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Barriers to PIH management and possible solutions: Patient's perspective

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Abstract

Pregnancy Induced Hypertension is a pattern of high blood pressure during pregnancy. It is one of the major causes of maternal mortality and neonatal morbidity in the world, contributing about 5-14% of pregnant women globally (Arshad *et al.*, 2014). In Zimbabwe, despite the availability of guidelines for PIH management, PIH still contribute about 19.4% (Muti *et al.*, 2015) more than global statistics. For this reason, this study sought to assess barriers to PIH management and possible solutions or strategies. The strategies will help to curb both maternal and neonatal mortality. The study employed descriptive qualitative design. Focus group discussions (FGDs), each with 8 participants, were held in Bindura District and Bindura provincial Hospital. Women diagnosed with PIH, in age group 18 to 49 years were included in the study and these were able to speak Shona or English. Approval was obtained from respective ethical review boards. FGDs followed a semi-structured questionnaire. Comprehensive notes were taken during the interviews which were also being audiotaped. Data were analyzed thematically and manually. Themes identified were barriers and possible solutions to PIH management. Barriers were poor cultural practices, religious practices, employment and use of herbs. Possible solutions were to develop culture-specific health education and interventions to improve health seeking behavior of PIH patients and to reduce adverse perinatal outcomes. Husbands as family heads to be actively involved in the management of PIH and accompanying their wives to the hospital. This is critical in improving ANC visits and general management of PIH among pregnant women.

Keywords: PIH, ANC, PIH management, Zimbabwe

1. Introduction

Pregnancy Induced Hypertension (PIH) contribute annually maternal deaths internationally. With global statistics estimated to be 5%-14% (Muti et al., 2015)^[34] of all pregnancies Nevertheless, the impact of the disease is extremely greater in developing countries where interventions are ineffective attributable to late presentation of pregnant women as well as health care delivery challenges. The prevalence of PIH in Zimbabwe (Harare) was 19.4% more than global statistics (Muti et al., 2015)^[34]. However, there are no studies addressing barriers to PIH management that is, community, individual, factors on early detection and management. An effective health care system, ensuring proper management of PIH care on various levels of maternal health is essential for successful maternal and perinatal outcomes.

PIH is a challenge in low- and middle-income countries as a result of inadequate supply of basic supplies, shortage of health care workers, healthcare system challenges that lead to delays in women receiving necessary treatment. PIH is the third primary cause maternal and neonatal demises (Jabuya, 2016)^[26]. In Zimbabwe, studies were conducted on determinants of PIH as well as pregnancy adverse effects of

PIH.

The purpose of the study was to comprehensively explore potential barriers to PIH management at all levels of the health care system, individual and community in order to provide a window of opportunity for health care providers to identify the gaps and strategize interventions that are effective for PIH management. Therefore, the purpose of this study was to explore barriers to PIH management that is early detection, prevention and management at three levels of care (community individual, health system) in Bindura District and Bindura Provincial Hospital focusing mainly on barriers at policy, health care and community levels.

2. Methodology

Eight (8), FGDs were conducted at Bindura Provincial hospital and Bindura district in Zimbabwe consisting of 8 participants. The FGDs were utilized because they allow recruitment of relatively more participants in a shorter space of time and allow group interaction thereby yielding faster than in-depth interviews FGDs each one consisting of women with PIH and those with PIH. Data saturation determined the number of FGDs whereas participants were predetermined. The group was big enough to allow all

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participants to talk and share their views. Maximum variation purposive sampling was conducted for the purpose of documenting diverse variations that are unique that have emerged in adapting to different conditions and identifying important common patterns that across variation. The recruitment was done consecutively as they were identified until 8 participants were identified for each group this assisted in ascertaining most common obstacles in PIH management. It as well underscored common life experiences in living with PIH. Women aged 18 to 49 years with PIH and those without PIH, who were able to speak either Shona or English were recruited into the study. Approval to carry out research was obtained from respective ethical bodies. All participants signed an informed consent after full explanation of the study, its risks and benefits. The FGDs followed a semi structured questionnaire that had sections that with open-ended questions asking about the barriers and possible solutions to PIH management.

The researcher moderated and guided the discussion while probing participants for clarity and responses and taking notes. The research assistant took detailed notes. All interviews were conducted in a private room and lasted for almost an hour. The FDGs were audiotaped and then transcribed verbatim. Trustworthiness was achieved by observing credibility, dependability, transferability and combinability.

