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MAJOR RISK FACTORS FACED BY WOMEN DURING PREGNANCY IN KATHMANDU METROPOLITAN CITY

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ABSTRACT

Giving birth to another person's life is not a minor matter. Pregnancy can also be a risky condition that can lead to death, while some die; some survive a short-lived battle of death happens. This study aimed to identify risk factors for female pregnancy and find out the major pregnancy problems faced by pregnant women. Forty six women who teach in the Faculty of Education in Kathmandu, Nepal were taken as a sample size. A descriptive quantitative method was used where a structured questionnaire was filled with their consent. IBM SPSS 20 version was used for statistical analysis which calculated the risk estimates odd ratio and confidence interval at 95%; the only normal frequency was tabulated and analyzed. This study finds that many risk factors in the pregnancy period like; health problems, lack of adequate knowledge, lifestyle exposure, and age factors. Hence women should be accompanied by their partner and family and society and support them during pregnancy time.

Keywords: major risk factors - pregnancy - knowledge - lifestyle exposure- age factors

INTRODUCTION

In most of the developing countries, WHO reported that about 5,15000 women died in a year from pregnancy-related reasons which included pregnancy and the six weeks postpartum(Pradhan *et al.*, 2002; Stefanovic, 2020). Every sixty seconds in the world; 380 new pregnancies occur 110 complicated pregnancies, of which 40 pregnancy outcomes to abortion and a pregnant woman dies(Fathalla, 2020). Of which, 99% of the death happens in developing countries while the remaining 1% of these deaths occur in developed countries, and the majority of these deaths

are due to avoidable reasons(Atadag *et al.*, 2017). Likewise, worldwide, more than 14 million adolescents become mothers each year. Of course, such births occur in all societies, but 12.8 million, or more than 90%, of adolescent mothers are in developing countries. Women aged 35 and older have reported pregnancy in their late 30s which has gradually increased over the past decade(Jolly *et al.*, 2000; Tozzo *et al.*, 2019). Serious pregnancy complications appear in all trimesters; since pregnancy is not a comfortable condition. Diagnosing and managing complications during pregnancy is a major challenge in developing countries like Nepal(Paudel *et al.*, 2020).

Factors affecting pregnancy outcomes mainly include socioeconomic status, daily habits like smoking and drinking, and other health conditions and human behaviors. Different types of early pregnancy complications include miscarriage, genital trophoblastic disease, ectopic pregnancy, and hyperemesis gravid arum(Khaskheli *et al.*, 2010). All pregnancies are not comfortable, while most pregnancies and births are very challenging, around 15% of pregnant women will face life-threatening situations and some will want a major obstetrical involvement to survive(Lampinen *et al.*, 2009). Abortion is the most common complication during early pregnancy(Adhikari & Wagle, 2018). It may lead to depression and anxiety in most women(Hameed *et al.*, 2018). According to, UNICEF (1999)women need more iron than men. Iron deficiency causes many mothers in developing countries to become malnourished before and during pregnancy. One of the major causes of a review of Pregnancy in women over 35 Years of age, iron deficiency anemia is the inability to get iron-rich and iron-absorbing food, especially during the reproductive age or pregnancy (Larsson *et al.*, 2017). Therefore, in most parts of Asia and Russia, where the prevalence of anemia is high, the WHO and UNICEF recommend iron supplements for all pregnant women (WHO, 1999).

In the Nepalese context, we can see so many risk factors that make pregnancy a menace. High-risk factors for pregnancy can be varied, such as existing health conditions, maternal age, lifestyle, and health issues that occur before or during pregnancy(Cleland & Van Ginneken, 1988). Health in Nepal is in miserable condition as compared to the health status of developed nations of the world. This paper aims to identify the major pregnancy problems and risk factors that women face.

