



# Senior Nursing Students' Assessment of the Physical Health Status of Patients Diagnosed with Mental Disorders

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## ABSTRACT

**Objective:** This research was carried out to examine senior nursing students' assessment of the physical health status of individuals diagnosed with mental disorders.

**Material and Methods:** The study was carried out using a descriptive and retrospective design to examine the clinical practice forms of 118 students who performed the clinical practice of Mental Health and Diseases Nursing in the nursing departments of two private universities in the 2021-2022 academic year. The clinical practice forms include patient demographics, patient history, mental state examination, daily living activities, treatment, laboratory findings, and nursing care plan.

**Results:** According to the clinical practice forms the students completed, the mean age of the cases they followed was  $32.90 \pm 12.35$  years; of the patients, 62.7% were male ( $n = 74$ ), and 46.6% were diagnosed with bipolar disorder ( $n = 55$ ). All students were determined to have evaluated patients' vital signs and height and weight; however, 73.7% did not evaluate pain. The area the students were determined to have evaluated most in terms of daily living activities was sleeping activity and the area they evaluated least to be sexual activity.

**Conclusion:** The need exists to develop senior nursing students' practical skills as well as their theoretical knowledge on evaluating the physical health status of patients with mental disorders. By developing students' knowledge and skills, their self-confidence and motivation regarding physical examination will also increase. This is considered to be able to contribute to the holistic evaluation of patients.

**Keywords:** Nursing students, physical health assessment, nursing care plan

## INTRODUCTION

According to the Mental Health Atlas 2020 data published by the World Health Organization (WHO), at least one out of 4 adults in the world is diagnosed with a mental disorder (1). The literature review found the physical health of individuals who use both inpatient and community-based mental health services to be neglected for a variety of reasons (2,3). In this sense, one important issue for nurses working in mental health and psychiatric care settings is to improve individual's mental as well as physical health (4,5). As a result of many factors such as a sedentary lifestyle, low physical activity, poor eating habits, smoking, and alcohol consumption, people with mental

disorders have a higher risk of physical disease, especially cardiovascular disease, compared to the general population (6-8).

Studies are found to have stated nurses who work in mental health and psychiatric care services to have positive attitudes and sufficient knowledge about physical health care (5,9). However, studies are also found to have stated nurses to experience role confusion and to perceive themselves as inadequate at evaluating physical health (10,11). Happell et al. (12), emphasized a lack of information to be found about the physical health of patients diagnosed with serious mental illness (SMI). A gap exists in practice, and evidence-based

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interventions should be planned in this regard. The obstacles to evaluating physical health parameters have been stated to include lack of time, sustainability, and the need for training (5,9,12,13). A recent study conducted in three Asian countries determined that nurses need training to meet the physical health needs of individuals with serious mental disorders. One result from the same research suggested that training provided by psychiatric nurses can meet this need (14). Another study conducted in Türkiye determined nurses who believe in the importance of patients' physical health to have higher levels of knowledge and self-confidence (11). Ince et al. (15) found nurses to believe that the physical health care provided to individuals with SMI is insufficient and to draw attention to the need to improve their knowledge and skills on the subject.

One issue that has become increasingly important in recent years involves nurses' roles, competences, and qualifications. Pursuant to Article 2b of Regulation on Amending the Nursing Regulation No. 27910 (2011) published in the National Gazette of Türkiye regarding the duties, authorities, and responsibilities in mental health and diseases nursing, a mental health and diseases nurse is obliged to make planned and regular meetings where the mental and physical health of the patients are evaluated and the problems of the patients are discussed in line with the planned nursing practices. In accordance with Articles 3d and 3f of the same regulation, nurses are to plan and conduct a health education to eliminate the deficiencies of the sick individual and to evaluate the effectiveness of the education (16). Oflaz et al. (17) found that most of the nurses working in mental health and psychiatric care services in Istanbul have a bachelor's degree or higher education level. From this point of view, the majority of nurses working in mental health and psychiatric care services throughout the Türkiye can be stated to have completed their undergraduate (i.e., Bachelor of Science in Nursing), and a graduate education (i.e., Master of Science in Nursing or doctorate degree) has great importance in the roles, competencies, and qualifications of nursing (18). A holistic approach is an important element in how undergraduate nurses assess the health needs of the individuals under their care (3,12). For this reason, importance is had in considering the knowledge and skills related to assessing the physical health of individuals diagnosed with SMI, both in psychiatric nursing undergraduate education as well as in in-service training.

One method for measuring the holistic evaluation of the needs of patients/healthy individuals in psychiatric nursing education involves case studies (19). Many countries have widely adopted case-based learning strategies in nursing education due to benefits such as having students develop reflective and critical thinking, improve their problem-solving skills, and take responsibility for self-learning (20,21). Case assignments are frequently used in psychiatric nursing education in Türkiye as one of the measurement and evaluation parameters and provide an opportunity to address patients' physical as well as mental health issues. Case-based learning strategies have been stated to have an important role in preparing students for the profession (19,21,22). The aim of this retrospective

study is to examine senior nursing students' assessments of the physical health status of individuals diagnosed with mental disorders. The results that are obtained are thought to be able to guide discussions about student awareness of the holistic approach to assessing both the mental and physical health of individuals diagnosed with mental disorders. The plan is to discuss proposals for solutions related to the current situation and the future by considering the results.

