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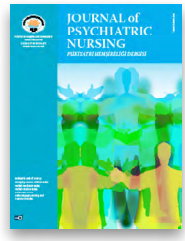

Case Report

An evaluation of the use of the NANDA NIC NOC system in psychiatric nursing

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Abstract

It is known that the use of classification systems in nursing care is beneficial in the context of creating and using standard language in nursing, evaluating and increasing the quality of nursing care, and creating evidence for nursing care. NANDA-I taxonomy is the most widely used in nursing. It is recommended to use NANDA-I with nursing intervention classification interventions and nursing outcomes classification indicators. Despite the many possible benefits that this system, called NNN, can provide, it is known that it is not used effectively by nurses and is believed to be complex, and therefore, its potential benefits cannot be proven. This study was carried out to explain the NNN system through the story of a case diagnosed with bipolar disorder and to set an example for the use of this system in the nursing process applied in the field of psychiatry. In addition, possible difficulties that may prevent the use of the NNN system in psychiatric nursing are discussed in the study. In this way, with the increase in the frequency of use of classification systems in practice, it will be possible to develop nursing care and to determine the effects of care on patient outcomes. The knowledge gained in this way will enable the development of evidence-based practices in nursing.

Keywords: Classification systems in nursing; NANDA; NIC; NOC nursing care.

The concept of the nursing process, which was first used in nursing in 1955, developed over time and turned into a five-step structure that is frequently used today.[1] This system abbreviated as ADPIE, assessment (A), diagnosis (D), planning (P), implementation (I), and evaluation (E) stages. The NNN system, which provides a systematic approach and standard to nursing care, includes the nursing diagnosis classification system (NANDA-I), nursing intervention classification (NIC) and nursing outcomes classification (NOC). In studies, it is stated that the appropriate use of the NNN system is beneficial in the context of creating and using a standard language in nursing, evaluating and increasing the quality of nursing care, and creating evidence for nursing care, and its use is recommended.[2-4]

The first element of the system, NANDA, it is a group of nurse theorists, educators, and practitioners working in the United States (USA) and Canada, established in 1973 to create a common language and classify nursing diagnoses. The process that this group started with 86 nursing diagnoses progressed with meetings held every 2 years and the first classification system was formed in 1986. In addition, it was renamed "NANDA International" in 1992 to represent international participation.[5,6] In NANDA Taxonomy II, there are three levels of structure: domains, classes, and nursing diagnoses, and four types of nursing diagnoses: actual (Problem-Focused) diagnoses, risk diagnoses, health promotion diagnoses, and syndrome diagnoses.[7] Today, NANDA-I is the most widely used international diagnostic classification in nursing.[3] Nursing diagnoses, namely, NANDA-I, are used in most of the studies on nursing classification systems. The last published 2018-2020 NANDA taxonomy consists of 13 domains, 47 classes, and 244 nursing diagnoses.[8]

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NIC; it was developed at the University of Iowa in 1987. It is a classification system that covers all interventions performed by nurses, dependent, independent, and direct and indirect, that can be applied in every field and in every environment.[6,9] The most recently published NIC system includes 7 domains, 30 classes, 565 interventions, and 13,000 activities.[10]

NOC also began development at the University of Iowa in 1991 and was published in 1997. It is a classification system developed to evaluate the changes that occur after care. It is similar to the NIC system in taxonomic structure. NOC; it is grouped into 7 domains, 32 classes, and approximately 540 nursing outcomes and indicators.[11] A 5-point Likert type scale is used to evaluate the results. While the least observed situation in the measurement is evaluated with 1 point, the most observed situation is evaluated with 5 points. With the change in the scoring, it is followed whether there is an improvement in the patient's condition.[5]

