Original Study

Dysmenorrhea Management and Coping among Students in Ghana: A Qualitative Exploration

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A B S T R A C T

Study Objective: The study sought to gain an in-depth understanding of primary dysmenorrhea management and coping strategies for dysmenorrhea among adolescents and young adults who were in school.
Design: The study adopted a qualitative exploratory approach using a descriptive phenomenology to explore the phenomenon of interest.
Setting: The study was conducted in two educational institutions in Accra, Ghana: a Senior High School (SHS) and a University.
Participants and Data Collection: Sixteen participants were purposively recruited (8 SHS and 8 University students) through snowball sampling. Individual interviews were conducted in English, audio-taped, transcribed and analysed using content analysis procedures. Informed consent was obtained from all participants and rigor was ensured through prolonged engagement and member checking.
Results: Participants employed both pharmacologic (orthodox and herbal) and nonpharmacologic approaches such as warm compress, exercise, and water and diet therapy for their dysmenorrhea. Students' dysmenorrhea was managed at the school clinic and the hospital. Health professionals demonstrated negative attitudes towards dysmenorrhea management. Students coped with dysmenorrhea by planning activities before the onset of pain, receiving social and spiritual support, and developing a mind-set to bear pain.
Conclusions: Individualized approaches should be employed to enhance dysmenorrhea management. Health professionals should be educated on dysmenorrhea to improve their attitude and skills for dysmenorrhea management.
Key Words: Menstrual pain, Phenomenology, Pain management, Dysmenorrhea, Ghana

Introduction

The incidence of menstrual pain or dysmenorrhea among adolescents and young adults continues to be high globally. The incidence of dysmenorrhea among adolescents ranges between 70% and 80% in many countries including Ghana.[1–3] Adolescents and young adults mostly experience dysmenorrhea with no underlying cause (primary dysmenorrhea).[4,5] Although much has been reported about primary dysmenorrhea, it still remains a problem for sufferers. The management of secondary dysmenorrhea poses less of a challenge because there is an identifiable cause of the pain[4] and when this is treated, there is positive and sustained outcome of the treatment. Primary dysmenorrhea has been managed with several approaches over the years including pharmacologic and nonpharmacologic measures.

Pharmacologic agents for primary dysmenorrhea include analgesics such as paracetamol, piroxicam, ibuprofen, diclofenac and mefenamic acid,[6] combined oral contraceptive agents and herbal preparations.[4,7] Primary dysmenorrhea management is challenging because these agents have different efficacy for different individuals[7,8] and some sufferers resort to trial and error.[9] Primary dysmenorrhea sufferers usually resort to self-medication to control pain.[10] Other sufferers are prescribed medications apart from analgesia (vitamins, sedatives and hematinics) for associated symptoms.[4] The lack of knowledge on analgesic also limits the use of analgesics for dysmenorrhea.[9] Menstrual pain is seen as a normal female phenomenon in certain cultures; so, some sufferers may not take analgesics.[8,11,12] Also, patients may not report pain because of the effect of socialization about pain perception and expression, thus hindering dysmenorrhea management.[13,14]

Nonpharmacologic approaches have been used with some degree of efficacy for dysmenorrhea management. The use of exercise, warm compress, massage, and rest,[7,11] as well as red bean pillow,[15] have been reported. Music has also been found to reduce pain[16] and could be useful. Transcutaneous electrical nerve stimulation, acupuncture, and acupressure have also been reported.[4,17]

The nonpharmacologic measures have varying effectiveness for dysmenorrhea sufferers. This further highlights the difficult nature of primary dysmenorrhea management. It is therefore necessary for on-going research on dysmenorrhea to derive an effective approach for pain relief. Physical, social, psychological, and spiritual support may also be necessary for students with severe dysmenorrhea as pain is a multidimensional phenomenon and individuals respond to pain differently.[18]

The authors indicate no conflicts of interest.
We thank Miss Daniela Korletey for transcribing our interviews.
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1083-3188/$ - see front matter
http://dx.doi.org/10.1016/j.jpag.2014.07.002

Individuals with moderate to severe dysmenorrhea whose pain management is inadequate have to cope with the pain every month. There is a paucity of research on in-depth qualitative explorations of coping strategies adopted by students with dysmenorrhea, especially in Ghana. Female students with severe dysmenorrhea sometimes absent themselves from school and are unable to cope with activities of daily living.[1,6,10,12,19,20] It is important for females to attend school so that they can have better quality of life and be empowered to contribute effectively during adulthood. In view of this, the study sought to explore the pain management approaches and the coping strategies adopted by students for dysmenorrhea. The study formed part of an initial exploration on dysmenorrhea among students towards development and implementation of a multi-method intervention for pain management.

