

ORIGINAL ARTICLE

Nursing Students' Perceptions of Effective Factors on Mental Health: A Qualitative Content Analysis

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ABSTRACT

Background: Mental health is a fundamental and widespread concept with individual meanings. The purpose of this study is to perceive and clarify the factors influencing mental health from the perspectives of nursing students.

Methods: The present qualitative study was conducted in Khoy, Iran from July-December 2018. Twenty nursing students were selected as the research participants through purposeful sampling method and interviewed using semi-structured in-depth interviews. All interviews were recorded, transcribed, and then analyzed with Graneheim and Lundman's approach of conventional content analysis. The Trail version of the MAXQDA 10 software was applied to conduct the coding process.

Results: Data analysis revealed four themes and 12 sub-themes. The themes included feeling of self-worth, religious beliefs, socio-economic factors, and behavioral factors.

Conclusion: The results showed that mental health in nursing students is a multidimensional phenomenon and is influenced by various factors. The current results could help the nurse educators to intervene and provide suitable, effective, practicable, and culture based mental health services and also help the nursing students achieve mental stability. Therefore, it is suggested that further qualitative and interventional studies should be conducted in this area.

KEYWORDS: Mental health, Students, Nursing, Qualitative research, Factors

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INTRODUCTION

Mental health is one of the most important requirements of man and an important aspect of health. As defined by the World Health Organization (WHO), health means full physical, mental and social well-being, and it doesn't refer to the lack of illness or infirmity.¹ The central part of health is mental health because all health-related interactions are carried out mentally.² Health is a perceptual concept based on learning, values and beliefs of each individual who is influenced by the environment, family, and community. If the concept of health is understood abstractly, its effects in life will not be clear.³

Several definitions of mental health have been made: lack of mental illness, emotional balance, social harmony, feeling of comfort, integrity of personality, self and environmental awareness, ability to play a social, physical and emotional role, ability to co-ordinate with others, modification and improvement of the individual and social environment, resolution of conflicts and personal preferences logically, fairly and appropriately, the ability to adapt to the normal stresses of life, and finally self management. The concept of mental health, according to the WHO, refers to a status beyond the absence of mental disorders and it includes mental well-being, self-efficacy, autonomy, competence, social relations, social communication, prosperity, and intellectual and emotional potentialities.^{4,5}

Many factors affect mental health. Researchers consider reasons such as personality structures and cognitive and attitudinal components such as hope, optimism, empathy, affiliation, forgiveness, religion and spirituality in the stability of a sense of well-being and health.^{6,7} Studies have shown that those with a high psychological well-being also have a better physical health. These people are generally happy, optimistic, and positive, and have emotional stability, self-esteem, and high self-efficacy. High mental health is positively associated with the logical perception of others and

negatively associated with suicidal ideation, unprofessional behavior and burnout.⁸

The results of many studies in and out the country (IRAN) show that nursing students have lower general and mental health than other health related disciplines and non-medical students.^{9,10} In fact, nursing education does not create a suitable environment for nursing students. According to the nursing education curriculum, nursing students, in addition to learning theoretical courses, are placed in various clinical settings to acquire knowledge, skills and clinical judgment to achieve professional competence.⁹ During this period, they experience stressful events that affect their personal and professional life.¹¹ Some previous researches in this area also revealed that stressors which affected the students' mental health were related to academic training. The most common stressors included 'stress experience in the educational environment', 'relationships at work', 'issues of death and suffering', 'inadequate knowledge and training', 'insufficient hospital resources', and 'communication and procedural aspects of client care'.¹²

The consequences of a meta-analysis study in Iran during a 23-year period between 1991 and 2015 showed that the prevalence of mental disorders among students in Iran using random models was 33%. Unfortunately, the prevalence rate showed an increasing rate over time while in other countries this rate was below 20%.¹³ Previous studies conducted in United States, Iran, Singapour, India, and Malaysia showed that mental health issues are a growing concern among college student^{14,15} and depression, alcohol use, stress, low sleep quality, excessive daytime sleepiness, and anxiety are major mental health problems among nursing students.^{8,16} The results of another study which assessed the general health of nursing and other health related disciplines students indicated that mental disorders were observed 19.5%.¹⁷ Findings of some studies showed that a very small percentage of nursing students had a good status of happiness as an indicator of the

