

# **ASSESSMENT OF ATTITUDES RELATED TO THE MANAGEMENT OF AGGRESSION AND VIOLENCE IN FOUR PSYCHIATRIC HOSPITALS**

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# Declaration

By submitting this thesis electronically, I declare that the entirety of the work contained therein is my own, original work, that I am the authorship owner thereof (unless to the extent explicitly otherwise stated) and that I have not previously in its entirety or in part submitted it for obtaining any qualification.

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# Abstract

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The aim of this descriptive survey was to investigate the attitudes of mental health care providers with regards to the management of aggression and violence. The absence of scientific data describing the attitudes of nurses towards the management of aggression and violence motivated the researcher to conduct this study. The researcher undertook a descriptive survey to describe the attitudes of nurses towards the management of aggression and violence.

The management of aggression and violence attitude scale (MAVAS) was administered to N92 nurses with different qualifications these nurses are employed in the acute admission units of four psychiatric hospitals in a province in South Africa.

The results showed no significant differences in attitudes between the different categories of nurses in most of the questions.

Enough evidence was gathered that indicated, compared to trained staff, staff without a qualification in psychiatric nursing science had found it difficult to calm patients down, had not understood the effect of the environment on a patient, had felt that patients should control their feelings and had lacked the perception of trained nurses, with regards to the effect of negotiation and poor communication on violent and aggressive mental healthcare users.

These findings can make significant contributions towards the implementation of training programmes and policies to assist staff to deal with patient related aggression and violence. Furthermore the data generated can contribute towards future research in this field with subsequent expansion of skills programmes.

# Opsomming

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Die doelstelling van hierdie navorsings studie was om die houding van psigiatriese gesondheidsdiens voorsieners ten opsigte van die hantering van aggressie en geweld te bepaal. Die afwesigheid van wetenskaplik gefundeerde data het die navorser genoop om hierdie studie te onderneem. Die navorser het derhalwe 'n beskrywende studie gedoen om die houding van verpleegsters ten opsigte van die hantering van aggressie en geweld te bepaal.

Die "management of aggression and violence attitude scale" (MAVAS) is deur N92 verpleegsters met verskillende kwalifikasies voltooi. Hierdie verpleegsters is indiens van vier verskillende psigiatriese hospitale in 'n provinsie in Suid-Afrika. Die verpleegsters werk in die akute opname eenhede van die onderskeie hospitale.

Die resultate het geen noemenswaardige verskille tussen die onderskeie kategorieë verpleegsters se houding teenoor die hantering van aggressie en geweld aangedui nie.

Genoegsame bewys is ingesamel wat aandui; dat in vergelyking met opgeleide personeel, personeel sonder 'n kwalifikasie in psigiatriese verpleegwetenskappe, dit moeiliker vind om pasiënte te kalmeer, nie verstaan watter effek die omgewing op 'n pasiënt het nie. Dié kategorieë voel pasiënte moet hul gevoellens beheer en het ook nie dieselfde persepsie ten opsigte van die effek van onderhandeling en swak kommunikasie op aggressiewe en geweldadige psigiatriese gesondheidsdiens verbruikers as hul kollegas nie.

Hierdie bevinding is 'n belangrike bydrae ten opsigte van die implementering van opleidings programme en beleid ten einde personeel te ondersteun om pasiënt verwante aggressie en geweld te hanteer.

Die nuwe data gegenereer deur dié navorsings studie kan bydra tot toekomstige navorsing in hierdie veld asook gevolglike uitbreiding van vaardigheds programme.



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# Definitions of terms

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**Mental healthcare user:** A person seeking and receiving help from a mental healthcare facility as voluntary user, assisted user, or involuntary user (South Africa, 2002:8).

**Mental healthcare provider:** A nurse, medical officer, social worker and occupational therapist providing mental healthcare (South Africa, 2002:8).

## **ABBREVIATIONS**

**MAVAS:** Management of Aggression and Violence Attitude Scale.

**WHO:** World Health Organization.

## **SPECIAL CLAUSE**

The ethics committee and chief executive officer (CEO) of one of the four hospitals granted permission for the performance of this study, provided that the names of neither the hospitals, nor the province should be mentioned, in order to protect these hospitals and their staff from identification.

The researcher hence referred to the region as 'a province in South Africa', or 'one of the provinces in South Africa', and to the four psychiatric hospitals in this province as 'the four psychiatric hospitals chosen for this study'. These hospitals were specifically referred to as Hospitals A, B, C and D.

# CHAPTER 1

---

## SCIENTIFIC FOUNDATION OF THE STUDY

*“Many who live with violence day in and out assume that it is an intrinsic part of the human condition. But it is not so. Violence can be prevented. Violent cultures can be turned around. In my own country and around the world, we have shining examples of how violence can be countered. Governments, communities and individuals can make a difference.” (Mandela, 2002).*

### 1.1 INTRODUCTION AND BACKGROUND

When reflecting on this statement by Emeritus President, Nelson Mandela, the researcher realised that caregivers in mental health institutions have become used to and have accepted violence in their day-to-day work situation. The researcher could relate to staff accepting violence and aggression as “*all in a day’s work*” through her own experience, whilst employed as a registered nurse in an acute admission unit in one of the four hospitals included in this study. Furthermore, the researcher noted that the successful management of aggression varied from one colleague to the next, as did the perceptions on how aggression and violence should be managed. In addition to opposing perceptions regarding the management of aggression and violence, the researcher also experienced differences in perceptions of violence and aggression among colleagues. Therefore, in order to clarify the concept, violence, in mental health facilities, the researcher first examined the differences in meaning between aggression and violence. Both these terms have such broad meanings, to the extent that they have different meanings to different individuals.

Cooper and Swanson (n.d.:ii) compiled a manual for the training of staff working with mentally ill clients. In this manual they differentiate between aggression and violence by identifying violence as the behavioural component of aggression. Hence, Cooper and Swanson (n.d.:ii) define aggression as ‘verbal abuse and threats’ and further explain that although it is non-physical in nature, it can, however, have psychological consequences to the individual.

Uys and Middleton (2004:255) support this notion of aggression being a broad term, and define aggression to be uttered threats, rather than physical harm. Mason and Chandley (1999:6), in addition, regard aggression to be “disposition to show hostility towards becoming violent. The Penguin Dictionary of Psychology (1995:18) emphasises aggression to be a desire to produce fear or flight in others.

## **1.2 INTRODUCTION AND BACKGROUND LITERATURE**

The above discussion indicates that aggression can take on many forms, varying from verbal aggression in the form of uttered threats and abusive language directed at another person, to actual physical damage inflicted on self, another person, or the property of others, as per Uys and Middleton (2004:255).

Contrary, as pointed out by Mason and Chandley (1999:50), aggression does not only have a negative connotation, as it may be more acceptable if displayed in sport for example, such as rugby. It becomes socially acceptable, because of the notion of “survival of the fittest”, i.e. the stronger team will win the match. Sport is thus regarded a socially acceptable outlet for aggression. The researcher assumed that aggression implies a means to a goal, based on a statement by Mason and Chandley (1999:4), that humans need an amount of aggression to survive daily life.

However, for the purpose of this study, the term aggression was used to point out the negative connotation only.

Contrary to aggression, violence does not have any positive connotation to it. As was mentioned, Cooper and Swanson (n.d.:i) regard violence to be the behavioural part of aggression. The behavioural component is clarified by Uys and Middleton (2004:255) to be physical injury to self or others. Violence is defined as the “use of brute force or rough handling of another person or property”, as per the Collins Paperback Thesaurus in A - Z form (1994: 686).

