



Systematic Review

Analysis of the Restraint Model for Mental Disorder Clients in Health Care Facilities: A Systematic Review

Sitti Sulaihah, Siti Khadijah and Darni Darni

Faculty of Nursing, Universitas Airlangga, Surabaya, Indonesia

ABSTRACT

Introduction: The reduction or elimination of restraint for psychiatric patients continues to be an area of concern and debate. The lack of accessible alternatives to restraint shows that nurses need to use restraints. The aim of the study was to gain insights from the restraint model used by mental disorder client nurses in health care facilities.

Methods: The method used was the identification of interventions in the literature, the identification of the relevant literature by topic and title, obtaining the literature in full-text form and the analysis of the results from the various interventions used in the literature. We systematically searched Scopus, Proquest and Science Direct by including keywords such as 'restraint models' and 'clinical restraint'. The years were limited to 4 (2015-2018).

Results: From the 80 potentially relevant articles, 15 met our eligibility criteria with qualitative and quantitative designs; all discussed restraint interventions. The restraint models for mental disorder clients were physical, mechanical and chemical.

Conclusion: This study reports on the latest experience that restraint cannot be eliminated from use. Nurses tended to disagree if the restraint method was removed. Restraint with physical, chemical, and mechanical solutions could be tailored to the client's case in health care facilities. The results of this review should be considered when developing interventions aimed at reducing the use of restraint.

ARTICLE HISTORY

Received: December 26, 2019

Accepted: December 31, 2019

KEYWORDSrestrain; mental disorder;
psychiatric;**CONTACT**

Sitti Sulaihah

✉ [sitti.sulaihah-
2018@fkip.unair.ac.id](mailto:sitti.sulaihah-2018@fkip.unair.ac.id)✉ Faculty of Nursing, Universitas
Airlangga, Surabaya, Indonesia

Cite this as: Sulaihah, S., Khadijah, S., & Darni, D. (2019). Analysis of the Restraint Model for Mental Disorder Clients in Health Care Facilities: A Systematic Review. *Jurnal Ners*, 14(3si), 256-259.
doi:[http://dx.doi.org/10.20473/jn.v14i3\(si\).16957](http://dx.doi.org/10.20473/jn.v14i3(si).16957)

INTRODUCTION

The reduction or elimination of restraint for psychiatric patients continues to be an area of concern and debate. The lack of accessible alternatives to restraint and exile shows that nurses believe that there are no effective and accessible alternatives to this collective practice (Muir-Cochrane E C, Baird J and Mccann T V, 2015). Three related themes contribute to this perception. First, is that adverse interpersonal environments contribute to restraint and isolation, which are both associated with the undesirable consequences of poor staff-to-patient relationships. Second, the unfavorable physical environment contributes to aggression and restraint and the use of exile. Third, the practice

environment influences the adoption of controllers and exile (Eskandari et al, 2018).

The Omnibus Budget Reconciliation Act (Obra) guidelines define physical restraint as "any physical or mechanical method or device, material or equipment installed or adjacent to the body of an individual that the individual cannot remove easily, and limits freedom of movement (standing, walking, lying down, turning, sitting) or normal access to one's body" (Winokur, E. J, Loucks, J and Raup G.H, 2018).

The finding of the previous study that has been done contributes to the limited evidence of psychiatric nurse's experiences and if they would reduce or remove restraint. Policy reduction or the elimination of restraint needs to be accompanied by broad initiatives to deal with aggression, including providing appropriate education and support and

addressing ethical cultural issues and workplace attitudes around these practices (Eskandari et al, 2018).

Several approaches have been commonly carried out but they are not effective. A quantitative survey aimed to describe the attitude of the nurses using different questionnaires to investigate the relationship between the attitudes of the nurses and other factors. For example, the use of physical restraint, the education level of the nurses and the characteristics of the facility and/or country. The results of this study are inconsistent; no clear association has been identified. A comparative survey in three countries showed that the nurses' attitudes differ depending on the nurses' definition of physical restraint and their national and cultural affiliation (Lan S H et al, 2017).

To gain an insight from the restraint model used by mental disorder client nurses in health care facilities, the systematic analysis of both qualitative and quantitative studies is needed to investigate the restraint model used by nurses.

MATERIALS AND METHODS

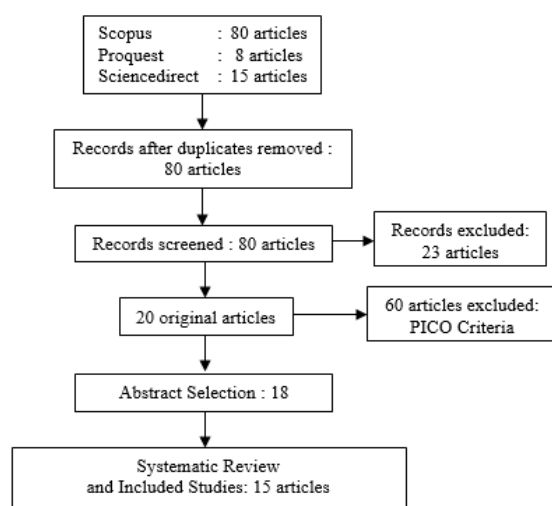


Figure 1. Flowchart of the study selection process.

