Neurocognitive Care to Reverse Solitary Confinement in Prison: Case Report

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ABSTRACT

Inmate populations have been found to have mental health problems and substance abuse much higher than non-incarcerated populations. Caring for incarcerated patients is problematic, given the limitations on access to healthcare services within detention facilities. A case report of a patient with psychomotor agitation and psychoactive substances use, prone to hetero and self-aggression, is presented. The patient was treated for a month in a Mexican state detention center by nursing students, under supervision and pedagogical support. Using the nursing process, focused on psychosocial health needs, six priority diagnoses were identified: anxiety, ineffective health maintenance behaviors, acute confusion, risk of self-directed violence and violence directed at others, as well as discomfort. Based on these diagnoses, care plans using cognitive stimulation was carried out with the goals of decreased anxiety, increased self-care, increased self-responsibility, better anger control, management of hallucination. The cognitive stimulation was a primary intervention that helped with other interventions to achieve holistic goals, such as improving hygiene. Improvements in the patient’s general ability to function led to, among other aspects, the release of solitary confinement and adaptation to social environment of the prison. Patient improvements reflect the importance of professional nursing care in mental health care in correctional healthcare.

Keywords
Cognitive training, Mental disorders, Nursing, Nursing process, Prisons.

Abbreviations
PDL: Persons Deprived of their Liberty, CPRS: Center for Prevention and Social Rehabilitation, WHO: World Health Organization.

Introduction
The complexity of caring for a person with mental illness presents a nursing challenge, not only because of the disorder itself, but because of the stigmatizing and precarious context that surrounds it. Nursing care for a person with a mental disorder who is in prison is even more intricate, due to the dangers of the being in a detention facility and the challenges of providing care in that environment. The World Health Organization pointed out the deficiencies in the treatment of mental health problems in prisons [1]. In addition, the high prevalence of mental health disorders among inmates has been well documented, which is higher than in the general population [2]. The scarcity of the dissemination of foundations for the exercise of care and the lack of professionals inserted in this area, add to the pending that nursing has with society, for this reason the need to project through this article the care in patients with psychosis, this developed in the field of clinical teaching with professionals in training.

The patient (inmate)1 that is the subject of this report resides in The Center for Prevention and Social Readaptation (CPRS) a medium-high prison in the area of Mexico State [3]. The CPRS has six dormitories for men and women, all of them prosecuted or sentenced by a court of law, of common and federal jurisdiction.

Received: 15 Jul 2023; Accepted: 24 Aug 2023; Published: 31 Aug 2023
The care given to one of the patients who was in that area under this measure of solitary confinement as a disciplinary measure is described below.

**Case Report**

Accessing the patient at the CPRS was always complicated, time consuming, and stressful. It was required of all visitors to go through different security filters that consisted of personal identification, classification of one’s purposed in the prison, a thorough review of articles and clinical intervention material, a physical review, facial identification, and the constant counting of the group of students. It is not possible to enter the prison with any telecommunications devices, so the students remained incommunicado for the duration of their stay.

The dormitory with the mental health nursing clinic was designed for men with mental health problems or developmental disabilities. The prison facilities in general are in a state of poor maintenance, and the living areas had very basic services such as drinking water and electricity. There was a green area with grass and plants, a sports field, a space to grow vegetables, and some tables and chairs used as a dining zone. The cell area in general was also overcrowded and exposed to the weather due to the lack of windows in some areas of the building. Most of the inmates in that dormitory were in a state of poor hygiene and shabby clothing. Even after accounting for the limited services available, some of them did not bathe, wore dirty clothes, did not brush their teeth, and so on.

The relationship of the authors with the inmates were uniformly positive and constructive. From the beginning, most of the inmates were respectful and collaborative in the interventions.

Inside this dormitory, there were cells intended for solitary confinement, known as "punishment cells." The imposition of this disciplinary sanction was due to the infractions of the regulations of the center. The physical constitution of these cells was even more deplorable and more overcrowded. There was only a small hole used to receive food and maintain communication with the staff. Inmates were not allowed to leave for any reason. They did not have access to hygiene until their punishment was completed, so the inmates were in very compromised conditions of hygiene and infestations. Mental health was even more compromised. The inmates could not sleep due to the poor conditions, and the confinement could last for months. Therefore, anxiety levels of these inmates were high, with hyperactivity behaviors, hetero and self-harm frequently evident. They also presented with compromised mental functions such as disorientation, hypo- or hyperattention, memory problems, even psychotic symptoms, such as the patient who is the subject of this case report.

