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# Care self-efficacy in adolescents with mental disorders: A qualitative study

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## Abstract:

**BACKGROUND:** The promotion of health in adolescents with mental disorders depends on their levels of self-care empowerment. Self-efficacy is a significant prerequisite for successful self-management and behavior change in adolescents with mental disorders. The present study was conducted to explain the concept of care self-efficacy in adolescents with mental disorders.

**MATERIALS AND METHODS:** This qualitative study was carried out using the conventional content analysis approach. Semi-structured interviews ( $n = 34$ ) were conducted with adolescents having mental disorders, their families, and healthcare providers. The participants were selected from neurology and psychiatry clinics affiliated with University of Medical Sciences using the purposeful sampling method in 2021. Data were analyzed according to Graneheim and Lundman method.

**RESULTS:** According to the findings of content analysis, four main themes were derived from the data: “health information-seeking behavior,” “adaptation of life to the disease and treatment conditions,” “adaptive coping,” and “social self-care.”

**CONCLUSION:** Based on the findings, the promotion of adaptive styles and social support is effective in acquiring social competencies. As a result, policymakers are suggested to design health-oriented educational programs based on care self-efficacy principles to promote health in adolescents with mental disorders.

## Keywords:

Adolescents, mental disorders, self-efficacy

## Introduction

Adolescence is a critical era in terms of psychological and physical growth. Adolescents’ good health status can guarantee the social development and future of a country.<sup>[1,2]</sup> However, shreds of evidence show that many mental illnesses are rooted in childhood and adolescence.<sup>[3,4]</sup> Approximately 2 to 49% of children and adolescents suffer from some type of psychological disorder.<sup>[5,6]</sup> Mental illnesses not only deteriorate adolescents’ mental and physical health but also affect their academic and social performance.<sup>[7]</sup> Furthermore, psychological disorders impose huge and irreparable

costs on the families, communities, and healthcare system.<sup>[8]</sup> In this regard, treating the disease and improving the quality of life are of great priority in these patients. To this end, awareness, attitude, and self-care skills should be improved in the community.<sup>[9]</sup> Self-efficacy pertains to one’s belief in their coping ability and affects humans’ mental, behavioral, and emotional patterns at different levels of experience. In other words, it indicates the endurance level of individuals in the face of a problem.<sup>[10]</sup> According to the World Health Organization, adolescents with high self-efficacy have better problem-solving skills and are at higher levels of flexibility, resilience, and empathy.<sup>[11]</sup> Adolescents with low self-efficacy tend to give up and retreat easily in the face of stressors, which

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in turn increases their symptoms of depression and anxiety.<sup>[12]</sup> Self-efficacy plays a pivotal role in coping with chronic diseases (e.g., psychiatric disorders) and mental illnesses in stigmatized patients by increasing their self-confidence.<sup>[13]</sup> Improvement of self-efficacy in self-care enhances patients' self-management in performing meaningful activities and reduces disease recurrence.<sup>[14]</sup> The present study adopted a qualitative approach to manage the disease more effectively in the face of cultural, religious, and other contextual management to the disease. Given the significant role of adolescents as future makers of society, identifying their perceptions and beliefs about self-efficacy of care seems necessary. Thus, the present qualitative study was conducted to investigate the concept of care self-efficacy in adolescents with mental disorders.

## Materials and Methods

### Study design and setting

The present research was carried out using qualitative content analysis to explain the concept of care self-efficacy in adolescents with mental disorders referred to psychiatric clinics affiliated with University of Medical Sciences from August to March 2021.

### Study participants and sampling

The participants were selected using the purposeful sampling method. Based on the inclusion criteria, 12–18-year-old adolescents with confirmed mental disorders (major depression, schizophrenia, bipolar disorder, conduct disorder, anxiety disorders, and nutritional disorders diagnosed) by a psychiatrist, a minimum 6-month history of mental disorders, willingness to participate in the study, ability to provide rich and sufficient information on the study topic, and Persian literacy were selected. The exclusion criteria included the onset of the acute phase of mental illness during the study period, the onset of psychosis symptoms (delirium and hallucinations), an event of severe mental stress during the study, hospitalization in a psychiatric hospital, and unwillingness to continue participating in the study. Inclusion criteria for the family caregivers were having 18 years of age and over; being in direct contact with the patients and caring for them; having the required physical, mental, and cognitive abilities to attend the interview; providing consent to participate in the research; and answering the questions. The healthcare providers were included if they were working in the psychiatric ward, had been caring for adolescents with mental disorders for at least three years, provided rich information about the concept, and confirmed their willingness to cooperate in the study. Reluctance to continue participating in the study was an exclusion criterion for family caregivers and healthcare providers.