This systematic review was made with the aim of gaining insights from the restraint model used by ODGJ client nurses in health care facilities. The articles were analyzed using PICO. The literature search was carried out on several databases such as Scopus, Proquest and ScienceDirect by including keywords such as restraint models and clinical restraint. The year limit used was 4 years (2015 - 2018) according to the inclusion criteria for qualitative and quantitative designs that discussed restrain interventions in health care facilities and mental disorder clients. There was no age limit for the participants in the article. This is because the focus of the search was on the model or restraint intervention used. Articles were excluded if the results of the study

did not explain the estimated effects of the intervention provided.

The method used in preparing this systematic review was to identify interventions in the literature, to identify the relevant literature based on both topics and titles, to obtain the literature in the full-text form and to analyze the results from various interventions in the literature. From 80 potentially relevant articles, 15 met our eligibility criteria. Furthermore, the articles that met the criteria were analyzed using the PICO method.

RESULTS

In their clinical practice, nurses who feel the need to use physical restraint in a number of situations and for various reasons explained some of the strategies used to overcome their moral conflicts, which come from these differences. Nurses do not question the use of physical restraints in general, and it seems that the nurses consider physical restraints to be the usual nursing intervention (Winokur, E. J, Loucks, J and Raup G.H, 2018).

It is felt that it is necessary to use physical restraints in daily practice

In everyday practice, nurses are faced with situations where they experience the need to use restraint. The need to use restraint includes situations where the nurses are required to guarantee the safety of the clients and the officers themselves, to fulfill other tasks, to prevent themselves from being harmed by those at risk or they must comply with decisions being made regarding the use of restraint. In addition, a lack of knowledge about alternatives to using restraint increases the perceived need to use physical restraint.

Restrain Model for Mental Disorder Clients in Health Facilities

Physical Restraint

Psychiatric nurses have a positive attitude and adequate practice towards the use of physical restraint as an alternative management for psychiatric patients. It is important for psychiatric nurses to recognize that physical restraint must be carried out as a last resort (Rose D, Perry E, Rae S and Good N, 2017). Physical restraints can include belts, gloves, vests, bedrails, geriatric chairs and other devices. The use of such devices has been under close supervision. This is because physical restraint can result in anxiety, confusion, de-conditioning, pressure ulcers, strangulation, death and adverse psychological effects (Cunha M et al 2016).

Mechanical Restraint

Mechanical isolation or restraint is seen of as a last resort to keep the staff safe. Nurses likely to disagree if detention methods are eliminated (Gerace, A and Muir-Cochrane E, 2018).

Chemical Restraint

There were no specific journals describing chemical restraints that only focused specifically on physical

control (which is usually followed by chemical control) (Visaggio, N et al, 2018).

Synthesis of the Qualitative and Quantitative Studies

The results of the qualitative and quantitative studies are difficult to compare because only a small number of items were assessed by the aspects of the nurse's attitudes described in the qualitative research. Regarding the nurses' feelings about the use of physical restraints, the qualitative results and those of the quantitative studies were inconsistent. The qualitative studies described negative feelings especially on the use of physical restraint. The quantitative surveys showed inconsistent results regarding the nurses' feelings.

A level of agreement was shown regarding the reasons for using physical restraint. In qualitative research, the nurses describe the perceived need to use physical restraints to ensure the safety of both their clients and fellow officers. It is felt to be necessary to use physical restraint as confirmed by the quantitative surveys, which describes the safety issues, especially in terms of preventing falls and injuries and maintaining medical care.

There is also evidence in qualitative research as well as in several quantitative surveys that nurses consider physical restraint to be an 'ordinary' nursing intervention.

DISCUSSION

The restraint models for mental disorder clients were physical, mechanical and chemical. Responding to the lack of studies that focus more on physical control, this study reports on the latest collective experience indicating that restraint cannot be eliminated. The nurses tended to disagree if the restraint method was removed. Restraint with physical, chemical and mechanical solutions could be tailored to the client's case in health care facilities.

The results of this review should be considered when developing interventions aimed at reducing the use of restraint. Policies addressing these measures need to be accompanied by wide-ranging initiatives to deal with aggression, including providing appropriate education and support and addressing the ethical and workplace cultural issues surrounding these practices.

The nurses use physical restraint as one of the main strategies to control psychiatric patients, and despite having negative consequences, it is extensively used. Given the risks and challenges of using physical restraint, nursing education should find alternative methods.

Some techniques used as an effort to develop a restraint model can be used as a basis for consideration in an effort to reduce physical restraint use. The choice of intervention can be adjusted to the client's case and the objectives that are to be achieved.

