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Nurse perceptions of the use of seclusion in mental health inpatient facilities: Have attitudes to Māori changed?

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Abstract

Introduction

The impact of New Zealand Government initiatives to reduce seclusion and restraint in inpatient mental health, and the attitudes of mental health nurses to seclusion, factors involved in its use, and alternatives to seclusion, were examined.

Methodology

Two primary data sources were used for analysis (1) Ministry of Health seclusion data, and (2) a questionnaire circulated to inpatient mental health nurses.

Results

Current use of potential strategies to reduce seclusion events ranged from 41% to 100%. Barriers to reducing seclusion included staffing issues, management and medical resistance, and the facility's physical characteristics.

Between 2007-14, seclusion events, the number of patients secluded, and the percentage of total patients secluded declined, but there was little change with respect to Māori patients.

Discussion

Four of the six least-used strategies incorporated Māori cultural approaches. An inability to provide culturally sensitive care may underlie the lack of change in seclusion rates for Māori.

Key words

Behaviour control; culturally competent care; inpatients; Māori; mental health; seclusion

Introduction

In 2008 the results of a survey of New Zealand's twenty District Health Boards (DHBs) which evaluated implementation of initiatives to reduce seclusion and restraint indicated all had initiatives in place (Te Pou o Te Whakaaro Nui, 2008). Six DHBs had initiated comprehensive programmes, while the remaining fourteen had implemented or were in the process of implementing approaches. One of their results was that interviewees recommended surveying nurses directly involved with patients regarding their views of seclusion and restraint. This current project was designed to gain the views of those nurses as well as review changes in seclusion events since 2007.

Background

Standards New Zealand (2008a) defines seclusion as a form of restraint, "Where a consumer is placed alone in a room or area, at any time and for any duration, from which they cannot freely exit" (p. 30). Seclusion with or without additional restraint is a procedure for managing aggressive or agitated clients and promoting site security, particularly in an emergency psychiatric setting (Larue, Dumais, Ahern, Bernheim, & Mailhot, 2009). These authors also note the complex interaction of factors which are involved in a decision to seclude a patient (Larue et al., 2009). The ethical challenge in restraint and seclusion lies in the nurse's ability to maintain a therapeutic relationship with the patient, whilst simultaneously appearing to infringe on their basic human right to freedom.

Happell and Harrow (2010) reviewed the literature and found that nurses believe seclusion is a necessary practice in regard to managing violent and aggressive patients. Further, Happell and Koehn (2010a) surveyed 123 nurses in Queensland, Australia and found the nurses recognised seclusion had a negative effect on service users, but believed it was a necessary option related to safety where potential or actual violence threatened staff or service users.

They concluded a lack of alternatives limited the nurses' approaches to managing aggressive or violent service users.

The New Zealand Mental Health Commission [MHC] (2004) carried out a two year review of seclusion from a human rights, policy and practice perspective. This seclusion project involved various components including a survey of all District Health Boards (DHBs) in 2000-2001, a literature analysis on seclusion, a review of key policy documents related to seclusion, and consultation with practitioners and selected DHB site visits. They found that while seclusion varied over time between DHBs, all DHBs surveyed used seclusion, with 37% of service users admitted under The Mental Health (Compulsory Assessment and Treatment) Act 1992, (New Zealand Government, 1992) having experienced time in a seclusion room. On average, secluded persons spent 50 hours per month in seclusion. Monthly hours ranged from 1 to 600 hours, while most seclusion events were between 8 to 24 hours in duration. Further to this, the MHC (2004) review of biographical data indicated that males and females were secluded at about the same rate, but that Māori tended to be secluded more than other patients.

