ORIGINAL ARTICLE

Knowledge and Perception of Women Towards Danger Signs in Pregnancy in Choma Rural District, Zambia

B. S. Nambala*, C. Ngoma

University of Zambia, School of Medicine,Department of Nursing Sciences,
P. O. Box 50110,Lusaka.

ABSTRACT

Background: Pregnancy is usually an exciting time in the life of a family. It is a joyous event for most families as they anticipate bringing new life on earth.

Sometimes a pregnant woman may experience signs and symptoms which signal danger. Danger signs in pregnancy are those signs that a pregnant woman will see, or those symptoms that she will feel which indicate that something is going wrong with her or with the pregnancy.

Objective: the objective of the study was to determine women's knowledge and perception towards danger signs in pregnancy in Choma rural district, Zambia

Design: a mixed method study design with both qualitative and quantitative approach was used. The study was conducted in Choma rural district. The study population was women of childbearing age residing in Choma rural district who had given birth before or those who were pregnant at the time of the study. One hundred and eighty-six (186) respondents were systematically sampled from three villages at Mapanza health centre catchment area. Two Focus Group Discussions (FGDs) were conducted at the health centre.

Data were collected using interview schedules and focus group discussion guides. Data analysis was conducted using SPSS version 16 soft ware. Chi square test was used to test for associations between independent and dependent variables. FGDs were analysed using Contentanalysis. The cut-off point for statistical significance was 0.05

Results: The study revealed that 66% of the respondents had heard about danger signs in pregnancy, and 66.7% had positive perception about them. The study revealed that majority (71%) of the respondents had low levels of knowledge about danger signs in pregnancy.

The study showed significant associations between women's knowledge about danger signs in pregnancy and education level (40%, p value=0.006) and between age and knowledge about danger signs in pregnancy (37.5%, p value=0.017). Occupation was associated with women's knowledge of danger signs in pregnancy (45.5%, p value=0.002), as well as quality of services (80.8%, p value=0.000). Marital status was significantly associated with women's perception towards danger signs in pregnancy (82.7%, p value=0.009), as well as cultural beliefs (58.4%, p value=0.000).

Conclusion: The study revealed that majority of the respondents had low levels of knowledge about danger signs in pregnancy. This could be contributing to women delaying to seek medical care, and increased maternal mortality in the district.

Knowledge and perception of danger signs in pregnancy can be improved if Information, Education and Communication (IEC) is given to all women to raise awareness, and this will in turn help them know when

Corresponding Author:
Brenda Nambala Sianchapa,
University of Zambia, School of Medicine,
Department of Nursing Sciences,
P. O. Box 50110,
Lusaka.

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danger signs have occurred, and help them to seek medical care.

The IEC should be conducted in such a way that there is time for questions and those questions should be adequately answered by the Health Workers. Male involvement should be encouraged to raise men's awareness so that they quickly seek medical care should their wives develop danger signs in pregnancy.

INTRODUCTION

Pregnancy is a normal physiologic process[8] although at times some of the common discomforts of pregnancy may make the pregnant woman feel ill. Problems of pregnancy range from mildly irritating to life- threatening conditions[4].

The danger signs in pregnancy include vaginal spotting or bleeding at any time, leaking of fluid from the vagina, unusual abdominal pain, cramping, pelvic pressure, or persistent backache, persistent nausea and vomiting, especially in the second and third trimester. The other danger signs in pregnancy are persistent headache or blurred vision, marked swelling of hands and face, painful or burning urination, foul-smelling vaginal discharge, chills or fever, feeling very tired, and decreased fetal movements in the third trimester[8, 11].

The occurrence of any danger sign in pregnancy is a signal that something is wrong with the pregnant woman or the pregnancy itself. If this happens, the pregnant woman needs urgent medical care and advice.

Knowledge of danger signs in pregnancy by pregnant women and their communities is the essential first step in accepting appropriate and timely referral to obstetric and newborn care[9] and ensures that pregnant women do not delay in seeking medical care.

The World Health Report of 2005 by Lerberghe estimates that half a million women die in pregnancy, childbirth or soon after delivery. Of these deaths, 86% occur in developing countries[6]. The same report states that a woman dies every minute from pregnancy and delivery related causes somewhere in the world.

It is against this background that countries have adopted strategies to try and reduce maternal mortality. One of these strategies is IEC on danger signs in pregnancy in order to raise women's awareness and enable them to seek care when they experience any of the danger signs.

