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## Prevalence of Emotion Dysregulation among Patients with Mental Disorders: Egyptian Sample

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**Abstract: Background:** Mental disorders are a mental health condition with high diagnostic importance. These disorders manifest as changes in cognition, emotion and behaviour, and may be accompanied by painful experiences or dysfunction. **Aim of the study:** To assess prevalence of emotion dysregulation among an Egyptian sample of patients with mental disorders. **Subjects and method:** A descriptive cross sectional study design was utilized with a sample of 84 patients diagnosed with mental disorders who were admitted to Inpatient Psychiatric Department of Mansoura University Hospital. Data was collected using two tools: socio-demographic characteristics and clinical data sheet and difficulties in emotion regulation scale - short form (DERS-SF). **Results:** This study revealed that more than half of the studied patients (53.6%) were in the age group of 30 to less than 45 years. Nearly two thirds of the studied patients (73.8 %) were male, and the majority of the studied patients were having diploma or just read and write (42.9% & 31.0%) respectively. Also, more than half of the studied sample showed higher difficulties in emotion regulation.

**Conclusion:** This study illustrated that higher percentages of participants with mental disorders have higher difficulties in emotion regulation. **Recommendation:** It is recommended to establish a psycho-educational programs to be applied by nurses to help the patients to improve their emotion regulation, conduct the study in different mental hospitals to generalize the results and further study should be done on large sample size.

**Key Words:** Mental disorders, Emotion dysregulation.

### INTRODUCTION

Mental disorders are defined as a collection of symptoms that result in a clinically significant disruption in an individual's cognitive processes, emotional regulation, or behavior. These disorders often lead to considerable disturbance in various domain of life, including social interactions, work, and other fundamental activities (American Psychiatric Association [APA], 2013). Annually, mental disorders impact over 165 million individuals globally (Aljunaidy & Adi, 2021). It is estimated that more than fifty percent of the population in middle- and high-income nations will have a diagnosis of at least one mental disorder throughout their life span (Trautmann et al., 2016).

Emotions are powerful and observable responses that facilitate our adaptation to the surrounding environment. They arise in response to both positive and negative stimuli, enabling us to respond instinctively prior to consciously assessing or addressing the situation (Paulus, Ohmann, Möhler, Plener & Popow, 2021). The study of emotion regulation (ER) is gaining crucial traction in the field of psychiatric disorders and their treatment, as inadequacies in managing undesirable emotional states are linked to the onset and persistence of various forms of psychopathology (Berking, 2024).

Emotion dysregulation (ED) refers to a consistent style of emotional experiences or expressions that disrupt suitable goal-directed actions (Thompson, 2019). The unpredictable

fluctuations in a person's emotions can hinder his ability to regulate effectively, thereby attributing the emergence of ED (Cole, Ramsook, & Ram, 2019), which is a transdiagnostic approach prevalent across various mental health disorders (Beauchaine & Cicchetti, 2019), manifesting in varying levels of severity (De Prisco et al., 2023).

For example, individuals with major depression, anxiety disorders, and eating disorders (D'Agostino, Covanti, Monti, & Starcevic, 2017), as well as those with schizophrenia (Liu, Chan, Chong, Subramaniam, & Mahendran, 2020), may exhibit diminished awareness of emotions. Conversely, individuals with borderline personality disorder, attention deficit hyperactivity disorder, or bipolar disorder (BD) may demonstrate inappropriate emotional reactivity or heightened expression of emotions (De Prisco et al., 2023).

In particular, individuals diagnosed with BD frequently encounter challenges in recognizing facial emotions (Ulusoy, Gülseren, Özkan, & Bilen, 2020) or emotional experience and tend to experience feelings with greater intensity than other people. It is obvious that ED can be affected by decline in social cognition, such as the capacity to accurately interpret emotional cues from others or to anticipate their demeanor and actions (De Prisco et al., 2023).

Both positive and negative emotion regulation hold significant clinical and theoretical importance for BD.

