of 10,023) to identify differences in poor fertility outcomes [high fertility (three or more childbirths); rapid repeat childbirth (<24 months between births); unwanted pregnancy (any ever); pregnancy termination (any stillbirth, miscarriage or abortion ever)] by early (<18) versus adult (≥18) age at marriage. Associations between child marriage and fertility outcomes were assessed by calculating adjusted odds ratios (AORs) using logistic regression models after controlling for demographics, social equity

indicators (education, wealth index, rural residence), contraception use, marriage duration and culture-specific factors (husband's desire for more children, son preference). Overall, 50 % of ever-married women aged 20–24 years in Pakistan were married before the age of 18 years. Girl child marriage was significantly ($p < 0.001$) associated with low social equity indicators (poverty, rural residence, and no formal education). Adjusted logistic regression models showed that girl child marriage was significantly associated with high fertility (AOR 6.62; 95 % CI 3.53–12.43), rapid repeat childbirth (AOR 2.88; 95 % CI 1.83–4.54), unwanted pregnancy (AOR 2.90; 95 % CI 1.75–4.79), and pregnancy termination (AOR 1.75; 95 % CI 1.10–2.78). Girl child marriage affects half of all ever-married women aged 20–24 years in Pakistan, and increases their risk for high fertility and poor fertility health indicators, highlighting the need of increasing the age of marriage among women in Pakistan. Efforts to eliminate girl child marriage by strict

law enforcement, promoting civil, sexual and reproductive health rights for women can help eliminate girl child marriage in Pakistan.[50}

OBJECTIVES

The objectives of this study were to:

1. Asses the proportionate sharing of teenage pregnancies among women delivering in the Gynecology wards of Services Hospital, Lahore.
2. To assess the sociodemographic profile of the teenage women under study.

METHODOLOGY

STUDY DESIGN

This was a case series study.

STUDY SETTING

Study was performed at Gynecology units, in Services Hospital Lahore. This is an 1196 bed tertiary care referral teaching hospital in the Centre of Lahore city providing health care services to the public.

STUDY POPULATION

All pregnant women coming to and delivering in the gynecology units in Services Hospital Lahore during the study period.

SAMPLE SIZE :

Sample size was calculated by WHO S-size software by using formula of estimating a population proportion with specified relative precision at confidence limit 95%, anticipated population proportion of 50% , and relative precision 10%.The minimum sample size was 171.

STUDY DURATION

The study consisted of one month duration i.e. May 2017.

DATA COLLECTION PROCEDURE

Those fulfilling the criteria of inclusion criteria were recruited for study after an informal consent. By using semi structured questionnaire, face to face interview was conducted to check the knowledge along with an observational checklist to assess the socioeconomic profile. Check for complete accuracy of questions on daily basis was done by research group .All data was collected by research group.

DATA ANALYSIS PLAN:

Data analysis plan comprised of following steps

- Collected data was entered on SPSS software.
- Pie charts or data presentation diagrams were made.
- Frequency and percentage distribution tables were made for qualitative variables i.e. educational status, Occupation, Willful marriage, Living area, Earning members, Needs and demands.
- Quantitative variables i.e. no. Age of patient, Age of marriage, Husband's income were also included.

DATA COLLECTION TOOLS

Semi Structured questionnaire with close ended questions with multiple choices was used with the last choice allowing the participants to suggest his/her as required , if it was different from choices listed for the questions, along with an observational checklist.

OPERATIONAL DEFINITIONS:

TEENAGE PREGNANCY:

Teenage pregnancy is defined as a girl who had conceived before her 20th birthday.

Proportionate Sharing of Teenage Pregnancy:

Proportionate sharing means proportion of share of teenage pregnancies out of the total proportion of all women delivering in Gynecology units, Services Hospital Lahore.

RESULTS:

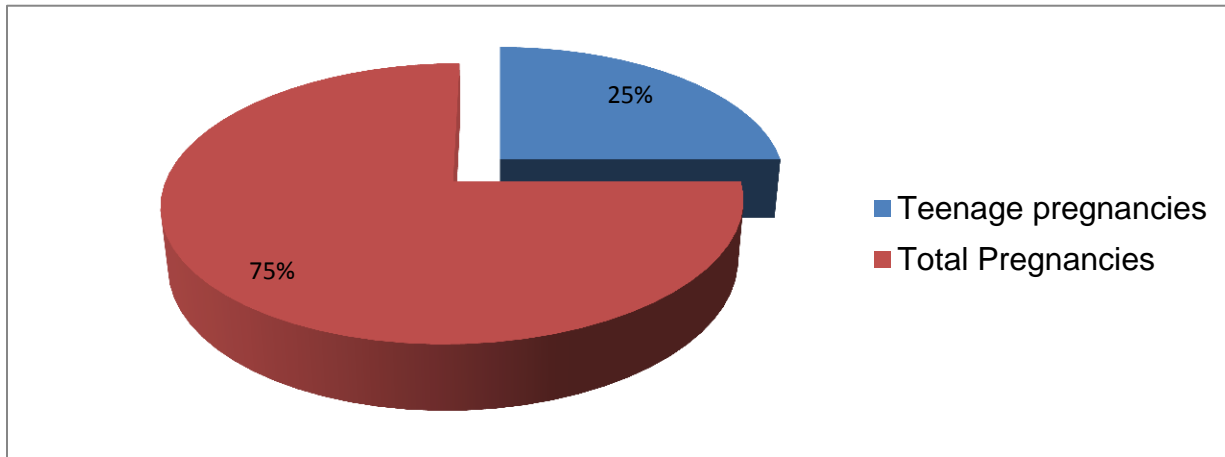
The research was conducted in Gynecology wards of Services Hospital Lahore during the month of May 2017. Out of 171 women delivered, 44 women were less than 20 years of age. Thus, 25.73% of the women delivering in Gynecology wards were teenagers. Among the teenage pregnancies, highest percentage of teenage girls i.e. 56% were of age 19. There were no girls of less than 16 years. The girls were married between ages of 15-19 with highest proportion of girls i.e. 40.9% getting married at the age of 17. And second highest proportion i.e. 30.6% getting married at the age of 19. Of the 44 girls, 54.5% had a willful marriage. About half i.e. 52% of the girls were married within family, showing the fact that family supported the marriage at this age.

TABLE I : Proportionate sharing of teenage pregnancy.

61.4% girls were having a primigravida pregnancy while 38.6% were having multigravida pregnancy. 90.9% of those girls were willing to become pregnant at that age while 8.2% were not willing. With 18.8% having the knowledge of contraceptive use. The teenage girls were assessed for their socioeconomic and demographic details and following results were made: 90.9% of the girls were housewives while the rest having temporary jobs that were not highly paid. Educational status showed that 71% of the girls were under matric, 26% had completed their intermediate while 6% were graduate. 91.5% of husbands had income below 20000, while 2% having an income of 50000 and 40000. Remaining proportion had an income less than 20000. About 16% had an income of 15000 and 10% had an income of 10000. 61% of the girls lived in urban areas while 39% lived in rural areas. More than half i.e. 58% lived in a rented house. 62% had only one earning hand in their families. 91% of the girls had a supportive partner while 9% did not.

Age Group	Frequency	Percent
Teenage	44	25.73%
Adult	127	74.27%
Tot	171	100%

FIGURE: I Proportionate sharing of teenage pregnancy.

