

## Research Article

# Assessing the Alignment of Short-Term Assessment of Risk and Treatability (START) with NANDA-I Taxonomy in Forensic Care Settings

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**Purpose.** To investigate the alignment of START with NANDA-I in forensic psychiatric care. **Design.** A quantitative design was chosen to compare the START instrument with the NANDA-I taxonomy and analyze their alignment. Each item of the START was attempted to be matched with potentially relevant NANDA-I diagnoses, and the matched diagnoses were extracted and presented. **Findings.** The study demonstrated a strong alignment between START coding and NANDA-I diagnoses, with 99% of the START diagnoses finding a match within NANDA-I. These results support the use of NANDA-I in forensic psychiatric care, which facilitate providing comprehensive care and avoiding sole focus on psychiatric problems. **Practice Implications.** It is recommended to use a structured nursing taxonomy, such as NANDA-I, in forensic psychiatric care.

## 1. Introduction

Despite continuing improvement in forensic psychiatric care, the focus of the care remains primarily on assessing the risk of violence, rather than considering the patients receiving such care, holistically. However, to provide optimal care, forensic psychiatric care should encompass all dimensions of nursing care in forensic psychiatric care settings. The Swedish National Forensic Psychiatric Register [1] indicates that a significant number of patients in forensic psychiatric care require treatment for somatic diseases such as heart disease (28%) and diabetes (12%). Moreover, according to a Swedish study, the court-ordered length of stay for patients in forensic psychiatric care is often longer than necessary based on patients' clinical need [2]. These data indicate the importance of providing nursing care beyond risk assessment and psychiatric needs. Using a structured approach for planning, implementing, and

evaluating nursing outcomes such as NANDA International (NANDA-I) could contribute to the improvement of forensic psychiatric care. A standardized nursing language provides consistency and continuity of the care among nursing staff as the nurses use the same language and terms for describing the patients' problems and the expected outcomes of nursing interventions. However, there is a need for studies exploring the feasibility of using such standardized nursing language in forensic psychiatric care together with currently used risk assessment tools and their alignments.

Patients in Sweden who receive care in forensic psychiatry are treated in accordance with the Forensic Mental Care Act [3]. In 2020, 1,932 patients were treated in inpatient forensic psychiatric care [4]. A person who has committed a crime and is consequently receiving care under the LRV must have undergone a forensic psychiatric evaluation conducted by the National Board of Forensic Medicine in

Sweden. The investigation of the person must demonstrate that they committed the crime while under the influence of a severe mental disorder, and as a result, they cannot be sentenced to imprisonment or any other conventional sanctions. Serious mental disorder is not a medical term, but a legal one. The court's decision is based on the forensic psychiatric examination. More than half of the yearly conducted forensic psychiatric examinations lead to forensic psychiatric care [5]. In 2016, forensic psychiatric care was the main sentence in 291 cases, out of which 74% were related to forensic psychiatric care with special discharge trials [6]. The special discharge trials involve an administrative court determining whether a person can be released from the forensic psychiatric care and return to the society or should continue to receive care.

The administrative court makes rulings on leave and discharge for patients who have been sentenced to forensic psychiatric care with a special discharge trial every six months. For patients without a special discharge trial, the psychiatrist in charge makes the decision on whether the patient may be discharged or allowed to leave. Patients in forensic psychiatric care, with or without special discharge trials, have an average length of stay of more than five years and just over one year, respectively [4]. The excessively long periods of care emphasize the significance of nursing care that is influenced by person-centered care, empowerment, and recovery.