Individuals with BD experience considerable instability and intensity in their affective states between episodes. While managing elevated emotions may be particularly challenging for people with BD, characterized by excessively high mood states, they also experience extremely low as well as mixed emotional states. Notably, most episodes of mania encompass both negative and positive affect, along with higher and lower levels of activation (Dodd, Lockwood, Mansell, & Palmier-Claus, 2019). Moreover, individuals diagnosed with schizophrenia exhibit significant challenges in regulation of emotions, that are believed to be fundamental factors for initial emergence of psychosis and the worsening of psychotic symptoms and prior research has explored a diverse array of ER strategies (Kimhy et al., 2020).

***Aim of the study:***

The study aims to evaluate prevalence of emotion dysregulation among an Egyptian sample of patients with mental disorders.

***Research question:***

What is the prevalence of emotion dysregulation among patients with mental disorders?

**SUBJECTS AND METHOD**

***Study design:***

A descriptive cross sectional research design was utilized to carry out this study.

***Setting:***

This study was conducted in the inpatient psychiatric department of Mansoura University Hospital.

***Subjects:***

The subjects of the study comprised of 84 patients diagnosed with mental disorders who met these characteristics: patients diagnosed with schizophrenia, major depression and bipolar disorders according to patients records, both gender, age from 18 to less than 60 years old, patients who can speak and patients who agreed to participate in the research.

***Tool: Two tools were utilized for data collection, including:***

***Tool (1): Socio-demographic characteristics and clinical datasheet:***

This questionnaire was created by the investigator after reviewing new relevant literature. It included data about:

- Socio-demographic data: Patient's name, age, gender, educational level, marital status,...etc.

- Clinical data: This composed of diagnosis, duration of illness, previous psychiatric hospitalization and presence of psychiatric disorders in the family,...etc.

***Tool (II): Difficulties in Emotion Regulation Scale - Short Form (DERS-SF):***

DERS-SF was created by Victor and Klonsky (2016). This scale comprises 18 items, which are derived from the 36-item difficulties in emotion regulation tool developed by Gratz and Roemer (2004). It evaluates difficulties in various aspects included in the regulation of emotions as: lack of emotional awareness, lack of emotional clarity, nonacceptance of emotional responses, difficulties participating in goal-directed behavior, difficulties in control of impulse and restricted access to strategies of emotion regulation (Gouveia et al., 2022).

Currently, no defined cutoff points for this tool. Respondents rate items using a Likert scale, where 1 indicates "almost never," 2 signifies "sometimes," 3 represents "about half the time," 4 denotes "most of the time," and 5 means "almost always." High grades reflect greater difficulties in regulation of emotion (Hallion et al., 2018). The DERS-SF is recognized as a valid and reliable instrument for evaluating emotion dysregulation across diverse populations. It demonstrates excellent internal consistency, with subscale alphas ranging from .77 (Awareness) to .90 (Goals and Impulse), and an overall score alpha of .91 (Gouveia et al., 2022).

***Ethical considerations:***

The Mansoura University Faculty of Nursing's Research Ethics Committee provided ethical approval. Furthermore, the Head of the Psychiatric Department at Mansoura University Hospital formally granted authorization to carry out the study. The goal, dangers, advantages, and methods of study were explained to the patients. They were informed that their involvement is completely voluntary. Those who opted to take part in the study gave their informed consent. In addition to being informed that they might leave the study at any moment without suffering any consequences, participants received assurances that their personal data would be kept private.

***Statistical analysis:***

Version 22 of SPSS was utilized to analyze. Numbers and percentages were used to describe qualitative data. Continuous variables were demonstrated through "Mean  $\pm$  standard deviation" for parametric data.

