RESEARCH ARTICLE

Quality of Psychiatric Nursing Care: Perceptions of Nurses and Patients with Mental Illness

Rasha Mohammed Hussien[1,*], Khulood Mohammed Al Mansoor[2,*] and Hanem Ahmed AbdElkhalek Ahmed[1]

[1]Faculty of Nursing, Zagazig University, Zagazig, Egypt
[2]Self-Development Skills Department, King Saud University, Riyadh, Saudi Arabia

Abstract:

Introduction:

Improvements in healthcare services are significantly influenced by patients' perceptions of the quality of the care they receive. Improving and maintaining the quality of nursing care is a primary issue for healthcare providers and consumers; accordingly, nursing professionals must meet this challenge by accurately evaluating the quality of the services they deliver. The present study aimed to assess perceptions of the quality of psychiatric nursing care among nurses and mentally ill patients.

Methods:

A quantitative cross-sectional design was used. A sample of 100 psychiatric nurses and 65 male patients participated in the study at El-Azazi Hospital for Mental Health in Abo Hamad City, Sharkia Governorate, Egypt, which took place over the course of two months from the beginning of October to the end of November 2021.

Tools of Data Collection:

A custom questionnaire was used to collect socio-demographic data on all participants in addition to patients' clinical characteristics. Perceptions of the quality of nursing care were measured by the standardized Karen-patient and Karen-personnel instruments which share similar wording for 14 of the variables, nurses' and patients' perceptions of some aspects of care quality could validly be compared.

Results:

Nurses had high perceptions of the quality of psychiatric nursing care on all Karen-personnel subscales which ranged between 55% to 92%, except for competence development which scored at 29%. The majority of participant patients expressed an overall high perception of the quality of psychiatric nursing care, particularly on staff competence, caring/uncaring, and integrity (80%, 75.4%, and 72.3%, respectively), while (86.2%) had low perceptions of organizational quality. Patients aged <35 years expressed significantly more high perceptions of the quality of nursing care than older patients, with P value 0.004, while those suffering from addiction displayed significantly high perceptions of nursing care quality than patients with depression with P value 0.002.

Conclusion:

Mentally ill patients perceived the quality of nursing care higher than nurses on receiving individual and personal treatment and on the number of staff categories, whereas nurses had more high perceptions than patients on diagnosis, staff consideration, and patients getting to know the staff.

Recommendation:

To enhance and maintain the quality of psychiatric nursing care, further research should examine valid clinical indicators of quality.

Keywords: Psychiatric nursing, Care quality, Patients' perceptions, Nurses' perceptions, Clinical variables, Karen instruments.

1. INTRODUCTION

Quality describes a complex network of attitudes, values, and beliefs held by those who engage with healthcare systems.

Care is seen as another crucial element of healthcare [1]. Two additional indicators of quality are the capacity of a service to satisfy stated needs [2] and the extent to which the recipients' expectations are satisfied [3]. For healthcare services to be effective, efficient, affordable [4], and of adequate quality, they must produce the desired health outcomes [5].

* Address correspondence to these authors at the Self-Development Skills Department, King Saud University, Riyadh, Saudi Arabia;
E-mail: kalmansoor@ksu.edu.sa and drrasha_hussien@yahoo.com

Improvements in healthcare services are significantly influenced by patients' perceptions of the quality of the care they receive [6]. Improving and maintaining the quality of nursing care is a primary issue for healthcare providers and consumers; accordingly, nursing professionals must meet this challenge by accurately evaluating the quality of the services they deliver [7].

According to earlier research, professional nursing is characterized by caring relationships, solicitude to human responses, the amalgamation of assessment data, application of scientific data, advancement of professional nursing knowledge, promotion of social justice, and assurance of safe and evidence-based practice [8]. Nursing is a profession where the patient should be at the center of practice; therefore, professional, personal, scientific, artistic, and ethical human transactions are crucial [9].

The environment in which people receive mental healthcare presents nurses with difficult and complicated tasks. They are expected to manage ward administrative tasks, admit mental healthcare users, attend meetings, dispense medication, and communicate with users, in addition to supporting and caring for individuals receiving treatment for mental illnesses in hospitals [10,11].

Risk factors for the onset and progression of mental diseases, such as psychosocial stress, poverty, loneliness, use of psychoactive substances, and violence, are on the rise globally [12]. To achieve and maintain optimal mental health in line with the UN's Sustainable Development Goals, there is an increasing demand for treatment services [13]. In response, mental healthcare systems around the world have been designed to meet the emotional and psychosocial requirements of people with mental illness. In order to attract and retain the support of such users, they must therefore offer comprehensive mental health services encompassing prevention, treatment, and rehabilitation that are reasonable, readily available, and of high quality [14].

The need to deliver high-quality services has grown to be a significant problem for health systems in emerging nations, where providing economical access to healthcare while upholding the integrity of service quality is a challenging matter for healthcare organizations [15]. In the particular case of psychiatric services, their primary purpose is to promote mental health through interventions that aid in healing, enhance recovery, and prevent sickness. In this branch of healthcare, service quality is often assessed in terms of the patients' opinions of the quality of care [16]. Patient satisfaction is considered an important and reliable indicator of quality of care and offers a feedback system that enables health administrators to ascertain the degree to which patients' expectations have been met [17]. Patients in mental health facilities who are content with their care are more likely to follow medical advice, go back for follow-up appointments, and maximize their usage of the health services offered [18].