Mason and Chandley (1999:6) agree that violence stems from aggression, in stating that aggression, if not managed, can build up to such an extent that a person may become violent, or act violently towards others. Therefore, violence is seen as the action of aggression towards persons, or the property of self and others.

To conclude, it is noteworthy to mention that the impact of verbal aggression is often overlooked, as it may appear less obvious than physical violence. However, a study by Ilkiw-Lavelle and Grenyer (2003:390) pointed out that the emotional effect of constant exposure to verbal aggression is equally distressing as a single incident of violence. As a result, it has been the underestimated effect of verbal aggression that motivated the researcher to view aggression as a significant part of violence for the purpose of this research project. Furthermore, because of the close connection between aggression and anger, the researcher incorporated both concepts in this study. Participants were made aware of these two definitions in order to provide clarity for the completion of the questionnaire.

Healthcare providers are constantly faced with violence and aggression, as proven by numerous studies being done, such as those by Needham (2004:2), Chen *et al.* (2005:141) and Lewis-Lanza *et al.* (2006:71). These authors all agree that aggression is a common occurrence in the health sector, which will impact on service delivery to varying degrees. The four psychiatric hospitals included in this study is no exception to the rule and subsequently security guards were appointed to all the acute admission units to assist staff in the management of aggression and violence.

Regardless of the attempts by management to ensure a safer work area for staff aggression still occurs in the acute admission units. This situation has been further complicated by factors such as, the out flux of experienced staff from the four psychiatric hospitals included in this study which has led to a situation where newly qualified registered nurses, relying on theoretical knowledge, due to a lack of work experience, must take charge of wards. This has been cited during meetings as one of the possible reasons for the increase in mental healthcare providers' injuries in psychiatric hospitals, as mentioned in correspondence to the management team of one of the four psychiatric hospitals included in this study (Louw, 2001).

### **1.3 PROBLEM STATEMENT**

In view of the previous discussions, management and staff in the four psychiatric hospitals chosen for this study were concerned about the increase in incidences of



violence in the admission units. The researcher elaborates on the current situation in the four psychiatric hospitals in chapter 2 of this thesis. Due to the absence of formal baseline data explaining the attitudes of staff towards the management of aggression and violence in psychiatric patients, the researcher envisaged assessing the attitudes of staff with regards to the management of aggression and violence among patients in four psychiatric hospitals in one of the provinces of South Africa.

## **1.4 PURPOSE AND SIGNIFICANCE OF THIS STUDY**

The purpose for conducting this research was to describe the attitudes of nursing staff in acute admission units towards the management of aggression and violence in four psychiatric hospitals in one of the provinces in South Africa.

This research project should generate valuable baseline data with regards to nursing staff's attitudes relating to the management of aggression and violence in psychiatric patients. Furthermore, the baseline data being generated should be useful in assisting management in implementing appropriate training programmes, focused on addressing possible shortcomings, as depicted by the MAVAS questionnaire.

The significance of the study lies in the academic purposes of:

- Development of new knowledge and adding to the body of knowledge.
- Stimulation of further research into this topic.

## **1.5 RESEARCH QUESTION**

What are the current attitudes of nursing staff towards the management of aggression and violence in acute admission units of four psychiatric hospitals in one of the provinces in South Africa?

## **1.6 AIM OF THIS STUDY**

This study was undertaken to establish baseline data regarding the attitudes of nursing staff towards current management practices of aggression and violence in four psychiatric hospitals in a province in South Africa.

## **1.7 OBJECTIVES**

The objectives of this research were to:

- Determine the mental healthcare providers' attitudes towards the management of mental healthcare user related aggression and violence.
- Propose baseline data that could be used to assist management in implementing appropriate training programmes for mental healthcare providers.

## **1.8 DIVISION OF CHAPTERS**

**Chapter One:** Introduction, problem statement, research questions and objectives of the research.

**Chapter Two:** Literature review.

**Chapter Three:** Research methodology.

**Chapter Four:** Discussion of the findings of the research.

**Chapter Five:** Recommendations and conclusions of the research.

## **1.9 CONCLUSION**

The lack of scientifically generated evidence relating to staff's attitudes of the management of mental healthcare user related violence and aggression in the four psychiatric hospitals chosen for this study, necessitated further investigation to collect data to describe the current status.

In further chapters the researcher will discuss the findings from the literature review, the research methodology followed during this study, the research outcomes and final conclusions made.

# CHAPTER 2

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## LITERATURE REVIEW

### 2.1 INTRODUCTION

This literature review discusses the literature being consulted by the researcher in order to obtain more information on topics related to aggression and violence in psychiatric hospitals.

Leedy and Ormrod (2005:640) define “review” very literally as “looking again” at what other authors have written about a topic chosen by a researcher. Through consulting the literature, the researcher can form an idea as to what research paradigm would be most appropriate for this study (de Vos *et al.*, 2009:83). If appropriate, the literature review should assist the researcher in formulating a hypothesis for a proposed research project (De Vos *et al.*, 2009:93). De Vos *et al.*, (2009:124) further point out that the literature review would reveal whether the proposed study has been done by other researchers.

For the purpose of this study, therefore, the researcher performed a literature review to determine if similar studies had been done in South Africa before. The literature review further helped to define the concepts of aggression and violence more clearly, thus eliminating preconceived ideas by the researcher. In performing the literature review, it assisted the researcher in identifying that the phenomenon of violence and aggression in psychiatric hospitals originates in society and that it has far reaching implications for both the mental healthcare user and the healthcare provider.

In identifying the effects of violence and aggression and the subsequent lack of scientific evidence to support the views of healthcare providers regarding the management of aggression and violence in the hospitals chosen for this study, the researcher concluded that the undertaking of this research project was justified.

Furthermore, the literature review allowed the researcher to organise the information that was collected during this research in a logical way (de Vos *et al.*, 2009:129).

The researcher therefore started this literature review by clarifying the meanings of the concepts of aggression and violence. Subsequently, the general perspectives related to violence and aggression in society and specifically in the healthcare context were discussed. Furthermore, the consequences of aggression and violence and attempts to manage this were pointed out.

In the discussion that follows, the researcher discusses how aggression and violence originates in society and how it is transferred to the healthcare setting. It is further explained how it impacts on healthcare staff and service delivery. The researcher also elaborates on attempts being implemented to assist staff to deal with mental healthcare user related violence and the current situation in the four psychiatric hospitals under investigation.

## **2.2 AGGRESSION**

Prior to this study, the researcher viewed aggression as being a broad term, having different meanings to different individuals. However, in order to understand aggression and violence, it was necessary to make a distinction between these two concepts.

Uys and Middleton (2004:255) support this notion of aggression being a broad term and define it as uttered threats, rather than physical harm. Mason and Chandly (1999:6) describe aggression as a “disposition to show hostility towards becoming violent”, whilst the Penguin Dictionary of Psychology (1995:18) describes aggression as “a desire to produce fear or flight in others”.

These authors thus all agree that aggression is a very broad and general term, used for a variety of acts that involve attacks and hostility, with no real physical harm being done to the victim.

Aggression can take on many forms, varying from verbal aggression in the form of uttered threats and abusive language directed at another person, to actual physical damage inflicted on self, another person, or the property of others, as per Uys and Middleton (2004:255).