## RESULTS

**Table (1): Distribution of studied patients according to Socio-demographic characteristics:**

Socio-demographic characteristics	N (84)	100%
<b>Age</b>		
18 – less than 30	29	34.5%
30 – less than 45	45	53.6%
45 – 60	10	11.9%
<b>Mean±SD = 34.63 ±7.82</b>		
<b>Gender</b>		
Male	62	73.8%
Female	22	26.2%
<b>Educational level</b>		
Illiterate	12	14.3 %
Read and write/ primary/prep	26	31.0 %
Diplome/ Secondary School	36	42.9 %
University education	10	11.9 %
<b>Marital status</b>		
Single	46	54.8 %
Married	21	25.0%
Divorced/ separated	15	17.9%
Widow	2	2.4%
<b>Occupation:</b>		
Not working	47	56.0%
Housewife	13	15.5%
Technical Worker	19	22.6%
Employee	5	6.0 %
<b>Place of Residence</b>		
Urban	28	33.3%
Rural	56	66.7%
<b>Income satisfaction</b>		
Insufficient	48	57.1%
Sufficient	36	42.9%
<b>Total</b>	84	100%

**Table (1)** shows that the mean  $\pm$  SD of the patients under study was  $34.63 \pm 7.82$ , with ages ranging from 18 to under 60. Over half (53.6%) of the patients in the study were between the ages of 30 and under 45. Nearly two thirds of the investigated patients (73.8 %) were male. Based on educational attainment, the majority of the patients under study had a diploma and could only read and write (42.9% & 31.0%, respectively). Regarding marital status, more than

fifty percent (54.8%) of the participants informed that they were single, while married and divorced were (25.0% & 17.9%). Concerning occupation, over half of the participants (56.0%) weren't working. Regarding the residence, more than half of the subjects (66.7%) live in rural regions. Concerning income, more than half of the participants (57.1%) haven't enough income.

**Table (2) Frequency distribution of Difficulties in Emotion Regulation Scale (DERS) among the studied subjects:**

DERS	Mean	Std. Deviation
Total score of DER	55.95	11.06
Awareness subscale	8.26	3.67
Clarity subscale	7.84	3.39
Goals subscale	10.46	2.60
Impulse subscale	10.23	2.90
Non acceptance subscale	9.07	2.76
Strategies subscale	10.07	2.65

**Table (2):** indicates that the total mean score on the difficulty in emotion control scale was  $55.95 \pm 11.06$ , with the goals subscale having the comparatively highest difficulty in emotion regulation, followed by the impulse and strategies subscales, with means of 10.49, 10.23, and

10.07 respectively. The clarity subscale had the comparatively lowest indicated difficulties in emotion regulation, with a mean score of 7.84. The awareness and non-acceptance subscales had somewhat lower scores, with means of 8.26 and 9.07, respectively.

**Table (3): Severity of emotional dysregulation among the studied sample according to Difficulties in Emotion Regulation scale (DERS-18) :**

Severity of emotional dysregulation		
	No	%
Emotionally regulated	30	35.7
Emotionally dysregulated	54	64.3
Total	84	100%

**Table (3)** illustrates that more than half of the studied subjects showed higher difficulties in emotion regulation.

## DISCUSSION

Patients diagnosed with mental disorders often experience significant emotional challenges, as they struggle to express their feelings despite possessing them. This inability to effectively express emotions can lead to a state of apathy, even though their biological responses remain intact. Emotional deficits can impact various processes, including facial expression of emotions, and the realms of recognition and perception (Horan et al., 2012; Tawfik, Harfush, Ramadan, & Gemeay, 2021).

In terms of the socio-demographic data of the examined patients, findings indicated that above half of the subjects were aged between 30 and 45 years, with a mean age of 34.63 and a standard deviation of 7.82. This aligns with the findings of Saber, Abd-Elraof, and El-Bilsha (2023), who reported that more than half of their patients fell within the 30 to 50 age range and is also in agreement with the study done by Forma, Green, Kim, and Teigland (2020).

The study further revealed that nearly two-thirds of the participants were male, suggesting a higher prevalence of mental illness among men. This result may be attributed to the tendency of families of female patients to refrain from seeking assistance due to stigma and fear that they will not be preferred as spouses. These findings are in agreement with the work of Tesfaw, Kibru, and Ayano (2020), who noted that three-fifths of their subjects were male. Conversely, this outcome contrasts with the findings of Osuji and Onu (2019), which indicated a higher number of female patients compared to males.