CONCLUSION

The restraint models for mental disorder clients in health care facilities were physical, mechanical, and chemical. This study reports on the latest experience that it turns out that restraint cannot be eliminated. Specialized psychiatric emergency services and emergency departments, because of their treatment primarily of acute patients, may not be able to entirely eliminate the use of seclusion and restraint. Restraint through physical, chemical and mechanical solutions could be tailored to the client's case in health care facilities.

REFERENCES

- Care, T., Beckett, P., Holmes, D., Phipps, M., Patton, D., Molloy, L., & Hons, M. N. (n.d.). *Trauma-Informed Care and Practice*.
- Cunha, M., André, S., Bica, I., Ribeiro, O., Dias, A., & Andrade, A. (2016). Chemical and Physical Restraint of Patients. *Procedia - Social and Behavioral Sciences*, 217, 389–399. <https://doi.org/10.1016/j.sbspro.2016.02.109>
- Eskandari, F., Abdullah, K. L., Zainal, N. Z., & Wong, L. P. (2018). The effect of educational intervention on nurses' knowledge, attitude, intention, practice and incidence rate of physical restraint use. *Nurse Education in Practice*, 32(April 2017), 52–57. <https://doi.org/10.1016/j.nepr.2018.07.007>
- Espinosa, L., Harris, B., Frank, J., Armstrong-muth, J., Brous, E., Moran, J., & Giorgi-cipriano, J. (2015). Archives of Psychiatric Nursing Milieu Improvement in Psychiatry Using Evidence-Based Practices : The Long and Winding Road of Culture Change. *Archives of Psychiatric Nursing*, 29(4), 202–207. <https://doi.org/10.1016/j.apnu.2014.08.004>
- Gerace, A., & Muir-Cochrane, E. (2018). Perceptions of nurses working with psychiatric consumers regarding the elimination of seclusion and restraint in psychiatric inpatient settings and emergency departments: An Australian survey. *Int J Ment Health Nurs*, (October 2017). <https://doi.org/10.1111/inm.12522>
- Lan, S. H., Lu, L. C., Lan, S. J., Chen, J. C., Wu, W. J., Chang, S. P., & Lin, L. Y. (2017). Educational intervention on physical restraint use in long-term care facilities – Systematic review and meta-analysis. *Kaohsiung Journal of Medical Sciences*, 33(8), 411–421. <https://doi.org/10.1016/j.kjms.2017.05.012>
- Mahmoud, A. S. (2017). Psychiatric Nurses' Attitude and Practice toward Physical Restraint. *Archives of Psychiatric Nursing*, 31(1), 2–7. <https://doi.org/10.1016/j.apnu.2016.07.013>
- Muir-Cochrane, E. C., Baird, J., & Mccann, T. V. (2015). Nurses' experiences of restraint and seclusion use in short-stay acute old age psychiatry inpatient units: A qualitative study. *Journal of Psychiatric and Mental Health Nursing*, 22(2), 109–115. <https://doi.org/10.1111/jpm.12189>
- Perez, D., Peters, K., Wilkes, L., & Murphy, G. (2018). Physical restraints in intensive care—An

- integrative review. *Australian Critical Care*.
<https://doi.org/10.1016/j.aucc.2017.12.089>
- Rhodes, K., & Rhodes, A. (2017). Aggression and Violent Behavior The pursuit of homeostasis: Closing the gap between science and practice in the treatment of aggression and violence. *Aggression and Violent Behavior, 34*, 9–19.
<https://doi.org/10.1016/j.avb.2017.03.003>
- Rose, D., Perry, E., Rae, S., & Good, N. (2017). Service user perspectives on coercion and restraint in mental health. *BJPsych. International, 14*(03), 59–61.
<https://doi.org/10.1192/S2056474000001914>
- Shrestha, Y. (2017). Archives of Psychiatric Nursing Knowledge and Attitude of Family Member of Mentally Ill Patient Regarding Restraint , 2016. *Archives of Psychiatric Nursing*, (November), 0–1.
<https://doi.org/10.1016/j.apnu.2017.11.018>
- Visaggio, N., Phillips, K. E., Kichefski, K., Mcelhinney, J., Idiculla, T. B., Blair, E. W., ... Young, S. C. (2018). Archives of Psychiatric Nursing Is it safe? The restraint chair compared to traditional methods of restraint: A three hospital study. *Archives of Psychiatric Nursing*, (March), 0–1.
<https://doi.org/10.1016/j.apnu.2018.04.003>
- Winokur, E. J., Loucks, J., & Raup, G. H. (2018). Use of a Standardized Procedure to Improve Behavioral Health Patients' Care: A Quality Improvement Initiative. *Journal of Emergency Nursing, 44*(1), 26–32.
<https://doi.org/10.1016/j.jen.2017.07.008>
- Wu, W. W. K. (2015). *Psychosocial Correlates of Patients Being Physically Restrained within the First 7 Days in an Acute Psychiatric Admission Ward : Retrospective Case Record Review*. 47–57.