O'Malley and colleagues suggested that in New Zealand, restraint and seclusion is used as a last resort if other methods of de-escalation including intensive nursing input and additional medication are unsuccessful, and at the time their study was published they noted that research on factors contributing to its use is limited (O'Malley, Frampton, Wijnveld, & Porter, 2007). A New Zealand phenomenological study of seven mental health nurses published in the following year (Bigwood & Crowe, 2008) found the respondents were uncomfortable with the use of restraint but accepted it as an essential part of the job. Similar

to O'Malley et al's (2007) findings the nurses in this study sought all possible viable alternatives before using restraint.

Around this time in New Zealand the mental health workforce development unit, Te Pou o Te Whakaaro Nui (Te Pou) began to advocate for the implementation of Huckshorn's "Six Core Strategies for Reducing Seclusion and Restraint Use" (6CS) (Huckshorn, 2004). This was supported by Te Pou's publication of the 'Seclusion – Time for Change' initiative (O'Hagan, Divis, & Long, 2008) which outlined best practice in seclusion reduction approaches. The Health and Disability Services (Restraint Minimisation and Safe Practices) Standards (Standards New Zealand, 2008b) came into effect on June 1 2009 and note that "...expect restraint to be used only after all less restrictive interventions have been attempted and found to be inadequate" (p. 6). In 2010 the Ministry of Health revised guidelines regarding the use of seclusion, identifying best practice related to progressively decreasing and limiting the use of seclusion and restraint for patients. However, according to more recent research by Tyrer, Beckley, Goel, Dennis and Martin (2012) there is significant variation in the use of seclusion across DHBs in New Zealand but there have been no studies investigating why this is so.

These aims to reduce seclusion also specifically targeted Māori (Ministry of Health, 2012b; Te Pou o Te Whakaaro Nui, 2013a, 2014; Wharewera-Mika et al., 2013). Māori comprise 14.9% of New Zealanders (Statistics New Zealand, 2013), but are vastly over-represented in mental health inpatient seclusion numbers as the quotes below indicate. One of the objectives of this research was to examine the effect of these programmes.

> In 2013, Māori were 3.7 times more likely to be secluded in adult services than people from other ethnic groups (per 100,000 population). Of the 768 people (aged 20 to 64 years) secluded in adult services during 2013, 36 percent were Māori." "Māori were

secluded at a rate of 78 people per 100,000, and non-Māori at a rate of 21 people per 100,000 population (Ministry of Health, 2014, p. 37).

In 2014, Māori were almost four times more likely to be secluded in adult inpatient services than people from other ethnic groups (per 100,000 population). Of the 736 people secluded in adult inpatient services during 2014, 38 percent were Māori."

"Māori were secluded at a rate of 67.9 people per 100,000, and non-Māori at a rate of 18 people per 100,000 population (Ministry of Health, 2015, p. 44).

Methods

An anonymous internet survey was developed to assess MH inpatient unit (MHIU) staff attitudes to seclusion, factors involved in seclusion use, and alternatives to seclusion. The survey questionnaire was developed from issues raised in the literature as well as from the published New Zealand government initiatives relating to the reduction of the use of seclusion. The questionnaire (Table 1) asked about factors contributing to seclusion events, discussion/modification of seclusion processes, strategies to reduce seclusion events, alternatives to seclusion, and barriers to seclusion reduction initiatives. Eleven of the 20 NZ District Health Boards agreed to distribute the survey to their MHIU staff. Research approval was received from the authors' institutional ethics committee as well as locality approval from the eleven DHBs.

Table 1 about here

Descriptive statistics were used to analyse the yes/no and Likert responses, while a content analysis of the open-answer questions was utilised. This was undertaken to identify how frequently words or themes related to the alternatives to seclusion or the barriers to implementing seclusion reduction initiatives appeared in the open-ended responses. The authors undertook independent coding and categorisation of the open-ended responses

(Vaismoradi, Turunen, & Bondas, 2013) and to ensure validity their findings were compared and discussed in an iterative cycle until agreement was reached.

