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# **ORIGINAL ARTICLE**

# Melancholic Features and Dream Masochism in Patients with Major Depression

Mehmet Yucel Agargun<sup>1\*</sup>, Rosalind Cartwright<sup>2</sup>

<sup>1</sup>Istanbul Medipol University, School of Medicine, Department of Psychiatry, Istanbul, Turkey <sup>2</sup>Professor Emerita; Rush University Medical Center, Chicago, IL, USA

### **ABSTRACT**

To investigate whether untreated depressed subjects with melancholic features have higher dream masochism scores than those without melancholic features, the dreams of a group of community volunteers undergoing divorce were recorded in the sleep laboratory. A second question of interest was whether there was a gender difference in dream masochism. We also examined whether melancholic depressed individuals tend to report masochistic dreams closer to morning. Three groups of depressed with and without melancholic features and a non-depressed group had three laboratory nights of sleep. On the third night, dream reports were elicited from each period of rapid eye movement (REM) sleep. Dream 'masochism', as defined by Beck (1967), was scored as present if the dreams had any one of ten characteristics. Subjects with melancholic features had higher dream masochism scores than those who did not meet depression criteria. Presence of melancholic features did not affect gender difference in dream masochism. Melancholic depressed individuals had higher DM scores in the second half than the first half night, whereas non-melancholic depressed individuals and non-depressed subjects did not differ between the halves of the night. These findings suggest that melancholic depressed individuals express deeper levels of self-criticism and self-blaming in their dreams. REM sleep deprivation closer to morning by dream collection method may improve diurnal mood symptoms and negative dream content in major depression.

Keywords: REM sleep, Dreams, Dream Masochism, Melancholic Features, Depression, Diurnal Rhythm

# INTRODUCTION

Among the clinical, dynamic, and structural features of the depressive character, self-directed aggression and self-denigration are frequent but not invariably present. Such individuals suffer from chronic depression which may or may not be masked, but which permeates their character (Kahn, 1975). Masochism has also become one of the

most confusing and controversial clinical and diagnostic terms within the psychotherapy literature (Glickauf-Hughes & Wells, 1991). The term 'masochistic dream' designates a class of unpleasant dreams characterized by a specific thematic content. The image of the dreamer has negative characteristics and the outcome of the dream sequence is essentially a negative one. The dreamer is either represented as less fortunate or less attractive than he is in reality or he is subjected to an unpleasant experience (Beck, 1967). Previous studies suggested that dreams in which the dreamer is deserted, frustrated, deprived, or injured are characteristic of depression-prone people. 'Masochistic' dreaming had been reported to characterize depressive patients before, during, and after episodes as a stable psychological

\*Correspondence: myagargun@kure.com.tr Istanbul Medipol University, School of Medicine, Department of Psychiatry Istanbul, Turkey

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variable (Beck & Ward, 1961; Hauri, 1976). Using Beck's scale for dream masochism, a recent study (Cartwright, 1992) examined whether masochistic dreaming was associated with the presence of major depression, whether women have higher masochistic dream scores than depressed men, and whether depressed women have higher masochistic dream scores than depressed men. This study found that masochistic dreaming was not significantly associated with the presence of a major depression. Women, whether depressed or not, have higher masochistic dream scores than depressed men, and depressed women have higher masochistic dream scores than depressed men. In another study, (Cartwright & Wood, 1993) studied twenty-five women and twentyone men undergoing divorce for three nights of sleep laboratory monitored on two occasions 1 year apart. In this study, women also showed less improvement at follow-up and had more need for emotional support. These findings suggested that dream masochism might be a continuing cognitive characteristic that contributes to the vulnerability of women to major depression. It is still an unresolved issue whether clinical severity of depression is associated with dream masochism. In the present study, we examined three hypotheses: 1) Subjects with melancholic features will have higher dream masochism scores than those without melancholic features, 2) Women with melancholic features will score higher on dream masochism than men with melancholic features, and 3) Melancholic depressed individuals tend to report masochistic dreams closer to morning.

