Journal Homepage: - www.journalijar.com
INTERNATIONAL JOURNAL OF ADVANCED RESEARCH (IJAR)
Article DOI: 10.21474/IJAR01/3735
DOI URL: http://dx.doi.org/10.21474/IJAR01/3735
ISSN NO. 2320-5407

RESEARCH ARTICLE

EFFECTIVENESS OF SELF DEVELOPED INFORMATIONAL BOOKLET REGARDING BIRTH PREPAREDNESS AND COMPLICATION READINESS ON KNOWLEDGE OF ANTENATAL WOMEN AND ASSESSMENT OF COMPETENCIES OF ASHAS REGARDING BIRTH PREPAREDNESS AND COMPLICATION READINESS - A LITERATURE REVIEW.

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Manuscript Info

Manuscript History

Received: 15 January 2017
Final Accepted: 11 February 2017
Published: March 2017

Key words:-
Birth preparedness and complication readiness (BPCR), knowledge, antenatal women, competency, health care provider.

Abstract

Birth preparedness and complication readiness (BPCR) is an approach that focuses on raising awareness and creating a stronger demand for quality healthcare services. Childbirth is a crucial biological event which is socially constructed as it takes place within a cultural context and gets shaped by the perception and practices. According to the Integrated Management of Pregnancy and Childbirth (IMPAC) manual of WHO, birth preparedness would significantly increase the capacities of women, their partners and their families to remain healthy, to take appropriate steps to ensure a safe birth and to seek timely skilled care in emergencies. BPCR also reduces delays in receiving appropriate care as it requires the health care providers like nurses, doctors, community health workers to be prepared to attend births and be ready to manage or prevent complications through appropriate measures. On reviewing literature, the researcher found various studies which have shown that not only that antenatal women lack in BPCR, even the health care providers lack in knowledge and/or skills in delivering services related to BPCR.

Introduction:-

A positive childbirth experience is very important not only to the woman but also to the newborn's health and well-being. Childbirth is a normal physiological process for the majority of women and a process that, like all other life events, is looked upon with a mixture of anticipation and happy expectation. Studies in developed countries have shown a positive impact on pregnancy and birth outcomes when the woman feels in control of the process of pregnancy and birth; childbirth preparation has been shown to facilitate this feeling of self-control and autonomy.

In the Standards for Maternal and Neonatal Care developed by the Department of Making Pregnancy Safer, World Health Organization, a birth plan/emergency preparedness plan includes identification of the following elements: the desired place of birth; the preferred birth attendant; the location of the closest appropriate care facility; funds for birth-related and emergency expenses; a birth companion; support in looking after the home and children while the woman is away; transport to a health facility for the birth; transport in the case of an obstetric emergency; and identification of compatible blood donors in case of emergency.[1]

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Since pregnancy is perceived as an ordinary event, most families do not effectively prepare for an emergency. When a pregnancy complication arises, the family is unprepared and while in a hasty attempt to handle the situation precious time is lost in most of the cases. Even to have BPCR at the provider level-health care facility, the doctors, midwives, and other health care workers like ASHAs must have the knowledge and skills necessary to treat or stabilize and refer women with complications.

Hence, the researcher strongly felt the need of assessing the knowledge of antenatal women regarding BPCR after developing and administering an informational booklet and also assessing the competencies of ASHAs regarding the same. In the same context, the researcher reviewed many literatures obtained through various databases like CINAHL, MEDLINE, PubMed, Science Direct, ProQuest and Google Scholar and found out that most of the studies showed lack of BPCR among both the antenatal women and the health care providers.

Materials, Methods And Findings:-

This study is mainly headed in two areas based on the target population and they are knowledge of antenatal women regarding BPCR and competencies of ASHAs regarding the same.

A cross-sectional study was conducted to assess the Birth Preparedness and Complication Readiness of ASHAs at Koppal, Karnataka. (2013). A structured pre-tested interview schedule was used to collect data on socio-demographic and BPCR from 225 randomly selected ASHAs. The study findings showed that the proportion of ASHAs who knew key danger signs were just 1% for labor and child birth, 4.8% for postpartum period and 7.2% for pregnancy. Composite score out of 10 showed a poor score of 0-3 in 55.1%, 4-5 in 37.7%, 6-7 in 7.2%, with none scoring above 7. Score for BP/CR out of 8 showed a maximum score of 8 in 1.4%, 4-7 in 71% and 1-3 in 27.5%. However, knowledge of antenatal care components was good with ≥90% in 50.2% of ASHAs. Thus the study concluded that the ASHAs were poorly equipped to identify obstetric complications. They had considerable potential but needed sustained support from the health system to be able to make a difference to maternal mortality and morbidity.[2]