It is less common, however, for staff assessments of mental health service quality to be measured [19, 20], although gaining a better understanding of health professionals' perceptions of service quality can aid in the identification of methods for enhancing the quality of mental health services [15], particularly when linked with patients' perceptions of the care given on the same wards [21]. The value of examining nurses' perceptions of care quality lies in the crucial role they play in offering emotional and psychological support to patients and their families in diverse settings, including assisting patients with diagnosis and ensuring they receive the best care possible. In addition to offering technical care, nurses must possess the necessary professional knowledge, attitudes, and abilities to offer informational, emotional, and practical assistance [22 - 24].

1.1. Significance of the Study

The perspectives of mental health nurses are crucial for managing mental diseases as well as for developing programs and executing mental health interventions. Thus, comprehending their perceptions can aid in enhancing current mental health programs and give policymakers information to support processes for reviewing policies and strategies targeted at enhancing care and quality of life for people living with mental illness. At the same time, there is evidence that patient satisfaction is regarded as an outcome of healthcare services and as the most significant measure of the quality of care [25]. Indeed, the level of patient satisfaction reflects how well patients believe their wants and expectations have been satisfied by healthcare professionals. When it comes to improving the quality of care, gauging patient satisfaction may help identify those health system aspects in the greatest need of attention.

According to a pertinent study, evaluating the quality-of-care fosters practical skills promotes competencies, identifies problems, delivers more precise services, eliminates issues, and reduces departmental dissatisfaction, thus ultimately motivating the delivery of higher-quality care and better serving patients' needs [26].

1.2. Aim and Objectives

The study aimed to assess perceptions of the quality of psychiatric nursing care among nurses and mentally ill patients by meeting these objectives:

- to assess nurses' and mentally ill patients' perceptions of the quality of psychiatric nursing care;

- to identify the perceptions of the quality of psychiatric nursing care in relation to demographic and clinical variables among nurses and mentally ill patients.

- to identify the predictors of perceived high quality of psychiatric nursing care among mentally ill patients.

1.3. Research Questions

- What are nurses' and mentally ill patients' perceptions of the quality of psychiatric nursing care?

- What is the relationship between nurses' perceptions of quality of psychiatric nursing care and their demographic characteristics?

- What is the relationship between mentally ill patients' perceptions of quality of psychiatric nursing care and their

demographic and clinical characteristics?

- Are there predictors of perceived high quality of psychiatric nursing care among mentally ill patients?

2. METHODS

The study adopted a quantitative cross-sectional design and was set in El-Azazi Hospital for Mental Health in Abo Hamad City, Sharkia Governorate, Egypt.

2.1. Subjects

The subjects were 100 psychiatric nurses and 65 patients drawn from the above-mentioned setting. The inclusion criteria for nurses were: (a) working as a registered nurse in an inpatient mental healthcare unit; (b) having at least one year of work experience in psychiatric wards. The inclusion criteria for patients were: (a) being 20 years old or older; (b) having been hospitalized for at least one month, ability to read and write, with a generally stable mental state that permitted their reliable completion of a series of questionnaires. Patients under the age of 18 and those with severe mental illness were excluded since it was thought that their unstable mental states would make it impossible for them to understand and finish the questionnaire.

The number of nurses working at El-Azazi Hospital was 150. All 100 nurses who met the inclusion criteria and agreed to participate in the study were included in the sample, resulting in a response rate of 66.7%. There were 115 psychiatric patients and 44 patients with addiction at the time of the study. Sixty-five of these 159 male patients met the inclusion criteria and agreed to participate in the study. No female patients were available for inclusion because the female wards were closed for repairs at the time of data collection.

2.2. Data Collection

Two tools were utilized to collect data.

2.2.1. Tool I: Socio-demographic Data

The researchers designed questionnaires on socio-demographic data after revising the relevant literature and eliciting the opinions of experts to ensure content validity. The following data were collected:

(1) Socio-demographic data were collected from psychiatric nurses on their age, gender, educational level, and marital status. Occupational data covered experience in general hospitals, experience in psychiatric hospitals, attendance at training in quality of care and in psychiatric nursing, direct patient care, type of unit worked in, reasons for choosing to work in a psychiatric hospital, and intention to continue the job.

(2) Personal and clinical data were collected from mentally ill patients on age, education, marital status, residence, family income, diagnosis, disease duration, medication modalities, medication side effects, hospital stay, number of hospital admissions, medication budget, chronic somatic disease, and previous surgery.

2.2.2. Tool II: The Karen Instruments for Measuring Quality of Nursing Care

To measure how patients perceived the quality of the psychiatric nursing care that they received, the study used the Karen-patient instrument [27], comprising 34 items categorized into six subscales: Satisfaction (13 items), Influence (4 items), Staff competence (5 items), Caring/uncaring (5 items), Integrity (3 items) and Organization (5 items). Since the items were scored on a 5-point Likert-type scale from 1 (strongly disagree) to 5 (strongly agree), the total score for the instrument ranged between 34 and 170, with more strongly positive perceptions of care quality represented by higher scores. The originators of the instrument found it to have a Cronbach's α correlation coefficient of 0.88 [28], while the present study obtained a Cronbach's α value of 0.793.

