

ASSOCIATION OF TEENAGE PREGNANCIES WITH FIRST TRIMESTER ABORTION IN OBSTETRIC WARD

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Abstract: The aim of the study is explored the association of teenage pregnancies with first trimester abortion in obstetric ward. Teenage pregnancy rates varies vastly between different countries and different regions within a country. Such pregnancies are seen mostly amongst the poorer and less educated sections of the society. In developed countries majority of teenage pregnancies occur to unmarried girls unlike developing countries including Pakistan where teenage pregnancies occur to married girls and are associated with early marriages. The objective of the study were; to study the association of teenage pregnancies with first trimester abortion in obstetric ward, to find the teenage pregnancies with first trimester abortion in obstetric ward. To identify the factors that affect the teenage pregnancies with first trimester abortion in obstetric ward. The population of the study were all teenage pregnancies with first trimester abortion in obstetric ward in Jhang city. A well-managed self-contractor questionnaire distributed to 120 teenage pregnancies with first trimester abortion in obstetric ward in different hospital in Jhang City. Descriptive statistics and using suitable statistical techniques used by data analyzed. After the collection of data, the researcher analyzed the data by T Test. Primary information was also collected in this regard and compared to assess the probability and significance of this study.

Keywords: Teenage Pregnancies, Trimester Abortion.

1. INTRODUCTION

World Health Organization¹ defines Teenage Pregnancy as “any pregnancy from a girl who is 10-19 years of age”, the age being defined as her age at the time the baby is born.² Often the terms “Teenage pregnancy” and “Adolescent pregnancy” are used as synonyms. According to UNICEF, worldwide every 5th child is born to teenage mother.³ Worldwide 13 million births each year occur to girls younger than 19 years. The incidence of teenage pregnancies varies dramatically between the different countries. Approximately 90% of the teenage births occur in developing countries.⁴ Nevertheless, there is also a significant variation in teenage pregnancy and birth rates between developed countries, although the teenage pregnancy and birth rate of developed countries are significantly lower than that of developing countries (World Health Organization, 2006.).

Teenage pregnancy is an important public health problem in both developed and developing country, as it is a ‘high-risk’ or ‘at-risk’ pregnancy due to its association with various adverse maternal and fetal outcomes which results in increased mortality and morbidity of the mother and the child. Early childbearing is associated with various health risks for both mother and child. Teenage mothers are more likely to experience pregnancy related complications which often lead to maternal death (Sylvia, 2009).

Teenage pregnancies are considered problematic because complications from pregnancy and childbirth are the leading causes of death in teenage girls aging between 15 and 19 years in developing countries. It is estimated that 70,000 female teenagers die each year because they are pregnant before they are physically mature enough for successful motherhood.⁵ Therefore, teenage pregnancies and births are considered as risky. Adverse Maternal outcomes of teenage pregnancy includes Preterm labour, anemia, Hypertensive Disorders of Pregnancy (HDP), Urinary Tract Infection, abortion, Sexually Transmitted Diseases, HIV, malaria, obstetric fistulas, puerperial sepsis, mental illness and high rate of Cesaerean Sections for cephalopelvic disproportion and fetal distress. Adverse fetal outcomes include preterm births, Low Birth Weight infants, Still Births, birth asphyxia, Respiratory Distress Syndrome and birth trauma or injury. Hence, the present study aims to find out the incidence and to evaluate the various complications associated with teenage pregnancy (Rahman, 2010).

Statement of the Problems:

The present study aimed to evaluate the outcomes and complications of teenage pregnancy. Teenage pregnancy today, still represent one of the most important public health problems. There is no doubt that the obstetrical problems can be managed by modern medicine and so the risk of Teenage pregnancy can be diminished.

Objectives of the Study:

The objectives of the study were to:

1. To study the association of teenage pregnancies with first trimester abortion in obstetric ward
2. To find the teenage pregnancies with first trimester abortion in obstetric ward.
3. To identify the factors that affect the teenage pregnancies with first trimester abortion in obstetric ward.

Significance of the study:

This is the first research of its kind being conducted on this topic no such research has been done before. The study will elaborate the association of teenage pregnancies with first trimester abortion in obstetric ward.

Delimitation of the study:

The researcher having limited time and available sources for the study. So, the study was delimited in following areas;

The sample was delimited only to 120 teenage

The sample was delimited to Jhang City.