However, aggression does not only have a negative connotation. Mason and Chandley (1999:50) point out that aggression might become more acceptable, if displayed in sport, such as rugby. It becomes socially acceptable, because of the notion of “survival of the fittest”, i.e. the stronger team will win the match. Sport is thus regarded a socially acceptable outlet for aggression.

The researcher assumed that aggression implies a means to a goal, based on a statement by Mason and Chandley (1999:4), namely that humans need an amount of aggression to survive daily life. Evidently, aggression seems to have a motivating factor behind it or a possible cause leading to it.

For the purpose of this study, the term aggression was used to point out the negative connotation only, as the experiencing of aggression in psychiatric hospitals does not bear positive repercussions for neither the perpetrator, nor the victim.

## **2.3 VERBAL AGGRESSION**

Verbal aggression can be seen as uttered threats, including the use of profanities towards another person. Verbal aggression and the tone of voice can be considered a good warning of imminent aggression. Mason and Chandley (1999:60) support this by claiming that as a person's voice becomes louder, the potential for violence increases proportionately. Furthermore, Owen, Tarantello, Jones and Tennant (1998:1458) point out that patients, whom repeatedly engage in violent behaviour, give more warning signs of imminent violence as opposed to those not frequently engaging in violent behaviour.

Although the impact of verbal aggression is often overlooked as it is less obvious than physical violence, a study by Ilkiw-Lavelle (2003:390) pointed out that the emotional effect of constant exposure to verbal aggression is equally distressing as a single incident of physical violence.

The effects of verbal aggression as pointed out by Ilkiw-Lavelle (2003:390), motivated the researcher to include both the concepts of aggression and violence for the purpose of this study.

## 2.4 VIOLENCE

Contrary to aggression, violence does not have any positive connotation to it. Also, violence *per se* does not have as ambiguous a meaning to it as aggression.

Cooper *et al*, (n.d.;ii) view violence to be the behavioural part of aggression. The behavioural component is clarified by Uys and Middleton (2004:255) as being physical injury to self or others. Moreover, the Collins Paperback Thesaurus in A - Z form (1994:686) defines violence as follows: “use of brute force or rough handling of another person or property.”

Mason and Chandley (1999:6) confirm that violence stems from aggression, by stating that aggression that is not managed can build up to such an extent that a person may become violent, or act violently towards others. Therefore violence is seen in terms of the action of aggression towards persons, or to the property of self and others.

The WHO defines violence as “The intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community that either results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment or deprivation.” (WHO 2002:5).

Mason and Chandley (1999:6) further state that violence is always harmful and unlawful. Violence can also include the use of weapons and not only mere physical force or strength.

The researcher also consulted different publications and textbooks that address the phenomenon of aggression and violence in the healthcare environment, specifically. This review focused on society, healthcare settings and the current situation in four psychiatric hospitals in a province in South Africa. It focused on how aggression and violence impact on the staff and services rendered, as well as to why aggression and violence are transferred from society into the healthcare setting. This literature review further outlined the strategies being implemented to manage mental healthcare user related violence and the efficacy of the chosen endeavours.

Through the clarification of concepts and the analysis of different authors' views, the researcher realised that aggression and violence reach further than mental healthcare user related violence. The researcher came to the conclusion that aggression is a global phenomenon that may have its origin in society, but that has as one of its ultimate consequences the serious impact on public settings, including mental healthcare, thus necessitating further exploration as to the strategies necessary to deal with the situation.

Mere knowledge of the concepts of aggression and violence does not facilitate the management of aggression and violence, because the perceptions and attitudes of staff dealing with such situations, had not been determined to date. As a result, it was impossible to make recommendations related to the management of aggression and violence, based on a study of the literature only.

The researcher will continue to point out how aggression in society has fed the current situation in the four psychiatric hospitals included in this study. Hence, the need for performing research that focussed on obtaining staff attitudes with regards to how aggression and violence had been managed in the four psychiatric hospitals to date is further emphasised.

## **2.5 AGGRESSION IN SOCIETY**

Aggression is a common occurrence globally, affecting all levels and aspects of society. On any given day, newspapers have numerous reports on violent incidents in society. De Jager (2010:9) for example, reported on a 17 year old boy being assaulted by 10 boys, associated with the Rufty Bundy Kids gang in Eerste River, Western Cape.

Needham (2004:2) asserts that aggression is more than just a societal problem and that it poses challenges to hospitals and care facilities. Levin, Hewitt and Misner (1998:249) explain this statement by Needham as follows: "Hospitals and care facilities are part of society; therefore the clientele admitted to institutions often reflect the values of society inside the hospital setting."



In addition, Zapf, Knorz and Kulla (1996:232) emphasise that high levels of violent crime, drug use and gang activities in a community may contribute to violence in the healthcare setting. Kelleher (1999:170) further states that changing societal norms around the acceptance of aggression will impact on the risk for workplace violence.

The previous statement led the researcher to conclude that violence in general society can be transferred to the hospital setting, since patients bring societal norms into the hospital context.

Even though society does not accept violence and aggression, nor the transfer of aggression into hospital settings, it is evident that society attempts to make sense of this phenomenon, as clarified through a statement by Baumann (1998:81), wherein he refers to the medicalisation of violence through societal statements, such as “No normal person would have done something like this!”

Statements such as these usually render the perpetrator “mad”, as opposed to “bad”, thus further reinforcing misconceptions through false claims that psychiatrically ill people are prone to acts of violence (Baumann, 1998:81). Based on this statement by Baumann (1998:81), it seems as though society attempts to find clarification and acceptance for violence by laying it at the door of the health profession to find possible solutions to manage aggression and violence.

In summary, the above authors all pointed out that because hospitals are situated in environments where violence is an almost daily occurrence, violence could be transferred into the healthcare environment, and hence affect the healthcare setting.

## **2.6 AGGRESSION AND VIOLENCE IN THE HEALTH SECTOR**

Van Rensburg (2007:208) alluded to the fact that changes in society leads to a change the nature of the nurse-patient relationship especially since the passing of the Mental health care act 2000. Similarly, Kelleher (1997:170) claims that if society changes its norms around the acceptance of violence, it will impact on the risk for workplace violence.

The researcher was therefore led to believe that if society refuses to accept violence, the workplace may become less prone to violent incidences.

However, the *status quo* has pointed out that there is global concern about aggression and violence in healthcare centers that has stimulated many research projects. Oostrom and Van Mierlo (2008:320) reported the findings of a British Audit Office survey conducted in 2003, where it was concluded that violence and aggression were identified as the causes of 40% of all reported health and safety incidents amongst healthcare workers. Aggression and violence are such common occurrences in the healthcare sector that Oostrom *et al.*, (2008:321) quoted Badger and Mullan's (2004), claim that the percentage reported by the British Audit Office survey may have been higher than 40%, because violent encounters are often not reported.

Different approaches to understand aggression have been followed; from the studying of staff and their perceptions of violence to patient perceptions, with subsequent comparisons of the outcomes of these studies.

In addition to these studies, attempts were also made to study positive predictors of violence in an attempt to prevent possible occurrences of violence in the health sector.

In the United Kingdom, Monahan, Steadman, Appelbaum, Robbins, Mulvey, Silver, Ross and Grisso (2000) implemented an actuarial tool, aimed at assessing the risk of violence in both hospitalised and discharged psychiatric patients. The motivation for implementing this new instrument was based on the findings of other studies, indicating that existing tools being used posed problems with clinical implementation. Subsequently, Monahan *et al.*, (2000:312) designed and implemented the Iterative Classification Tree (ITC). The ITC allowed for greater combinations of different risk factors in order to predict violence. The ITC was based on a question posed and depending on the answer given, it would lead to subsequent questions down a contingency in the tree, resulting in a final answer, indicating the risk for violence.