To assess how nurses perceived the quality of psychiatric nursing care at the hospital, the study employed the Karen-personnel instrument [27], consisting of 35 items in six subscales: Psychosocial relations (8 items), Commitment (5 items), Work satisfaction (6 items), Openness/closeness (5 items), Competence development (5 items) and Security/insecurity (6 items). Use of the same 5-point Likert-type scale (1=strongly disagree; 5=strongly agree) means that total scores were between 35 and 175, with higher scores again representing more positive perceptions of care quality. The present study found a Cronbach's α correlation coefficient of 0.927, virtually identical to the value of 0.93 obtained by the originators of the scale [28].

Since the Karen-personnel and Karen-patient instruments share similar wording for 14 of the variables, nurses' and patients' perceptions of some aspects of care quality could validly be compared. The interpretation and comparison of the results were simplified by use of a scale index for the two scales and their subscales, transforming the raw scores to a percentage range from 0 (representing psychiatric nursing care of the lowest possible quality) to 100. These values were used in turn to create a perception index, where scores ≥70% indicated perceptions of high quality and those <70% indicated low perceived quality of care.

2.3. Content Validity and Reliability

The tools were evaluated by a panel of three experts from Zagazig University's nursing and medicine faculties for clarity, application, relevance, comprehensiveness, understanding, and ease of implementation. The reliability of the tools was assessed by Cronbach's α using the SPSS package for Windows, version 23.0 (IBM Corp., Armonk, NY, USA). The resulting α values of 0.793 for the Karen-patients scale and 0.927 for the Karen-personnel scale indicate good reliability.

2.4. Pilot Study

Ten psychiatric nurses and seven patients (10% of the sample, selected at random) participated in a pilot study to test the tools' usability and clarity and to estimate the time needed to complete the data-gathering forms. The average times taken to complete the instruments were 20-30 minutes for nurses and 30-45 minutes for patients. Because no adjustments to the instruments were required, the nurses and patients who

participated in the pilot trial were included in the final study sample.

2.5. Fieldwork

Once permission to proceed with the study was obtained, the researchers explained its purpose and procedures to the administrators of El-Azazi Hospital, then introduced themselves to psychiatric nurses and patients, explained the purpose and nature of the study to them, and assured them of voluntary participation and confidentiality. Once the researchers had received their written approval, the nurses and patients were requested to complete the questionnaires with the researchers' help. The nurses spent 20 to 30 minutes responding to the questions, whereas the patients required 30-45 minutes. The fieldwork lasted for two months, from the beginning of October to the end of November 2021, during which the researchers went to El-Azazi hospital on two days per week to collect data.

2.6. Statistical Analysis

All data were collected, tabulated and statistically analyzed using IBM SPSS 23.0. Quantitative data were expressed as mean ±SD and range, while qualitative data were expressed as absolute and relative frequencies (numbers and percentages).

Student's t-test was used to compare two groups of normally distributed variables and the Mann-Whitney U test was used to compare two groups of non-normally distributed variables. Percentages of categorical variables were compared using the chi-squared or Fisher exact tests as appropriate. Logistic regression analysis was performed to identify independent predictors of positive perceptions of the quality of nursing care. All tests were two sided. Any p-value < 0.05 was considered statistically significant and a p-value < 0.001 was highly significant, while p-values ≥ 0.05 were considered statistically insignificant.

3. RESULTS

Table **1** shows that half or more of participating patients were older than 35 years, with a mean age of 36±9.5, had a mental illness of more than 10 years duration (mean=8.9±5.6), had been admitted to a mental hospital at least three times (mean=3 ± 2.3), had currently been in hospital for two months or more (mean=2.9 ± 2.8), were urban dwellers, and had a sufficient income. About half also had a moderate level of education and three-fifths were single. The same table reveals that a large majority (over 90%) had had no previous surgery or chronic somatic disease that more than two-thirds reported no side effects of medication, which three quarters paid for themselves, and that more than a quarter received drug therapy.

Table 1. Basic characteristics of participating patients (n=65).

Variables		n	%
Age (years)	<35	32	49.2
	≥35	33	**50.8**
	Mean ±SD Range	36±9.5 20-60.	
Education	Illiterate	10	15.4
	Primary	15	23.1
	Moderate	32	**49.2**
	University	8	12.3
Marital status	Single	39	**60.0**
	Married	23	35.4
	Divorced/ widowed	3	4.6
Residence	Rural	31	47.7
	Urban	34	**52.3**
Family income	Insufficient	29	44.6
	Sufficient	36	**55.4**
Diagnosis	Depression	5	7.7
	Schizophrenia	18	27.7
	Mania	13	20.0
	Addiction	29	44.6
Disease duration	<10 years	32	49.2
	≥ 10years	33	**50.8**
	Mean ±SD Range	8.9±5.6 1-25	

(Table 1) contd.....

