



## **ASSESS THE KNOWLEDGE AND ATTITUDE OF PREGNANT WOMEN ABOUT RISK FACTORS DURING PREGNANCY IN LAKHODAIR COMMUNITY HEALTH CENTER**

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### **ABSTRACT**

Knowledge regarding maternal risk factors among pregnant women ultimately overcomes the likelihood of adverse events in pregnancy and childbirth. This study aimed to explore Lakhodair community pregnant women's knowledge and attitudes about maternal risk factors in pregnancy. A single-center cross-sectional survey was conducted from 8<sup>th</sup> March to 13<sup>th</sup> June 2024 among women of reproductive age (15-49 years). A convenient sampling technique was used to recruit the sample and data was collected using an adopted structured questionnaire. SPSS version 20 was used to analyze the data. Data from 92 women underwent final analysis. The mean age of respondents was 26-35 years (52.2%). Most of the respondents (89.10%) correctly knew the maternal risk factors in pregnancy. A large percentage of women knew that poor nutrition, anemia (93.5%), smoking and passive smoke (92.4%), and obesity (87.0%) during pregnancy were risk factors affecting the fetus's health. However, the overall attitude of pregnant women towards pregnancy risk factors is positive, about (70.7 %) of women mentioned pregnancy does not cause any harm. So, there was no need for medical check-ups regularly. In conclusion, Lakhodair community pregnant women demonstrated a good level of knowledge and positive attitude regarding the risk factors during pregnancy.

**KEYWORDS:** knowledge, attitude, pregnancy, women, risk factors.

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## INTRODUCTION

Pregnancy is a normal phenomenon from which every woman has to go through a phase to give birth to the next generation. Maternal lifestyle-associated health behaviors in the course of pregnancy affect their offspring's health status. These adverse health behaviors are related to nutrition, smoking, food supplements, medication, antenatal care, and physical activity. However, a major condition of healthy behavior is the ability to understand health information and how to access it. (Oechsle et al., 2020). Pregnancy risk factors are important indicators to determine the potential complications in expected mothers. In a comparative study between adult and adolescent women, the risk of adverse pregnancy outcomes including restricted fetal growth, preterm delivery and neonatal deaths were found frequent in female having risk pregnancy. These risks are due to their physiological, psychological immaturity and insufficient sexual and reproductive knowledge. Most importantly age is a risk factor in pregnancy. Under 18 are at high risk of gestational complication such as preeclampsia, Anemia, pre mature delivery, low birth weight and congenital fetal anomalies (neural & cardiac defects). On the other hand, pregnancy over the age of 35 is associated with bad outcomes due to potential for a higher rate of chronic condition (Yahyaa et al., 2022). In fact, pregnant women are at higher risk when exposed to conditions such as smoking, obesity, polycystic ovary syndrome, non-prescription drug, consanguineous marriages or some have any previous history of chronic diseases (diabetes & hypertension). The prevalence of high-risk pregnancy was reported up to 20% worldwide. Moreover 50% of perinatal deaths are being observed during high-risk pregnancies. As compared to developed countries, in many developing countries pregnant women are more prone to risk or complications due to their inefficient knowledge about gestational care. Due to lack of awareness or insufficient knowledge the risk of maternal death in developing countries is estimated to be 1 in 61; while for the developed countries it is about 1 in 2800. According to WHO reports: almost every day (800) women died caused by preventable risk factors during pregnancy, 99% of these deaths are occur in developing countries. (Aziz et al., 2019). Every pregnancy is different. Irrespective of age many of the condition in gestational time needs special attention too. It includes prematurity (less than 37 weeks) or post maturity (more than 41 weeks), Grand multipara (more than 5 children), short statured primigravida (less than 5 feet), twin pregnancies, Mal presentation (breech\transverse lie), toxemia of pregnancy, past bad obstetric history (abortion, still birth, antepartum hemorrhage, caesarean section, postpartum hemorrhage). Women at the childbearing age are at the greatest risk,



