

Late Luteal Phase Dysphoric Disorder: Do We Need Another Psychiatric Category?

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ABSTRACT

The prevalence rate of the proposed diagnostic category of DSM-III-R "Late Luteal Phase Dysphoric Disorder" (LLPDD) was assessed in a survey in 2272 Egyptian females in Suez Canal Area. 69.6% of the surveyed females reported symptoms and patterns that qualify them to have "Premenstrual Tension Syndrome" (PMS). However, 703 of those who have the disorder reported that they need treatment for their symptoms. This represents 30.9% of the sample surveyed. These high prevalence rates, the biological necessity of cyclic changes, the predominance of pains and physical symptoms, together with the highest need for treatment in married and infertile females suggest that inclusion of the LLPDD in DSM-IV might not be an ideal choice.

INTRODUCTION

Many females report on a variety of physical and psychological changes associated with specific phases of the menstrual cycle. For most of these females, these changes which have been known for many years as Premenstrual Syndrome (PMS), are not severe and have no effect on social or occupational functioning. World-wide prevalence rate of the frequency of PMS ranged from over 40% in healthy females to less than 20% in selected samples and recently between 2 and 8% (Kessel and Coppen, 1963; Clare, 1977; Clare, 1985). In Egypt, Amin et al. (1989) suggested a prevalence rate of 8.1% up to 47.2% according to severity. Currently, DSM-III-R (American Psychiatric Association, 1987) is attempting to categorize this syndrome and proposed diagnostic criteria for PMS, defined as "Late Luteal Phase Dysphoric Disorder (LLPDD)", attempt to circumvent many of the methodological difficulties encountered in investigating this disorder. LLPDD is classified as a proposed category needing further study to be included in psychiatric classification of future DSM-IV.

Throughout the proposed category DSM-III-R indicates that mild psychological symptoms during the latter part of

the luteal phase are common. However, it points out that the prevalence rate of the LLPDD is unknown.

The DSM-III-R criteria define the syndrome as a cluster of signs and symptoms (five of ten listed with at least one affective symptom) occurring in the premenstrual week and lasting until a few days after the onset of menses during most menstrual cycles.

As diagnosis constitutes the first step in the treatment process, proposed treatment for PMS is far less clear, and there are evidences of a high placebo response rate (Smith, 1975) and that higher rates of symptoms which are found were related to suggestion and expectation (Clare, 1983). LLPDD may provide a model for understanding how reproductivity related hormonal changes over the life cycle of women affect psychosocial and somatic functioning.

Therefore, it is important to assess the need for treatment in women having these cyclic changes for two main reasons. The first is that no single therapeutic recommendation for treatment can be made and treating target symptoms is more likely to be helpful (Gitlin and Pasnau, 1989). The second reason is that the seeking of treatment may be predom-

inantly associated with some demographic characteristics such as being married or a house-wife (Schnurr, 1988).

The present study was designed to assess the prevalence rate of LLPDD in an epidemiological survey in a non-selected random sample of Egyptian females residing in the Suez Canal area using most of the DSM-III-R criteria and to investigate the need for treatment in those who have these periodical recurring changes.

MATERIAL AND METHOD

Over one year (1988), 2500 females (aged from 15 to 40 years and over) reside in Al-Arbaen district in Suez city in Suez Governorate and a similar socio-economically related district in Ismailia city in Ismailia Governorate were surveyed and interviewed by trained female medical personnel at their homes. The DSM-III-R proposed criteria were formulated in the form of questions.

We were unable to use or apply criterion E of prospective self-rating during at least two symptomatic cycles. Briefly, the four criteria used included criterion A related to recurrence of at least 5 of the psychological and physical symptoms listed in criterion B with most menstrual cycles during the past year, which "occurred during the last week of the luteal phase and remitted within a few days after onset of the follicular phase". Criterion C reflects the severity of the disturbance that interferes with work or with usual social activities or relationships with others. However, there is no mention of the subjective evaluation of the females suffering from these biological changes about their need for treatment. Criterion D is an exclusion criterion, that is, it excludes other psychiatric problems.

The interview was structured to start with an initial short statement about the nature of the questions each female was going to answer and the purpose of the study. Identification data were recorded including age, parity, occupation and any previous psychiatric treatment. The ques-

tions were asked from a list of psychological and physical symptoms. Answers were either positive or negative for each symptom. If the answer was positive (yes), the subject was asked to define the relationship of her symptoms to the menstrual cycle. If the answer related symptoms to the last week or so before menstruation, recurring almost every cycle (or at least the last two), subject was considered to be positive for the presence of Late Luteal Phase Dysphoric Disorder (LLPDD).