The study was aimed at finding out how much women knew about danger signs in pregnancy, and their perception, in an attempt to find out whether lack of knowledge and negative perception towards danger signs in pregnancy could be contributing to maternal mortality in Choma district.

METHODS

This study used a mixed method study design that employed both the qualitative and quantitative approach. The study was conducted in Choma rural District, Zambia. Interviews were held with the women in the communities, while Focus Group discussions were conducted at the Health centre.

The study population were women in the child bearing age (15-49 years old). The inclusion criteria was women in the child-bearing age who had given birth before or who were pregnant at the time of the study, residing in Mapanza, and were willing to take part in the study. Systematic sampling was used to select the households where the respondents were gotten from. From each household, if only one or two women were found, they were interviewed, but if more than two women who met the inclusion criteria were found, simple random sampling was used to select only two women to be interviewed. A sample of 186 respondents was selected.

SEMI-STRUCTURED INTERVIEW SCHEDULE

A pretested semi-structured interview schedule with both open and closed ended questions, translated in the local language was used to collect data over a period of one month. One hundred and eighty-six respondents were interviewedusing face to face interviews.

Two Focus Group discussions which comprised 7 participants each, separated according to age groups to facilitate free discussion, were conducted at the health centre. One group comprised younger women (15-30 years old) while the other group comprised older women

(31-49 years old). Purposive sampling was used to select 14 women who were attending the Maternal and Child Health clinic. The women selected were women in the child-bearing age who had given birth before or who were pregnant at the time of the study, were willing to take part in the study and were not part of those interviewed individually. All participants were assured of confidentiality and anonymity of data collected.

DATA ANALYSIS

Data were analysed using SPSS Version 16 statistical package. The Chi-Square test was used to test for associations between dependent and independent variables.The dependent variables were knowledge and perception. The independent variables were level of education, cultural beliefs, number of antenatal visits, quality of services and parity. Only p values of 0.05 or less were considered statistically significant.

RESULTS AND DISCUSSION

The majority of the respondents, 74 (39.8%) were aged between 25-34 years of age and 8 (4.3%) were aged 45-49 years. A number of respondents 139 (74.7%) were married, 186 (100%) were Christian and 118 (63.4%) had 1-4 children. More than half (54.3%) of the respondents had low levels of education, and 45.7% were housewives.

KNOWLEDGE ABOUT DANGER SIGNS IN PREGNANCY

The research findings showed that 61.8% of the respondents had heard about danger signs in pregnancy. The commonest source of information (39.2%) was health personnel, probably because most of the women in the study attended ANC and could have heard about danger signs in pregnancy at the health centre. Of the respondents who had heard about danger signs in pregnancy, 54.8 % could define danger signs in pregnancy correctly, while 7% could not. Most respondents (52.7%) had low levels of knowledge and could only mention 0-4 danger signs. Low levels of knowledge were also found with Focus Group Discussion participants who were only able to mention 4 danger signs per group. Most of them were only able to mention 2 danger signs, with bleeding being the most commonly mentioned danger sign.

This finding is similar with the findingsof a study done in Pakistan by Hasan in 2001, and in Nepal[7] which revealed that women had low levels of knowledge about danger signs in pregnancy. In the Gambia, similar results were found where women's awareness levels about danger signs were low. The low levels of knowledge could be attributed to a number of factors, like the low education level of respondents which could make the women less able to understand and remember what they were taught[3].

Of the women who had heard about danger signs in pregnancy, 45.2%said that not every pregnant woman could develop danger signs in pregnancy, but only those who were unfortunate. This was also expressed by some participants during Focus Group Discussions where one respondent said, "*It is only the unlucky women who develop danger signs"*. Only 16.7% of respondents said every pregnant woman is at risk of developing pregnancy danger signs. This could be because women did not really understand what danger signs in pregnancy were, and did not understand their seriousness.

Few (34.9%) respondents had experienced danger signs in pregnancy before, and out of these, 33.3% were able to mention correct danger signs experienced. These results are similar to those found in Nepal where 35.1% of respondents who experienced danger signs in pregnancy and were counselled had correct knowledge about danger signs in pregnancy[7]. Of the respondents who experienced danger signs, 26.3% of them sought medical care, while 7.5 % stayed home. Out of the respondents who sought medical care, 12.4% were given information and 12.9% were counselled about the danger signs they experienced, while 14% were not given any information. This shows the opportunities that are there to teach women about danger signs when they seek medical care.

