Health Related Quality of Life Among Women With Premenstrual Syndrome and Premenstrual Dysphoric Disorder

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INTRODUCTION

- Premenstrual Syndrome (PMS) and Premenstrual Dysphoric Disorder (PMDD) occurs during the luteal phase of the menses, and it can significantly affect women's health related quality of life (HRQOL).
- Studies have shown 20% of women meets the subclinical criteria for PMS and up to 10% report a significant disruption in their daily activities.[1]
- Similarly, up to 76% of women who are diagnosed with PMDD also have a lifetime history of depression.[2]

RESULTS

- The prevalence of moderate to severe PMS was 16% and PMDD was 3.8% according to DSM-IV-TR criteria.
- Majority (46.2%) of them were 18 to 30 years of age, had college and higher education (79.2%), were married (61.1%), and reported of using contraception (60.9%).
- PMS had highest impact on women's social life (73.7%) and work efficiency (50%).
- Whereas PMDD had highest impact on women's home responsibilities (55.6%).
- More women with moderate/severe PMS reported anger/irritability, decreased interest in work activities, physical symptoms resulting in breast tenderness, headache and joint muscle pain (p<0.05).
- Fatigue/Lack of energy and decreased interest in social activities was most common among women with PMDD.
- Majority of women reported level of menstrual pain negatively impacting their work, enjoyment of leisure activities and daily life (p<0.05).

CONCLUSIONS

- The prevalence of moderate/severe PMS was 16% whereas of PMDD was 3.8% among Bahamian women.
- Recognizing PMS and PMDD in Bahamian women will help health professionals to effectively manage and improve their HRQOL.

REFERENCES

1. Walsh S, Ismaili E, Naheed B, O'Brien S. Diagnosis, pathophysiology and management of premenstrual syndrome. The Obstetrician & Gynaecologist 2015; 17:99–104.

2. Bhatia S, and Bhatia SK. Diagnosis and Treatment of Premenstrual Dysphoric Disorder. Am Fam Physician 2002; 66:1239-48,1253-4

OBJECTIVES

- To examine the prevalence of PMS and PMDD and its impact on HRQOL.

Table 1. Demographic characteristics of the study participants

| Variables	Mild PMS (n=168)	Moderate/ Severe PMS (n=38)	PMDD (n=9)	p-value
Age in Years (n, %)				
<30 years	80 (47.9)	24 (63.2)	4 (44.4)	0.226
30 -40 years	63 (37.7)	10 (26.3)	4 (44.4)	
>40 years	24 (14.4)	4 (10.5)	1 (11.1)	
Education (n, %)				
High School	26 (15.5)	3 (7.9)	0 (0.0)	0.556
College	46 (27.4)	11 (28.9)	3 (33.3)	
Masters and above	96 (57.1)	24 (63.2)	6 (66.7)	
Marital Status (n, %)				
Single	64 (38.1)	7 (18.4)	1 (11.1)	0.008
Married	104 (61.9)	31 (81.6)	8 (89.9)	
Employment (n, %)				
Employed	140 (83.3)	25 (65.8)	4 (44.4)	0.002
Unemployed	28 (16.7)	13 (34.2)	5 (55.6)	
Income (n, %)				
<$30,000	66 (43.1)	17 (54.8)	4 (50.0)	0.473
≥ $30,000	87 (56.9)	14 (46.2)	4 (50.0)	
Health (n, %)				
Excellent/Very good	75 (45.2)	19 (51.4)	2 (22.2)	0.011
Good	77 (46.4)	13 (35.1)	3 (33.3)	
Fair/poor	14 (8.4)	5 (13.5)	4 (44.4)	
Age at Menarche (Years) (Mean ± SD)	12.3 (1.9)	11.9 (1.7)	12.2 (1.9)	0.646
Regularity of Cycle (n, %)				
Yes	110 (66.3)	18 (47.4)	5 (55.6)	0.086
No	56 (33.7)	20 (52.6)	4 (44.4)	
Length of Cycle (n, %)				
< week	122 (74.4)	25 (67.6)	5 (55.6)	0.362
≥ week	42 (25.6)	12 (32.4)	4 (44.4)	
Length of Cycle (Days) (Mean ± SD)	5.4 (2.5)	5.7 (2.2)	8.2 (8.3)	0.022
Endometriosis (n, %)				
Yes	166 (98.8)	37 (97.4)	9 (100.0)	0.741
No	2 (1.2)	1 (2.6)	0 (0.0)	
Contraceptive Use (n, %)				
Yes	98 (58.3)	24 (63.2)	9 (100)	0.042
No	70 (41.7)	14 (36.8)	0 (0.0)	
Length of Contraceptive use (Months) (Mean ± SD)	19.4 (37.4)	16.0 (40.0)	0 (0.0)	0.295