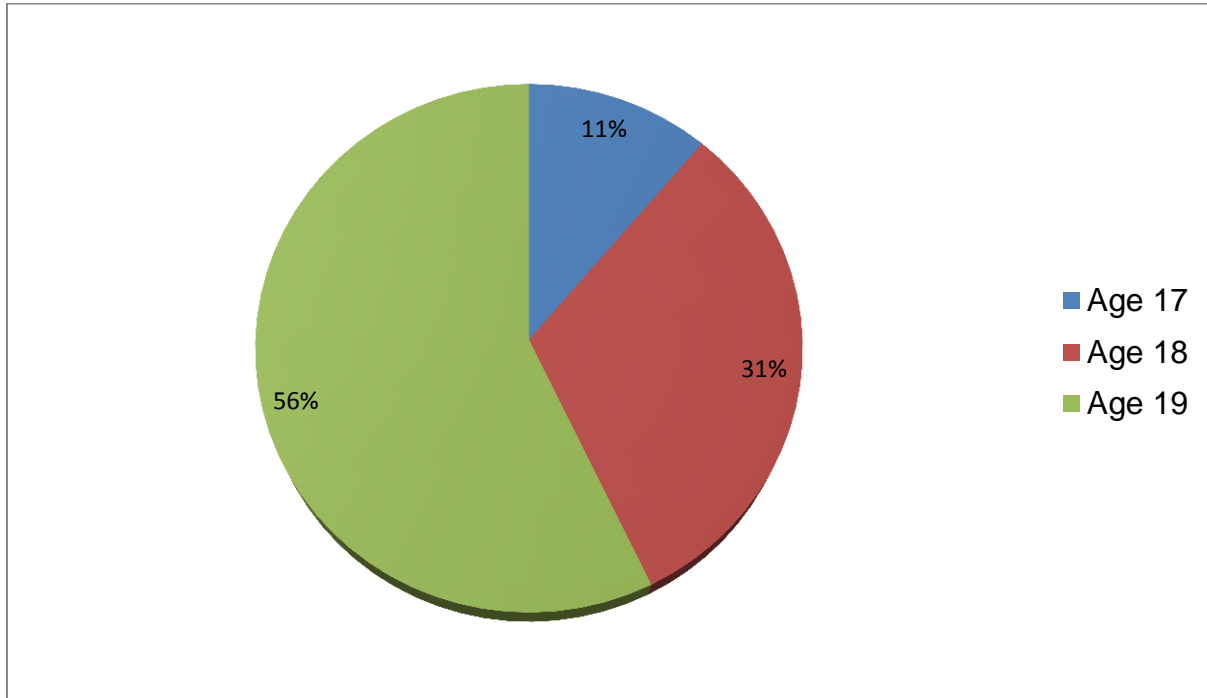


It is clear from the above data that 25.73% (44) of the individual women delivering in Gynae wards were teenagers.

Table II : Age of patient

AGE	Frequency	Percent
17	5	11%
18	14	31%
19	25	56%
Total	44	100

Figure II: Age of patient

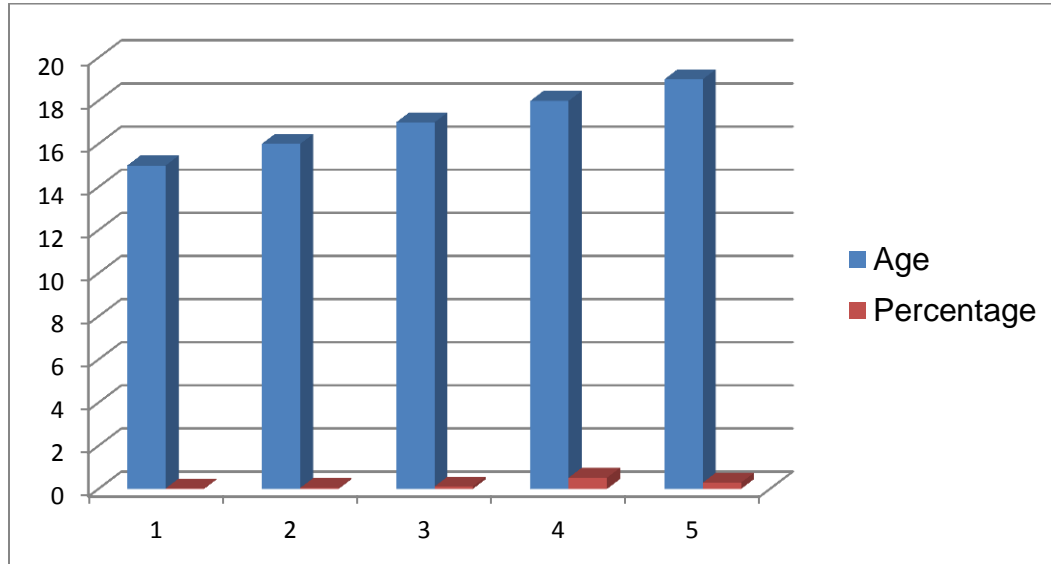


It is clear from the information given in this pie chart that highest percentage of teenage girls were of the age 19 i.e. 56%. While no individuals were younger than 16 age years of age. (figure II)

Table: III Age of marriage

Age of marriage	Frequency	Percent
15	1	2.3
16	2	4.5
17	5	11.4
18	23	52.3
19	13	29.5
Total	44	100.0

Figure III: Age of marriage

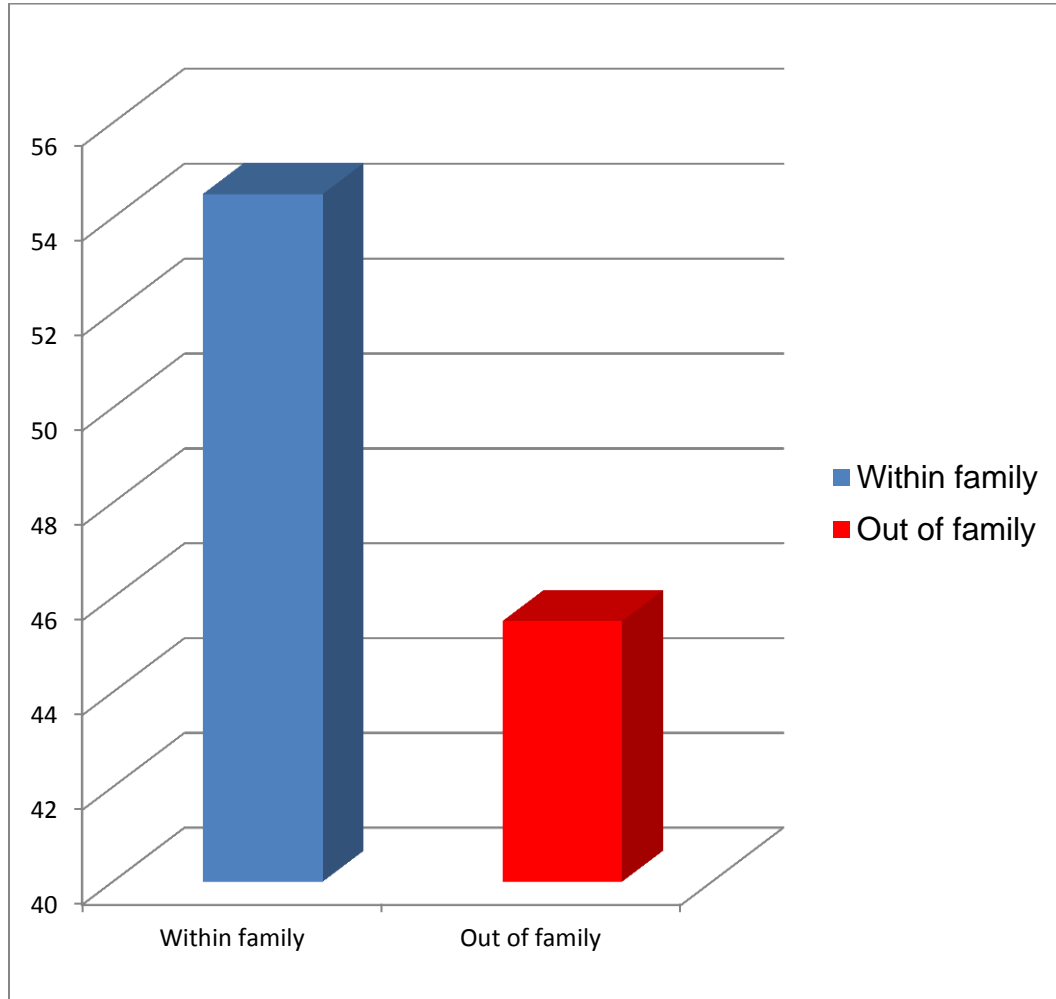


As shown bar chart, majority of the girls i.e. 52.83% were married at the age of 18.