## METHODS

### Study design

This study was carried out using the retrospective design method in order to determine the level at which senior nursing students evaluate the physical health status of patients under their care during the clinical practice within the scope of their mental health and diseases course.

### Research questions

- At what level do senior nursing students assess the physical health parameters of patients diagnosed with mental illnesses in accordance with the nursing process?
- What nursing diagnoses do senior nursing students evaluate when addressing the physical health characteristics of patients with mental illnesses as part of the nursing process?

### Participants

The universe of this study consists of all the clinical case papers (N = 154) prepared by nursing students enrolled in the Mental Health and Diseases Nursing course in the fall semester of the 2021-2022 academic year at two private universities in Istanbul. The two private universities have the same course topics, case assignments, location, and clinical hours and different order of course topics, days, clinical practice instructors, and clinical practice days. All students also completed the same courses in previous semesters, such as the Fundamentals of Nursing course to learn how to prepare nursing care plans and the Interpersonal Communication in Nursing course to learn how to communicate with patients.

The sample consists of 118 students who perform clinical practice in mental health and psychiatric care services case papers (n = 118). The inclusion criteria are: being enrolled in the Mental Health and Diseases Nursing course in the 2021-2022 academic year, having clinical practice hours in mental health and psychiatric care services, having submitted completed case papers, and giving permission to include their case papers in this study. Of the students' case papers, 36 were excluded from the study due to having clinical practice hours in clinical areas of consultation such as liaison psychiatry or a psychiatric emergency ward as opposed to in-patient psychiatric care services and/or for submitting incomplete case papers.

## Data collection

Once the researchers obtained the necessary permissions, the study went on to examine the case papers of students who'd completed the clinical practice section of the Mental Health and Diseases Nursing course and submitted their clinical practice forms during the 2021 fall semester.

## Data collection tools

Data were collected from the clinical practice forms the students used during the course at the two universities. These clinical practice forms have been used as data collection tools based on Gordon's functional health patterns model (FHPM). Patient diagnosis and how nursing is conducted regarding the psychiatric clinical practice procedures are based on Gordon's FHPM (23). Patient diagnosis is based on the 13 functional health patterns defined in the FHPM. Data have been gathered regarding such areas as patients' sociodemographic factors, psychiatric history, mental state evaluation, daily living activities, therapies, and laboratory findings within the FHPM framework (23). The second step of the nursing process determines the patient's difficulties as based on the nursing diagnoses of the North American Nursing Diagnosis Association-International (NANDA-I) as produced by the North American Nursing Diagnosis Association (24). Throughout this evaluation, the Turkish translation of Carpenito-Moyet's *Handbook of Nursing Diagnosis* and the NANDA-I Taxonomy-II were utilized as guides (23,24).

## Data analysis

The data for the study consist of 118 clinical case papers. The package program Statistical Package for Social Science (SPSS; ver. 28.0) was used for the statistical analysis of the data. The research uses means, standard deviations, percentages, and frequency distributions based on descriptive statistical methods.

Institutional permissions and ethics committee approval were obtained (Dated September 30, 2022; Permission No. 15/22). The necessary permissions were also obtained by giving information about the purpose and method of the research to the universities' nursing departments. The students' permissions for including their case papers in the study were also obtained on the last day of the course after they had submitted their cases.

## Limitations

The findings from this study do not reflect the assessment status of all student nurses regarding physical health and are not generalizable.

## RESULTS

Of the students, 75.4% (n = 89) are female and 24.6% (n = 29) are male. According to the clinical practice forms the students completed, the mean age of the cases they followed was 32.90 ± 12.35, with 62.7% being male. Of these cases, 46.6% were

diagnosed with bipolar disorder, and only 5.9% were diagnosed with another comorbid psychiatric disorder.

All students were determined to have evaluated patients' blood pressure, pulse, body temperature, height, and weight. However, only 90.7% of the students were determined to have evaluated respiratory rate and 28.0% to have evaluated waist circumference. In addition, 26.3% of the students were determined to have evaluated patients' pain and 81.4% to have evaluated patients' allergies. The students also evaluated the patients' habits. Accordingly, 92.4% of students obtained information about smoking status, amount, and duration of use; 68.6% obtained information about alcohol use status, amount, and duration of use; and 61.9% evaluated information about substance use status, amount, and duration of use. The 60.2% of students evaluated comorbid physical disease, 14.4% evaluated drug use due to physical illness, and 48.3% evaluated previous surgical operation history (Table 1).

When examining the students' clinical practice forms, their laboratory findings, being an important point regarding patients' physical health status, were seen to cover various tests from liver function tests (AST, ALT, and GGT); lipid profile (total cholesterol, LDL, HDL, and triglycerides) and fasting or postprandial glucose value; and thyroid function tests (TSH, T3 and T4 levels), and vitamins D and B12 tests. Among these tests, more than half of the students evaluated patients' AST, ALT, GGT, total cholesterol, LDL, HDL, glucose, and TSH values (Figure 1). Of the students, 62.7 % were determined to have evaluated laboratory findings as being normal or abnormal and to have expressed the possible reasons for laboratory findings containing abnormal values.