with prevalence of anemia estimated at 42% in pregnant women aged 15–49 and 30% in non-pregnant women, with Africa and Asia accounting for more than 85% in high-risk groups where its causes are multi-factorial. According to World Health Organization (WHO), Iron deficiency is the most common nutritional problem in the world and affects about 25% of the world population, especially women in the childbearing age (Aboud et al., 2019). Alcohol beverages consumption (any amount) during pregnancy can result in multiple major health and social problems both mother and fetus; including miscarriage, stillbirth, low birth weight, and prematurity. At regional and national level, alcohol use prevalence data was used as an indicator for maternal and child health. It was found that alcohol use is associated with multiple reproductive risks, including having a child with a Fetal Alcohol Spectrum Disorder, increased risk of fetal loss, and decreased chance of live birth and increase the vulnerability of different risks in the context of reproductive health. The study also found that Australian women of childbearing age have poor knowledge of the specific effects of alcohol in pregnancy on the unborn child. We also found a disjunction between women's knowledge and attitude (Bayu & Demeke, 2021). Direct obstetric causes such as hemorrhage, hypertensive diseases of pregnancy, maternal infections, and abortion are responsible for 73% of all maternal deaths. In Egypt, maternal mortality ratio (MMR) reached to 53 deaths per 100,000 live births in 2003, but it gradually declined to be 43.6 deaths per 100,000 live births in 2017. However, maternal mortality rate is higher in Upper Egypt than Lower Egypt (74 versus 61%, respectively). The recognition of obstetric danger signs and contact the health care system by the women and their families play an important role in preventing and reducing maternal morbidities and mortalities. The most common consequences during pregnancy are intense vaginal bleeding, blurred vision, and swollen hands and face (Ali et al., 2020). Adverse pregnancy outcomes account for more than half of maternal mortality, include infection, hypertensive diseases, and pregnancy hemorrhage. The World Health Organization (WHO) estimates that problems related to pregnancy or childbirth cost the lives of more than 830 women worldwide every day. Non-obstetric risk factors include poor socio-economic status, maternal malnutrition, illiteracy, maternal age < 20 and > 35 years, heavy physical work, smoking, and trauma. Obstetric risk factors associated with these outcomes include cervical incompetence, multiple pregnancies, short birth intervals, abortions, preterm deliveries, and previous preterm birth. Several other medical conditions have also been associated with these outcomes, including diabetes mellitus, urinary and genital tract infections and mental stress (Salim et al., 2024). Despite the advancement in knowledge and awareness regarding



pregnancy risk factors; complications are still tended to pose a significant public health challenge globally. High-risk pregnancies lead to many gestational complications such as preeclampsia, Anemia, pre-mature delivery, low birth weight and congenital fetal anomalies (neural & cardiac defects) which result in high fetal and maternal mortality. Yet there remains a gap in knowledge and attitude towards pregnancy risk factors in pregnant women. Therefore, this research aims to investigate the knowledge and attitudes of pregnant women about risk factors during pregnancy in the Lakhodair community health center.

The significance of exploring the knowledge and attitude level of women lies in its potential to address critical gaps in preventing gestational period complications. It is one of the significant global health challenges, affecting vulnerable populations in low-resource settings. By investigating determinants such as knowledge and attitude; this study aims to:

- Knowledge regarding pregnancy risk factors is essential for Lakhodair community health centre pregnant women during pregnancy to prevent them from complications such as pre-eclampsia, Anemia, pre mature delivery, low birth weight and congenital fetal anomalies (neural & cardiac defects) etc.
- The attitude of Lakhodair community health centre pregnant women towards pregnancy risk factors is necessary to measure; to enhance the cooperation in preventing complications associated with gestational period.

Ultimately, this study's significance extends beyond academia, offering practical implications for public health programs and policies aimed in minimizing the mortality child women ratio and helpful in preventing complication during gestational period.

Objectives of the research were to assess the knowledge of pregnant women's regarding pregnancy risk factors in Lakhodair community health centre and to assess attitude of pregnant women towards their pregnancy risk factors in Lakhodair community health centre.

### **Conceptual Definition**

#### **Knowledge**

Knowledge is a familiarity, awareness, or understanding of someone or something, such as facts, information, descriptions, or skills, which is acquired through experience or education by perceiving, discovering, or learning (Gilan, 2022).

