

## PREMENSTRUAL SYNDROME (PMS) THE MALADY AND THE LAW

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### ABSTRACT

A study was conducted in 96 females suffering from PMS. Behavioral symptoms appearing during PMS were noticed. It was found that there is a substantial link between PMS and behavior alterations. Depression, aggression, irritability etc. were recognized as extremely common symptoms of the syndrome. Considering at this point, these psychological symptoms associated with PMS might form a plea of insanity for some female offenders.

**KEY WORDS:** Premenstrual syndrome, Behavioral symptoms

### INTRODUCTION

PMS is a psycho-neuro-endocrinal disorder of unknown etiology, often noticed just prior to menstruation [1]. There is a cyclic reappearance of a large number of symptoms during the last 7-10 days of menstrual cycle which are not caused by any organic disease.

Various studies have shown appearance of significant behavioral symptoms - depression, aggression, agitated depression and other symptoms like irritability etc. during PMS. The nature of behavioral changes or symptoms, which perhaps are the focus of the link with criminal law, has been studied for about 30 years. Some research focuses on the fact that the menstrual cycle is in itself influenced by stress to such a large extent and thus that the relationship between behavioral changes and premenstrual changes is complex and multidirectional [2]. One such study in the United States of America observed that 79% of women report experiencing emotional changes such as mood swings, irritability, anger and depression when they have PMS. And men are perceptive when it comes to PMS and its effect on women in their lives - 84% of men report that women are close to experience the emotional changes of PMS [3].

As per this study, women believe that their personal relationship suffer the most as a result of the emotional changes of PMS. The survey shows

that 72% of women feel that PMS negatively affects their relationship with their husbands/significant others and 62% of them feel it negatively affects their relationship with their children [3]. Dalton (1959) found that 46% of all admissions in psychiatry ward and 53% of attempted suicides were during menstruation or pre-menstruation [4].

A strong relationship between psychiatric illness especially depression and severity of PMS was confirmed [5]. In a study of prison inmates it was found that out of a group of 42 women who had committed crimes of violence, the crime of 25 (62%) of women had taken place in pre-menstruating and one at the end of menstrual phase [6].

### MATERIAL AND METHODS

Ninety-six, self referred females having PMS in the age group of 18-45 years, having regular, normal menstrual cycle ranging 21-35 days, attending premenstrual clinic of Obstetrics & Gynecology, Rajindra Hospital, Patiala and Pharmacology Department of Govt. Medical College, Patiala were taken.

A randomized single blind study was done. Survey of behavioral symptoms - depression, aggression, agitated depression, irritability, mood swings etc. were done. Premenstrual tension syndrome (PMTS) self rating scale consisting of 36 questions [7] were answered by encircling Yes/

No by patient twice, once in premenstrual phase and once in post- menstrual phase. Observations related to behavioral symptoms -depression, aggression and agitated depression were then analyzed.

**OBSERVATIONS**

The present study consists of 96 females suffering from PMS.

Out of 96 females, 37.5% belongs to the age group of 18-24 years, 41.67% in the age group of 25-34 years and 20.83% in the age group of 35-45 years. In the age group of 35-45 years, out of 20 patients, 80% had depression, 80% had aggression and 80% had agitated depression and 100% had other symptoms as shown in table 1.

In study group of 96 females, 37.5% were

married, 62.5% were unmarried. In married group all the symptoms were more as shown in table 2.

Occupation wise distribution of study group consisted of maximum number of nurses comprising 41.6% and minimum of students comprising 4.16% of total study cases. Out of 12 housewives, 100% had depression, 100% had aggression and 100% had agitated depression and 100% had other symptoms. Among 4 students, all had depression, aggression, agitated depression and other symptoms. Same is with service women, out of 8 service women; all had depression, aggression, agitated and all other behavioral symptoms as shown in table 3.

