Objective: The aim of this review is to examine the literature on professional containment methods, to draw attention to this important topic concerning which relevant research remains limited in our country and to offer professionals the opportunity to make evaluations utilizing holistic perspectives.

Method: Relevant, obtainable studies published within the last 15 years, but primarily after the year 2000, were included in this retrospective literature review. For this purpose a literature search was conducted via internet based search engines, including Pubmed, Science Direct, Medline, Psychinfo, the ULAKBIM Turkish Medicine Index and the Turkish Psychiatry Index, using the keywords containment methods, psychiatry, aggression, conflict, restraint, seclusion and mental health hospitals, in different combinations.

Results: According to the literature, professional containment methods are defined as methods used to prevent harm to patients or others as a result of the patient’s conflict-provoking behaviour (agression, absconding, rule breaking, refusing medication etc.) in psychiatric wards. These methods include the use of mechanical/physical restraint, seclusion, compulsory intramuscular sedation, observation, and pro re nata (prn) medication. The type and frequency of use, views or attitudes to methods varies between different countries.

Conclusion: Although professional containment methods are an effective management strategy, they may cause physical and psychological damage to both patient and staff. So the use of these methods in psychiatric care settings remains controversial and an ongoing source of legal and ethical dilemmas. Despite discussions, the containment methods used in the past remain present as a part of psychiatric treatment and care. There is a need for standard practice guidelines to ensure the security of patients and staff and to use those methods effectively and correctly. In conclusion, it is necessary that health care professionals be informed about preparing the new guidelines and using professional containment methods effectively.

Key Words: Containment methods, psychiatry, conflict.

INTRODUCTION

The situations where people can not be treated under the conditions of everyday life require hospitalization in psychiatry wards. Psychiatric care involves determining the nature and dimension of patients’ problems and meeting their self-care and safety related needs (Bowers et al. 2007b; 2006a; Foster, 2007).

Nowadays, advances in psychiatric home care services, the foundation of community mental health centers and the organization of crisis intervention programs, have brought community based mental health treatment and care into prominence, changing both the number of beds in psychiatric hospitals and the criteria for patient admission. In other words, because of the improvements mentioned above, acute treatment and care centers have started to receive patients with more acute/serious conditions and the bed numbers in psychiatric wards have been decreased. In the case of Britain, a country which adopted community-based health services, the clearest visible result stands out as the decrease in bed numbers. In 1954, under the National Health Service, the
total number of beds in psychiatric hospitals was about 154,000, whereas today this number has been reduced to 35,000 (Ulaş, 2008; WHO, 2005).

In the Turkish mental health system, psychiatry wards operate according to the hospital-based health service approach, however proposals for a mental health action plan are being prepared in order to provide community-based health service facilities. The first aim in that direction to attain the world standards is to increase the number of beds for acutely psychotic patients and to follow and treat patients with chronic mental health problems in the environment they live in (National Mental Health Policy Draft Text, 2006).

Belief in the necessity of treating psychiatric patients in less restrictive environments has become dominant and, therefore the literature on this subject is increasing. The purpose of this review was to examine the literature on professional containment methods, to draw attention to this important topic, concerning which relevant research remains limited in Turkey, and to offer professionals working in this field an opportunity to evaluate these methods from a comprehensive perspective.

**CONFLICT BEHAVIOR IN PSYCHIATRY WARDS**

For patients admitted to psychiatry wards as in-patients, who have disoriented reality testing and awareness, as well as psychotic symptoms such as hallucinations, delusions, and mood variations, and who display destructive behavior toward themselves or the environment, it is inevitable that these patients display conflict behaviors endangering the system and safety of the environment (Foster, 2007; Bowers et al. 2007a; 2007b; 2006a; 2006b; Evans and Fitzgerald, 2002). While the word “Conflict” means, struggle between opposing or incompatible impulses, desires, and inclinations which effect the individual simultaneously and at approximately equal intensity (Freshwater et Maslin-Prothero, 2005), in the literature the term is used for the events that cause the normal activities to stop or intermingle (Bowers et al., 2007a; 2007b; 2006a; 2006b; Foster et al., 2007; Ryan and Bowers, 2006). Conflict behavior types often seen in psychiatry wards are “self-harm”, “aggression-violence”, “breaking rules”, “absconding” and “medication refusal” (Bowers et al., 2007a; 2007b; 2006a; 2006b; Foster et al., 2007).