A similar study in Gambia revealed that opportunities to teach women were available at the health facilities[1].

SERVICE RELATED INFORMATION

Most (46.8%) of the respondents interviewed were able to reach the Health Centre within an hour. A number of the respondents (17.7%) took more than 2 hours to reach the

health facility and 82.8% travelled to the Health Centre on foot, 15.6% used bicycles and 1.1% hiked. These findings are similar to those found in Mexico where it was found that most of the women died in pregnancy because of delays in seeking care[2]. One of the causes of delay was lack of efficient transport to Health Centres.

The majority (91.9%) of the respondents interviewed had been pregnant within the last 5 years prior to the study. 98% received antenatal care during their last pregnancy prior to the study, and 54.3% attended 4 antenatal visits or more.

During antenatal care, 63.4% of respondents spent less than 5 minutes individual time with health workers. Similar sentiments were also expressed by the FGD participants as stated by one participant, *'we spend very little time'*, and another, *'they only touch our abdomen briefly, listen to the baby, and off we go'*. Most participants indicated that they were not given time to ask questions while alone with the health worker. They were not even examined thoroughly. It is recommended in the WHO antenatal model that a full physical examination should be done on mothers during the antenatal visit[10]. Most mothers stated that Health Workers did not conduct physical examination during antenatalvisits. This could be due to shortage of staff at the Health Centre.

The majority (85.5%) of the respondents reported that they would use the same antenatal facility if they became pregnant again, while 14.5% would not. Of those who would use the health facility again, 45.7% said that they would use the same facility because they wanted to get an antenatal card, to follow hospital policy, and, because it was the nearest health centre, giving them no option. The other respondents (12.4%) said that they would not use the same facility due to poor quality services.

PERCEPTION TOWARDS DANGER SIGNS

The majority (51.1%) of respondents believed that danger signs in pregnancy were due to medical causes, while 19.4% believed that they were due to traditional causes. Others (15.1%) believed that danger signs were caused by other things, like the world coming to an end, and witchcraft. A number (66.7%) of the respondents believed that danger signs could be prevented, 51.1% believed that danger signs could be prevented by getting medical advice, while 5.4% believed that danger signs could be prevented by using herbs and consulting from witch doctors.

If a woman developed danger signs in pregnancy, 76.9% of respondents believed that medical care should be sought, 18.8% said care should be sought from older women and (4.3%) believed that help should be sought from traditional healers. Even if most women are realizing the importance of seeking medical care for danger signs, others still hold on to traditional beliefs which make them delay in seeking medical care.

Some (28.5%) of the respondents had cultural beliefs that would hinder them from seeking medical care if they developed a pregnancy danger sign, while 71.5% had no cultural beliefs. The commonly mentioned cultural belief was that of marital unfaithfulness by either spouse (18.3%). Respondents in this study believed that marital unfaithfulness led to bleeding, vomiting, and abdominal pain. This is because there are a lot of myths and traditional concepts surrounding pregnancy and childbirth. Such a belief would cause a delay in seeking medical advice when danger signs occurred. Bleeding in pregnancy was attributed to witchcraft by 7.5% of the respondents. Other traditional beliefs mentioned were,' *eating fluidly diet and chicken trotters'* which were believed to be a cause for draining, *'promiscuity, multiple pregnancy and pregnancy of a baby boy'* were believed to cause oedema. These socio cultural beliefs surrounding pregnancy could influence pregnant women to consult traditional medicine when danger signs in pregnancy occurred.

RECOMMENDATIONS

Based on the study findings, theresearcher recommended that the Ministry of Health should put in place measures to intensify health education on danger signs in pregnancy to increase levels of knowledge among women, and to improve perception towards danger signs in pregnancy.

The Ministry of Health should also work in conjunction with the General Nursing Council to ensure that midwifery students graduate with the skills to teach women and communities about danger signs in

pregnancy.

The Ministry of Health should put in place measures to ensure that more midwives are trained and deployed equally to all areas including rural areas to provide women and communities with the needed midwifery services.

The Ministry of Health should collaborate with other ministries, like Ministry of Education to accord girl children with opportunities to go to school so that they can be enabled to easily understand Health messages.

The researcher recommended that another research should be done on women's knowledge and perception of danger signs in pregnancy in Choma rural District to cover a larger area as this study was conducted in Mapanza only.

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