However, this study pointed out limitations as to the honesty of answers by respondents and the application to other settings, such as general hospitals and forensic hospitals. Furthermore, Monahan *et al.*, (2000:318) noted that this tool only

indicated the risk for violence and did not offer any solutions to the management of identified risk factors.

Such studies are invaluable to the health profession. However, contrary to the ability to predict violence and aggression, it is not uncommon for psychiatric hospitals to have to deal with first admissions being acutely psychotic and aggressive, making it impossible to predict the risk of violence, due to an absence of clinical history and a lack of co-lateral information from family members on arrival of such a client (Monohan *et al.*, 200:318). This was confirmed in a study by Milton, Admin, Singh, Harrison, Jones, Courdace, Medley and Brewin (2001:438), wherein aggression was reported to escalate on first contact with health services.

## **2.7 THE IMPACT OF AGGRESSION AND VIOLENCE ON THE HEALTH SECTOR**

Healthcare providers are constantly faced with violence and aggression, as proven by numerous studies being done, such as those by Needham (2004:2), Chen *et al.*, (2005:141) and Lewis-Lanza *et al.*, (2006:71). These authors all agree that aggression is a common occurrence in the health sector, which will impact on service delivery to varying degrees.

Violence and aggression impact severely on both society and healthcare providers. This is evident from the conclusion drawn by Chen *et al.*, (2005:141) from their research, namely that the threat of violence increases the anxiety levels amongst nurses and subsequently leads to negative attitudes towards patients. Consequently negative attitudes towards patients could lead to unnecessary harsh application of ward rules, including the use of seclusion as a means of managing aggression, as pointed out by Brennan (1999:31). According to Ilkiw-Lavelle and Grenyer (2003:392) also, violence and aggression evoke fear in staff members. These emotional reactions by staff members may lead to complications in treatment regimes, due to splitting and disagreement amongst members of the multi-disciplinary team (Rossberg, 2003:1388).

A situation of great concern is thus pointed out by Brennan (1999:31) in his statement that if healthcare providers experience fear, the quality of care they deliver might suffer.

Similarly, Saverman, Astrom, Bucht and Norberg (1999:43) observed that aggressive patients in long term care may be treated more forcibly by staff, be restrained more frequently and face the possibility of abuse by caregivers. Furthermore, Roos (2005:53) quoted Kus (1990), who claimed that taking care of unpopular patients might lead to job dissatisfaction, which may influence absenteeism from work.

As much as constant exposure to aggression can increase anxiety, the opposite effect was also observed by Lewis-Lanza *et al.*, (2006:72), who documented that psychiatric nurses are so often exposed to workplace violence that it becomes a norm as opposed to a rare occurrence. Accepting violence and aggression as the norm may cause the under reporting of incidences of violence and non compliance with participation in de-briefing after exposure to violence and aggression, as cited by Lewis-Lanza *et al*, (2006:73). These findings were supported in a Power Point presentation by Dr. Victor Litlhakanyane (2004), wherein he indicated that incidences of patient related violence go unreported, because staff fear being blamed by colleagues.

Constant exposure to violence and aggression may also impact on staff retention in psychiatric hospitals. In support of the effect of violence on the health sector, Arnetz and Arnetz (quoted in Oostrom & Van Mierlo, 2007:321) state that workplace violence leads to increased staff absenteeism, early retirement and a reduction in the quality of care, all of which hold substantial financial implications for organisations.

In summary, violence and aggression have a negative impact on the hospital as institution, the nursing staff, as well as the client as user of the service. The impact can be classified as financial and quality implications for the hospital, due to staff absenteeism, lower retention rates and injuries on duty. Nursing staff on the other hand suffer from emotional and physical trauma, leading to higher rates of absenteeism, subsequently affecting the patient, due to staff shortages, or harsher application of ward rules, resulting in less effective treatment regimes.

## **2.8 THE PROFILE OF THE VICTIM OF PATIENT RELATED VIOLENCE**

The researcher had noticed that some colleagues were repeated victims of patient related violence and aggression. Duxbury, Hahn, Needham and Pulsford (2008:596) shed some light on this observation by indicating that nurses' attitudes influence the manner in which patient related incidents of aggression and violence is managed. In support, Whittington and Wykes (1994:85) identified a cyclical model of violence to psychiatric nurses, this model claims that violence leads to stress resulting in impaired staff performance with a subsequent adoption of behaviours that might make the re-occurrence of violence more likely. This observation was of great concern to the researcher, as there was a lack of data describing the staff's attitudes towards the management of aggression and violence in the four psychiatric hospitals included in this study.

In addition, numerous studies have focused on the profile of staff being assaulted by mental healthcare users. Duxbury (2002:325) quotes Vanderslott (1998), who reported that male nursing staff were more frequently attacked than female staff, pointing out that it was most probably due to the male nursing staff being more involved in the containment of outbursts. Furthermore, Cooper *et al*, (n.d.) quote Arnetz (1998) and point out that younger female workers pose a higher risk for being the victims of violence.

It is the researcher's opinion, however, that compared to males, female healthcare providers are softer targets of violence, because they cannot physically measure up to aggressive male patients. During her experience in acute admission units, the researcher had observed that female nurses were more often challenged by aggressive female mental healthcare users than their male colleagues.

Furthermore, because nursing is still a predominantly female profession in South Africa, it has lead to a situation where the majority of nurses working in the acute admission units of the four psychiatric hospitals included in this study, are female, thus further complicating the management of aggressive male mental healthcare users.

Since 1997, there has been a noted out flux of experienced staff from the four psychiatric hospitals included in this study, leading to a depletion of the amount of experienced staff, thus adding to complications in dealing with aggression and violence.

## **2.9 PREDICTORS OF PATIENT RELATED VIOLENCE**

Coinciding with the out flux of experienced staff and reported changes in the patient population, is a reported escalation of patient related violence and aggression.

Noted changes in the client population over the past few years, from people who suffer from conditions such as schizophrenia, depression and bipolar mood disorder, to a majority of mental healthcare users suffering from substance induced psychosis, have been linked to an increase in reported incidences of violence (Koen 2003:254). Changes in the patient population have been evident from the average discharge diagnosis over the past 10 years. The researcher as a member of the management team of the four psychiatric hospitals noted that four more admission units had to be commissioned during the past 10 years to accommodate the increase amount of admissions.

Due to the nature of the pathology associated with substance induced psychosis, there has been a sharp rise in the incidence of aggression. Koen (2003:254) proved a link between substance abuse and violence in male mental healthcare users with schizophrenia, as supported by similar findings by Milton *et al.*, (2001:439).

## **2.10 THE SITUATION IN THE FOUR PSYCHIATRIC HOSPITALS**

The out flux of experienced staff from the four psychiatric hospitals included in this study has led to a situation where newly qualified registered nurses, relying on theoretical knowledge, due to a lack of work experience, must take charge of wards. This has been cited during meetings as one of the possible reasons for the increase in mental healthcare providers' injuries in psychiatric hospitals, as mentioned in correspondence to the management team of one of the four psychiatric hospitals included in this study (Louw, 2001).

In comparison with studies done off the African continent such as done by Oostrom *et al*, (2008:320), the situation in the four psychiatric hospitals included in this study reflects a similar picture. These four psychiatric hospitals have experienced an increase in incidences of aggression and violence in all forms, as has been evident from reported incidents in these hospitals.

