

What Do Women in Rural Tamil Nadu Think about Postmenopausal Bleeding? A Mixed-Method Study

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Abstract

Introduction: Perception of women about postmenopausal bleeding (PMB) may have a greater influence on their treatment-seeking behavior. **Objectives:** The objective was to explore the perceptions of causes and treatment of PMB among menopausal women and to quantify its perceived reasons. **Materials and Methods:** It was a sequential exploratory mixed-method study design, with two group interviews (qualitative phase), followed by a survey among 1530 postmenopausal women (quantitative phase). The qualitative data were analyzed by thematic analysis and quantitative data using descriptive statistics. **Results:** Lack of seriousness about PMB and stigma were stated as barriers for the treatment of PMB. Among 1530 women, 40.8% of them did not know the cause for PMB. The problem in the uterus, cancer, and improved nutrition were stated as reasons by 17.6%, 16.8%, and 15.8% of women, respectively. **Conclusion:** Most of the women did not know the reason for PMB and its awareness is crucial for better uptake of screening and detection of pathology at an early stage.

Keywords: Perception, postmenopausal bleeding, rural, Tamil Nadu

INTRODUCTION

Menopause is a natural phenomenon, defined generally as “cessation of periods for 12 months or a period equivalent to three previous cycles or as time of cessation of ovarian function resulting in permanent amenorrhoea.”^[1] With increasing life expectancy and decreasing age at menopause, the Indian women spend nearly one-third of their lifespan in the postmenopausal phase.^[2] Several symptoms experienced during this phase which are crucial for diagnosing certain underlying life-threatening conditions are largely neglected by these women due to ignorance and shyness. One such vital symptom is postmenopausal bleeding (PMB).^[1]

Postmenopausal bleeding is defined as “any bleeding that occurs from the genital tract after one year of amenorrhoea in a woman who is not receiving hormone replacement therapy (HRT).”^[3] It is an alarming sign of a probable underlying cervical/endometrial cancer. Reporting to a health facility at early stages will provide an opportunity to women with PMB to get detected at early stages which in turn will increase their chances of survival.^[4,5]

Perception of women about menopause and postmenopausal bleeding varies across different social, cultural, and

economic settings, and it may have a greater influence on their treatment-seeking behavior.^[6] Only a very few studies have tried to explore the perception of women about PMB. For the last 5 years, we are undertaking cervical cancer screening program at our Rural Health Training Centre, Thiruvannainallur. We observed that the uptake of screening is far from satisfactory. The previous study done in the same area showed that only 5.6% of the postmenopausal women underwent screening for cervical cancer.^[7] Most often health-care seeking depends on the perceptions of women. In addition to this, the understanding of these perceptions forms the base for planning behavior communication for the desired change in the practice. Hence, the current study was planned with the objective to explore the perceptions of causes and treatment of postmenopausal bleeding among menopausal women and to quantify the various perceived reasons for PMB.

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MATERIALS AND METHODS

Study setting

The study was conducted in the field practice area of Rural Health Training Centre, Thiruvannainallur, Tamil Nadu, of Sri Manakula Vinayagar Medical College and Hospital, Puducherry, which constitutes 34 villages with a population of 63,921.

Study design

It was a sequential exploratory mixed methods study design, where group interviews were conducted in the qualitative phase, followed by a questionnaire survey in the quantitative phase.^[8] Postmenopausal women (>30 years) were included in the study. Data collection was done between February and June 2016.

Selection of participants, data collection, and analysis

Qualitative phase

This study was conducted after obtaining clearance from the Research Committee and Institutional Ethics Committee (IEC clearance number: 37/2015). After obtaining informed consent, two group interviews were conducted with eight postmenopausal women (>30 years of age) in each group, who were purposively selected to explore their perceptions about postmenopausal bleeding and local terms for causes of PMB.^[9] The group interviews were conducted by a trained female postgraduate in a prefixed date, time, and venue using a semi-structured interview guide containing broad open-ended questions. Each interview lasted for around 30 min. The interviews were audio recorded and important points were noted down in the diary. The transcripts were prepared in verbatim in the English language on the same day of the interview. Thematic analysis of the transcripts was done manually by a trained female postgraduate.^[10] Descriptive codes were derived from the transcripts. Similar codes were merged to form the categories. Later, similar categories were combined to form major themes. The findings of the qualitative phase were used for questionnaire development, which was used in the quantitative phase of the study.

Quantitative phase

A community-based questionnaire survey was conducted in this phase with a representative sample of 1530 postmenopausal women >30 years of age who attained menopause at least 1 year before the date of the survey, selected by two-stage cluster sampling. The details of the sample size calculation and sampling procedures for the primary purpose of the study have been reported elsewhere.^[7] The sample size for the present purpose was adequate enough for the assumption of P – 50%, design effect – 2, and 95% confidence Interval. After obtaining informed written consent, a trained team of female medical interns led by a female postgraduate collected data in the field by making house-to-house visits. The data were entered into Epi Data (version 4.0.1.45) software package and analyzed in SPSS 24 software (SPSS Inc., Chicago, Illinois, USA) package. The data were presented as frequency and percentages.