The rates of occurrence for conflict behavior have been studied in several countries, however it is quite difficult to compare transnational rates because of the difference in organizational structure of psychiatry wards (the number of people working in psychiatry wards, the patient density, the education level of nurses, etc). For instance, a study conducted by Foster et al. (2007) in psychiatry wards revealed that 29.5% of 254 patients displayed absconding during a 10 months period. According to other studies conducted by Bowers et al. (2007a, 2007b) absconding was seen at a rate of 2.7 in every 100 beds. 58% of the aggressive-violent behavior observed in a study conducted in 5 psychiatry wards in Australia was determined to be at seriously life-threatening levels (Owen et al., 1998). Another study, which aimed to study the frequency of conflict behavior between patients and staff and the containment methods used in acute psychiatry wards showed that “aggression” and “absconding” were followed by “regular medication refusal” (31.9%) and “prn medication refusal” (15.1%) (Bowers, 2003). In addition, “rule breaking” behavior mentioned in the literature lists acts such as the refusal to go to or get out of bed, eat, drink, practice personal hygiene, or communicate with staff, and to smoke in non-smoking areas (Bowers et al., 2005; 2006a; 2006b; Ryan and Bowers, 2006; Foster et al., 2007). In the study carried out by Bowers et al. (2005) to determine disturbing and dangerous behavior types in psychiatry wards in three European cities (London, Athens, Modena) it was found that there were differences in rates of occurrence of behavior types aimed at the violation of rules. For instance, the refusal to eat, get out of bed, communicate with staff and smoking in non-smoking areas were the most frequently encountered conflict behavior types in London, whereas the refusal to drink and bathe were the most frequently seen conflict behavior types in Athens. In Turkey, the most frequently observed conflict behavior is reported to be “aggression-violence” (Bilici, 2007). Sercan and Bilici’s study (2009) indicated that the primary reason to display conflict behavior was human-directed active violence (37.1%), followed by reasons related to the ward environment (34.1%), and human-directed probable violence was the third (28.8%). In another study, which attempted to determine the extent of aggressive behavior of psychiatric in-patients, physical aggression was the most commonly observed aggression type, and it was reported that the physical aggression was mostly directed towards property (Kırpinar et al., 1995). This type of aggressive behavior might be directed towards all health-care staff in psychiatry wards (Ferns, 2006; Nolan et al., 2001; Foster and Ryan, 1994). Bilgin and Buzlu (2006) reported that half of the nurses working in psychiatric wards has been exposed to aggressive behavior by patients and patients’ relatives. Coşkun and Öztürk (2008) studied verbal and physical violence that nurses working in a Regional Mental Health Hospital were ex-
posed to, and found that 86% of nurses were exposed to verbal, and 50.4% of nurses were exposed to physical violence.

The management of conflict behavior encountered in psychiatry wards is crucial as aggression may cause physical or psychological harm to staff and other patients. Absconding leads to time-consuming bureaucratic procedures, cutting treatment, and the creation of anxiety in staff. Medication refusal interferes with the treatment and healing process and increases the duration of the hospital stay. Breaking rules causes deterioration in the therapeutic environment and creates conflicts between patients and staff. Considering all these issues, keeping patient behavior under control is essential in psychiatry wards.

CONTAINMENT METHODS USED IN PSYCHIATRY WARDS

The methods used to prevent patients and staff from suffering from conflict behavior in psychiatry wards (Bowers et al., 2007a; 2007b; 2006a; 2006b) are defined as “Containment Methods”. Seclusion, special observation, mechanical restraint, transfer to psychiatric intensive care units and prn medication are some of the containment methods used (Bowers et al., 2007a; 2007b; 2006a; 2006b; 2004). It is necessary to describe these methods according to information in the literature.