Figure 1. Impact of PMS and PMDD on pain
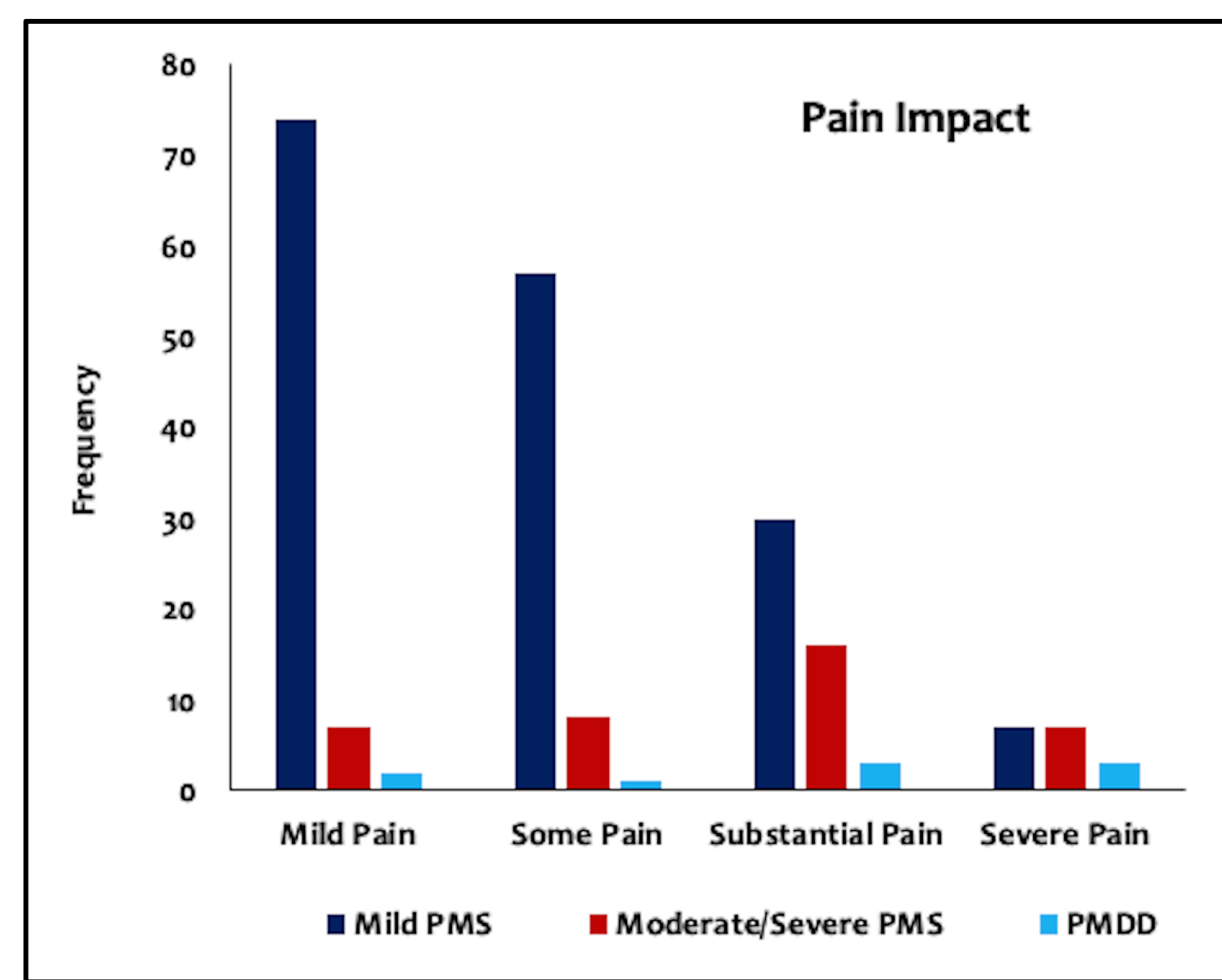