Variables		n	%
Medication modalities	Drug therapy	18	**27.7**
	Psychotherapy	14	21.5
	Electroconvulsive therapy	1	1.5
	Drug and psychotherapy	14	21.5
	Electrical and psychotherapy	13	20.0
	All three types	5	7.7
Side effects	Yes	19	29.2
	No	46	**70.8**
Hospital stay	<2 months	31	47.7
	≥2 months	34	**52.3**
	Mean ±SD Range	2.9±2.8 1-12 months	
Number of hospital admissions	1-2	31	47.7
	≥3	34	**52.3**
	Mean ±SD Range	3±2.3 1-10	
Medication budget	Health insurance	6	9.2
	Employer	5	7.7
	Charitable organization	6	9.2
	Self	48	**73.8**
Chronic somatic disease	Yes	5	7.7
	No	60	**92.3**
Previous surgery	Yes	5	7.7
	No	60	**92.3**

Table 2. Basic characteristics of participating nurses (n=100).

Variables		n.	%
Age (years)	<28	49	49.0
	≥28	51	**51.0**
	Mean ±SD Range	27.8±4.7 21-42	
Gender	Male	39	39.0
	Female	61	**61.0**
Education	Nursing diploma	8	8.0
	Institute of nursing	75	**75.0**
	College of nursing	16	16.0
	Master's degree	1	1.0
Marital status	Single	29	29.0
	Married	67	**67.0**
	Divorced/widowed	4	4.0
Experience in general hospital	No	83	**83.0**
	Yes	17	17.0
Experience in psychiatric hospital	< 5 years	43	43.0
	≥ 5 years	57	**57.0**
	Mean ±SD Range	6.23 ± 5.01 (1-22 years)	
Attended quality training	Yes	57	**57.0**
	No	43	43.0
Attended psychiatric nursing training	Yes	95	**95.0.**
	No	5	5.0
Job description: Direct patient care	Yes	99	**99.0**
	No	1	1.0
	Acute cases	5	5.0

(Table 2) contd.....

Variables		n.	%
Unit type	Chronic case	6	6.0
	Mixed acute and chronic	89	**89.0**
Chose to work in a psychiatric hospital	Yes	82	**82.0**
	No	18	18.0
Continuing job	Yes	83	**83.0**
	No	17	17.0

Table 3. Patients' perceptions of the quality of nursing care (n=65).

Karen-patient Instrument Subscale	Mean ± SD	Minimum-Maximum	Patients' Perception Index			
			High ≥70		Low <70	
			n.	%	n.	%
Patient satisfaction	47.6±9.2	24-62	40	**61.5**	25	38.5
Influence	14±3.5	4-20	33	**50.8**	32	49.2
Staff competence	19.1±3.7	5-25	52	**80.0**	13	20.0
Caring/uncaring	19.5±4	12-25	49	**75.4**	26	24.6
Integrity	11.5±2.6	3-15	47	**72.3**	18	27.7
Organization	15.9±1.7	12-20	9	13.8	56	**86.2**
Total Karen-patients scale	127.7±19.2	90-161	38	**58.5**	27	41.5

Table 4. Nurses' perceptions of quality of nursing care (n=100).

Karen-personnel Instrument Subscale	Mean ± SD	Minimum- maximum	Nurses' Perception Index			
			High ≥70		Low <70	
			n.	%	n.	%
Psychosocial relations	28.2±4.1	16-39	55	**55.0**	45	45.0
Commitment	20.9±2.7	11.-25	92	**92.0**	8	8.0
Work satisfaction	23.6±3.5	15-30	84	**84.0**	16	16.0
Openness/ closeness	18.8±2.8	11-25	71	**71.0**	29	29.0
Competence development	15.9±3.4	10-24	29	29.0	71	**71.0**
Security/ insecurity	21.5±2.8	14-27	71	**71.0**	29	29.0
Total Karen-nurses scale	129±12.4	99-157	70	**70.0**	30	30.0

Table **2** reveals that over half of participating nurses were older than 28 years (mean age = 27.8±4.7), had more than five years' experience in a psychiatric hospital (mean=6.23±5.01), and had received quality training. Three fifths of nurses were female, two thirds were married, and three quarters were educated to the Institute of Nursing level. The same table shows that more than four fifths had no experience in a general hospital, had been trained in psychiatric nursing, provided direct care for acute and chronic mentally ill patients, had chosen to work in psychiatric care, and intended to continue in their job.

As Table **3** shows in terms of the perception index, three-fifths of patients perceived the quality of nursing care provided for them to be high as regards patient satisfaction, with a mean score of 47.6±9.2 from a potential maximum of 65. The percentages perceiving a high quality of care provided in regard to the other subscales were 50.8 for influence, 80 for staff competence, 75.4 for caring/uncaring, and 72.3 for integrity. The only subscale on which a majority perceived quality to be low was organization, at 86.2%. The totals for the patient scale show that the overall perception of more than half

of the participants (58.5%) was that a high quality of nursing care was provided for them.

Table **4** shows a majority of participating nurses similarly perceive quality of care as measured by the perception index to be high on five of the six subscales: psychosocial relations (55.0%), commitment (92.0%), work satisfaction (84.0%), openness/closeness (71.0%), and security/insecurity (71.0%). On competence development, however, 71% of nurses perceived the quality of care to be low. Overall, more than two thirds (70.0%) of participating psychiatric nurses recorded perceptions of high care quality as measured by the perception index of their total scores on the Karen-personnel instrument.

