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## Physical and mental effects of menstruation cycle in relation to ten diverse professions among females of district Kohat, KP Pakistan

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### Abstract

Menstruation period is also known as monthly or simply it can be called as periods. This period is characterised by discharge of blood along with menstrual fluid. About 35-36 ml blood is released during menstrual flow. A large number of female also exhibit some other clinical conditions like breast tenderness, mood swings, appetite, irritability fatigue and many more. A Total of 600 females from 10 diverse occupations were included in this study. Data was collected from, security guards, Tailors, Households, Maids, Paramedical staff, Social workers, Teachers, Students, lady Police and House wives. Physical and mental symptoms like backache, migraine, fatigue, abdominal cramps, mood swings, breast tenderness, vaginal dryness and feelings of appetite were questioned. Among all respondents' backache was observed as more frequent clinical symptom i.e. among 28.50% respondents as compare to others symptoms. Next more prevalent issue was fatigue (among 27.50% respondents) and mood swings (among 17.83% respondents). Abdominal and vaginal cramps were observed among 8.83% respondents, migraine was observed among 7.83% respondents, appetite in 3.83%, and vaginal dryness among 3.00% while Breast tenderness was observed among 2.66% respondents during menstruation period. This study revealed that backache and fatigue are the most common clinical conditions that a female suffer no matter if she belongs to either of the profession. While these conditions are followed by abdominal cramps and migraines. Vaginal dryness, breast tenderness and appetite are the least common conditions during menstruation period in any of the professional.

**Keywords:** Menstrual period, menstrual syndrome, symptoms, professions

### 1. Introduction

Menstruation period is also known as monthly or simply it can be called as periods [1]. This period is characterised by discharge of blood along with menstrual fluid [2]. About 35-36 ml blood is released during menstrual flow [3]. A large number of females also exhibit some other clinical conditions like breast tenderness, mood swings, appetite, irritability fatigue and many more [4]. These conditions are sometime called menstrual syndrome [3]. In most of the cases menstruation periods are very painful, characterise with abdominal and vaginal cramps, this condition is called Dysmenorrhea or it is also known as aching periods [5,6]. Menstruation periods varies in relation to physical activities of a female [7, 8]. Most of the female feel change in moods and also a sort of mental disturbance before and during menstruation [9]. The objective of the research work was to find out Physical and mental effects of menstruation cycle in relation to ten diverse professions among females of district Kohat, KP Pakistan.

### 2. Materials and Methods

From March 2016 to June 2016 a total of 600 Females from 10 diverse occupations were included in this study. After sharing the importance of the study and seeking consent all of them were investigated for the effects of physical and mental activity on the duration of menstruation period. Data was collected from Security guards Tailors Households Maids Paramedical staff Social workers Teachers Students lady Police and House wives. Physical and mental symptoms like Backache Migraine Fatigue Abdominal Cramps Mood Swings Breast Tenderness Vaginal dryness and feelings of appetite were questioned. Female respondents were given questionnaires to be filled.

Those who were illiterate, questionnaire were filled by an oral investigation by a female researcher. Privacy of the respondents was kept confidential to avoid any ethical issue.

**3. Results**

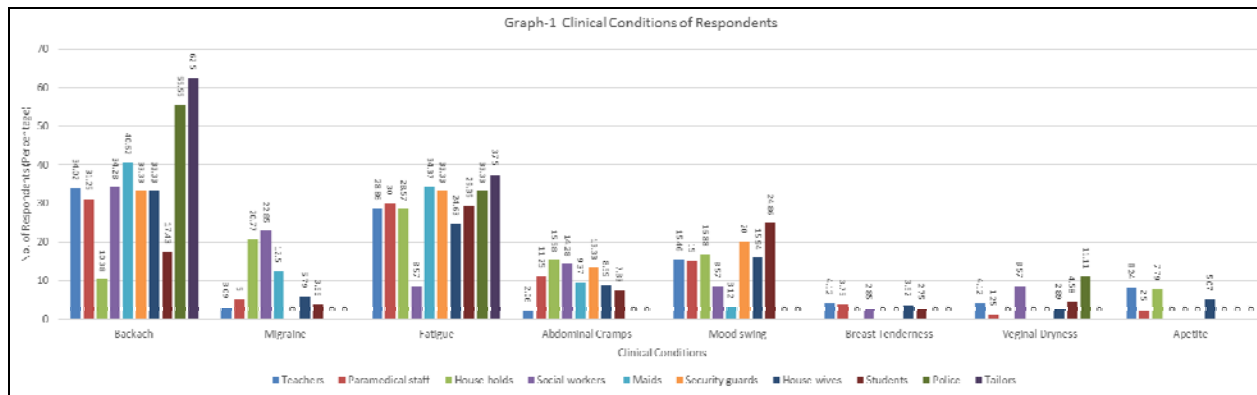
**3.1 Physical and mental effects of menstruation in relation to different profession of females**

