IJFANS INTERNATIONAL JOURNAL OF FOOD AND NUTRITIONAL SCIENCES

ISSN PRINT 2319 1775 Online 2320 7876

Research paper UGC CARE Listed (Group -I) Journal Volume 11, Iss 12, Dec 2022

PREVALANCE OF MENSTRUATION AND PROBLEMS FACED BY COLLEGE GOING ADOLESCENT GILRS IN COIMBATORE CITY

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ABSTRACT

Menstrual disorders are a common presentation by late adolescence; 75% of girls experience some problems associated with menstruation including delayed, irregular, painful, and heavy menstrual bleeding, which are the leading reasons for the physician office visits by adolescents. The journey from puberty to maturity is known as adolescence. Menarche is one of the puberty markers, and as such, it is an essential occurrence in the lives of adolescent girls. a prevalence study was conducted among college going females at Coimbatore city with objective to study prevalence of primary menstruation in young females and to examine problems associated with menstruation in selected respondents . The cross-sectional study was conducted by the researcher for the current study, for a period of 3 months (June 2020 to August 2020). The study was performed on a total of 1106 girls and 685 agreed to voluntarily participate in the study. The study it can be identified that most of the respondents are facing issues like backache,

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headache, anxiety, tension during their cycle. And many are facing irregular menstrual cycle. a broad understanding of the sexual and reproductive health issues the adolescents and youth face today is menstrual cycle.

Keywords: Menstruation, adolescent, college girls, menstrual pain, psychological problem, psychical problem, dysmenorrheal.

Introduction

Adolescence is a stage of life that has its own set of health and developmental demands as well as rights. There is a distinction between being a child and becoming an adult in all societies. Between cultures and over time, the transition from infancy to adulthood is defined and recognised differently. It has often been relatively quick in the past in some societies. (Kaplowitz 2006) However, in many nations, this is changing, and the transition from childhood to adulthood is becoming lengthier and more distinct of body fat and the development of secondary sexual characteristics. The growth spurts during early and mid-adolescence is regulated by the complex, inter-related production of a number of hormones. (Kuteyi 1997).

The journey from puberty to maturity is known as adolescence. Menarche is one of the puberty markers, and as such, it is an essential occurrence in the lives of adolescent girls (Laufer 2006)Menarche appears earlier in life as a society's sanitary, nutritional, and economic conditions improve, according to studies. It happens in the majority of females between the ages of 10 and 16, however there is a wide range of variation. Ovulatory cycles typically last between 21 and 35 days. Menstrual flow usually lasts between 2 and 7 days, while most periods last 3 to 5 days. Irregular and prolonged cycles are frequent in the first few years after menarche (Thomas 2001, Hillard 2002).

Dysmenorrhea is a frequent gynaecological disorder characterised by unpleasant uterine cramps. Primary and secondary dysmenorrheas are the two types of dysmenorrhea. Menstrual pain without any pelvic disease is referred to as primary dysmenorrhea. Elevated endometrial prostaglandins and their metabolites are the root cause of these symptoms. [Ziaei et.al. 2001]

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Primary dysmenorrhea is a significant clinical and social issue that affects more than half of all menstrual women.

Because of the various definitions of dysmenorrhea, determining its prevalence is challenging, with estimates ranging from 45 percent to 95 percent. [Harlow er.al 1996] According to a recent systematic assessment of the world literature on chronic pelvic discomfort, dysmenorrhea affects between 17 and 80 percent of women. [Lattee 2006] Other characteristics linked to dysmenorrhea include body mass index (BMI), smoking, early menarche, prolonged menstrual flow, and psychological disorders, according to prevalence studies. [Latee et.al.2006]

Menstrual disorders are a common problem in adolescents. By late adolescence, 75% of girls experience some problem associated with menstruation31. Delayed, irregular, painful and heavy menstrual bleeding are leading reasons for hospital visits adolescents and dysmenorrhea is the leading cause for absenteeism in schools among adolescent girls. (Padmavathi 2012) These disorders are often the source of anxiety for the patients and the families. The common menstrual disorders in adolescents are amenorrhea, abnormal / excessive uterine bleeding, dysmenorrhoea and premenstrual syndrome. (Dangal 2012)

Although menstrual problem is a common gynecological problem in young females but there are limited studies in this subject especially in central India. It is unclear the extent to which young girls are incapacitated each month due to the severity of menstrual pain. Hence, this raises a need to evaluate the menstrual characteristics and prevalence of dysmenorrhea in young college going females in Indore to provide evidences of the severity of the problem.