According to the students' clinical practice forms regarding breathing activity, the students were seen to have evaluated respiratory rate per minute, depth of respiration, difficulty breathing, and external factors affecting respiration. Among these parameters, respiratory rate per minute was evaluated most frequently at 90.7%, with external factors affecting respiration being the least evaluated parameter at 61.9%. Regarding patients' eating and drinking activities, the students were seen to have evaluated weight gain/decrease status, number of main meals and snacks, carbohydrates, caffeine intake, liquids, vegetable/fruit consumption status, market shopping, and food preparation. The parameter students evaluated the most regarding patients' eating and drinking activities was the number of daily snacks and main meals at 55.1%, while their least evaluated parameter was daily carbohydrate consumption at 19.5%. With regard to eliminating body waste activity, the students were seen to evaluate the frequency, amount, and color of micturition and defecation; urine/fecal incontinence; number of times going to the toilet; diarrhea; and constipation status. More than 70% of students were observed to have evaluated the frequency, amount, and color of micturition and defecation, while only 63.6% were seen to have evaluated patients' constipation status (Table 2).

**Table 1: Patient assessment statuses according to the clinical practice form by the students (N= 118)**

Variables	n	%
<b>Patients' Gender</b>		
Female	44	37.3
Male	74	62.7
<b>Patients' Psychiatric Disorder</b>		
Bipolar Disorder	55	46.6
Depression	12	10.2
Schizophrenia and Psychotic Disorder ( <i>Inorganic, Atypical, Postpartum, Substance-Induced</i> )	34	28.8
Substance Abuse	13	11.0
Obsessive-Compulsive Disorder	4	3.4
<b>Habits Evaluation</b>		
Smoking ( <i>using, amount, duration, attempts to quit if any</i> )	109	92.4
Alcohol evaluation ( <i>using, amount, duration, attempts to quit if any</i> )	81	68.6
Substance evaluation ( <i>using, amount, duration, attempts to quit if any</i> )	73	61.9
<b>Vital Signs Evaluation</b>		
Blood Pressure	118	100.0
Heart Rate	118	100.0
Temperature	118	100.0
Respiration Rate	107	90.7
<b>Comorbid Psychiatric Disorder</b>		
Evaluated by students	7	5.9
Not evaluated by students	111	94.1
<b>Body Measurements (height and weight)</b>		
Evaluated by students	118	100.0
Not evaluated by students	0	0
<b>Waist Circumference Measurement</b>		
Evaluated by students	33	28.0
Not evaluated by students	85	72.0
<b>Pain</b>		
Evaluated by students	31	26.3
Not evaluated by students	87	73.7
<b>Allergy</b>		
Evaluated by students	96	81.4
Not evaluated by students	22	18.6
<b>Comorbid Physical Illness</b>		
Evaluated by students	71	60.2
Not evaluated by students	47	39.8
<b>Medicine Used Due to Physical Illness</b>		
Evaluated by students	17	14.4
Not evaluated by students	101	85.6
<b>Past Surgical Operation</b>		
Evaluated by students	57	48.3
Not evaluated by students	61	51.7

Regarding personal cleanliness and dressing activity, the factor the students evaluated the most was determined to be cleaning and arranging clothes at 89.0%, with the least evaluated factor being patients' routine dental examination status at 33.9%. As one of the health promoting practices in the mobilizing activity, 75.4% of students evaluated exercise status. Regarding the most comprehensively evaluated sleeping activity, the students were seen to have evaluated the parameters of sleep hours, difficulty falling asleep, sleep routine, restfulness upon waking, and waking up frequently at

night. Of these parameters, students most commonly evaluated waking up frequently at night at a rate of 67.8 %, with the least commonly evaluated parameter (22.0%) being how many times patients wake up throughout the night. The least evaluated daily life activity was sexual activeness. While 19.5% of students were seen to have evaluated patients' satisfaction with sexual activity, 33.9% of students were seen to have evaluated patients' parameter of practicing safe sex. Apart from daily living activities, 21.2% of students were seen to have evaluated menstrual cycle (increase/decrease in bleeding, pain

**Table 2: Evaluation of physical health in terms of daily living activities according to the clinical application form of the students (N=118)**