A quasi-experimental study was conducted to evaluate the effectiveness of Home Based Life Saving Skills training on knowledge of danger signs, birth preparedness, complication readiness and facility delivery, among women in Rural Tanzania. (2016). A two-stage cluster sampling strategy was employed to select 700 samples each from two districts. An intervention district received training with routine care whereas the comparison district continued to receive routine antenatal care. The main findings of the study showed significant improvement of knowledge of three or more danger signs during pregnancy (15.2 % vs. 48.1 %) with a net intervention effect of 29.0 % (95 % CI: 12.8–36.2; $p < .0001$) compared to the comparison district. Birth preparedness practice improved for those who made more than three actions (20.8 vs. 35.3 %) with a net intervention effect of 10.3 % (95 % CI: 10.3–20.3; $p < .0001$) between the intervention and control district at pre-intervention and post intervention. Use of facility delivery improved in the intervention area as compared to comparison district. Thus the study concluded that a community-based intervention in delivering Home Based Life Saving Skills program improved the knowledge of mothers & families regarding preparedness for childbirth and increased deliveries at health facilities.[3]

A community-based study was done to assess perception and practices regarding BPCR and to identify the related factors among women in a rural community of Bankura district, West Bengal, India. (2011). Cluster sampling technique was used to select 240 women who had delivered in last 12 months with the help from ASHA & Anganwadi workers. Data collection was done using semi structured questionnaire and a set of ten indicators constructing the BPCR index. The study result showed that the proportion of women who had identified a blood donor was low 12.9% (+3.3). Around only one-sixth respondents were aware of key danger signs of pregnancy, childbirth, postpartum and neonatal period, which indicated low awareness at the individual level. BP/ CR index of the study population was 49.4 (+1.7). The study noted that women who were more vulnerable to obstetric complications showed reluctance in following BPCR practices. Thus the study concluded to emphasize the need of motivating the health workers to utilize every contact with the beneficiaries and making them equipped with the concept of 'focused antenatal care' in order to empower women and their family to take decision, plan and implement BPCR practices.[4]

A cross-sectional study was conducted by NIHFW and Department of Community Medicine, S.S. Medical College, Rewa to assess the status of BP/CR at individual, institute and community levels in Rewa district, Madhya Pradesh. (2008-09). 2022 mothers who had delivered before one year of the study and pregnant women who were in 2nd & 3rd

trimester of pregnancy were selected using cluster sampling technique and among the 9 CHCs of Rewa district, 9 medical officers and 11 peripheral health staffs like staff nurses and ANMs were included. The study findings noted that all the CHCs severely lacked manpower like an anesthetist and Ob -Gynae specialist. None of the CHCs had blood storage facilities and were not providing Comprehensive Emergency Obstetric Care like CS facility, blood transfusion, and anesthetic kit. Among the knowledge and skills of health care providers less than 50% of them were competent in diagnosing and management of complications. BP/CR index was only 47.5%. The Birth preparedness indicators like knowledge of danger signs, knowledge of transportation services, 1st trimester registration and population saved money was found to be very low like 18.6%, 18.6%, 24.1% and 44.2% respectively. Thus the study concluded the need to enhance the facilities and manpower at the CHCs through effective resource management and adequate staff training. It also stressed to encourage the mothers and community to effectively involve in BPCR activities.[5]

A descriptive study was done to assess the proportion of women with birth preparedness plans, and the socio-demographic, maternal and institutional determinants of birth preparedness among 345 systematically selected women who had delivered within two years prior to the study attending maternal and child health clinics at Tharaka, Kenya. (2014). Data collection was done using interviewer administered questionnaires, focus group discussion guide and key informant interview guide. The study noted that only 20% of the women were prepared for birth. The aspect of birth preparedness that was identified and planned for by the highest number of women was finances for delivery expenses (74%) followed by place of delivery (68%) while the least was the mode of transport to the facility (35%). The maternal determinants of birth preparedness were history of still birth and attendance of 4 or more antenatal visits. There were no institutional determinants in this study. Thus the study concluded that the level of birth preparedness among the women of Tharaka was low and thus recommended to their ministry of health to sensitize women of reproductive age on birth preparedness.[6]

A cross sectional study was conducted to assess the status of BPCR and socio-demographic factors affecting BPCR among 417 antenatal mothers attending a primary health center, Palam, New Delhi. (2012). The study revealed that the BPCR index was very low 41%. Only 42.9% women were aware about early registration of pregnancy. Only one-third 33.1% of women knew about four or more antenatal visits during pregnancy. Overall, only 27.8% women knew about any one danger sign of pregnancy. Thus the study concluded that efforts should be targeted to increase the awareness regarding components of BPCR among pregnant women and their families at the PHC as well as at the community level.[7]