In table 4, parity wise distribution has shown. Out of 36 married females, 33.3% had no children, 55.5% had 1 or 2 children and 11.1% had >2

Table 1 Age wise Distribution

Age(in years)	Study Cases		Depression		Aggression		Agitated depression		Others	
	No.	%age	No.	%age	No.	%age	No.	%age	No.	%age
18-24	36	37.5	20	55.5	36	100	20	55.55	28	77.77
25-34	40	41.67	16	40	16	40	12	30	36	90
35-45	20	20.83	16	80	16	80	16	80	20	100
Total			96		100		52		68	

Table 2 Marital Status

MaritalStatus	StudyCases		Depression		Aggression		Agitated depression		Others	
	No.	%age	No.	%age	No.	%age	No.	%age	No.	%age
Married	36	37.5	24	66.6	28	77.77	24	66.66	36	100
Unmarried	60	62.5	28	46.6	44	73.33	28	46.66	48	80
Total	96	100	52		72		52		84	

Table 3 Occupation wise Distribution

Occupation	Study cases		Depression		Aggression		Agitated depression		Others	
	No.	%age	No.	%age	No.	%age	No.	%age	No.	%age
Doctor	20	20.83	4	20	4	20	4	20	20	100
Nurse	40	41.66	16	40	32	80	16	40	28	70
Teacher	12	12.5	8	66.66	12	100	8	66.66	8	66.66
Housewife	12	12.5	12	100	12	100	12	100	12	100
Student	4	4.16	4	100	4	100	4	100	4	100
Service	8	8.33	8	100	8	100	8	100	8	100
Total	96	100								

Table 4 Parity Status

No. of Children	Study cases		Depression		Aggression		Agitated depression		Others	
	No.	%age	No.	%age	No.	%age	No.	%age	No.	%age
No Child	12	33.33	4	33.33	8	66.66	4	33.33	12	100
1 or 2	20	55.55	16	80	16	80	16	80	20	100
>2	4	11.11	4	100	4	100	4	100	4	100
Total	36	100								

children. Out of 4 females having >2 children, 100% had depression, 100% had aggression, 100% had agitated depression and 100% had other symptoms.

**DISCUSSION**

In present study, 96 females suffering from PMS were observed for various behavioral symptoms occurring during PMS.

In this study, out of total 96 cases, maximum behavioral affection was noticed in females with in the age group of 35-45 years. Depression and agitated depression were 80%. Dalton suggested more incidence of PMS in women >30 years of age in comparison to younger women [8].

Any significant correlation between marital status and PMS has not been accounted. According to this study more behavioral symptoms were noticed in married females among which aggression was maximum i.e. 77.77%.

According to Freedman, 1985[1], housewives and women with less education report more premenstrual symptoms than those employed or better educated. Likewise is this study, housewives were reported maximum (100%) behavioral affection during PMS whereas better educated females like doctors were reported with only 20% symptoms. Dalton (1984)[9] found that incidence of PMS has been more in women with more parity. In present study, it was found same that women with more parity i.e. having >2 children were reported with 100% changes in behavioral symptoms during PMS whereas women with no child were having very less (33.33 %) depression and agitated depression.

**CONCLUSION**

From the present study, it has been shown that there is appearance of marked behavioral changes like depression, aggression, irritability, mood swings etc. during PMS. These behavioral

changes affect some females to such as extent that they act uncharacteristically and commit minor to major crimes which can turn into unlawful behaviors. If the criminal behavior is associated with hormonal changes of female reproductive cycle, their findings could be admissible in criminal trials of female offenders. Even psychological symptoms associated with menstruation might form a plea of insanity for some female offenders.

**BIBLIOGRAPHY**

1. Friedman DE, Laffe A. Influence of life style on the premenstrual syndrome. 1 *Reprod. Med.* 1985; 30:715.
2. Harry H, Balcer CM. Menstruation and crime: A critical review of literature from the clinical criminology perspective. *Behavioral Science and the law*, 1987; 5:684.
3. Premenstrual syndrome has come a long way. Report on the Roper Starch survey about attitudes and awareness of PMS.
4. Dalton K. Menstruation and acute psychiatric illness. *British Medical Journal* 1959; 148-149.
5. Clarie AW. Psychiatric and social aspects of premenstrual complaint. *Psychol. Med. Monograph (Supplement 4)*. London. Cambridge Univ. Press, 1983.
6. Mortan JH, Addison HRG, Hunt L, Sullivan JJ. A clinical study of premenstrual tension. *Am 1 Obstet Gynecol* 1953; 65: 1182.
7. Steiner M, Haskett RF, Carroll BL. Premenstrual tension syndrome the development of research diagnostic criteria and new rating scale. *Acta Psychiatr. Scand* 1980; 62:177-191.
8. Dalton K. *The premenstrual syndrome - Springfield, Ill. Charles C. Thomas*, 1964.
9. Dalton K. *The premenstrual syndrome and progesterone therapy*. London, William Heinemann Medical Books 1984.