**Assessment**

The patient, a young adult male of 33 years old, Catholic, schooling up to the fifth semester of high school, bricklayer occupation, single. Inadequate hygiene, he reports not having bathed for a month, he has bromhidrosis, long and dirty nails, presence of dental plaque. He was exposed to a hemipteran insect plague with a blood-sucking diet. Compromised dressing, inappropriate clothing for the size, dirty and deteriorated, broken shoes. He presents with cutting injuries. He was conscious, oriented in person, disoriented in time, space and circumstance, partial awareness of the disease. Cooperative at the initial interview with avoidance of eye contact, in selective and inattentive hyperalertness, showing a hallucinatory and anxious attitude accompanied by dermatophagy, with a history of aggression, preserved long-term memory, compromised short-term memory. Shows psychomotor agitation, adequate visuospatial ability, altered sensory perception due to the presence of auditory and visual hallucinations, errors in judgment and behavior. Used few word, with low volume, adequate speed, delusional speech with fugitive ideological thought, distracted, makes silent pauses apparently in response to hallucinations. He reports difficulty staying and falling asleep, mood referred to as sadness and frustration, restricted affection, presence of anhedonia and apathy in daily life tasks. In an impulsive context, he has made two suicide attempts showing poor judgment, little tolerance for stressful situations. History of addiction to the use of substances including marijuana and methampetamines.

At the beginning of the practice at the CPRS, the nurse-patient relationship was closely supervised by two custodians since the patient was in solitary confinement and was considered dangerous due to his history of aggression. Therapeutic meetings with the patient were daily from Monday to Friday for two hours periods each day, for a total period of one month. It is important to note that the patient had not left his cell for approximately a month and a half.

For nursing evaluation, clinical interviews were carried out, delving into the mental examination and applying tests such as the mini mental test by Folstein et al., which is a "dichotomous measure of 30 items, with a quick and brief administration, which detects the deterioration of cognitive functions." [4]. The global score did not reveal a cognitive deterioration; however, the dimension of attention and orientation was altered. The scale for the assessment of psychotic symptoms (PSYRATS) was also applied, "a specific instrument to measure the entire phenomenological variety of hallucinations," [5] which allowed us to understand more about the emotions that accompanied the perceptual experience, obtaining a score of 28.

Of the assessed needs, six priority diagnoses were identified. The nursing care scheme is presented below summarizes the care plan made for the patient under the NANDA, NOC and NIC taxonomies. Cognitive stimulation is pointed out as a primary intervention that helped with other interventions to achieve holistic goals.

**Care Description**

Due to the patient’s hyperactivity and impulsivity, it was important to control the environment to ensure everyone’s safety. At the same time, it was also essential to establish a relationship of trust and open communication. From the beginning this patient demonstrated decreased anxiety, which helped to continue with other
interventions. He was at times euphoric, irritable and hyperactive, at the same time the cognitive stimulation intervention was applied. Different therapy options were employed such as physical activities, recreation and occupational therapy. The interventions by nursing diagnosis are described below.

Anxiety (see diagram 1), was treated with physical therapy to reduce euphoria levels. Every day and through a series of exercises that included everything from warming up to series of push-ups, sit-ups, basic strength training exercises, etc., in addition to managing anxiety. Energy, exercise fine and gross motor skills, improve attention, psychomotor coordination and short-term memory. Therefore, after each physical activity, the patient showed longer periods of concentration, paid attention and remembered the series of exercises indicated by the nursing staff, which allowed continuing with other interventions. Recreation therapy or also known as game therapy, included puzzle-solving games and games to build hand-eye coordination and teamwork, as well as sports tournaments such as soccer and basketball. These helped to reduce stress, release emotions and feelings of the patient. The activities carried out were of great importance for the development of the patient's expression. Because therapies appeared to be having a positive effect, he gradually presented greater confidence to express his feelings.