RESEARCH METHODOLOGY

First, the structured questionnaire was approved by consensus, and after each visit to their respective area, they filled out the questionnaire

in front of the researcher. There are almost 46 women teachers who teach University campus, Mahendra Ratna Campus, Tahachal, and Sanothimi campus as well from the educational faculty only. The population of this study was all women who have at least a child through the census method.

After collecting the data, it was analyzed with the help of a statistical method which included risk estimates by using odd ratio and 95% confidence interval in IBM SPSS v 20(Beauclair *et al.*, 2014). The age at which women got pregnant for the first time was initially examined as a continuous variable to explore its relationship with pregnancy-related knowledge and health problems.

RESULTS

Background characteristics of the informants

Among the respondents, the majority i.e. 56.5% of them was from the age group of 31 to 40 years, 30.4% were from more than 40 years old while the remaining 13% were below the age 30. Among them, 98% were Master's Degree holders and 2% had a Ph.D. Degree too. 95.7% % of the total respondents were Hindus while the remaining were Buddhists. Among the respondents, more than two-third 71.7% earn up to 5 lakh whereas the remaining 28% earn more than 5 lakh Nepali Rupees per year as shown in Table 1.

Table 1: Background characteristics of the respondent

Characteristics		Total	
		N	%
Age group	Upto 30 years	6	13.0
	31 to 40 years	26	56.5
	More than 40 years	14	30.4
Education level	Master Degree	45	97.8
	Ph. D	1	2.2
Religion	Buddhist	2	4.3
	Hindu	44	95.7
Income	Up to 5 Lakh	33	71.7
	More than 5 Lakh	13	28.3

Source: Field study, 2019)

Half of the respondents married at the age of 22 to 25 years. A good majority of the respondents (63%) expressed that they were under pressure for marriage from their parents. As shown in table 2, more than half (51%) of respondents had only one child and 78% said the baby in their arms was their first child.

Table 2: Background information of age of marriage and number of the child of the respondent

Characteristics		Total	
		N	%
Age at marriage	16-19	6	13
	20-22	12	26.1
	22-25	23	50
	25-above	5	10.9
Cause of marriage at young	own choice or interest	10	24.4
	parental choice /pressure	26	63.4
	Other	5	12.2
	Two	18	40
	Three	2	4.4

Source: Field study, 2019

The majority (40%) of women in our study said the cause of pregnancy was due to societal norms and value, whereas 27.5% of women were pregnant due to illiteracy during teenage age. More than 70% of women were not prepared when they were pregnant for the first time whereas the remaining 30% of women had planned pregnancy. Of those, 42 % said that teenage pregnancy affects not only the adolescent mother but also the entire family; including the baby. More than half of the teenage pregnancy led to complications, whereas 22.5% of the total responded lost their child during pregnancy. Our findings were supported by results from rural Nepal which was conducted in 2009 (Christian *et al.*, 2008). Their findings suggested that women aged <19 and >35 years are prone to a greater risk of pregnancy and health problems due to immature pregnancy and late delivery respectively. The majority of women i.e. 87.1% received care and support from their family and husband during pregnancy whereas remaining was neglected (Table 3). Exceptionally, the majority of women had no problem adjusting to society.

DISCUSSION

The result presented in Table 4 includes all the parameters of women who underwent pregnancy and demonstrate various significant relationships between different parameters. These results provided enough data to distinguish risk into different categories such as age and parity,

lifestyle approaches, and social life of a woman you witness pregnancy at different ages and health conditions. Most of the respondents were under 22-25 years of age at first pregnancy. So there were a lot of people who said no to health problems at pregnancy. The age of pregnancy can also be a major factor in enhancing or reducing the risk (Pokharel, 2019).