#### **Attitude**



An attitude is a global and relatively enduring evaluation (e.g. good or bad) of a person, object, or issue. Attitudes can be based on affective, cognitive, or behavioural information and can vary in their strength (e.g. how enduring, how resistant to change, and how predictive of behaviour they are (Bizer et al., 2006).

### **Operational Definition Knowledge**

Knowledge is understanding gained through learning and experience measured by an adopted Questionnaire, consists of 10 items of knowledge section, scores less than 60% shows poor knowledge and more than 60% shows good knowledge.

### **Attitude**

Attitude is a mental position or feelings toward a person, object or idea measure by Questionnaire consists of 9 items of attitude section, scores less than 80% shows poor attitude and more than 80% shows good attitude.

## **LITERATURE REVIEW**

A literature review helps to form the foundation and provides context for a new study. Researchers usually undertake a thorough literature review to familiarize themselves with the knowledge relevant to topic under study. Literature resources like International Journals, Published Research Studies, CINAHL, Pub-Med, Medscape and Google Scholar are used to find out the relevant literature as guideline for the study.

A study conducted in obstetric and gynecologic care settings at three hospitals in Southern Germany aimed to investigate pregnant women's level of knowledge of lifestyle-related risk factors during pregnancy and their potential health impact on their offspring. This cross-sectional observational study of pregnant women explored that factors affecting women's knowledge of lifestyle-related risk factors during pregnancy were specifically associated with socioeconomic status, e.g., lower household net income, middle educational level, and statutory health insurance status. Women who had received information from their gynecologist had a higher level of knowledge of lifestyle-related risk factors during pregnancy. This study showed that health promotion regarding lifestyle-related risks during pregnancy specifically needs to address women from the low-to-middle socioeconomic status group. Gynecologists seem particularly effective in providing this information. (Oechsle et al.,





2020).

A mixed method of community based cross-sectional study was employed from March 1st to 30; 2017 conducted in Debre Birhan Town, North Shewa, Ethiopia. aimed to assess the utilization of preconception care and associated factors among reproductive age group women. The finding of this study showed that women's utilization of preconception care is relatively low. A woman's age, marital status, educational status, knowledge about preconception care services, and availability of units for preconception care were factors affecting the utilization of preconception care. (Demisse et al., 2019). A cross-sectional survey was conducted in marginalized areas in Sri Lanka using the KAP model questionnaire administered to 400 reproductive-age women (18–49 Years) to assess the food and nutrition-related KAP among reproductive-age women and understanding of household food and nutritional security in Sri Lanka as an example for marginalized societies. Data were collected using a random sampling method. The research results clearly showed that reproductive-age women have a low level of nutritional knowledge in the areas being investigated. Most women have a positive attitude toward receiving nutritional knowledge but have low-level practice about a healthy diet. Furthermore, the knowledge, practices, and attitudes of women largely affect their BMI status, as well as household food security. The research results showed that KAP largely determines women's nutrition and household food security. Based on the results of this research, there is a need to enhance nutritional education in reproductive-age women in marginalized areas in Sri Lanka. (Weerasekara et al., 2020).

A descriptive cross-sectional study was carried out among eight antenatal clinics in the Matsuyama Medical Officer of Health (MOH) area, Sri Lanka. This study aimed to assess knowledge and attitudes on GDM (gestational diabetes mellitus) and its associated factors in a selected population of pregnant mothers in Sri Lanka. Study findings showed that only a minority of the study group (20.0%) had good knowledge about GDM while, more than 50.0% of the participants showed positive attitude towards the management of GDM (TMDYD & Hettiaratchi, 2021).

Another Quantitative design (Descriptive study) was conducted during the period 15th November 2018 at 25th March 2019 in the city of Al-Amara at Southern of Iraq. This study aimed to assessment of knowledge for pregnant women toward risk of pregnancy and to identify the association between level of awareness and demographic data. The first part for socio-demographic characteristic and second part to risk of pregnancy which contain: nutritional; exercise; smoking; caffeine; polycystic



ovary syndrome; radiation; consanguineous marriages, and nonprescription drugs. In conclusion, the study showed that quarter the sample had low knowledge while less than half of the sample had moderate knowledge (Aziz et al., 2019).

