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## International Journal of Nursing Sciences

journal homepage: <http://www.elsevier.com/journals/international-journal-of-nursing-sciences/2352-0132>

## Discussion

## Physical restraints: An ethical dilemma in mental health services in China

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## ARTICLE INFO

## Article history:

Received 18 April 2017

Received in revised form

25 September 2017

Accepted 1 December 2017

Available online 7 December 2017

## Keywords:

Ethics

Mental health

Nursing care

Physical restraint

## ABSTRACT

Given that physical restraints cause adverse effects to patients and nurses, their wide and frequent use has resulted in various clinical and ethical controversies in mental health services. The rate of physical restraints is significantly higher in China than in other countries. Some western and domestic media blamed relevant institutions for compromising the basic rights of psychiatric patients. Therefore, this study aims to collect and synthesize the relevant ethical evidence and to provide corresponding guidance for the nursing practice based on the current situation of the mainland of China. This study synthesized the ethical issue according to the ethical principle of autonomy, justice, beneficence, and non-maleficence. Given the current situation where the nursing workforce is limited and the mental health service is under-developed in China, applying physical restraints in the psychiatric inpatients to guarantee the safety of patients and nurses is crucial. In regard to respect the basic rights of psychiatric patients, it is recommended to protect their autonomy, and eliminate the adverse effects of physical restraint. This goal would be achieved by ensuring the informed consent, providing humane care, and regulating the implementation of physical restraints.

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## 1. Introduction

In the last two hundred years, the application of physical restraints in mental health services has resulted in the clinical and ethical controversy encompassing the requisites and abuse of physical restraints [1]. This article focuses on the ethical issue of physical restraints in China. According to the previous study, physical restraint has been defined as a coercive measure that must be employed as the last resort under any circumstance to ensure the safety of patients by adopting the designed instrument to restrict their physical movement [2]. To some extent, physical and mechanical restraints would be comprehended interchangeably. In the recent ten years, the incident rate of physical restraints has been high and increasing steadily. The prevalence of physical restraints has ranged from 6% to 17% globally [3], whereas the incident rate of mechanical restraints ascended moderately from 29% to 34% in the United States in 2007–2013 [4]. In the mainland of China, the

incident rate of physical restraints has dramatically exceeded the prevalence in other countries, increasing sharply from 42.6% to 51.3% between 1994 and 2012 [2,5]. Consequently, high rates of physical restraints have caused a range of serious clinical and ethical issues. The western and domestic media blamed the local governmental authorities for compromising the basic rights of psychiatric patients. Therefore, this article aims to collect and synthesize the relevant ethical evidence and to provide guidance for the nursing practice based on the current situation of the mainland of China. For the facilitation of the understanding of the ethical consideration, a common scenario of psychiatric nursing practices and the mental health background of China will be introduced. The consideration of ethical principles will be broadly and critically discussed. Finally, this article proposes several ethical recommendations given the identified evidence.

Scenario: Mr. Anger aged 34, unmarried, was diagnosed with mania and regularly took the lithium carbonate tablets (a kind of mood stabilizers) after the last discharged five weeks ago. He insisted that he had fully recovered and refused any medication although he was told to adhere to the treatment and visit the general practitioner every two weeks. He was just talkative and aggressive initially, but his condition had deteriorated as he easily became irritated. Given that he

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Peer review under responsibility of Chinese Nursing Association.

lived with his parents, he would assault them once they did not agree with him or satisfy his unreasonable demands. Although his parents cannot endure the violence, they did not report this issue to any authorities. Actually, with the assistance of their close relatives, the patient was subdued and transferred to the psychiatric hospital. The patient was admitted to the hospital as involuntary admission after the medical assessment, and the next of kin (Mr. Anger's parents) was informed about potential risks of the patient. The parents accepted the explanation regarding the policy of coercion and signed the documentation. After the admission, Mr. Anger lost control, shouted to the nurses and other patients, and clenched his fists. The patient was still irritated and started attacking others, having failed to neither adopt any alternatives nor obtain the consent. Subsequently, the physical restraint was employed accordingly.

In China, the foregoing scenario is common in psychiatric nursing practices. Given that the ethical issue is an essential dimension of nursing practices, the use of physical restraints has caused an ethical dilemma because balancing the human rights, ethical value, and clinical effect is challenging. Therefore, ethical principles should be seriously considered before drawing an ethical conclusion. Being enlightened from the scenario above, we will discuss the ethical principle of autonomy, justice, beneficence, and non-maleficence based on the literature review.