mental health. Happiness was claimed to be essential in developing nursing students as future nurses since happy nurses are more energetic, creative, successful, sociable, and more interested in caring.^{18, 19} In general, the results of most empirical research indicate that nursing students are at a relatively poor level of mental health which could have undesirable personal and professional consequences.^{4, 8, 9} In fact, major changes in the social, family, and personal life of the nursing students and experience of traumatic events in various clinical setting can lead to some psychological problems. Considering the fact that young people and university students include more than one third of the whole population of Iran, it is important to be aware of their perceptions of the factors affecting mental health. Nursing educators are always concerned about the knowledge and skills of nursing students. One of the obstacles in this regard is mental health problems. Therefore, the researchers tried to get deeper understanding about the factors affecting nursing students' mental health. Regarding the fact that mental health is formed in the socio-cultural context and due to low knowledge about the mental health of nursing students, the researchers decided to use nursing students' own experiences to discover and deeply understand this phenomenon. Thus, they chose the qualitative content analysis method to perceive and clarify the factors influencing mental health from the perspectives of nursing students.

MATERIAL AND METHODS

The present qualitative study using content analysis approach was conducted in Khoy, Iran during July-December 2018. In accordance with qualitative research, sampling was started with purposeful method and done with theoretical sampling with maximum variation. In the purposeful sampling, the researcher is looking for those who have a rich experience of the phenomena under the study and have the ability and desire to express it.²⁰

The participants in this study were 20

nursing students who were studying at Khoy Medical Science University, Iran. The inclusion criteria for the study were having at least one semester of university experience and willingness to express their own experiences. Exclusion criteria for the study were having a mental or physical illness during the previous year based on the participants' own self report.

Data collection was done through in-depth semi-structured interviews. The time and place of the interviews were agreed upon by the parties and they were conducted in a private class at the university by the first author. In the first instance, the researcher initially referred to the participants and presented the purpose of the research and if they were willing to participate in the research, an interview was scheduled. The open questions were designed as an interview guide to provide an open and interpretative response and follow-up questions were asked after the interviewees' responses. The general question in all interviews was: When do you feel you have mental health and when not? Which factors increase or decrease your mental health? As the interview went on, more detailed questions were asked about the influential factors (inhibitors or facilitators) expressed by the participants. The duration of interviews varied from 30-50 minutes. The guiding principle in the sampling of qualitative research is the saturation of the data to the extent that no new data is obtained.²⁰ In general, 20 interviews were conducted with 20 students to achieve theoretical saturation. No new data or concept was obtained after analyzing the last (18th) interviews. However, two more interviews were conducted to ensure data saturation. Data analysis process was carried out continuously and concurrently with data collection.

Interviews were analyzed using Graneheim and Lundman's (2004) conventional content analysis guidelines.²¹ (i) The recorded interviews were transcribed (ii) The researchers listened to the recordings and reviewed the transcripts several times to find the meaning units. (iii) The meaning

units from the statements of the participants were extracted in the form of initial codes. (iv) Codes were categorized according to the conceptual similarities to be minimized. (v) This trend continued across all the analysis units until themes and subthemes emerged. Each interview was recorded and typed in MAXQDA software, version 10.

Guba and Lincoln's criteria were used to assure the trustworthiness and rigor of the data. Credibility was achieved by reviewing the transcripts by participants themselves and using their complementary ideas as well as the prolonged engagement of the researchers with the data. For conformability, peer examination was done on the process of the work and research findings. For transferability, an extensive description of details regarding the methodology and context was included and sampling was done purposively. And finally for dependability, all accomplished activities were recorded precisely from the first step of the study.²²

This study was approved by the research ethic committee of Khoy Medical University (IR.KHOY.REC.1398.005). Written informed consent was signed by all participants. They were made aware of ethical, confidentiality

(anonymity in publishing) and voluntary participation principles and recording of their interviews.

RESULTS

The participants in the study were in the age range of 20-24 years. They were 12 female and 8 male undergraduate nursing students from different semesters (Table 1). The analysis of the findings from the interview resulted in the extraction of four themes. They were classified as: feeling of self-worth, religious beliefs, socio-economic factors, and behavioral factors. (Table 2).