Data from the Ministry of Health for inpatient facilities by District Health Board (Ministry of Health, 2008, 2009, 2010, 2011, 2012a, 2013, 2014) were collected and graphed to illustrate seclusion numbers and rates for Māori and non-Māori inpatients. The format of the report for 2015 changed such that detailed numbers were no longer available and thus data for 2014 were unavailable (Ministry of Health, 2015).

Results

There were 62 responses to the survey, but it was not possible to determine what percentage of potential respondents that represented. Responses to the yes/no and Likert scale questions will be presented.

Participants were asked which of the following factors contributed to seclusion events in their experience. By far the most common factor was patient acuity with 92% of responses indicating 'often' or 'sometimes', followed by staff experience and skills at 77% and staffing levels at 72% (Figure 1).

Figure 1 about here

A list of strategies which may contribute to the reduction of seclusion events were provided and respondents were asked to indicate how often they were used. Table 2 shows those used 90% of the time or more, while Figure 2 shows those used less than 90% of the time.

Table 2 about here

Figure 2 about here

Staff perceptions of seclusion reduction policy and initiatives

The major barriers to reducing the use of seclusion listed by respondents related to staffing issues, including reduced staffing levels ("... lack of staff to deal with new initiatives to reduce seclusion"), staff skill levels ("... staff's reluctance to change practices"), safety ("We have a duty of care to other clients that means we need to protect them against violent individuals.") and staff attitudes ("... some staff want to seclude anything that moves"). Other factors included a lack of management and medical support, and difficulties related to physical characteristics of the facility.

The use of sensory modulation or a sensory room were the most frequently cited alternatives to seclusion, followed by 1:1 or 2:1 staffing levels, PRN medication, and distraction/diversion techniques. A number of tools were described (DASA, HONOS, START, WRAP[1]) to identify risk factors for incidents of violence or aggression, as well as mechanisms for collecting data on patients, but one consistent approach was not seen across respondents. Several respondents also commented that it was the staff's responsibility to recognise early warning signs and alternatives.

Several factors were consistently listed as contributing to the use of seclusion, the most frequent being patient violence/aggression, drugs and/or alcohol, and poor management (including under-medication and staff handling the situation badly). Less frequent, but mentioned by several respondents, was the ward culture: "... i.e. the expectation that following an aggressive incident a client will be secluded".

[1] DASA: The Dynamic Appraisal of Situational Aggression; HONOS: Health of the Nation Outcomes Scales; START: Short-Term Assessment of Risk and Treatability; WRAP: Wellness Recovery Action Plan

It was apparent that all facilities had discussed changes to the use of seclusion in the previous two years. These included alternative therapies, changes to documentation, staff education, the use of seclusion review panels, and consideration of culture and consumer perspectives.

New Zealand Seclusion Data

Data from the NZ Ministry of Health details seclusion events in inpatient facilities by District Health Board have been collated across DHBs by year and summarised below. As can be seen in Figure 3, since implementation of the Health and Disability Services (Restraint Minimisation and Safe Practice) Standards (Standards New Zealand, 2008b), seclusion events and rates overall, and percentage of total patients secluded have been decreasing (the linear regression line indicates the trend of the data, and the slope of the regression line (the change in seclusion numbers over the years shows whether the trend is increasing (a positive/upward slope), remaining the same (slope =0) or decreasing as shown by a negative/downward slope). However, the only group where the percentage of patients secluded did not noticeably decrease between 2007 and 2013 was Māori (where the slope was slightly positive/upward: $y=0.0017x$). Statistically there was no significant difference ($F=0.41$) between these slopes. While the Director of Mental Health's Annual Report 2014 states "Māori were secluded at a rate of 67.9 people per 100,000, and non-Māori at a rate of 18 people per 100,000 population" (Ministry of Health, 2015), equivalent data to that from 2008-2013 was not available to include in Figure 3.

Figure 3 about here

Discussion

Mental health nurses in New Zealand face many of the same issues as their colleagues internationally with respect to the use of seclusion, and in reducing the use of seclusion.