Activities of Daily Living	Parameters Evaluated under Activities of Daily Living	Evaluated		Not Evaluated	
		n	%	n	%
<b>Breathing</b>	Respiratory Rate ( <i>per minute</i> )	107	90.7	11	9.3
	breathing depth	49	41.5	69	58.5
	Difficulty in breathing	61	51.7	57	48.3
	Respiratory being affected by an external factor ( <i>such as overweight or smoking, etc.</i> )	45	38.1	73	61.9
	Weight gain/decrease in a short	50	42.4	68	57.6
<b>Eating food and drinking fluids</b>	Number of main meals and snacks and per day	65	55.1	53	44.9
	Daily carbohydrate consumption	23	19.5	95	80.5
	Daily caffeine consumption	38	32.2	80	67.8
	Daily fluid consumption	60	50.8	58	49.2
	Daily consumption of vegetables and fruits	46	39.0	72	61.0
<b>Eliminating body wastes (Miction)</b>	Shopping (market etc.)	33	28.0	85	72.0
	Food preparation	44	37.3	74	62.7
	Frequency of going pee, amount, and color of urinary	95	80.5	23	19.5
<b>Eliminating body wastes (Defecation)</b>	Urinary incontinence	71	60.2	47	39.8
	Frequency of going defecation, amount, and color of defecation	87	73.7	31	26.3
	fecal incontinence	32	27.1	86	72.9
	Diarrhea	53	44.9	65	55.1
	constipation	75	63.6	43	36.4
<b>Personal Cleansing and Dressing</b>	Tooth brushing habit	89	75.4	29	24.6
	Going to the dental examination status	40	33.9	78	66.1
	Hair and body care (care routine)	98	83.1	20	16.9
	Hand and foot care status	50	42.4	68	57.6
	Clothes cleaning and arrangement	105	89.0	13	11.0
<b>Mobilizing</b>	Exercise status ( <i>exercise routine, minute...</i> )	89	75.4	29	24.6
	The individual's posture and need for an assistive device for movement	56	47.5	62	52.5
	Sleep hours ( <i>bedtime, wake-up time, average number of hours sleep...</i> )	80	67.8	38	32.2
<b>Sleeping</b>	Difficulty falling asleep status	39	33.1	79	66.9
	Having a regular sleep routine	75	63.6	43	36.4
	Rested waking state	20	16.9	98	83.1
	Frequent waking at night	26	22.0	92	78.0
<b>Expressing Sexuality</b>	Satisfaction and level of satisfaction with sexual activity	23	19.5	95	80.5
	Safe sexual activity	40	33.9	78	66.1
	For women: Menstrual cycle & Menopause	25	21.2	93	78.8
<b>Other screenings</b>	For women: Pap Smear Test	28	23.7	90	76.3
	For men: Prostate Self-Exam	21	17.8	97	82.2
	For both men and women: Breast Self-Exam	27	22.9	91	77.1
	Eye Examinations	35	29.7	83	70.3

experience) and menopause symptoms (such as hot flashes, symptomatic drug use) and 23.7% to have evaluated smear screening tests. Of all students, 17.8% were seen to have evaluated prostate self-examination for men, 22.9% to have evaluated the performance of breast self-examination, and 29.7% to have evaluated patients' routine eye examinations (Table 2).

When examining the nursing diagnoses the students had determined for physical health in their nursing care plans in

order of priority, disturbed sleep pattern was the most common first diagnosis at 48.1%, with self-care deficit being the second most common diagnosis at 32.8%. Imbalanced nutrition (i.e., consuming under or over body requirements) was the third most common nursing diagnosis at 25.6%. Without regard to order, the least defined nursing diagnoses were seen to be activity intolerance, pain (acute/chronic), and constipation (Table 3).

**Table 3: Nursing diagnoses determined by students for physical health.**

Nursing Diagnoses	1st Determined Nursing Diagnosis n %	2nd Determined Nursing Diagnosis n %	3rd Determined Nursing Diagnosis n %
Disturbed Sleep Pattern	50 (%48.1)	15 (%23.4)	8 (%20.5)
Self-Care Deficit	19 (%18.3)	21 (%32.8)	7 (%17.9)
Ineffective Health Maintenance	9 (%8.7)	2 (%3.1)	3 (%7.7)
Risk for Falls	8 (%7.7)	7 (%10.9)	3 (%7.7)
Imbalanced Nutrition: Less Than/More Than Body Requirements	8 (%7.7)	8 (%12.5)	10 (%25.6)
Constipation	3 (%2.9)	3 (%4.7)	1 (%2.6)
Risk for Electrolyte Imbalance	2 (%1.9)	3 (%4.7)	-
Pain (Acute/Chronic)	2 (%1.9)	1 (%1.6)	-
Fatigue	2 (%1.9)	2 (%3.1)	4 (%10.3)
Activity Intolerance	1 (%1.0)	-	-
Ineffective Sexuality Pattern	-	2 (%3.1)	3 (%7.7)

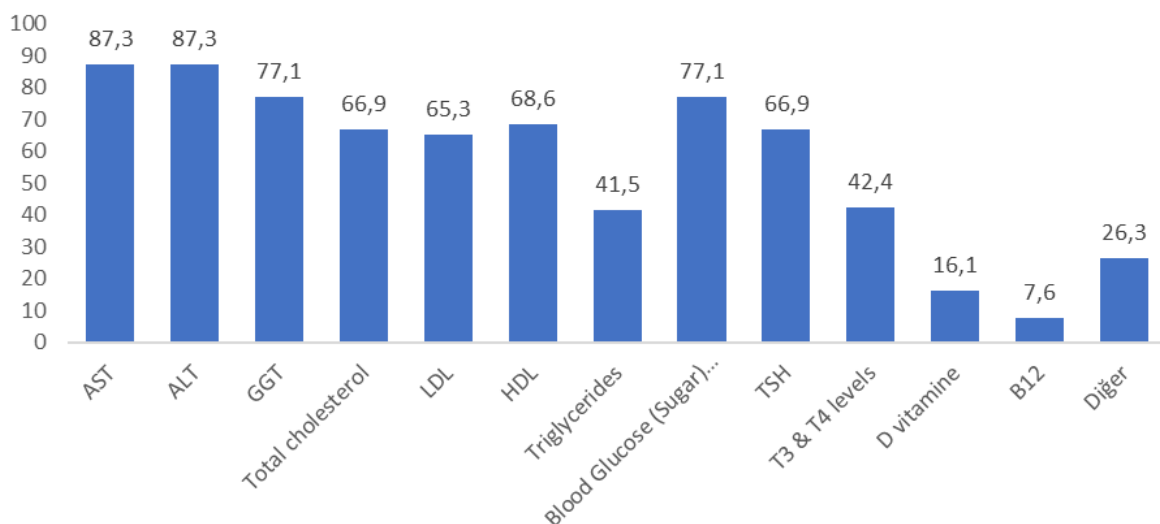
**DISCUSSION**

With regard to constant rapid changes in health, an individual’s holistic bio-psycho-socio-cultural approach is the only component that will not change. Evaluating the physical health status of individuals with mental disorders has remained in the background (12,13). Dickens et al.’s (13) systematic review of studies involving 7,549 nurses in 14 countries, they defined the most significant barriers to mental health nurses’ evaluation of physical health to be lack of confidence, skills, and knowledge. To change this situation, Insufficient studies are found to have examined the evaluations of nursing students in the vocational training (12).

