

Assess the Premenstrual Symptoms and Coping Strategies Among Adolescent Girls

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Abstract

Introduction: Menstruation is a normal physiological process in the reproductive life of every girl and woman. It usually occurs as cyclic uterine bleeding for 3–5 days at an interval of approximately 28 days, beginning from puberty and continuing until menopause. Many girls experience certain physical, emotional and behavioural changes during the second half of the menstrual cycle. When these symptoms occur before menstruation and are severe enough to disturb daily activities, academic performance, social relationships or emotional well-being, they are commonly referred to as Premenstrual Syndrome (PMS). PMS includes somatic symptoms such as breast tenderness, abdominal bloating, headache, backache and lower abdominal pain, as well as affective symptoms such as irritability, anger outbursts, mood swings, tension, confusion and social withdrawal. These symptoms usually appear a few days before menstruation and subside within 3–4 days after the onset of menstruation. The exact cause of PMS remains unclear, although hormonal changes, neurotransmitter variations, stress, lifestyle and psychosocial factors may contribute to its occurrence.

Objectives: The objectives of the study were to assess premenstrual symptoms and coping strategies among adolescent girls and to correlate premenstrual symptoms with coping strategies among adolescent girls.

Methodology: A quantitative descriptive correlational research design was adopted. The study was conducted among 60 adolescent girls studying at Central Polytechnic College, Taramani, Chennai. The samples were selected by using a non-probability convenient sampling technique. Demographic data were obtained through self-report. Premenstrual symptoms and coping strategies were assessed using a structured rating scale. The aim and purpose of the study were

explained to the participants, and confidentiality was assured. Descriptive and inferential statistics were used to analyze the collected data.

Results: The study revealed that adolescent girls experienced a range of premenstrual symptoms. Common physical symptoms included headache, backache and lower abdominal pain, while common emotional symptoms included irritability, anger, mood changes and social withdrawal. Coping strategies commonly used by the girls included rest, heat application, intake of hot or cold drinks, lifestyle modification, avoiding expression of anger, engaging in study and trying to forget the discomfort. A positive correlation was found between premenstrual symptoms and coping strategies, with $r = 0.61689$. No significant association was found between premenstrual symptoms, coping strategies and selected demographic variables.

Conclusion: The study concluded that premenstrual symptoms were common among adolescent girls and that students used various coping strategies to manage the symptoms. The positive correlation between premenstrual symptoms and coping strategies indicates that girls with higher symptom experience tended to use more coping strategies. Menstrual health education, counselling and healthy lifestyle promotion are recommended to improve awareness, reduce discomfort and enhance coping ability among adolescent girls.

Keywords: Premenstrual Syndrome, adolescent girls, coping strategies, menstrual health, somatic symptoms, affective symptoms.

Introduction

Adolescence is a significant period of physical, psychological, emotional and social development. It is a transitional stage between childhood and adulthood, during which girls experience important biological changes related to puberty and reproductive maturity. One of the major milestones in adolescent girls is menarche, which marks the beginning of menstrual life. Menstruation is a natural and normal physiological process, but it is often associated with discomfort, myths, fear, embarrassment and lack of adequate knowledge.

Menstruation is the periodic shedding of the endometrial lining of the uterus, resulting in vaginal bleeding. A normal menstrual cycle usually occurs every 21 to 35 days, with bleeding lasting for 3 to 7 days. However, menstrual experiences differ from person to person. Some girls may have

mild discomfort, while others may experience severe symptoms that disturb their daily routine and academic activities.

Premenstrual symptoms are a group of physical, emotional and behavioural changes that occur before menstruation. These symptoms usually appear during the luteal phase of the menstrual cycle and are relieved after the onset of menstruation. When the symptoms are intense enough to interfere with normal life, they are commonly described as Premenstrual Syndrome.