RESULTS

Qualitative

Sixteen codes identified from the group interviews were grouped under four broad categories, namely normal phenomenon, abnormal pathology, native treatment, and barriers for treatment. Later, these categories were grouped into two major themes (perception about the cause of PMB and perception about treatment) [Table 1].

Quantitative

The average age at menopause of the respondents was 46.47 ± 5.06 (standard deviation) years. Of the 1530 responding women, majority (1017, 66.5%) were between 50 and 69 years age group, illiterates (1155, 75.5%), and were housewives (1074, 70.2%). Most of the respondents, 1491 (97.4%) followed the Hindu religion, were married 965 (63.1%) and lived in nuclear families 816 (53.3). Among the postmenopausal women, 645 (42.2%) of them possessed health insurance and only 210 (13.7%) of them were members in self-help groups.

Of the total 1530 respondents, 330 (21.6%) women perceived bleeding after menopause as normal, 555 (36.3%) women believed it to be abnormal, and the remaining (42.1%) respondents were not sure of its normal or abnormal nature. Among 1530 women, majority (625, 40.8%) of them did not know the cause for bleeding after menopause. About 17.6% of women were able to attribute PMB to some problems in the uterus. Exact medical causes of PMB such as cancer and prolapse uterus were stated by 16.8% and 3.9% of the women, respectively. Only 8.7% of women acknowledged the sudden liberation of stagnant blood from the uterus after menopause (*Soothagam udaithal*) as a reason for PMB. Improved nutritional status, old age, and body nature were perceived as reasons by 15.8%, 13.2%, and 7.1% of women, respectively [Table 2].

DISCUSSION

In the qualitative phase, perception of women about the cause of PMB varied from perceiving it as a normal phenomenon due to improved nutritional status, old age, body nature to perceptions as an abnormal phenomenon occurring due to some problems in the uterus, cancer, prolapsed uterus, and breaking of *soothagam*. The main barriers for treatment perceived by these women were lack of awareness, lack of seriousness about the symptom, shyness to expose the private body part, social stigma, and lack of resources. However, in the quantitative phase, 21.6% of women perceived it as a normal phenomenon, 36.3% felt it as an abnormal occurrence, and 42.1% were not sure about its nature. About 40.8% of the women were not able to state even single medical cause of PMB.

Health Care Belief Model (HBM) which is a framework for planning behavior change suggests that people's beliefs about health problems, perceived benefits of action, and barriers to action and self-efficacy explain engagement or lack of

Table 1: Perceptions about postmenopausal bleeding among rural postmenopausal women (qualitative)**Theme 1: Perception about causes of PMB****Category 1: Normal phenomenon***Improved nutrition*

Women felt that their periods usually stop (menopause) when they are undernourished. Once they start eating and when the nutritional status improves, they will again get their periods (PMB)

Old age

According to the respondents, the aging process is the main reason for postmenopausal bleeding

Body nature

The respondents perceived that attaining menopause and getting PMB depend on the nature of one's body

Ill fate

Women perceived that those who are unlucky and had done some sins in their previous life are destined to get this condition

Category 2: Abnormal pathology*Problem in uterus (karpapaiyil prachanai)*

Participating women perceived that postmenopausal bleeding occurs due to some underlying pathology in the uterus

Cancer (putru noi)

Cancer was perceived as one of the reasons for PMB. But they were not able to specify the type of cancer

Sudden liberation of stagnant blood from the uterus (soothagam udaithal)

Women had a perception that after attaining menopause, the blood gets stagnated in the uterus. Later, the stagnant blood along with the uterus will roll back into the abdomen leading to nausea and vomiting (this is termed as soothagam). When this soothagam breaks, it will lead to bleeding (PMB). They also feel that once the bleeding occurs, the person will eventually die

Prolapsed uterus (adi irakam)

Few people perceived that uterus protruding outside will be susceptible to injury, leading to bleeding

Theme 2: Perceptions about treatment for PMB**Category 1: Native treatment for PMB***External use*

Few women opined that bleeding occurs due to wounds in the genital area and suggested native treatment such exposing the genital area to vapor arising from freshly boiled paddy. Other treatment suggested by them was putting the poppy seeds in burning charcoal and showing the vapors arising from it in the genital area

Oral intake

Some participants suggested intake of lemon/vinegar to stop the bleeding. The addition of coconut oil to the diet was also recommended by one elderly woman. Intake of the juice of drumstick leaves and eating petals of hibiscus flower were stated as a remedy of genital bleeding by the participants

Category 2: Barriers for treatment seeking*Not feeling the need for treatment*

Some women were of the view that discharges and abnormalities in the postmenopausal period were more or less normal and do not require any specific treatment or care and a few participants also opined that pain and abnormalities related to reproductive organs were always a part of their life so they may not take postmenopausal problems seriously