While applying the NNN system, the nurse is expected to choose the appropriate NANDA diagnosis for the patient, the targeted NOC indicators and NIC interventions that can be applied in this direction. Although most of the nurses have been trained to use these standard nursing languages, studies show that nurses' knowledge about the nursing process is insufficient, and there are still deficiencies in correctly identifying nursing diagnoses and choosing appropriate interventions and outcomes.[2,12-15] In a study conducted with the participation of 555 nurses in our country and examining the knowledge levels of nurses about the nursing process and classification systems, it was determined that 60.2% of the participants had no idea about the classification systems used in nursing care. On the other hand, it was stated that only 28.3% of the nurses knew NANDA I, 8.8% NIC, and 7.2% NOC classification systems. In the same study, it was determined that 77.8% of the nurses believed in the necessity of using the nursing process.[12] When the studies conducted using the NNN system are examined, it is observed that the studies are generally publications that explain the system or are case reports; it is seen that it mostly shows the frequency of use of diagnoses and does not cover the whole system and does not focus on the effect of the system on its results in practice.[16-19] Although the components of the NNN system include the nursing care provided in psychiatry wards,[20,21] there are very few studies testing the use of the system in the field of psychiatric nursing and the effectiveness of care.[22-25] Except for a small number of studies involving NANDA-I diagnoses in our country, no study has been found regarding the use of the NNN system in the field of psychiatric nursing. The use of the NNN system will contribute to the standardization and documentation of nursing care in the field of psychiatric care, as well as the development of evidence-based practices.

The aim of this study is to discuss the use of the NNN system in the field of psychiatric nursing and possible barriers to use of the NNN system, through the problems that can be encountered frequently in cases treated in the psychiatry service for manic episode due to bipolar 1 diagnosis. In the study, it was planned to adapt four nursing diagnoses determined through a case story to the NNN system, and the nursing diagnosis handbook published by Ackley et al.[26] was used to integrate the NNN system into the case. Before the study, the individual was informed and verbal consent was taken by the researcher. While choosing the diagnoses to be discussed in this study, attention was paid to include diagnoses that may be of priority for the case, diagnoses with a high frequency of use in the literature,[27-29] and diagnoses in different domains in the NANDA Taxonomy II classification system.[26] In line with these criteria, risk-prone health behavior, ineffective coping, impaired verbal communication, and sleep deprivation were preferred and explained in detail within the scope of NNN.

What is presently known on this subject?

- Although it is assumed that the effective use of the NANDA, NIC, and NOC (NNN) system will provide many positive effects in nursing care, it is known that the efficiency of use is low and it is believed to be complicated by nurses. The use of NNN system has not been found in publications in the field of psychiatric nursing.

What does this article add to the existing knowledge?

- This study sets an example for its use in psychiatric nursing by explaining the structure, use, and relationship of the NNN system through a case history. At the same time, the difficulties that may arise in practice during the use of the NNN system are discussed through the case history.

What are the implications for practice?

- Nursing care given in line with the NNN system contributes to creating a common language, revealing nursing results, and applying evidence-based nursing care. It is thought that this study will contribute to the clarity of the NNN system in terms of psychiatric nursing education and practice and, therefore, will encourage its use in practice.

Case Report

F.Y. is a 32-year-old male single patient. The patient with a diagnosis of bipolar 1 was hospitalized due to manic symptoms. When the patient's story was examined, it was learned that he was an architect, changed jobs 6 times in the past 3 years, and lived alone. The patient's hospitalization was made by the patient's relatives on noticing the symptoms of hyperactivity, rapid speech, and sleep deprivation. When the patient's prehospital evaluation was examined, it was learned that he used his medications intermittently because he felt better about a week ago, and that he had taken only 3–4 doses of medication in the last week. The patient was hospitalized with the diagnosis of bipolar disorder manic episode.

Brief history of illness: The patient had symptoms such as distraction, hyperactivity, increased sexual desire, and rapid speech that started 3 years ago, and then delusions that he had a task from God and that he was the chosen one. During this period, the patient, who was hospitalized, was diagnosed with Bipolar I, antipsychotic treatments and lithium treatment were administered, and he was discharged with the planned continuation of lithium treatment. It is stated that there were two episodes of depression that did not require hospitaliza-

tion after discharge. It is stated in the notes of the patient that he received appropriate support from the psychiatric services of the institution during these periods and that he continued to use medicines. F.Y. does not have any other chronic diseases and he continues Lithium Carbonate 300mg 3×1 maintenance treatment. However, it was recorded that he did not come to the last 2 scheduled psychiatric check-ups.