Symptomatic criteria were grouped into either physical pains, breast swelling, weight gain, limb, muscle and joint pains, headache, gastrointestinal, skin, visual or general weakness and clumsiness and psychological status before and during menses.

After each female answers these questions she was asked whether she thinks (in her opinion) that these symptoms are severe enough to seek treatment or not (i.e. actually, if it affects and interferes with her routine daily life).

RESULTS

Of the 2500 females surveyed and interviewed, 2272 (90.9%) gave consent and agreed to be interviewed and reply to the questionnaire. 228 (9.1%) females refused to be interviewed or to give any valid responses for data analysis. Of those 2272 females, 1581 (69.6%) revealed that they suffer cyclic recurrence of symptoms that qualify them to have LLPDD. Almost all females interviewed were house-wives.

Table (1) shows the age distribution of the sample surveyed and females with LLPDD. Table (2) shows the number and percentage of females surveyed distributed according to marital and parity status with the relationship of LLPDD and their need for treatment. Table (3) shows the distribution of psychological and physical symptoms according to the marital status and parity.

TABLE I
The Distribution of LLPDD According to the Age

Age (years)	Number Surveyed	Number with LLPDD	%
15 - 19	362	212	58.6 %
20 - 24	295	199	67.5 %
25 - 29	532	358	67.3 %
30 - 34	413	318	77.0 %
35 - 39	309	279	90.3 %
> 40	361	215	59.6 %
Total	2272	1581	69.6 %

TABLE II
Number and Percentage of Females Surveyed (N=2272) Distributed According to Marital and Parity Status with the Relationship of LLPDD and Their Need for Treatment

Marital and Parity Status	Married with Children =1501	Married and Infertile =292	Unmarried =479	Total =2272
Presence of LLPDD	N (%)	N (%)	N (%)	N (%)
LLPDD	1042	279	260	1581
Yes	(69.6 %)	(95.5 %)	(54.3 %)	(69.6 %)
LLPDD	459	13	219	691
No	(30.4 %)	(4.5 %)	(54.7 %)	(30.4 %)
Yes Need for Treatment	430 (41.2 %)	201 (72.0 %)	72 (22.7 %)	703 (30.9 %)
No Need for Treatment	612 (58.8 %)	78 (28.0 %)	188 (77.3 %)	878 (69.1 %)

* $\chi^2 = 146$, $df=2$, $P<0.001$

** $\chi^2 = 119$, $df=2$, $P<0.001$

TABLE III

The Distribution of Symptoms of Females with LLPDD According to Marital Status and Parity and Need for Treatment

Symptom	Married with Children N = 1042				Married & Infertile N = 279				Unmarried N = 260			
	LLPDD		Need Treatment		LLPDD		Need Treatment		LLPDD		Need Treatment	
	N	%	N	%	N	%	N	%	N	%	N	%
Psychological	721	69.2	193	18.5	202	72.4	189	67.7	102	39.2	33	12.6
Breast	497	47.7	28	2.7	153	54.8	80	28.7	190	73.1	11	4.2
Lower Limb	317	30.4	61	5.9	72	25.8	16	5.7	61	23.5	22	8.5
Weight	165	15.8	34	3.3	96	34.4	35	12.5	89	34.2	26	10
Pains	853	81.9	269	25.8	69	24.7	24	8.6	99	22.7	6	2.3
Visual	243	23.3	78	7.5	23	8.2	2	0.7	39	15	6	2.3
GIT	406	39.0	164	15.7	63	22.6	6	2.2	92	35.4	41	15.8
Skin	444	42.6	30	2.9	99	35.5	23	8.2	109	41.9	42	16.2
Clumsiness	92	8.8	12	1.2	25	9.0	9	3.2	24	9.2	9	3.5

* $\chi^2 = 90$, df=2, $P < 0.001$

** $\chi^2 = 295$, df=2, $P < 0.001$

*** $\chi^2 = 54$, df=2, $P < 0.001$

DISCUSSION

The study of LLPDD (PMS) involves understanding the complex interplay of psychological, biological and environmental factors and processes. Our data were collected from a large sample of Egyptian females from suburban community and could be considered representative of different socioeconomic strata residing the Suez Canal area.

We have included only one rating of a single interview and it is possible that if we have used the daily self-rating less females would have reported on their symptoms. However, we were not able to use the two weeks self-rating and we think that this criterion (E) is an impractical one but can be only used for research purposes rather than clinical services. Schnurr (1988) has underscored the need to use prospective diagnostic criteria in research on premenstrual score. Our high prevalence rate (69.6%) could be due to the problem of attribution, where many women will remember those occasions when poor performance coincided with the imminent arrival of their periods and will forget those occasions when it coincided with ovulation, the actual onset of the menses or their cessation. Clare (1985) pointed out the methodological problems concerned with correlation between the premenstrual or menstrual phases of the cycle and the physical and psychological changes. The 30.9% of the sample who reported the need for treatment is not far from other studies in which 24% had consistently severe premenstrual syndrome (Schnurr, 1988) or those who seek treatment at gynecological clinics (Kaye et al. 1986).