A cross-sectional survey was done to assess the knowledge and practice towards BPCR among women in Northern Ghana. (2015). Systematic random sampling technique was used to select 211 pregnant women and 211 women who had given birth in the 12 months preceding the study who attended antenatal or postnatal care in health facilities within the 5 zones of the study area. A structured survey questionnaire adapted from the safe motherhood research tools by the Maternal Neonatal Programme of JHPIEGO was used for data collection. The study findings related to knowledge noted that only 3.79% respondents mentioned of knowing about arrangement for someone to cater for house and kids, 3.08% knew about making transport arrangements, 4.5% mentioned arrangement for delivery place ahead of time, 0.24% mentioned the identification of blood donor, 0.71% mentioned identification of skilled attendants and 12.09% did not know anything about BPCR. The study findings related to practices noted that only 18.01% of respondents planned ahead for a place of delivery, only 10.18% had prior arrangement for transport, only 0.95% & 0.47% had identified a potential blood donor and a skilled provider respectively. Thus the study concluded that antenatal care education should be emphasized on BPCR to improve access to skilled and emergency obstetric care.[8]

Qualitative study using focus group discussions (FGD) were conducted to explore the perception of community on BPCR at Rufiji district, Eastern Tanzania (2011). Purposively selected 65 young women and men, as well as 67 older men and women, participated in the FGDs. A pretested topic guide that included cultural and social issues surrounding birth preparedness, pregnancy, and childbirth, steps taken to prepare for pregnancy and potential complications during childbirth in the community, recognition of maternal danger signs, and the use of traditional medicine during pregnancy and childbirth was used to conduct the FGDs. The study finding noted that the community members expressed a perceived need to prepare for childbirth. They were aware of some aspects of BPCR however, certain factors like stigma on unmarried women and transportation were identified as hindrance to birth preparedness and hence utilization of skilled care. Challenges were related to the consequences of poverty they perceived difficulties due to informal user fees. Thus the study concluded to stress upon community reinforcement

for BPCR, by using insurance schemes, community health funds, and by providing information on other birth preparedness messages via community health workers.[9]

A cross-sectional study was done to assess BPCR among slum women in Indore, India. (2004-06). A pretested interview schedule was used to collect data from purposively selected 312 mothers of infants aged 2-4 months in 11 slums of Indore. The study finding noted that only 47.8% respondents were well-prepared. Factors associated with well-preparedness were maternal literacy and availing of antenatal services. Deliveries in the slum-home were high 56.4%. Among these, skilled attendance was very low 7.4%. Skilled attendance during delivery was three times higher in well-prepared mothers compared to less-prepared mothers. Thus the study concluded that antenatal outreach sessions should be used for promoting BPCR as it will be important to increase the competency of slum-based traditional birth attendants, along with promoting institutional deliveries.[10]

A Facility-based cross-sectional study was conducted to assess the determinants of BPCR among pregnant women attending antenatal care at Dilchora Referral Hospital, Dire Dawa City, East Ethiopia. (2015). A pre-tested structured questionnaire was used to collect data from 405 systematically selected participants. The study findings noted that the proportion of women who were well prepared for birth and ready for complications were 54.7%. Attending tertiary level education and being knowledgeable on obstetric danger signs were found to be significantly associated with BPCR. The study concluded that the proportion of women who were well prepared for birth was still low and thus improving their awareness and reinforcing counseling on obstetric danger signs was recommended to increase level of BPCR.[11]

A community-based mixed method study was conducted to find out awareness and practices regarding BPCR among pregnant and recently delivered women in Uttar Dinajpur, West Bengal. (2011). Two-stage, 40 cluster sampling technique was used to select 360 participants. Information on socio-demographic variables as well as awareness and practices regarding BPCR were collected through semi-structured interview. In-depth interviews with one respondent per cluster were also conducted. The study findings indicated that overall BPCR index of the study population was 34.5. Proportion of women aware of at least one key danger sign each of pregnancy, labor, postpartum, and newborn ranged from 12.1% to 37.2%. Proportions of women with first ANC within 12 weeks, four or more ANCs, institutional delivery, saving money, identifying transport, and blood donor were low. Thus the study concluded that preparedness in health system, ensuring competence, and motivation of workers were needed for promotion of BPCR among the study population.[12]

Conclusion:-

Various studies have been done to assess BPCR among the antenatal women and even the health care providers. These studies showed that there is a varied range of factors that affect BPCR. In spite of various health programs for antenatal women, and training of health care providers regarding BPCR, they are found to be not effectively prepared for birth and emergencies. As knowledge of antenatal women and competence of health care providers play substantial role to reduce maternal mortality and morbidity, the researcher feels the need to assess both.

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