Contributors to seclusion events

The primary contributors to seclusion events in this study reflect those in the literature. These included patient acuity, staffing experience and skills, and factors such as ward design and overcrowding (Happell & Koehn, 2011; Larue et al., 2009). Respondents did not indicate staffing levels were a major contributor to seclusion events. However, as noted by Bowers and Crowder (2012), increased staffing levels were unexpectedly related to an increase in the number of seclusion events, although this negative effect was subtle. Similar to international literature, several respondents in this survey expressed the expectation that patients should be secluded after an aggressive incident and that this was necessary to both contain dangerous or violent behaviour as well as teach patients to respect physical limits (Van Der Merwe, Muir-Cochrane, Jones, Tziggili, & Bowers, 2013). Many staff appeared reticent to change practices with respect to seclusion, some expressing the belief that seclusion was beneficial to the patient. This attitude was also noted by Happell and Koehn (2010a), Van Der Merwe and colleagues (2013) and van Doeselaar, Sleegers and Hutschemaekers (2008). In Van Der Merwe et al.'s review of 39 studies they found that staff, in general, believed seclusion to be beneficial to the patient and was part of a therapeutic approach. The reticence to change seclusion practices noted in this survey was also related to other factors supported in the literature, such as safety concerns for staff and patients (Donat, 2005; El-Badri & Mellsop, 2008; Happell & Koehn, 2010a; van Doeselaar et al., 2008), issues caused by challenging behaviours (Van Der Merwe et al., 2013) and reduced staffing levels. On the other hand, Huckshorn (2014) suggests that staff beliefs, opinions and actions can change with respect to seclusion and restraint with appropriate leadership and policies, an approach with which Donat (2005) concurs.

Indigenous population considerations

A review of the international literature related to indigenous people's health identified that globally there is evidence of health disparities between indigenous and non-indigenous

populations, and that overall the poorer state of health experienced by indigenous peoples must raise concern(Foxall, 2013). According to King, Smith and Gracey (2009), Canada, the United States of America, Australia and New Zealand all have minority indigenous populations with poor health, even though these nations are consistently placed near to the top of the United Nation Development Program's human development index (United Nations Development Programme, 2016). King et al. (2009) reported that the impact of colonisation on indigenous peoples has led to high rates of mental health issues such as depression and alcoholism. This is exemplified in a New Zealand survey which revealed that 51% of Māori develop a mental health disorder at some point in their life (Baxter, Kingi, Durie, & McGee, 2006).

With respect to seclusion, high rates of seclusion have been reported for indigenous populations. For example, Happell and Koehn (2010b) reported indigenous people were more likely to be secluded than non-indigenous peoples in Australia, and Sambrano and Cox (2013) interviewed indigenous Australians' experiences of seclusion and noted:

> *While power imbalances inherent in seclusion are problematic for all mental health clients, the distinguishing factor in the Indigenous clients' experience is that seclusion is continuous with the discriminatory and degrading treatment by governments, police, and health services that many Indigenous people have experienced since colonization. (p. 522)*

Similarly, in New Zealand, Van Kessel and colleagues (van Kessel, Milne, Hunt, & Reed, 2012) and McLeod et al. (2013) noted Māori were involved in a higher proportion of violent incidents or seclusion events than non-Māori but only recommended further research into reasons for ethnic variations in the incidence of violence/seclusion.

In response to the identified higher rates of seclusion events for Māori, the New Zealand Ministry of Health (Ministry of Health, 2012b), in its publication *Rising to the Challenge,* has stated a priority action is to "Reduce and eliminate the use of seclusion and restraint for Māori" (p. 39).