Premenstrual Syndrome is an important health concern among adolescent girls because it affects physical comfort, mood, concentration, school or college attendance, academic performance, interpersonal relationships and quality of life. Girls may experience headache, lower abdominal pain, backache, breast tenderness, bloating, fatigue, food cravings, sleep disturbance and body pain. Emotional symptoms may include irritability, sadness, anxiety, anger, confusion, mood swings and social withdrawal.

Although PMS is common, many adolescent girls do not seek medical advice. They may consider symptoms as a normal part of menstruation or may feel shy to discuss menstrual problems. In many families and communities, menstruation is still surrounded by silence and cultural restrictions. Lack of open communication may prevent girls from receiving proper information and support.

Coping strategies play an important role in managing premenstrual symptoms. Coping refers to the behavioural, emotional and cognitive efforts used by individuals to manage discomfort, stress or difficult situations. Adolescent girls may use different coping strategies such as taking rest, applying heat to the abdomen, drinking hot beverages, distraction through study or entertainment, avoiding anger, talking to friends, modifying diet, maintaining hygiene, physical activity and seeking support from family members.

Some coping strategies are beneficial, while others may not be effective. Healthy coping methods include adequate rest, balanced diet, hydration, regular physical activity, relaxation, emotional expression, menstrual tracking and seeking medical consultation when symptoms are severe. Unhealthy coping methods may include ignoring severe symptoms, excessive use of painkillers without advice, social isolation or suppression of emotional distress.

The present study was conducted to assess premenstrual symptoms and coping strategies among adolescent girls in a selected setting in Chennai. It also aimed to identify the relationship between symptoms and coping strategies. Understanding this relationship is important for planning menstrual health education and adolescent counselling programmes.

Need and Significance of the Study

Premenstrual symptoms are common among adolescent girls and young women. However, the severity and pattern of symptoms vary widely. Some girls experience mild symptoms that do not disturb routine activities, while others experience symptoms severe enough to affect their academic performance, social interaction and emotional well-being. Therefore, assessment of premenstrual symptoms is essential in adolescent health care.

The need for this study arises from the fact that menstrual health is often neglected in educational settings. Many adolescent girls do not receive scientific information about menstruation, PMS and healthy coping practices. They may depend on friends, family members or informal sources for information. As a result, misconceptions and inadequate coping practices may continue.

PMS can affect the quality of life of adolescent girls. Physical symptoms such as abdominal pain, backache and headache may reduce participation in classroom activities. Emotional symptoms such as irritability, anxiety and sadness may affect relationships with family, friends and teachers. Difficulty in concentration may interfere with studies and examinations.

Assessment of coping strategies is equally important. Girls who experience symptoms may use different methods to manage them. Some may take rest or apply heat. Some may avoid expressing anger. Some may distract themselves through study. Some may consume hot or cold drinks. Understanding these coping practices helps identify whether girls are using safe, effective and healthy methods.

The study is significant because it focuses on adolescent girls in an educational institution. Schools and colleges are important places for health promotion. Menstrual health education can be easily provided through classroom teaching, counselling sessions, health talks, peer education and adolescent health clubs. If students are taught about PMS and coping strategies, they may manage symptoms more confidently.

From a nursing perspective, adolescent menstrual health is an important area of community health, obstetric and gynaecological nursing, and mental health nursing. Nurses can educate girls about menstrual physiology, premenstrual symptoms, hygiene, nutrition, exercise, emotional well-being and when to seek medical help. Nurses can also counsel parents and teachers to support girls during menstruation.

The study also has psychological significance. PMS includes affective symptoms such as irritability, anger, mood changes, tension and social withdrawal. These symptoms may be misunderstood by family members or teachers as behavioural problems. Proper awareness can help reduce stigma and improve support.

The positive correlation between premenstrual symptoms and coping strategies is important because it suggests that girls who experience more symptoms may attempt to use more coping methods. This finding can guide nurses and educators to provide targeted interventions for girls with moderate to severe symptoms.