As far back as 2001, a doctor, the director of the four psychiatric hospitals included in this study, was quoted in the Cape Argus (Viall & Johns, 2001:1), stating that “We’re also noticing that patients are much more aggressive, which is a burden on our staff, and on our policy of not over-medicating patients.” This article further quotes the statement by another doctor that “There has been a huge increase in dangerous mentally ill criminals” (Viall & Johns, 2001:5).

The researcher’s interest in aggression and violence in the mental healthcare setting had led her to do a mini survey, using a group of students undergoing the one-year course in psychiatric nursing science. The survey focused on the perceptions of these students with regards to exposure to violence and aggression and the management thereof.

The results showed that all of the students had been victims of patient related aggression, and had witnessed colleagues being verbally and physically assaulted by psychiatrically ill patients. Furthermore, these students reported incidents, where they were of the opinion that the way in which clients had been managed was a direct cause of aggression, due to provocation, or patronising behaviour of staff.

The participants in this survey had between 5 to 15 years of experience in working with psychiatrically ill clients in the four psychiatric hospitals included in this study. However, the participants were employed as either nursing auxiliaries or enrolled nurses, who subsequently underwent the bridging programme in order to qualify as registered nurses. These students, regardless of their experience in psychiatric hospitals, had no formal training in psychiatric nursing science.

These findings from the mini survey correlated well with a formal study done by O’Connell, Young, Brooks, Hutchings and Lofthouse (2000) in Australia. They reported that 95% of participants had been on the receiving end of verbal abuse,

whilst the mini survey during this study showed that 87% (n=13) of participants had been on the receiving end of verbal abuse.

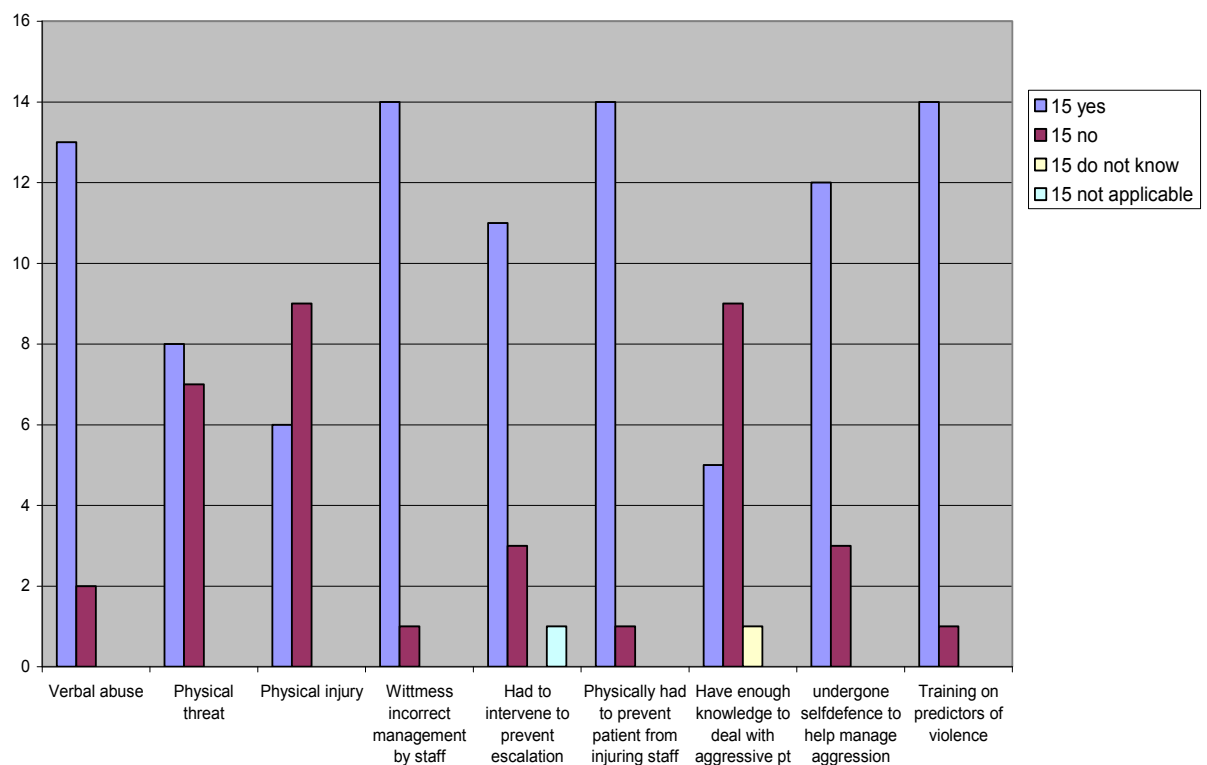


Figure1: Responses during mini survey by healthcare providers regarding experiences of aggression in the four psychiatric hospitals included in this study.

The researcher was concerned about the number of respondents; n=14 who declared that they had witnessed incorrect management by staff as a possible cause of the escalation of aggression. Furthermore n=9 (nine) respondents did not know if they themselves had enough knowledge to deal with the aggressive client, whereas 5 (five) stated that they did not have enough knowledge, whilst n=1(one) respondent was unsure if his / her knowledge level had been sufficient.

These results, as represented in the above graph, confirmed that staff was in need of being skilled with regards to the management of aggression and violence. n=14 of the 15 respondents however indicated that they had received training on the predictors of violence.



## **2.11 CONSEQUENCES FOR VIOLENT MENTAL HEALTHCARE USERS IN PSYCHIATRIC HOSPITALS**

On the advent of the implementation of the Mental Health Care Act no 17 of 2002, mental healthcare users and staff were made aware of the rights of the mental healthcare user. In the specific province, it is further required that each person admitted to any of the four psychiatric hospitals included in this study, be given a card with the contact details of the Mental Health Review Board of that specific province, and with the rights of the client being spelled out on this card. In the event of a client being so out of contact with reality that (s)he does not understand what his / her rights are, a card is given to the family for reference. As soon as the client shows a reasonable understanding of his environment, (s)he is issued with the necessary card for own personal reference.

Mead and Bower (2000:1087) refer to a study by Grol *et al*, (1990), wherein the researchers state that information enables patients to take greater responsibility for their health, and that patients cannot be seen as passive recipients of medical care any longer. However, they further cite Gilson *et al*, (2004) who indicate that through being more aware of their rights and being more demanding in their requests, conflict arises between the nurse and the patient. This is especially true when patients, who are hospitalised as involuntary users and deemed not to be capable of making informed decisions, become demanding as to what they deem their rights to be.

The researcher agrees with the finding by McIntyre and Klugman (2003), stating that nurses have indicated that they feel their rights have been ignored, whilst the rights of the patients are being protected. The researcher has witnessed verbal allusions to this claim on numerous occasions, during informal conversations with colleagues.

In the event of mental healthcare user related violence and aggression, where the client poses a threat to him- / herself and others, it is the practice to sanction such behaviour by means of prescribing single seclusion. In a study, Duxbury (2002:325) confirmed that in a reported 70% of incidents that involved verbal abuse or threat, “traditional methods” were used to manage these incidents. Duxbury (2002:325) clarified these “traditional methods” to be the use of medication, seclusion, or

restraints. Incidentally, Duxbury (2002:325) reported that 47% of clients who were managed by means of traditional methods, viewed this control measure by staff as part of the problem of client related aggression.