Methods

The study adopted a descriptive phenomenology to understand the participants' world. The methodology allowed in-depth exploration of the phenomenon under investigation. Descriptive phenomenology allows the lived experiences of participants to emerge without an influence from the researcher or existing literature. In this instance, dysmenorrhea is a subjective personal phenomenon and the study approach allows an exploration of this largely personal phenomenon.[21]

The study was conducted in two educational institutions in Accra, Ghana: a Senior High School (SHS) and a University. Snowball sampling was adopted to recruit participants where an initial participant helps to identify another participant(s) with dysmenorrhea for recruitment.[22] The inclusion criteria were students with no underlying pathology who had consented to be part of the study. Participants confirmed that they were not diagnosed with any other pelvic disease and were not on any special treatment as a result of their dysmenorrhea. This personal confirmation was used to classify participants as having primary dysmenorrhea in this study. No confirmatory diagnostic evaluations were done before participants were recruited. The exclusion criteria were those with underlying disease (secondary dysmenorrhea) and those who did not consent to participate in the study.

Data was collected through individual in-depth interviews in English using a semi-structured interview guide. Participants shared their dysmenorrhea management and coping experiences and these were probed until full-understanding of emerging themes were derived. For example: '*Please tell me how you manage your menstrual pain*'; '*Share with me the effect of the approach you use to manage your pain*'; '*How do you cope with your pain?*'. The first author conducted all the interviews at a time when the participants were not in pain. Interviews were conducted at a place and time convenient for participants and were audio-taped with their consent. These were later transcribed verbatim and analysed concurrently. Interviews lasted for 45 minutes to 1 hour.

The study was approved by the Institutional Review Board of the Noguchi Memorial Institute for Medical Research at the University of Ghana. Permission was obtained from the appropriate educational authority before data was collected. Individual informed consent was obtained from all participants. Teachers at the Senior High School also gave consent before students under 18 years of age in their School were interviewed. There were no parents at the School at the time of data collection to give consent. Confidentiality and anonymity were ensured by removing all identifiable information and assigning identification codes to participants. The right to withdraw from the study was stressed. The principle of anonymity and confidentiality was explained to the research assistant. Identification codes SD and UD were used to represent SHS and University students respectively and the numbers 1 to 16 were added to these codes as participants were recruited chronologically. For example SD8 represented the 8th interview and the participant was from the SHS.

Transcripts were read several times to make ensure that the true meanings of their experiences were captured. Themes and sub-themes were generated from the data and transported to the NVivo software version 9 (QSR International Pty Ltd, UK). Data was coded and similar codes were grouped into sub-themes and themes as the analysis progressed. Data that were most suitable to describe the theme were used to present findings. The team discussed themes and sub-themes with the view of representing the true experiences of participants and where there was disparity during the analysis; consensus was reached after a review of the themes and sub-themes as necessary.

Rigor was achieved through prolonged engagement which ensured that in-depth understanding was achieved. The process of member-checking was employed during interviews to follow-up on initial themes generated during data collection. Concurrent analysis ensured that participants' experiences were followed among participants until themes were fully developed. Also, participants' accounts were summarized and they confirmed the accuracy of their experiences during the interviews. Detailed field notes were written. Context and participants were described to enable transferability and application of findings to similar context. Verbatim quotes were used to report findings and this ensured that participants' experiences were vividly represented.

Results

Demographic Characteristics

There were 16 participants including 8 SHS and 8 University students. Two of the University students were married and one had 2 children. One was a doctoral student and the others were undergraduates. The SHS students were in the first and second years of their programs and all were not married. One participant was a Muslim and the others were all Christians. Participants were aged between 16 to 38 years.

Themes and sub-themes that emanated from the study were pain management strategies such as pharmacologic (orthodox analgesics and herbal medicine) and non-pharmacologic interventions (warm compress, exercise,