Service nurse's clinical evaluation and interview notes: The clinical evaluations and interview notes of the nurse who welcomed the patient and was responsible for the 6-h care during that shift were examined and summarized as follows.

Physical assessment: His general appearance is mobile and messy. The skin is dry that there are ecchymoses of unknown cause on the skin. There is dryness in the oral mucosa. Place-time-person orientation is available. No pathology was found in other system examinations.

Interview notes: The patient states that he feels very healthy and believes that his illness has passed, so he cannot understand why he is in the hospital. He also stated that he did not use his medication for this reason. When her nutritional status was questioned, he stated that he had been very busy in the last few days, and therefore, she could not eat, only snacks but frequently drank water. The patient, who states that he defecates once a day and there is no change in this area, states that his urination is also normal. The patient, who stated that he spent 10–15 h a day outside, constantly walking and trying to do new activities, also stated that he had difficulty in completing the activities. The patient stated that he wanted to try new things and believed that he could do anything. He stated that he had been sleeping intermittently for a total of 10 h in the past 5 days, but he felt rested. When he was questioned about what he experienced in the case of sleep deprivation, he stated that he was sometimes confused and had trouble focusing. It was observed that the self-confidence of the patient with place-time-person orientation was extremely high. The patient, who stated that he rarely met with his family and that he was sorry about this situation, stated that his family did not understand him and did not want to meet with him when asked about the reasons for this situation. It was determined that the patient, who did not have a friend or romantic relationship identified during the conversation, also did not meet with his colleagues. During the interview, the patient did not define a role related to work or family. The patient, who has an active sexual life, does not have increased sexual desire and coexistence in recent days. It was determined that the sexual relations of the patient who did not express a change in sexual desire were also superficial. The patient states that the current stress level is very low. It has been observed that the main goal of the patient, who does not have a clear plan for the future, is to try new things and experience adventures. When F.Y.'s communication features were examined, it was found that he spoke fast and disorganized. It has been observed that while communicating with health-care personnel and people around, he speaks very quickly, jumps from subject to subject, has difficulty concentrating, makes little eye contact, and his emotional state changes quickly. It has been observed that he is interested in the environment, health-care professionals and the events around him, but he often draws attention, is authoritarian in his relationships, and has difficulty in protecting the boundaries of employees and the clinic. In addition, it has been observed that the individual is very active in all these communication and relationship processes and often has difficulty in standing still and constantly wanders during communication.

In line with the information mentioned above, nine nursing diagnoses were determined for the case. These are risk-prone health behavior, ineffective coping, impaired verbal communication, sleep deprivation, disturbed thought processes, imbalanced nutrition/ less than body requirements, ineffective health management, risk of electrolyte imbalance and risk for impaired tissue integrity. In this study, the first four diagnoses selected in accordance with the criteria previously stated will be explained within the framework of NNN. The main starting point of this article is not to deal with all the problems of the case, but to discuss the NNN system in the context of certain diagnoses, interventions and outcomes, as an example for the use of the NNN system in psychiatric care.

Nursing Care Plan for F.Y. including NNN system by NANDA Nursing Diagnoses, NIC Nursing Interventions, and NOC Indicators

In this section, the diagnoses of risk-prone health behavior, ineffective coping, impaired verbal communication, and sleep deprivation will be explained in detail within the scope of NNN.

Selecting patient-specific NOC interventions and indicators in line with the identified NANDA diagnoses constitute the first step of the process. Afterward, by examining the NIC interventions and selecting the activities in accordance with this NOC category and indicators, tables suitable for the NNN system will be created. The next step in the nursing process system is the implementation of the identified activities and the evaluation of outcomes that serve the patient-specific goal associated with them. This evaluation can be made with 5-point Likert type measurements, which are spontaneous in the NOC structure. It should be noted that there may be many indicators or NIC interventions and activities specific to the specified NOC criteria. Similarly, it seems possible to use a NIC intervention for many different outcomes or to measure many indicators of a NOC criterion with more than one scale. In selection and evaluation, it should be kept in mind that changes in the clinical status of the patient will also change the NNN design. After this system is applied as a whole; if there has been a good development in the individual's condition or if the problem has been completely resolved, an evaluation is made that NNN connections have a positive correlation with each other. On the other hand, in cases where there is no improvement in the individual's condition, the problem persists or worsens, the NNN connection is reviewed, and new additions or dele-