Further, our data came with close agreement with those of prevalence rate of similar studies (Sharma, 1982). At least 20% and as many as 80% of women reported mild to minimal mood or somatic premenstrual changes (Davis, 1985). Also, the subgroup of married females with children who admitted having LLPDD and their need for treatment

(41.2%) is closely related to the prevalence rate of a similar study done by Amin et al. (1989) of moderate and severe premenstrual syndrome (47.2%). In that study, reports of pains and aches (74.2%) which were the most frequent clinical manifestation are, also, not far from our sample where 81.9% of married females with children have physical pains. That many of the females in our study were house-wives and of less education could be responsible for the high prevalence rate of LLPDD. House-wives and women with less education report more premenstrual symptoms than those who are employed and/or better educated (Friedman and Jaffe, 1985).

It has been our clinical observation that many of those female with LLPDD were talking and describing their symptoms as it was part of their normal life. Clare (1985) discussing this phenomenon, commented that the great majority of women appear to negotiate the premenstrual phase of their menstrual cycles with little or no impairment or difficulty.

The ubiquity of premenstrually perceived changes as revealed by the high prevalence rate and as part of the biological feminine-like and role and as distinct from "symptoms", "illness" or "disorder" might raise the possibility that with more attention and inquiry by the inclusion of the LLPDD into the psychiatric classification it may lead to increase in the "nosological seeking behaviour" of psychiatrists. Thus, by creating a LLPDD criteria we might be categorizing an essentially biological normal phenomenon and extending ourselves beyond the scope of our field of practice. Moreover, it appears that many of those females complained of various physical disorders and their somatic manifestations exceeded the psychological symptoms. For example, pains rank the first highest physical complaint in the group of married females with children and psychological symptoms come second in the same group. The predominance of physical symptoms in this group and in our culture may indicate that fe-

males are searching for a more socially acceptable medical explanation for their PMS. This is in contrast to the predominance of psychological symptoms in PMS in other cultures (Halbreich and Endicott, 1985).

On the other hand, less females (married with children) asked for treatment for psychological symptoms (18.5%), than those for pains (25.8%) and gastrointestinal symptoms (15.7%). In addition, in the unmarried group, psychological symptoms rank the third (39.2%) in those with LLPDD after breast discomfort (63.1%) and skin manifestations (41.9%). Again, only 12.7% of those unmarried females complained of psychological symptoms in comparison to the higher rate of complaints of gastrointestinal (15.8%) and skin (16.2%) symptoms. These figures should direct our attention to the question of why should we include in a psychiatric nosological system a disorder that sometimes predominantly recurs with physical symptoms. It could belong to the gynecological field of practice. Perhaps the accompanied psychological manifestations are a mere biological reaction to the physical and somatic changes. Strong opposition about the inclusion of LLPDD in DSM-III-R focuses on stigmatizing a normal biological process and on whether LLPDD is a gynecological or mental disorder (Blumenthal and Nadelson, 1988).

It is of great interest that a number of nonpsychopharmacological medications are of benefit in treatment of PMS and that antidepressants sometimes fail to treat cyclic changes (Watts et al. 1987; Harrison et al. 1985).

Complaint of illness (or LLPDD) might depend more on the basic personality and the circumstances in which the female experiences the cyclical changes than on the underlying mechanism (Sanders et al. 1983). Thus our married infertile females who exhibited the highest incidence of LLPDD (95.5%) might be at a high risk because of their biological and psychological vulnerability.

Lastly, future research in the area of LLPDD should be geared towards investigating the effect of the psychological status on the symptom profile rather than just creating a new diagnostic category. This may expand our knowledge of these areas as well as provide us with a window into the complex mechanisms underlying the interactions of psychosocial, behavioural and neurobiological processes.