Unaware of the problem

They considered it a taboo to look in one's own private parts or never tried to observe such abnormalities. They also felt that all things related to genitalia are dirty and did not feel any difference

Not comfortable with disclosing the illness

They do not want others (doctors) to look into their private area and they also fear that the results might reveal some grave illness

Ignoring the symptoms due to lack of seriousness

People neglect the symptom since it happened only once/only mild dirty discharge was seen (no fresh bleeding) or bleeding occurred a long time ago

Social stigma

Fear that if others know about such treatments that will affect the marriage of young women in the family

Lack of resources

The potential burden of any treatment on the already poor financial status of the family might prevent them from approaching for treatment (lack of money). Currently, lack of women doctors in the area hinders approaching for checkup (lack of health-care professionals). Their family members and they themselves cannot sacrifice work and take them to distant place for treatment (lack of time)

PMB: Postmenopausal bleeding

health-promoting behavior. The perceived threat is at the core of the HBM and it is linked to person's readiness to take action.

^[11] But unfortunately, in our study, nearly 21.6% of women perceived it to be a normal occurrence, attributing it to nutrition, old age, and body nature. Since they consider it as a normal condition, their chances of seeking health care and getting detected at the early stage for any underlying pathology become

almost nil. Hence, it is essential to break their misconception by awareness generation about PMB through mass media (TV, radio and newspaper, displays in public places, and pamphlet distribution). Since majority of women in our study are illiterates, cartoon-based IEC materials with simple messages based on the components of the health belief model will be useful to break the myths and misconceptions about PMB.^[12]

Table 2: Quantification of perceptions of respondents about postmenopausal bleeding (n=1530) (multiple responses)

Variables	n (%)
Perceptions about bleeding after menopause	
Perceived as normal	330 (21.6)
Perceived as abnormal	555 (36.3)
Not sure	645 (42.1)
Perceived causes of postmenopausal bleeding	
Don't know	625 (40.8)
Normal phenomenon	
Improved nutrition (<i>Sathu athigamaanaal</i>)	242 (15.8)
Old age (<i>Vayathu muthirthal</i>)	202 (13.2)
Body nature (<i>Udal vagu</i>)	109 (7.1)
Ill fate (<i>Thalai vithi</i>)	53 (3.5)
Abnormal pathology	
Problem in the uterus (<i>karpapaiyil prachanaai</i>)	269 (17.6)
Cancer (<i>Putru noi</i>)	257 (16.8)
Sudden liberation of stagnant blood from the uterus (<i>Soothagam udaithal</i>)	133 (8.7)
Prolapsed uterus (<i>Adi irakam</i>)	60 (3.9)

Words in *Italics* are in the Tamil language

Once they reach the stage of cognitive dissonance, explaining the benefits of seeking health care for PMB at early stage to them by a woman who is a survivor of cervical cancer/have undergone cervical cancer screening and benefited by it, will aid them in the change process.

Nearly 40.8% of the respondents had no idea about the cause of PMB. Knowledge is the base for action and people tend to seek treatment for PMB only if they are aware of its cause and graveness of the symptom. Improvement in awareness for causes of PMB and treatment options would help for desired behaviour change. One of the promising ways to bring about this change is the use of peer educators to deliver culturally appropriate and acceptable information about PMB to these women.^[12] Women SHG leaders and NGO outreach workers in these areas can be trained as peer educators to disseminate information related to PMB.

Encouragingly 36.3% of the women perceived it as an abnormal phenomenon and some women were even able to state the exact etiology of PMB. Although the concept of *Soothagam udaithal* (sudden liberation of stagnant blood from the uterus) is scientifically unacceptable, these women are atleast aware that PMB is an abnormal phenomenon, which may lead to fatality. Although these people are aware of the causes of PMB, it still does not ensure that they will seek treatment. Hence, constant motivation, reinforcement of benefits of seeking early treatment, and social support are needed to help them to overcome the other barriers for treatment seeking such as shyness and social stigma. Information regarding the availability of cervical cancer screening facilities in government and private sectors in their area and importance of screening should be emphasized to these postmenopausal women and they should be encouraged to undergo cervical cancer screening even in the absence of any symptoms.

To the best of our knowledge, this is the first community-based mixed methods study to explore the perceptions of women about postmenopausal bleeding and quantify the responses of respondents. The study was based on a large representative sample. We used context-specific information for questionnaire development. Sequential use of the Qualitative and Quantitative phase helped us to improve the study rigor. However, when compared to cross-sectional design, being a mixed methods research, the research process was complex and a bit time-consuming.

CONCLUSION

Most of the women did not know the reason for PMB and lack seriousness about the condition. Hence, creating awareness is crucial to make the women to seek health facility in case of PMB and get detected of any underlying pathology at an early stage.

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Conflicts of interest

There are no conflicts of interest.

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