

Assess the Premenstrual Symptoms and Coping Strategies Among Adolescent Girls

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Abstract: Menstruation is a normal physiological impact on each girl's life. Menstruation is monthly uterine bleeding for 3-5 days after every 28 days from puberty till menopause. A change in mood, behaviour, appearance of some abnormal vague symptoms is often noticed in the second half of the cycle. Symptoms are severe enough to disturb the life cycle of a woman called premenstrual syndrome (PMS). The study aimed to assess the premenstrual symptoms and coping strategies among adolescent girls. The majority of the students suffered from premenstrual syndrome.

Objective: to assess the premenstrual symptoms and coping strategies among adolescent girls. **Methodology:** A non-experimental descriptive research design was adopted in this study. Non probability convenient sampling technique was used to select the sample size of 30 adolescent girls. The assessment of premenstrual symptoms and coping strategies was carried out using a self-reported Likert's rating scale. Data was analyzed by using descriptive and inferential statistics. **Result:** Majority (93.3%) of the samples sometimes had physiological and psychological problems, 90% of them had behavioural symptoms. Majority (43.3%) of the samples always followed coping strategies and 16.7% of the samples sometimes followed coping strategies and 40% never followed any coping strategies. **Conclusion:** PMS was common among students at 18-24 years. The most common physical symptoms experienced by adolescent girls were headache, backache and lower abdominal pain. Adolescent girls used coping strategies as taking hot / cold drinks, do not express anger to others, and turn to study and forget things, hearing music and taking medications.

Keywords: Premenstrual Symptoms, physiological, psychological & behavioural symptoms, Coping Strategies, Adolescent Girls.

1. INTRODUCTION

Menstruation is an ordinary physiological effect on every girl's lifestyle. Menstruation is a monthly uterine bleeding for 3-5 days after every 28 days from puberty until menopause. An alternate in mood, behaviour, appearance of few odd indistinct signs is regularly observed in the second half of the cycle. But if the symptoms are excessive enough to disturb life cycle of a girl or require medical help, known as premenstrual syndrome (PMS). Symptoms that arise one week earlier than menstruation are together referred to as PMS. At least one of the following somatic & affective symptoms appears five days earlier than menses or prior menstrual cycle. Affect symptoms are anger outburst, irritability, tension, confusion & social withdrawals. While in somatic symptoms are breast tenderness, abdominal bloating, headache. These symptoms are relieved within 3- 4 days of the onset of menses. The aetiology of that ailment continues to be uncertain.

A premenstrual symptom refers to a collection of expectable physical, cognitive and behavioural symptoms that can be found cyclically at some stage in the luteal phase of the menstrual cycle and resolve within a few days prior to menstruation.

Active coping strategies are either both behavioural or psychological responses designed to alternate the character of the stressors themselves or how one thinks approximately it, while avoidant coping strategies lead human beings into activities (alcohol use) or mental states (withdrawal) that preserve them from without delay addressing demanding events.

Various research in India has found and prevalence of premenstrual symptoms to be 25% in the general population with 8% revealing excessive symptoms. The premenstrual symptoms consist of breast pain 22.7%, abdominal distention 37.5%, headache 40.6%, swelling of limbs 5%, depression 45.7%, anger 61.2%, irritability 88.1%, anxiety 51.8%, confusion 46.4%, rejection 24.8%. About 94% of adolescent girls have a problem with premenstrual symptoms. The investigator also had premenstrual symptoms. So, the investigator to interested to assess the premenstrual symptoms and coping strategies among adolescent girls.

1.1 STATEMENT OF THE PROBLEM

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

1.2 OBJECTIVES

1. To assess the premenstrual symptoms and coping strategies among adolescent girls.
2. To correlate the premenstrual symptoms and coping strategies among adolescent girls.
3. To associate the premenstrual symptoms and coping strategies with demographic variables.
4. To create awareness on premenstrual symptoms and coping strategies.

1.3 ASSUMPTION

- Adolescent girls have some knowledge about the premenstrual symptoms and coping strategies.
- Premenstrual symptoms are not uncommon in adolescent girls.
- Premenstrual syndrome is the main reason for less academic performance and school absenteeism among students who suffer from the same.

1.4 DELIMITATION

- The sample size is limited to 30 adolescent girls.
- The duration of study is delimited to one week.
- The limitation of adolescent girls between 15-17 years.
- Adolescent girls who present at the time of data collection.
- Adolescent girls who willing to participated in the study.