For ineffective health maintenance behaviors (see diagram 1), we began with dependent assistance to self-care based on cognitive stimulation and hygiene exercises of daily life. Due to the state of agitation, attention in hypervigilance and concentration difficulties, the patient demonstrated errors of judgment and behavior while washing his hands, brushing his teeth, hurting his gums and did not follow a logical sequence of steps for these activities. He showed a tendency towards apathy in some self-care exercises such as hydration of integuments, since he said, “I don’t use cream.” After insisting and assisting for a consecutive week with the cognitive stimulation exercises based on a series of exercises of sequenced, coordinated and repetitive steps in hand hygiene and tooth brushing, confidence improves, achieving a collaborative attitude when performing hygiene exercises staff. The hyper vigilant state decreases, since in the handwashing exercise he was able to follow some indications. However, attention continued to be compromised. It should be noted that the patient was cooperative, respectful, and interested in self-care interventions. Impulse control was still being worked on when performing self-care exercises, so he was kept under strict surveillance when using hygiene supplies.

When working with the patient, his attention oscillated between low to normal. However, with cognitive stimulation and hygiene
exercises of daily life the patient improved to a level of self-care only slightly compromised. He exhibited reduced agitation, with a restoration of focused and sustained attention, progressed in the capacity of will and attention. He carried out the correct procedure and with little need for indications for personal hygiene activities independently, such as bathing, dressing and brushing teeth. In addition, we worked with an intervention to facilitate self-responsibility, with a self-care log, where the patient independently recorded and followed up on their self-care activities in terms of hygiene. He were provided with the necessary resources such as: powdered soap to clean the cell. He showed interest, responsibility, initiative, and a collaborative attitude towards the recommended activities.

At the end of the intervention, it was observed that the patient had the ability to take responsibility for his personal hygiene, showed a collaborative attitude, was able to explain and carry out the correct procedure of the cognitive stimulation exercises in daily life hygiene.

Regarding the acute confusion presented by the patient (see diagram 1), significant progress was achieved mainly with two interventions. The first was to maintain a nurse-patient interpersonal relationship. For this, active listening was maintained with the patient to expose the interest in what he communicated, when the nurse-patient relationship began to have results, it was visible, because the patient felt more free to express his thoughts or his hallucinations, to expand with this information, the nurses asked more specific questions about the hallucinations or about his personal life, and the patient responded without any problem.

By having a relationship of open communication and trust, the patient was able to share with nurses the characteristics of the three characters of his auditory hallucinations, presenting their names and personality, so that the patient remained oriented in reality. The second fundamental intervention was cognitive stimulation, various mathematical, logic and reasoning exercises were assigned where the resolution of these allowed longer periods of sustained attention, helping to maintain a conversation with real people, likewise it was observed that he did not respond to his hallucinations, showing longer periods of time with logical thought flow patterns.

To reduce aggressive behaviors (see diagram 1) and verbal outbursts, we taught methods of developing emotional intelligence through coping strategies. We enforced meditation times in situations that they were not to his liking. For this, meditation training was carried out so that he could control his violent impulses, guiding him to count from 1 to 10 until the anger of that moment subsided, in such a way to assess if the problem could be avoided or if necessary, led to violence. Aggressive behavior decreased. He was frequently calmer in unpleasant situations, controlling verbal outbursts, likewise it was achieved that the patient often expressed his feelings, and used meditation to manage his impulses and avoid high-risk environments or situations risk. He also maintains a more comprehensive relationship with his cellmates and remains less euphoric.

Three days after starting nursing care, the patient reported having thoughts of taking his own life and two previous suicide attempts, including cutting of his arms, for which the diagnosis of risk of self-harm was identified (Diagram 1). Specifically for this diagnosis, the intervention began trying to promote self-reflection through the analysis of a literary story in order to obtain moral learning. To improve containment of suicidal thoughts and self-injurious behavior, occupational functions were encouraged by increasing responsibility in daily tasks. Was requested the elaboration of a logbook so that the patient had better organization of those occupational activities and thus responsibility was encouraged, the patient contributed adequately and showed a willingness to improve his habits.