*1.1. Structured Assessment Model of the Risks.* Structured assessment models are characterized by being made according to strict and well-validated methods and reliability-tested principles [7, 8]. The assessment models provide systematized and structured assessments of patients, which in a forensic psychiatric care process help decision makers assess risks of violence and recidivism of crime [9]. Risk assessment tools began to take shape in the 1990s and over time have evolved into today's third-generation risk assessments with a focus on actuarial assessment of static and dynamic factors [8, 9] and fourth-generation risk assessment tool with a focus in integrating case planning and management. Initially, risk assessments were made by a psychiatrist or psychologist responsible for the individual patient. The assessments leaned on the theory and were guided by clinical knowledge and expertise, but the assessments could vary between assessors as they lacked scientific support and that their personal experience had impact on their assessment. Second-generation risk assessments, so-called actuarial risk assessments, focused on static factors, patients' historical data such as past violent behaviours, criminal history, psychiatric diagnoses, and gender, whereafter statistical probabilities of relapse of violence were calculated. Third-generation risk assessments could be conducted not only by clinicians but also by professionals with similar skills who weigh risk factors against the patient's specific circumstances [8]. In Swedish forensic psychiatric care, third-generation risk assessments have become the tool applied by healthcare professionals to provide the administrative court with a basis for their

assessment of whether the patient is allowed to leave or be discharged [10]. Short-Term Assessment of Risk and Treatability (START) [11] is a third-generation risk assessment tool used by Forensic Psychiatry Care in Stockholm within Stockholm County Council. START, specifically designed for use in forensic psychiatric care, has demonstrated its usefulness as a standardized tool for risk assessment in both international and national forensic psychiatric departments [12, 13].

The 20 items in START are various aspects and characteristics of the patient relevant to the risk assessment (Appendix 1). START is designed as a guiding memorandum with which a cross-professional care team can reason from several perspectives, thus forming the clinical assessment [14, 15]. In the estimation form, each coding is assessed as strength or vulnerability on a three-point scale. If we add up all kinds of coding of START items, there are 271 kinds of coding on which the cross-professional care team can determine the patient's state. Furthermore, key factors or as it is sometimes called critical factors need to be rated to reflect the full strength of each patient as well as the vulnerabilities that the patient is evaluated to experience and can be turned into warning flags. The strengths include resources that the patient poses or has access to ([11], pg 26).

These key factors/critical factors shall be considered in the patient's care plan. The coding includes eight risk assessments linked to violence to others, self-harm, suicide, unauthorised leave, substance abuse, self-neglect, being victimized, and case-specific risk if any [11]. START is one of the few risk assessment tools that considers patients' strengths and resources to integrate positive aspects into care planning [12]. Nicholls et al. [13] showed that START provides healthcare professionals with valuable insights into care needs and resources for forensic psychiatric patients. Furthermore, Kikuchi et al. [16] found START being a feasible and valid tool that allows staff to plan treatment and promote the recovery of forensic patients. The predictive validity of START varies considerably; for instance, Paetsch [17] revealed that only five of the START items had predictive validity for the occurrence of violence in the following six months. Therefore, the potential limitations of START in capturing the full range of outcomes should be carefully considered, and it should not be solely relied upon.

The NANDA-I nursing diagnosis system is used worldwide [18]. The system consists of 235 nursing diagnoses, categorized into health-promoting diagnosis, problem-focused diagnosis, and risk diagnosis. The definitions are linked to the patient's characteristics (symptoms and signs) and related factors (etiological factors) as well as risk factors (factors that increase vulnerability). The available research on the application of NANDA-I in general psychiatric and forensic inpatient care is limited. The few studies carried out in this area suggest that the tool can and should be used to a greater extent [19, 20]. Escalada-Hernández et al. [21] have shown that NANDA-I is an important instrument in psychiatric care that can contribute to a more complete picture of patients' conditions, problems, and needs. In addition, Åling et al. [22] have demonstrated that patient records in forensic psychiatric care, describing

symptoms and signs, correspond well with NANDA-I. By implementing a standardized language such as NANDA-I with its language classification, nurses would have common meanings of terms, instead of their own personal understanding and interpretation of the terms and patients' status [23], which in turn can increase patient safety and outcomes. Moreover, NANDA-I supports the nurses' clinical judgment, planning the appropriate nursing interventions, implementing the intervention, and evaluating the outcomes in a structured and documented way. The Swedish Research Council [24] points out that nursing research regarding implementing NANDA-I in forensic psychiatric nursing is lacking both nationally and internationally.