Theme 1: Feeling of Self-Worth

Throughout the interviews, nursing students with various statements tried to express this important theme that their mental health is influenced by factors affecting their feeling of self-worth, and as long as students have a positive perception of themselves, their mental well-being will increase. The components of the feeling of self-worth in this study include: 'confirmation', 'success', 'autonomy', 'self-acceptance', and 'hope' that are discussed in detail below. In fact, students

Table 1: Demographic characteristics of the participants

Participants	Sex	Age (years)	Semester
Participant 1	Female	21	4
Participant 2	Male	20	4
Participant 3	Female	22	6
Participant 4	Female	20	2
Participant 5	Female	24	8
Participant 6	Female	23	6
Participant 7	Female	22	6
Participant 8	Male	20	4
Participant 9	Male	20	6
Participant 10	Female	22	4
Participant 11	Male	20	2
Participant 12	Female	22	4
Participant 13	Male	20	2
Participant 14	Female	24	8
Participant 15	Female	24	6
Participant 16	Male	24	8
Participant 17	Female	22	6
Participant 18	Male	20	4
Participant 19	Male	22	8
Participant 20	Female	20	2

Table 2: Themes and sub-themes extracted from the interviews

Sub-theme	Themes
<ul style="list-style-type: none"> • Confirmation • Success • Autonomy • Self-acceptance • Hope 	Feeling of self-worth
<ul style="list-style-type: none"> • Participating in religious ceremonies • Reciting the holy Quran and other religious books 	Religious beliefs
<ul style="list-style-type: none"> • Social Support • Economical support 	Socio-economic factors
<ul style="list-style-type: none"> • Disengagement • Physical Exercise • Balanced use of social networks 	Behavioral factors

described in a variety of ways how to gain feeling of self-worth for mental health.

1.a. Confirmation

Participants believed that when they received positive feedback from others and were confirmed, they were both satisfied and mentally health.

“People around you have a lot of influence. For example, when your parents accept, care about, and listen to you well, you feel quite well off, but when they say come on, forget it, and she’s really young, you feel worthless and upset”.(p.4)

1.b. Success

Most participants say that they feel relaxed when they feel successful or have a successful experience of overcoming problems.

“I think mental health is a sense of success. When your work is done successfully, it has a good effect on your minds. Imagine you are in charge of a task and you are just cutting the mustard”.(p.18)

“When you fulfill your colleagues’ expectations and reach the required standard, you feel relaxed”.(p.10)

1.c. Autonomy

Participants said that they had psychologically good feelings when parents or relatives did not create a constraint for them, or when they felt independent and were able to manage their own affairs and make decisions or once others respected their decisions, they were emotionally well-off. But when faced with resistance, they did not experience a good psychological feeling.

“I feel psychologically healthy when I am independent in my own work and decide for myself. We youth need to be free, we need to think independently”.(p.10)

“When my friends and acquaintance give me power and freedom and respect my decision, I feel psychologically healthy”.(p.5)

1.d. Self-acceptance

Participants thought someone as a healthy person if s/he values himself and accepts him/herself with all the weaknesses and abilities.

“To have mental health, first of all, one needs to accept herself/himself, I value my own self. I accept myself as I am”. (p.15)

1.e. Hope

Participants believed that having hope for the future was also the key to health. They expressed hope as a driving force behind the development of mental health.

“When you have the hope of life, you are healthy; that is, there is something that pushes you forward”.(p.8)

Theme 2: Religious Beliefs

Another extracted theme of the study was religious beliefs. This theme consisted of ‘participating in religious ceremonies’ and ‘reciting the holy Quran and other religious books’.

2. A. Participating in religious ceremonies

Students asserted that participating in religious ceremonies, praying and asking God to provide help to meet their needs, help them overcome the problems and make them feel calm and relaxed.

"When I attend religious ceremonies, I feel well at the time". (p. 3)

2.b. Reciting the holy Quran and other religious books

Students stated that they were turning to religious books when they felt lonely, depressed and troubled, and thus became mentally relaxed.

"Whenever I feel depressed or bored, either physically or mentally, I prefer to recite the holy Quran or pray. It helps me feel calm". (p.5)

"I don't feel lonely by reciting the holy Quran and thinking about God".(p.7)

Theme 3: Socio-Economic Factors

Socio-economic factors were one of the most important and influential experiences in the mental health. This theme consisted of 'social support' and 'economical support'.

3. a. Social Support

Students expressed that when they had a sense of family support and had suitable social relationships, such as the ability to communicate with parents, family, friends or university teachers, they felt mentally relaxed, and vice versa. This information empowered them.