2. REVIEW OF RELATED LITERATURE

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.⁹ 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.⁵ 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 Punjab (10.3%) and the lowest rate is in KPK (6.5%).

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.¹² 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.

Many studies have found that the outcomes of pregnancy are worse for Pakistani adolescent girls as compared to older mothers. A case control study found that 50% of the Pakistani adolescent mothers were primigravidas, >32% were having their second baby, and around 17% were delivering their third or more babies.¹³ The frequency of anemia among adolescent mothers was three times higher as compared to the non-adolescent mothers. Moreover, the adolescent mothers had significantly lower pre-pregnancy Body Mass Index (BMI), were twice as likely to have instrumental births, and three times more likely to acquire chorioamnionitis.¹³ Besides these outcomes, other studies also reported higher incidences of eclampsia, pregnancy induced hypertension, prolonged and obstructed labor, obstetric fistulas, spontaneous and unsafe abortions, and increased rates of cesarean sections among adolescent mothers. Also, their babies were at a higher risk of having low Apgar scores, being born preterm, experiencing intrauterine growth restriction (IUGR), meconium aspiration, and neonatal death.

There are several factors associated with adolescent pregnancies in Pakistan, and most of them are common in the South Asian region. Besides poverty and illiteracy, the prevailing social norms in the rural areas are a major challenge. A study from Bangladesh¹⁷ reported several sociocultural norms that could be found in Pakistan also. These customs include beliefs that wives should be several years younger than their husbands; a demand of young men for marriage due to their sexual desires; the mother-in-law's dominance, and the desire for a daughter-in-law who can be shaped by her husband and his family members from a young age; parents' perceptions that marrying their girls earlier saves them from sexual exploitation; and misconceptions that family planning causes infertility. In addition, the majority of adolescents lack information regarding sexual and reproductive health issues and rights, because discussion of these issues is a social and religious taboo. Even parents show discomfort in guiding their children. Hence, misconceptions regarding sexuality and contraception prevail. Furthermore, women have a low status; a male child is preferred over a female due to the dowry traditions. Girls are considered an economic liability, and men are considered breadwinners; education for males is preferred and a woman is not allowed to use contraception when her husband wishes for more children.

Industrialized countries have sustained comparatively lower rates of adolescent pregnancy because of a continuing focus on the issue. These strategies include better access to and completion of formal education; increased availability of high quality sex education in schools; and an obligation to acquire job skills before starting a family. In England, for example, a 41% reduction in the adolescent birth rate occurred from 1998-2012; this has been maintained as the all-time lowest fertility rate in the developed world. The success story involved efforts for prevention at the primary level by involving the local government, health organizations, health services, and frontline practitioners. Reducing adolescent pregnancies is one of the 66 indicators in the public health outcome framework of the National Health Service (NHS), and it is a priority in the Framework of Sexual Health Improvement (FSHI). This framework includes provision of high quality Sex and Relationship Education (SRE), promotion of friendly discussions with parents, and provision of youth friendly contraceptive services through a strong school health program, which is run by school health nurses. Moreover, England has also strengthened the role of midwives and nurses, with the Family Nurse Partnership (FNP) program for young adolescent mothers and fathers, from 28 weeks of pregnancy to 2 years after birth, to support their physiological and psychological transition to parenthood.

3. METHODOLOGY

This is a one year clinical prospective study carried out in the Department of Obstetrics and Gynecology, at a DHQ of Jhang city. Institute ethical committee approval was taken. All pregnant females admitted to the Hospital in the age group of 13-19 years during the study period were included and all pregnant females equal to or more than 20 years admitted to the Hospital during the same period were excluded from the study.

Research Design:

It is a process of collecting, analyzing and interpreting the data. It enables a researcher to draw logical inferences, concerning causal relationship among the variables under investigation. Research design also determines the domain of generalization (Nachmias and Nachmias, 1992, p.97). This present clinical prospective study was explanatory in character. For feedback questionnaires were adapted and utilized in this research, therefore, survey method was used to gather the information.

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Population:

The population of the study were all teenage pregnancies with first trimester abortion in Jhang city. It is one of the rapidly grown district of Pakistan. 45.7% of people live in urban area and remaining 54.3% lives in rural area (Government of Punjab, 2015). Literacy rate (estimated for 2015) is 70.1% for males and 64.1% for females (UNESCO 2012).