It is important to highlight that this article was proposed to describe the progress achieved. However, in the sessions there were also adversities that were faced. For example, as a result of drug use, an event that happened on one occasion during the care provided. Faced with this situation, the intervention was to maintain a safe environment and contain the patient because he again presented disruptive behavior, could not follow the instructions issued by the nursing staff, the penal institution decided to increase security to three custodians in nurse-patient meetings and continued recognized in the prison as a highly dangerous person. However, through a persistent and systematized work of the interventions already described, an improvement of the patient was achieved, which allowed promoting the adaptation of the patient to the penitentiary environment, with which the benefit of being revoked from his punishment was obtained.

**Discussion**

Solitary confinement as a disciplinary measure is one of the interventions that the penal system has cultured in the face of bad behavior, little is known about its effectiveness in terms of social reintegration for inmates. However, in the area of psychiatry much has been debated on this type of restrictive measures for people who suffer from a mental disorder, which has led to the establishment of only two conditions for this type of intervention: the existence of a risk of self-harm and/or the presence of aggression [6], no more. In order to humanize penal execution, certain strategies have been indicated that must be applied to penitentiary facilities such as hygiene, food, moral-religious education, work and compulsory instruction [7]. In the case presented, the patient was unable to activities of daily living due to a state of agitation, attention in hypervigilance and a less tenacity state caused in part by his mental illness, but on the other, due to the disciplinary measure imposed.

With the actions carried out, was achieved, what the discipline of nursing has always preached, humanization, contributing to the penitentiary treatment that is indicated as a pedagogical-therapeutic strategy of social reintegration for individuals who are serving a sentence for an act criminal, in this case the capacities and abilities of the individual of teaching were potentiated [8].

An important aspect was that the nurses were able to establish
a level of trust, where the patient came to express his feelings, sharing his ideas of suicide, that is where therapies are essential for the treatment of people with psychopathologies, because the most frequent psychiatric disorders in the prison population at risk of suicide are dependence on psychoactive substances, affective disorders, and psychotic disorders [2]. To achieve containment of suicidal thoughts, the nurses appropriately applied the specific techniques previously described.

On the other hand, with the purpose of obtaining a better physical, psychological, and social well-being, cognitive stimulation was applied, as a fundamental intervention that diminished the entire nursing plan and allowed the rehabilitation of the patient. This intervention is supported to improve the emotional level, because its objective is to train people to reuse forgotten mental and social skills, “thus exercising external resources to maintain preserved skills for longer and delay their final loss” [9].

Where it was possible to observe that the patient presented progress in the functioning of cognitive capacities and functions, such as: perception, abstraction, orientation, reasoning, attention, memory, language, orientation, etc. It is shocking that the nursing students has overcome stigmas established by society and manages to demonstrate that “there is an extensive field of action for those who wish to intervene in the prison environment given the many existing limitations and needs: social and health needs, organization and training.” [10] the fact that nurses are inserted into a prison environment empowers nursing, since it allows them to collaborate so that this highly stigmatized environment can really be a resource for rehabilitation and insertion.

Conclusions

Nursing assessment and mental examination were effective in this case and setting, making it possible to detect diagnoses focused on psychosocial needs. When providing nursing care, the cognitive stimulation was diminished in all the other interventions, as happened, for example, in the self-care exercises, the follow-up of a series of indications made it possible to work with the capacities of attention, retention, memorization and psychomotor coordination in daily activities such as bathing, washing hands or brushing teeth, had a great impact on the patient's progress.

It was also observed that nursing care was able to improve the psychosocial state of the patient without pharmacotherapy. The interventions were self-care, management of self-injury behavior, help in anger control, hallucination management, anxiety reduction, promotion of self-responsibility and environmental-comfort management.

In addition, social skills were improved, achieving interaction with his prison group, since he was previously excluded due to his anxious, euphoric, and violent behavior. At the end of the period in which the nursing interventions were carried out, the patient showed a notable change for him and his cellmates, since they reported being able to live together more harmoniously. Finally, it is worth emphasizing the importance of nursing personnel in care carried out without pharmacological treatment, nursing adapts to different scenarios and challenges, exercising autonomy to help the most vulnerable people.

References
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