2. METHODOLOGY

The present study was to assess the premenstrual symptoms and coping strategies among adolescent girls in a selected setting, Chennai. The sample size was 30 adolescent girls selected through using non-probability convenient sampling technique. Samples were selected from central poly technique college, Taramani. The demographic data were obtained by self-report. Premenstrual symptoms and coping strategies were assessed using a rating scale. The aim and the purpose of this study were explained to the study participants and confidentiality was assured to them. Descriptive and inferential statistics were used to analyze the collected data.

2.1 DESCRIPTION OF THE TOOL

Structured Questionnaire and Likert's rating scale was used to collect data. It consists of three sections.

SECTION A: DEMOGRAPHIC VARIABLES included structured questionnaire to elicit the age, age at menarche, Education, Body mass index, Exercise, Coffee consumption, Dietary habits, Menstrual cycle, Dysmenorrhea.

SECTION B: PREMENSTRUAL SYMPTOMS: Three major symptoms was assessed. Rating scale was used to assess the physiological, psychological and behavioural symptoms of adolescent girls.

- **Physiological Symptoms** included Breast tenderness/swelling, Abdominal bloating, Weight gain, Headache, Dizziness/fainting, Fatigue, Palpitation, Pelvic discomfort and pain, Abdominal cramp, Changes in bowel habits, Increased appetite, Generalized acne and pain, Food cravings (sugar and salt), Skin changes/Rashes/Pimples, Nausea/vomiting, Muscle and joint pain.
- **Psychological Symptoms** included Depressed mood, Anxiety, Irritability, Mood swings, Tension, Loss of concentration, Sleep changes (Insomnia/Hypersomnia), Confusion, Aggression, Hopefulness, Forgetfulness, Easy crying/crying spells.
- **Behavioral Symptoms** included Social withdrawal, Restlessness, Lack of self-control, feeling guilty, Clumsiness, Lack of interest in usual activities, Poor judgement, Impaired work performance, Compulsive behaviour, Obsessional thoughts, Irrational thoughts, Being over sensitive.
- **Scoring and Interpretation**

Rating scale was used to assess the premenstrual symptoms. Scored as never (1), rarely (2), some time (3), very often (4), always (5).

SECTION C: coping strategies included Distraction (Hearing music, reading books, sleeping), Meditation, Isolation, Rest, hearing music, Application of hot water bag, taking medication (NSAIDS), Heat fomentation, rest, pain killers, Antispasmodic drugs, jaggery, eat light foods, rest, increased water intake, Coconut water, Rest, coffee intake, Frequent face washing, increased intake of water, turmeric, Rest and sleep, Relaxation therapy, yoga, meditation, Applying primrose oil.

- **Scoring and Interpretation**

Rating scale was used to assess the coping strategies. Scored as never (1), some time (2), always (3). The maximum score was 36. Classified into poor (< 50%), average (51 – 75%) & good (75 – 100%) coping strategies

2.2 DATA COLLECTION METHODS

The Principal of Poly Technique College gave formal approval. The researcher's self-presentation and information about the nature of the study were explained to the samples to facilitate collaboration in data collection. A declaration of consent was obtained from the samples. The sample that met the criteria was selected using the non-probability sampling methods. The data was obtained from the adolescent girls through self-reporting of demographic variables and a rating scale was used to assess premenstrual symptoms & strategy for coping.

3. RESULT

3.1 Demographic Variables

Majority (63.3%) of the samples were in the age of 17 years, 66.7% were attained menarche at 10-15 years, 63.3% were 2nd year education, 80% had normal body mass index and 70% were irregular exercise, (66.7%) had the habit of coffee consumption, 73.3 % were non vegetarian, 90% had regular menstrual cycle, 96.7% had normal menstrual bleeding and 63.3% had dysmenorrhea.