Sampling Technique and sample:

The researcher selected a sample of nursing staff through simple random sampling from Jhang City. Simple random sampling was also used for the teenage pregnancies with first trimester abortion. Due to shortage of time and financial resources it was not feasible for researcher to gather data from all the district. So the researcher applied simple random sampling technique to justify the sample of the study.

Research Instrument:

To know the hepatitis B awareness among nursing staff and their vaccination researcher developed a questionnaire for nursing staff based on five-points rating scale after going through the connected literature, i.e., books, journals, articles, reports magazines with the consultation of supervisor. Questionnaires contained 5 items. The questionnaire prepared for this study is given in Appendix A.

Pre-Testing of Research Instrument:

For the purpose of making questionnaire valid it was pilot tested. Fifteen teenage pregnancies with first trimester abortion from Jhang city were taken in this regard. The researcher himself visited and administrated the questionnaires among relevant respondents. They were asked for giving their judgment freely for the protection of the questionnaire. They were also requested to modify the questions, if necessary in arrangement and language to mark questions easy and understandable. The researcher used data collection instruments for teachers. Validity and reliability of the instrument judged through pilot testing. Whole research was carried out by data collection, data analysis and interpretation of data. Pilot study was carried out with small size sample. The main purpose of the study was to determine the validity and reliability of the instrument. Consequently, questionnaire was revised by incorporating their suggestions. Then the final shape of questionnaire was emerged. Cronbach's alpha was used to estimate the reliability of questionnaire.

Scoring Procedure:

Table 3.1 Scoring procedure for statement

Positive and negative Statements	
Category	Scores
Yes	1
No	2

Table 3.2 Scoring procedure for gender

Gender	Score
Male	1
Female	2

Table 3.3 Scoring Procedure for Qualification

Age	Score
21-30	1
31-40	2
41-50	3
51-60	4

Data Collection:

The researcher himself visited the hospitals and made the demographic sheets filled from the nursing staff. Before the process of data collection, researcher obtained institutional support letter from Independent College of Nursing Faisalabad. The researcher visited the sample hospitals personally. The questionnaires were distributed among respondents and help them where they got confused and gave them maximum time to fill in the questionnaire. The questionnaires were received back after filling up by the nursing staff.

Data Analysis:

Data was analyzed with SPSS software and statistical analysis was made with the help of descriptive statistics. Description of the data was done in the form of tables and phrases. After collection of data entered it according to upper mentioned scoring procedures and then it was tabulated, scored, analyzed and interpreted by means of suitable descriptive and inferential statistics. The data obtained from this technique was analyzed statistically by applying Descriptive statistics and T test. Secondary information were also collected in this regard and compared to assess the probability and significance of this study.

4. RESULTS

The purpose of this chapter is to present analysis and interpretation of data. The data obtained from teachers randomly and analyzed statistically by applying Descriptive statistics and t- test. The data was collected from nursing staff who belong to Jhang City.

Demographic Variable:

Table: 4.1 Classification of Respondents according to gender

Gender	Frequency	Percent
Male	0	0
Female	120	100.0
Total	200	100

The table 4.1 indicates that percentage according to sample of the study 100.0% were female from gender.