Thus, a prevalence study was conducted among college going females at Coimbatore city with following objective:

- To study prevalence of primary menstruation in young females and
- To examine problems associated with menstruation in selected respondents.

Review of Literature

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Kural et.al. (2015), carried a research work on "Menstrual characteristics and prevalence of dysmenorrhea in college going girls" with objective to study prevalence of primary dysmenorrhea in young girls and to evaluate associated clinical markers of dysmenorrhea. In a cross-sectional study, data was collected among 310 girls (18–25 years) on age at menarche, presence and absence of dysmenorrhea, dysmenorrhea duration, pre-menstrual symptoms (PMS), family history, menses irregularities, menstrual history, severity grading using visual analogue scale (VAS) using a semi-structured questionnaire. Dysmenorrhea was reported in 84.2% (261) girls and 15.8% (49) reported no dysmenorrhea. Using VAS, 34.2% of girls experienced severe pain, 36.6% moderate and 29.2% had mild pain. Bleeding duration was found to be significantly associated with dysmenorrhea (χ^2 = 10.5; P < 0.05), girls with bleeding duration more than 5 days had 1.9 times more chance of getting dysmenorrhea (OR: 1.9; 95% CI: 1.7–3). Moreover, girls with the presence of clots had 2.07 times higher chance of having dysmenorrhea (OR: 2.07; 95% CI: 1.04–4.1) (P < 0.05). Almost 53.7% girls who had some family history of dysmenorrhea, 90.9% experience the condition themselves (χ^2 = 11.5; P < 0.001). Girls with family history of dysmenorrhea had three times greater chance of having the same problem (OR: 3.0; 95% CI: 1.5–5.8; P = 0.001). Study concluded that Dysmenorrhea is found to be highly prevalent among college going girls. Family history, bleeding duration and presence of clots were significant risk factors for dysmenorrhea.

Omidvar et.al. (2018), made a study on "A study on menstruation of Indian adolescent girls in an urban area of South India". A cross-sectional study was conducted on 536 healthy menstruating females aged 10–19 years. Standardized self-reporting questionnaires were used to obtain relevant data. The categorical data were analyzed using Chi-square or Fisher's exact test. Mean age of menarche was 13 ± 1.1 years with wide variations, i.e., 10–17 years. 73.1% had cycle duration of 21–35 days. More than half of them reported 5–6 days' duration of menstrual blood flow and 12% of the participants had >7 days of flow. Long blood flow duration was more prevalent in early than in late adolescence. 30.1% reported abundant blood loss. 66.8% had dysmenorrhea and no difference was observed between early and late adolescents. Menstrual cycles tend to be shorter in early adolescence period. Study concluded that A comprehensive

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school education program on menarche and menstrual problems may help girls to cope better and seek proper medical assistance.

Methodology of the study

The cross-sectional study was conducted by the researcher for the current study, for a period of 3 months (June 2021 to August 2021). The study was performed on a total of 1106 girls and 685 agreed to voluntarily participate in the study. All the girls belonged to the same socio-economic and dietary background and were of the same age group which constituted a homogenous group and engaged in I UG level of education was selected for the study. Written informed consent was obtained from all the girls before commencement of the study.

Sources of Data

Both the primary and secondary data were collected for the study. The primary data were collected by administering a questionnaire to the respondents that was prepared by the researcher. Secondary data were collected from journals, magazines, books, newspapers, reports of Central and State Government, various publications of International Bodies and websites.

Findings of the study

The researcher has investigated to young college going students specially Ist U.G students regarding their prevalence of menstruation and pain. The findings of the study has been discussed below.

Socio demographic characteristics

The first enquiry made by the researcher on the respondents was their socio and demographic characteristics in which respondent's age, religion and education was studied. Result of this can be seen in Table (1)

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TABLE 1

SOCIO DEMOGRAPHIC CHARACTERISTICS

S. NO	PARTICULARS	FREQUENCY	PERCENTAGE
1	Age		
	16-18 years	235	34.30
	18-20 years	370	54.01
	Above 20 years	80	11.69
	Total	685	100
2	Religion		
	Hindu	402	70.80
	Muslim	180	26.27
	Christian	103	02.93
	Total	685	100
3	Education		
	I U.G	685	100
	Total	685	100
	Total	**685**	**100**

The above table shows the result on socio demographic characteristics of the selected respondents. It can be identified from the study that among the selected respondents the age wise classification showed that 54.01 percent of them were between the age group of 18 to 20 years of age, 34.30 percent were between the age group of 16 to18 years and 11.69 percent were above the age of 20 years of age. The religion wise classification of the respondents was identified under the heads Hindu, Muslim and Christian. About 70.80 percent of the respondents were belonging to Hindu community, 26.27 percent were Muslims and 02.93 percent were belonging to community Christianity. All the selected respondents were studying in Ist year of Under Graduate education.