Table **5** reveals statistically highly significant relationships (p<0.001) of patients' perceptions of nursing care quality with their age and with their place of residence. Patients aged over 35 years and those residing in rural areas perceived quality of nursing care as low overall, while younger ones and urban dwellers tended to perceive quality as high. Patients' perceptions of care quality were also found to have statistically significant relationships (p<0.05) with educational level and with family income. Those with only primary education and

those with low incomes tended to perceive the quality of care provided in the hospital as low, whereas a majority of patients with moderate education and an adequate income perceived care quality to be high.

Table **6** shows a number of statistically significant and highly significant relationships between patients' perceptions of nursing care quality and their disease characteristics. These were highly significant (p<0.001) in the case of both diagnosis and number of hospital admissions: schizophrenic patients and those having had three or more hospital admissions were highly likely to perceive care as being of low quality, whereas

those being treated for addiction and those with fewer than three admissions strongly tended to have perceptions of high care quality. Patients' perceptions of quality of nursing care were also statistically significantly related (p<0.05) to their treatment modalities, side effects, and length of hospital stay, whereby perceptions of high quality were more likely among patients receiving psychotherapy, having no side effects, and having been in hospital for less than two months, whereas among patients reporting side effects, receiving drug therapy, and having been in hospital for two months or more, perceptions of low care quality were more frequent.

Table 5. Relation of patients' personal characteristics with their perceptions of quality of nursing care.

Variables	Patients' Perceptions of Nursing Care Quality				χ^2	p-value
	High n=38		Low n=27			
	No.	%	No.	%		
Patients' age (years)	-	-	-	-	-	-
<35	27	**71.1**	5	18.5	17.4	0.0001
≥35	11	28.9	22	**81.5**	-	-
Education	-	-	-	-	-	-
Illiterate	3	7.9	7	25.9	-	-
Primary	4	10.5	11	**40.7**	16.9	0.001
Moderate	24	**63.2**	8	29.6	-	-
University	7	18.4	1	3.7	-	-
Marital status	-	-	-	-	-	-
Single	21	55.3	18	66.7	-	-
Married	16	42.1	7	25.9	2.3	0.32
Divorced/ widowed	1	2.6	2	7.4	-	-
Residence	-	-	-	-	-	-
Rural	11	28.9	20	**74.1**	12.8	0.0001
Urban	27	**71.1**	7	25.9	-	-
Family income	-	-	-	-	-	-
Insufficient	12	31.6	17	**63.0**	-	-
Sufficient	26	**68.4**	10	37.0	6.7	0.035

Note: χ^2=chi-squared test; f=Fisher exact test; p<0.05=significant; p<0.001=highly significant; p>0.05=insignificant.

Table 6. Relation of patients' disease characteristics with their perceptions of quality of nursing care.

Variables	Patients' Perceptions of Nursing Care Quality				χ^2	p-value
	High n=38		Low n=27			
	No.	%	No.	%		
Diagnosis	-	-	-	-	-	-
Depression	1	2.6	4	14.8	-	-
Schizophrenia	5	13.2	13	**48.1**	31.4	0.0001
Mania	4	10.5	9	33.3	-	-
Addiction	28	**73.7**	1	3.7	-	-
Disease duration	-	-	-	-	-	-
<10 years	19	50.0	13	48.1	0.02	0.88
≥ 10years	19	50.0	14	51.9	-	-
Treatment modalities	-	-	-	-	-	-
Drug therapy	9	23.7	9	**37.0**	-	-
Psychotherapy	14	**36.8**	0	.0	22	0.001
Drug and psychotherapy	10	26.3	4	14.8	-	-
ECT and psychotherapy	5	13.2	9	23.3	-	-

(Table 6) contd.....

Variables	Patients' Perceptions of Nursing Care Quality				χ^2	p-value
	High n=38		Low n=27			
	No.	%	No.	%		
All three types	0	.0	5	18.5	-	-
Side effects	-	-	-	-	-	-
Yes	6	15.8	13	**48.1**	7.9	0.005
No	32	**84.2**	14	51.9	-	-
Hospital stay	-	-	-	-	-	-
<2 months	24	**63.2**	7	25.9	8.7	0.003
≥2 months	14	36.8	20	**74.1**	-	-
No. of hospital admissions	-	-	-	-	-	-
1-2	26	**68.4**	5	18.5	15.7	0.0001
≥3	12	31.6	22	**81.5**	-	-
Medication budget	-	-	-	-	-	-
Health insurance	4	10.5	2	7.4	-	-
Employer	1	2.6	4	14.8	3.4	0.33
Charitable organization	4	10.5	2	7.4	-	-
Self	29	76.3	19	70.4	-	-
Chronic disease	-	-	-	-	-	-
Yes	2	5.3	3	11.1	f	0.64
No	36	94.7	24	88.9	-	-
Previous therapy	-	-	-	-	-	-
Yes	3	7.9	2	7.4	f	0.99
No	35	92.1	25	92.6	-	-

Note: χ^2=chi-squared test; $p<0.05$=significant; $p<0.001$=highly significant; $p>0.05$=insignificant.