Table 1. NNN System for the Diagnosis of Risk-prone Health Behavior

Domain 1: Health promotion **Class 2:** Health management **Nursing diagnosis:** Risk-prone health behavior

Related factors: Low self-efficacy, insufficient social support, and hopelessness

Defining characteristics: Denial of change in health status, and failure to take preventive measures for health problems

NOC indicators: Participation in health care decisions/	**1 Never demonstrated**	**2 Rarely demonstrated**	**3 Sometimes demonstrated**	**4 Often demonstrated**	**5 Consistently demonstrated**	**NIC interventions: Self-awareness enhancement**
Takes responsibility for decision making						1. Encourage the patient to become aware of and discuss their feelings and thoughts.
Seeks the right information						2. Help the patient to identify their values that contribute to their self-concept.
Defines priority health outcomes						3. Help the patient to identify/ recognize his usual feelings about himself.
Identifies barriers to achieving desired results						4. Share your observations and thoughts about the patient's behavior or reactions.
Determines the degree to which the targeted results are achieved						5. Help identify the patient's usual responses in various situations.
Shows intention to act on decisions						6. Help the patient to recognize/ determine the impact of the illness on the self-concept.
Identifies support systems that are appropriate to achieve the desired outcome						7. Express the patient's denial of reality appropriately, verbally.
Receives health care for desired results						8. Observe the patient's current emotional state.
						9. Help the patient become aware of situations where he/she uses negative statements about himself/ herself.
						10.Identify/reveal the need for control with the patient.
						11.Help the patient recognizing/ identifying positive traits about himself.
						12.Assist patient/family in recognizing/identifying reasons for recovery.
						13.Help the patient reconsider their negative self-perception.
						14.Assist the patient in recognizing/ identifying the source of his motivation.
						15. Help the patient to identify/ recognize destructive behaviors toward himself/herself.

Table 2. NNN system for the diagnosis of ineffective coping

Domain 9: Coping/stress tolerance **Class 2:** Coping responses **Nursing diagnosis:** Ineffective coping
Related factors: Ineffective problem-solving skills, disorganized family system, and inadequate support system
Defining characteristics: Inappropriate use of defense mechanisms, sleep disturbance, poor concentration, risk taking, altered communication, inadequate problem solving, and impaired social participation

NOC indicators: Mood balance/ Coping	**1 Never demonstrated**	**2 Rarely demonstrated**	**3 Sometimes demonstrated**	**4 Often demonstrated**	**5 Consistently demonstrated**	**NIC interventions: Mood management**
Affect appropriate to the situation						1. Assess mood at baseline and regularly as treatment progresses.
Notification of adequate sleep						2. Determine if the patient poses a safety risk to himself or other individuals.
Ability to focus attention						3. Initiate the necessary measures for the safety of the patient or others at risk for physical harm.
Maintaining a normal appetite						4. Monitor self-care ability.
Reporting compliance with the planned treatment regimen						5. Assist the patient in providing self-care when necessary.
Identifying effective coping skills						6. Monitor and regulate activity level and environmental stimuli according to patient needs.
Identifying ineffective coping skills						7. Help the patient to maintain a normal sleep/wake cycle.
Searching for accurate information about the diagnosis						8. Monitor their cognitive functions.
Verbally expressing acceptance of the situation						9. Help the patient to express his/her feelings in an appropriate way.
Expressing a need for support/ help						10. Help the patient to identify the modifiable/non-modifiable factors that cause mood disorders.
Adapting to life changes						11. Help him identify personal difficulties/skills and available resources that he can use to change the factors that cause his mood disorder.
Using support systems						12. Teach new coping and problem solving methods.
Seeking accurate information about treatment						13. Apply drugs for mood stabilization.
Using effective coping skills						14. Monitor the patient in terms of the side effects of drugs and their effects on mood.
Getting help from healthcare professionals						15. Monitor and improve patient adherence to treatment.
						16. Provide training on drug therapy to the patient/his relatives
						17. Provide guidance on developing and maintaining support systems.
						18. Encourage the patient to take an active role in treatment and rehabilitation, as appropriate.