The study has found that majority of the respondents were belonging to Hindu community and are between the age group of 18-19 years of age.

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Knowledge about Menstruation before Puberty

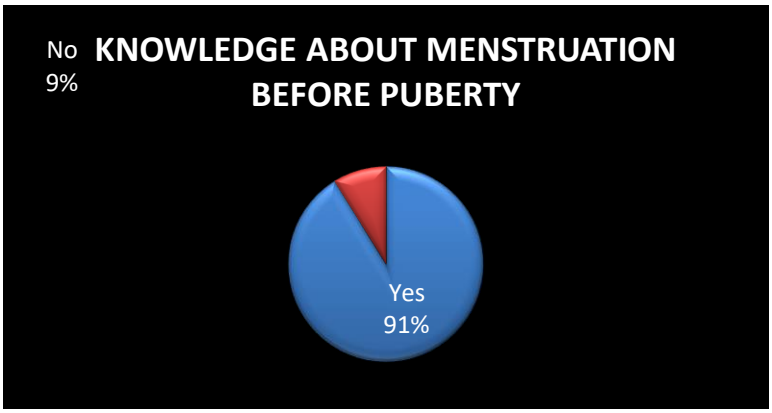
Respondent's knowledge about menstruation before their puberty was examined by the researcher. Result of this is been tabulated in table (2).

TABLE 2

KNOWLEDGE ABOUT MENSTRUATION BEFORE PUBERTY

S. NO	PARTICULARS	FREQUENCY	PERCENTAGE
1	Yes	625	91.24
2	No	060	08.76
	Total	**685**	**100.0**

FIGURE – 1



Being a female child the knowledge on menstruation is necessary in order to examine this the researcher asked the respondents regarding it and the result showed that 91.24 percent of the respondents had the knowledge about menstruation before their puberty and only 08.76 percent were lacking information on it. further the researcher investigated to those respondents who had knowledge on menstruation before their puberty regarding the source which was responsible for their knowledge. Result of this can be identified in table (3)

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TABLE 3

SOURCES OF INFORMATION ABOUT MENSTRUATION BEFORE PUBERTY

S.NO	PARTICULARS	FREQUENCY	PERCENTAGE
1	Relatives	09	1.31
2	Friends	102	14.89
3	TV Advertisement	308	44.96
4	Mother	092	13.43
5	Sister	174	25.41
	Total	**685**	**100.0**

The source of information for the respondents on their knowledge on menstruation before puberty was identified. The result showed that huge number of respondents (44.96 percent) got knowledge on menstruation through TV advertisements. Now a days many napkin advertisement can be seen published in TV ads frequently like whisper, Stayfree etc. These advertisements are highly influencing the younger generation regarding menstruation. Followed by TV 44450 advertisements the next source is sisters. Before the respondents the respondents sisters have got their puberty so through them the respondents have gained knowledge about menstruation, next source flowed by sister are friends at certain age girls starts getting their puberty so through their friends the respondents have gained information about menstruation, followed by mother which was mentioned by 13.43 percent at present modern world the parents are teaching their children about the changes that is been taking place in their body in which menstruation is major changes so by the teaching of their mother the respondents have gained the knowledge about it and finally relatives which is been mentioned by 1.31 percent of the respondents.

The study has found the major influences of menstruation knowledge among the respondents are through TV advertisements and sisters.

Information about puberty of the respondents

The details pertaining about the puberty of the respondents was identified by the researcher. The result is been given in table (4)

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TABLE 4

INFORMATION ABOUT PUBERTY OF THE RESPONDENTS

S.NO	PARTICULARS	FREQUENCY	PERCENTAGE
1	Age of puberty		
	Below 12 years	09	1.31
	12-14 years	496	72.40
	Above 14 years	180	26.29
	Total	685	100.0
2	Frequency of periods		
	Less than 27 days	297	43.35
	30 days once	266	38.83
	30 days and above	122	17.82
	Total	685	100
3	Menstruation lasting period		
	3 days	245	35.77
	3-5 days	312	45.55
	Above 5 days	128	18.68
	Total	685	100.00
4	Timing of heavy bleeding		
	1st day	82	11.97
	2nd day	510	74.45
	3rd day	93	13.57
	Total	685	100.0
5	No. of pads changed in a day		
	Less than 2	245	35.76
	2-3	362	52.84
	More than 3	078	11.38
	Total	685	100.0