About 97/600 respondents of this study were teachers by profession. Among them 33/97 reported backache, 3/97 reported migraine, 28/97 reported fatigue, 2/97 reported abdominal and Vaginal cramps, 15/97 reported mood swings, 4/97 reported breast tenderness, 4/97 reported vaginal dryness while 8/97 reported appetite during menstruation period. A total of 80/600 respondents of this study were paramedical staff by occupation, among them 5/8 reported Backache, 4/8 reported migraine, 24/8 reported fatigue, 9/8 reported abdominal and vaginal cramps, 12/8 reported mood swings, 3/8 reported breast tenderness, 1/8 reported vaginal dryness while 2/8 reported appetite during menstruation period. About 77/600 household unmarried girls were included in this study, they were jobless household respondents. Out of them 8/77 reported Backache, 16/77 reported migraine, 22/77 reported fatigue, 12/77 reported abdominal and Vaginal cramps, 13/77 reported mood swings, No one reported breast tenderness and Vaginal dryness while 2/8 reported appetite during menstruation period. About 35/600 respondents were social workers by their profession. among them 12/35 reported backache, 8/35 reported migraines, 3/35 reported fatigue, 5/35 reported abdominal and vaginal cramps, 3/35 reported mood swings, 1/35 reported breast tenderness, 3/35 reported vaginal dryness

while no one reported appetite during menstruation period. About 32/600 maids were included in this study. Among them 13/32 reported backache, 4/32 reported migraines, 11/32 reported fatigue, 3/32 reported abdominal and vaginal cramps, 1/32 reported mood swings, No one reported breast tenderness, vaginal dryness and appetite during menstruation period. About 15/600 respondents were security guards by their profession among them 5/15 reported backache, no one migraines, 5/15 reported fatigue, 2/15 reported abdominal and vaginal cramps, 3/15 reported mood swings, while No one reported breast tenderness, vaginal dryness and appetite during menstruation period. A total of 138/600 respondents were house wives by their occupation. among them 46/138 reported backache, 8/138 reported migraines, 34/138 reported fatigue, 12/138 reported abdominal and vaginal cramps, 22/138 reported mood swings, 5/138 reported breast tenderness, 4/138 reported vaginal dryness while 7/138 reported appetite during menstruation period. About 109/600 female students were included in this study, out of them 19/109 reported backache, 4/109 reported migraines, 32/109 reported fatigue, 8/109 reported abdominal and vaginal cramps, 38/109 reported mood swings, 3/109 reported breast tenderness 5/109 reported vaginal dryness while no one reported appetite during menstruation period. About 9/600 Lady police respondents were included in this study, out of them 5/9 reported backache, 3/9 reported fatigue, 1/9 reported vaginal dryness while no one any other symptom during periods. Out of 8/600 female tailors 5/8 reported backache while 3/8 reported fatigue; no one highlighted any other symptom (Table-1) (Graph-1).

**Table 1:** Physical and mental effects of menstruation in relation to different profession of females

Professions	Total No. of Respondents	Side Effects							
		Backache	Migraine	Fatigue	Abdominal Cramps	Mood swing	Breast Tenderness	Vaginal Dryness	Appetite
Teachers	97	33	3	28	2	15	4	4	8
Paramedical staff	80	5	4	24	9	12	3	1	2
Households	77	8	16	22	12	13	0	0	6
Social workers	35	12	8	3	5	3	1	3	0
Maids	32	13	4	11	3	1	0	0	0
Security guards	15	5	0	5	2	3	0	0	0
House wives	138	46	8	34	12	22	5	4	7
Students	109	19	4	32	8	38	3	5	0
Police	9	5	0	3	0	0	0	1	0
Tailors	8	5	0	3	0	0	0	0	0
Grand Total	600	171	47	165	53	107	16	18	23