## 2. Ethical judgment of physical restraints

### 2.1. Principle of autonomy

Autonomy refers to the ability of a person to make decisions according to their personal value; thus, in the nursing practice, obtaining the informed consent is basic to respect to the autonomy of patients [6]. Undoubtedly, the use of physical restraints contravenes the principle of autonomy because it breaches the freedom of patients. Acquiring the informed consent from patients is impossible under various circumstances, particularly the involuntary admission of patients. The use of physical restraints without the permission of patients breaches their autonomy; hence, such a practice should be considered as unlawful. Likewise, medical staff would be judged as violating the autonomy of patients unless they can explain the rationale to patients before conducting such a practice.

In modern society, personal autonomy has a significant value. Thus, under any circumstance, the autonomy of patients should be respected and not disregard the nursing practice, even for patients with the deficiency of mental functioning. Furthermore, psychiatric patients should be treated in the minimum restrictive environment and with the least involuntary treatment given their health needs and the safety of others [7]. Apparently, patients with serious mental disorder usually have aggressive behavior but refuse any means of medical intervention. Indeed, only after the appropriate intervention can the aggression be alleviated effectively. However, in terms of safety, the implementation of physical restraints guarantees the interest of most people and prevents the staff, restraint-receiver, and other patients from violence, but acquiring the consent though involuntary treatment is difficult and must be accompanied by means regarding ensuring the consent. To make up such ethical deficiency and give utmost respect to the autonomy of patients, the author of this article proposes an alternative way to inform the next of kin about using physical restraints.

### 2.2. Principle of justice

With regard to justice, patients should be addressed as “human” rather than be labeled “insane” under any circumstances. The fundamental rights of patients with mental illness should not be

deprived. Moreover, the psychiatric patients are not in such an extreme condition all the time; thus, they are rightful to behave as normal people. Specifically, blindly implementing physical restraints toward aggressive patients results in the failure to understand the patient in a human-to-human relationship. Therefore, physical restraints should be blamed for the ignorance of justice, making patients suffer from unfairness and prejudice. Although adopting physical restraint is unavoidable in the nursing practice as the last resort to manage the occupational violence, restrained patients should be treated as humans, and their basic needs must be satisfied.

### 2.3. Principle of beneficence

Beneficence is simply defined as the implementation of the measure to benefit patients [8]. Specifically, the beneficence in implementing physical restraints is referred to as selective beneficence that such protective intervention is designed to prevent patients from physical injury. The nursing staff has the obligation to appropriately care for patients and promote their health. Ensuring the safety of the patients is an important part of the nursing practice. However, the impairment of emotional and cognitive function results in abnormal behaviors [9]. Certain types of the extreme behavior may place severe risks to others and patients themselves, namely, aggression, suicide, and self-injury. Regarding beneficence, physical restraint is the immediate measure to reduce the movement of patients to control the emergent circumstance. Meanwhile, patients with severe mental disorder with ongoing agitation receive coercive treatment [10] to make them partially mental disabled. Thus, psychiatric patients will pose life-threatening danger to others or themselves as they cannot make decisions individually. An intervention with an explicit therapeutic goal may be conducted without consent [11]. The empirical evidence has proven that medication can effectively alleviate symptoms of agitation; thus, patients with severe mental disorder must adhere to the treatment. Given that patients may refuse any medical intervention, the coercion, such as physical restraint, is the last resort to maintain the compulsory treatment. However, the beneficence has the conflict with autonomy from the perspective of ethical principles.

Finally, the code and guideline have strictly ordered that patients undergoing physical restraints must be closely supervised by a professional practitioner as long as the restraint is conducted [10]. Evidently, the medication rarely takes effect as soon as taken and needs a couple of minutes, hours, or days to alleviate agitation [12]. In addition, patients undergoing physical restraints receive rigorous monitoring, which is beneficial to observe the changes in their condition to some extent. Additionally, the Mental Health Commission (2009) claimed that the medical staff must implement a medical review no later than 4 hours after commencing bodily restraints and that patients should be assessed every 2 hours for the inspection of circulation and skin integrity. In sum, the assessment and inspection are required to minimize the adverse effects of physical restraints and ensure that the interests of patients are prioritized.