Canatsey, Bermudez and Roper (1994:13) agree by stating that some therapeutic matters that often include managing an aggressive person in a confined area, can actually increase aggression in the client, thus impinging on the therapeutic plan devised for the client. In support of Canatsey *et al*, (1994:13). Ilkiw-Lavelle, Brin and Grenyer (2003:392) reported that mental healthcare users had indicated that being prevented from leaving the hospital increased feelings of aggression.

Fisher (1994:1589) also feels that the use of restraints and seclusion can have deleterious physical and psychological effects on patients and staff. Fisher further indicates that numerous non clinical factors sometimes have a greater impact on the use of seclusion and restraints than mere aggression and prevention of injury. Fisher points out that cultural bias and staff role perception may influence the rates of restraint and seclusion.

The above led the researcher to perceiving involuntary hospitalisation and the use of seclusion and restraints as a dichotomous situation, whereas the measures used to manage aggression have also been identified as causes of aggression.

On the contrary, in support of these practices, a medical doctor wrote a letter to the editor of Psychiatric Services, in which he pleaded not to reduce restraints and seclusion for aggressive patients, since a study in Pennsylvania in the United States (US) had proven a 30% increase in assault rates after attempts to reduce these mechanisms (Becker, 2007:1227).

Ilkiw-Lavalle *et al*, (2003:389) reported during a study that staff were of the opinion that in order to manage aggression, it was necessary to change the patient's medication. This statement directly contradicts a general statement by a doctor, the Director of the four psychiatric hospitals included in this study, namely that over-medication contravenes the policy (Viall & Johns, 2001:1).

Contrary to staff perceptions, the clients as reported in a study by Ilkiw-Lavelle *et al*, (2003:392) felt that staff should spend more time explaining the use of medication

and the need for compliance, as the administration of medication had been cited by these patients as a trigger for aggressive behaviour.

As seen in the previous discussion European countries and the USA use restraints as part of managing violent and aggressive clients, the four psychiatric hospitals included in this study do not use any form of physical restraint. The only options available in these four hospitals are sedation and seclusion in a single room in the event that a client poses a threat to himself or others.

## **2.12 STRATEGIES IMPLEMENTED TO IMPROVE STAFF'S ABILITIES TO DEAL WITH AGGRESSIVE CLIENTS**

Training and education are the departure points of any organisation aimed at assisting employees to deal with work related violence and aggression. Training, focussing on the prediction and prevention of violence and self-defence, has been cited as valuable in reducing violence and aggression and the effects on staff (Fisher, 1994:1584). Chappell and Di Martino (2000:22) agree by urging employers to implement programmes to equip staff with the skills to deal with aggression and violence.

The human resource (HR) department of Hospital C implemented self defence training courses on 6 August 2002 to equip staff with the skills to defend themselves against mental healthcare user related violence.

This endeavour has unfortunately proven unsuccessful, as demonstrated by an incident in which a mental healthcare user was admitted to hospital C on 8 November 2002. He was hospitalised involuntarily and due to aggression was immediately placed in seclusion. The client remained verbally aggressive and threatening from the day of admission up to the recorded incident on 11 November 2002. The mental healthcare user managed to force his way out of a seclusion room and in the process injured 1 (one) registered nurse, 1(one) nursing auxiliary and 1 (one) security official. He smashed a shutter proof window, a solid wooden door and the "vibracrete" (cement slabs) wall in the backyard of the ward. This incident happened after the staff had attended the self-defence course.

As self defence did not seem to be a solution, it was the opinion of the researcher that a study regarding the current attitudes of staff towards the management of aggression and violence among mental healthcare users should be conducted, in order to clarify the issue.

## **2.13 POLICIES AS STRATEGY TO MANAGE AGGRESSION**

Policies can be compared to a recipe when baking a cake. In order to bake a cake successfully, the recipe acts as guideline. Policies should be put in place to act as guidelines when staff are confronted with mental healthcare user related aggression. These policies should also guide the employer to provide the mental healthcare provider with skills to render safe patient care.

Mason and Chandley (1999:106) describe the use of policies as a tool by management to inform staff with regards to their practices and the organisation's guidelines to prevent transgressions in the execution of their duties.

Mason and Chandley (1999:107) further infer that although the implementation of policies may not be lawfully enforced; it is a moral obligation of the employer to provide employees with guidelines and training to manage aggression and violence.

In recognition of the serious nature of violence and aggression, in 2005 the WHO published a Mental Health Policy and Service Guidance package to assist the training of staff in mental health. These policies are necessarily implemented to improve the mental health of both the individual and the population, to provide the greatest possible care with the human resources available and to provide a service to those in need.

Furthermore, the WHO (2005:59) advises on strategies such as the training of staff to improve negative staff attitudes towards mental healthcare users. The WHO (2005:59) further points out that if the attitudes of staff are addressed through training, they should treat people with mental healthcare disorders with as much respect as other healthcare users.

The specific Provincial Government where the four psychiatric hospitals being investigated are situated, issued Circular 125 of 2002. This circular comprises a “Policy and Guidelines for the management of High-risk (*sic*) and High security patients”. This policy, however, is more concerned with the management of alleged gangster members, awaiting trial prisoners and convicted prisoners. Regarding the aggressive disoriented patient, being referred to as a high risk patient, the circular only mentions that “This patient is to be managed according to the appropriate management protocol”.

The assumption was thus made that all healthcare facilities should have appropriate management protocols.

Apart from the implementation of training programmes and self defence techniques, Foster *et al*, (2005:357) report on staff and patient awareness programmes in New South Wales, where a zero tolerance campaign to violence and aggression was launched. The aim of this campaign was to make staff and patients aware that violence and aggression were unacceptable and may result in refusal of treatment if such incidents occurred in medical and surgical wards. Staff also received training in the management and prevention of aggression and violence. Foster *et al*, (2005:360) report a 30% decrease in the incidence of violence after the campaign was launched and a 99% decrease in days lost due to work place violence.

During this literature review, the researcher found a protocol in only one of the four psychiatric hospitals included in this study, as named in Afrikaans, “Protokol vir hantering van aggressiewe of onbeheerbare pasiente.” (translated as ‘Protocol for the management of aggressive or uncontrollable patients’). This protocol addresses the signs of violence, strategies to calm the client and methods to physically restrain a violent person. The strategies being advised are written in generic terms, such as “keep calm” and “acknowledge the client’s feelings”, which assume that a person has the necessary skills to perform these actions. However interpersonal skills are not naturally part of an individual’s make up and should usually be taught, especially in relation to the psychiatric context.

During 2008, the researcher was involved in compiling a manual and in providing training to assist staff in district hospitals to deal with aggressive mental healthcare

users. This training manual currently acts as provincial guideline for the management of aggression. Presentations of this manual were provided to staff in the district hospitals only, whilst no roll-out of the programme was done to any of the four psychiatric hospitals included in this study.

In view of this, the researcher proposed to conduct this descriptive survey to determine the current attitudes of staff with regards to the management of aggression and violence in psychiatric hospitals. Knowledge of the current situation may provide information that could be used to implement policies and training based on scientific evidence.

## **2.14 CONCLUSION**

Aggression and violence as a societal phenomenon reaches further than society alone. Because hospitals are societal institutions, psychiatric clients may transfer violence and aggression into hospitals. The result of societal violence and aggression being transferred into the healthcare environment, impacts on the management of those clients with a tendency towards violence and aggression.

Staff can either react with fear, or apply ward rules more harshly. The way in which staff react towards aggression will impact on the care being given to the client and effectively also on the way that the client will reciprocate on the care received.