tions are made.[30]

Diagnosis 1: Risk-prone health behavior. According to the 2018-2020 NANDA diagnosis list, this diagnosis, which is in the health management class (Class 2) of the health promotion domain (Domain 1), defines the individual whose ability to change their lifestyle/behaviors to improve their health status is impaired.[8] When this diagnosis is examined in line with the case, it can be seen that the main sources of the risk prone behaviors of the case are false beliefs about the disease, drug non-compliance, and not receiving the necessary health-care assistance.[8] When this diagnosis is examined in line with the case, it can be seen that the main sources of the risky behaviors of the case are false beliefs about the disease, drug non-compliance, and not receiving the necessary health-care assistance. In this context, the case-specific goal will be to improve these areas. In this context, NOC outcomes were examined and NOC indicators were selected from the field of participation in health-care decisions. From this field consisting of fifteen indicators, ten suitable for the patient were selected. Subsequently, NIC interventions were reviewed and selected from the field of self-awareness enhancement. This area has been chosen because the main point of the objectives is to strengthen awareness. It was thought that 15 of the self-awareness strengthening areas, which consisted of 25 nursing activities, were suitable for the case. In line with the determined NANDA nursing diagnosis, the appropriate NIC interventions and the NNN design by 5-point Likert evaluation of the determined NOC indicators are shown in Table 1.[31]

Diagnosis 2: Ineffective coping. This diagnosis is included in the coping responses class (class 2) of the coping/stress tolerance domain (domain 9) according to the 2018-2020 NANDA diagnostic list and describes the individual who is unable to assess stressors validly, select responses appropriately, and/or use available resources.[7] When this diagnosis is examined in line with the case, it can be seen that the main reasons for the ineffective coping situation of the case are problems related to mood changes (such as sleep disorder, risk taking, and speech disorders) and ineffective use of coping skills. In this context, it was decided to select NOC indicators from the areas of mood balance and coping. The mood balance field consists of 13 indicators and six indicators suitable for the patient were selected from this field. The coping area consists of 18 indicators and nine indicators that may be suitable for the case were selected from this area. Possible NIC interventions related to this target were selected from the field of mood management. The reason for choosing this area is the change of mood experienced in the individual and the inability to manage it effectively. This area consists of 54 nursing activities and 18 of them were determined to be suitable for the case. In line with the determined NANDA nursing diagnosis, NIC interventions and 5-point Likert evaluation of determined NOC indicators and NNN design are shown in Table 2.[31]

Diagnosis 3: Impaired verbal communication. This diagnosis is in the communication class (class 5) of the perception/cognition domain (domain 5) according to the 2018-2020 NANDA diagnostic list and describes an individual with a loss, reduction or delay in the ability to receive, process, transmit, and/or use a symbol system.[7] It can be seen that the communication disorder in the case is associated with other diagnoses and also with mood changes. However, the specific goal of this diagnosis is to improve communication within the framework of the existing situation. In this context, it was decided to choose the NOC indicators from the communication area, and six of them suitable for the patient were selected from this area consisting of ten indicators. In line with this goal, NIC interventions were selected from the areas of active listening and communication enhancement. This area has been chosen considering that it covers the two main dimensions of the determined target, namely, listening and communication. Active listening area consisted of 17 nursing activities and 11 of them seem to be suitable for the case. The area of strengthening communication consists of 22 nursing activities and three of them are suitable for the case. In line with the determined NANDA nursing diagnosis, NIC interventions and 5-point Likert evaluation of determined NOC indicators and NNN design are shown in Table 3.[31]

Diagnosis 4: Sleep deprivation. This diagnosis is included in the sleep/rest class (class 1) of the activity/rest domain (domain 4) according to the 2018-2020 NANDA diagnosis list and defines the individual who is sleepless for a long time.[7] When this diagnosis is examined in line with the case, it can be seen that the sleep deprivation problem in the case is related to other diagnoses and also to mood changes. The specific goal of this diagnosis is the improvement of sleep in the context of the existing situation. Within the scope of the objectives for this diagnosis, NOC indicators were selected from the sleep area. Eight suitable for the patient were selected from this field consisting of 23 indicators. Possible NIC interventions to this goal were selected from the field of sleep enhancement. The reason for choosing this area is that it contains interventions related to the determined target. This area consisted of 26 nursing activities and ten of them were determined to be suitable for the case. In line with the determined NANDA nursing diagnosis, NIC interventions and 5-point Likert evaluation of determined NOC indicators and NNN design are shown in Table 4.[31]