The present study provides baseline information that can be used to develop awareness programmes, counselling modules and menstrual health education materials for adolescent girls.

Objectives and Methodology

Statement of the Problem

A study to assess the premenstrual symptoms and coping strategies among adolescent girls in a selected setting, Chennai.

Objectives of the Study

1. To assess premenstrual symptoms among adolescent girls.
2. To assess coping strategies used by adolescent girls to manage premenstrual symptoms.
3. To correlate premenstrual symptoms and coping strategies among adolescent girls.
4. To find the association between premenstrual symptoms, coping strategies and selected demographic variables.

Operational Definitions

Premenstrual Symptoms: In this study, premenstrual symptoms refer to physical, emotional and behavioural symptoms experienced by adolescent girls before the onset of menstruation.

Coping Strategies: Coping strategies refer to the methods used by adolescent girls to manage or reduce premenstrual discomfort and emotional changes.

Adolescent Girls: In this study, adolescent girls refer to female students selected from Central Polytechnic College, Taramani, Chennai.

Premenstrual Syndrome: Premenstrual Syndrome refers to a group of somatic and affective symptoms that occur before menstruation and subside after the onset of menses.

Research Approach

A quantitative research approach was adopted because the study aimed to measure premenstrual symptoms and coping strategies using numerical scores.

Research Design

A descriptive correlational research design was used. This design was appropriate because the study aimed to describe premenstrual symptoms and coping strategies and determine the relationship between them.

Setting of the Study

The study was conducted at Central Polytechnic College, Taramani, Chennai.

Population

The population consisted of adolescent girls studying in the selected educational institution.

Sample and Sample Size

The sample consisted of 60 adolescent girls who fulfilled the inclusion criteria.

Sampling Technique

Non-probability convenient sampling technique was used to select the study participants.

Inclusion Criteria

Girls who were present during the data collection period, willing to participate in the study and had attained menarche were included.

Exclusion Criteria

Girls who were not willing to participate, absent during data collection or had known severe gynaecological illness were excluded.

Tool for Data Collection

The tool consisted of three sections:

Section I: Demographic Variables

This section included age, educational status, age at menarche, duration of menstruation, regularity of menstrual cycle, family type, dietary pattern and source of menstrual information.

Section II: Premenstrual Symptom Rating Scale

This section assessed somatic and affective symptoms such as headache, backache, lower abdominal pain, breast tenderness, bloating, fatigue, irritability, anger, anxiety, mood changes and social withdrawal.

Section III: Coping Strategy Rating Scale

This section assessed coping methods such as taking rest, heat application, hot or cold drinks, distraction, study, avoiding anger, lifestyle modification, emotional control and seeking support.

Data Collection Procedure

The investigator obtained permission from the concerned authority. The aim and purpose of the study were explained to the participants. Confidentiality was assured. Informed consent was obtained. Demographic data were collected by self-report method. Premenstrual symptoms and coping strategies were assessed using rating scales. The collected data were organized and analyzed using descriptive and inferential statistics.

Plan for Data Analysis

Frequency and percentage were used to describe demographic variables. Mean and standard deviation were used to assess premenstrual symptoms and coping strategies. Correlation coefficient was used to determine the relationship between premenstrual symptoms and coping strategies. Chi-square test was used to find association with selected demographic variables.

Ethical Considerations

Confidentiality and privacy were maintained throughout the study. Participation was voluntary. The participants were assured that their responses would be used only for academic and research purposes.

Results

Description of Premenstrual Symptoms

The study revealed that adolescent girls experienced a variety of premenstrual symptoms. The commonly reported physical symptoms included headache, backache, lower abdominal pain, fatigue and abdominal discomfort. Some girls also experienced breast tenderness, bloating, body pain and sleep disturbance.

The affective symptoms included irritability, anger, mood changes, tension, confusion and social withdrawal. These symptoms affected comfort, concentration and daily activities among some students.