3.2 Premenstrual Symptoms

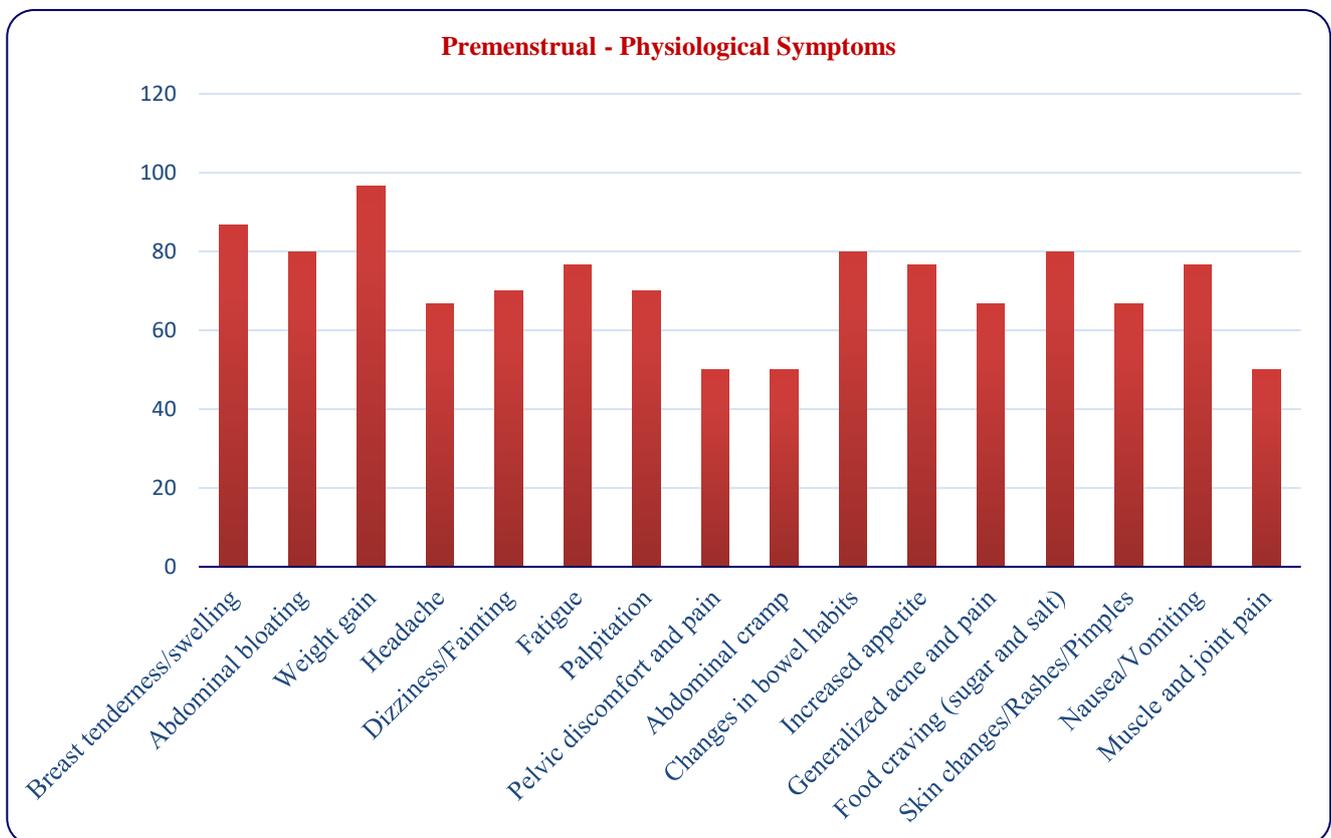


Fig 1: Premenstrual - physiological symptoms

Fig 1 showed that, majority (86.7%) of the samples had breast tenderness/ swelling, 80% had abdominal bloating, 96.7% had weight gaining, 66.7% had headache, 70% had dizziness/ fainting, 76.7% had fatigue, 70% had palpitation, 50% had pelvic discomfort and pain, 50% had abdominal cramp, 80% had changes in bowel habits, 76.7% had increased appetite, 66.7% had generalized acne and pain, 80% had food craving (sugar and salt), 66.7% had skin changes, 76.7% had nausea and vomiting, 50% had muscle and joint pain.