Table 3: Background characteristics of Pregnancy-related problems

Characteristics		**Total**	
		N	**%**
Cause of teenage pregnancy	Illiteracy	11	27.5
	Religious and social norms	16	40.0
	violence against women	2	5.0
	relational complications	2	5.0
	unprotected sex	8	20.0
	Other	1	2.5
Cause of case of pregnancy	Illiteracy	15	39.5
	violence against women	12	31.6
	religious and social norms	1	2.6
	unprotected sex	4	10.5
	Other	6	15.8
Consequences of teenage pregnancy	health complication	22	55.0
	death of the born child	9	22.5
	Family /social conflict	7	17.5
	Other	2	5.0
Family support during Pregnancy	support and care	27	87.1
	Neglect	4	12.9
Faced pregnancy complications	Yes	24	53.3
	No	21	46.7
Family support during pregnancy Faced pregnancy			

Source: Field study, 2019

Table 4: Risk factors of pregnancy in women, OR: odd ratio, CI: Confidence interval

Risk Factors faced by women during pregnancy	**OR**	**95% CI**	
		Lower	Upper
Knowledge of teenage pregnancy	6.227	2.207	17.565
Health problems during pregnancy	3.468	1.64	7.334
Condition of Pregnancy	1.642	0.457	5.894
Family support during Pregnancy	1.516	0.512	4.493
Age at Marriage	0.324	0.061	1.716
First Pregnancy	0.901	0.778	1.044

Source: Field study, 2019

Age and parity

Table 4 shows that the age of pregnancy is highly significant in inducing health problems in pregnant women. Pregnancies among women who haven't reached their maturity are associated with high risks to both the pregnant mother and her fetus(DiPietro *et al.*, 2006). Deaths during pregnancy are twice as common among adolescent women who are aged 15–19 years than women aged above the twenties(Pradhan *et al.*, 2018). Among the respondents 85% knew about teenage pregnancy. Likewise, 40% of the respondents said that religious and social beliefs are the cause of teenage pregnancies.

Three-quarters (75%) of respondents witnessed a teenage pregnancy case. Similarly, 55% of them linked the complications of pregnancy to the health consequences of adolescence. Half of the respondents said that the pregnancy condition was good. Of those, 63% experienced health problems during pregnancy. Similarly, a quarter (25%) of health problems has experienced high blood pressure, while 20 % of them have experienced infections, bleeding, and pain (Table 5). Different respondents had a different perspective on pregnancy.

The majority of respondents i.e. 42% suggested that teen pregnancy is very dangerous not only for the mother but for the child too. Apart from that, 24.4% suggested that pregnancy is a natural phenomenon that is inevitable and natural while 24.4% suggested avoiding pregnancy as it has huge complications.

Table 5: General information on pregnancy and pregnancy-related problems in the respondent

Characteristics		Total	
		N	%
Age at first pregnancy	16-19	2	4.4
	20-22	10	22.2
	22-25	26	57.8
	25-above	7	15.6
Type of health problem	high blood pressure	5	25.0
	gestational diabetes	2	10.0
	Miscarriage	2	10.0
	bleeding and pain	4	20.0
	Infection, such as UTI, bacterial vaginosis, etc.)	4	20.0
	premature delivery	3	15.0
Opinion toward pregnancy	there is nothing wrong with the pregnancy	11	24.4
	pregnancy is a health risk and should be avoided	11	24.4
	Teen pregnancy not only negatively affects the younger mother, but also the child	19	42.2
	Other	4	8.9

Source:Field study, 2019

So, it is believed that a person's educational level is an important factor in risk reduction in the pregnancy period (Chagas de Almeida & Aquino, 2009).

Socio-economic status

Family support during pregnancy and knowledge about teenage pregnancy plays important role in determining the health of pregnant women and newly born children(Kumar *et al.*, 2019). A study conducted in Africa has found that any young woman enrolls in school, leaving school after becoming pregnant. There can be various reasons for this, not being allowed to leave the house, family disagreement on various issues like; no autonomy for women about their health, and the responsibility of caring

for the child as well.Adolescent mothers play a key role in determining whether both economic and social resources are available within the family. Studies have shown that even if the mother resumes her education after the birth of the child, the education will be disrupted during pregnancy (Grant & Hallman, 2008; Navarrete *et al.*, 2020).