The physical health status of individuals diagnosed with mental disorders is predicted to be affected in the long term due to disease symptoms, prognosis, drug use, and diagnosis of comorbid psychiatric disorder (12). Demir et al.’s (26) study found physical

illness to be present in individuals with mental disorders at a rate of 51%, with this rate being 59% in Erginer’s (27) study and 62% in Placentino et al.’s (25) study. However, the incidence of chronic physical diseases such as cardiovascular disease (CVD), hypertension, metabolic syndrome (MetS), and diabetes mellitus (DM) is higher in individuals with mental disorders compared to the general population and by age (26,28,29). All the student nurses were seen to have evaluated physical examination parameters such as blood pressure, pulse, body temperature, height, and weight, which are important in determining physical diseases. In addition to these parameters, having psychiatric nurses also evaluate respiratory rate, waist circumference, pain, allergy, and habits (i.e., smoking, alcohol, and drugs) is considered to be able to increase patients’ quality of life.

More than half of the students were seen to have examined laboratory findings, which is one key aspect of patients’ physical



**Abbreviations :** AST: Aspartate aminotransferase test, ALT: Alanine aminotransferase test, GGT: Gamma glutamyl transferase test, LDL: Low-density lipoprotein test, HDL: High-density lipoprotein test, TSH: Thyroid stimulating hormone testing. others includes hemogram and serological tests and blood substance analysis tests .

**Figure 1:** Examining / saving the laboratory results according to the clinical practice form by the students



health status, and to have interpreted the normal-abnormal states of their findings. Changes occur in patients' laboratory findings due to reasons such as psychopharmacological agents, sedentary lifestyle, nutritional status, and other habits. The literature has reported liver function tests to provide higher scores in individuals with alcohol and substance use disorders and lipid values to be higher in individuals with a comorbid diagnosis of a mental disorder, a diagnosis of CVD, and/or a diagnosis of MetS, as well as in individuals with a diagnosis of prediabetes or DM, all compared to the general population (30,31). Psychiatric nurses should also follow and interpret the laboratory findings of individuals with mental disorders in order to take on an active role in protecting and promoting health (2,3).

The students evaluated their patients' physical health status in line with their daily living activities. Accordingly, the students were determined to have most frequently discussed sleeping activity followed by eating activity, with sexual activity being discussed least often and most superficially. The students who comprehensively evaluated sleeping activity were determined to have planned nursing care specific to this area. Less than half the students were determined to have evaluated all questions about eating activity; however, nursing diagnoses specific to this area were addressed quite frequently. Taşdemir and Kızılkaya's (32) study examined the cases of 136 nursing students and determined 15.5% of students who'd completed their clinical practice in psychiatric services to have identified a diagnosis related to sleep activity. Ata and Çobanoğlu (33) found 97.2% of students to have collected data on sleeping and eating activities and determined this area-specific diagnosis to have occurred at a rate of 40.7%.

This study has observed students to determine their nursing diagnoses related to sexual activity, being the least evaluated activity, in a more limited manner. A similar study conducted in Türkiye determined diagnoses related to sexual activity to also occur least often with regard to the nursing care plans examined in the Mental Health and Diseases Nursing course (34). Another study determined nursing students' attitudes and beliefs toward sexual activity in Türkiye to be more negative compared to those of nurses and student nurses in other countries (35). Ata and Çobanoğlu's (33) study observed students to have problems collecting data and diagnosing with regard to patients' sexual activity and to sometimes not even evaluate this area. Students' communication skills were thought to not be at the desired level during the diagnosis of sexual activity. However, although sexuality is not considered separate or isolated from other daily life activities, evaluating it has been stated as an extremely difficult issue in Türkiye, as well as informing individuals about this (36). Through cultural effects, an insufficient number of well-trained mental health professionals who focus on the sexual health of the patients with a mental disorder has also been found, which is why this area usually stays in the background and rarely questioned (37).

Apart from daily living activities, a limited number of evaluations were determined to have occurred regarding

menstrual cycles, menopause, and pap smear tests for women, regarding prostate self-examinations for men, and regarding breast self-examinations for both men and women. While health screenings fall outside daily living activities, they are also important as they affect daily life activities over time. For example, routine cancer screening is important for early diagnosis (3,38). The literature review revealed much evidence that not adequately addressing these parameters negatively affects individuals who have a mental disorder diagnosis (38). Chou et al.'s (39) stated that, although the risk of developing cancer is lower in individuals with schizophrenia compared to the general population, this is not true for breast cancer and cervical cancer. Another study conducted in Taiwan found liver cancer to be the most common type of cancer in patients diagnosed with schizophrenia, alongside Hepatitis B and Hepatitis C (40).