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Total	**685**	**100**

FIGURE - 2

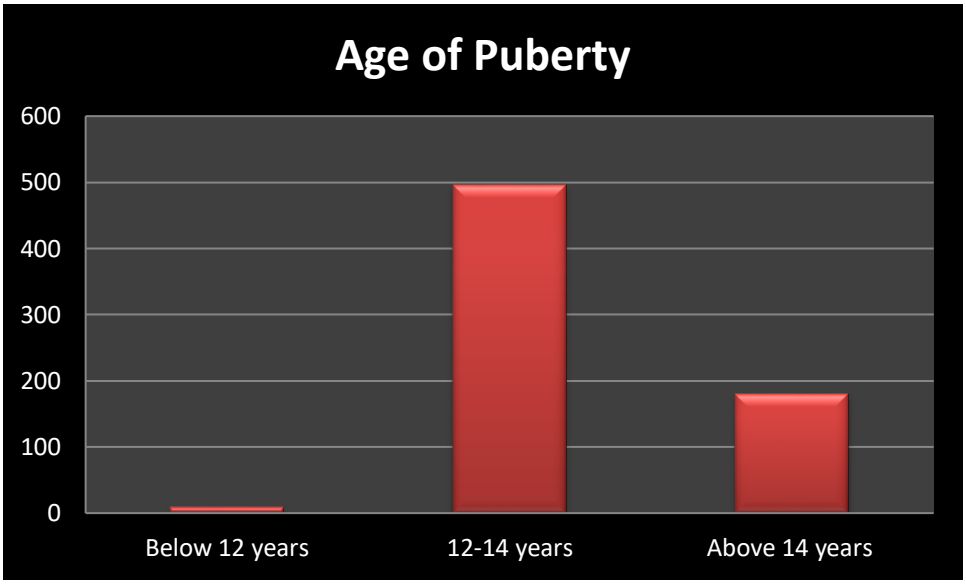
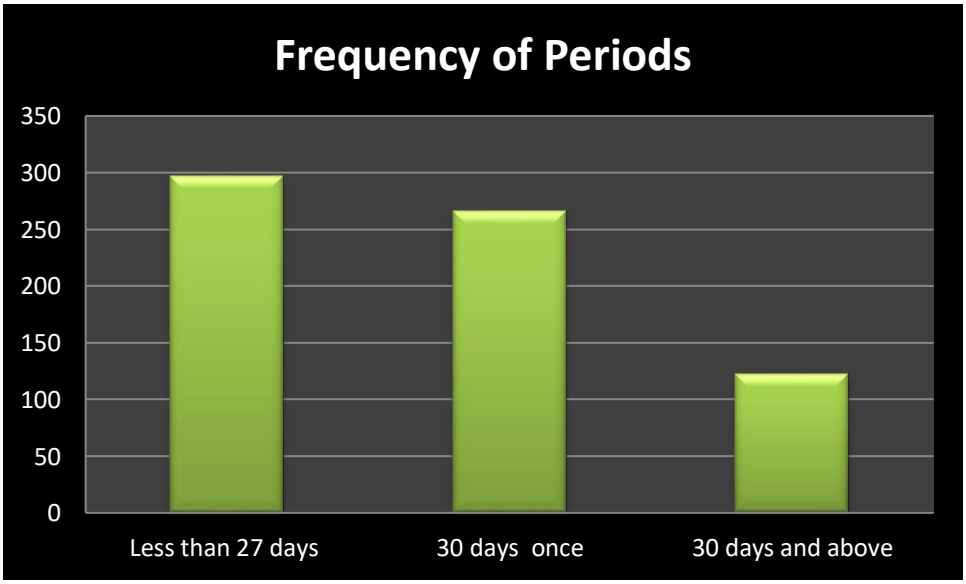


FIGURE – 3



The respondent'sdetails about their puberty were examined by the researcher. It can be identified from that table that 72.40 percent attended their puberty between the age of 12 to 14

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years followed by 26.29 percent who attended their puberty above the age of 14 years and only 1.31 percent attended their puberty below the age of 12 years. Frequency of getting their periods was studied by the researcher the result of which can be seen in Table (4). The result showed that 43.35 percent had period cycle less than 27 days, followed by 38.83 percent who got their periods cycle 30 days once and 17.82 percent got their cycle above 30 days once. The menstruation lasting period for the respondents showed that 45.55 percent had their periods 3 to 5 days followed by 35.77 percent who had their cycle 3 days and 18.68 percent have their periods above 5 days.