Care plans can be presented with help of the START's 20 items. Nursing diagnosis functions in an analogous way, where characteristics, related factors, and risk factors also act as coding for nursing diagnosis. There are studies demonstrating that NANDA-I nursing diagnosis can be implemented in forensic psychiatric care as well. Since there are clear similarities between START coding and nursing diagnosis, it is of value to examine these similarities in order to facilitate using NANDA-I in forensic psychiatric settings. It will be an important step in improving forensic psychiatric care by utilizing NANDA-I as a systematic care plan system even in forensic psychiatric care as it is well proven to be useful in somatic care settings.

## 2. Aim

The aim of this study was to investigate the alignment of START with NANDA-I in a forensic psychiatric care context.

## 3. Design

A quantitative design was chosen to compare an extensively used instrument in forensic psychiatric care settings with a well-known nursing taxonomy to assess their associations. The START instrument [11] and NANDA-I taxonomy [18] were compared and their alignment was analyzed. We attempted to match each item in START with potentially relevant NANDA-I diagnoses. The resulting matched NANDA-I diagnoses have been extracted and presented here.

## 4. Data

START is an internationally recognized instrument widely used in many countries, including Sweden, for risk assessment in forensic psychiatric care. A multidisciplinary team, comprising mainly of psychiatrists, psychologists, registered nurses, and nursing staff, performs assessments through START. The instrument is used to assess the risk of crime recidivism and to aid administrative courts in deciding whether patients should continue to receive forensic psychiatric care.

The START instrument consists of 20 items that reflect various aspects and characteristics of the patient that are relevant to the risk assessment (Appendix 1). It includes

a total of 271 kinds of coding that the cross-professional care team can use to determine the patient's status for each coding. Each coding indicates the patient's strength and vulnerability on a three-point scale. Each item has 2–13 kinds of coding including both strength and vulnerability. There are eight specific risks to estimate: violence; self-harm; suicide; that the patient escapes; drug use; lack of self-care; vulnerability to crime; and a case-specific risk if any.

Furthermore, a smaller number of coding items are selected as key or critical factors, indicating the patient's strengths that are considered resources and beneficial to their health, as well as vulnerabilities that serve as warning flags. These key and critical factors are taken into consideration when planning the patient's nursing care. Additionally, management measures, plans, health concerns/medical tests, risk formulations, and factors/predictors regarding patients' outpatient activities are documented as part of the instrument.

The NANDA-I taxonomy is an internationally recognized standardized nursing terminology that makes nursing care measurable and comparable. It is used worldwide to establish a systematic standard for nursing clinical judgments, as well as nursing care practice and outcomes. The NANDA-I taxonomy consists of 235 nursing diagnoses, categorized into health-promoting diagnosis, problem-focused diagnosis, and risk diagnosis. The definitions of nursing diagnoses are linked to the patient's characteristics (symptoms and signs) and related factors (etiological factors) as well as risk factors (factors that increase vulnerability). NANDA-I is used systematically in diverse somatic care settings, but it is utilized sparsely within psychiatric care. The reason for not using NANDA-I in a psychiatric care setting, in particular forensic care, is not well researched. All NANDA-I nursing diagnoses are scientifically developed and well researched within nursing science.

## 5. Data Analysis

The START instrument and NANDA-I system were systematically compared and the similarities were documented. Coding of the START was matched with definitions, symptoms and signs, related factors, and risk factors of the nursing diagnoses in NANDA-I in order to find nursing diagnoses covering the intent in the coding of START. The connection of the items and diagnoses was discussed repeatedly in the research group consisting of specialized research nurses including a specialized researcher within NANDA-I domain, to achieve a consensus.

## 6. Results

The analysis resulted in matches between the 20 START items and 58 NANDA-I diagnoses. Twenty-one percent of the coding match health promotion diagnosis ( $n = 13$ ), 65 percent of the coding match "problem diagnosis" ( $n = 35$ ), and 14 percent of the coding match risk diagnosis ( $n = 12$ ) of NANDA-I (see Figure 1). The remaining NANDA-I diagnoses do not align with any of the START diagnoses primarily due to their somatic characteristics.