The current study determined both male and female students to have also limitedly evaluated the patient cases regarding routine dental and eye examinations. Ashour et al.'s (41) study stated 91% of psychiatric patients to have excessive sugar consumption, which paves the way for high rates of dental diseases. Studies have shown glaucoma and/or other retinal disorders accompanying physical diseases and the use of antidepressants to play a role in the future development of cataracts (42,43). However, Jani et al.'s (44) study found a relationship between retinopathy and psychosocial symptoms due to DM. In line with this, nurses should be emphasized to evaluate routine cancer screenings, as well as dental and eye examinations that increase individuals' quality of life, and to follow the necessary practices, apart from just evaluating patients' daily life activities.

The students in this study were observed to have determined the diagnoses of disturbed sleep pattern, self-care deficit, and imbalanced nutrition (under/over body requirements) with regard to patient physical health on their nursing care plans. The students were observed to have evaluated sleep, personal cleanliness, and dressing activities relatively more than other parameters in daily living activities and to have made appropriate nursing diagnoses. However, despite the relatively low number of evaluations regarding eating activity, the students' diagnosis of patients having imbalanced nutrition (under/over body requirements), their relatively moderate number of inquiries into mobilizing activity, and their failure to identify a nursing diagnosis in this area may indicate deficiencies in the data collection process. When examining the literature, more studies are seen to have occurred that analyzed and evaluated the nursing diagnoses as determined by students who practice in surgery and internal medicine services as opposed to psychiatric services (45-47). Nursing diagnoses determined within the scope of the Mental Health and Diseases Nursing course as conducted in universities in Türkiye were previously examined and disturbed sleep pattern (7.83%) was seen to have been the most frequently determined diagnosis (34). Meanwhile, Uysal et al. (48) identified most of the determined nursing diagnoses to have been based on accurate but insufficient objective and subjective data. The results of the

current research show that, similar to the literature, students should take objective and subjective data into consideration when making their nursing diagnosis. This situation may result in patients being given specific and patient-centered nursing care.

## CONCLUSION

As a result of this study assessing students' ability to evaluate the physical health status of individuals diagnosed with mental disorders, the students were observed to be unable to fully transfer their theoretical knowledge to clinical practice and to be unable to address physical health parameters in depth. Therefore, the research findings are thought to be able to provide information on evaluating the physical health of patients diagnosed with mental disorders at the undergraduate level and to form the basis for future research with nurses who will work in the field of psychiatry.

In line with the research findings, the student nurses' evaluations of the physical health of patients with mental disorders were better in some areas such as sleep and eating while insufficient in other areas such as sexual activity, other routine cancer screenings, and routine dental and eye examinations. Deficiencies in communication skills, inability to apply theoretical knowledge to clinical practice, and an insufficient number of nurse educators per student may have led to this result. In order to provide holistic nursing care that includes individual, biological, psychological, emotional, and social aspects, having students consider all parameters in depth is important. In order to do this, studies need to be carried out on holistic care during student education (2,49). One theme that emerged in Kaya et al.'s (50) qualitative study on holistic care was students' views regarding the instructors wanting to the students to benefit from the experience of interviewing a real patient.

Dyrstad et al.'s (51) study determined the simulation used to transfer theoretical knowledge into clinical practice in real life situations to be beneficial. In line with this, the current study recommends the use of innovative teaching techniques such as case studies and clinical simulation in theoretical and laboratory course hours for evaluating the physical health of individuals diagnosed with mental disorders. In addition, observing the physical health status of patients diagnosed with mental disorders during clinical practice and conducting group sessions with developmental feedback would also be considered beneficial.

**Ethics Committee Approval:** This study was approved by the ethics committee of Acıbadem University (Dated September 30, 2022; Permission No. 15/22).

**Informed Consent:** Written consent was obtained from the participants.

**Peer Review:** Externally peer-reviewed.

**Author Contributions:** Conception/Design of Study- M.M., S.E., T.D.; Data Acquisition- M.M., S.E., T.D.; Data Analysis/ Interpretation- M.M.; Drafting Manuscript- M.M., S.E., T.D.; Critical Revision of Manuscript- M.M., S.E.; Final Approval and Accountability- M.M., S.E., T.D.