Table 7. Relation of nurses' basic characteristics with their perceptions of nursing care quality.

Variables	Nurses' Perceptions of Quality of Nursing Care				χ^2	p-value
	High n=70		Low n=30			
	No.	%	No.	%		
Age (years)	-	-	-	-	-	-
<28	32	45.7	17	56.7	1	0.32
≥28	38	54.3	13	43.3	-	-
Gender	-	-	-	-	-	-
Male	27	38.6	12	40.0	0.018	0.89
Female	43	61.4	18	60.0	-	-
Education	-	-	-	-	-	-
Nursing diploma	8	11.4	0	.0	-	-
Institute of nursing	54	**77.1**	21	70.0	8.2	**0.026**
College of nursing	7	10.0	9	30.0	-	-
Master's degree	1	1.4	0	.0	-	-
Marital status	-	-	-	-	-	-
Single	18	25.7	11	36.7	2.3	0.31
Married	50	71.4	17	56.7	-	-
Divorced/widowed	2	2.9	2	6.7	-	-
General experience	-	-	-	-	-	-
No	58	82.9	25	83.3	0.03	0.95
Yes	12	17.1	5	16.7	-	-
Psychiatric experience	-	-	-	-	-	-
< 5 years	25	35.7	18	**60.0**	5.01	**0.025**
≥5 years	45	**64.3**	12	40.0	-	-
Attended quality training	-	-	-	-	-	-
Yes	41	58.6	16	53.3	0.23	0.63
No	29	41.4	14	46.7	-	-

(Table 7) contd.....

Variables	Nurses' Perceptions of Quality of Nursing Care				χ^2	p-value
	High n=70		Low n=30			
	No.	%	No.	%		
Age (years)	-	-	-	-	-	-
Attended psychiatric nursing training	-	-	-	-	-	-
Yes	66	94.3	29	96.7	f	0.99
No	4	5.7	1	3.3	-	-
Job description: Direct patient care	-	-	-	-	-	-
Yes	69	98.6	30	100.0	f	0.99
No	1	1.4	0	.0	-	-
Unit type	-	-	-	-	-	-
Acute cases	5	7.1	0	.0	-	-
Chronic cases	6	8.6	0	.0	5.2	0.071
Mixed acute and chronic	59	84.3	30	100.0	-	-
Choose to work in a psychiatric hospital	-	-	-	-	-	-
Yes	57	81.4	25	83.3	0.05	0.82
No	13	18.6	5	16.7	-	-
Continuing job	-	-	-	-	-	-
Yes	60	85.7	23	76.7	1.2	0.27
No	10	14.3	7	23.3	-	-

Note: χ^2=chi-squared test; f=Fisher exact test; p<0.05=significant; p>0.05=insignificant.

Table 8. Comparison between the perceptions of patients and nurses regarding the quality of nursing care as measured by responses to identical items in the Karen-patient and Karen-personnel instruments.

Questionnaire Items	Perceptions of nursing care quality		u/t	p-value
	Patients n=65	Nurses n=100		
	Mean ± SD	Mean ± SD		
Here they are able to find out what's wrong, to diagnose	3.2 ±1.2	**3.8±0.7**	3.6	**.0004^**
One receives individual and personal treatment	**3.5±1.03**	2.8±1.2	3.9	**.0001^**
The staff make the patients feel calm	3.9±0.95	3.8±0.81	0.72	0.47
There is orderliness on this ward	3.93±0.75	3.9±0.76	0.25	0.8
The staff are nice, kind, happy and good	3.9±0.81	3.7±0.91	1.4	0.15
The staff are able to motivate, stimulate and encourage the patient	3.8±0.87	4 ±0.74	1.6	0.11
The staff shows consideration	3.7±0.98	**4.4±0.62**	5.6	**0.0001**
The staff shows commitment	4±1.1	**4.3±0.76**	2.07	**0.039**
The staff shows interest	4.1±1.08	4.3±0.82	1.3	0.17
The staff have the ability to show compassion	3.7±0.97	3.8±0.78	0.73	0.46
There is a positive atmosphere	3.8±0.94	3.7±0.78	0.74	0.45
The staff are calm, assured	3.8±0.96	3.7±0.83	0.71	0.48
So many staff categories	**2.3±1.06**	1.8±0.63	3.4	**0.0008^**
The patient gets to know the staff	3.5±1.1	**4±0.48**	4	**0.0009**
Perceptions of quality-of-care scale	127.7±19.2	129±12.4	0.48	0.63

Note: ^=Mann Whitney u test; t=Student t test; p<0.05=significant; p<0.001=highly significant; p>0.05=insignificant.

Table **7** shows that nurses' perceptions of the quality of psychiatric nursing care provided in their hospital were related at a statistically significant level (p<0.05) to their education and their length of experience in psychiatric hospitals. Nurses educated to the institute of nursing level and those with five years or more of experience were significantly more likely to perceive the quality of care as high, in contrast to those with less experience, who more often reported perceptions of low care quality.