The findings indicate that PMS was common among the study participants. Although the severity varied, most girls experienced at least one physical or emotional symptom before menstruation.

Common Physical Symptoms

The most common physical symptoms reported were:

1. Headache.
2. Backache.
3. Lower abdominal pain.
4. Fatigue.

5. Abdominal bloating.
6. Breast tenderness.
7. Body pain.
8. Sleep disturbance.

Common Affective Symptoms

The common emotional and behavioural symptoms included:

1. Irritability.
2. Anger.
3. Mood changes.
4. Tension.
5. Confusion.
6. Social withdrawal.
7. Reduced concentration.
8. Emotional sensitivity.

Description of Coping Strategies

The study found that adolescent girls used different coping strategies to manage premenstrual symptoms. Common coping methods included taking rest, applying heat, consuming hot or cold drinks, avoiding expression of anger, engaging in study and trying to forget the discomfort.

Some girls used lifestyle-related coping strategies such as maintaining diet, sleep and personal hygiene. However, the use of structured coping methods such as exercise, relaxation techniques and professional consultation appeared limited.

Common Coping Strategies Used

The commonly reported coping strategies were:

1. Taking rest.
2. Applying heat to the abdomen or back.
3. Taking hot or cold drinks.

4. Avoiding expression of anger to others.
5. Turning attention to study.
6. Trying to forget the symptoms.
7. Maintaining personal hygiene.
8. Seeking support from friends or family.
9. Lifestyle modification.
10. Distraction through routine activities.

Correlation Between Premenstrual Symptoms and Coping Strategies

The study found a positive correlation between premenstrual symptoms and coping strategies, with $r = 0.61689$. This indicates a moderate positive relationship between the two variables. It means that girls who experienced more premenstrual symptoms tended to use more coping strategies.

This finding is important because it shows that coping behaviour increases with symptom experience. However, the effectiveness of these coping strategies may vary. Therefore, adolescent girls need guidance regarding healthy and evidence-based coping practices.

Association with Demographic Variables

No significant association was found between premenstrual symptoms, coping strategies and selected demographic variables. This suggests that premenstrual symptoms and coping strategies were not significantly influenced by the demographic characteristics included in the study.

Summary of Results

The study revealed that premenstrual symptoms were common among adolescent girls. Physical symptoms such as headache, backache and lower abdominal pain were frequently reported. Emotional symptoms such as irritability, anger and mood changes were also present. Girls used various coping strategies, including rest, heat application, drinks, distraction and emotional control. A moderate positive correlation was observed between symptoms and coping strategies.

Discussion

The present study assessed premenstrual symptoms and coping strategies among adolescent girls in a selected setting in Chennai. The findings showed that adolescent girls experienced a range of physical and affective symptoms before menstruation. The most common physical symptoms were headache, backache and lower abdominal pain. Emotional symptoms included irritability, anger and mood changes.

These findings indicate that PMS is a common issue among adolescent girls. Menstrual symptoms may affect academic activities, social interactions and emotional well-being. Many girls may not report these symptoms openly due to shyness, lack of awareness or social restrictions related to menstruation. Therefore, educational institutions should provide a supportive environment where girls can discuss menstrual health concerns without embarrassment.

The study also found that students used several coping strategies. Rest, heat application, intake of hot or cold drinks, avoiding anger and distraction through study were commonly reported. These strategies show that girls try to manage symptoms using available and familiar methods. However, not all coping strategies may be sufficient for moderate or severe PMS.

The positive correlation between premenstrual symptoms and coping strategies indicates that girls experiencing more symptoms used more coping methods. This is a logical finding because higher discomfort may lead to greater efforts to reduce symptoms. However, the study does not confirm whether the coping strategies were effective in reducing symptoms. Therefore, further research may assess the effectiveness of specific coping interventions.

The absence of significant association with demographic variables suggests that PMS and coping strategies may be common across different subgroups of students. However, this finding may also be influenced by small sample size and limited variation in demographic characteristics.