Consequently, 34 participants entered the study followed by considering the maximum diversity in terms of gender, age, marital status, educational level, confirmed diagnosis, and duration of the disease. Healthcare providers were also interviewed until data saturation was reached.

### Data collection tool and technique

After making the necessary coordination with the participants, semi-structured interviews were performed in a private room in the health clinic to collect information. The goals, procedure, and duration of the interview were explained to the participants prior to recording the session. Each interview lasted 45–90 min. The interviewees were also provided with the researcher's contact information so that they could ask any questions about their ambiguities regarding the study. The recorded interviews were transcribed after each interview.

The thematic guide to the semi-structured interviews was based on the following questions: What is your understanding of the word "care self-efficacy"? How do you take care of yourself? What competencies have enabled you to take care of yourself? What qualities can help you take better care of yourself? What factors affect your self-care? Some exploratory questions were also asked based on the participants' answers; such as Can you explain more? Please give an example! or What do you mean?

Data were analyzed concurrently with data collection using Graneheim and Lundman method.<sup>[15]</sup> Initially, the recorded interviews were transcribed verbatim and the transcriptions were reviewed several times meticulously by the researchers. As a consequence of the researchers' immersion in the data, semantic units were determined and initial analysis was performed. Later, each semantic unit was conceptualized and labeled according to its hidden meaning. Similar basic codes were merged, organized, and categorized into the primary subcategories. In the next stage, similar subcategories were integrated based on their relationships and the main categories were formed. By merging similar main categories, the themes of care self-efficacy were extracted for adolescents with mental diseases. To facilitate the classification and comparison processes, MAXQDA software (version 20) was run.

Guba and Lincoln's (1994) criteria, including credibility, transferability, dependability,<sup>[16]</sup> and confirmability, were considered to confirm validity of the collected data. Furthermore, researchers' prolonged engagement with participants and data, questionnaire review by the panel of experts, and maximum diversity of participants in terms of demographic characteristics were employed to enhance validity of the findings. Other measures taken

to improve validity of the study included: the research process was described in detail for the participants, the transcription and interview processes were based on the standard techniques, the research process was delineated comprehensively, the interviews were transcribed and additional notes were taken immediately after each interview, and the entire research process was recorded and documented.

### Ethical considerations

Followed by obtaining approval of the Ethics Committee from the Vice-Chancellor of Research, University of Medical Sciences, the researchers referred to the research units. The participants were explained about the study goals and procedure, voluntary cooperation, and confidentiality of the data. Informed consent forms (containing the permission to record the interviews) were also collected from all participants and they were provided with the right to withdraw from the research at any time.

## Results

A total of 34 participants, including 22 females and 12 males, participated in this study. Table 1 shows the participants' demographic characteristics.

According to data analysis, the concept of care self-efficacy of adolescents with mental disorders was constructed around the themes of "health information-seeking behavior," "adaptation of life to the disease and treatment conditions," "adaptive coping," and "social self-care." Table 2 contains the themes and categories of care self-efficacy in adolescents with mental disorders.

### 1. Health information-seeking behavior

The "health information-seeking behavior" theme included the categories of "searching for practical resources," "assessing the quality of health information," and "optimal use of information."

The "searching for practical resources" consisted of the following subcategories: "Receiving information from medical staff," "Attending training classes," "Seeking information from peers/relatives," and "Searching information in media sources."

From the participants' point of view, seeking information from nurses and friends as well as searching online resources and the media was an effective factor in care self-efficacy.