"When your family understands you, you feel happy, but sometimes they cause you feel disappointed and depressed. Sometimes, they don't live up to your expectations".(p.6)

"My parents always remind me to inform them if any problem occurs, and I always do it. When I keep them posted on how my works go on, I feel mentally relaxed".(p.17)

"When I'm getting along with my friends well, I feel mentally relaxed but when it is hard to get along with them or dispute a problem with them, I feel bored and tired".(p.5)

"When I don't behave like my friends, they often reject me or taunt me. They are the reasons to drive me up the wall".(p.15)

"When you are in an environment where you feel you have a supporter, for example, a professor who can help you solve your problems, you can tolerate everything and you feel mentally sound".(p.10)

3. b. Economical support

Students expressed that having at least the financial resources and having fun with their friends made them feel happy and ultimately mentally healthy. But they did not feel happy when they themselves had to work to meet their own education costs and when there was no possibility of having fun because of financial problems.

"Nowadays, being well off can calm you down mentally. When you have some money to have fun with, then you're happy".(p.13)

"It makes you upset when the prospects for the job are unclear or when you're not sure what the future holds".(p.18)

"When you have to work hard to help fund your studies, when you cannot go out and have fun with your friends, when you cannot dip into your own pocket, it is then that you feel small and humiliated".(p.20)

Theme 4: Behavioral Factors

This theme includes the following sub-themes of disengagement, exercise, and balanced use of social networks. During the interviews, students often pointed to the role of these factors in mental health. According to the expressed experiences, nursing students described some behavioral factors in maintaining mental health and reducing their stress. They struggled to gain psychological stability by refraining from encounter with problems, physical and sports activities, which were often irregular, and also having self-control over the use of cyberspace.

4.a. Disengagement

Most participants stated that they were not involved in problems to maintain mental peace. They used ineffective mechanisms to solve problems such as avoidance and escape from problems.

"There are so many problems to which I do not want to think about. I try to avoid problems myself".(p.15)

4.b. Physical exercise

Participants expressed that by exercising; they reduced their mental conflicts and experienced a sense of mental relaxation.

"The days I exercise myself or go to the gym, I feel happier. It makes me get rid of some intrusive thoughts. It helps you forget your daily problems for a few hours".(p.13)

4. c. Balanced use of social networks

Another factor that participants felt to be effective in the sense of mental health was the balanced use of social networks and believed that excessive use of it caused anger and nervousness.

"I have a roommate who is always head over heels for social media. When you talk to her, she starts shouting and fighting. It has made her very nervous".(p.7)

DISCUSSION

The results of this study showed that there are many factors influencing the students' perceptions of mental health. Data analysis revealed four themes and twelve sub-themes. The four themes were classified as: Feeling of self-worth, religious beliefs, socio-economic factors, and behavioral factors.

The feeling of self-worth theme included the five sub-themes of 'confirmation', 'success', 'autonomy', 'self-acceptance', and 'hope'. Participants believed that when they received positive feedback from others and were confirmed, or when they were trying to succeed, or when they felt more autonomous, highly self-confident, 'self-acceptance', and hopeful, they found a positive perception of themselves, and this contributed to their mental well-being. Findings of some studies showed that there was a significant reverse correlation between self-reported stress and self-acceptance. This finding emphasized the importance of creating a sense of positive self-perception and self-confidence among nursing students to improve their mental health. Indeed, self-confidence in nursing students was considered as a buffer and protective shield in the face of stress and prevented mental disorder. Thus, the nursing students who have a sense of self-esteem have a high ability to communicate and can play an effective role in the development of the profession, handle

fatigue and pressure, and positively impact the interpersonal relationships, quality of care, and job satisfaction.^{23,24}

The participants in the present study considered autonomy as an effective factor in creating positive sense of self-worth and in achieving mental well-being. The findings of this study are in line with those of a research done in Iranian context in which the researchers studied the concept of health in adolescents' point of views. They expressed that autonomy and sense of independence is another key factor affecting health. They also continued that preventing adolescents and young people's access to independence and posing unfair and undeserved restrictions for them can lead to some unsatisfactory consequences such as depression, hiding, urging, recklessness and immorality (night party, runaway, cigarette smoking, and addiction) and double dealing.²⁵

Another key sub-theme of the study was 'hope'. The findings of the present study showed that those nursing students who had hope for the future had a better psychological feeling. Findings of a study conducted in Turkey revealed that university students have some negative mental states such as hopelessness and suicidal behavior. Their findings suggest that there are significant correlations among life satisfaction, hope, and mental health.²⁶ In fact, having self acceptance and positive self-image can act as a social protection factor against stress and anxiety. Those who feel good about themselves and are more confident also have a good sense of life and can successfully face problems and are able to handle them easily. Hope also makes life meaningful. It prevents us from mental breakdown and protects us from harmful situations.⁶ In sum, it is argued that self-acceptance has been inversely associated with depressive symptoms, anxious symptomatology, and disruptive behaviors.