Discussion

For the use of the NNN system, the nurse must have knowledge of the three classification systems, how to use these systems, and how to relate them to each other. However, Kaya et al.[12] have shown with their studies that this is not enough. Even in cases where the information is sufficient and the system can be planned by tabulating as in this study, it can be foreseen that some other difficulties will be encountered in practice. In this section, the difficulties that may arise regarding the use of the care plan in the field of psychiatric nursing are discussed, within the framework of its use in evidence-based practices and research, which is tabulated using the NNN system adapted according to the case history.

Table 3. NNN system for the diagnosis of impaired verbal communication

Domain 1: Perception/cognition **Class 2:** Communication **Nursing diagnosis:** Impaired verbal communication

Related factors: Decreased attention, changes in perception, and fatigue

Defining characteristics: Inappropriate speech and response

NOC indicators: Communication	**1 Severely compromised**	**2 Substantially compromised**	**3 Moderately compromised**	**4 Mildly compromised**	**5 Not compromised**	**NIC interventions: Active listening/ Communication enhancement**
Use of spoken language Use of nonverbal language Acceptance of the received message Accurate interpretation of the received message Directs messages to correct recipient Exchange messages accurately with others						1. Determine the purpose of the interaction. 2. Show the patient that you are interested in him. 3. Ask questions and use empathetic expressions to encourage them to express their thoughts, feelings, and concerns. 4. Focus entirely on interaction, suppressing prejudices, biases, assumptions, personal concerns, and other distractions. 5. Show sensitivity and awareness to their emotions. 6. Listen to the unexpressed messages and feelings along with the content of the speech. 7. Be aware of the words being avoided as well as the nonverbal messages that accompany the words being expressed. 8. Define the predominant/dominant content/ subject. 9. Identify the meanings of the messages by reflecting on the present situation, past experiences and behaviors. 10. Clarify the message using feedback and questions. 11. Avoid obstacles in active listening. 12. Monitor the speech in terms of speed, pressure, fluency, length, sound, and pronunciation. 13. Follow the communication style to meet the needs of the patient. 14. Instruct the patient to speak slowly.

Table 4. NNN system for the diagnosis of sleep deprivation

Domain 4: Activity/rest **Class 1:** Sleep/rest **Nursing diagnosis:** Sleep deprivation

Related factors: Hyperactivity due to manic processes, changes in affect, and impaired concentration

Defining characteristics: Difficulty staying asleep, mood changes, and daytime sleepiness

NOC indicators: Sleep	**1 Severely compromised**	**2 Substantially compromised**	**3 Moderately compromised**	**4 Mildly compromised**	**5 Not compromised**	**NIC interventions: Sleep enhancement**
Hours of sleep						1. Identify the patient's sleep/activity pattern.
Sleep patterns						2. Plan your care appropriately according to the patient's sleep/wake cycle.
Sleep quality						3. Explain the importance of adequate sleep during pregnancy, illness, psychosocial stress etc.
Sleep throughout the night consistently						4. Determine the effects of the patient's medications on the sleep pattern.
Wakeful at appropriate time						5. Monitor the patient's sleep pattern and pay attention to the physical and/or psychological conditions that interrupt sleep.
	1 Severely	**2 Substantially**	**3 Moderately**	**4 Mildly**	**5 Not**	6. Monitor participation in activities that cause fatigue during wakefulness to prevent excessive fatigue.
Inappropriate napping						7. Organize the environment to improve sleep.
Difficulty getting to sleep						8. If necessary to meet his sleep needs, allow him to take a nap/snooze during the daytime.
Interrupted sleep						9. Educate the patient and their relatives about the factors that may cause disturbance in the sleep pattern.
						10. Regulate environmental stimuli to maintain the normal day-night cycle.