Mechanical Restraint: A containment method used to restrict the patients’ actions and immobilize him/her using belts, handcuffs, or other equipment (Bowers et al., 2007a; 2007b; 2006a; 2006b). In the literature, mechanical restraint and physical restraint are used interchangeably (Bilici, 2007; Bowers et al., 2007a; 2007b; 2006a; 2006b; Sailas and Wahlbeck, 2005). The decision to administer prn medication is often made by a nurse, depending on the condition and need of psychiatric in-patients (Davies et al., 2007). The fundamental step in the use of prn medication is the complete assessment of the patient (Szczesny and Miller, 2003).

Open-Area Seclusion: Isolating patients in a locked area accompanied by a nurse. The area in which the patient is held may be locked and include separate rooms. The patient shouldn’t be left alone. At least one staff member should accompany the patient (Almvik et al., 1999).

Time-Out Method: Leaving patients alone in their room or in a seclusion room rather than behind locked doors (Sailas and Wahlbeck, 2005). This method is considered less restrictive in controlling violence and aggression compared to the seclusion method (Foster et al., 2007).

Special Observation: Observation of patients who are at risk of harming themselves or others. The special observation method has two types (Bowers et al., 2007a; 2007b; 2006a; 2006b; Whittington et al., 2006; NICE, 2005).

1. Intermittent Observation: Periodical observation and control of patients (approximately every 5-10 minutes) who don’t yet display a tendency towards causing harm, but carry that risk (Hill and Etheridge, 2008; Bowers et al., 2007a; 2007b; 2006a; Whittington et al., 2006; NICE, 2005).

2. Constant Observation: Observation of patients who have a high risk of harming themselves or others. One person from the staff keeps the patient always within sight, so that he/she can keep the patient within arm’s reach if necessary (Hill and Etheridge 2008; Bowers et al., 2007a; 2007b; 2006a; Whittington et al., 2006; NICE, 2005).

Net Bed: Placement and observation of patient in a bed surrounded by steel wire. This method aims to restrict the actions of the patient and keep violent behavior under control (Whittington et al., 2006; Bowers et al., 2006a; 2004; 2002; Sailas and Wahlbeck, 2005).

Pro Re Nata (PRN) Medication: This treatment may be administered, in case of need, in addition to the routine treatment (oral, injection, etc.), with the approval of the patient (Davies et al., 2007; Bowers et al., 2006a; 2006b). The decision to administer prn medication is often made by a nurse, depending on the condition and need of psychiatric in-patients (Davies et al., 2007).
Compulsory Intramuscular Sedation (Chemical Restraint): Implementation of intramuscular chemical drugs in order to prevent aggressive and violent behavior (Bowers et al., 2007a; 2006a). In the event of an emergency, the typical antipsychotics (haloperidol, thioridazine, droperidol, lorazepam) which are intramuscular formulations, and the combination of these drugs, may be preferred (Bilici, 2007).

Psychiatric Intensive Care: Compulsory transfer of a patient who had lost self-control, was at a high risk of harming him/her-self or others, and whose conflict behavior cannot be controlled by means of therapeutic management or treatment to a separate and secure place. (Bowers et al., 2007a; 2007b; 2006a).

Finally, different methods of containment having varied qualities but common objectives are mentioned in the literature. Although the methods are different from each other, the main objective is to control or eliminate conflict behavior.

THE HISTORICAL DEVELOPMENT OF PROFESSIONAL CONTAINMENT METHODS

Different methods have been used throughout history to control behavior that can endanger staff, other patients, or the institution. In the history of psychiatric care, methods that may be described as brutal were implemented from time to time in order to control patients. The most common abuses of containment methods in history were the massacres termed “compulsory sterilization” used to isolate psychiatric patients from the community, and experimental neurosurgery operations, conducted without the patient’s approval, under the Nazi regime (Whittington et al., 2006; Dominik, 1997). In contrast to these methods, the French psychiatrist Philippe Pinel started a movement in 1793 called “Liberating the Insane From Their Chains”, and for the first time, he liberated 40 “insane” individuals from their chains with his own hands. People were liberated from their chains at least in the literal sense (Bilici, 2007; Öztürk, 2001).