TABLE:IV Married within or out of family

Married to	Frequency	Percent
Within family	24	54.5
Out of family	20	45.5
Total	44	100.0

Figure IV: Married within or out of family

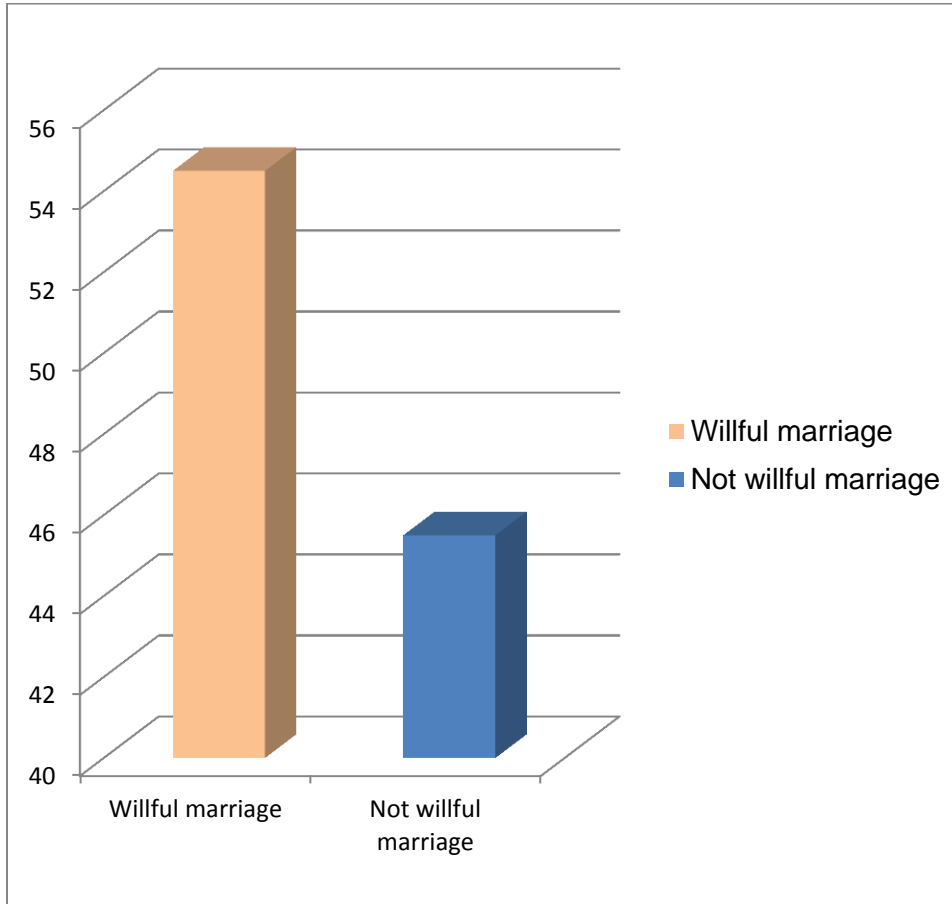


Our research indicated that out of a total of 46 people 25 were married within their families making a percentage of 56%. (More than half)

TABLE : V Willful marriage

Willful marriage	Frequency	Percent
Yes	24	54.5
No	20	45.5
Total	44	100.0

Figure V: willful marriage

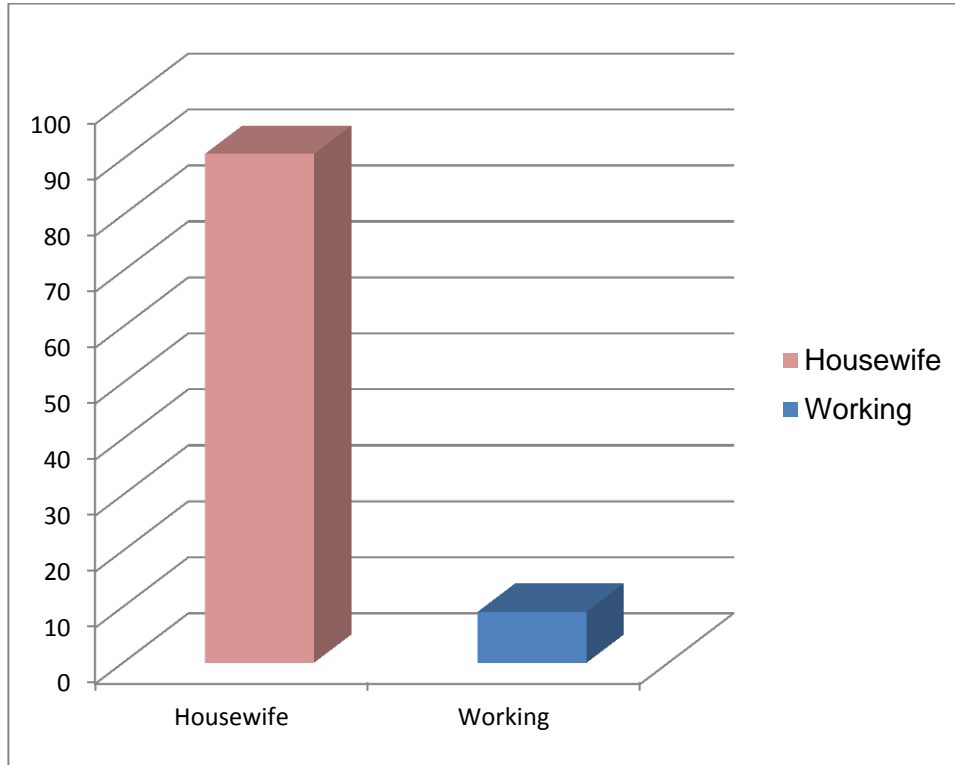


It is illustrated from the information given in this chart that yet more than half of the girls i.e. 54.5% had willful marriage without any parental force.