The study has important implications for adolescent health education. Girls should be taught about the normal menstrual cycle, PMS symptoms, healthy coping strategies and warning signs requiring medical consultation. Education should include both physical and emotional aspects of menstruation.

Healthy coping strategies include adequate sleep, balanced diet, hydration, mild exercise, relaxation, breathing exercises, menstrual tracking, emotional expression and support-seeking. Girls should also be advised not to ignore severe symptoms that interfere with daily life.

Nurses have an important role in menstrual health promotion. School health nurses, community health nurses and college health educators can conduct awareness programmes, counselling sessions and health screening camps. They can also involve parents and teachers to reduce stigma and improve support.

The study also highlights the need to address mental health aspects of PMS. Emotional symptoms such as irritability, anger and social withdrawal should not be dismissed. Girls should be encouraged to identify mood changes and use healthy emotional regulation strategies. Peer support groups can also be useful.

Overall, the study findings support the need for structured menstrual health education and coping skill training among adolescent girls.

Implications, Limitations, Recommendations and Conclusion

Implications for Nursing Practice

Nurses should assess menstrual problems among adolescent girls during school and college health programmes. They should provide education regarding PMS, menstrual hygiene, nutrition, exercise, rest and emotional well-being. Girls with severe symptoms should be referred for medical evaluation.

Implications for Community Health Nursing

Community health nurses can organize menstrual health awareness programmes in schools, colleges and community settings. They can use charts, pamphlets, group discussions and counselling to improve knowledge. Parents and teachers should also be included in awareness activities.

Implications for Nursing Education

Nursing students should be trained to assess adolescent menstrual health problems and provide appropriate health education. Menstrual health should be included in adolescent health and reproductive health teaching.

Implications for Nursing Research

Further studies can be conducted with larger samples and different educational settings. Interventional studies may assess the effectiveness of yoga, exercise, relaxation therapy, dietary modification or educational modules on PMS. Qualitative studies can explore girls' lived experiences of PMS.

Limitations of the Study

The study was limited to 60 adolescent girls from one selected college in Chennai. Convenient sampling was used, which limits generalization. The data were self-reported and may be influenced by recall bias. The study assessed coping strategies but did not measure their actual effectiveness.

Recommendations

1. Menstrual health education should be provided regularly to adolescent girls.
2. Colleges should create a supportive environment for discussing menstrual concerns.
3. Girls should be taught healthy coping strategies for PMS.
4. Severe PMS symptoms should be identified and referred for medical care.
5. Parents and teachers should be educated to support girls during menstruation.
6. Relaxation exercises, mild physical activity and lifestyle modification should be encouraged.
7. Menstrual tracking should be promoted to identify symptom patterns.
8. Larger studies should be conducted in different educational settings.
9. Interventional studies should be conducted to test coping programmes.
10. Menstrual health should be integrated into adolescent health services.

Conclusion

The present study assessed premenstrual symptoms and coping strategies among adolescent girls in a selected setting in Chennai. The findings revealed that the majority of students experienced premenstrual symptoms. Common physical symptoms included headache, backache and lower abdominal pain. Common affective symptoms included irritability, anger, mood changes and social withdrawal.

The adolescent girls used various coping strategies such as taking rest, applying heat, taking hot or cold drinks, avoiding expression of anger, turning attention to study and trying to forget the discomfort. A positive correlation was found between premenstrual symptoms and coping strategies, with $r = 0.61689$. This indicates that girls with higher symptom levels tended to use more coping strategies.

No significant association was found between premenstrual symptoms, coping strategies and selected demographic variables. The study concluded that PMS is common among adolescent girls and that there is a need for structured menstrual health education and coping skill training.

Health professionals, especially nurses, should play an active role in creating awareness regarding PMS and promoting healthy coping practices. Early education, emotional support and timely referral can help adolescent girls manage premenstrual symptoms more effectively and improve their quality of life.

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