MEN KNOWLEDGE/AWARENESS LEVEL ON BIRTH PREPAREDNESS AND COMPLICATION READINESS IN MAGARINI SUB COUNTY

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ABSTRACT

Purpose: This study sought to find out the knowledge/awareness level of men on birth preparedness and complication readiness in Magarini Sub County.

Methodology: A cross-sectional study sequential mixed methods design was used where a total of 464 men will be enrolled. Quantitative data was collected using semi structured questionnaires and interview guides were used to collect qualitative data. Quantitative data was coded, and analyzed by SPSS software. Qualitative data was analyzed using NVIVO software. Chi-square test was used to determine associations between categorical variables and Logistics regression was used to identify factors associated with birth preparedness and complication readiness. The associations between awareness and each independent variable were determined by odds ratio (OR) and 95% confidence interval (CI). Thematic content analysis was applied for qualitative data analysis.

Findings: The result indicated that the odds of pregnancies resulting in a baby that was born alive were 47.306 times higher for more than two pregnancies as compared to one pregnancy(Odds=47.306,p=0.000). The odds of pregnancies resulting in a baby that was born alive were 16.25 times higher for one pregnancy as compared to no pregnancy(Odds=16.25,p=0.000).

Unique contribution to theory, practice and policy: Birth Preparedness and Complication Readiness (BPACR) should be endorsed as an essential component of safe motherhood programs to reduce delays for care-seeking for obstetric emergencies and this has been proven to positively impact on birth outcomes

Keywords: knowledge/awareness level, birth preparedness, complication readiness, Magarini Sub County
1.0 INTRODUCTION

It is estimated that more than 600,000 women die due to pregnancy- and birth-related causes where, when? (WHO 2005). Majority of these deaths occur during and immediately following birth: 25% are caused by severe bleeding, 15% by infection, 12% by eclampsia (a seizure disorder), and 8% by obstructed labor. The remaining deaths are due to unsafe abortion (13%), other direct causes (8%), and indirect causes such as HIV and malaria diseases which may be aggravated by pregnancy (Ronoms and Graham; 2006). No initials of authors when citing references. Among other known medical causes of maternal deaths are lack of advance planning for use of a skilled birth attendant for normal births, and particularly inadequate preparation for rapid action in the event of obstetric complications, are well documented factors contributing to delay in receipt of skilled obstetric care and thus result to maternal deaths and still births. Avoiding maternal deaths is possible even in resource poor countries yet every year in the world. Often, preventive measures are not accessible (Campbell and Graham 2006). Haemorrhage, for example, which accounts for over one third of maternal deaths, can be prevented or managed through a range of interventions administered by a skilled health-care provider with adequate equipment and supplies.

Nwakwo and Oshonwoh (2013) did a study in Patani Town, south Nigeria to assess the level of male involvement in their spouses' reproductive health events before pregnancy, during pregnancy, delivery and puerperium. A descriptive cross-sectional study design was used with a multistage sampling technique used to select 400 respondents. Results from data collected on the study indicated that (61.1 %) of men were aware of maternal health issues and the level of education was shown to have significant with the knowledge of maternal health issues. They concluded that though the level of male involvement in safe motherhood was shown to be of good proportion, strategies to create awareness on male support for their parous spouses should be given a broader frontier, both in clinics, household and community levels. Men should be more involved than before, as they have a priceless role to play towards a significant improvement in maternal health. The Government, development partners and NGOs at all levels should be committed with a strong political will in this regard.

Another study was carried out on married men resident by Zubairu et al (2010) in Ungogo town, Northern Nigeria where birth preparedness, complication readiness and male participation in was assessed. Interviews were done using a questionnaire adapted from the survey tools developed by JHPIEGO Manteral and Neonatal Health Program. The study showed that men made plans for the baby’s naming ceremony (71.5%), less than a third made plans for mother’s health care (30.8%), transportation (24.2%), delivery (23.1%) and baby/mothers clothes (22.6%). Only 19.5% of respondents made savings for obstetric emergencies and a mere 10.5% identified a decision making process in case of obstetric emergency. Similarly decision on place of delivery, arrangement for skilled assistance at delivery and preparations for blood donation were made by only 9.0%, 6.2% and 0.8% of respondents respectively. Under the same study, nearly half (48.1%) of men viewed pregnancy in sick women as high risk. Approximately a quarter of respondents considered pregnancy while a woman is still breastfeeding (26.5%) and too frequent pregnancies (25.4%) as high risk. Less than a quarter of men considered pregnancy in the young mother (23.7%) and previous operative delivery (19.8%) as high risk pregnancies. Furthermore, only 1.8% of men considered twin pregnancy and other high order pregnancies as being high risk.
Studies in India, Bolivia and Indonesia (Khan ME et al 1997) indicate delays in decisions to seek care occur because those responsible for making decisions often times may not even recognize certain symptoms or complications as dangerous, not associate them with maternal death.