A 17-year-old male patient said: "Previously, I did not know what was good or bad for me. I did not know what measures I could take to improve my health. In the clinic, nurses and

psychologists provided me with some explanations about my disease. This is my right to know what is wrong with me."

The category of "assessing the quality of health information" included the subcategories of "assessing information from medical staff," "assessing information from media sources," and "assessing information from peers and relatives."

A 13-year-old female patient noted: "When I learn something new about my disease in the clinic, I quickly go to the Internet and search to check if it is right or not... It is important for me to know about my disease and its medications."

The category of "optimal use of information" was formed followed by merging the two subcategories of "promoting knowledge and skills according to the instructions" and "enhancing the ability to participate in self-care programs."

Most participants acknowledged that they should improve their knowledge and skills in the self-care area and participate in self-care educational programs to control their disease and prevent its recurrence.

An 18-year-old male patient admitted: "When my mother was alive, she took care of me and prevented recurrence of my disease... but now I'm all alone in helping myself. I should be careful not to get sick again because I do not like to end up in the hospital. So, I want to learn everything to take care of myself."

### 2. Adaptation of life to the disease and treatment conditions

Given the stressful nature of mental diseases, most participants emphasized the integration of treatment with life to manage the disease stress, prevent side effects of the medications, and improve treatment adherence. This theme consisted of three categories: "adopting a health-oriented lifestyle," "management of treatment complications," and "adherence to treatment."

The category "adopting a health-oriented lifestyle" consisted of six subcategories: "Having regular and adequate physical activity," "Having a proper sleep pattern," "Adopting the healthy eating pattern," "Observing personal hygiene," "Planning for leisure," and "Reducing stressful conditions."

As a 16-year-old female adolescent stated, "The illness may recur with the slightest provocation. I have to live in a way to reduce my stress. For example, I do my homework on time or listen to my parents to avoid conflicts and disagreements."

In the same vein, a 17-year-old boy admitted: "Even though I take sleeping pills at night, I still cannot sleep properly. To meet this problem, I should not sleep during the

**Table 1: Participants' demographic characteristics and inclusion criteria**

Participant	Gender	Age (years)	Marital status	Educational level	Diagnosis	Relationship	Duration of the disease
1	Female	15	Single	Secondary school	Conduct.Dis	Patient	9 months
2	Female	17	Single	Secondary school	BID	Patient	10 months
3	Female	14	Single	Secondary school	Undifferentiated	Patient	9 months
4	Female	18	Single	Secondary school	BID	Patient	18 months
5	Male	16	Single	Secondary school	Conduct.dis R/O Borderlin	Patient	7 months
6	Male	16	Single	Secondary school	ADHD	Patient	8 months
7	Male	18	Single	Grade 10 (Dropout)	BID	Patient	2 years
8	Female	13	Single	Grade 6	R/O BID	Patient	6 months
9	Female	15	Single	Grade 8 (dropout)	R/O Schizophrenia	Patient	7 months
10	Female	16	Single	Secondary school	BID	Patient	18 months
11	Female	16	Single	Secondary school	MDD R/O Borderline	Patient	9 months
12	Female	16	Single	Secondary school	R/O cluster B Personality	Patient	8 months
13	Female	13	Single	Grade 6	R/O BID	Patient	7 months
14	Female	18	Single	Secondary school	BID	Patient	12 months
15	Female	15	Single	Secondary school	BID	Patient	12 months
16	Female	17	Single	Secondary school	Substance abuse R/O PTSD	Patient	12 months
17	Female	17	Single	Secondary school	Cluster B personality	Patient	10 months
18	Female	18	Single	Grade 9 (dropout)	Personality Borderline	Patient	9 months
19	Male	18	Single	Secondary school	BID	Patient	11 months
20	Male	16	Single	Grade 8	Epilepsy	Patient	8 months
21	Female	17	Single	Secondary school	PTSD	Patient	9 months
22	Male	17	Single	Secondary school	BID	Patient	12 months
23	Male	18	Single	Secondary school	BID	Patient	10 months
24	Male	18	Single	Secondary school	Adjustment.dis	Patient	11 months
25	Female	18	Single	Secondary school	Personality.dis	Patient	24 months
26	Female	18	Single	Secondary school	BID	Patient	18 months
27	Female	21	Single	Diploma	–	Patient's sister	–
28	Female	49	Married	Diploma	–	Patient's mother	–
29	Female	40	Married	Grade 8	–	Patient's mother	–
30	Male	48	Divorced	Lower secondary school	–	Patient's father	–
31	Male	51	Married	Master	–	Clinical supervisor	–
32	Male	28	Single	Bachelore	–	Nurse	–
33	Male	53	Married	Master	–	Sociologist	–
34	Female	50	Single	Master	–	Clinical psychologist	–