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## REFERENCES

1. World Health Organization. Mental health atlas 2020. Geneva: World Health Organization; 2021. Licence: CC BY-NC-SA 3.0 IGO
2. Martin CT. The value of physical examination in mental health nursing. *Nurse Educ Pract.* 2016;17:91-6.
3. Murat, Merve. Turkish adaptation of health improvement profile to determine the status of physical well-being in individuals with severe mental illness [dissertation]. Istanbul: Istanbul University-Cerrahpaşa, Institute of Graduate Studies; 2020.
4. Blythe J, White J. Role of the mental health nurse towards physical health care in serious mental illness: an integrative review of 10 years of UK literature. *Int J Ment Health Nurs.* 2012;21(3):193-201.
5. Lundström S, Jormfeldt H, Hedman Ahlström B, Skärsäter I. Mental health nurses' experience of physical health care and health promotion initiatives for people with severe mental illness. *Int J Ment Health Nurs.* 2020;29(2):244-53.
6. Heald A, Pendlebury J, Anderson S, Narayan V, Guy M, Gibson M, Haddad P, Livingston M. Lifestyle factors and the metabolic syndrome in Schizophrenia: a cross-sectional study. *Ann Gen Psychiatry.* 2017;16:12.
7. Teasdale SB, Ward PB, Samaras K, Firth J, Stubbs B, Tripodi E, Burrows TL. Dietary intake of people with severe mental illness: systematic review and meta-analysis. *Br J Psychiatry.* 2019;214(5):251-59.
8. Wei DN, Wang YZ, Deng SY, Cohen A, Luo W, Liu B, Ran MS. Physical illness comorbidity and its influencing factors among persons with severe mental illness in Rural China. *Asian J Psychiatr.* 2022;71:103075.
9. Knight M, Bolton P, Kopeski L. Providing physical care to persons with serious mental illness: attitudes, confidence, barriers, and psychological empowerment. *Arch Psychiatr Nurs.* 2017;31(5):447-53.
10. Bradshaw T, Pedley R. Evolving role of mental health nurses in the physical health care of people with serious mental health illness. *Int J Ment Health Nurs.* 2012;21(3):266-73.
11. Yalçın SU, Bilgin H, Özslan Z. Physical healthcare of people with serious mental illness: A cross-sectional study of nurses' involvement, views, and current practices. *Issues in Mental Health Nursing.* 2019;40(10):908-16.
12. Happell B, Platania-Phung C, Watkins A, Scholz B, Curtis J, Goss J, Niyonsenga T, Stanton R. Developing an evidence-based specialist nursing role to improve the physical health care of people with mental illness. *Issues Ment Health Nurs.* 2019;40(10):832-38.



13. Dickens GL, Ion R, Waters C, Atlantis E, Everett B. Mental health nurses' attitudes, experience, and knowledge regarding routine physical healthcare: systematic, integrative review of studies involving 7,549 nurses working in mental health settings. *BMC Nurs.* 2019;18:16.
14. Bressington D, Badnapurkar A, Inoue S, Ma HY, Chien WT, Nelson D, et al. Physical health care for people with severe mental illness: the attitudes, practices, and training needs of nurses in three Asian countries. *Int J Environ Res Public Health.* 2018;15(2):343.
15. İnce SÇ, Günüşen NP, Serçe Ö. The opinions of Turkish mental health nurses on physical health care for individuals with mental illness: A qualitative study. *Journal of Psychiatric and Mental Health Nursing.* 2018;25(4):245-57.
16. Regulation on making changes in the nursing regulation [Internet]. Ministry of Health; 2022. [April 19, 2011]. Retrieved from <https://www.saglik.gov.tr/TR,10526/hemsirelik-yonetmeliginde-degisik-yapilmasina-dair-yonetmelik.html>.
17. Oflaz F, Boyacıoğlu NE, Yılmaz S, Sukut Ö, Doğan N, Enginkaya S. A profile of nurses in psychiatric units: Istanbul sample. *Journal of Psychiatric Nursing.* 2021;12(3):188-97.
18. Workshop on Role, Competence and Competence Determination in Nursing [Internet]. Ege University Faculty of Nursing; 2022. Retrieved from <chrome-extension://efaidnbmninnbpcjpcglclefindmkaj/https://egeduyuru.ege.edu.tr/dosyalar/20220225-hems-program.pdf>
19. Kaçkin Ö, Küçük L. Measurement and evaluation methods in psychiatric nursing undergraduate education. In: Kelleci, M. *Psychiatric Nursing Education.* (1st Edition). Ankara: Turkey Clinics; 2021. 25-31.
20. Cone C, Godwin D, Salazar K, Bond R, Thompson M, Myers O. Incorporation of an explicit critical-thinking curriculum to improve pharmacy students' critical-thinking skills. *Am J Pharm Educ.* 2016;80(3):41.
21. Li S, Ye X, Chen W. Practice, and effectiveness of "nursing case-based learning" course on nursing student's critical thinking ability: A comparative study. *Nurse Educ Pract.* 2019;36:91-6.
22. Altınbaş Y, İster, ED. (2020). Nursing students' views on the case-based teaching technique: a qualitative study. *Journal of Health Sciences of Adıyaman University.* 2020;6(3):295-303.
23. Carpenito LJ. *Hemsirelik tanıları el kitabı.* In: Erdemir F, İkinci Baskı, Nobel Kitabevi; 2005.
24. NANDA International, T. Heather Herdman. *NANDA International Nursing Diagnoses: Definitions and Classification 2012-14.* Wiley-Blackwell, 2012.
25. Placentino A, Rillosi L, Papa E, Foresti G, Materzanini A, Rossi G, Battista Tura G, Perez J. Clinical characteristics in long-term care psychiatric patients: a descriptive study. *World J Biol Psychiatry.* 2009;10(1):58-64.
26. Demir S, Bulut M, İbiloğlu AO, Güneş M, Şimşek Ş, Sır A. Comorbid somatic illnesses in psychiatric inpatients. *Medical Journal of Mustafa Kemal University.* 2016;7(26):1-10.
27. Erginer DK, Günüşen NP. Physical health of chronic psychiatric patients: a neglected area. *E-Journal of Dokuz Eylül University Nursing Faculty.* 2013;6(3):159-64.
28. Correll CU, Ng-Mak DS, Stafkey-Mailey D, Farrelly E, Rajagopalan K, Loebel A. Cardiometabolic comorbidities, readmission, and costs in schizophrenia and bipolar disorder: a real-world analysis. *Ann Gen Psychiatry.* 2017;16:9.
29. Kopf D, Hewer W. Somatische Risiken bei alt gewordenen Menschen mit schweren psychiatrischen Erkrankungen [Somatic risks in elderly people with severe psychiatric illnesses]. *Z Gerontol Geriatr.* 2018;51(7):779-84. German.
30. Rocco A, Compare D, Angrisani D, Sanduzzi Zamparelli M, Nardone G. Alcoholic disease: liver and beyond. *World J Gastroenterol.* 2014;20(40):14652-9.
31. Hussain T, Margoob MA, Shoib S, Shafat M, Chandel RK. Prevalence of metabolic syndrome among psychiatric inpatients: A hospital-based study from Kashmir. *J Clin Diagn Res.* 2017;11(6):VC05-VC08.
32. Taşdemir G, Kızılkaya M. Evaluation of NANDA nursing diagnoses of healthcare college final year students during the clinical application of the mental health and disease nursing course. *Journal of Human Sciences.* 2013;10(1):246-57.
33. Ata EE, Çobanoğlu A. (2022). Evaluation of care plans prepared by first year nursing students according to the Activities of Daily Living Model and NANDA Diagnoses. *International Journal of Caring Sciences.* 2022;15 (1):201.
34. Körpe G, İnangil D, Vural PI. Evaluation of NANDA-I diagnoses identified by students in the clinical practice of mental health and diseases nursing courses. *Haliç University Journal of Health Sciences.* 2019;2(2):51-66.
35. Güven ŞD, Çelikkaya GK. Evaluation of nursing students' attitudes and beliefs regarding sexual care. *Andrology Bulletin.* 2021;23(1):7-12.
36. Şimşek Ç, Barlas GÜ, Ardiç E. Evaluation of sexuality in healthcare workers. *Journal of Academics Research in Nursing.* 2018;4(3):148-55.
37. Montejo AL. Sexuality and mental health: The Need for Mutual Development and Research. *J Clin Med.* 2019 Oct 26;8(11):1794.
38. Dikeç G, Gümüş F, Atlı A. Physical health status of individuals with mental disorders: A cross sectional study. *JAREN.* 2022;8(2):53-62.
39. Chou FH, Tsai KY, Su CY, Lee CC. The incidence and relative risk factors for developing cancer among patients with schizophrenia: a nine-year follow-up study. *Schizophr Res.* 2011;129(2-3):97-103.
40. Wang MYH, Tang CH, Tsai SJ, Liu CJ, Wu CS. Hepatitis B and C in Taiwanese patients with schizophrenia: A Nationwide, population-based study on prevalence, and healthcare utilization. *J Psychol.* 2017;1(1):1-6.
41. Ashour AA, Fahmi MK, Mohamed RN, Basha S, Binmadi N, Enan ET, et al. (2022). Association between gastric reflux, obesity, and erosive tooth wear among psychiatric patients. *Medicine.* 2022;101(7):e28923.
42. Chou PH, Chu CS, Chen YH, Hsu MY, Huang MW, Lan TH, Lin CH. Antidepressants, and risk of cataract development: A population-based, nested case-control study. *J Affect Disord.* 2017;215:237-44.
43. Fu Y, Dai Q, Zhu L, Wu S. Antidepressants use and risk of cataract development: a systematic review and meta-analysis. *BMC Ophthalmol.* 2018;18(1):31.