A Community based cross sectional study design was employed in West Gojjam of Amhara region. The aims of this study were to assess knowledge and attitudes of reproductive women (15- 49) towards alcohol consumption during pregnancy. The study revealed that, the knowledge of women on the health effect of alcohol consumption during pregnancy high. Their attitude also towards alcohol consumption is low and medium (Bayu & Demeke, 2021).

Another study was designed to examine the females' perceptions, attitude towards pregnancy and antenatal care (ANC) as well as their empowerment to take decisions regarding safe pregnancy and practice of antenatal care services and to suggest some measures for policy makers to improve the reproductive health state of young mothers in district Faisalabad. A sample of 600 young married females of age 15-32 years were selected through multistage sampling technique. In reproductive health pregnancy and antenatal care has an important place in reproductive life of a female. More numbers of pregnancies, low spacing and less knowledge about antenatal care & less medical visits wipe out their health which is mostly because of cultural restriction and socio-religious stringency (Tarar et al., 2019). One of the studies was conducted at eight health centres at Tabuk region on deficiency anemia. Descriptive design was utilized to fulfill the aim of this study. The study is aimed at evaluating knowledge, attitude and practices regarding prevention of iron deficiency anemia among pregnant women attending primary health centres in Tabuk region. The findings revealed that 25.0% of the pregnant women had history of anemia before pregnancy, 66.7% % of them had poor knowledge, and 70.0 % of them had neutral attitude toward iron deficiency anemia. In addition, 40.0 % of them obtained poor practices score regarding prevention of iron deficiency anemia. In conclusion; The majority of pregnant women in Tabuk Region have poor knowledge, neutral attitude and poor practices regarding prevention iron deficiency anemia (Aboud et al., 2019). A cross-sectional study with systematic sampling was conducted in Massawa city. All pregnant mothers who were resident of Massawa city and visiting Amatere Health Centre for their current pregnancy were included in the study. Conclusion. Even though majority of the pregnant mothers had high level of knowledge and attitude, their practice towards ANC was relatively low. Age, marital status, and occupation showed statistically significant association to their comprehensive knowledge. Moreover,



multiparous and multigravida mothers were having higher level of knowledge and practice on antenatal care. (Gebremariam et al., 2023). Another study was conducted at obstetrics and gynaecological outpatient clinic affiliated to Benha University Hospital. A convenient sample used in the study; it included 220 pregnant women. The aim of this study was to assess knowledge and attitudes of pregnant women regarding urinary tract infection. Results showed that less than three quarters of the studied women (70.5%) had average total knowledge about urinary tract infection. majority the studied women (84.1%) had positive attitude about urinary tract infection. By concluding; there was a highly statistically significance relation between the total knowledge score of the studied women and total attitude score (Abd Elfatah et al., 2021).

Another cross-sectional study conducted at Hayat memorial teaching hospital to assess Pregnant Women for Information About Hypertension in Pregnancy. This study was undertaken with the participation of 300 pregnant women, and data were gathered through direct interviews with the participants. The outcomes of the study suggested that pregnant participants had a poor understanding of PIH (pregnancy induced hypertension) (Naz et al., 2022).

## **RESEARCH METHODOLOGY**

**Study design:** A cross-sectional descriptive study was conducted at Lakhodair community health centre. A cross-sectional study, also known as a prevalence or transverse study, uses a snapshot of participants' beliefs, behaviors, or other variables of interest of a study population (e.g., a group of individuals or organizations) at a specified point in time (Maier et al., 2023)

**Sampling technique:** A convenient sampling technique was used to collect the data from the outpatient gynecology services located in Lakhodair community health centre.

### **Study setting**

The study was conducted in Lakhodair community health centre Sharif Pura Bakra Mandi, Service Road, Lahore.

### **Study population:**

Study population was reproductive age group pregnant women (15-49 years) of Lakhodair community health centre.