### **METHODS**

The study sample was drawn from a group of community volunteers for a project designed to examine the effects of a stressful life experience, a marital breakup, on sleep and dreams. To be included one partner had to have taken an overt step to end a first marriage, moved out of the shared dwelling, and/or filed for divorce. Treatment for depression either by medication or psychotherapy was an initial exclusion criterion. The volunteers completed the Beck Depression Inventory (BDI) and were interviewed using the Structured Clinical

Interview for DSM-IV Axis I disorders (SCID) to reach a diagnosis of depression. Hamilton Depression Rating Scale (HDRS) was also used to assess the severity of depression. Thirty-seven volunteers were included in the study. Of these volunteers, 28 were diagnosed as currently experiencing an episode of major depression. These subjects had a HDRS score of 18 or above and a BDI of 14 or above. None were on medication at the time of assessment nor had a history of psychotic or bipolar disorders. Of depressed subjects, 10 (3 males and 7 females) were diagnosed as major depression with melancholic features according to DSM-IV criteria (American Psychiatric Association, 1994). The key melancholic features of major depressive disorder are:

Psychomotor retardation or agitation
Loss of interest or pleasure
Lack of reactivity to usually pleasant stimuli.
Worse depression in the morning.
Early morning awakening.

Nine subjects (2 males and 7 females) undergoing divorce included in the study as a non-depressed control group. The study was described to all subjects and written informed consent was obtained.

Sleep was monitored for three consecutive nights using a minimum of five channels of recording: EEG C3/ A2 or C4/A1, EOG ROC/A1 and LOC/A2, chin EMG, and EKG. To rule out a sleep disorder, monitoring of respiratory effort, air flow, oxygen saturation, and EMG of anterior tibialis were added to the first night sleep study. All nights were controlled to end after 420 min of bedtime. The second night was used as the baseline to establish the sleep architecture, and the third to collect dream reports. Each rapid eye movement (REM) period was interrupted on a fixed schedule, 5 min into the first REM, 10 min into the second REM, 15 into the third, and 20 into the fourth and any subsequent REM. At each REM awakening subjects were asked to give a report of what they could recall of the mentation occurring just before the awakening. Following this, the experimenter asked two questions concerning the type of affect experienced and its strength: `Would you say that dream was negative, neutral or positive?' and then `Would you say that dream

was unemotional, mildly emotional or strongly emotional?'

Dream Masochism (DM) as defined by Beck (1967), is scored as present if the dreams has any one of the following ten characteristics:

- 1. A negative representation of the self.
- 2. Physical discomfort or injury.
- 3. Thwarting of dreamer`s efforts.
- 4. Deprivation, some disappointment, loss or lack.
- 5. Physical attack in which the dreamer is hurt.
- 6. Non-physical attack.
- 7. The dreamer is excluded, superseded, or abandoned.
- 8. The dreamer is lost.
- 9. The dreamer is punished.
- 10. The dreamer fails some specific activity.

To establish reliability, two raters scored 70 dreams for `masochism`. These came from a random sample of 10 male and 10 female subjects. Ten of the 80 awakenings produced reports of `no recall` (4 from female subjects and 6 from males). The interrater agreement on the DM scale was 92% for the 36 dreams of the female subjects and 91% for the 34 dreams of the males. Each subject was given a score based on total number of reports with recalled content. The score could vary from 1.00 if all dreams were positive for `Masochism` to .00 if none met criteria. In addition to a total DM score, two separate DM

scores were provided for the first and the second halves of the night DM1 and DM2).

The statistical Package for the Social Sciences (SPSS), release 9 was used for data analyses. Kruskal-Wallis variance analysis, Mann Whitney-U test, and chi-square test were used to compare the variables.

### **RESULTS**

Hypothesis 1 was not confirmed. The Kruskal-Wallis variance analysis showed a significant difference among three groups (p<0.05). DM scores between depressed subjects with melancholic features and non-depressed control subjects were significantly different (Mann-Whitney U test; p<0.05) (Table 1). However, melancholic subjects were not different from depressed subjects without melancholic features (Mann-Whitney U test; p>0.05). When subjects were stratified by DM scores using a cut-off level of .50, the high DM score group contained more melancholic subjects (X2=6.51; p=0.038) (Table 2).

Hypothesis 2 was not confirmed. Again within the depressed group, there was no significant difference between the members with high versus low DM scores. Although one of 9 males and 8 of 19 females had high scores, the X2 of 1.45 did not reach significance (p>0.05). (Table 1 and 2).