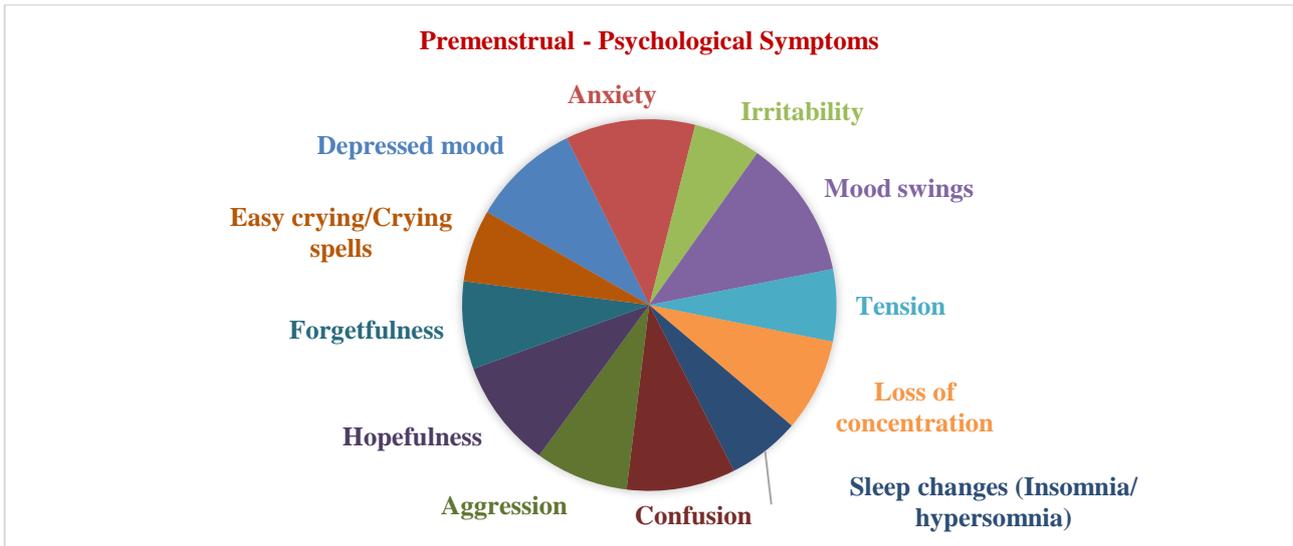


Fig 2: Premenstrual – Psychological Symptoms

Fig 2 showed that, majority (70%) of the samples had decreased mood, 90% had anxiety, 56.7% had irritability, 90% had mood swings, 46.7% had tension, 60% had loss of concentration, 46.7% had sleep changes (insomnia/ hypersomnia), 70% had confusion, 90% had aggression,70% had hopefulness, 56.7% had forgetfulness, 46.7% had easy crying/crying spells.