TABLE : VI Occupation of the patient

Occupation	Frequency	Percent
1. Housewife	40	90.9
2. Working	4	9.1
Total	44	100.0

FIGURE : VI Occupation of the patient

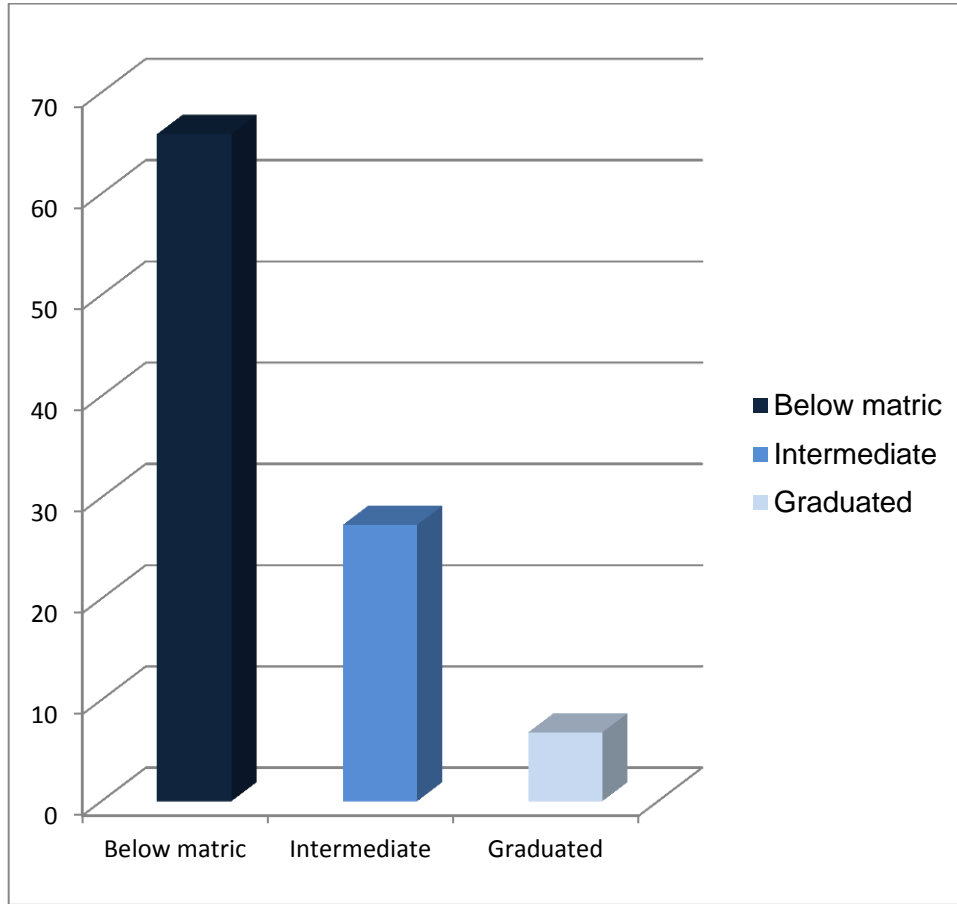


As per the graphical review, it is evident that nearly 90.9% of the teenage girls were house wife and less than 10% work.

Table VII: Educational Status :

Educational status	Frequency	Percent
1.Below metric	29	65.6
2.Intermediate	12	27.3
3.Graduated	3	6.8
Total	44	100.0

Figure VII : Educational status

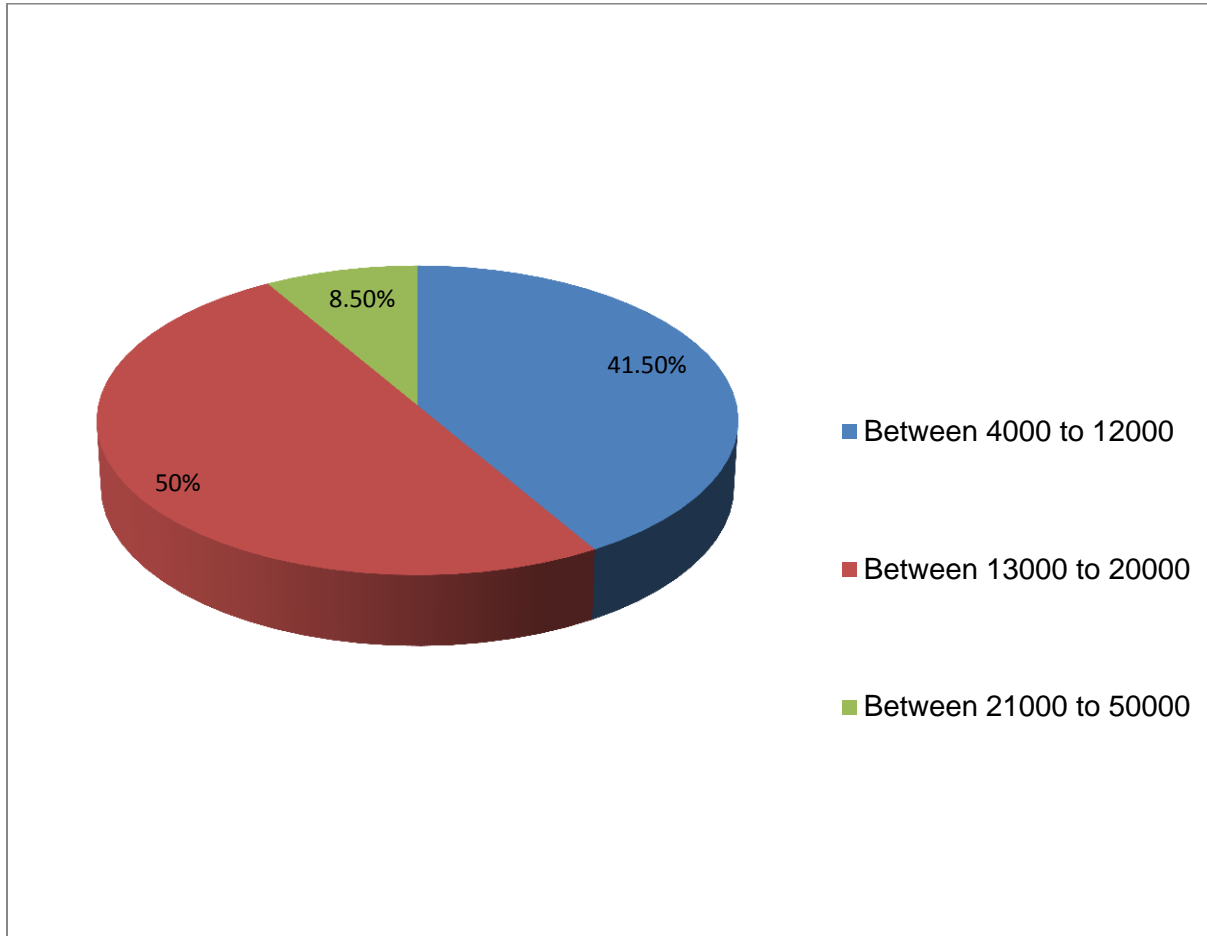


Our research has illustrated that out of 44 correspondents only 6 % have completed their graduation while more than 65.6% of the girls were under metric educated.

TABLE VIII: Husband’s income.