This incident carries a symbolic meaning in the psychiatry world. It pioneered the “social psychiatry movement”, which has psychiatry interact with the community, not only as a mere medical practice, but also as an area having an increased number of advocates (Çam and Bilge, 2007). In the mid 1800’s, the opinions related to the “moral” treatment that points to the opposite of the word physical supported to abolish the mechanical restraint method. Discussions concerning the abolition of mechanical restraint methods between 1840 and 1888 have continued down to the present, and the movement to secure this aim has been successful in Europe. Today in the USA, seclusion and restraint methods are still considered to be necessary practices in the control of psychiatric patients (APNA, 2007). In time when it is not always possible to translate philosophical ideals into practical realities, the coercive methods used in psychiatric care are still utilized in various countries (Colaizzi, 2005).

INTERNATIONAL UTILIZATION OF PROFESSIONAL CONTAINMENT METHODS

The literature indicates that the utilization of the professional containment methods used in psychiatry wards shows some variations on the international level (Bowers et al., 2007a; 2007b; 2006a; Sailas and Wahlbeck 2005). For instance, the mechanical restraint method is not used in Britain where the seclusion and physical restraint methods are more commonly employed. At the beginning of the 1980’s, physical restraint was started to be used in prisons, later this method was transferred to general psychiatric settings without any change. The British Mental Health Code of Practice suggested the use of restraint methods as a last resort (Ryan and Bowers, 2006; Sailas and Wahlbeck, 2005).

The open-area seclusion method is only used in Norway (Almvik et al., 1999). Intermittent and constant observation is a commonly preferred method in Britain and it has been recently begun to be used in Denmark (Bowers et al., 2004). Mechanical restraint and seclusion are methods employed in the Netherlands, but the seclusion method is more extensively used (Bowers et al., 2007a). In Finland, the compulsory administration of drugs is considered to be a more difficult method compared to the mechanical restraint and seclusion methods, and seclusion is more commonly used. Net beds are used in Austria, Russia, Slovenia, and the Czech Republic under the influence of local cultural values (Sailas and Wahlbeck, 2005; Bowers et al., 2004), the mechanical restraint method is more often used in Germany, whereas seclusion is a more commonly preferred method in Switzerland (Martin et al., 2007). In the USA and Turkey, mechanical restraint is the most commonly used method used to protect patients from harm (Bilici, 2007; Sercan and Bilici, 2009).

To sum up, it is not possible to make a relative comparison between these studies conducted to describe containment methods and determine the frequency of
their use, because of the differences in research methods and the sample. On the other hand, it can be indicated that the preferred methods vary from one country to another on an international level, and cultural and societal structure play an important role in those variations.

**FUNCTIONALITY AND ETHICAL ISSUES IN PROFESSIONAL CONTAINMENT METHODS**

For a health care attempt to be defined as successful, it needs to pass at least two tests: One is efficiency and the other is acceptance. There are some difficulties in testing the efficiency and acceptability of psychiatric containment attempts. For instance, evaluating the efficiency of these attempts requires a multi-dimensional approach. It is quite difficult to decide on the result that should be evaluated in the efficiency test. Some of the results are a decrease in physical aggression, the appearance of verbal aggression and physical injuries following the use of the restraint method (Whittington, 2006). There are some dilemmas regarding the functionality of these methods, because, although on one hand, they are effective in terms of ensuring the security of the environment and preventing the regular use of violence, on the other hand, these methods cause physical and mental trauma (fear, anger, etc.) in patients and the staff who are responsible for implementing them (Whittington, 2006). Since the beginning of 1800, containment methods have been the topic of many ethical discussions. One opinion holds that containment methods interfere with the dignity, privacy, mental and personal integrity of patients, and that those methods are unacceptable (Stolker et al., 2006). Another opinion maintains the opposite view, and claims that these methods can be accepted as therapeutic attempts in preventing conflict behavior (Whittington, 2006; Colaizzi, 2005; Petti et al., 2001). These dilemmas are important with regard to the acceptability of containment methods.