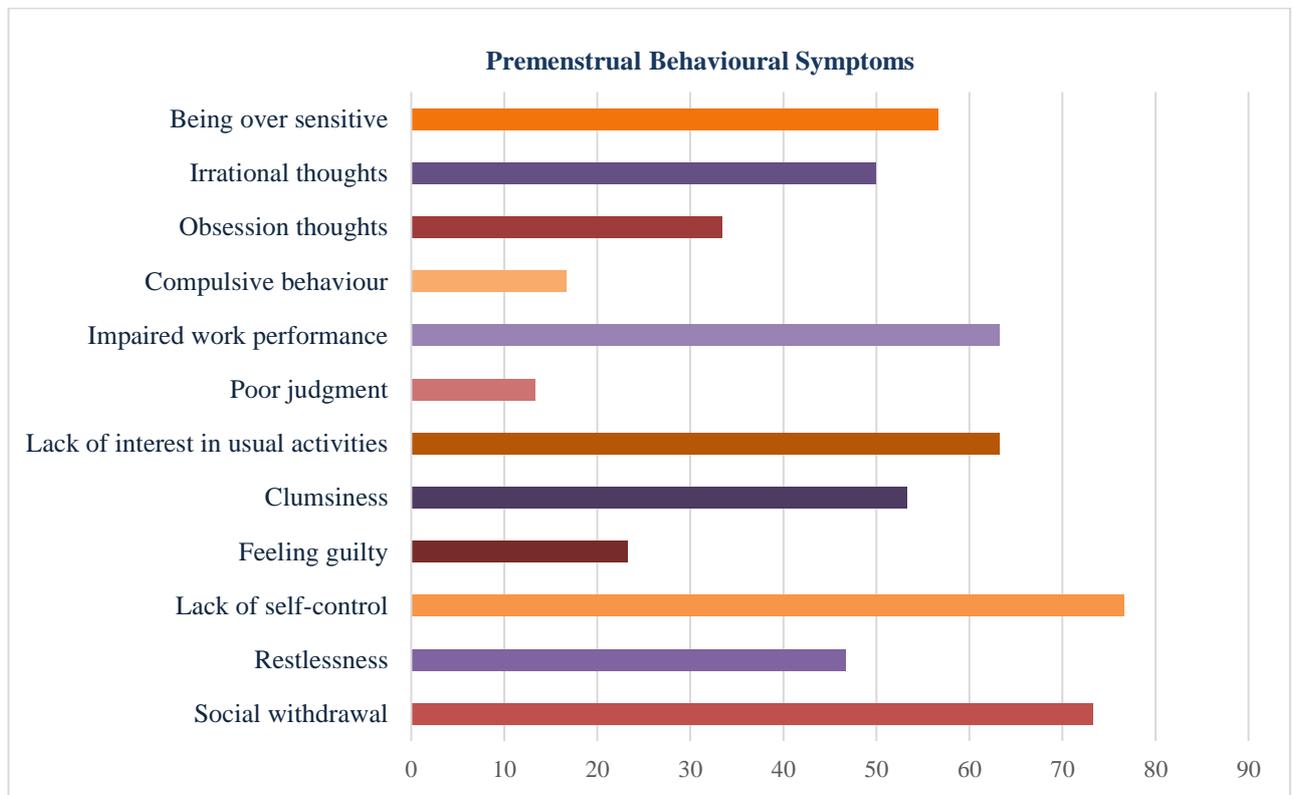


Fig 3: Premenstrual – Behavioural Symptoms

Fig 3 showed that the majority 73.3% of the samples had social withdrawal, 46.7% had restlessness,76.7% had lack of self-control, 23.3% had feeling guilty,53.3% had clumsiness,63.3% had lack of interest in usual activities,13.3% had poor judgment,63.3% had impaired work performance,16.7% had compulsive behaviour, 33.4% had obsession thoughts,50% had irrational thoughts,56.7% of the samples had being over sensitive

**3.3 TABLE 1: PREMENSTRUAL SYMPTOMS WITH COPING STRATEGIES**

S.NO	SYMPTOMS	COPING STRATEGIES	ALWAYS (3)		SOMETIMES (2)		NEVER (1)	
			F	P (%)	F	P (%)	F	P (%)
1.	Anxiety/tension	Distraction (hearing music, reading books, sleeping)	9	30.0	14	46.7	7	23.3
2.	Outburst of anger, bad temper, frustration.	Medication, Isolation	7	23.3	2	6.7	21	70.0
3.	Feeling sad, craving, depression	Rest, hearing music.	11	36.7	9	30.0	10	33.3
4.	Backache, joint and muscle pain, body ache.	Application of hot water bag, taking medication (NSAIDS)	19	63.3	9	30.0	2	6.7
5.	Pain in the pelvic region.	Heat fomentation, rest, painkiller, antispasmodic drugs, jiggery.	8	26.7	3	10.0	19	63.3
6.	Abdominal discomfort (GI symptoms)	Eat light foods, rest, increased water intake.	12	40.0	15	50.0	3	10.0
7.	Oedema, swelling, puffiness, water retention.	Coconut water	11	36.7	-	-	19	63.3
8.	Changes in sleep cycle.	Rest, coffee intake	18	60.0	11	36.7	1	3.3
9.	Skin changes (rashes, acne)	Frequent face washing, increased intake of water, turmeric.	24	80.0	6	20.0	-	-
10.	Fatigue/tiredness	Rest and sleep	10	33.3	13	43.3	7	23.4
11.	Stress	Relaxation therapy, yoga, meditation.	6	20.0	2	6.7	22	73.3
12.	Menstrual cramping	Applying primrose oil.	5	16.7	-	-	25	83.3

Table 1 showed that, always 30% of the samples used coping strategy like hearing music, reading books to relieve anxiety & tension, 23.3% used coping strategy like meditation & isolation to relieve from Outburst of anger, bad temper, frustration, 36.7% taken rest & hearing music to avoid feeling sad, craving & depression, 63.3% applied hot water bag & taking medications to get relief for Backache, joint and muscle pain, body ache, 26.7% used heat fomentation, rest, painkiller, antispasmodic drugs, jiggery to get relief from Pain in the pelvic region, 40% had light food, rest & increased water intake to relieve from Abdominal discomfort, 36.7% had coconut water for Oedema, swelling, puffiness, water retention, 60% had rest, coffee intake for Changes in sleep cycle, 80% had frequent face washing, increased intake of water, turmeric for Skin changes, 33.3% had rest and sleep for Fatigue/tiredness, 20% used relaxation therapy like yoga & meditation for relieving stress, 16.7% of them applied primrose oils for menstrual cramps.

3.4 TABLE 2: CORRELATION OF PREMENSTRUAL SYMPTOMS AND COPING STRATEGIES AMONG ADOLESCENT GIRLS.

S.NO	VARIABLES	CORRELATION COEFFICIENT VALUE
1.	Premenstrual symptoms	r = 0.61689 p = 0.7
2.	Coping strategies	

Table 2: showed that, there was a positive correlation between premenstrual symptoms and Coping strategies at $P < 0.05$ level of significance.