Husband’s income in rupees	Frequency	Percent
Between 4000 to 12000	18	41.5%
Between 13000 to 20000	23	50%
Between 21000 to 50000	4	8.5%
Total	44	100

Figure VIII : Husbands income

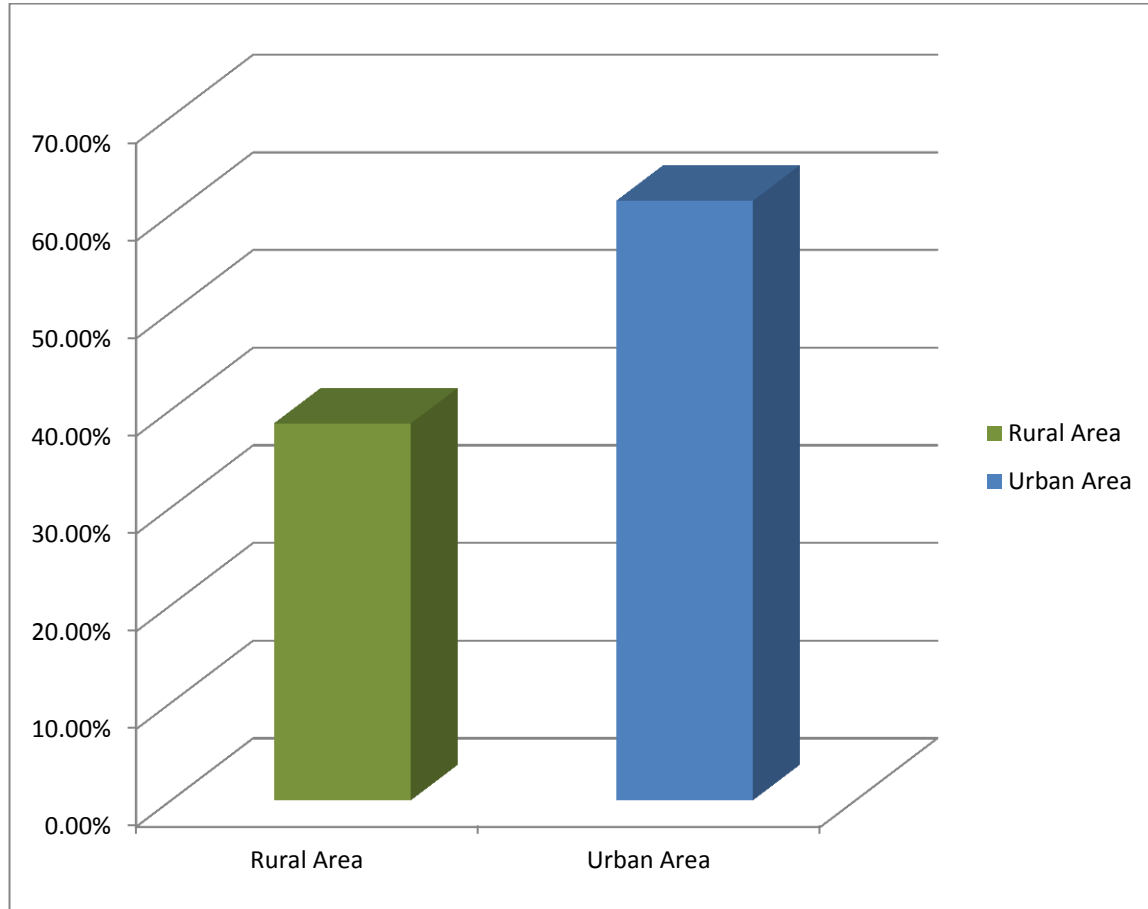


This pie chart shows that the major proportion of the income that most of the Husbands had was 50 % and income was between 9000 to 15000 rupees.

TABLE IX: Living Urban/ Rural Area

Living area	Frequency	Percent
Rural	17	38.6
Urban	27	61.4
Total	44	100.0

Figure IX : Living area Rural/Urban

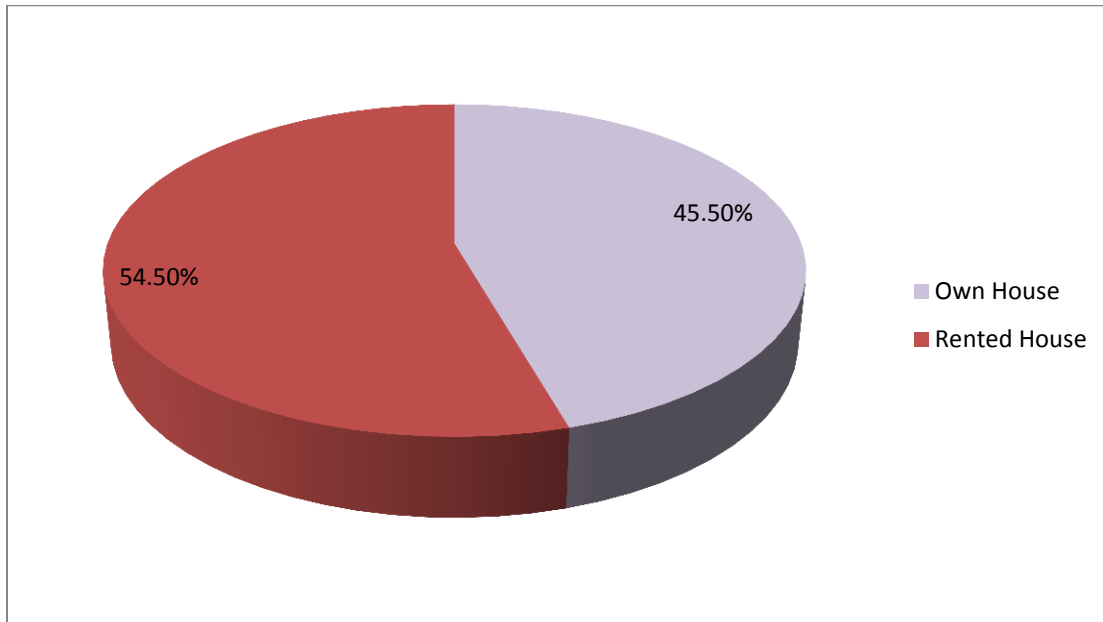


It is illustrated in this Bar chart that more than 61.4% of the girls lived in urban areas while 38.6% estimated lived in rural area.

TABLE X : Owns a House/ Rented house.