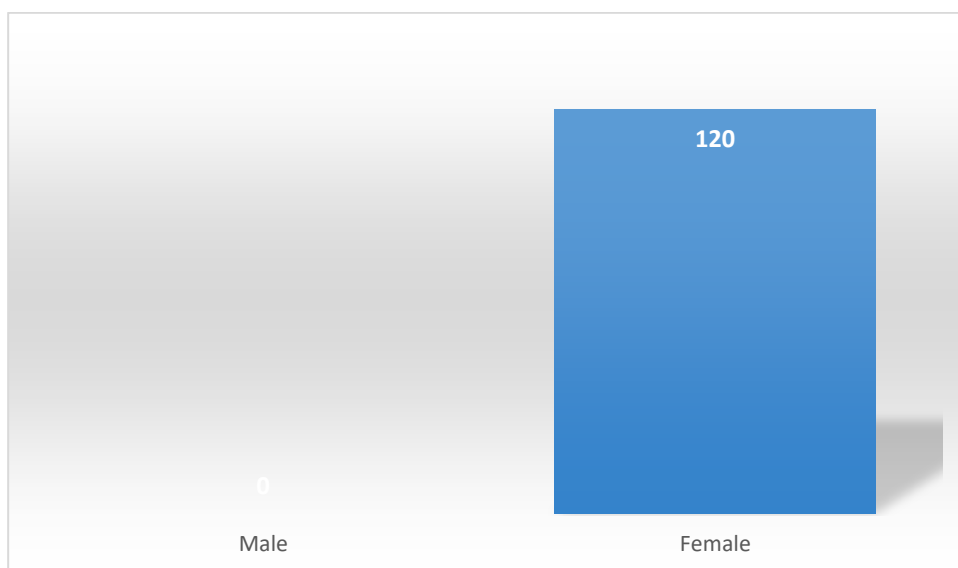


Fig: 4.1 Classification of Respondents according to gender

Table: 4.2 Classification of Respondents according to Age

Age	Frequency	Percent
21-30	24	20.0
31-40	46	38.5
41-50	35	29.0
51-60	15	12.5
Total	120	100.0

The table 4.2 shows that age of teachers between 21-30, 31-40, 41-50 and 51-60 years was 24(12 %), 46(23 %), 35(29.0 %) and 15(12.5 %) respectively.

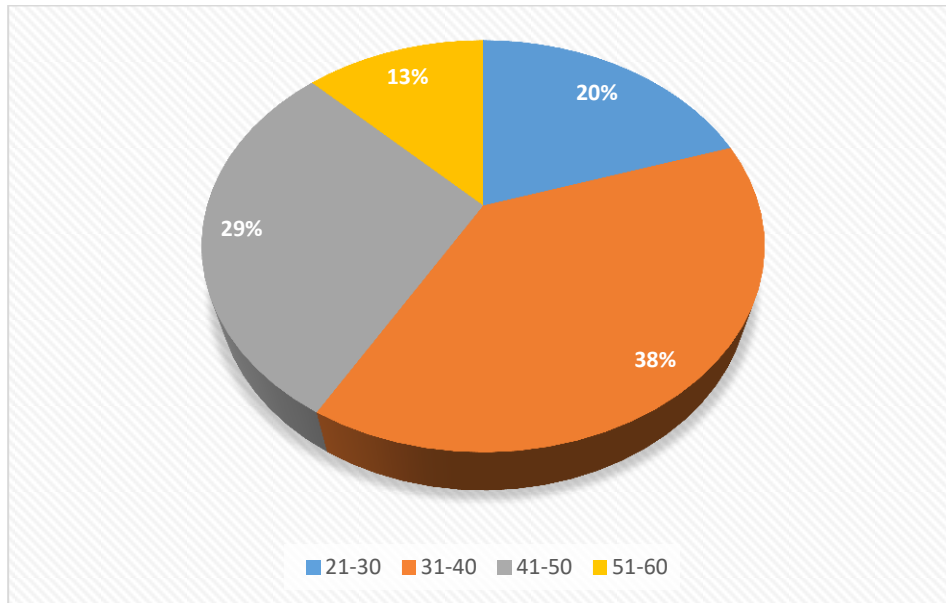


Fig: 4.2 Classification of Respondents according to Age

Table: 4.3 Classification of Respondents according to Experience

Year	Frequency	Percent
1-10	41	30.5
11-20	43	31.5
21-30	25	32.5
31-40	11	5.5
Total	120	100.0

The table 4.3 shows that experiences of respondents. The respondents who have experiences 1-10, 11-20, 21-30, 31-40 years were 41 (30.5%), 43(31.5%), 25(32.5%) and 11(5.5%) respectively.