3.5 ASSOCIATION OF PREMENSTRUAL SYMPTOMS AND COPING STRATEGIES WITH DEMOGRAPHIC VARIABLES AMONG ADOLESCENT GIRLS.

There was no statistically significant association between premenstrual symptoms and coping strategies with demographic variables such as age, age at menarche, education, body mass index and exercise, coffee consumption, Dietary habits, menstrual cycle, menstrual bleeding and Dysmenorrhea.

4. DISCUSSION

OBJECTIVES: 1. TO ASSESS THE PREMENSTRUAL SYMPTOMS AND COPING STRATEGIES

Majority (93.3%) of the samples sometimes had physiological and psychological problems, 90% of the samples had behavioural symptoms. majority (43.3%) of the samples always followed coping strategies and 6.7% of the samples sometimes followed coping strategies and 50% followed coping strategies. So, we can infer from the findings that majority of the adolescent girls suffered from premenstrual symptoms and followed some coping strategies.

The present study supported by **Padmavathi (2018)** conducted a study to assess the premenstrual symptoms and coping strategies among adolescent girls. The finding showed that 96% student were having pain in lower abdomen, 93% were having difficulty in concentration, 87% had backache, pain in the thighs and body ache, 83% of them, had pain in breast and 81% were irritability and lower work performance and 78% were fluctuation of mood. About 84% do not blame themselves for this problem, 71% accept it in healthy way that nothing can be done, 70% take hot or cold drinks, 64% do not express their anger on others.

OBJECTIVES: 2 TO CORRELATE THE PREMENSTRUAL SYMPTOMS WITH COPING STRATEGIES.

The correlation between premenstrual symptoms with coping strategies revealed that there was a positive correlation existing between premenstrual symptoms and coping strategies $r = 0.61689$ at $P < 0.05$ level of significance. From the above findings we can infer that the premenstrual symptoms were relieved by using some coping strategies like hearing music, meditation, isolation, rest, application hot water bag, eat light foods, rest, increased water intake, coconut water, frequent face washing and applying primrose oils.

OBJECTIVES: 3 TO ASSOCIATE THE PREMENSTRUAL SYMPTOMS WITH DEMOGRAPHIC VARIABLES

The study findings showed that, there was no statistically significant association between premenstrual symptoms and coping strategies with demographic variables such as age, age at menarche, education, body mass index, exercise, coffee consumption, Dietary habits, menstrual cycle, menstrual bleeding and Dysmenorrhea.

The above findings supported by **Amal, Sanaa, entesarl (2015)**, assessing the premenstrual syndrome and coping behaviour among female nursing students.

5. CONCLUSION

The study aimed to assess the premenstrual symptoms and coping strategies among adolescent girls. The majority of the students suffered from premenstrual syndrome. PMS was common among students at 18-24 years. The most common physical symptoms experienced by nursing students were headache, backache and lower abdominal pain. Students used coping strategies as taking hot/cold drinks, do not express anger to others, and turn to study and forget things.

6. NURSING IMPLICATIONS

Implication was drawn for nursing service, nursing administration, nursing education and nursing research

6.1 NURSING PRACTICE

- The nurses have a vital role to play in rendering teaching program on premenstrual symptoms and coping strategies and this can be facilitated by motivating nurses to educate the women regarding the experts of premenstrual symptoms and coping strategies.
- Nurses can create awareness regarding the premenstrual symptoms and coping strategies among adolescent girls.
- Coping strategies can be incorporated as one of the interventions to relieve premenstrual symptoms among adolescent girls.

6.2 NURSING ADMINISTRATION

- Nurse administrator can plan and organize continuing nursing education program on premenstrual symptoms and coping strategies among adolescents' girls.

6.3 NURSING EDUCATION

- The nurse educator can motivate and educate the students on premenstrual symptoms and coping strategies during this critical posting.
- The nurse educator can encourage the adolescent girls to educate about coping strategies to other adolescent girl.

6.4 NURSING RESEARCH

- The finding of this study can be disseminated through journals and books.

6.5 RECOMMENDATION

- The same study can be conducted in a large scale for a longer period of time.
- Health education program are necessary to provide students with required information for coping in a healthy way with premenstrual syndrome.

6.6 LIMITATION

- There was limitation found by the investigator during the study.

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