House	Frequency	Percent
Rented	24	54.5
Own	20	45.5
Total	44	100.0

Figure X : Owns a house / Rented house

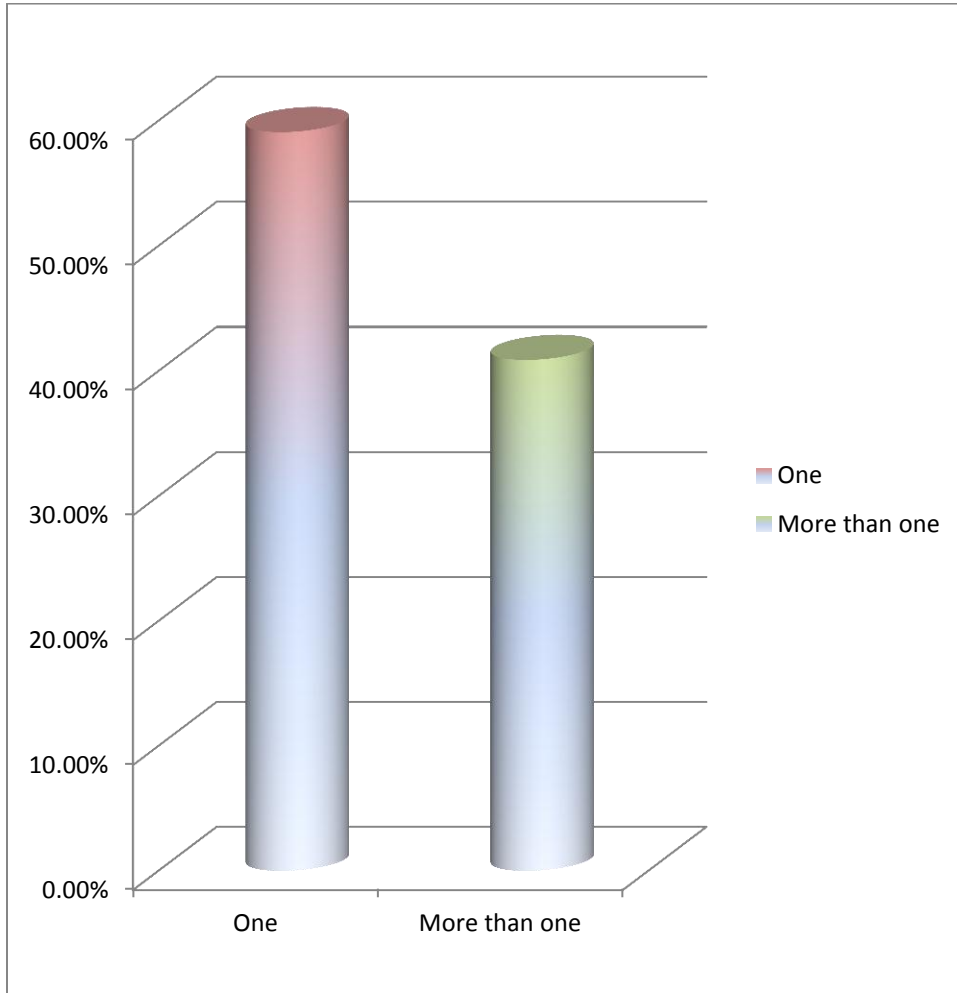


With a total number of 44 Girls, 24 individuals i.e. 54.5% lived in a rented house, while the rest had their own house.

TABLE XI: Earning hands in the family :

Earning hands	Frequency	Percent
One	26	59.1
more than one	18	40.9
Total	44	100.0

Figure XI : Earning hands in the family :

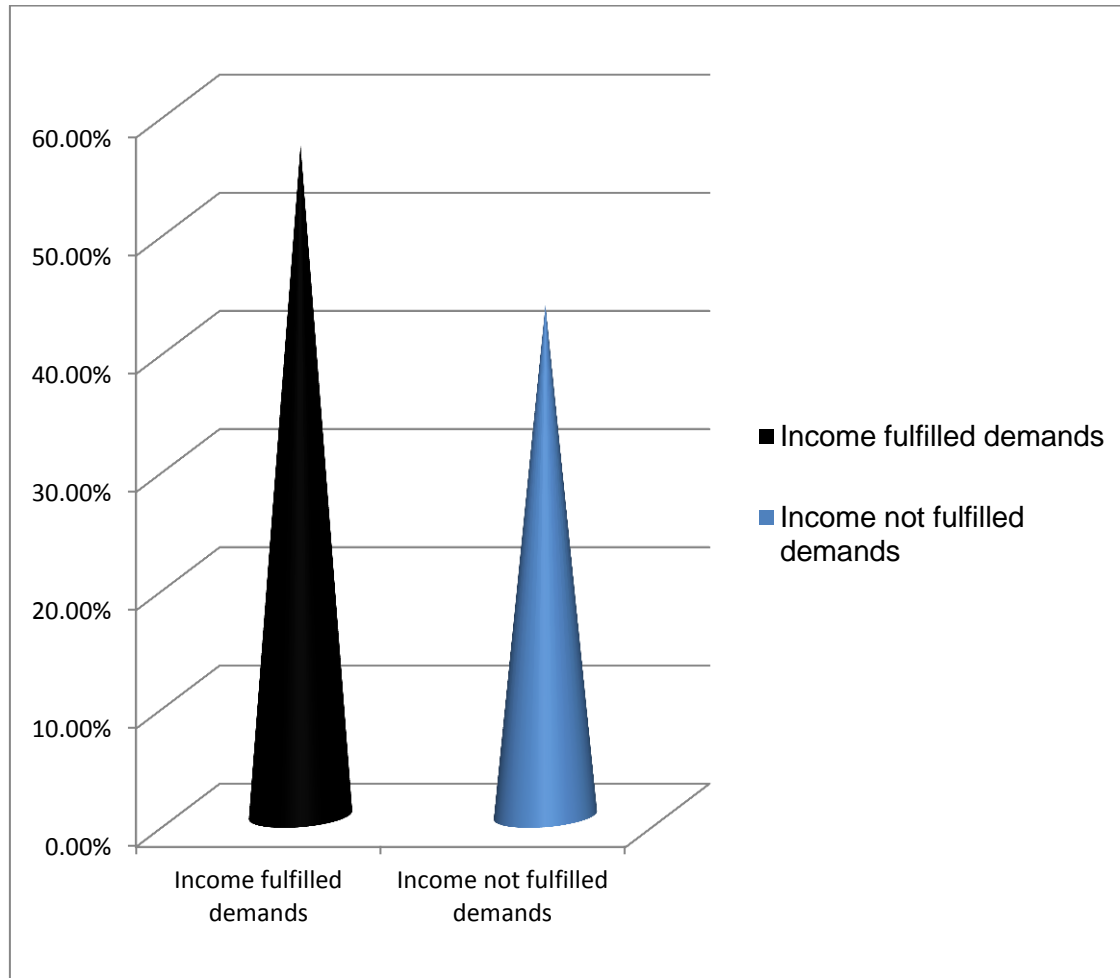


The results illustrated that most of the families i.e. 59.1 % had only one earning member suggesting low income of the families.

TABLE XII: Income fulfilling demands or not

Income fulfilling demands	Frequency	Percent
yes	25	56.8
no	19	43.2
Total	44	100.0

Figure XII : Income fulfilling demands or not

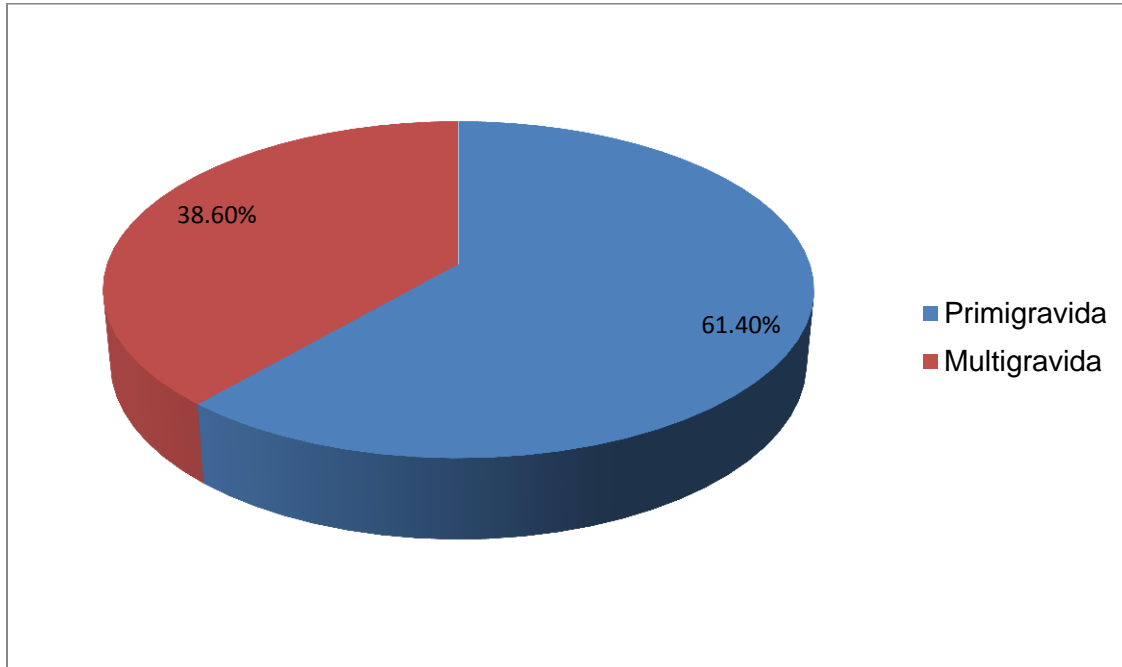


The analysis showed that more than 56.2 % of the families had income fulfilling the demands while almost 43.2% of the families has lower income as compared to their demands.