### **Sample size**





Total sample size was 92 reproductive age group pregnant women (15-49 years) of Lakhodair community health centre; calculated by slovin formula:

$$\text{Sample size} = N / (1 + Ne^2)$$

$$N=120$$

$$n = N / (1 + Ne^2)$$

$$n = 120 / (1 + 120(0.05)^2)$$

$$n = 120 / (1 + 120(0.0025)) \quad n = 120 / (1 + 0.3)$$

$$n = 120 / 1.3 \quad n = 92$$

### **Inclusion criteria**

- All the pregnant women of the reproductive age (15-49 yrs.)
- All the pregnant women registered in Lakhodair community health centre.

### **Exclusion criteria**

- All women's who have complicated pregnancy.
- Women (health professionals: nurse, doctors) who have knowledge about pregnancy risk factors are excluded from the study.

### **Study variables**

- Knowledge of pregnant women regarding pregnancy risk factors
- Attitude of pregnant women regarding pregnancy risk factors

### **Study instrument and data collection**

A semi-structured questionnaire was developed to interview the participants. The questionnaire was divided into three sections:

- **Demographic data:** including name, age, marital status, occupation, level of education, type of family.
- **Knowledge:** Ten close-ended questions to assess the knowledge of women about pregnancy-related risk factors. Each question included two options (yes, no). The yes answer was scored 1, while the No answer was 0. The total knowledge score could range from 0 to 10, where a higher score represents a higher knowledge level.
- **Attitude:** A Likert scale was used where 5= strongly agree, 4= agree, 3= neutral, 2=disagree, 1=strongly disagree to assess the woman's attitude towards pregnancy risk factors. Responses were



from 1 to 5, using a 5-point Likert-type scale (“Strongly Agree 5,” to “Strongly Disagree 1”). The positive score ranged from 5 to 45, where a higher score represents a good attitude and low score represents poor attitude towards pregnancy risk factors.

### **Data Collection Procedure:**

After the approval from IRB (institutional review board) and synopsis approval. Researchers got approved permission letter for data collection from medical officer of Lakhodair community health centre. The study has been conducted among pregnant women of Lakhodair community health centre. Researchers got the address of pregnant women from community health centre. We collected data by going door to door. Questionnaire administered personally by the researcher. Informed consent had been taken by the participants in the study. Making sure them of maintaining the secrecy of their information and using their given information for study purpose only.

### **Ethical Consideration:**

The medical officer of Lakhodair community health centre, established instructions and protocols, which will be followed while conducting the study.

- Research participants’ rights will be valued.
- All the participants will sign the informed consent.
- All the material, used in the study, including facts and figures will be kept confidential.
- In this study, all the benefits or risks will be mentioned to the participants.

### **Data Analysis:**

Statistical package for social sciences (SPSS) version 20 used to analyze the data. Descriptive analysis have been used to analyze frequency distribution and summary statistics. Frequency tables were generated to represent data.

## **RESULTS**

The following results shows the demographic data, knowledge & attitude level among pregnant women of Lakhodair community health centre, Lahore. The results involve three frequency tables (table 1 showing demographical variables and the rest two are showing the responses of pregnant women towards the pregnancy risk factors)

**Table:1 Demographic characteristics of participants**

Age	Frequency	Percentage
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15-25	15	16.3
26-35	48	52.2
36-49	29	31.5
<b>Qualification</b>		
No education	18	19.6
Primary education	31	33.7
Secondary education	30	32.6
Graduation education	13	14.1
<b>Marital status</b>		
Married	92	100
Unmarried	0	0
<b>Occupation</b>		
housewife	79	85.9
Working women	13	14.1
<b>Types of family</b>		
Nuclear	44	47.8
Joint	48	52.2

A total of 92 females participated in the study in which all of the participants were married (100%) falls between the ages of 26-35 years (52.2%), with primary education (33.7%), with the occupation of house wife (85.9%) with joint family system (52.2%).