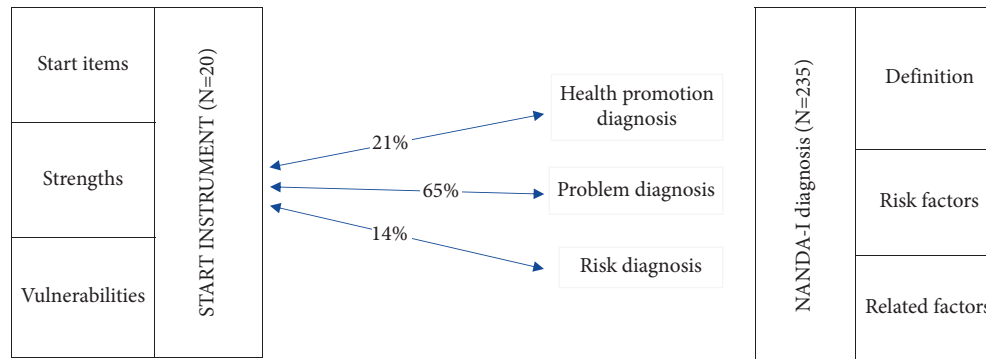


FIGURE 1: The alignment of START instrument with NANDA-I diagnosis.

The alignment between the START items and NANDA-I is remarkably high, with 99% of the START items finding a match within NANDA-I. The incongruous items are three kinds of coding of inappropriate fashion, abnormal fluid intake, and indiscriminate intake. Of the 271 kinds of coding of the START, 44 percent relate to the strengths and match 13 health-promoting diagnoses, and 56 percent relate to vulnerabilities matching 36 problem diagnoses and 12 risk diagnoses.

The health promotion diagnosis matching most kinds of START coding is “Readiness for enhanced resilience.” Of the problem diagnoses, “Ineffective health maintenance” and “Self-mutilation” have most matches with START coding. The risk diagnosis matching START coding is “Risk for self-mutilation” (00139).

The dominant parts of the matched NANDA-I diagnosis were found within the “Coping/stress tolerance” domain of NANDA-I, regardless of if it being a health promotion diagnosis, a problem diagnosis, or a risk diagnosis. The matched diagnoses which can show patients’ strength include readiness for enhanced coping (00158), readiness for enhanced power (00187), and readiness for enhanced resilience (00212).

The other matched nursing diagnoses include “Ineffective activity planning” (00199), “Anxiety” (00146), “Defensive coping” (00071), “Ineffective coping” (00069), “Ineffective denial” (00072), “Fear” (00148), “Impaired mood regulation” (00241), “Powerlessness” (00125), “Impaired resilience” (00210), and “Stress overload” (00177).

The matched risk diagnoses include “Risk for ineffective activity planning” (00226) and “Risk for powerlessness” (00152).

From the perspective of NANDA-I, the coding in START is mostly redundant. For example, 141 kinds of coding in all 20 START items point to a single NANDA-I diagnosis (Readiness for enhanced resilience).

## 7. Discussion

The mapping per se is an interconnection of START and nursing diagnoses, which form a schematic system of links between coding and concepts. A total of 99% of all START coding were matched to the 58 nursing diagnoses. The results demonstrate a very strong alignment between the two

well-known and widely used instruments. The study encourages nursing staff working in psychiatric care settings to increase using the NANDA-I, knowing that NANDA-I also covers the domains listed in START.

The important advantage of using NANDA-I within psychiatric care is that the NANDA-I extends the focus from “problems” to include even strategies to deal with the problems and evaluate the results of implementing the strategies. Using a standardized language such as NANDA-I not only assists nursing staff with assessments and diagnoses but also provides them with a structured approach for planning, implementing, and evaluating outcomes. This is something that START alone cannot offer. Using NANDA-I increases consistency and continuity of the care among nurses as the nurses would use the same language and terms for describing the patients’ problems and the expected outcomes of nursing interventions. Using a standardized language such as NANDA-I with its language classification helps the nurses to have common meanings of terms, for example, what is meant by loneliness or isolation instead of personal understanding and interpretation of the terms and patients’ status [23].