### 2.4. Principle of non-maleficence

In addition to beneficence, the side effects of physical restraints make them contentious. The principle of non-maleficence means no harm, which requires health-care providers to balance therapeutic goals and side effects [13]. However, bodily restraints will cause physical injury and psychological trauma to patients. On the one hand, bodily restraints are argued to cause physical injury, including skin injury, nerve system damage, pulmonary disease,

deep vein thrombosis, or even death. Another type of physical injury is the consequence of coercive immobilization, resulting in functional disability, damage of muscle tone, and contracture [14]. Moreover, the physical injury will lead to extended hospitalization, pressure ulcer, and failure of discharge. On the other hand, restrained patients are reported to have experienced psychological trauma associated with physical restraints, such as demoralization, fear, anger, and the loss of dignity [15]. Additionally, such restraints aggravate the apathy and depression of patients and decrease their social function [16]. Empirical findings have corroborated that the side effects of physical restraints opposed the ethical principle of beneficence; thus, the ethical dilemma of physical restraints is how to balance beneficence and non-maleficence. However, applying the principle of double effect to interpret the rationality of applying physical restraints will be appropriate. Given the principle of double effect, physical restraints are performed with beneficial intentions (ensuring the safety of patients and staff) but lead to injurious consequences (causing harm to the patients) and will be morally accepted with a good intention or if the desired effect does not directly cause the side effects [17]. Therefore, the author of this article asserts that the therapeutic goal of physical restraints should outweigh their adverse effects in nursing practices.

### 3. Current situation in China

The psychiatric in-patient service in China is significantly different from that in other countries; therefore, its background should be carefully considered in terms of physical restraints. Overall, due to diverse reasons, developments in the mental health service in China are not as fast compared with that in western countries. First, China has the largest population, meaning that the number of patients with mental illness is sizable. Approximately, 173 million people are diagnosed with mental diseases, whereas 158 million of them are untreated, and only 1.83 million psychiatric patients are registered in mental health settings [18]. Second, the psychiatric industry has received inadequate investment and financial support. Consequently, the mental health service is unable to meet the public demand. The national yearbook of 2015 reported that the number of psychiatric hospitals in China is 831, which only accounted for 0.08% of the total number of hospitals in China. The total number of beds in psychiatric units in China is 287770 (equal to 21.0 beds per 100,000 residents), which is far below the global average level (52.30 beds per 100,000 residents). Third, the number of registered mental health nurses per 100,000 residents is 3.77, which is also lower than the global average (5.1 nurses per 100,000 residents) [19,20]. The status quo of mental health services reported above revealed an insufficient number of nurses serving a huge number of patients, resulting in their heavy workload. Noticeably, in psychiatric wards, only one nurse caters to the needs of more than one patient (usually two to six). In such a situation, a nurse should complete several nursing assignments in a shift. Therefore, when facing an agitated patient, given that attempting for alternatives consumes plenty of time and human resources, which is not permitted in clinical circumstances, nurses are prone to bodily restrain an aggressive patient.

In addition, the use of physical restraints is associated with the clinical characteristics of patients as well. Patients with critical mental disorder are likely restrained [2,21]. Given that the stigma delays the appropriate treatment in the early stage of mental illness in China, most of newly admitted psychiatric patients are critically ill [2]. Thus, physical restraints are frequently applied to psychiatric patients after admission. This status quo will partly explain the high incidence of physical restraints in mental health settings in China.

Apparently, nurses are torn between employing physical restraints or not, and they experience a sense of helplessness and fear

when facing aggressive patients [22]. The attitude of nurses and clinical culture determine the degree of using physical restraints. In return, these factors will influence nurses who have just graduated. Currently, employing physical restraints in severe conditions the workforce encounters is critical. Given the ethical principles, measures should focus on the regularization of physical restraints instead of their elimination. Accordingly, the recommended ethical considerations are proposed in view of autonomy, justice, beneficence, and non-maleficence.

## 4. Suggestion for nursing practice

### 4.1. Protection of autonomy

The acquisition of the informed consent from patients is basic to respect their autonomy. However, according to THE National Mental Health Act of China, conducting physical restraints without the consent of patients during emergency is legal, for instance, when a patient poses AN immediate risk to others [10]. Given that most of the admitted patients are in severe condition and unable to decide for their interest, the informed consent of the next of kin will be practical and achievable in China as it agrees with the traditional perception. Physical restraints should refer to the rules of Mental Health Commission (2009). Although it fails to obtain consent from patients, they should be informed of the reason, possible duration, and requirements for release. Moreover, the next of kin has the right to know the therapeutic process. In addition, the informed consent and documentation are necessary to protect patients and staff. Regarding the documentation, due to the intensified physician–patient relationship in China, the purpose and side effects of restraints must be explicitly clarified in case the next of kin may sue for unjustified compensation once the patient exhibits any adverse effects (regardless whether the adverse effect is related to restraints or not). Additionally, this study proposes that the procedure of physical restraints must be recorded in the electronic medical record. However, in China, the application of electronic medical record evidently reduces the workload of nurses and provides an objective recording; particularly, the result of violent risk assessment is included. The nursing administration department is responsible for the supervision of physical restraints within the hospital. To further regularize physical restraints, the author recommends that the coercion at the third party be registered for supervision [10].