There is evidence that overall, the Ministry of Health and Te Pou initiatives since 2008 have shown reductions in the use of seclusion in a number of DHBs, where the total number of Māori secluded dropped by 32% between 2007 and 2014 (Ministry of Health, 2015). Thus, it could be argued that the success of these programmes is beginning to be evident. However, the results of this study show that the number of Māori secluded as a percentage of the total secluded had not changed appreciably from 2007 to 2013 (Figure 3).

While reporting on the seclusion experiences of indigenous Australians, Happell and Koehn (2010b) did not suggest any alternative approaches. One of the strengths of the approach taken in New Zealand has been the inclusion of culturally appropriate strategies to reduce seclusion as outlined in the Six Core Strategies Checklist (Te Pou o Te Whakaaro Nui, 2013b), the New Zealand adaptation of the original document (National Association of State Mental Health Program Directors, 2008). These include: the involvement of Māori support staff / Kia Manaaki (support for the service user) in de-escalation situations; staff education in calming and restraint practices including knowledge of tapu (things sacred) and noa (to be free from tapu) for Māori service users; staff education in calming and restraint practices including elements of tikanga Māori (correct Māori procedure/custom); and involvement of whanau (extended family) in de-escalation situations. The results of this study and that of Wharewera-Mika et al. (2013) would suggest that there is still considerable gap between the recommended strategies for culturally appropriate strategies and the practice. Wharewera-Mika and colleagues (2013) recently analysed data from discussions with Māori mental

health clinicians, consumers and cultural advisors and strongly advocated for a Māori model of care, including Māori leadership in mental health. They noted their findings reflected Huckshorn's six core strategies (2006). Unfortunately, several of those strategies are the least used de-escalation approaches from our survey. While the respondents do not appear to regard the lack of a culturally appropriate response as a problem, as shown in Figure 1; yet, as seen in Table 2, several of these culturally appropriate de-escalation techniques were used less than 90% of the time, and four of the six implemented less than 65% of the time.

The paucity of culturally appropriate strategies is of particular concern in the New Zealand context as there has been concerted effort over several decades in nursing, and successive governments' policies to transition the health system to one which is more culturally responsive to address the acknowledged health gaps. For example, the Ministry of Health has initiated a number of strategies to increase Māori participation in the workforce and to support ongoing Māori workforce development (Ministry of Health, 2012b). A key focus has been the provision of more effective health service provision through the development of the Māori health and disability sector. Included in these strategies has been an investment in strengthening and developing the Māori nursing and midwifery workforce, and the establishment of Ngā Manukura ō Āpōpō (National Māori Nursing and Midwifery Workforce Development Programme) in 2008 to facilitate this (Foxall, 2013). In 2015, Māori nurses constituted 7% of the total nursing workforce which is not representative of their 15% presence in the New Zealand population (Statistics New Zealand, 2013). A significantly higher proportion of Māori work in inpatient mental health than the workforce as a whole (8% and 4% respectively) (Nursing Council of New Zealand, 2015). However, in terms of the actual numbers of nurses working in this area, Māori total 280 out of a total of 2,176 nurses or 13% of the inpatient mental health nurses. Therefore, it has to be questioned to what extent

they are able to reinforce the initiatives with respect to a more culturally responsive environment in the face of a workforce that is largely non-Māori.

Conclusion

This study reports similar issues as those in the literature with respect to staff attitudes to seclusion and seclusion rates. Staff have significant concerns about safety in their unit, but have generally been involved in implementing processes to reduce seclusion events. This is reflected in the overall reduction of seclusion events and number of patients secluded between 2008 and 2013.

However, while seclusion rates overall have been decreasing, Māori seclusion rates did not decrease appreciably between 2007 and 2013. While there are undoubtedly a variety of factors involved, it is also apparent that the implementation of culturally appropriate and inclusive approaches should be more widely practiced, which may influence incidences of seclusion for Māori.

Relevance for clinical practice

The inclusion of culturally appropriate approaches to de-escalation of violent/aggressive situations in mental health inpatient units may assist in reducing seclusion events for Māori and other indigenous peoples. Implementation of these approaches may require changes to staffing profiles as well as education/professional development support.