Bearing the above in mind, the healthcare institution consequently suffers financially, due to poor staff retention, absenteeism associated with the effect of exposure to a violent milieu, as well as due to a decrease in skills and quality of services.

The absence of scientific data made it difficult to fully reflect the impact of violence and aggression in the four psychiatric hospitals included in this study. It furthermore complicated the implementation of programmes to improve staff capacity to deal with violence and aggression. Research into the current attitudes of staff towards the management of aggression and violence should thus provide programme developers with the necessary information to adapt training programmes and to implement policies to suit the needs of staff in these four psychiatric hospitals, as well as to inform clients of the stance of staff and management towards aggression and

violence. Of importance is that the client is in a vulnerable position when s(he) is admitted to an institution (Johansen & Lundman, 2002:639). Hence the emphasis to create a helpful and supportive environment for the patient.

# CHAPTER 3

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## RESEARCH DESIGN AND METHODOLOGY

### 3.1 INTRODUCTION

This chapter describes the methodology being followed during this study, elaborates on the aims of this study and how the researcher decided on the instrument to be employed. The procedure that was used during data collection, as well as sample selection and the ethical considerations during the research process are described. A discussion of the data analysis methods that were utilised concludes this chapter.

As noted in the introduction and in the literature review, aggression is a common phenomenon in healthcare settings throughout the world, with numerous studies that have investigated the occurrences and effects of aggression and violence on healthcare staff. Duxbury (2003:39) designed and tested a Management of Aggression and Violence Attitude Scale (MAVAS) to determine staff's attitudes towards such violence.

### 3.2 METHODOLOGY

#### 3.2.1 Research approach and design

According to Babbie *et al*, (2003:92), a descriptive cross sectional study is designed to study a phenomenon at one specific point in time. Therefore, in this research project the researcher studied the attitudes of staff in the admission units of four psychiatric hospitals in one of the provinces of South Africa, in order to determine their attitudes towards the management of aggression and violence at the time.

As pointed out by Babbie *et al*, (2003:78), the research design can either be empirical or non-empirical in nature. Surveys in which primary data is used are empirical studies.



Mouton (2003:152) classifies surveys that collect numeric data as quantitative studies, as this type of research aims to provide an overview of a representative sample of a large population.

Based on the above definition and the way that data was collected by means of a survey that had, until this research, not been performed before, this project was classified as a quantitative design with an empirical methodology, namely a descriptive, cross-sectional survey. (Babbie *et al.*, 2003:92)

### **3.2.2 Study area, Population and Sampling**

#### **3.2.2.1 Study area**

This research was conducted in four separate psychiatric hospitals in one of the provinces in South Africa, each serving a different geographical area within the borders of this province.

These hospitals were combined into one region by their director. The four hospitals were identified as hospitals A, B, C and D for the purpose of confidentiality.

**Hospital A** is a care and rehabilitation facility for persons with intellectual disabilities, varying from mild to profound intellectual disabilities. Hospital A also manages clients with a dual diagnosis of intellectual disability and acute psychiatric illness.

**Hospital B** was the largest of the four hospitals and provides two separate services, namely psychiatry and intellectual disability. Hospital B also provides acute and therapeutic psychiatric services, female forensic services and it has a child and adolescent unit.

**Hospital C** provides acute and therapeutic psychiatric services and specialises in psycho geriatric services, alcohol rehabilitation and opioid detoxification.

**Hospital D**, the oldest of the four hospitals, provides acute and therapeutic psychiatric services and forensic services for male clients.

The researcher conducted this research in the acute admission units of these four hospitals, as most of the incidences of violence are being reported in these units.

The researcher investigated a total of 8 (eight) admission units, which represented all the acute admission wards in the province.

### **3.2.2.2 Population**

The participants in this research project were nursing staff working in the total of 8 acute admission units of the 4 hospitals. The nursing staff consisted of 4 (four) categories of staff, namely a total of 12 unit managers, 76 registered nurses, 11 enrolled nurses and 63 enrolled nursing auxiliaries. The total population was (n=162). The identified staff categories used in this survey were in line with the occupational specific dispensation structures of South Africa.

The researcher only selected nursing staff to participate in this study, based on the fact that this group of healthcare professionals are mostly in contact with the patients and provide care to patients for a total of 40 hours per week (160 hours per month), as opposed to other multidisciplinary team members who only have contact for about one hour per week per patient. The option to use nursing staff only was supported by a study by Cooper *et al*, (n.d.:10), in which they refer to Aquilina (1991), Binder and Mc Niel (1994), Bjorkley (1999), and Carmel and Hunter (1989), stating that “Although there is a high risk of workplace violence across all health-care occupations... it is the members of the nursing profession who are most at risk”.

### **3.2.2.3 Sampling**

Babbie *et al*, (1992:192) define sampling as “selecting observations”.

According to Polit and Hungler (1999:279), “sampling is the process of selecting a portion of the population to represent the entire population”.

De Vos *et al*, (2005:195) indicate that it is not always possible to select a sample if the total population is very small, in which case it is advisable to use the whole population. The smaller the population is, the higher a percentage is selected in order to make the sample representative (De Vos *et al*, 2005:196). De Vos *et al*, (2005:196) refer to a guideline for sampling drawn up by Stoker (1985). This

guideline suggests that a population of 50 should be 64% representative, i.e. 32 respondents should be selected. Based on the discussion by De Vos *et al*, (2005:195), the researcher did not select a sample, but used the whole population instead.

Due to the small nature of the target population (N = 162), the researcher decided to study the whole population, namely all the permanent mental healthcare providers doing day and night duty in the 8 acute admission units of the four psychiatric hospitals included in this study. The total population used is summarised in table 3.1.

**Table 3.1: Research population**

	HOSPITALS				
CATEGORIES	A	B	C	D	TOTAL
Unit Managers	n1	n7	n2	n2	N12
Registered Nurses	n12	n36	n14	n14	N76
Enrolled Nurses	n2	n6	n1	n2	N11
Enrolled Auxiliary Nurse	n6	n27	n14	n16	N63
TOTAL	N21	N76	N31	N34	N 162

The method used by the researcher to “select units of observation” (Babbie *et al*., 1992:192), is referred to as purposive sampling. According to Babbie *et al*, (2003:167), “Occasionally it may be appropriate for you to select your sample on the basis of your own knowledge of the population, its elements, and the nature of your research aims...” Purposive sampling is further defined by Trochim (2006) as selection with a “purpose in mind.” The researcher selected the admission units, as most reports of aggression and violence are being reported by these wards.

Purposive sampling is a type of non-probability sampling. For the purpose of this study the researcher selected all 162 permanent, mental healthcare providers on day

and night duty, dealing with psychiatric patients in the admission units of the four psychiatric hospitals included in this study.

The researcher further applied stratified sampling to the population by dividing the population into the subgroups of unit managers, registered nurses, enrolled nurses and enrolled auxiliary nurses (table 3.1). According to Trochim (2006), the stratification of the sample will ensure greater statistical accuracy.

The researcher therefore made use of stratification within the purposive sample. The researcher further made use of random stratified sampling for the purpose of conducting a pilot study. The criteria by which the randomized sampling was done, is discussed below under the discussion of the pilot study.

#### **3.2.2.4 Inclusion criteria**

All the permanent staff, scheduled to work in the acute admission units of the four hospitals chosen for this study, were included as participants. Therefore, only staff, working with mental healthcare users in the wards for a total of 160 hours per month, were included in this study.