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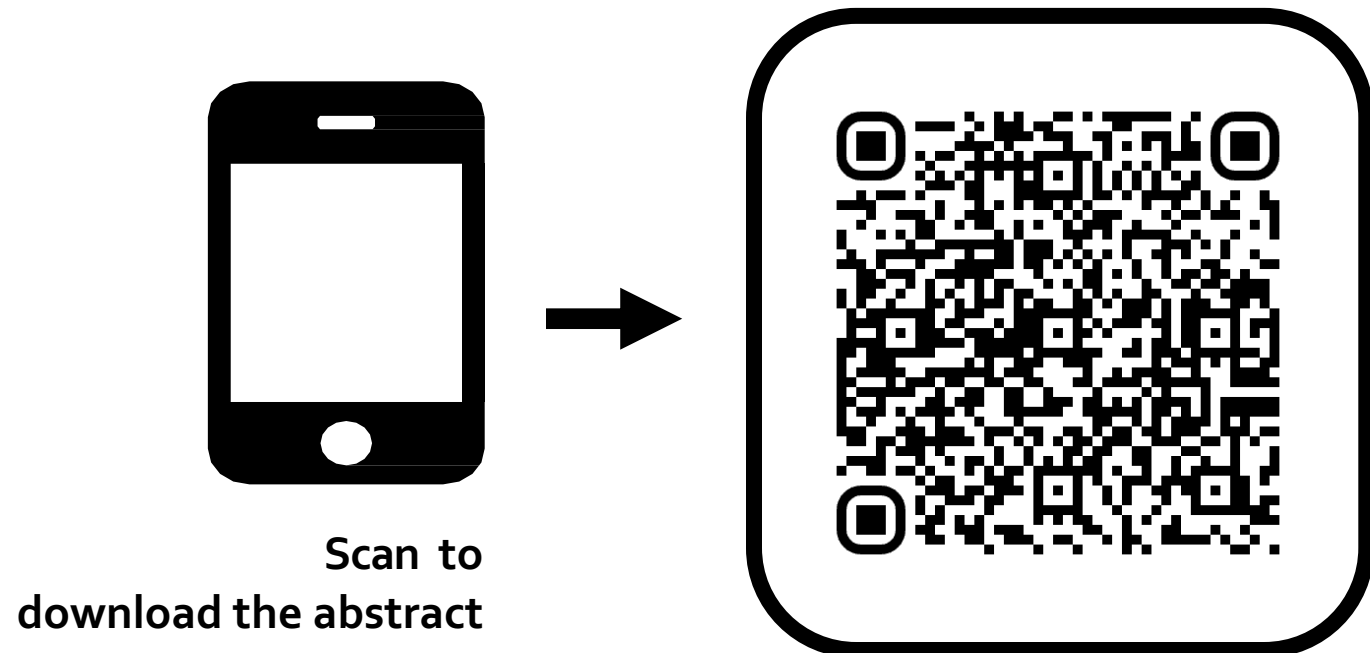
METHODS