### 4.2. Maintenance of justice

Undoubtedly, similar to normal people, patients with mental illness still have major rights, such as the right to survival and equality. Hence, patients must not be treated with prejudice at any circumstance. In addition to communicating in a human-to-human relationship, patients undergoing physical restraint should be treated with humane care. On the basis of the status quo of mental health services of China, the author of this article agrees to the appropriateness of physical restraints. However, when patients have calmed down from agitation, the following approaches will be necessary to minimize the traumatic experiences. The first one is emotional support. In addition to explaining the reasons and possible duration of the restraint, given that restrained patients are associated with a series of psychological trauma, they should be treated with empathy and concern to alleviate their negative emotions, such as the anxiety and depression induced by restraints [15]. The second one is the post-restraint care. Physical restraints depress patients' subjective thinking about the quality of life [23] and the attention given to them when the restraint is insufficient. However, currently following up discharged patients in China is

unrealistic given that several resources are consumed. Moreover, this study verifies that the implementation of post-restraint care for released patients during hospitalization is achievable. Therefore, focusing on patients suffering from physical restraints and providing psychological counseling and support appropriately are recommended [10]. Once a patient with a severe psychological problem is identified, the referral to the psychotherapist should be allocated in time. That the registration of physical restraints at the third party can facilitate the following up is worth mentioning, as well as collecting the relevant data valuable to improve the quality of care concerning bodily restraints.

#### 4.3. Balance the beneficence and non-maleficence

Maximizing the benefit and minimizing the detriment of physical restraints maintain the principle of beneficence and non-maleficence. Two perspectives are present regarding this matter. According to the Mental Health Commission of Ireland, from the organizational level, the principles and requirement underpinning physical restraints must be demonstrated explicitly and detailed in guideline/code to standardize and supervise the nursing practice and to guarantee that the implementation of restraints is lawful [24]. Similarly, Giuseppina et al. (2013) proclaimed that with this way alone, the therapeutic goal of restraints can outweigh its side effects [1]. Otherwise, the unlawful practice potentially leads to the abuse of physical restraints. Additionally, given that staff training is an important approach to reduce the use of physical restraints in mental health settings, the institute is obligated to provide nurses with relevant training to familiarize nurses to the guidelines, to cope with the violence, and to regulate their practices [25]. Meanwhile, the National Mental Health Law of China requires nurses to strictly follow the guidelines that physical restraints must only be applied after the comprehensive assessment with the results recorded in the electronic medical record [26]. Furthermore, to minimize the side effects of physical restraints, the medical staff should conduct timely medical reviews unless the restraints are removed.

#### Declaration of interests

All authors have declared that they have neither competing interests nor any financial or personal relationship with other people or organizations that can inappropriately influence this work.

#### Funding

This study was funded by the grant of the Scientific Research Project of the Twelfth Five-year Plan Internal Medicine of the Affiliated Brain Hospital of Guangzhou Medical University (Grant Number: GBH2014-HL07).

#### Appendix A. Supplementary data

Supplementary data related to this article can be found at <https://doi.org/10.1016/j.ijnss.2017.12.001>.