Knowledge is also an important factor that affects attitude, intention and behavior. Knowledge relates to behavior, and behavior produces change towards service utilization. The more knowledge families have about dangerous signs of pregnancy and delivery the more they go for antenatal and delivery services. Moore et al (2002) study observed that majority of pregnant women and their families do not know how to recognize the danger signs of complications. When complications occur, the unprepared family will waste a great deal of time in recognizing the problem, getting organized, getting money, finding transport and reaching the appropriate referral facility.

A cross sectional study to examine the factors associated with male involvement in Antenatal Care, birth plans, exclusive breast feeding and immunization was conducted in Kathmandu, Nepal between May to December 2010 by Dharma (2013). A two stage cluster sampling was used and a large sample of 2178 men participated. The study revealed men who were knowledgeable and obtained health education were more likely to accompany their spouses for ANC visit. In this study only 26.9% of men had knowledge about least danger signs of pregnancy and 53.7% of men arranged money for delivery. 30.2% of men arranged transportation to hospital for delivery.

The men of Marikebuni again echoed this thought process acknowledging that when a problem arose during delivery the decision of where the baby would be born was deferred to the husband. Otherwise hospital births were for problems and not for normal deliveries, which could be conducted successfully at home (Carter et. al. 2010)

2.0 METHODS AND PROCEDURES

The study was conducted in Magarini Sub County which is located in Kilifi County in the former Coast Province of Kenya. It covers an area of 2417.9km² and has an altitude of 0-418m above sea level. The study used a cross sectional survey using mixed mixed methods comprising of both quantitative approach and qualitative in-depth interview and Focus Group Discussions was used in the study over a period of three months from June 2014 to September 2014. Study participants were male partners to women of reproductive age (18 - 49 years) that had a full-term delivery within the previous 24 months preceding the survey. Male opinion leaders were involved in the in-depth interviews. A semi structured questionnaire prepared in English and translated into Kiswahili was used to collect quantitative data. The questionnaire, was developed based on the guidelines of the Safe Motherhood Initiative Birth Preparedness and Complication Readiness matrix of JHPIEGO (affiliate of Johns Hopkins University). Quantitative data was coded, and analyzed by SPSS software. Qualitative data was analyzed using NVIVO software. Chi-square test was used to determine associations between categorical variables and Logistics regression was used to identify factors associated with birth preparedness and complication readiness. The associations between awareness and each independent variable were determined by odds ratio (OR) and 95% confidence interval (CI). Thematic content analysis was applied for qualitative data analysis. The study was conducted after approval of both the Scientific Steering Committee (SSC) of KEMRI and from the Ethical Review Committee (ERC), also by ascertainment of informed verbal and written consent from study participants.
3.0 RESULTS

Knowledge Determinants of Men Preparedness and Readiness in Magarini Sub County

The study sought to establish the knowledge/awareness level of men on birth preparedness and complication readiness in Magarini Sub County. The result indicated that the odds of pregnancies resulting in a baby that was born alive were 47.306 times higher for more than two pregnancies as compared to one pregnancy (Odds=47.306, p=0.000). The odds of pregnancies resulting in a baby that was born alive were 16.25 times higher for one pregnancies as compared to no pregnancy (Odds=16.25, p=0.000). The result are in agreement to (KDHS 2014) results that showed that despite the strategies and policies, designed to improve maternal health, Kenya’s maternal mortality rate stands high with 400 deaths per 100,000 live births and was ranked among the 11 countries contributing to 65% of all maternal deaths on a global scale in 2008 and one of the 23 countries in sub Saharan Africa making insufficient progress towards MDG five.