- A self-administered validated Premenstrual Symptoms Screening Tool (PSST) (19 items, on a 4-point Likert scale) and the Pain Impact Questionnaire (PIQ-6) (6 items on a 4-point Likert scale) was used to investigate the HRQOL and severity of menstrual pain impacting work and leisure activities among Bahamian women.
- Premenopausal women of 18 to 50 years of age attending six public health and one specialty clinic were included.
- Women who no longer had a menses or had a previous diagnosis of a psychiatric or psychological disorder were excluded.
- This study was approved by the institutional Review Board and informed consent were obtained from the participants.
- Data were analysed for descriptive statistics and associations using the Chi-squared and Fisher exact test.
- A p-value <0.05 was considered statistically significant..

Table 2. Frequency of responses to PSST assessing emotional impairment and functional wellness

Emotional Impairment	Mild PMS	Moderate/ Severe PMS	PMDD	p-value
Anger/Irritability	66 (39.3)	28 (73.7)	5 (55.6)	<0.001
Anxiety/Tension	38 (22.6)	14 (36.8)	4 (44.4)	<0.001
Tearful/Increased sensitivity to rejection	35 (21.0)	19 (50.0)	5 (55.6)	<0.001
Depressed Mood / Hopelessness	35 (20.8)	17 (44.7)	3 (33.3)	<0.001
Decreased interest in work activities	59 (35.1)	28 (73.7)	4 (44.4)	<0.001
Decreased interest in home activities	54 (32.1)	23 (60.5)	4 (44.4)	<0.001
Decreased interest in social activities	50 (29.8)	22 (57.9)	6 (66.7)	<0.001
Difficulty concentrating	34 (20.2)	14 (36.8)	2 (22.2)	<0.001
Fatigue/Lack of Energy	58 (34.9)	33 (86.8)	6 (66.7)	<0.001
Overeating/food cravings	53 (31.5)	27 (71.0)	4 (44.4)	<0.001
Insomnia	29 (17.3)	9 (23.7)	3 (33.3)	<0.001
Hypersomnia	43 (25.6)	23 (60.5)	4 (44.4)	<0.001
Feeling overwhelmed / out of control	30 (18.0)	15 (39.5)	3 (33.3)	<0.001
Physical symptoms:	58 (34.5)	37 (97.3)	5 (55.6)	<0.001
Functional Wellness				
Work Efficiency	54 (32.1)	19 (50.0)	2 (22.2)	<0.001
Relationships with Co-workers	37 (22.0)	8 (21.1)	1 (11.1)	<0.001
Relationships with Family and Friends	44 (26.2)	19 (50.0)	1 (11.1)	<0.001
Social Life	69 (41.3)	28 (73.7)	4 (44.4)	<0.001
Home Responsibilities	65 (38.7)	18 (47.4)	5 (55.6)	<0.001

Numbers are presented as frequency (%)

Table 3. Comparison of mean scores on PSST items assessing emotional impairment and functional wellness

Emotional Impairment	Mild PMS	Moderate/ Severe PMS	PMDD	p-value
Anger/Irritability	1.77 (0.8)	2.71 (0.7)	3.11 (1.2)	<0.001
Anxiety/Tension	1.44 (0.7)	2.18 (0.8)	2.89 (1.2)	<0.001
Tearful/Increased sensitivity to rejection	1.47 (0.8)	2.30 (0.9)	3.00 (1.3)	<0.001
Depressed Mood/Hopelessness	1.45 (0.8)	2.26 (0.9)	2.89 (1.2)	<0.001
Decreased interest in work activities	1.86 (0.9)	2.76 (0.9)	3.11 (1.0)	<0.001
Decreased interest in home activities	1.80 (0.9)	2.71 (0.9)	2.78 (1.3)	<0.001
Decreased interest in social activities	1.74 (0.9)	2.61 (1.0)	3.67 (0.5)	<0.001
Difficulty concentrating	1.45 (0.7)	2.21 (0.8)	2.89 (0.9)	<0.001
Fatigue/Lack of Energy	2.11 (0.9)	3.11 (0.6)	3.11 (1.4)	<0.001
Overeating/food cravings	1.99 (0.9)	2.82 (1.0)	2.78 (1.3)	<0.001
Insomnia	1.37 (0.7)	1.71 (0.9)	2.11 (1.5)	<0.001
Hypersomnia	1.76 (0.9)	2.71 (1.1)	2.78 (1.3)	<0.001
Feeling overwhelmed/out of control	1.47 (0.8)	2.21 (0.9)	2.78 (1.2)	<0.001
Physical symptoms:	2.39 (0.9)	3.39 (0.6)	3.44 (0.7)	<0.001
Functional Wellness				
Work Efficiency	1.54 (0.7)	2.42 (0.7)	2.89 (0.9)	<0.001
Relationships with Co-workers	1.36 (0.7)	1.87 (0.8)	2.11 (1.0)	<0.001
Relationships with Family and Friends	1.39 (0.7)	2.37 (0.8)	2.22 (1.0)	<0.001
Social Life	1.67 (0.8)	2.79 (0.6)	3.33 (0.7)	<0.001
Home Responsibilities	1.60 (0.8)	2.42 (0.8)	3.33 (1.0)	<0.001

Item scores are presented as Mean ± SD

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