NANDA-I not only provides the possibility of going beyond the problems and possibilities that STARTS could give insight to but also fulfils the aim of developing and using START as well. Using other measures, in addition to START, can result in more beneficial forensic mental health nursing assessment and care. Based on our study results and considering the literature on NANDA-I, we suggest using NANDA-I as an extension of the practice of using START in forensic psychiatric care. Furthermore, NANDA-I makes it possible to involve the patients in solutions and is in line with a person-centered care approach. The importance is highlighted knowing that the court-ordered length of stay for patients in forensic psychiatric care is often beyond clinical necessity [2] and that a significant number of the patients in forensic psychiatric care require treatment for somatic diseases [1]. Using NANDA-I equips nursing staff with a structured approach for planning, implementing, and evaluating outcomes of their assessment and diagnosis. This is something that START alone cannot offer. Using NANDA-I in forensic psychiatric care facilitates the detection of somatic problems and equips the nursing staff to plan strategies, implement, and evaluate the results in

a systematic documented way. It also makes the nursing care measurable and comparable. Implementing NANDA-I in forensic psychiatric care should not be viewed as an additional burden to nurses' already high workload, but rather as a valuable resource that equips them with a proper structure and standardized language, leading to significant improvement in patient safety and outcome.

The result also showed that 186 of the NANDA-I nursing diagnoses did not match with any of the START coding. The nonmatched diagnosis consists of diagnoses within overlooked aspects of the START. If we aim to take a comprehensive approach to patient care in forensic psychiatric settings, it is important to consider these diagnoses. Forensic patients are often treated only for their psychiatric symptoms, while other important aspects of care are largely ignored.

Another important consideration in forensic psychiatric care settings is that the patients usually consume many medicines. By implementing NANDA-I in forensic psychiatric care, it is possible to detect and plan to decrease the side effects of these medications. NANDA-I reflects a comprehensive understanding of the human being. It covers not only somatic and psychiatric dimensions but also other aspects of life including patients' cultural, spiritual, psychosexual, social, and recreational needs and sensitive care related to gender, age, (dis)ability, sexual orientation, and gender identity among others. This holistic approach to patient care is what makes nursing distinguished from others, as nursing views the person as a whole and the nursing care plan takes into account not only the patient's problems but also how they have affected the patient's overall life. Two examples of such aspects are the NANDA-I diagnoses of "Deficient diversional activity" (00097) and "Sedentary lifestyle" (00168). Further research is needed to establish importance of using NANDA-I in improving forensic psychiatric care.

Nurses are committed to provide care which supports all patients' dimensions of being. Åling et al. [20] who have interviewed patients in forensic psychiatric care settings found that all the patients expressed some needs relevant to diagnose of Deficient diversional activity (00097) and "Sedentary lifestyle" (00168). Patients' needs cannot be assessed and met only by using risk assessment instruments such as START; otherwise, some patients needs which should be met would be overlooked.

The results show that there is a transferability between the two reference frameworks of START and NANDA-I. The START system is interconnected with NANDA-I consisting of domains, diagnoses, their characteristics, related factors, or risk factors. There is what Bakken et al. [25] called a semantic interoperability between START and NANDA-I, which they believe is necessary for all types of healthcare science disciplines to develop and meet increasingly complex healthcare environments and several types of patient data.

The results show that the transferability between START items and NANDA-I is almost complete, and that the nursing diagnosis covered the 271 START items well. The results are in line with those of Frauenfelder et al. [26] who found that NANDA-I is linked to general psychiatric

nursing notes, although gaps between nursing diagnoses and prevalent conditions in patients, as described by nurses, were identified.

Our study may provide a basis for rigorous diagnosing. Lunney [27] emphasizes that nursing diagnoses are probabilistic and that they should be applied with a certain probability. Setting nursing diagnoses in the forensic psychiatric environment while considering START may be useful to reach rigid and appropriate diagnosing.

Further research can shed light on the benefits of using NANDA-I in combination with START in forensic psychiatric care settings. Nursing staff working in these settings need to be more aware of the possibilities and advantages that NANDA-I provides to improve care considering the patient as a whole and not solely through the lens of their psychiatric diagnosis.