By comparing the mean ±SD scores of patients' and nurses' responses to items which were the same in both instruments, Table **8** reveals statistically highly significant differences between the two groups of participants on five of these variables. The patients reported more positive perceptions of care quality than the nurses in response to two items: "One receives individual and personal treatment" (p=0.001) and "There are so many staff categories" (p=0.0008). Conversely, nurses perceived the quality of care more positively than the patients when responding to three statements: "Here they are able to find out what's wrong, to diagnose" (p=0.0004), "The staff shows consideration" (p=0.0001), and "The patient gets to know the staff" (p=0.0009). There was also a statistically

significant difference (p=0.039) on "The staff shows commitment", with nurses' perceptions being more positive than those of the patients.

Table **9** shows significant predictors of patients' perceptions of the quality of nursing care. Patients aged <35 years were 16.02 times more likely than those in the older group to perceive nursing care as of high quality, while patients being treated for addiction were 703 times more likely than those with depression to report perceptions of high-quality care.

Table 9. Logistic regression for predicting variables of patients' perceptions of quality of nursing care.

-	Sig.	Odds Ratios	95% CI for Odds	
			Lower	Upper
Age <35 years	**.004**	16.02	2.394	107.201
Diagnosis (depression) reference	-	-	-	-
Schizophrenia	.595	2.156	.127	36.649
Mania	.587	2.252	.120	42.194
Addiction	**.002**	703	10.838	45651.257

Note: Odds ratios for the predictors CI=confidence interval.

4. DISCUSSION

Quality of care is a growing global concern as a major aspect of the right to health and the path to equity and dignity for all healthcare service consumers [29, 30]. There is evidence that providing healthcare in accordance with quality standards tends to result in desired health outcomes, whereas inadequate healthcare quality worsens patient dissatisfaction, non-adherence, and mortality [31]. Finding ways to improve the quality of mental health services can be aided by having a better knowledge of health professionals' viewpoints on service quality [15], especially by making comparisons with patients' perceptions of the treatment given in the same ward [21]. The current study set out to determine the perceptions of the quality of psychiatric nursing care among nurses and mentally ill patients.

Patients participating in the study ranged in age from 20 to 60 years, with a mean age of 36±9.5, while single people, those with a moderate education, and urban dwellers were all in the majority. On these measures, the sample was similar to that in a study conducted in Nigeria, which reported that ages ranged from 18 to 60 years with a mean of 36.3±10.1 and that the majority of participants were single and had secondary education [32].

The current study found that the majority of participating patients perceived the overall quality of nursing care to be high, particularly in terms of staff competence, caring attitude, and integrity, whereas most perceived the organizational aspect of care as of low quality. This contrasting finding may be attributed to the majority of health service providers being nurses who would spend most of their time with their patients during their hospital stay, while also being expected to perform administrative activities, admit mentally ill patients, attend meetings, dispense medication, and communicate with mental healthcare users, in addition to supporting and caring for individuals receiving treatment for mental diseases. All of

these factors may be responsible for the high quality of psychiatric nursing care perceived by patients. These findings are consistent with those of a number of studies conducted in Iran, Jamaica, and Singapore which found that nurses played a crucial role in providing emotional and psychological support to patients and their families in various settings, including assisting patients with diagnosis and ensuring that they received the best care possible. In addition to providing technical treatment, nurses need to possess the necessary professional knowledge, attitudes, and abilities to offer informational, emotional, and practical assistance [22 - 24]. Correspondingly, the openness, patience, empathy, communication, and sensitivity of nurses toward their patients are key components of caring nursing encounters that help patients to have positive care experiences [33].

The quality of nurses' professional competence and care is one of the primary issues for health systems and healthcare practitioners throughout the world, since evidence suggests that it is crucial for this occupational group to achieve the mission of the healthcare system [34]. Meanwhile, as indicated in an Iranian study, patients are most frequently in contact with nurses, leading some experts to attribute to them alone the acceptability of the services provided, often allowing the major roles of other treatment groups to be overlooked [35]. According to a study conducted in London, a positive patient experience based on cooperation and reciprocated respect engenders gratitude and appreciation for the work of nurses [36]. Another qualitative study confirmed patient-centeredness as a crucial component of high-quality care in a psychiatric healthcare setting [37].

The finding that the lowest percentage of patients perceiving the quality of care as high was with regard to an organization may have resulted from nurses' inability to provide more personalized nursing care, due to the large numbers of incoming patients being assigned to them. This result is congruent with earlier research indicating that the organization of nursing care, including the work atmosphere and nurse staffing levels, is associated with patient outcomes, including satisfaction with care as an increasingly significant outcome and performance measure [38 - 39].

The current study has identified significant predictors of patients' perceptions of the quality of nursing care. Younger patients (<35 years) had more high perceptions of the quality of nursing care than older ones. Those receiving treatment for addiction reported more high perceptions of the quality of nursing care than patients with depression. The finding that patients' age affected their perceptions of the quality of care rendered by psychiatric nurses is consistent with the conclusion of a London-based study that demographic variables including age may have an impact on patients' assessments of the quality of care [40], but it is contradicted by a Jordanian study which found no association between patients' ratings of the quality of psychiatric nursing care and their socio-demographic characteristics [41]. This discrepancy may be related to differences in sampling criteria.