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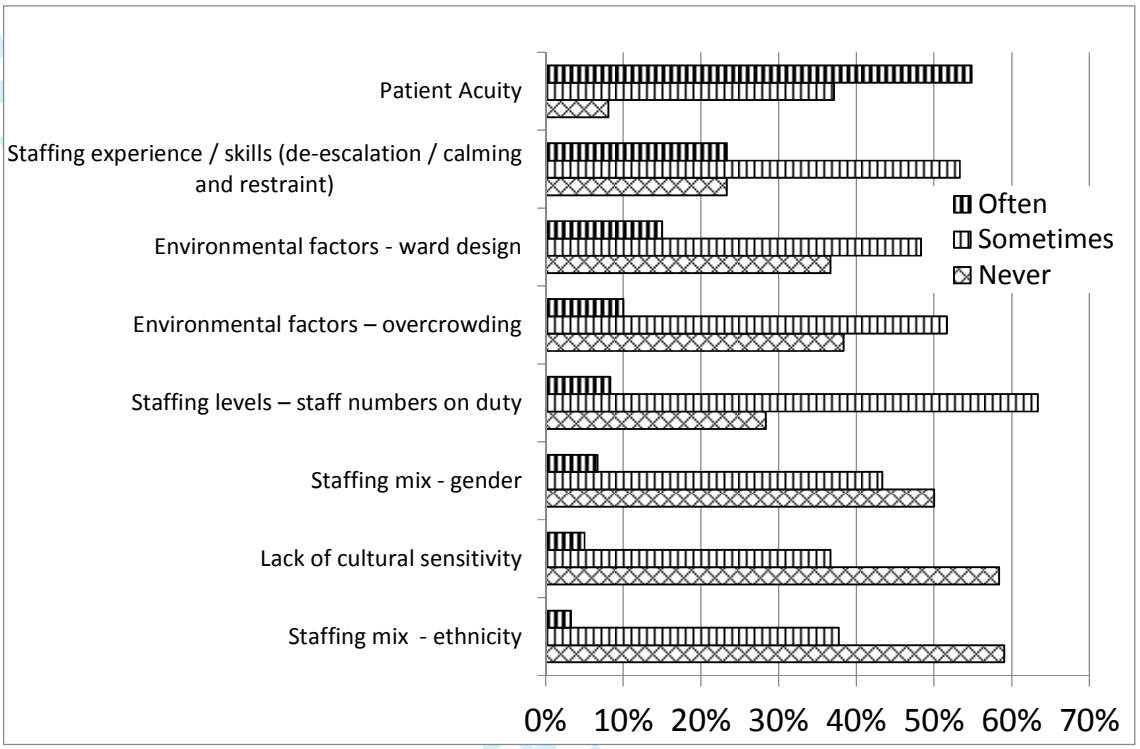

Figure 1: Frequency of factors contributing to seclusion events, ranked as the sum of 'often' and 'sometimes'.