**Table: 2 knowledge of Women about risk factors during pregnancy in Lakhodair Community Health Centre Lahore Pakistan (N:92).**

Sr	Statements	YES (%)	NO (%)
1	Do you know Pregnancy with an age greater than 35 years may lead to fetal abnormalities?	54 (58.7%)	38(41.3%)



2	Do you have idea the malnutrition and anemia of the pregnant woman result in low birth weight or premature birth?	86(93.5%)	6(6.5%)
3	Do you know High blood pressure during pregnancy can cause maternal death?	88(95.7%)	4(4.3%)
4	Is Obesity in the pregnant mother may cause complications during pregnancy?	80(87.0%)	12(13.0%)
5	Do you know Diabetes during pregnancy may cause miscarriage or the birth of a large-weight child?	53(57.6%)	39(42.4%)
6	Do you know Repeated urinary tract infection during pregnancy or swollen feet is a risk factor for pregnancy?	67(72.8%)	25(27.2%)
7	You have any idea that hypertension during pregnancy is risk factor?	86(93.5%)	6(6.5%)
8	If the mother has projections or a previous Caesarean section, she needs frequent doctor reviews?	83(90.2%)	9(9.8%)
9	Do you think Any bleeding at the beginning or during pregnancy is a risk factor?	86(93.5%)	6(6.5%)
10	Do you know Smoking and passive smoking are harmful to fetal health?	85(92.4%)	7(7.6%)

The total of 92 participants knowledge was assessed in which average no of the females (58.7%) were agree that Pregnancy with an age greater than 35 years may lead to fetal abnormalities. Similarly, most of them (93.5%) were having idea that the malnutrition and anemia of the pregnant woman result in low birth weight or premature birth. Majority of them (95.7%) were agree that the High blood pressure during pregnancy can cause maternal death. About (57.6%) females know that the Diabetes



during pregnancy may cause miscarriage or the birth of a large-weight child. A lot of participants (72.8%) agree that the repeated urinary tract infection during pregnancy or swollen feet is a risk factor for pregnancy. A bulk of them (93.5%) having knowledge that hypertension is a risk factor during pregnancy. About (90.2%) females agree that if the mother has projections or a previous caesarean section, she needs frequent doctor reviews. Majority of the females (93.5%) think that bleeding is a risk factor at the beginning or during pregnancy. A lot of females (92.4%) knew that the smoking and passive smoking are harmful to fetal health.

**Figure 1: Knowledge of pregnant women about risk factors during pregnancy in Lakhodair Community Health Centre.**

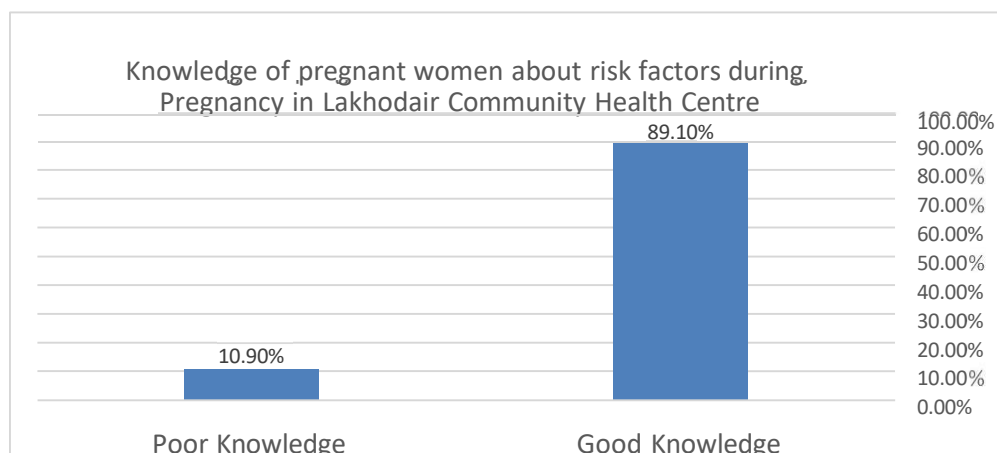


Figure 1 shows knowledge of pregnant women about risk factors during pregnancy in Lakhodair Community Health Centre. A cut-out value has been taken in which <60 indicates poor knowledge & >60 indicates good knowledge. 10 (10.90 %) participants show poor knowledge whereas 82 (81.9 %) participants show good knowledge.





