

# MENSTRUAL CRAMPS IN COLLEGE GIRLS OF SURAT CITY – A STUDY

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## Abstract

Menstruation accompanied by lower abdominal pain is the most common feature taken for granted as a normal monthly inconvenience by most of the females. During each menstrual cycle every month the old uterine endometrial lining breaks under the influence of various chemicals of the body & cause uterine contractions leading to menstrual pain or menstrual cramps. It is mostly confined to adolescents, wherein in most cases generally, it gets cured in later life following pregnancy & vaginal delivery. Yet, this at times turns to be a severe & unbearable health ailment that interferes with the daily activities of a girl & may need medical help.

The present research paper tries to study menstrual cramps, its symptoms, possible causes & effects amongst hundred college girls of Surat City with respect to their day to day food habits, exercise & menstrual cycle.

Keywords: Menstrual Cramps & Menstrual Cycle, Vegetarian & Non-vegetarian food, Physical Exercise

## Introduction

Menstruation is the visible manifestation of cyclic physiologic uterine bleeding due to shedding of the endometrium (Chakravorty, 2009). Menses is a combination of pain and continuous blood flow for couple of days and for many women, handling the days of periods is extremely difficult due to severe pain that they experience. Pain in the belly and pelvic areas that is experienced by a woman as a result of her menstrual period is known as menstrual cramps ([www.medicinenet.com/menstrual\\_cramps/article.htm](http://www.medicinenet.com/menstrual_cramps/article.htm)). When such painful menstruation of sufficient magnitude incapacitates day-to-day activities it is known as Dysmenorrhoea (Dutta, 2009).

It can be of 2 types, Primary Dysmenorrhoea (Spasmodic) & Secondary Dysmenorrhoea. Generally Primary dysmenorrhoea is confined to adolescents while Secondary dysmenorrhoea occurs in late thirties (Dutta, 2009). Around 50-90% adolescents & women of reproductive age experience menstrual cramps. The pain diminishes or disappears with age or after pregnancy (vaginal delivery). The prevalence of dysmenorrhoea is difficult to determine. However, dysmenorrhoea seems to be the most common gynaecological condition in women regardless of age and nationality (Pais & Noronha, 2011). Symptoms of abdominal bloating, frequent and intense cramps, pain below the waistline, or a dull ache that may radiate to the lower back or legs, headache, nausea, diarrhea or constipation, frequent urination, weakness and occasionally, vomiting are observed during such pains. The difference between "menstrual cramps" and "dysmenorrhoea" is not necessarily clear because of the individual difference in rating the severities of the subjective symptoms listed above.

This every month's painful episode causes significant disruption in quality of life and absenteeism. Menstrual pain can be associated with endometriosis or uterine fibroids. Menstrual cramps are often dismissed as a mere nuisance, but new research suggests the monthly misery may be altering women's brains. Alternative therapies, NSAIDS, appropriate diet & exercise can help resolve this problem to some extent.

## Methodology

For the present study, 100 B.Sc. students from various Science Colleges of Surat City- Gujarat, were randomly selected & were asked to fill up a questionnaire with their prior concern. Questionnaire was planned after appropriate literature review wherein various questions related to their food habits; general health profile, menstruation etc., were noted. Later, this information was converted to numerical data in MS Office Excel & was further analyzed.

## Result & Discussion

In the present study out of 100 subjects, 50 girls were found to be experiencing menstrual cramps. Out of these 50 subjects, 29 reported of feeling fatigue, 19 with nausea , 17 suffered from headache & 15 girls experienced vomiting along with menses pain. While there were others who showed more than 1 symptoms along with cramps, like 9 subjects reported to have weakness, headache, nausea & vomiting along with pain, 3 girls suffered headache, nausea & vomiting but not weakness, while still other 3 felt nausea & vomiting but no headache & weakness (Table- 1). During the study we also found 3 girls complaining of headache with nausea & 1 of weakness with headache. Only 1 subject showed no associated symptoms (Table – 1). These associated symptoms define the menstrual cramps to be spasmodic dysmenorrhoea (Padubidri & Daftary, 1991).

