

A Community-Based Study Determining the Risk Perceptions among High-Risk Pregnant

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Abstract

Aim: The aim of the present study was to explore the perceptions of high-risk pregnancy among women with high risk factors.

Methods: A community-based study was undertaken in the district. The study was conducted for the period of 2 years. In-depth interviews were conducted with 50 participants using semi-structured interview schedule.

Results: The women's mean (standard deviation) age was 23.7 years (6.04) and age ranged from 14 to 36 years. All the participants belonged to Muslim religion and majority had extended family. Majority of them were uneducated and home maker. Majority of the participants were first or second birth order with anemia being the most common risk factor among them.

Conclusion: Women must understand their risk in the same way as their healthcare providers otherwise they may not follow the recommended advice for birth preparedness. Women are willing to deliver at home in spite knowing they are at high risk. Sociocultural practice and belief that pregnancy/delivery is a normal event affects women's decisions for seeking care. Government have implemented various programmes and schemes to reduce maternal/perinatal mortality (like incentives, free diagnostics and medications for institutional deliveries), but to avail them pregnant women must understand their risk and change their behavior.

Keywords: High risk, Risk acceptance, Risk denial, Risk perception

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Introduction

In health decision-making, individuals are expected to navigate choices involving weighing risk for consequences with benefits of action. Behaviors contributing to disease initiation and progression are often pleasurable (e.g., smoking or overeating). Motivation to forgo such pleasurable behaviors, or engage in inconvenient preventive behaviors, is believed to be driven to some extent by beliefs about the probability that a health consequence will occur. [1,2] Correlational evidence supports an at-least-modest association between risk perceptions and health behaviors. [3,4]

Theory-guided health behavior change interventions and health communications often target risk perceptions toward the end of changing health behaviors. [5] A recent meta-analysis of experimental evidence supports the role of risk perceptions in health decision-making; when interventions successfully change risk perceptions, health behavior change often results. [6] Risk perceptions may also have implications for overall

well-being as threats unfold. For example, prospective evidence demonstrates that, among individuals with high cancer risk perceptions, subsequent cancer diagnosis is associated with poorer well-being; however, among those with low cancer risk perceptions, subsequent cancer diagnosis is unrelated to well-being. [7]

Risk understanding by an individual is dependent on previous experience, life philosophy and the sociocultural context in which they live. [8] Low-income countries shows a considerable difference between the proportion of pregnant women identified as high risk and those who attend referral level care. [9-13] Evidence also shows that high risk of pregnant women defined/identified by experts had little influence on a woman's decision to seek hospital care. [9] Researchers have indicated that risk perception by pregnant women is not exclusively based on medical diagnoses and is highly individualized. [10]

The aim of the present study was to explore the perceptions of high-risk pregnancy among women with high risk factors.

Materials and Methods

A community-based study using qualitative research design was undertaken in the district. The study was conducted for the period of 2 years. In-depth interviews were conducted with 50 participants using semi-structured interview schedule.

Recruitment

Pregnant women in their third trimester with high-risk criteria were taken as inclusion criteria, while rest pregnant women were excluded. Pregnant women without any risk factor, high risk pregnant women in labour or admitted for delivery or those who did not give consent were excluded.

The criteria for participants selection involve a list of high-risk criteria that have been constructed in collaboration with the district health society from sources like high-risk pregnancy, national health portal, NIHFWS, MoHFW, Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA). The front-line workers (FLW) (ASHA and ANM) were the first contact point to enquire about eligible participants. Although the state has been training the FLWs on identification of the high-risk pregnant women (HRPWs) and early referral, for the purpose of the study these FLWs were given an orientation listing all the high-risk criteria for identification of participants. The participants were identified in the village health nutrition days, ANC visits and routine home visits. A total of 34 high risk pregnant women (HRPW) were selected for the study. The women were located in their community/villages with the help of FLWs based on their records. They were explained about the study and was invited to participate. The informed consent was read to them and written consent was obtained for adult participants, whereas assent form was obtained for minor participants. The data generation process was performed following the Helsinki declarations guidelines and regulations. The principal investigator was involved in data generation to reduce the loss of information.

Data collection

The data was collected through semi-structured interview schedule. The interview was conducted at the home of the participant in presence of an ANM and ASHA so that she felt comfortable and no issue of language barrier occurs. In-depth interviews were taken in Assamese language or local dialect. FLW assisted in translating the local dialect in cases required. In-depth questions like "Can you describe more or elaborate?" and "Could you give an example?" were used during the interview to clarify the explanations and summarize the interview, and obtain feedback to ensure that the researcher understood correctly. In the end, the participant was asked: is there any topic you want to talk about? The interviews were audio recorded. To develop rapport the interview was started with sociodemographic information followed by specific questions, each interview lasted for 45-60 minutes. The participants were recruited till data saturation was achieved. All the recordings were transcribed and translated into the English language for ease of coding and analysis on the same day of data collection to avoid recall bias. The principal investigator transcribed the interviews to secure confidentiality, and participants were de-identified during the transcription phase.