The result indicated that the odds of pregnancies resulting in a baby that was born dead were 65.667 times higher for more than two pregnancies as compared to one pregnancy (Odds=65.667, p=0.000). The odds of pregnancies resulting in a baby that was born dead were 6.3 times higher for one pregnant as compared to no pregnancy (Odds=6.3, p=0.002). The results were consistent to (MOH 2007) results that indicated that statistics, revealed that Magarini Sub county in Coast Province has MMR of 625 per 100,000 live births.

Table 1 Gravidity and parity

| Gravidity | Prevalence (%) | Regression Results |
|-----------|----------------|--------------------|
|           |  unprepared    |  Prepared          |  Sig. | OR | 95% CI |
|          |     %          |       %           |       |    | Lower  |
|          | unprepared     |  prepared         |       |    | Upper  |
| alive    | 68.40%         | 31.60%            | 107.735(0.000) | 0.000 | 3.91    |
|          | 13%            | 6%                | 19     | 0.000 | 7 to 67.412 |
|          | 11.80%         | 88.20%            | 0.000  | 16.25 | 21 to 67.412 |
|          | 4%             | 30%               | 0.000  | 16.25 | 7 to 67.412 |
|          | 4.40%          | 95.60%            | 47.30(6.1) | 0.000 | 16.1 |
|          | 60.00%         | 40.00%            | 158.482(0.000) | 0.000 | 138.818 |
|          | 19.20%         | 80.80%            | 0.000  | 6.3  | 3 to 20.643 |
| dead     | 18%            | 411%              | 0.000  | 6    | 21 to 138.818 |
|          | 21%            | 35%               | 158.482(0.000) | 0.000 | 1.92    |
|          | 4.40%          | 97.80%            | 0.000  | 6.3  | 3 to 20.643 |
|          | 2.20%          | 403%              | 0.000  | 7    | 12 to 169.026 |
The result went further to show that the odd of being prepared are 0.013 times lower for those with knowledge compared to those without knowledge (Odds=0.013, p=0.000). The odd of being prepared are 0.0182 times lower for those who were aware of vaginal bleeding as compared to those who were not aware of vaginal bleeding (Odds=0.0182, p=0.000). The odd of being prepared are 0.0105 times lower for those who were aware of severe headache as compared to those who were not aware of severe headache (Odds=0.0105, p=0.000). The odd of being prepared are 0.029 times lower for those who were aware of blurred vision as compared to those who were not aware of blurred vision (Odds=0.029, p=0.000). This results were consistent with (WHO 2005) findings that indicated that on an estimate more than 600,000 women die due to pregnancy- and birth-related causes in Africa.

The odd of being prepared are 0.009 times lower for those who were aware of convulsions as compared to those who were not aware of convulsions (Odds=0.0009, p=0.000). The odd of being prepared are 0.014 times lower for those who were aware of convulsions as compared to those who were not aware of convulsions (Odds=0.014, p=0.000). This results were consistent with (WHO 2005) findings that indicated that on an estimate more than 600,000 women die due to pregnancy- and birth-related causes in Africa.

The odd of being prepared are 0.014 times lower for those who were aware of swollen hands as compared to those who were not aware of swollen hands (Odds=0.014, p=0.000). The odd of being prepared are 0.043 times lower for those who were aware of high fever as compared to those who were not aware of high fever (Odds=0.043, p=0.000). The odd of being prepared are 0.07 times lower for those who were aware of higher fever as compared to those who were not aware of high fever (Odds=0.029, p=0.000). This results were consistent with (WHO 2005) findings that indicated that on an estimate more than 600,000 women die due to pregnancy- and birth-related causes in Africa.