Some studies argue that mechanical restraint may cause death (Bilici, 2007; Bowers et al., 2007a; 2007b; 2006a; 2006b; Whittington, 2006). A descriptive study conducted by Nunno et al. (2005) studying child and adolescent death related to the utilization of mechanical restraints revealed that 45 cases ended in the death of the patient. In a report published in Hartford Courant, one of the oldest newspapers in the USA, Weiss (1998) indicated that 142 deaths had occurred during the use of seclusion and restraint methods in psychiatric institutions and group houses.

The main issue of these ethical discussions is that containment methods cause physical and psychological harm to staff and patients. According to the best practice guidelines, the well accepted point of view emphasized the need to view these methods more as a management strategy than a treatment method, and included them as part of patient care. In the direction of these guidelines, we believe that elimination of the ethical dilemmas is quite important in evaluating the functionality of these methods and improving them.

**THE VIEWS, PERCEPTIONS, AND ATTITUDES OF STAFF TOWARDS PROFESSIONAL CONTAINMENT METHODS**

In the literature, the results of the study focusing on the perceptions, attitudes, and experiences of patients and nurses towards containment methods are controversial. For instance, a study conducted by Meehan et al. (2000) in Australia focused on the patients’ experiences in seclusion and found that patients felt weak and helpless, like being punished in solitary confinement and perceived the place they stayed in as a prison. Another study that focused on seclusion (Meehan et al., 2004) revealed that nurses perceived this method as a necessary therapeutic attempt to calm patients, whereas patients thought that nurses used this method to ensure power and control over them. Another study on seclusion, conducted in the USA, showed a positive correlation between patients’ and nurses’ perceptions and showed that both of the groups thought that this method was safe and used for the benefit of patients (Petti et al., 2001).

Nurses are usually in charge of implementing containment methods in psychiatry wards (Marangos et al., 2000). Therefore, the attitudes (beliefs, arguments and feelings) of nurses towards these methods and their efficiency might influence the process of implementing them (type, frequency, means of implementation consequences, etc.) in many ways (Bowers et al., 2006a; Marangos et al., 2000). For instance, observation and treatment (such as) methods were found to be more acceptable to nurses than seclusion and restraint (Bowers et al., 2007b; 2004).

The acceptance of containment methods is observed to differ depending on the gender of nurses, and this difference is believed to be related to empathy and emotional intelligence. In British psychiatry wards where the gender balance among the staff as essentially equal; it was found that male nurses preferred to use containment methods more than female nurses (Bowers et al., 2006a). A study conducted in Finland (Lind et al., 2004) indi-
cated that female nurses perceived restraint, seclusion, and prn medication methods as more problematic in terms of ethical concerns than male nurses did. In addition, it was revealed that female nurses used containment methods less frequently in countries where female nurses outnumber male nurses (Bowers et al., 2006a). Age and experience are found to be important factors influencing perceptions of, and attitudes towards the use of containment methods. For instance, older staff use the mechanical restraint and net bed methods less compared to the younger staff in Britain. Moreover, staff members who have become used to employing any particular method tends to continue using it (Bowers et al., 2006a).

To sum up, nurses, who are usually responsible of implementing professional containment methods, have different attitudes towards the various issues it entails, such as the means of implementation, method preference and the frequency with which any method is used. It has been observed that these attitudes and behavior types are related to the age, gender, and experience level of the staff. It is also believed that the attitudes and behavior of the staff in the course of implementing these methods would, in turn, influence the patients’ behavior toward, and perceptions of the particular method being used. Bowers (2002) claimed that the frequent use of restraint methods didn’t lead to a decrease in the patients’ conflict behavior, and that, the positive attitudes and behavior of nurses, in particular, elicited improvements in patients’ negative/dangerous behavior, thus providing a basis for a therapeutic environment. It should be taken into consideration that the means chosen to apply treatment and care methods is important in improving psychiatric care and staff–patient relationship networks.