Data Analysis

Data collection and analysis was carried out concurrently using the Granheim and Landman (2004) method of qualitative content analysis. Each interview was considered as a unit of analysis. After each interview, the researcher would listen to the audio file several times to get an overview of the content. The text content was transcribed in the same words as used originally during the interview. Meaning units were assigned to those sentences or paragraphs which was related to the main concept. The meaning units were reviewed several times before being assigned appropriate codes. Following the reduction and compression process, similar codes were merged, and subcategories appeared. The process of data reduction continued until the final category with a general and abstract meaning were extracted. Data analysis and management were carried out using the CAT (coding analysis toolkit) and Q-Notes.

Results

Table 1: Participants characteristics

Number	Percentage		
Age (in years)	<18	18	36
	18-35	27	56
	>35	5	10
Family	Joint	38	76
	Nuclear	12	24
	Uneducated	29	58
Education	Under matriculate	16	32
	Matric pass	5	10

Occupation	Home maker	45	90
	Daily wage earner	5	10
	Daily wage earner	12	24
	Mansion/ Carpenter	5	10
Husbands occupation	Farmer	26	52
	Rickshaw puller	5	10
	Business	2	4
	First	22	44
	Second	16	32
Parity	Third	8	16
	Fourth	2	4
	Fifth	0	0
	Sixth	1	2
	Teenage	18	36
	Grand multipara	1	2
	Previous miscarriage/ abortions	7	14
	Previous cesarean section	7	14
Risk factor (multiple options)	Multiple pregnancies	6	12
	Anemia	40	80
	Gestational hypertension	4	8
	Pre eclampsia	3	6
	Previous still birth	9	18

The women's mean (standard deviation) age was 23.7 years (6.04) and age ranged from 14 to 36 years. All the participants belonged to Muslim religion and majority had extended family. Majority of them were uneducated and home maker. Majority of the participants were first or second birth order with anemia being the most common risk factor among them.

Discussion

Pregnant women are one of the most vulnerable groups. High risk during pregnancy occurs when the pregnant mother has underlying problems before or during pregnancy, due to which her physical, psychological, and social vulnerability increases. [15] The prevalence of high-risk pregnancies in India ranges from 20-30%, which is responsible for 75% of perinatal morbidity and mortality. [16] Attitude and behavior towards health and health seeking decisions are affected by one's risk perceptions. [17,18] This formed a key component in many health behavior-change theories. [19,20] Reduction of maternal and perinatal mortality and morbidity largely depends on the risk approach. [19] Therefore the process of risk assessment is needed to be started early in pregnancy, based on which required examination and treatment can be identified at an early stage. [15] Mitigating high-risk conditions include adherence to early and frequent antenatal care, specific treatment, birth preparedness and early referral.

The women's mean (standard deviation) age was 23.7 years (6.04) and age ranged from 14 to 36 years. All the participants belonged to Muslim religion and majority had extended family. Majority of them

were uneducated and home maker. Majority of the participants were first or second birth order with anemia being the most common risk factor among them. Knowledge about their condition was imparted by the health care workers mainly the ASHAs and ANMs during their ANC in the sub centres, VHNDs and routine home visits. In other study similar findings about awareness of high-risk pregnancies was present. [21] But the source was not limited to health care workers as in this study. Multiple sources like their own experiences of risk, immediate family members and relatives' stories including health workers advice provided them the knowledge. [22-24] Studies also showed that these pregnant women put less weight on professionals' advice, instead, they trusted family members and friends' advice, especially from women who had similar experiences. [25] Besides healthcare providers, women with high-risk pregnancies turn to their close family members or friends who have children for advice. Women valued advice given based on personal experiences from sources they trust. [26] Any discussion of risk is also influenced by the social context in which it occurs. [27]

Positive attitude towards the high risk was shown by very small number of the participants while majority did not relate the risk to oneself and accepted their faith. The participants attitude depended on the decisions of the elderly, who mostly ignored the risk. While other studies showed HRPWs developed coping strategies for themselves and the fetus irrespective of their employment status, culture, family history, or past personal

experiences. [17] Women must understand their risk in the same way as their healthcare providers

because evidence suggests that women may not follow recommended treatment if they do not assess the risk at the same level as healthcare providers. [27,28]

Conclusion

Women must understand their risk in the same way as their healthcare providers otherwise they may not follow the recommended advice for birth preparedness. Women are willing to deliver at home in spite knowing they are at high risk. Sociocultural practice and belief that pregnancy/delivery is a normal event affects women's decisions for seeking care. Government have implemented various programmes and schemes to reduce maternal/perinatal mortality (like incentives, free diagnostics and medications for institutional deliveries), but to avail them pregnant women must understand their risk and change their behavior. If an event is not appraised as severe, nothing can be done about the event. Adequate and proper explanation regarding the risks in pregnancy especially targeting the teenage pregnant women for adequate knowledge and risks involved would bring change in behavioral intentions.

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