**Table:3 Attitude of Women about risk factors during pregnancy in Lakhodair community health centre Lahore Pakistan (N:92)**

Sr	Attitude	Agree (%)	Disagree (%)
1.	Does pregnancy cause any harm?	27(29.3%)	65(70.7%)
2.	I do not think it is necessary to check the doctor or care regularly when my pregnancy is normal?	65(70.7%)	27(29.3%)
3.	It is necessary to follow the doctor's advice on nutrition during pregnancy?	92(100%)	0(0%)
4.	See your doctor immediately if you have bleeding during pregnancy?	92(100%)	0(0%)
5.	Do you think Having four or fewer children is good?	92(100%)	0(0%)
6.	Is Antenatal checkup is necessary during pregnancy?	92(100%)	0(0%)
7.	Do you think Gestational age women needs extra bodily care rest and nutrition?	92(100%)	0(0%)
8.	Do you know any unprescribed use of drug i.e. pain killer or antibiotics does harm the pregnancy?	90(97.8%)	2(2.2%)
9.	Doing exercise during pregnancy such walk tends to lead healthy delivery.	85(92.4%)	7(7.6%)

Table 3 shows the attitude of females toward pregnancy risk factors in which majority of the females (70.7%) disagree that pregnancy cause harm. Majority of females (70.7%) agree that there is no need for checkup when pregnancy is normal. All females (100%) agree that during pregnancy is necessary to follow the doctor's advice on nutrition. All females (100%) agree that there is a need for checkup if bleeding occur during pregnancy. Total females (100%) agree of having four or fewer children.



Overall females (100%) agreed that during pregnancy Antenatal checkup is necessary. All of the females (100%) think Gestational age women need extra bodily care rest and nutrition. A bulk of females (97.8%) know that any prescribed use of drug like pain killer or antibiotics does harm the pregnancy. Generality of them (92.4%) agree that exercise during pregnancy like walk tends to lead healthy delivery.

**Figure 2: Attitude of pregnant women about risk factors during pregnancy in health. It was found that alcohol use is associated with multiple reproductive risks, Lakhodair Community Health Centre**

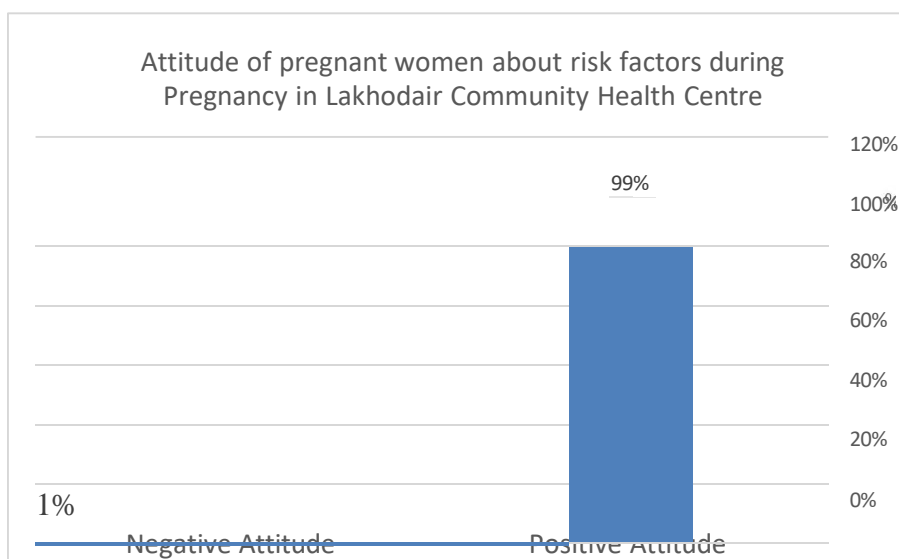


Figure 2 shows Attitude of pregnant women about risk factors during pregnancy in Lakhodair Community Health Centre. A cut-out value has been taken in which <80 indicates negative attitude & >80 indicates positive attitude. 1 (1.1 %) participant show negative attitude whereas 91 (98.9 %) participants show positive attitude.