TABLE XIII : Any previous pregnancies

Pregnancy	Frequency	Percent
primary gravid	29	62.4
secondary gravid	17	37.6
Total	46	100.0

Figure XIII : Any previous pregnancies

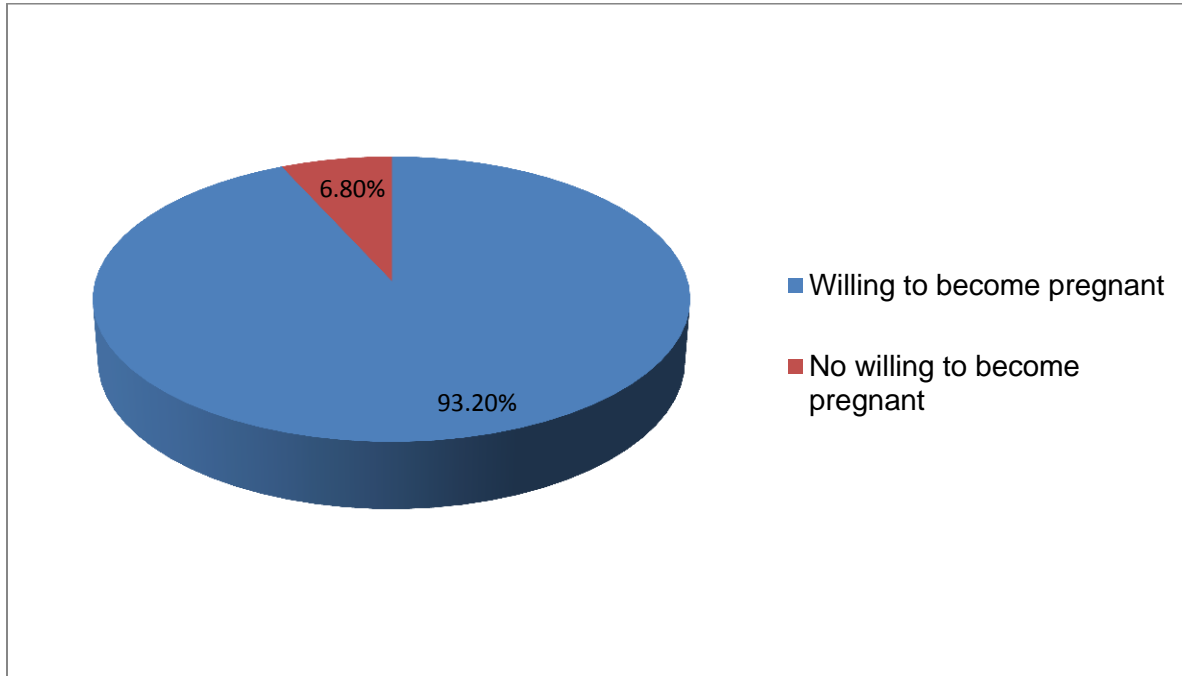


The results revealed that 62.4% of the teenage girls got pregnant for the first time , while 37.6 percent had second pregnancy.

TABLE XIV : Willing to become pregnant at this age

Willing to become pregnant at this age?	Frequency	Percent
Yes	41	93.2
No	3	6.8
Total	44	100.0

Figure XIV : Willing to become pregnant at this age

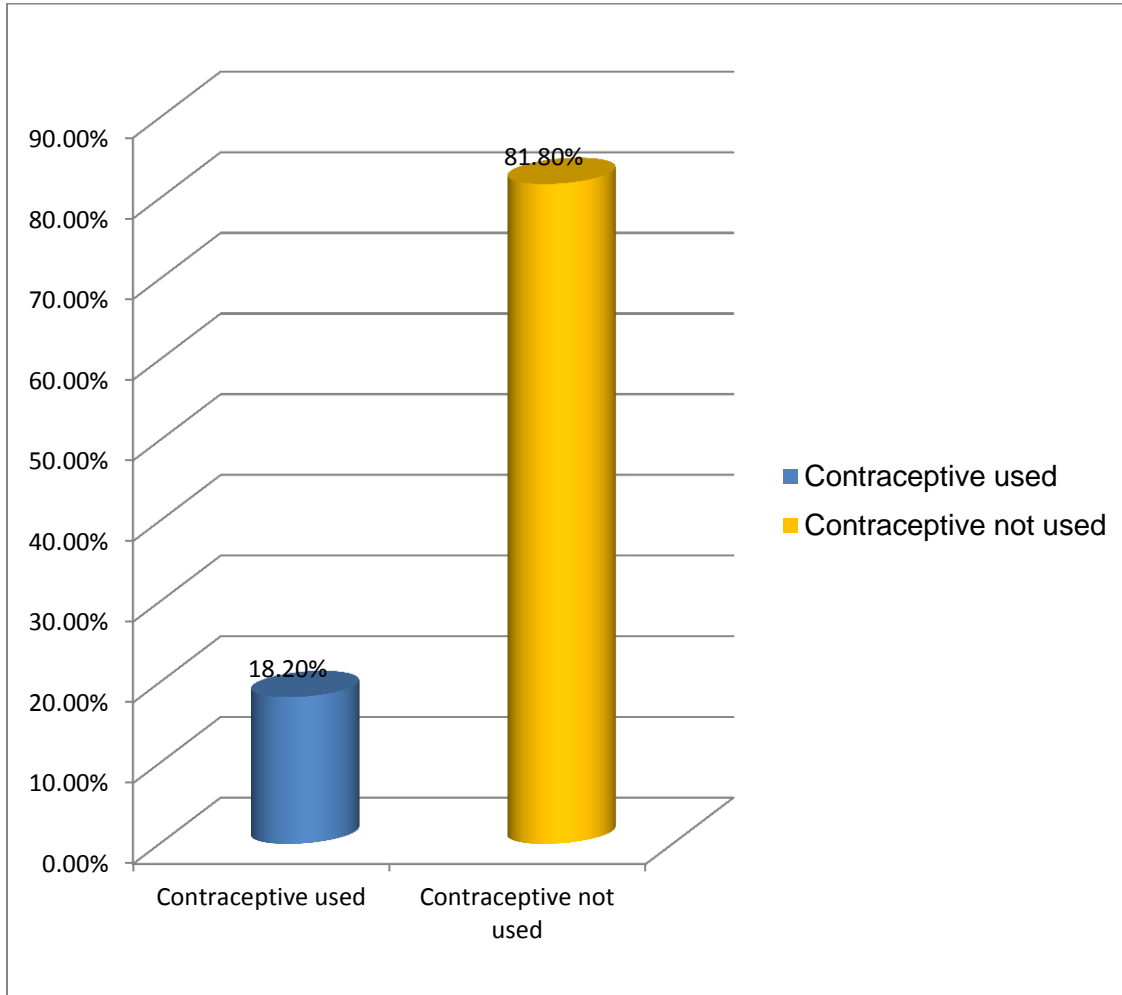


The results revealed that 93.2% of the girls were willing to become pregnant at this age showing there was no role of pressure of family or other causes in pregnancy of the girls at this age.