Our research indicated that, based on educational attainment, our study illustrated that the highest percentage of the participants were having diploma and just read and write, with percentages of 42.9% and 31.0%, respectively. This phenomenon may be linked to the impact of mental disorder symptoms on the educational achievements and cognitive abilities of the patients involved. This outcome aligns with research carried out in Egypt by Elsaid, Eletrby, Awad, and El-Bilsha (2024), which reported that nearly half of their participants were either illiterate or had basic reading and writing skills, while the other half had attained some level of secondary education. Additionally, the results are consistent with those of a study by Manea, Zaki, and Morsi (2020), which found that 57.7% of patients were either illiterate or had only basic literacy, with 25.8% having completed secondary education. Conversely, these findings contrast with those of Mackali, Çetinkaya, and Ay (2023), who discovered that the majority of their bipolar disorder sample had attained college or higher education.

In terms of marital status, over half (54.8%) of the participants identified as single, while those who were

married and divorced accounted for 25.0% and 17.9%, respectively. This trend may be attributed to the fact that a significant number of the patients were aged between 30 and 45 years, an age typically associated with marriage, so the presence of mental illness may have delayed marriage due to stigma. Furthermore, a majority of the patients reside in rural areas where social connections are strong, potentially exacerbating the stigma and increasing the likelihood of separation or divorce.

Another contributing factor to the higher incidence of single individuals in the sample may be due to the fact that more than half of the studied sample wasn't working and having inadequate income. This finding is in line with the findings of Elsaid et al. (2024), which noted that over half of their sample of individuals with schizophrenia were single. Additionally, this aligns with another study conducted by Aggarwal, Grover, and Chakrabarti.

Conversely, a study from Egypt by Osama, Sabra, and Barakat (2023) revealed that more than one-third of the surveyed participants were married. This observation is consistent with the results of Chowdhury and Chakraborty (2017) and Li et al. (2020), who noted that a notably higher proportion of their patient populations were also married. Furthermore, research conducted by Shin, Fei, Yi, Ruslan, and Sharkawi (2020) in Malaysia supported these findings, indicating that the majority of patients diagnosed with schizophrenia were married.

Regarding occupation, it was observed that over fifty percent of the patients involved in the study were not engaged in any form of employment. This observation may be linked to the effects of psychotic symptoms related to mental disorders, which can impede the ability of patients to sustain their jobs. Additionally, the widespread stigma associated with this mental health issue often leads to social isolation, negatively impacting relationships with both family and friends. Such discrimination can further limit access to vital services, including healthcare, education, housing, and employment opportunities. These results align with findings from Egyptian studies conducted by Elsaid et al. (2024) and Awad, Abdl-Elmageed, Hossein, and Elhadidy (2018), which both indicated that a significant proportion of their participants were unemployed. Moreover, research by El-Azzab, Ali, and Othman (2022) revealed that 61.7% of individuals diagnosed with schizophrenia were jobless. Similarly, Gao et al. (2022) reported that more than half of the patients diagnosed with schizophrenia were without employment.

However, these results contrast with the study by Sayed, Mahmoud, and Hadad (2022), which found that three-quarters of the patients surveyed were employed. Another study suggested that the highest proportion of depressed

patients were in permanent or fixed-term employment (Zhou et al., 2020). Additionally, a study conducted by Saber, Abd-Elraof, and El-Bilsha (2023) on patients with schizophrenia revealed that two-thirds of the participants were employed.

According to the residence, a significant portion of the patients examined, specifically more than fifty percent, reside in rural areas. This trend may be attributed to the proximity of the psychiatric hospital at Mansoura University, which serves as the closest facility to the village in the Dakahalia Governorate. This observation is consistent with the research conducted by Zein\_El Abdeen, Abd El Raoaf, and El-Bilsha (2024), as well as Muhammad and Meher (2021), both of which highlighted a greater prevalence of major depression in rural locales compared to urban environments. Additionally, El-Monshed and Amr (2020) found that more than half of the individuals diagnosed with schizophrenia also hailed from rural backgrounds.