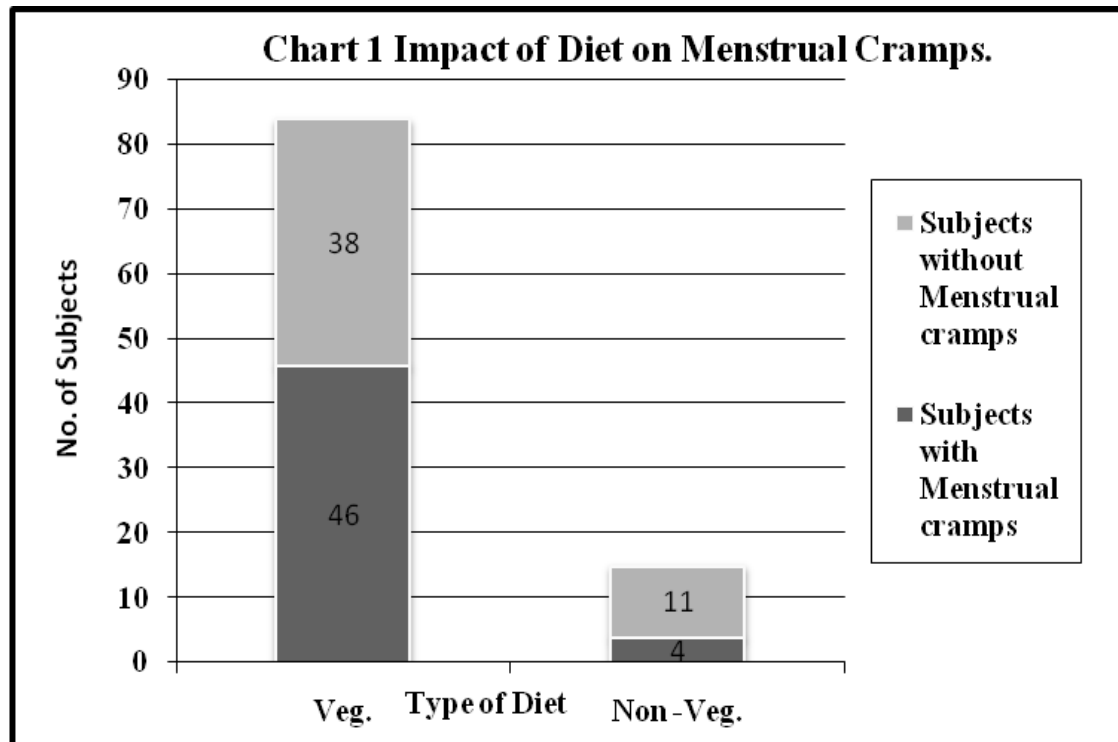
<b>Table – 1</b>	
<b>Symptoms associated with Menstrual Cramps</b>	<b>No. of Girls showing these symptoms</b>
<b>Weakness</b>	<b>29</b>
<b>Nausea</b>	<b>19</b>
<b>Headache</b>	<b>17</b>
<b>Vomiting</b>	<b>15</b>
<b>More than 1 symptoms associated with Menstrual Cramps</b>	
<b>No. of Girls showing more than 1 symptoms</b>	
<b>Weakness, Headache, Nausea, Vomiting</b>	<b>9</b>
<b>Weakness, Headache, Nausea</b>	<b>1</b>
<b>Headache, Nausea, Vomiting</b>	<b>3</b>
<b>Nausea, Vomiting</b>	<b>3</b>
<b>Weakness, Headache</b>	<b>1</b>
<b>Headache, Nausea</b>	<b>3</b>
<b>No symptoms with menstrual cramps</b>	
	<b>1</b>

All the subjects of this study were healthy & were not found to be suffering from any severe diseases. None of the subjects was found to come across irregular periods. The average menarche age was found to be 13 years & menstrual cycle of 30 days. Most of the subjects have reported of 5 days menses & moderate bleeding during that time. This implies surely that the subjects under this study have normal menstrual cycle.

As mentioned earlier, menstrual cramps are one of the many reasons of girls to remain absent in social events, sports practice, laboratory classes as well as college lectures. Here, if we assume that due to such menstrual pain, a girl drops her college studies for 1 day than she does this 12 times per year. During her menstruating life from menarche (considering average age 13) till 20 years of age, if each year she drops 12 days from studies, than she is ought to make a loss of  $12 \times 8 = 96$  days (3 months & 1 week) this means 96 days absence in a college. Apart from these days, she might be losing many days due to unexpected illness, some social events or other issues. Also it's an additional burden socially for those who are closely related to the sufferer & a matter of worry every month. If this statistics is applied to even 25% of the present subjects, i.e. 25 girls out of 100, who experience pain, then 2400 days ( $25 \times 96$ ) are wasted. Those who go through severe pain for 2 days will still make a major loss of 24 days/year, i.e. 192 days (6 months & 4 days) in 8 years. In one of the studies 51% women reported limitation of activities and 17% reported absenteeism due to dysmenorrhoea (Daywood, 2006). Even if these girls who come across menstrual pain avoid remaining absent, still they are not in a healthy state to concentrate or learn. But it's interesting to note that during our study we found that the subjects were not willing to undergo medication as they had accepted menstrual cramps to be a part of their life.

Many studies suggest that regular exercises can help reduce menstrual pain. When we analyzed the data, out of 100 respondents, only 11 girls were found to be doing exercise, 05 girls doing yoga & 02 girls doing both regularly. As per Hightower (1997) those who exercise show less pain, but surprisingly here these 18 girls showed menstrual cramps. Although they complaint of pain, but the associated symptoms were found to be nil or less amongst these compared to those 82 respondents who were not doing exercise daily.

Low fat purely vegetarian food can work as hormone-balancing diet & reduce menstrual cramps ([http://www.endo-resolved.com/diet\\_research.html](http://www.endo-resolved.com/diet_research.html)). In present study, 15 subjects were found to be non-vegetarian and remaining 85 were vegetarians (not eating egg & any type of meat) Also, out of the above mentioned 50 girls, who experience menstrual cramps, 46 girls are vegetarian & 4 are non-vegetarian (chart – 1). But this dietary difference does not seem to be of much help in decreasing the pain factor nor diminishing other associated symptoms nor worsening the problem. Infact, out of those 9 subjects who showed all the 4 associated symptoms (Table – 1) along with menstrual pain as mentioned above, 8 are vegetarian & only 1 is non-vegetarian. Further detailed research can throw more light in this area. Also the subjects were found to consume more fast food & less - irregular intake of fruits & green vegetables. The water intake was not sufficient too. Thus the girls are lacking sufficient anti-oxidants, micro-nutrients & necessary minerals too which might also be one of the confounding factor for severe cramps.



#### Conclusion

Looking to the monthly trouble faced by large mass of women & its impact on their daily life, menstrual cramps cannot be neglected & demands in-depth study. Also there appears to be underuse of currently available over-the-counter analgesics and prescription medications, or there is insufficient dissemination of information about primary dysmenorrhoea to targeted young populations. A thorough understanding of the prevalence & severity of dysmenorrhoea in Gujarat as well as India is essential for the provision of effective health care service for the women.

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