Data analysis commenced in the field during data collection where notes were being scrutinized for recurring or unusual statements. Data was analyzed based on thematic analysis from Miles *et al.* manually.

The stages used by researcher to analyze data were organization, familiarization, transcription, coding, developing a thematic framework, indexing, displaying and reporting. Coding was done addressing the discrepancies using original transcripts and field notes until consensus was reached. The major themes identified were barriers and possible solution to PIH management.

3. Findings

3.1 Demographics: This section presents the demographic data of the participants. Table 1 is a summary of all the participants of FGDs, (N=64). Thirty-four (50%) had PIH and 50% had no PIH respectively.

Variables	Frequency	Percentage
	Age	×
18-20	33	52
21-30	17	27
31-40	9	14
41+	5	9
	Marital status	
Single	23	36
Married	19	30
Divorced	10	16
Cohabiting	9	14
Widow	3	5
	Level of education	
Primary	34	53
O level	12	19
Advanced	7	11
Certificate	5	9
Diploma	4	6
Degree	2	3
	Religion	
Christian	19	30
Apostolic sect	28	44
Pentecostal	5	9
Atheist	3	5
Traditional	1	2
Other	9	14
	Employment status	
Formally employed	11	17
Self- employed	29	45
Unemployed	24	38

Table 1: Summary of demographic characteristics for participants for FGDs (N =64).

The table above shows demographic data of participants in relation to development of Pregnancy Induced Hypertension The age ranges from 19-49. Majority 33 (52%) were aged 18-20 years, 17 (27%) were aged 21-30 years, whilst, 9 (14%) were aged 31-40 years and only 5(9%) were aged 41 years and above. Twenty-three (36%) were single, 19 (30%) were married, 10 (16%) were divorced, whilst, 9 (14%) were cohabiting and 3 (5%) were widowed. Thirty-four

(53%) attained primary education, 12 (19%) attained ordinary level, 7 (11%) attained advanced level, 5 (9%) attained certificates, 4 (6%) attained diploma and 2 (3%) attained degrees. Majority, 19 (30%) were Christians, 28 (44%) were from apostolic sect, 5 (9%) were Pentecostal, 3 (5%0 were atheist, 1 (2%) was traditional and 9 (14%) were from other religions. Most, 24 (38%) were unemployed, 29 (45%) were self-employed and 11 (17%) were formally

employed.

Table 2: Summary of category identified under barriers to PIH management

Theme	Category	
Barriers to PIH management	1. Religious practices and beliefs	
	2. Cultural practices	
	3. Employment	
	4. Usages of lime and warm spices	
Possible solutions to PIH management	1. Husbands as family heads to be actively involved in the management of PIH	
	2. Culture specific education and intervention	

3.2 Barriers to PIH management

Religious practices and beliefs: Religious 3.2.1 construction of sickness among apostolic. Beliefs grounded in faith that conflict with modern medicine is also a barrier to the management of PIH as a woman who seek medical assistance is considered to be weak spiritually and deserve to be punished. In some sects, in cases where complication occurs, the referral is made to a maternity shrine, which is normally located in a bush or mountain. However, the referral has to be confirmed in the spirit by the receiving birth attendant. Thus, even within the apostolic maternal health systems, delay is encountered. It also emerged that the people providing maternal health services in the apostolic maternal health care system do not receive formal training. Others stated that they would look for assistance from faith healers since the disease existed alleged to be associated with demons as well as generational curse as PIH runs in families. This is elaborated by the following remarks below.

'Our birth attendants (mbuya nyamukuta) are trained by the Holy Spirit to conduct deliveries and help women with problems. Some may even tell us our problems beforehand. Prayers and holy water and oil are administered to avoid complications. We don't accept medicine because yakanh'ora, doctors and nurse are not spiritually clean therefore can't assist us"

Participant 2, FDG

"I have never heard of Bp yenhumbu but i know there is nothing like that. I believe it is the issue of bad spirits. And I do not disclose my pregnancy to anyone because vanokusunga so you will not be able to deliver".