**Table 2: Themes' formation**

Theme	Categories
1. Health information-seeking behavior	a. Searching for practical resources b. Assessing the quality of health information c. Optimal use of information
2. Adaptation of life to the disease and treatment conditions	a. Adopting a health-oriented lifestyle b. Management of treatment complications c. Adherence to treatment
3. Adaptive coping	a. Emotional-oriented coping b. Spiritual approach c. Problem-oriented coping
4. Social self-care	a. Effective social interactions b. Acquisition of social competencies c. Managing high-risk behaviors

day or should go to the gym, exercise, and walk throughout the day until I get tired and fall asleep easily at night. I know that sleeping properly is necessary to control my illness."

The subcategory "personal hygiene" was associated with the participants' emphasis on daily bathing, changing clothes, and maintaining proper appearance due to the physical changes caused by puberty. A 16-year-old boy commented: "I know that if I do not take a shower every day or every other day, my body smells bad, I hate myself, and feel shy."

Integration of "Modification of drug side effects via nutritional measures" and "Integration of life with treatment" subcategories led to the extraction of "Management of treatment complications" category. A participant proposed: "I'm a 16-year-old girl...My medications are hormonal and make me obese but I cannot stop them because my illness will get worse. In order to maintain a good weight, the nurses told me that I should exercise and follow my diet. I should not eat a lot of sweets and junky foods; I follow my diet because I hate obesity."



Another girl with 16 years of age mentioned: *“Drugs dry my mouth and sometimes I cannot speak as if my mouth is stuck but I drink water regularly and chew gum to help it.”*

The subcategories of “Accepting treatment as an integral part of life” and “Paying attention to monitoring one’s health” led to the formation of “adherence to treatment” category.

Most participants acknowledged the recurrent nature of mental illnesses and maintained that adherence to medications and monthly visits were of great importance in controlling the disease.

An 18-year-old boy noted: *“I have had this disease since I was 14 and this disease is a part of my life. I always study and do my homework before the pills make me sleepy...I do not stop taking my medication at all without the doctor’s permission. I remember, every time that I stopped taking my medications regularly, my illness became more severe. This bothered me and my family.”*

### 3. Adaptive coping

Most participants believed that the chronic nature of mental illnesses causes emotional exhaustion in patients and their families, which can be calmed down by praying to God, facing the reality and accepting it, and sharing problems with others to ask for help.

This theme consisted of three categories of “Emotion-oriented coping,” “Spiritual approach,” and “Problem-oriented coping.”

Integration of the “Cognitive emotion regulation,” “distraction of the mind from negative thoughts,” and “sharing emotions” subcategories led to the extraction of the “Emotion-oriented coping” category.

A 17-year-old male patient remarked: *“I try to entertain myself when I’m upset and nervous. I listen to music or watch movies. I also may talk to and play with my friends. We talk and laugh together and it makes me calm.”*

Most participants took steps to improve their caring self-efficacy by accepting the divine providence, trusting God, and setting a goal in life.

“Existential spirituality” and “Religious spirituality” led to the formation of “Spiritual approach” category.

A 16-year-old girl propounded: *“I am very calm when I am very upset, I talk to God and pray.”*

An 18-year-old boy also added: *“I always go to the mosque. The clergyman says that life is very valuable and when a problem arises, God’s will is wise and he does not abandon*

*his creatures. I rely on God in everything; this trust makes me calm.”*

Medical personnel believed that having skills such as problem-solving strategies by formulating a correct definition of the problem and finding the right solution according to predetermined goals without fantasizing play a significant role in improving the patients’ self-efficacy.