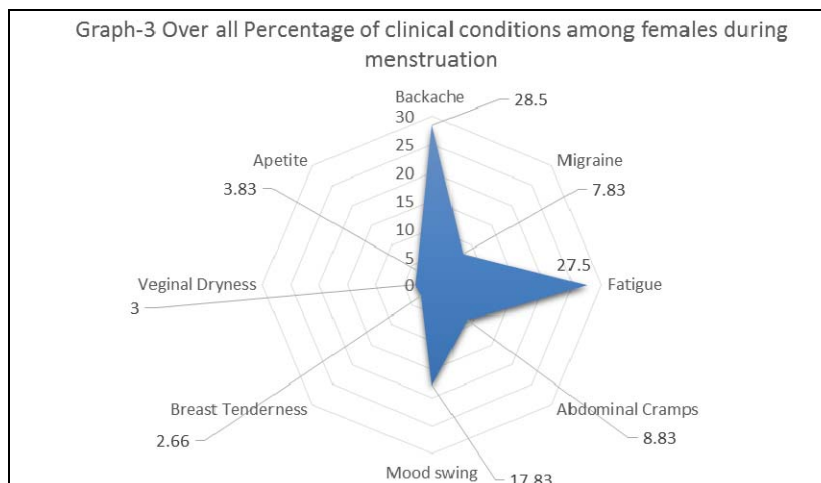


**Graph 1:** Clinical Conditions of females in relation to different professions

### 3.2 Over all Percentage of clinical conditions among females during menstruation

Among all respondents backache was observed as more frequent clinical symptom i.e. among 28.50% respondents as compared to others symptoms. Next more prevalent issue was fatigue (among 27.50% respondents) and mood swings

(among 17.83% respondents). Abdominal and Vaginal cramps were observed among 8.83% respondents, Migraine was observed among 7.83% respondents, appetite in 3.83%, and vaginal dryness among 3.00% while Breast tenderness was observed among 2.66% respondents during menstruation period.



### 4. Conclusion and Discussion

Current study is in agreement with the study of Russell [7] and Bernstein [8] who reported that physical and mental activities has an effect on the duration of menstrual period. This study revealed that Backache, Fatigue and mood swings were reported most frequent symptoms during menstrual period in teachers. This might be due to that major activity of the teachers is to be stuck to the white board for teaching and handle students of different mental level, in periods it is more difficult to withstand with such activities. Study of Paramedical staff disclosed that fatigue and mood swings were the common symptoms of them during menstrual period. A percentage of household unmarried female were found with Migraine, Abdominal and Vaginal cramps and mood swings. Backache was the most prevalent problem with social workers during menstrual period. Maids were observed abdominal cramps and backache in relation to their nature of the job. Backache and fatigue was reported by female security guards as most prevalent clinical condition. House wives and students reported same symptoms i.e. backache, fatigue, mood swings, Abdominal and Vaginal cramps as more common clinical conditions during periods. Backache was major issue with Lady Police while backache and fatigue both were common in female tailors. This study revealed that backache and fatigue are the most common clinical conditions that a female suffer no matter if she belongs to either of the profession, these findings are parallel to the study of Osayande and American College of Obstetricians and Gynaecologists [5, 6]. While these conditions are followed by abdominal cramps and migraines. Vaginal dryness, breast tenderness and appetite are the least common conditions during menstruation period in any of the professional.

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### 6. References

1. Women's Gynecologic Health. Jones & Bartlett Publishers. 2011, 94. ISBN 9780763756376.
2. Menstruation and the menstrual cycle fact sheet. Office of Women's Health. December, 2014. Retrieved 25 June 2015.
3. Ziporyn, Karen J, Carlson, Stephanie A. Eisenstat, Terra the new Harvard guide to women's health. Cambridge, Mass.: Harvard University Press, 2004. ISBN 0-674-01343-3
4. Premenstrual syndrome (PMS) fact sheet. Office on Women's Health. December 2014. Retrieved 23 June 2015.
5. Osayande AS, Mehulic S. Diagnosis and initial management of dysmenorrhea. American family physician March 2014; 89(5):341-6.PMID 24695505.
6. American College of Obstetricians and Gynecologists (Jan 2015). FAQ046 Dysmenorrhea: Painful Periods (PDF). Retrieved 26 June 2015.
7. Bernstein L, Ross RK, Lobo RA. The effects of moderate physical activity on menstrual cycle patterns in adolescence: implications for breast cancer prevention. Br J Cancer. 1987; 55:681-5.
8. Russell JB, Mitchell D, Musey PL. The relationship of exercise to anovulatory cycles in female athletes: hormonal and physical characteristics. Obstet Gynecol 1984; 63:452-6.
9. Premenstrual syndrome (PMS) fact sheet. Office on Women's Health. December, 2014. Retrieved 23 June 2015.