**PROCEDURES AND GUIDELINES REGARDING PROFESSIONAL CONTAINMENT METHODS**

Efforts made to decrease the restrictions imposed on patients who have already been subjected to restriction by staying in closed psychiatric wards, and to develop policies and procedures regarding the use of containment methods in order to protect patients and staff from aggressive patients, have gained importance in recent years. In the last couple of years, new legislation, proposals, and professional guidelines have been prepared to control the use of containment methods in psychiatry (Whittington, 2006; Sailas and Wahlbeck, 2005). The repeated message in all these guidelines is to be careful to ensure the safety of patients and staff, especially while using seclusion and restraint methods. The new proposals, presented to the Council of Europe, indicate that the benefit of using the physical restraint and seclusion methods should be proportional to the risks that necessitate the use of these methods (Bilici, 2007; Sailas and Wahlbeck, 2005).

These professional guidelines are used in many countries to ensure the best conditions for implementation. The National Institute of Clinical and Health Excellence (NICE) is one of guidelines for England and Wales. The focal point in NICE (2005) is on physical attempts, seclusion and observation practices. The fundamental areas of focus are: the institutional environment, alarm systems, anticipating leading evidence for violence, patients’ views, de-escalation techniques (techniques that mostly focus on interaction skills decreasing the intensity of conflict), the rapid administration of tranquilizers, and post-event investigations. The care principles define the ideal and highlight individual-based care and interdisciplinary work based on collaboration (Whittington, 2006; NICE, 2005). The European Committee for the Prevention of Torture and Inhuman or Degrading Treatment or Punishment (CPT) points to the necessity of having precise policies regarding the use of restraint and seclusion, and recording their application periodically and regularly. Additionally, the CPT suggests giving explanations to the patients after the implementation of seclusion or other restraint methods (Whittington, 1996).

The regulations regarding the use of restraint and seclusion methods are determined by the National Patient Safety Agency (NPSA) (2006) in Britain, and by the Joint Commission on the Accreditation of Healthcare Organizations (JCAHO) (2005) in the USA (Bowers et al., 2006c). In many countries, hospitals create their own procedures and guidelines. In Turkey, there are not yet any standard instructions regarding the use of professional containment methods. In recent years, Restraint Implementation Instructions have been prepared in some state psychiatric training hospitals, and their application has begun to be recorded (Bilici, 2007). On the other hand, it is indicated that the frequency of using these methods and the means of implementing them may differ from one hospital to another, or even from one ward to another ward in the same hospital. These differences may lead to inconsistencies in implementation and different perceptions of these methods on the part of patients and staff.

**CONCLUSION**

The use, implementation, and preference for the various professional containment methods used in psychiatry wards, vary from one country to another. In Turkey,
the mechanical restraint, seclusion, and prn medication methods are more commonly known and implemented (Steinert et al., 2009) than other methods.

Containment methods start ethical debates because their implementation depends on the autonomy of the staff, and causes physical and psychological harm to both patients and staff. From the past to the present, the debate about the use of the professional containment methods has been continuing. However, despite all the disagreements and international proposals, the seclusion and restraint methods are still implemented as a routine part of daily psychiatric practice (Bilici, 2007; Whittington, 2006).

The major part of the research available in the literature indicates that there are differences in the means and frequency of implementing containment methods. It has been argued that the main reasons behind these differences are individual and cultural variations and the lack of standard instructions. There is a need for standard practice guidelines and policies across the country, in order to eliminate differences in implementation, to protect patients and staff from being harmed by the conflict behavior, and to create safe working environments.

REFERENCES


National Institute for Health and Clinical Excellence (NICE) (2005)