Conversely, these findings contrast with an Egyptian study by Mohamed, Ahmad, Hassaan, and Hassan (2020), which determined that depression was more prevalent in urban areas. Additionally, research by Purtle et al. (2019), Nishigaki, Hanazato, Koga, and Kondo (2020), and Danek, Taylor, and Ellis Hiltz (2023) indicated that the distribution of depression diagnoses was higher in urban communities than in rural ones.

Regarding income levels, it was found that more than half of the patients studied had inadequate financial resources. This result can be linked to the high proportion of non-working individuals within the sample, which adversely affected their income, rendering it insufficient to meet basic living expenses or treatment costs. This finding is consistent with a study conducted in Egypt by Rady et al. (2021), which reported that nearly three-quarters of the patients had monthly incomes that fell short of their needs. Similarly, research by Hamzaa and Wahba (2022) indicated that approximately two-thirds of the patients had low income. In contrast to the current study's findings, Mumang et al. (2020) discovered that depression was more common among high-income groups than low-income groups, attributing this to the financial constraints faced by lower-income individuals, such as travel costs, which may limit their access to necessary services and contribute to the under diagnosis of depression. Assari (2019) also supported these conclusions.

The present study examines challenges in emotion regulation as measured by the Difficulties in Emotion Regulation Scale (DERS-18). The findings indicate that the overall mean score for difficulties in emotion regulation was  $55.95 \pm 11.06$ . Notably, the highest levels of difficulty were observed in the goals subscale, followed by the impulse and strategies subscales, which recorded mean scores of 10.49, 10.23, and 10.07, respectively. Conversely, the clarity subscale exhibited the lowest level of difficulty, with a mean score of 7.84, followed by the awareness and non-acceptance subscales, which had mean scores of 8.26 and 9.07, respectively.

This outcome aligns with the findings of a study conducted in Egypt by Atta, EL Genidy, and Lashin (2021), which reported elevated mean scores among the depressed patients examined, indicating greater challenges in emotional regulation. However, the two studies differ regarding which specific subscale presents the most significant difficulties. Atta, EL Genidy, and Lashin (2021) identified that the highest percentages of emotional regulation difficulties were observed in the subscales of "Lack of emotional clarity" (81.3%) and "Non-acceptance of emotional responses" (80%).

Regarding the severity of emotional dysregulation, this study indicated that over half of the participants experienced significant difficulties in regulating their emotions. This finding is consistent with Egyptian study by Zein\_El Abdeen, Abd El Raoaf, and El-Bilsha (2024), which revealed that approximately two-thirds of the depressed patients studied exhibited emotional dysregulation. Furthermore, this result is in agreement with the research conducted by Visted, Vøllestad, Nielsen, and Schanche (2018), which suggested that individuals suffering from major depressive disorders face difficulties in emotion regulation. As well, one potential mechanism contributing to the onset and persistence of depression is indeed the struggle with emotional regulation. Additionally, Musket, Hansen, Welker, Gilbert, and Gruber (2021) found that depressed individuals employed more maladaptive emotion regulation strategies compared to healthy group.

Moreover, this study corroborates with the outcomes of Kimhy et al. (2012), who illustrated that people with schizophrenia exhibited essential challenges in elaborating and recognizing their emotions, utilizing less reappraisal and more inhibition in their emotional regulation as opposed to the control group.

## CONCLUSION

This study showed that higher percentages of patients with mental disorders have higher difficulties in emotion regulation.

## RECOMMENDATIONS

The following recommendations are suggested based on the study results:

- Establishment of different workshops and seminars to improve nurses' knowledge about emotional dysregulation among patients with mental disorders and how they can help their patient to improve it.
- Establishment of psycho-education programs to be applied by nurses to help the patients to improve their emotion regulation.
- Conduct the study in different mental hospitals to generalize the results.
- Further study should be done on large sample size.

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