In Nepal, social and cultural taboos and embarrassments still exist towards sexual and reproductive health matters (Adhikari *et al.*, 2020; Regmi *et al.*, 2008).The results of odd-ratios are highly significant i.e. 95% CI (2.2-17.5) indicating that women are at high risk during pregnancy if they are not provided with adequate knowledge and care. Meanwhile,87% of respondents felt family support during pregnancy as shown in Table 3.

The impending birth of a child, starting with the context of family and community is a symbolizes of new life (Cavanagh & Fomby, 2019; Sagrestano *et al.*, 1999). Of the respondents, 26% found it difficult to integrate into society, while 37% were reluctant to socialize and communicate with others.

During pregnancy, 42 % suggested that public awareness programs could reduce adolescent pregnancy and pregnancy-related problems (Table 6). Adolescent pregnancy needs to be prioritized by awareness to reduce the burden of socio-economic and health problems (Papri *et al.*, 2016; Wado *et al.*, 2019). The study also asked about the impact on the education of respondents, where 45% said they discontinued after pregnancy.

When asked about the cause of teenage pregnancy, many respondents said religious and social norms, while few said illiteracy. Another major cause of teenage pregnancy is unprotected sex (Table 3). Some of the effective sexuality education programs help to delay the initiation of sex, increase condom or contraceptive use, and reduce unprotected sex among youth (Kirby, 2002; Najmabadi & Sharifi, 2019).

Lifestyle exposure

The majority of women are susceptible to sexual health-related problems during pregnancy. Health problem is also statistically positive in Nepalese women i.e. 95% CI (1.64-7.33). The study asked about some problems; high blood pressure, gestational diabetes, Miscarriage Bleeding and pain, Infection, such as UTI, bacterial vaginosis, premature delivery, etc.

Table 6: Impact of pregnancy on career and lifestyle of the respondents

Characteristics		Total	
		N	%
Problem faced	Hesitate to socialize and communicate with others	7	36.8
	unfit to peer groups due to being an early mother	3	15.8
	lack of time for relative and friends	5	26.3
	financial and health crisis	2	10.5
	Other	2	10.5
Pregnancy disturb the study	Yes	15	41.7
	No	20	55.6
	Others	1	2.8
Impact on study	discontinue education	9	45
	achieved low grades in exam	1	5
	high absenteeism in classes	7	35
	less active in the classroom activities	3	15
Opinion to minimize	mass awareness program	18	41.9
	introducing teenage pregnancy since school level	11	25.6
	female education program	7	16.3
	providing life skills to teenage girls	6	14
	Other	1	2.3

Source:Field study, 2019

High blood pressure was the common answer. During pregnancy, both low and high diastolic blood pressure is directly related to higher perinatal mortality for women of childbearing age in women (Steer *et al.*, 2004).

According to this survey, 22.5% of women lost their firstborn baby as they were pregnant during adolescence(Table 3). The mortality of newborns is directly related to a lack of awareness and support from family and the presence of complicated disease (Van Otterloo & Connelly, 2016).

CONCLUSION

Pregnancy is a very complicated condition in which various types of problems can be seen. Such problems can put the pregnancy at risk. When antenatal and maternal care is lacking, it results in the maternal mortality rate in the world. The support of husband and other family members is important to reduce the risk of pregnancy. Women married at adolescent age

and lack of proper knowledge on pregnancy is one of the leading causes of death in under-developed countries compared to developed ones which can be prevented with simple prevention. The majority of the first born child of women didn't survive, who married during their teens and got pregnant before <19 years. Thus, teenage pregnancy not only affects the mother but also the family, society, and the nation as a whole. Women, who hesitated to socialize and communicate with others during pregnancy, unfit to peer groups due to being an early mother, lack of time for relative and friends, financial and health crisis were the ones with most of the risks.

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