REFERENCES

- American Psychiatric Association (1987) *Diagnostic and Statistical Manual of Mental Disorders*. Third Edition, Revised. Washington, DC: APA.
- Amin, Y., Mikhail, N., Hamdi, E., Mahfouz, R. and Arafa, M. (1989) The premenstrual syndrome in El-Salam district: Prevalence and clinical presentation. *Egypt. J. Psychiat.*, **12**: 53-62.
- Clare, A. W. (1977) Psychological profiles of women complaining of premenstrual symptoms. *Curr. Med. Res. Opin.*, **4**: (Supp.) 23.
- Clare, A. W. (1983) Psychiatric and social aspects of premenstrual complaint. *Psychol. Med. Monogr.*, (Supp), **4**: 1-58.
- Clare, A. w. (1985) Hormones, behaviour and the menstrual cycle. *J. Psychosom. Research*, **29**: 225-233.
- Davis, M. (1985) Premenstrual syndrome. In *Report of the Public Health Service Task Force on Women's Health*. Vol II. Washington, DC: Government Printing Office.
- Gitlin, M. J. and Pasnau, R. O. (1989) Psychiatric syndromes linked to reproductive function in women: A review of current knowledge. *Amer. J. Psychiat.*, **146**: 1413-1422.
- Halbreich, V. and Endicott, J. (1985) Relationship of dysphoric premenstrual changes to depressive disorders. *Acta. Psychiat. Scand.*, **71**: 333-338.
- Harrison, W., Sharpe, L. and Endicott, J. (1985) Treatment of premenstrual symptoms. *Gen. Hosp. Psychiat.*, **7**: 54-65.

- Friedman, D. and Jaffe, A. (1985) Influence of lifestyle on the premenstrual syndrome. *J. Reprod. Med.*, **30**: 7/5-7/4.
- Kessel, N. and Coppen, A. (1963) The prevalence of common menstrual symptoms. *Lancet*, **2**: 61.
- Keye, W. R., Hammond, D. C. S. and Strong, T. (1986) Medical and psychological characteristics of women presenting with premenstrual symptoms. *Obstet. Gynecol.*, **68**: 634-637.
- Sanders, D., Warner, P., Bakstron, T. and Bancroft, J. (1983) Mood, sexuality, hormones and the menstrual cycle. I. Changes in mood and physical state: Description of subjects and methods. *Psychosom. Med.*, **45**: 487-501.
- Schnurr, P. P. (1988) Some correlates of prospectively defined premenstrual syndrome. *Amer. J. Psychiat.*, **145**: 491-494.
- Sharma, V. (1982) The premenstrual syndrome. *The Practitioner Journal*, **226**: 1091-1094.
- Smith, S. L. (1975) Mood and the menstrual cycle. In Sachar, E. J. (ed.), *Topics in Psychoendocrinology*. New York: Raven Press.
- Watts, J. F., Butt, W. R. and Logan-Edwards, R. (1987) A clinical trial using danazol for the treatment of premenstrual tension. *Brit. J. Obstet. Gynecol.*, **94**: 30-34.

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ABSTRAIT

"Late Luteal Phase Dysphoric Disorder" : Est-ce-qu'on a Besoin d'une Autre Catégorie Psychiatrique

Le taux de prévalence de la catégorie diagnostiquante proposée par le DSM-III-R "Late Luteal Phase Dysphoric Disorder (LLPDD)", a été évalué par un examen attentif de 2272 femmes égyptiennes dans la région de Canal du Suez. 69,6 % des femmes examinées ont rapportées des symptômes et des modèles qui les qualifient d'avoir le "Premenstrual Tension Syndrome (PMS)". Cependant, 703 femmes de celles qui avaient le désordre ont rapportées qu'elles ont besoin de traitement pour leur symptômes, ce qui représente 30,9 % du l'échantillon étudié. Ces taux de prévalence élevés, la nécessité biologique des échanges cycliques, la prédominance de la peine et des symptômes physique, ensembles avec le vrai besoin du traitement chez les femmes mariées et infertiles, démontrent que l'inclusion de la catégorie "(LLPDD)" en DSM-IV ne sera pas le choix idéal.

الموجز

اضطراب اعتلال المزاج فى طور ما قبل الطمث : هل هناك حاجة إلى فئة طبي نفسية جديدة ؟

تناولت هذه الدراسة مسحا طبيا شمل (٢٢٧٢) سيدة مصرية من القاطنات منطقة قناة السويس ، وذلك للبحث عن نسبة تواتر " اضطراب اعتلال المزاج فى فترة ما قبل الطمث " ، حسب التقسيم الأمريكى الثالث للأمراض النفسية (المراجع) . ولقد أظهرت نتائج البحث أن نسبة (٦٩,٦%) من العينة تعاني من أعراض تدل على وجود " زملة توتر ما قبل الطمث " ، من بينها (٧٠,٣) سيدة أفدن بحاجتهن لعلاج هذه الأعراض ، وهذا العدد يمثل (٣٠,٩%) من العينة الكلية التى تم مسحها . ولقد خلص البحث - بعد المناقشة - إلى أن هذه النتائج قد توحى بأن تضمين التقسيم الأمريكى الرابع للأمراض النفسية للفئة التشخيصية " اضطراب اعتلال المزاج فى طور ما قبل الطمث " ربما لن يكون اختيارا مثاليا .