The subcategories of “Psychological readiness for solving the problem,” “Employment of the problem-solving process,” “Ability to change goals,” and “A supportive environment” formed the category of “Problem-oriented coping.”

A supervisor and psychologist acknowledged: *“Since adolescence is a critical period and adolescents usually make sensitive and emotional decisions, we should try to teach them problem-solving skills so that they can set goals for themselves and deal with problems more realistically. These educations are often family-oriented because receiving support from family is crucial for adolescents and fundamental to their problem-solving ability.”*

In this regard, a 15-year-old boy commented: *“In the face of a problem that I cannot solve, for example, I ask my classmates to help me. Sometimes, I tell my mother and she helps me.”*

### 4. Social self-care

The majority of participants emphasized on performing respect-based behaviors, acquiring social competencies, and developing self-confidence to manage their behaviors in dealing with the other gender.

Another theme was “Social self-care,” which includes three categories of “Effective social interactions,” “Acquisition of social competencies,” and “Management of risky behaviors.”

“Effective social interactions” was one of the crucial categories found in this study. Given the importance of adolescence, most participants acknowledged that having intimate and empathetic relationships with others and active participation in peer groups were effective factors in enhancement of their self-efficacy. The subcategory of “satisfactory personal communication” and “effective membership in social groups” led to the extraction of the “effective social interactions” theme.

The category of “Acquisition of social competencies” was formed from the subcategories of “Education competence,” “Extracurricular competence,” and “Compliance with social norms.”

A 40-year-old father said: *“Despite his illness, my son is constantly trying to be the best in school; he has been taking music lessons since he was 8 years and now he can play the guitar.”*

A 17-year-old girl mentioned: *“I always wear appropriate clothes when I go out and do not wear much make-up; I don’t like people staring at me.”*

The category of “Management of risky behaviors” was formed on the account of integrating the two subcategories of “Relationship management with the other gender” and “Control of abnormal behavior.”

A 49-year-old mother propounded: *“My daughter is bipolar. According to the doctor, if she is in the manic phase, she starts spending money; she wants to have a relationship with boys; she sometimes leaves home and does not return or returns late... These behaviors should be managed and monitored.”*

Moreover, a 17-year-old girl indicated that she informed her close friends and family about her relationships with boys and did not interact with boys without her parents’ permission.

A 16-year-old boy admitted: *“Some of my friend’s smoke hookah or cigarettes but I know about the harms of smoking and avoid it. Even though they insist on smoking, I’m not affected by their temptations and don’t accept smoking cigarettes and hookahs. Of course, it is very difficult.”*

## Discussion

The present qualitative study was carried out to investigate the concept of care self-efficacy from the viewpoints of adolescents with mental disorders. According to the findings, the concept of care self-efficacy included “health information-seeking behavior,” “adaptation of life to the disease and treatment conditions,” “adaptive coping,” and “social self-care” themes in adolescents with mental disorders.

Most participants believed that obtaining information about the disease and its treatment procedure, evaluating the information obtained from nurses, friends, and the online resources, as well as improving knowledge and skills were highly effective in performing self-care behaviors, controlling the disease, and preventing its recurrence. Consistent with the present research, Goethals ER *et al.*<sup>[17]</sup> (2020) studied adolescents and observed a significant negative relationship between adolescents’ independent self-care and parental involvement in the care process. The optimal use of medical–pharmaceutical information and evaluation of their quality were considered as strong predictors of self-efficacy in adolescents with mental disorders.<sup>[18,19]</sup> In

a qualitative study, the theme of “Continuous therapeutic education” was extracted by the scholars. They proposed that continuous therapeutic education is needed for transferring pharmacological and therapeutic information due to the chronic nature and recurrence of mental illnesses.<sup>[20]</sup> These findings can be explanation by mentioning that mental disorders are chronic diseases that require taking self-care measures, such as regular and medication adherence to prevent recurrence of the disease. Given the adolescents’ ongoing activity in social networks and cyberspace, achieving this finding was not far from expectation.