The odd of being prepared are 0.09 times lower for those who were aware of difiicult breathing as compared to those who were not aware of difficult breathing (Odds=0.09, p=0.000). The odd of being prepared are 0.063 times lower for those who were aware of severe breathing as compared to those who were not aware of severe breathing (Odds=0.063, p=0.000). The odd of being prepared are 0.073 times lower for those who were aware of severe abdominal pain as compared to those who were not aware of severe abdominal pain (Odds=0.073, p=0.000). The odd of being prepared are 0.077 times lower for those who were aware of reduced fetal movement as compared to those who were not aware of reduced fetal movement (Odds=0.077, p=0.000). The odd of being prepared are 0.032 times lower for those who were aware of water breaks as compared to those who were not aware of water breaks (Odds=0.032, p=0.000). The results are in line to MOH (2007) findings which asserts that the sub county statistics, Magarini Sub county in Coast Province has MMR of 625 per 100,000 live births.
Table 2: Bivariate Regression Results of knowledge Factors on men preparedness and readiness in Magarini sub county

| Knowledge | Prevalence | Regression Results |
|-----------|------------|--------------------|
|           | un | Prepar | N | Chi | Sig. | OR | 95% CI | Lower | Upper |
|           | pre | ed |   | sig |     |    |        |       |       |
| knowledge |   |     |   |     |      |    |        |       |       |
| 1 10 | 2.30% | 416 | % | 426 | 000 | 0 | 3 | 5 | 0.000 | 0.01 | 0.03 |
| 2 25 | 65.80% | 13 | % | 34.20 | 38 | 26.46 | 2(0.0) | 0.18 | 0.08 |
| vaginal | 1 16 | 4.30% | 352 | % | 368 | 00 | 0 | 2 | 9 | 0.37 |
| 2 19 | 20.00% | 76 | % | 80.00 | 95 | 7.216 | (0.00) | 0.02 | 0.10 | 0.01 | 0.77 |
| severe Headache | 1 1 | 1.10% | 94 | % | 95 | 0 | 7 | 5 | 4 | 6 |
| 2 34 | 9.20% | 335 | % | 369 | 90.80 | 109.6 | 0(0.0) | 0.02 | 0.01 | 0.07 |
| Blurred vision | 1 20 | 4.50% | 420 | % | 440 | 00 | 0 | 9 | 1 | 3 |
| 2 15 | 62.50% | 9 | % | 37.50 | 24 | 182.6 | 90(0.0) | 0.00 | 0.00 | 0.02 |
| Convulsion | 1 17 | 3.80% | 425 | % | 442 | 00 | 0 | 9 | 3 | 9 |
| 2 18 | 81.80% | 4 | % | 18.20 | 22 | 132.4 | 90(0.0) | 0.01 | 0.00 | 0.04 |
| swollen hands | 1 21 | 4.70% | 425 | % | 446 | 00 | 0 | 4 | 4 | 7 |
| 2 14 | 77.80% | 4 | % | 22.20 | 18 | 84.67 | 55(0.0) | 0.01 | 0.00 | 0.04 |
| High fever | 1 21 | 4.80% | 417 | % | 438 | 00 | 0 | 3 | 8 | 5 |
| 2 14 | 53.80% | 12 | % | 46.20 | 26 | 61.97 | 9(0.0) | 0.03 | 0.01 | 0.10 |
| consiousness loss | 1 21 | 4.90% | 410 | % | 431 | 00 | 0 | 0.07 | 1 | 7 |
4.0 DISCUSSIONS, CONCLUSIONS AND RECOMMENDATION

Discussion

The study sought to establish the knowledge/awareness level of men on birth preparedness and complication readiness in Magarini Sub County. The result indicated that the odds of pregnancies resulting in a baby that was born alive were 47.306 times higher for more than two pregnancies as compared to one pregnancy (Odds=47.306, p=0.000).

Conclusions

The odd of being prepared are 0.014 times lower for those who were aware of swollen hands as compared to those who were not aware of swollen hands. The study concluded that the odds of men who acknowledged that when women do not go to a health facility to give birth, it is mainly because it is difficult to get there were 96.572 more as compared to those who did not acknowledge of men who acknowledged that in their community, (doctors/nurses/TBAs) know what kind of care a woman needs during pregnancy, childbirth, and immediately after child birth were 71.197 more as compared to those who did not acknowledge

Recommendations

The study also recommended that greater attention and efforts are scaled up to address challenges such as low emergency obstetric coverage, poor access to skilled attendance along
the continuum of care, lack of community involvement in Maternal Neonatal Health, high unmet need for family planning and the delays in seeking appropriate skilled care

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