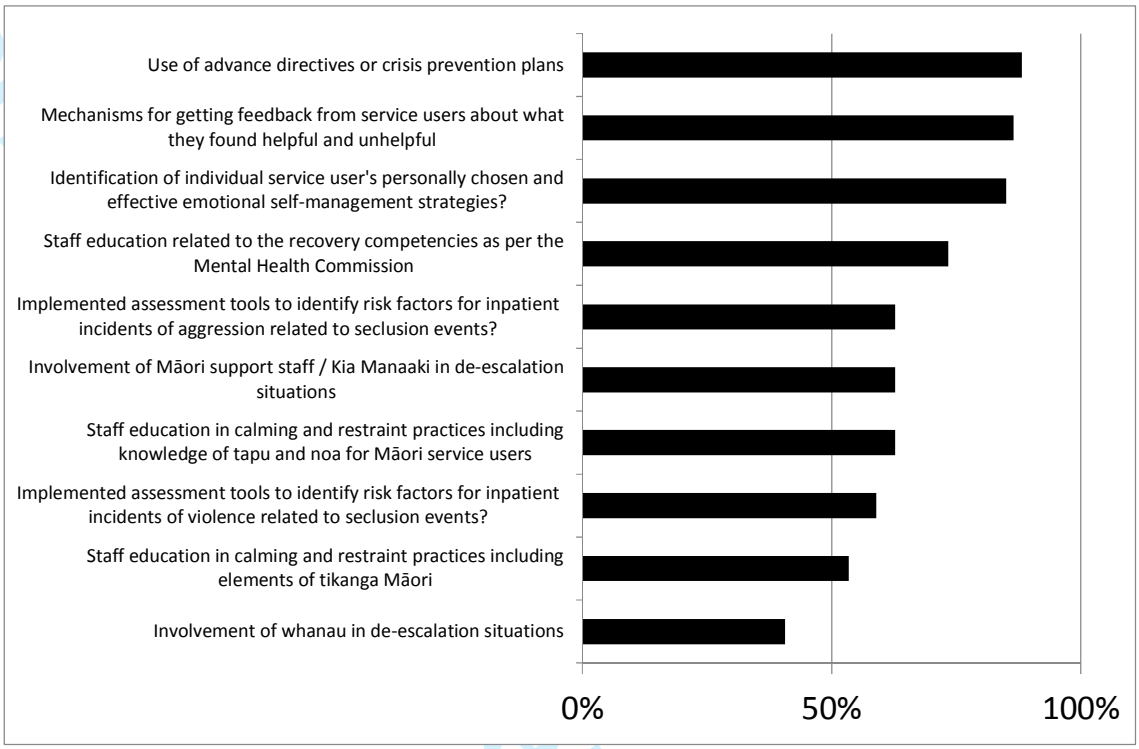

Figure 2: De-escalation factors implemented <90% of the time.