44. Jani C, Desai T, Parikh S, Shah A. Correlation of types of diabetic retinopathy and its psychosocial impact. *International Journal of Research in Medical Sciences*. 2018;6 (10):3220-25.
45. Bölükbaş N, Irmak B, Bulut G, Aydın Özdemir D, Bayrak HY. Evaluation of nursing diagnoses and interventions determined by students in their surgical diseases nursing summer internship files. *Ordu University Journal of Nursing Studies*. 2020;3(1):1-9.
46. Aydın N, Yılmaz ÜD. Investigation of nursing diagnoses determined by students in clinical practice in orthopedic patients. *Gumushane University Journal of Health Sciences*. 2022;11(1):257-63.
47. Aykin C, Alptekin HM, Akyüz N. Prioritized evaluation of the nursing diagnoses determined by the students performing the clinical practice of the surgical nursing lecture. *University of Health Sciences Journal of Nursing*. 2022;4 (1):1-6. doi: 10.48071/sbuhemsirelik.1009334
48. Uysal N, Arslan GG, Yılmaz I, Alp FY. Nursing diagnoses and data analysis in nursing care plans of second year nursing students. *Journal of Celal Bayar University Institute of Health Sciences*. 2016;3(1):139-43.
49. Gandhi S, Sahu M, Sivakumar T. Perception of facilitators and barriers to recovery of persons with mental illness among nursing students. *Journal of Psychosocial Rehabilitation and Mental Health*. 2020;7(3):273-84.
50. Kaya Y, Kılıç ST, Öz F. Holistic nursing clinical practice experiences of nursing students in medical-surgical clinics: A qualitative study. *Perspect. Psychiatr. Care*. 2022;58(3):1121-9.
51. Dyrstad DN, Bodsberg KG, Sjøiland M, Bergesen ÅU, Urstad KH. Value of simulating holistic nursing care: A quantitative study. *Clinical Simulation in Nursing*. 2021;54:113-20.