## 8. Conclusion

The study demonstrated a notable alignment between START coding and NANDA-I, with 99% of the START diagnoses finding a match within NANDA-I, implying the feasibility of integrating NANDA-I into forensic psychiatric care. Implementing and expanding the utilization of NANDA-I in forensic psychiatric care can enable the provision of comprehensive care that not only addresses patients' psychiatric problems but also encompasses other aspects of their health and well-being. NANDA-I provides support to forensic psychiatric patients in their life situations and actual needs through setting diagnoses, suggesting strategies, and evaluating the results in a systematic and documented process.

Further research examining how the match between START and NANDA-I can be applied by nurses is therefore justified. In addition, such a study would be relevant not only to clinical practice but also to courts responsible for conducting discharge assessments and to the society which receives patients when courts approve their discharge.

## Data Availability

The data used to support the findings of this study are available from the corresponding author upon request.

## Disclosure

This study was performed as part of the employment of authors at Swedish Red Cross University and Sophiahemmet University.

## Conflicts of Interest

The authors declare that they have no conflicts of interest.

## References

- [1] Swedish National Forensic Psychiatric Register (RättspsyK), *Annual 2021*, Swedish National Forensic Psychiatric Register, Gothenburg, Sweden, 2021.

- [2] H. Andreasson, M. Nyman, H. Krona et al., "Predictors of length of stay in forensic psychiatry: the influence of perceived risk of violence," *International Journal of Law and Psychiatry*, vol. 37, no. 6, pp. 635–642, 2014.
- [3] Lrv, "Forensic mental care act (LRV) [lag om rättspsykiatrisk vårdForensic," 1991, <https://lagen.nu/1991:1129>.
- [4] National Forensic Psychiatric Quality register in Sweden, "[RättspsyK]," 2021, <https://rattpsyk.registercentrum.se/>.
- [5] National Board of Forensic Medicine, "National Board of Forensic Medicine," 2021, <https://www.rmv.se/om-oss/forskning/statistik/#Rattpsykiatri>.
- [6] Swedish National Council for Crime Prevention (n.d., "Swedish National Council for Crime Prevention," 2017, <https://bra.se/bra-in-english/home/crime-and-statistics/crime-statistics.html>.
- [7] L. Lidberg and N. Wiklund, *Svensk Rättspsykiatri. Psykisk Störning, Brott Och Påföljd [Swedish Forensic Psychiatry. Mental Disorder, Crime and Penalty*, Studentlitteratur, Lund, Sweden, 2004.
- [8] J. Sturup, M. Forsman, U. Haggård, D. Karlberg, and P. Johansson, *Riskbedömnings I Kriminalvård Och Rättspsykiatri. Sammanfattningsrapport [Risk Assessment in Correctional Care and Forensic Psychiatry. Summary Report]*, University of Gothenburg, Gothenburg, Sweden, 2013.
- [9] S. D. Hart and L. S. Guy, "The structured professional judgment approach to violence risk assessment: origins, nature, and advances," in *The Wiley Handbook on the Theories, Assessment, Treatment of Sexual Offending: Volume II. Assessment*, B. Craig and M. Rettenberger, Eds., pp. 643–666, John Wiley and Sons, Singapore, 2016.
- [10] S. K. Levin, P. Nilsen, P. Bendtsen, and P. Bölow, "Structured risk assessment instruments: a systematic review of implementation determinants," *Psychiatry, Psychology and Law*, vol. 23, no. 4, pp. 602–628.
- [11] C. D. Webster, L. T. Nicholls, M.-L. Martin, S. L. Desmarais, and J. Brink, "Short-term assessment of risk and treatability (START): the case for a new structured professional judgment scheme," *Behavioral Sciences and the Law*, vol. 24, no. 6, pp. 747–766, 2006.