3.2.2 Employment

The other barriers affecting PIH management among pregnant women was lack of finance due to unemployment. Although maternal health is funded in Zimbabwe, sometimes drugs are out of stock and participants are forced to buy medicines for PIH. Although some could afford to purchase the medicine, majority could not afford to buy recommended medicine and food for pregnant women and as such exposing them to various health problems. In terms of employment, Participant 5, #FDG 1 had to say,

"I am not employed and my husband is an artisanal miner and he sometimes he comes home without money, therefore sometimes i am not able to buy food and medication monthly and transport to go the hospital to and I end up not taking my medication BP yobva yakwira. Sake musoro paunondirwadza ndinonwa mvura yakawanda "or else I buy medicine in one of our local Tuck shop".

3.2.3 Lack of family and community support

The absence of family, peer and community support was identified in all focus groups. Some participants reported that they had not been supported by their husbands, family members, in-laws and communities in general. While others indicated that the preparation of separate foods was deplorable in view of the fact that they would be regarded as distorting elements of the family unit. Not to mention rejecting prepared food to a family gathering as this is considered culturally inappropriate. Others stated that they disappointed their husbands by refusing to eat fast. It caused the husbands to be bitter. As a result, some would end up eating salt and spicy food so as preserve peace in the family resulting in poor control of PIH

Participant 3, FDG #2 made the following comment regarding culture,

"As you know that in our culture, it is a taboo to prepare your own food without involving others. You are considered semunhu anoruta kana kunyima.

3.2.4 Culture

It was also noted that culture has a negative impact on PIH management hence it is another barrier affecting effective management of PIH among pregnant women. Although the participants differed in relation to culture, some cultural practices significantly affect the proper management of PIH and compliance to medication and this aggravates the preexisting conditions such as diabetes, heart problems thereby leading undesirables PIH outcomes. Participant 3, FDG #2 made the following comment regarding culture,

"As you know that in our culture, it is a taboo to go to hospital without consulting the in laws unofanira kutanga wabvunza sekuru vemusha(svikiro) re musha. Saka kana musoro uchirwadza unotemerwa nyora, makumbo tinonyika muvhura inemashizha epfuta".

The usages of lime and warm spices were also reportedly used for treating eclampsia. One participant described the contents of one of the local concoctions used for eclampsia

A number of participants used herbs to control blood pressure as medicines for PIH are very costly: Participant 4 FDG #3 had this to say,

"I utilize original tobacco leave, use it with boiling water and soak it with lemon juice,

if the pregnant woman convulses, she should take a teaspoon, rub it on her eyes and body, this will generally calm her down."

Participant 4, FDG#1

'When I experience problems, I prefer not to go to hospital because I went through during my first pregnancy. I was admitted and stayed in hospital for many days until i gave birth. I don't go to hospital prefer using musawu leaves to reduce my blood pressure and mutara tree for headache' and this has been helping very very well.

Participant 7, FDG #1

"Convulsions or fits are signs and symptoms of witchcraft and we know kuti kurohwa nezvishiri therefore so I prefer using anointing oil, and if this fails, I visit traditional healers for assistance you pay nothing and they accept cash and kind"

3.3 Possible solutions to management of PIH

Two categories were identified under possible solutions to management of PIH.

3.3.1 Husbands as family heads to be actively involved in the management of PIH: this was supported by all participants across FGDs. This include involvement during pre-conception and during ANC care to improve their understanding of was highlighted 3 of the FGDs. In addition, some participants emphasized the importance of the participation of treatment partners in improving PIH management.

3.3.2 Culture specific health education and interventions: It was highlighted across all FGDs that giving information about PIH to patients, husbands, families, community and the nation in general would assist in securing financial as well as social support from different organizations

3.4 Discussion

Religion was observed to be a major barrier to PIH management. Majority of the respondents were of the view that convulsions are caused by bad air or spirit and some did not know. However, the control group perceives confusion as caused by witchcraft, punishment from God, bad spirit and worsening PIH. Cultural beliefs also have a significant affect in the management of PIH. This was confirmed by a Chavhunduka and Gelf (1978) who discovered that many Shona people believe that illness could either have a normal or strange origin. Therefore, disease could be due to frustrated or angry spirits that return to penalize the offender or his kinsmen. However, such values predispose women with PIH to severe complications.

Respondents among the cases relate flashes before the eyes to witchcraft and worsening PIH. The majority of respondents among the PIH cases attributed reduced fetal movement to the bad spirit followed by some, who think that it is caused by witchcraft. All the cases agree that continuous headache is caused by bad spirit. This clearly shows that there is extensive belief in African communities that illness during pregnancy is due to bewitchment or possession of wicked spirits or the devil, pregnant women is normally taken to divine healers for rituals as well as cleansing service. Camazine (2000), concur with these results and argued that Zuni people believe that fits in pregnancy is due to the activities performed by the expectant mother or father such as slaughtering an animal which will fit before it dies or form on its mouth.