Table 1. The distribution of dream masochism scores among the groups.												
	dream masochism scores											
	All subjects			Males			Females					
	No	Mean	S.D.	No	Mean	S.D.	No	Mean	S.D.			
Melancholic depressives	10	.34	.35	3	.14	.18	7	.39	.40			
Non-melancholic depressives	18	.20	.28	6	.10	.17	12	.25	.31			
Non-depressed subjects	9	.02	.11	2	.12	.17	7	.02	.11			

Table 2. The distribution of high and low DM scores among the subjects.											
	All sul	ojects	Ма	les	Females						
	High DM	Low DM	High DM	Low DM	High DM	Low DM					
Melancholic depressives	5	5	1	2	4	3					
Non-melancholic depressives	4	14	0	6	4	8					
Non-depressed subjects	0	9	0	2	0	6					

Hypothesis 3 was confirmed. Melancholic depressed individuals had higher DM scores in the second half than the first half (0.47 $\pm$ 0.14 vs. 0.32 $\pm$ 0.11; p<0.05), whereas non-melancholic depressed subjects and non-depressed subjects did not differ between the halves of the night (0.30 $\pm$ 0.47 vs. 0.21 $\pm$ 0.20 and 0.16 $\pm$ 0.20 vs. 0.22 $\pm$ 0.21 p>0.05).

# **DISCUSSION**

Melancholic symptom features appear to be a characteristic of major depressive disorder. Melancholic symptom features are reported to be predictive of a positive response to ECT and to tricyclic antidepressants in the severely ill. These features are associated with shorter REM latency and/or non-suppression of cortisol during the dexamethasone suppression test (Rush & Weissenburger, 1995). The present study shows that laboratory reported dreams of depressives are higher on scored masochism among those who have melancholic features. The difference on this dream characteristic between the sexes is not significant, although non-depressed females have higher scores than depressed males. In an early study, Beck and Ward (1961) found a significant relationship between depression and masochistic dreams among those recalled on an intake interview. The moderately and severely depressed groups reported significantly more masochistic dreams than non-depressed group. The authors suggested that masochistic dreams might be regarded as a manifestation of the individual's negative bias in interpreting of this experience and expectations. The difference between Beck and Ward`s study and this study may be related to cultural changes in the times. The personality and psychosocial characteristics of the population had also been changing for forty

In the present study, presence of melancholic features did not affect gender difference in DM. This finding did not confirmed previous studies. Cartwright (1992) found that women, whether depressed or not, had higher DM scores at screening and 1 year later than men. In another study, Cartwright and Wood (1993) showed that women

"masochistic" dreamers had significantly higher scores on a scale of negative aspects of traditional feminine role identity than men or women without such dreams. Interestingly, they also found that women showed less improvement at follow-up and had more need for emotional support. The difference between this study and previous two studies in gender distribution suggests that gender does not affect DM in more severe form of depression.

Melancholic depressed individuals had higher DM scores in the second half than the first half night in the present study. In contrast, there was no difference between DM scores of the first and the second halves of the night among non-melancholic depressed individuals and non-depressed subjects. In a recent study, Bears, Cartwright, and Mercer (2000) found that the masochistic dreams of the non-depressed sample had been equally distributed across the night, whereas depressed individuals tend to report masochistic dream closer to morning. A recent study conducted by Besiroglu, Agargun, and Inci (2005) examined whether a relationship exists between nightmares and terminal insomnia in unipolar depressed patients with melancholic features or diurnal mood symptoms. The findings suggested that the rates of terminal insomnia and nightmares were higher both in males and in females with melancholic features than the patients without melancholic features although they did not examine dream content in the patients.

According to previous and the present studies, it may be suggested that masochism in negative dreams is associated with deeper level of self-criticism and self-blaming in melancholic depressed individuals. As a pathognomic feature of melancholia, being worse in affective state in the morning and diurnality of mood symptoms may be related to the intervening dream content and negative dream affect. It may be also suggested that REM sleep deprivation closer to morning by dream collection method may have a therapeutic effect on mood regulation and improve negative dream affect and content in depressed subjects with melancholic features or diurnal mood symptoms.

### **Author's Declaration**

This study was conducted while the first author was a Visiting Professor at Rush University Rush-Presbyterian-St. Luke's Medical Center Sleep Disorder Service and Research Center Chicago, IL, USA.

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