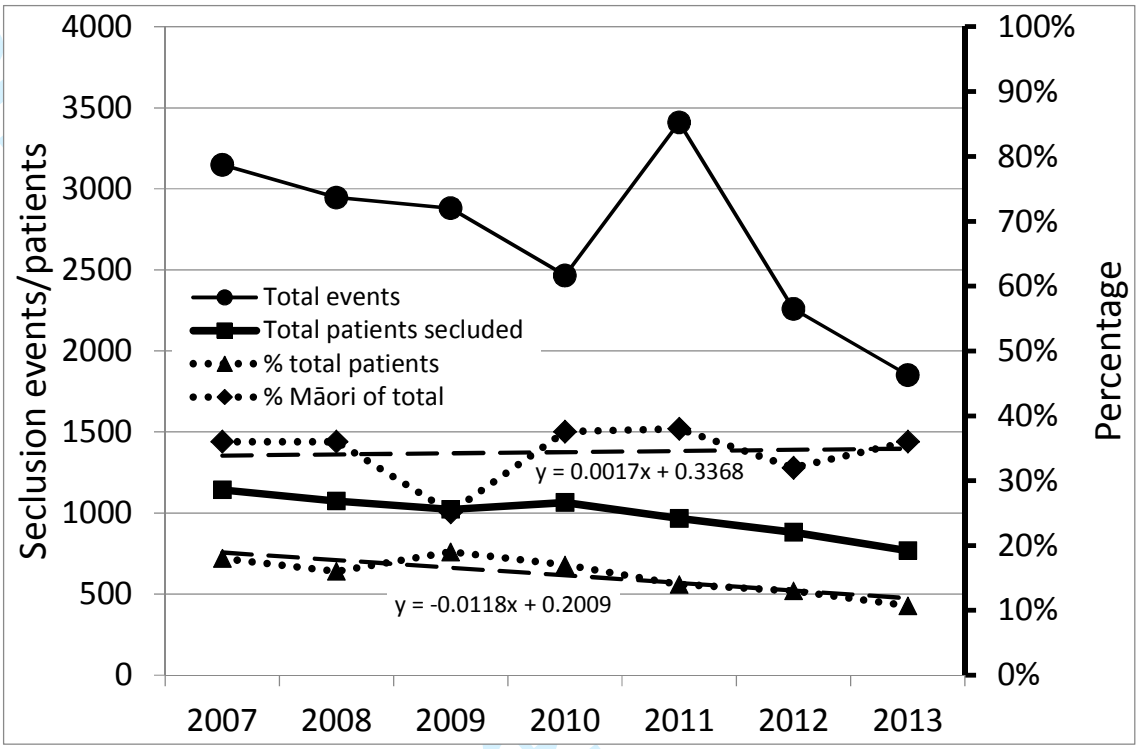

Figure 3: Total DHB seclusions by event, patient, total percentage and Māori percentage 2007-2013, with linear trendlines for the total percentage and Māori percentage.

Table 1: Questionnaire

1. From your experience, please indicate how often the following factors contribute to seclusion events: Never Sometimes Often

Patient Acuity

Environmental factors – overcrowding

Environmental factors - ward design

Staffing levels – staff numbers on duty

Staffing mix - gender

Staffing mix - ethnicity

Staffing experience / skills (de-escalation / calming and restraint?)

Lack of cultural sensitivity

Other factors? (please specify them)

2. Has your service discussed changes to procedures related to seclusion in the past two years? (Yes/No. If Yes, what are these?)
3. Has your service implemented assessment tools to identify risk factors for inpatients incidents of aggression related to seclusion events? (Yes/No. If Yes, what tools do you use?)
4. Has your service implemented assessment tools to identify risk factors for inpatient incidents of violence related to seclusion events? (Yes/No. If Yes, what tools do you use?)
5. Does your safety and planning assessment include identification of individual service user's triggers? (Yes/No)
6. Does your safety and planning assessment include identification of individual service user's personally chosen and effective emotional self-management strategies? (Yes/No)

7. Are service users included in planning for treatment? (Yes/No)
8. Are service users included in their own recovery planning? (Yes/No)
9. There are many strategies that may contribute to the reduction of seclusion events. Could you please indicate if any of the following are used in your unit: Yes No

Staff education related to the recovery competencies as per the Mental Health Commission

Staff education and skill development in de-escalation

Staff education in calming and restraint practices

Staff education in calming and restraint practices including knowledge of tapu and noa for Maori service users

Staff education in calming and restraint practices including elements of tikanga Maori

Involvement of Maori support staff / Kai Manaaki in de-escalation situations

Involvement of Whanau in de-escalation situations

Quiet spaces / areas for service users to go

Development of service user coping skills

Use of sensory modulation techniques

Use of advance directives or crisis prevention plans

Activity groups or provision for activities

Mechanisms for getting feedback from service users about what they found helpful and unhelpful

People who have experienced mental illness are employed as advocates, advisors, peer support workers or educators

10. What alternatives to seclusion are you are aware of?
11. What are (or were) the barriers to introducing and implementing seclusion reduction initiatives in your service?

Table 2: De-escalation strategies used most frequently.

Strategy	**% use**
Staff education and skill development in de-escalation	100%
Staff education in calming and restraint practices	100%
Are service users included in their own recovery planning?	100%
Activity groups or provision for activities	98%
Quiet spaces / areas for service users to go	97%
Are service users included in planning for treatment?	97%
Development of service user coping skills	95%
People who have experienced mental illness are employed as advocates, advisors, peer support workers or educators	95%
Has your service discussed changes to procedures related to seclusion in the past two years?	92%
Does your safety and planning assessment include identification of individual service user's triggers?	91%
Use of sensory modulation techniques	90%