Details on the timing of heavy bleeding among the selected respondents showed that 74.45 percent said that they experienced heavy bleeding in their 2nd day of periods, 13.57 percent said they experienced heavy bleeding in their 3rd day of periods and 11.97 percent experienced heavy bleeding in their 1st day. Information on number of pads changed in a day showed that 52.84 percent changed between 2 to 3 pads in a day followed by 35.76 percent who changed less than 2 pads in a day and 11.38 percent changed more than 3 pads in a day.

The researcher has found that most of the respondents have attained their puberty between their age of 12 to 14 years and they had less than 27 days period cycle with majority of them stating their menstruation lasted between 3 to 5 days most of then faced heavy bleeding in their 2nd day of periods and a larger group changed 2 to 3 pads in a day on their periods.

Pain during Menstruation

If the respondents faced any pain during their menstruation was examined by the researcher cent percent stated that they had pain during their menstrual cycle further the researcher examined information on the details on menstrual pain and types of pain relieveing activity carried by the respondents. Result of this can be identified in table (5)

TABLE 5

MENSTRUATION PAIN DETAILS

S.NO	PARTICULARS	FREQUENCY	PERCENTAGE

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1	Details on menstrual pain		
	Before periods	102	14.89
	After periods	018	02.62
	During periods	565	82.48
	Total	685	100.0
2	Types of pain relieving method		
	Medication	085	12.40
	Self-medication	585	85.40
	Rest	010	01.46
	Yoga	005	00.72
	Total	685	100.0
	Total	**685**	**100.0**

The details on the menstrual pain showed that 82.48 percent experienced pain during their periods followed by 14.89 percent had pain before their periods and only 02.62 percent got pain after their periods. The type of pain reliving method followed by the respondent has been examined under the heads medication, self-medication, rest and yoga. About 85.40 percent said they are taking self medication like eating fenugreek in empty stomach, drinking plenty of fluids etc, followed by 12.40 percent stating they go for doctor medication to overcome the pain 1.46 percent said they will rest during the pain and only 0.72 percent said they do yoga like pranayama for reducing pain.

Physical problems and psychological problems faced during menstruation

The respondents experienced various physical problems during their menstruation for which Garret ranking test is used for obtaining mean score and based on the score rank has been assigned.

TABLE 5

PHYSICAL PROBLEMS AND PSYCHOLOGICAL PROBLEMS FACED DURING MENSTRUATION

S.NO	PARTICULARS	MEAN SCORE	RANK

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1	Muscle stiffness,	29.70	5
2	Headache,	52.85	2
3	Cramps,	35.87	4
4	Backache,	45.89	3
5	Fatigue,	27.02	6
6	General aches and pains	60.63	I

The garret ranking showed that for the selected respondents the highest physical problem faced during their menstruation is “General aches and pains” for which “Rank I” has been assigned followed by physical problem “Headache” for this problem “Rank 2” has been assigned and for “Backache” “Rank 3” has been assigned. The least rank has been assigned for problem “Muscle stiffness” and “Fatigue”.

It can be found from the study that most of the respondents are facing aches and pains, backache and headache during their periods.

TABLE 5

PSYCHOLOGICAL PROBLEM

S.NO	PARTICULARS	MEAN SCORE	RANK
1	Tension	68.18	3
2	Crying	86.36	2
3	Loneliness	40.91	4
4	Anxiety	95.45	1
5	Restlessness	13.64	8
6	Irritability	40.00	5
7	Mood swings	34.55	6
8	Depression	22.73	7

The psychological problem of the respondents showed that Rank 1 has been assigned to problem “Anxiety”. Rank 2 has been assigned for problem “Crying”, Rank 3 has been assigned

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for problem "Tension" and least ranks has been allotted for problems "irritability", "Mood swings" and "Depression".

From the study it can be found that respondents face various psychological problems during their menstrual cycle in which the highest problem are anxiety, crying and getting tensed often.

CONCLUSION

Menstruation is common gender related issue faced specifically by women. it is their body nature and hormonal function, during the menstrual cycle women face so many issues like pain, cramps etc. in the study it can be identified that most of the respondents are facing issues like backache, headache, anxiety, tension during their cycle. And many are facing irregular menstrual cycle. a broad understanding of the sexual and reproductive health issues the adolescents and youth face today is menstrual cycle. By training the students to follow simple methods to overcome their problem it will be beneficiary to them in improving their health condition in their future.

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