TABLE XV: Contraceptive use :

Any contraceptive used previously?	Frequency	Percent
yes	8	18.2
no	36	81.8
Total	44	100.0

Figure XV : Contraceptive use :

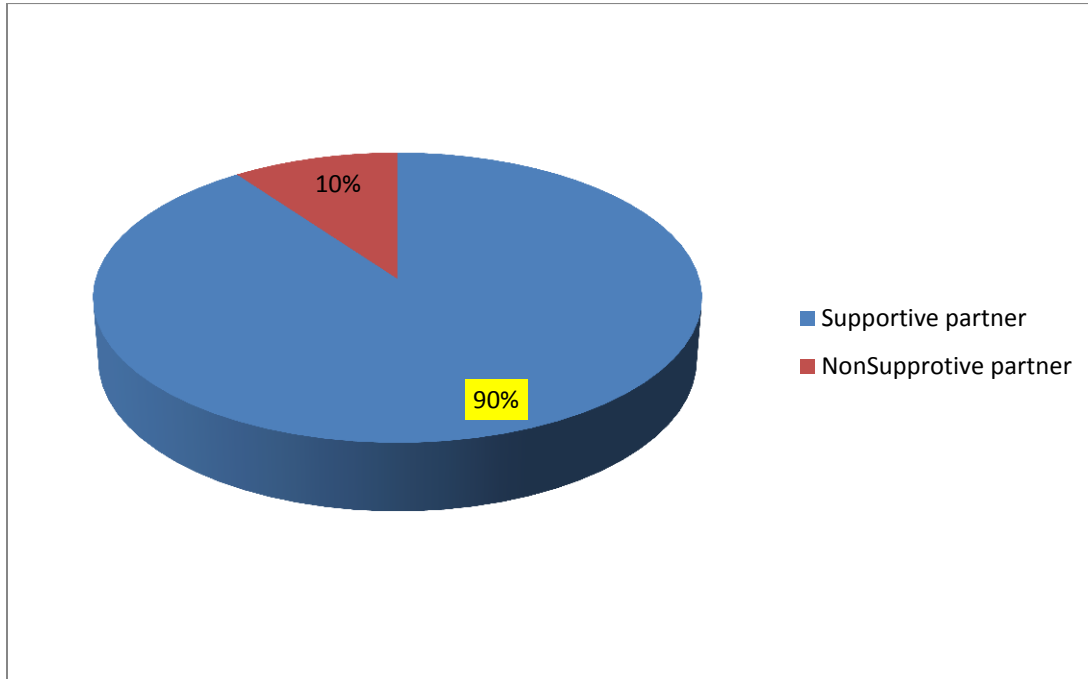


The results revealed that 81.80 % of the girls had not used any contraceptive previously.

TABLE XVI : Supportive partner .

Is your partner supportive?	Frequency	Percent
no	4	9.1
yes	40	90.9
Total	44	100.0

FIGURE XVI : Supportive partner :



More than 90% of the teenage girls had a supportive partner.

DISCUSSION

Teenage pregnancies have always been a major issue in the developed and underdeveloped states of the world. And many researches have been made for the major underlying causes of teenage pregnancies and the issues related to them. Issues can either be socially or educationally or economically proving the fact that teenage pregnancy on the overall is a wrong decision to make and people should be aware of the challenges and the risks the teenage girls have to face.

Our study i.e. case series study

which has focused on proportionate sharing of teenage pregnancies among overall women delivering in Gynecology ward Services Hospital Lahore along with their socioeconomic profiles. The frequency of teenage mothers in our study was 44 out of total 171 women. This makes one fourth of proportion being shared i.e. is 25%. It is greater than any of the previous studies being conducted in Pakistan, which was 22% in a study conducted by Kiran Mubeen and Marina Baig, published in 2016. However, the latest Pakistan Demographic Health Survey (PDHS)

has reported the frequency of teenage pregnancy as 8% which is further lower. This shows that adolescent pregnancies are common in area covered by services hospital.

According to our study, the girls were married between ages of 15-19 with highest proportion of girls i.e. 40% getting married at the age of 17. And second highest proportion i.e. 30.6% getting married at the age of 19.

A study was conducted, published in 2016, on a sub-set of 1526 ever married women, between 20 and 24 years of age, who were a part of a larger study of 10,023 women, were asked about their ages at marriage. The study revealed that the mean age of marriage was 17.52 ± 2.68 years; 5% got married when under 14 years of age; around 18.5% between the age of 14-16 years, and 26.4% got married at around 18 years of age. Of those who got married earlier, most (57.6 %) had had no formal education and resided in rural areas (70%). However, even after adjusting for social equity indicators, a history of early marriage was significantly associated with poor fertility outcomes

All mothers included in study were married hence there was no

problem of social support for pregnant teenagers as reported by some other foreign studies in which unmarried teenage girls become pregnant and face financial and social problems in giving birth. Most of the girls were married at age of 17 years i.e 40% and second highest proportion of girls i.e 30% was getting married at 19 years. No mother was less than 16 years, on contrary to the study conducted in Jackobabad, Sindh in 2009 in which 1% mothers were below 15 years. 91.8% of the girls were not willing to become pregnant at this age which shows the dominant role of family in this area, whereas study conducted by Chris Bonell, in USA and UK in 2011 showed that decision power rests with the mother to give birth to her baby with just 30% mothers unwilling to become pregnant at that time which is less than our finding. This shows that in Pakistan where teenage pregnancies usually occurs within wedlock where family and social support is not a problem but because of young age of girl and generally a low socioeconomic status of women, these girls are not empowered to take their decisions. 79% of mothers had the knowledge of

contraception which is better than previous studies conducted in Punjab in which most of mothers were unaware of contraception but this did not reduce the number of pregnant adolescents as they are not at liberty to decide on their own. The pregnancy at younger age thus causes a lot of physical and psychological stress on the girl. Illiteracy and lack of antenatal care were poor than the previous studies, 71% were under matric while 6% were graduate. Majority of the teenage mothers belonged to urban area i.e is 61% while 39% belonged to rural area. Considering the professional career of teenage mothers, 83% of them were housewives while the rest of them were having temporary jobs that were not highly paid this depict that teenage mothers have financial support from their families, while in a research in USA published in 2010 showed that more than 50% of teenage mothers have to work to meet their financial needs. Lower class individual i.e whose income is less than 10,000 per month have frequency of 10% while those having 25,000 per month income are about 46% among the overall teenage pregnancies included in the study.

Majority of families i.e. 62% having single earning hand. In our study 85% of adolescent pregnant women have supportive partners. This is better than research held in Karachi by Nusrat Shah in 2010 in which majority of husbands were not supportive. The main limitations of our study were, firstly, the sample size for teenage pregnancies was small secondly, the women mostly belonged to 18-19 year age group. Thus, we were not able to study the pregnancy outcome of younger teenagers. One of the reasons of small number of teenagers coming to tertiary care is that most of them are attended by traditional birth attendants.

CONCLUSIONS:

According to our research “Proportionate Sharing of Teenage Pregnancies Among all the women delivering in Gynecology Unit, Services Hospital, Lahore” one-fourth of proportion was made by teenage pregnancies among overall women delivered here. About half of them (52%) had willful marriages. Majority (62%) of them were primigravida while 37.6% were multigravida. A major number of teenage girls (91%) were not willing to

become pregnant. More than half of girls belonged to the families of low socioeconomic group. Most of the girls were less educated.

Recommendations:

- Steps may be taken for increasing the awareness among the families regarding the risks and consequences of teenage pregnancies. Both health related and social issues may be dealt with comprehensive health policies and its implementation
- Educating the families, parents and the teenagers for improving their knowledge about reproductive health can be helpful. Policies should be made to encourage information spread in this regard.
- Laws must be followed regarding marriage of girls and their age marriage.
- Parents should learn to overcome child communication barrier.
- Women empowerment programs must be laid by the government so that girls have rights in the

society and make decisions on their own.

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