## FINDINGS, DISCUSSION AND CONCLUSION



It consists of discussion regarding pregnancy risk factors among pregnant women of Lakhodair community health centre Lahore. It also includes strengths, limitations and suggestions for future research. The purpose of this chapter is to provide a detailed discussion of the findings, concerning with the pregnancy risk factors among pregnant women. The results of the data analysis were corresponding with the objectives of the study. Such a presentation was systematically organized to demonstrate the significant findings.

All respondents were married females. The age group of 25–36 years was higher than other age groups. Similarly, the qualification ratio among participant scored high in primary education compared to other level of qualification. The majority of respondents were housewives and resident of joint family. The finding of the study revealed that respondents demonstrate an adequate knowledge regarding pregnancy risk factors. Average number of females (58.7%) has poor knowledge that Pregnancy with an age greater than 35 years may lead to fetal abnormalities, which is lower than the findings reported in (Yahyaa et al., 2022). Similarly, most of them (93.5%) having idea that the malnutrition and anemia of the pregnant woman result in low birth weight or premature birth. Current study results show higher knowledge levels than those reported by (Weerasekara et al., 2020) and (Aboud et al., 2019).

Majority of them (95.7%) were agree that the High blood pressure during pregnancy can cause maternal death. In contrast, another study showed that pregnant participant had poor understanding of PIH (pregnancy induced hypertension (Naz et al., 2022). About (57.6%) females know that the Diabetes during pregnancy may cause miscarriage or the birth of a large-weight child. Similar findings were reported in (TMDYD & Hettiaratchi, 2021). A lot of participants (72.8%) agree that the repeated urinary tract infection during pregnancy or swollen feet is a risk factor for pregnancy. Similarly, study showed that less than three quarters of the studied women (70.5%) had average total knowledge about urinary tract infection during pregnancy (Abd Elfatah et al., 2021).

A bulk of them (93.5%) having knowledge that hypertension is a risk factor during pregnancy. About (90.2%) females agree that if the mother has projections or a previous caesarean section, she needs frequent doctor reviews. Similar finding was reported in (Yahyaa et al., 2022). Majority of the females (93.5%) think that bleeding is a risk factor at the beginning or during pregnancy. A lot of females (92.4%) knew that the smoking and passive smoking are harmful to fetal health. Moreover, one of the study findings indicated that women had adequate knowledge regarding most of pregnancy related risk factors including smoking, obesity, and malnutrition in pregnancy. Approximately 40% of



the women expressed a lack of knowledge of the risks of pregnancy and did not bother to see doctors during pregnancy (Yahyaa et al., 2022).

In light of attitude of women towards risk factors in pregnancy, about 29.3% women were worried about the liability of harm to their fetus. However still 70.7% women did not consider it harm and refused to see doctor when pregnancy was normal. Our results disagree with the findings reported in (Yahyaa et al., 2022). Furthermore, about 100% women agreed to follow doctors' advice on nutrition, any bleeding, having fewer children and necessity antenatal checkup during pregnancy. About 92.4% women were consider exercise leads healthy delivery which is higher than the findings reported in (Bayisa et al., 2022).

In conclusion, the findings of this study showed that pregnant women have good knowledge and positive attitude regarding most of the pregnancy related risk factor, including malnutrition, hypertension, urinary tract infection, bleeding and smoking in pregnancy. it may be because of ongoing educational sessions conducted by community health centre of Lakhodair community. So further actions should be taken to control these risk factors.

The outcome and potential utilizations of study focusing on consider the importance of pregnancy related risk factors. Moreover, the findings of current study can be used to design educational programs and advancing scientific understanding regarding pregnancy risk factors.

By understanding pregnancy related risk factors, policy makers and health care professionals can develop targeted interventions aimed at promoting healthy pregnancy that ultimately reduces the mortality and morbidity rate in pregnant women.

It is recommended that in future, studies can be done to assess further factors regarding pregnancy risk factors and the ways to prevent them.

This study complained about several limitations, including bias in data collection is liable because of face-to-face interview. Moreover, the small sample size was one of the limitations of this study. Also, the results of the study cannot be generalized to the whole population since this was a single centre research. The reason behind the adequacy of their knowledge is that in Lakhodair community has many health centres.

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