#### References

[1] Bozzuto Giuseppina, Paola Ruggieri AM. Ethical considerations for evaluating

- the issue of physical restraint in psychiatry. *Ann Ist Super Sanità* 2013;49: 281–5. <https://doi.org/10.4415/ANN>.
- [2] Zhu XM, Xiang YT, Zhou JS, Gou L, Himelhoch S, Ungvari GS, et al. Frequency of physical restraint and its associations with demographic and clinical characteristics in a Chinese psychiatric institution. *Perspect Psychiatr Care* 2014;50: 251–6. <https://doi.org/10.1111/ppc.12049>.
- [3] Steinert T, Lepping P, Bernhardsgrütter R, Conca A, Hatling T, Janssen W, et al. Incidence of seclusion and restraint in psychiatric hospitals: a literature review and survey of international trends. *Soc Psychiatry Psychiatr Epidemiol* 2010;45:889–97. <https://doi.org/10.1007/s00127-009-0132-3>.
- [4] Staggs VS. Trends in use of seclusion and restraint in response to injurious assault in psychiatric units in U.S. Hospitals, 2007–2013. *Psychiatr Serv* 2015;66:1369–72. <https://doi.org/10.1176/appi.ps.201400490>.
- [5] Li L, Zhou G. An investigation on physical restraint in psychiatric patients (in Chinese). *Chin J Pract Nurs* 1994;10:2–3.
- [6] Hughes L, Lane P. Use of physical restraint: ethical, legal and political issues. *Art Sci* 2016;19:23–7.
- [7] Council of Europe Recommendation Rec. 10 of the committee of Ministers to member states concerning the protection of human rights and the dignity of persons with mental disorder and its explanatory 2004. 2004.
- [8] Murdach AD. Beneficence re-examined: protective intervention in mental health. *Soc Work* 1996;41:26–32.
- [9] Green MF, Kern RS, Heaton RK. Longitudinal studies of cognition and functional outcome in schizophrenia: implications for MATRICS. *Schizophr Res* 2004;72:41–51.
- [10] Mental Health Commission. Rules governing the use of seclusion and mechanical means of bodily restraint vol. 2; 2009. Dublin.
- [11] Council of Europe. Convention for the protection of human rights and dignity of human being with regards to the application of biology and medicine: convention on Human Rights and Biomedicine. 1997.
- [12] Marder SR. A review of agitation in mental illness: treatment guidelines and current therapies. *J Clin Psychiatry* 2006;67:13–21.
- [13] Gillon R. Medical ethics: four principles plus attention to scope. *BMJ* 1994;309:184–8. <https://doi.org/10.1136/bmj.309.6948.184>.
- [14] Lorenzo R Di, Miani F, Formicola V, Ferri P. Clinical and organizational factors related to the reduction of mechanical restraint application in an acute ward: an 8-year retrospective analysis. *Clin Pract Epidemiol Ment Heal* 2014;10: 94–102. <https://doi.org/10.2174/1745017901410010094>.
- [15] Lancaster GA, Whittington R, Lane S, Riley D, Meehan C. Does the position of restraint of disturbed psychiatric patients have any association with staff and patient injuries? *J Psychiatr Ment Health Nurs* 2008;15:306–12. <https://doi.org/10.1111/j.1365-2850.2007.01226.x>.
- [16] Folmar S, Wilson H. Social behavior and physical restraints. *Gerontologist* 1989;29:650–3.
- [17] Boyle JM. Toward understanding the principle of double effect. *Ethics* 1980;90:527–38.
- [18] Phillips MR, Zhang J, Shi Q, Song Z, Ding Z, Pang S, et al. Prevalence, treatment, and associated disability of mental disorders in four provinces in China during 2001–05: an epidemiological survey. *Lancet* 2009;373:2041–53.
- [19] Liu J, Ma H, He Y-L, Xie B, Xu Y-F, Tang H-Y, et al. Mental health system in China: history, recent service reform and future challenges. *World Psychiatry* 2011;10:210–6. <https://doi.org/10.1002/j.2051-5545.2011.tb00059.x>.
- [20] National Health and Family Planning Commission of People's Republic of China. In: China health and family planning yearbook. Beijing: Peking Union Medical College Press; 2014.
- [21] An F-R, Sha S, Zhang Q-E, Ungvari GS, Ng CH, Chiu HFK, et al. Physical restraint for psychiatric patients and its associations with clinical characteristics and the National Mental Health Law in China. *Psychiatry Res* 2016;241:154–8. <https://doi.org/10.1016/j.psychres.2016.04.101>.
- [22] Brophy LM, Roper CE, Hamilton BE, Tellez JJ, McSherry BM. Consumers and Carer perspectives on poor practice and the use of seclusion and restraint in mental health settings: results from Australian focus groups. *Int J Ment Health Syst* 2016;10:6. <https://doi.org/10.1186/s13033-016-0038-x>.
- [23] Soinenen P, Putkonen H, Joffe G, Korkeila J, Puukka P, Pitkänen A, et al. Does experienced seclusion or restraint affect psychiatric patients' subjective quality of life at discharge? *Int J Ment Health Syst* 2013;7:1. <https://doi.org/10.1186/1752-4458-7-28>.
- [24] Mental Health Commission. Seclusion and restraint reduction strategy. Dublin. 2014.
- [25] Stewart D, Van der Merwe M, Bowers L, Simpson A, Jones J. A review of interventions to reduce mechanical restraint and seclusion among adult psychiatric inpatients. *Issues Ment Health Nurs* 2010;31:413–24. <https://doi.org/10.3109/01612840903484113>.
- [26] National People's Congress. National mental health Act. The People's republic of China. 2012.