An investigation in Turkey indicated that patients with mental disorders had difficulty in identifying their care needs causing a lack of control over their illness.<sup>[21]</sup> This finding may be due to the adolescents’ scarcity of information and education in the field of self-efficacy of patients with mental disorders in the studied country.

Considering the stressful nature of mental disorders, most participants emphasized integrating treatment with life to manage the stress caused by the disease, prevent the medication side effects, and improve treatment adherence. Diendorfer *et al.*<sup>[22]</sup> (2021) conducted a review study among adolescents with mental disorders and remarked that revising and improving these patients’ lifestyle was necessary to maintain and promote their health. In other words, choosing a health-oriented lifestyle leads patients to maintain and promote their health status by taking appropriate healthcare measures. In India, Chauhan *et al.*<sup>[23]</sup> (2021) concluded that positive health behaviors should be identified and strengthened in adolescent girls. They also acknowledged that families, schools, and peers play important roles in shaping adolescents’ lifestyles. This can be explained by the fact that the formation of individual values during adolescence can easily be influenced by peer groups and families.

Based on a cross-sectional study, maintaining the old lifestyle and lack of regular referring to the medical centers were among the fundamental obstacles in improving self-efficacy in adolescents with borderline personality disorder.<sup>[24]</sup> Adolescents with mental disorders can adhere to their treatment and manage their illness by interacting with and learning from the medical staff.<sup>[25]</sup> These results can be attributed to the intake of neuroleptics since they can cause gastrointestinal, skin, reproductive, and extrapyramidal complications. So, obtaining the required knowledge about the probable side effects and efficient strategies to deal with such complications can improve patients’ drug adherence.

According to the majority of our participants, praying and talking to God, accepting the reality, and consulting

with others were effective measures that could discharge them emotionally. In confirmation of these findings, some studies concluded that adherence to religion and spirituality play a key role in promoting adolescents' health and self-efficacy.<sup>[26,27]</sup> Dadfar *et al.*<sup>[28]</sup> (2021) corroborated that adherence to religious beliefs, spirituality, and ethics ensured the creation and maintenance of a healthy lifestyle by preventing many unhealthy behaviors. The participants' emphasis on the spiritual approaches may be associated with the dominance of Islam in Iran, where religious beliefs are more prominent and have deep roots in the family and school doctrines.<sup>[29]</sup>

The participants also emphasized performing respect-oriented behaviors, acquiring social competencies, and enhancing self-confidence to manage their behavior with the other gender. Despite all the efforts and pieces of training employed by the health organization to manage the adolescents' high-risk behaviors in dealing with the other gender, we are still witnessing some risky behaviors, such as lack of managing relationship with the other gender, smoking, and consuming alcohol among them.<sup>[25]</sup> In the same vein, a qualitative study showed that a lack of the required refusal skills to say "no" in tempting situations made most adolescents less resistant to risky behaviors, such as smoking.<sup>[30]</sup>

Based on the findings of a review and meta-analysis, fear of being rejected and mocked by peers is one of the main reasons for adolescents' lack of management in terms of high-risk behaviors.<sup>[31]</sup> In other terms, adolescents feel guilty by saying "no" to their peers because they have not learned the skills of courage.

According to our findings, lack of efficient management and attention to self-efficacy of care among adolescents with mental disorders can exacerbate their mental and physical problems and impose a health burden on society as a whole. Taking these findings into account, there is an urgent need to employ health promotion strategies in the field of adolescents' care self-efficacy.

### Limitation and recommendation

This study had no particular limitations. Future studies are recommended to investigate the effect of family-based educational intervention and counseling programs on the patients' quality of life and self-efficacy.

### Conclusion

The present qualitative study was conducted to explain the concept of care self-efficacy in adolescents with mental disorders. Based on the findings, the promotion of adaptive styles and social support is effective in achieving social competencies. Adaptation of adolescents' life with the disease and promotion of health information

behaviors can promote care self-efficacy in adolescents with mental disorders. Given the significant role of adolescents in the future of each country, authorities and managers of the health organizations are required to prioritize improving self-efficacy in adolescents with mental disorders in the care and treatment planning.

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### Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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### Conflicts of interest

There are no conflicts of interest.

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