The study revealed that PIH patients do not have adequate

knowledge on management of PIH since some viewed going to the hospital as waste of time, and they prefer traditional methods of treatment such as the use of tree leaves and roots. Thus, access to knowledge about Pregnancy Induced Hypertension was very important to women, their partners, relatives or friends (East *et al.* 2011)^[42]. It was stated that, although numerous sites can now be accessed with a simple online search, the quality and readability of information needs to be appropriate for women with varying levels of health literacy (East *et al.* 2011)^[42].

Majority of respondents disagree that they did not have money to pay for services. Most of the respondents, stated no in relation to the fact that family does not use medical treatment. Respondents agree that religion does not allow me to use medical treatment. This serves to confirm that the economic situation of a country and household income greatly influence management of PIH among pregnant women. This is also worsened by political and social instability exposing women to more sever health complications.

It was disagreed that the decision to go to hospital has to be made by husband or significant other. This clearly shows that husbands have a great role in deciding all family issues, including health matters of the entire family, which however affect the health status of their family. Despite the existence of affordable health care services, women's socio-cultural status in many developing countries translates into reduced access to and control over health resources and health literacy. For instance, many young women and girls are unable to make decisions about care for themselves or their children without the explicit approval of their husband or another family member (WHO, 2014) ^[40]. This is also an attribute of lack of knowledge on PIH. This explicitly shows that cultural factors play a crucial role in the development of PIH.

It was also noted that some participants do not prefer to go to the hospital because of negative experiences. This indicates that they value treatment from health centers. Perceived quality of care was found to be most highly correlated with choice of treatment (Goshomi, 2012). Generally, the quality of care has a negative effect on health seeking behavior and thus worsening PIH. This prevents access to appropriate treatment which includes financial constraint, distance to distance to health care facility, maintaining of quality of treatment. Therefore, the choice of treatment and where to be treated is influenced by distance to the health facility and the quality of care provided.

The results also showed that some participants did not have money to seek medication and this greatly affected heath seeing behavior. Goshomi, (2012), also noted that some patients thought that it was not necessary to seek medication from a hospital due to medical expenses that were incurred; moreover, faith healers offer free treatment while others fear hospital care. Results showed that most women disagreed that, they only go to hospital when referred by the traditional or faith healer. This implies that going to a health facility is not necessarily influenced by traditional or faith healers but it is a personal decision.

Having money for transport to the health facility is not a challenge affecting pregnant women, hence majority disagree. Those who agreed could be attributed to economic hardships faced and low household income. Thinking that it was not necessary was not a challenge affecting pregnant mothers seeking ANC at different health centres and this was supported by most of the respondents.

The majority of the respondents failed to recognize PIH symptoms. This shows that pregnant women have knowledge of the symptoms of PIH. Additionally, majority, disagree that, fear of hospital care can be a challenge affecting their decision to seek health attention. This shows that pregnant women are not afraid to visit health facilities which could be an attribute of good health system. However, Both East *et al.* (2011) ^[42] and Souza *et al.* (2007) ^[41] noted that the quality of information given to pregnant women with Pregnancy Induced Hypertension during prenatal care was not to their level of understanding so as to take preventative measures. In addition, Souza *et al.* (2007) ^[41] suggests that early diagnostic measures were essential for pregnant women who are at risk of gestational hypertension. Therefore, health care system and knowledge are vital elements of effective PIH management.

3.5 Conclusion

In conclusion, participants in this study lack knowledge on PIH management. Religion, culture, employment. And beliefs were major barriers to PIH management There is a need to improve culture-specific procedures in the management of PIH.

3.5 Implications to Practice: Pregnant women face a lot of barriers in the management of PIH. It is vital to train health care workers in the management of PIH in in order to reduce adverse perinatal outcomes. It is also crucial to develop culture-specific health education and interventions to improve health seeking behavior of PIH patients and to reduce adverse perinatal outcomes. There is need for husbands as family heads to be actively involved in the management of PIH and accompanying their wives to the hospital. This is critical in improving ANC visits and general management of PIH among pregnant women.

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Conflicts of Interest

There is no conflict of interest regarding the publication of this paper.

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