1. The application and frequency differences that may arise in the implementation of the determined intervention. For example, NIC interventions were selected from the field of mood management to reach the NOC indicators determined for the diagnosis of ineffective coping (Table 2). One of these interventions is "Help the patient to express his/her feelings in an appropriate way." How to apply such an intervention sentence in a patient-specific manner, how the nurse will understand whether it has done it or not, how to evaluate this intervention applied or not by another nurse may be basic questions that may cause difficulties.

2. Problems that may arise from evaluation differences. Difficulties that may arise as a result of different nurses evaluating similar NOC indicators differently. For example, NOC indicators were selected from the field of participation in health-care decisions in line with the diagnosis of risk-prone health behavior (Table 1). One of the indicators in this field is the expression "Shows intention to act on decisions." At this point, the nurse is expected to evaluate the patient's behavior in accordance with this statement, at a frequency determined according to the 5-point Likert scale (1-Never demonstrated, 2-Rarely demonstrated, 3-Sometimes demonstrated, 4-Often demonstrated, and 5-Consistently demonstrated). At this point, when evaluating this indicator of intent, it is not clear which behavior of the patient will be decided on. In addition, it is likely to change according to the frequency of communication with the patient, the time of communication, the communicating nurse, and many other environmental factors. The same discourse or expression of the patient may not be evaluated in the same way by the nurses on the scale.

3. Problems that may arise from the frequency of the evaluation or the time of the evaluation. When the NNN system is examined, it is seen that the frequency and time of evaluation should be planned according to the patient. However, while some indicators can be expected to change even during the day, some indicators are expected to change after weeks. For example, NOC indicators (Table 2) selected from mood balance and coping areas in line with the diagnosis of ineffective coping are "Ability to focus attention" and "Using effective coping skills" and these indicators are evaluated with the same 5-point Likert scale (1-Never demonstrated, 2-Rarely demonstrated, 3-Sometimes demonstrated, 4-Often demonstrated, and 5-Consistently demonstrated). At this point, it can be assumed that the assessment of the expression of focusing attention may change even during the day, while the expression of using effective coping skills may change within days-weeks. At this point, how often and when should nurses do their evaluations? Should even areas where change is not expected be evaluated on a regular basis? Should assessment totals or averages be indicative of care outcomes? How does such an evaluation form affect the workload? What should the nurse do when she/he sees that her/his evaluation at the specified frequency and time changes during the day? It has been evaluated that it is important for the applicability of the NNN system to address and discuss these and similar questions in studies to be conducted in this area.

It is thought that the possible problem/discussion areas mentioned above are important in terms of designing the nursing process using the NNN system. It is known that the level of knowledge of nurses about classification systems is low and they have difficulties in practice.[12-15] Beyond the lack of knowledge, this study also revealed that there may be many areas that may cause difficulties in implementation. It is important to examine the potential barriers to the use of the NNN system in psychiatric nursing. At this point, beyond eliminating the lack of information, studies should be carried out on how the system will be implemented, how it will be standardized, how and how often it will be evaluated.

The use of the NNN system as a scientific tool in demonstrating the effectiveness of nursing care seems to depend on the widespread use of this system in the field and the increase in research. In addition to increasing information, it has been determined that there is a need for application designs and guides that will provide ease of use. Only in this way will it be possible to see the assumed benefits of using the nursing process and classification systems in patient outcomes. The knowledge gained in this way will also enable the development of evidence-based practices in nursing.

Conclusion

With this study, which sets an example for the use of the NNN system in the field of psychiatric nursing, one more step has been taken to increase the intelligibility of the NNN system, to eliminate the lack of information in this sense, and to reveal possible problems that prevent the effective use of the NNN system. Despite the contributions that the active and effective use of the NNN system will bring to the field of psychiatric nursing, there is a need to provide a better understanding of the systems and to expand the use of the system with this and similar studies. It is the responsibility of the nurse to establish the NANDA diagnosis and NIC-NOC connections determined in the NNN system, to apply the interventions in a patient-specific manner, to evaluate the NOC indicators in a situation and individual-specific manner and frequency. The standardized use of the NNN system requires the making of applicable designs, apart from the nurses' knowledge of this system.

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