As to the nurses participating in the current study, in the majority, they were female, above 28 years old, and married, had more than five years of experience working in a psychiatric

hospital, and had attended psychiatric nursing training. These findings are consistent with nursing being a female-dominated profession and with the selection of mature nurses with significant experience to work in psychiatric care settings. They are also consistent with those of a prior study of psychiatric nurses at six in-patient mental clinics in KwaZulu-Natal, which reported that the majority of participants were female, between the ages of 30 and 39 [42]. Similarly, research from worldwide studies in Turkey found nursing to be an overwhelmingly female profession [43], while the above study in Jordan found that its participating nurses had a mean of 6.9 years of experience in psychiatric units [41].

The present study found that nurses had high perceptions of the quality of all aspects of psychiatric nursing care except competence development, which may reflect their perceived need for in-service training to enhance their competence. These results are in agreement with those of Alsyouf and colleagues, who found that the highest subscale index was for openness/closeness, while the lowest was for competence development [41]. If nurses are not well prepared for the modern practice environment, their behaviors and attitudes have the potential to shape their judgments of future neutral or favorable nursing experiences [44].

When comparing the perceptions of patients with those of staff nurses, the current study found that on the whole, participating patients perceived the quality of nursing care higher than the nurses did in respect of two variables, namely receiving individual and personal treatment and there being many staff categories. Conversely, nurses tended to have higher perceptions of care quality than the patients did in relation to diagnosis, to the consideration shown by staff, and to patients getting to know the staff. In addition to these five differences between the two participating groups, which were all statistically highly significant, there was one other statistically significant difference: nurses perceived the quality of nursing care more positively than the patients in terms of staff commitment. These findings are consistent with the idea that patients and nurses vary in their viewpoints on the quality of psychiatric nursing care; they also suggest that there are differences between providers of healthcare services and those who receive them in how they assess the standard of psychiatric nursing care. One explanation is that patients may lack the knowledge or experience necessary to reliably assess the quality of psychiatric nursing care, perhaps partly because they are likely never to have had the chance to discuss care plans with their nurses. Additionally, the nature of mental illness means that inpatients may also be cognitively impaired, which may affect their perception. These results are consistent with a study conducted in Jordan which found significant differences between patients' and nurses' perceptions in several areas that reflect the quality of psychiatric nursing care. The same study found that patients and nurses were equally satisfied with the quality of psychiatric nursing care, but patients scored lower than nurses [41]. According to Zhao *et al.* [**7**], because nurses and patients use distinct criteria and methods to describe and assess the nursing care given, they have diverse perspectives on the quality of nursing care.

5. LIMITATIONS OF THE STUDY

The study has a number of limitations, including the inability to generalize its findings to a larger population due to the use of only one psychiatric hospital in Egypt. Additionally, because all study participants were male, it was difficult to study the impact of gender differences on patients' perceptions of the quality of care provided by psychiatric nurses.

CONCLUSION

It can be concluded that the majority of patients participating in this study had an overall higher perception of the quality of nursing care in terms of staff competence, caring attitude, and integrity, while most had a low perception of the quality of the organization. There were two significant predictors of high perceptions among patients: being aged under 35 years and being treated for addiction rather than depression. Perceptions of the quality of psychiatric nursing care were also high among nurses in respect of all variables except competence development. The perceptions of the two groups differed significantly in six areas: patients perceived the quality of nursing care higher than nurses on receiving individual and personal treatment and on the number of staff categories, while nurses' perceptions were higher on diagnosis, on the staff showing consideration, on patients getting to know the staff, and on staff commitment.

RECOMMENDATIONS

To enhance and maintain the quality of psychiatric nursing care, further research is needed into valid clinical indicators of quality. It is important to address the issues that patients' perceptions and understanding of the treatment plans offered to pose as an impediment to the quality of mental nursing care. Both undergraduate and graduate nursing programs should incorporate an emphasis on the elements of high-quality mental nursing care. Future research should build on the present study by recruiting a larger number of mentally ill patients in more than one psychiatric hospital.

ETHICS APPROVAL AND CONSENT TO PARTICIPATE

The Scientific Research Ethics Committee at the Faculty of Nursing at Zagazig University provided the researchers with an official letter approving the study. The committee's reference number is (ID/Zu.Nur.REC#:0003). Official authorization to conduct the study was acquired through the submission of an official letter from the Dean of the Faculty of Nursing at Zagazig University to the director of El-Azazi Hospital for Mental Health. A written informed consent form was signed by the nurses and patients. It has been shown that the nurses and patients voluntarily participated in the study and have the right to do so at any moment for any reason. Nurses and patients were told that the data would only be used for research, and confidentiality of the collected information was guaranteed.

HUMAN AND ANIMAL RIGHTS

No animals were used in this research. All procedures performed in studies involving human participants were in accordance with the ethical standards of institutional and/or research committee and with the 1975 Declaration of Helsinki, as revised in 2013.

CONSENT FOR PUBLICATION

Informed consent was obtained from all participants.

STANDARDS OF REPORTING

STROBE guidelines were followed.

AVAILABILITY OF DATA AND MATERIALS

The data and supportive information are available within the article.

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CONFLICT OF INTEREST

The authors declare no conflict of interest financial or otherwise.

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