- [12] E. Kroppan, M. B. Nettet, K. Nonstad, T. W. Pedersen, R. Almvik, and T. Palmstierna, "Implementation of the short term assessment of risk and treatability (START) in a forensic high secure unit," *International Journal of Forensic Mental Health*, vol. 10, no. 1, pp. 7–12, 2011.
- [13] T. L. Nicholls, K. L. Petersen, J. Bring, and C. Webster, "A clinical and risk profile of forensic psychiatric patients: treatment team STARTs in a Canadian service," *International Journal of Forensic Mental Health*, vol. 10, no. 3, pp. 187–199, 2011.
- [14] G. L. Dickens, "Re-focusing risk assessment in forensic mental health nursing," *Journal of Psychiatric and Mental Health Nursing*, vol. 22, no. 7, pp. 461–462, 2015.
- [15] N. Gray, R. Benson, R. Craig et al., "The short-term assessment of risk and treatability (START): a prospective study of inpatient behavior," *International Journal of Forensic Mental Health*, vol. 10, no. 4, pp. 305–313, 2011.
- [16] A. Kikuchi, T. Soshi, T. Kono, M. Koyama, and C. Fujii, "Validity of short-term assessment of risk and treatability in the Japanese forensic probation service," *Frontiers in Psychiatry*, vol. 5, no. 12, Article ID 645927, 2021.
- [17] A. Paetsch, "Single-item predictive validity of the Short-Term Assessment of Risk and Treatability (START) for violent behaviour in outpatient forensic psychiatry," *Journal of Forensic Psychiatry and Psychology*, vol. 30, no. 4, pp. 630–641, 2019.
- [18] T. H. Herdman and S. Kamitsuru, *Omvårdnadsdiagnoser. Definitioner Och Klassifikation [Nursing Diagnoses. Definitions and Classification]*. 2015-2017, Studentlitteratur, Lund, Sweden, 2014.
- [19] F. Frauenfelder, M. Müller-Staub, I. Needham, and T. Van Achterberg, "Nursing phenomena in inpatient psychiatry," *Journal of Psychiatric and Mental Health Nursing*, vol. 18, no. 3, pp. 221–235, 2011.
- [20] M. Åling, S. Syrén, and L. Strömberg, "Patients' expressed nursing care needs in a forensic psychiatric setting," *Journal of Forensic Nursing*, vol. 17, no. 4, pp. 244–252, 2021.
- [21] P. Escalada-Hernández, P. Munos-Hermoso, E. González-Fraile et al., "A retrospective study of nursing diagnoses, outcomes, and interventions for patients with mental disorders," *Applied Nursing Research*, vol. 28, no. 2, pp. 92–98, 2015.
- [22] M. Åling, E. Nilsson, B. Garpstål, and L. Strömberg, "Nursing diagnoses panorama in a Swedish forensic psychiatric setting using NANDA-international taxonomy," *Journal of Forensic Nursing*, vol. 14, no. 3, pp. 141–147, 2018.
- [23] M. Lunney, "Helping nurses use NANDA, NOC, and NIC: novice to expert," *Nurse Educator*, vol. 31, no. 1, pp. 40–46, 2006.
- [24] Swedish parliament, "Law," 2017, [https://www.riksdagen.se/sv/dokument-lagar/dokument/svensk-forfattningssamling/lag-19911129-om-rattpsykiatrisk-var\\_d\\_sfs-1991-1129](https://www.riksdagen.se/sv/dokument-lagar/dokument/svensk-forfattningssamling/lag-19911129-om-rattpsykiatrisk-var_d_sfs-1991-1129).
- [25] S. Bakken, M. S. Cashen, and S. O'Brien, "Evaluation of a type definition for representing nursing activities within a concept-based terminologic system," *Proceedings of the AMIA Symposium*, vol. 70, pp. 17–21, 1999.
- [26] F. Frauenfelder, T. van Achterberg, I. Needham, and M. Müller Staub, "Nursing diagnoses in inpatient psychiatry," *International Journal of Nursing Knowledge*, vol. 27, no. 1, pp. 24–34, 2016.
- [27] M. Lunney, "Critical thinking and accuracy of nurses' diagnoses," *International Journal of Nursing Terminologies and Classifications*, vol. 14, no. 3, pp. 96–107, 2003.