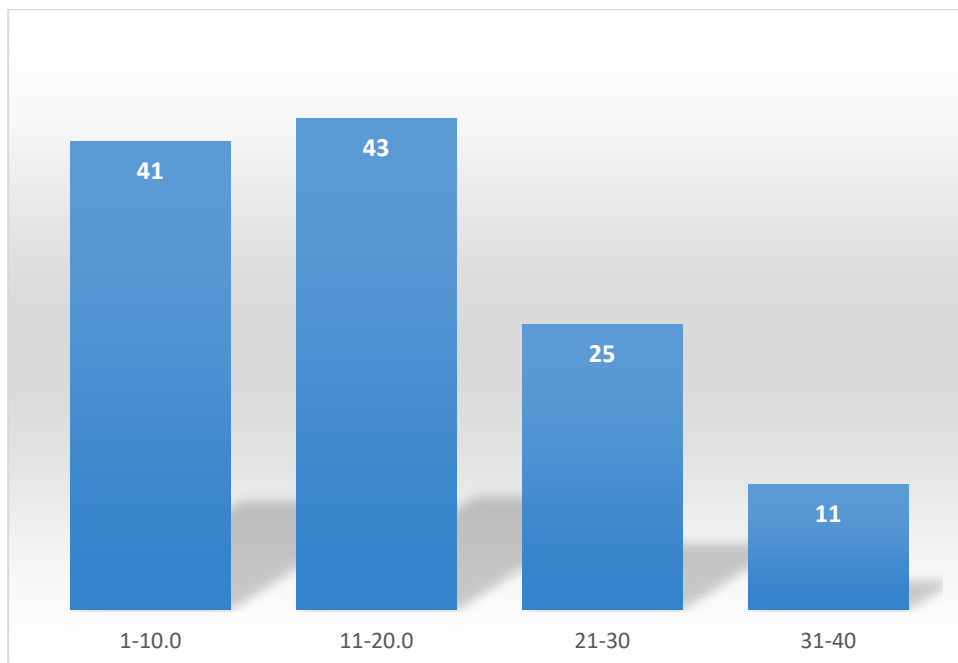


Table: 4.3 Classification of Respondents according to Experience

RQ 1 What is the importance of hepatitis B awareness among nursing staff and their vaccination?

Table: 4.4 Relationship about awareness and vaccination among nursing staff (N = 120).

Variable	Awareness
Vaccination	0.465**

= Highly significant (P<0.01) **

The above table shows that highly significant (P<0.05) ** difference was found between awareness and vaccination among nursing staff.

RQ 2 What is the difference of old age and young age nursing staff about hepatitis B awareness and their vaccination?

Table: 4.5 Score range of old age and young age nursing staff about hepatitis B awareness and their vaccination (N = 120).

Variable	Group	Mean	SD	t-value	p
awareness and vaccination	Young age	157.90	12.74	0.00	0.01
	Old age	181.52	14.49		

df = 118, = Significant (P<0.05)

The above table shows that significant (P<0.05) difference was found between young age would have low level of awareness and their vaccination as compare to old age nursing staff.

5. CONCLUSIONS AND RECOMMENDATIONS

This is the cross-sectional study about the hepatitis B awareness among nursing staff and their vaccination. The result shows that highly significant (P<0.05) ** difference was found between awareness and vaccination among nursing staff. The above result shows that significant (P<0.05) difference was found between young age would have low level of awareness and their vaccination as compare to old age nursing staff. The knowledge of HBV infection and its vaccination for majority of our respondents was ranged from moderate to high, and larger percentage of HCPs had negative or neutral attitudes on HBV and its vaccination. In spite of this, the vaccination status was encouraging as greater proportion of HCPs had been screened and received HB Vaccine. However, some areas of KAP of HCPs need to be corrected or improved. Areas where HCPs had knowledge deficiencies were: whether HBV infection is curable or not, number of doses of the vaccine required for complete protection, expected interval between the doses of the vaccine, the effectiveness of the vaccine when used as PEP, and requirement of post-vaccination serological testing. Knowledge score was significantly associated with: education level, type of profession and area of practice. Profession and history of training were the only significant predictors of vaccination status. Vaccination status was not significantly associated knowledge and attitudes score; there was no statistically significant association between knowledge and attitude score as well.

Recommendations:

Based on the study findings, this study recommends;

- i. Ministry of Health should come up with measures to increase the knowledge of hepatitis B.
- ii. Though advocacy mechanisms did not proof to affect vaccination, there is need for the health institutions to put in place advocacy mechanisms because a minority (13.3%) had advocacy measures in place. The measures may improve the completion of the doses and post-vaccination test check for immunity.
- iii. The attitude of nursing staff towards hepatitis B and vaccination is critical in uptake of the hepatitis B vaccination. The institutions should put in place programmes to keep promoting the positive attitudes of the nursing staff towards the HB.
- iv. The government and the health institutions should make hepatitis B vaccine available for free or at a cost that most nursing staff can afford. Nursing staff should be encouraged to get vaccinated and to take all the recommended doses.

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