Another important theme of the research was religious beliefs. Participants stated that they felt mentally healthy when they participated in religious ceremonies. We know different

religions have different beliefs. Several studies have shown a reciprocal relationship between different religious beliefs and mental health. The findings of research in Hindu system of beliefs showed that there was a significant negative correlation between the components of religious commitment, beliefs, and emotions, and components of general health (physical complaints, anxiety, depression and social dysfunction). They also proved that religion had a protective and supportive role for teenagers.²⁷ Another study conducted in Iranian context revealed that religiosity attitude was considered as a main factor affecting self-esteem and psychological hardiness and could promote psychological well-being.²⁸ Hence, institutionalizing of this religious teaching, trust in God, by health service developers and planners seems to be necessary in confronting the disruptive factors in mental health.

Another theme was socio-economic factors. Participants in the present study described their mental health with various statements. Receiving emotional and spiritual support from family, friends, and university professors and their proper relationships, their empathy and verbal attention helped the students' mental health. Indeed social support gives students a perception of being loved, cared, respected, and belonging to communication network. The results of the present study are in line with those reported in other studies.^{29,30} In the present study, poor economic conditions had negative effects on the students' perception of mental health. Economic deprivation, lack of a bright futures, and unemployment were regarded as mental and annoying concern which was affecting the mental health of the majority of participants. Generally, poor mental health is related to poor economic conditions. WHO states that mental health is determined by socio-economic and environmental factors, and economic crisis is likely to negatively affect the mental health.³¹ Another study also mentioned that economic crisis can be associated with a higher use of prescription medications and an increase in hospitalization for mental disorders.³²

The last theme extracted from the study was behavioral factors. Participants stated that they do some behaviors such as disengagement, physical exercise, and use of social networks to relive stress.

Disengagement from problems is an avoiding and ineffective strategy to deal with stress. Therefore, it is necessary to provide students with the necessary training on effective coping strategies. Some studies have reported adverse coping strategies such as drinking alcohol, smoking, and waterpipe.^{33,34} Participants in this study did not state the use of these materials perhaps because of the embarrassment and unfavorable views toward those who consume these materials in Iranian Islamic culture. In a qualitative study conducted in Malaysia, students showed that they used effective adaptive strategies and did not use undesirable behaviors.³⁵

In this study, nursing students expressed exercise and physical activities as another type of solution or strategy to achieve mental health. Although these activities were carried out irregularly and restrictively, they were described as useful in reducing daily stress. The results of a study in this area showed that increased physical activity which has been associated with life satisfaction, happiness, and positive attitude toward life can lead to the promotion of physical and mental health.³⁶

The balanced use of social networks was another subtheme of the study. Students argued that the high use of cyberspace or social networks has harmful effects on the nerves. Internet addiction and its association with mental distress can impact their academic achievement and long term career goals among medical students. Internet addiction would also indirectly impact the community of health care professionals and the society. There was a significant relationship between the student internet addiction and anxiety symptoms.³⁷ The results of another study showed that severe prevalence of internet addiction among nursing students was associated with poor mental health and depression without any impact on academic performance.³⁸

The strength of this study is that it increases our knowledge of the factors affecting the mental health of nursing students as a qualitative study conducted for the first time in Iran. However, as it is common for all qualitative studies, the results of the study cannot be generalized to other contexts and disciplines. Future qualitative and interventional studies are also suggested to be carried out in other contexts and on the students of other disciplines.

CONCLUSION

The results showed that mental health in nursing students is a multidimensional phenomenon and is influenced by various factors. The current results could help the nurse educators to intervene and provide suitable, effective, practical, and culture based mental health services and help the nursing students achieve mental stability. Promoting physical activities among nursing students, training problem-solving skills and activating the student counseling centers at universities are suggested. Nurse educators and clinical psychologist can provide opportunities for nursing students to express their own concerns and learn the strategies to cope with crises. Finally, deep religious and moral beliefs can be effective in providing mental health to students.

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