Only those staff who directly interact with mental healthcare users as part of their job description were included.

Only staff members with basic reading and writing skills were included to partake in the survey, as the questionnaires were self administered.

#### **3.2.2.5 Exclusion criteria**

The general workers (cleaners) and security staff were excluded from this study, as it was outside of their job descriptions to work directly with any patient. This point of departure by the researcher was supported by a statement by Cooper and Swanson (n.d.:10), in which they refer to Aquilina (1991), Binder and McNiel (1994), Bjorkley (1999), and Carmel and Hunter (1989), stating that “Although there is a high risk of

workplace violence across all health-care occupations... it is the members of the nursing profession who are most at risk.”

### 3.3 PILOT STUDY

The researcher conducted a pilot study beforehand to test and verify the suitability and accuracy of the proposed questionnaire, used to collect data during the main survey. The pilot study was a 10% (n=15) representation of the whole population chosen. The researcher decided on selecting the pilot group by means of randomised selection within each subgroup.

**Table 3.2: Selection of research population for the pilot study**

	HOSPITALS					
CATEGORIES	A	B	C	D	TOTAL	Total population chosen for the pilot study
Unit Managers	n1	n7	n2	n2	N12	n 1
Registered Nurses	n12	n36	n14	n14	N76	n7
Enrolled Nurses	n2	n6	n1	n2	N11	n1
Enrolled Auxiliary Nurse	n6	n27	n14	n16	N63	n6
TOTAL	N21	N76	N31	N34	N 162	n15

Participants of the pilot study were excluded from the main survey. The researcher and research assistant informed the participants during briefing for the primary study that those candidates who participated in the pilot study would be excluded from the primary study and should not resubmit questionnaires or consent forms.

The researcher made use of stratified random sampling and used a dice to ensure that each participant of this study would have an equal chance of being selected for participation in the pilot study.

The researcher used an excel spreadsheet (table 3.3) and plotted the amount of nurses per category in each hospital in black font. The researcher then allocated each staff member per category a number between 1 - 6 in red font on the spreadsheet. The researcher threw a dice once for each group of 6 participants (twice for 12 participants, i.e. two subgroups of 6 participants each). When the dice landed on 5 in the category for unit managers, the researcher selected the 5<sup>th</sup> participant in the first subgroup of six, namely participant 3 from hospital B as per excel spreadsheet. This was repeated a second time, because the category for unit managers throughout the four psychiatric hospitals included in this study had a total of 12 unit managers.

In the category of unit managers for example, having a total of 12 participants, only 1 participant could be included in order to meet the 10% (n=15) per category criterion for selection for the pilot study. After throwing the dice twice for the two groups of six, the researcher had selected 2 staff members of which one had to be selected for the pilot study. The researcher then allocated numbers 1, 3 and 5 to participants one and 2, 4 and 6 to participants two. The researcher again threw the dice, which landed on 6, thus selecting participant two. The researcher used the same method to select if the participant chosen should be selected from a male or female admission unit.

Where the groups could not be divided into exactly 6 participants, the researcher allocated the numbers as for all the categories, but when throwing the dice, discarded the fall of the dice if it landed on a number higher than the amount of participants in a specific selection.

In those sub categories where the researcher had a group larger than 6, after the initial throw of the dice, the researcher again applied the principal of allocating the numbers 1 - 6 to these categories and again threw the dice to draw the final 10% (n=15) per category.

The following table 3.3 shows the first throw of the dice, highlighted in yellow, and the second and final throw of the dice for the 10% (n=15) selection out of the yellow marked participants, highlighted in red.

**Table 3.3: Random stratified selection of participants for the pilot study from the total population**

SELECTION OF SUB CATEGORIES FOR PILOT STUDY																								
Nursing category	Hospital A						Hospital B						Hospital C						Hospital D					
Unit Managers	1	2					3	4	5	6	1	2	4	5					6	1				
	1	2					1	2	3	4	5	6	1	2					1	2				
							3																	
							7																	
Registered Nurses	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	3	4	5	6	1	2
	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	3	4	5	6	1	2
	7	8	9	10	11	12	7	8	9	10	11	12	7	8	9	10	11	12	7	8	9	10	11	12
							1	2	3	4	5	6	1	2					3	4				
							13	14	15	16	17	18	13	14					13	14				
							1	2	3	4	5	6												
							19	20	21	22	23	24												
							1	2	3	4	5	6												
							25	26	27	28	29	30												
							1	2	3	4	5	6												
						31	32	33	34	35	36													
Enrolled Nurses	1	2					3	4	5	6	1	2	3						4	5				
	1	2					1	2	3	4	5	6	1						1	2				
Enrolled Nursing Auxiliaries	1	2	3	4	5	6	1	2	3	4	5	6	4	5	6	1	2	3	6	1	2	3	4	5
	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
							1	2	3	4	5	6	4	5	6	1	2	3	6	1	2	3	4	5
							7	8	9	10	11	12	7	8	9	10	11	12	7	8	9	10	11	12
							1	2	3	4	5	6	4	5					6	1	2	3		
							13	14	15	16	17	18	13	14					13	14	15	16		
							1	2	3	4	5	6												
							19	20	21	22	23	24												
							1	2	3															
							25	26	27															

Conducting a pilot study is of tremendous benefit to the researcher, since according to Burns and Grove (1997:44), it allows the researcher to assess the feasibility of conducting the large scale research project. Furthermore, the outcomes of a pilot study should determine if research respondents understood the questions in the questionnaire and whether the questions were unambiguous. On completion of a pilot study the researcher should be able to determine the suitability of the instrument and whether the data collection method would be appropriate for the main survey.

Following the pilot study the researcher confirmed that the data collection method proposed by the researcher was effective and that the respondents had no difficulty in completion of the questionnaires.

### **3.4 INSTRUMENTATION**

It was the opinion of the researcher that the use of a structured questionnaire would be the most appropriate for this study, as per Marshall and Rossman (2006:133), who state that questionnaires facilitate the analysis and validation of data because data is easily categorised. The data is easily managed, quantified and amended for statistical analysis. The data can be generalised more easily. In addition distant participants can be easily reached and the processing of data is more cost effective time and money wise.

Duxbury (2003:39) identified a lack of research projects focusing on staff and clients' views concerning aggression and violence in the psychiatric context. She subsequently devised a tool to test the respective views of both clients and staff members regarding current approaches being used to manage patient aggression. The Management of Aggression and Violence Attitude Scale (MAVAS) was designed to incorporate views related to the management of aggression and violence that Duxbury found lacking in other measure instruments (Duxbury, 2003:42). The MAVAS has been designed for use as either a visual analogue scale, or a structured questionnaire.



Duxbury (2003:43) quotes McColl (1993) and points out that questions about related topics, if grouped together, can lead to response bias. Initially, the questions in the MAVAS questionnaire, compiled for this study, were not grouped together, nor did they follow from general to specific. However, a sub scale classification manifested itself during the pilot study, when conducted during this study. The questions were then classified under sub headings, titled Internal, External, Situational / Interactional and Management factors.

The reliability of the questionnaire had been determined during a study by Duxbury in 2003.

Subsequently, permission was obtained from Dr. J.A. Duxbury to use the MAVAS questionnaire (Annexure 1). The MAVAS questionnaire is self administered and consists of 27 close ended questions. The responses are spread over a 4-point Likert scale, with a scoring between 1 - 4. The lowest score (1) indicates agreement and the highest (4) score disagreement.

However, the researcher had to adapt one of the questions in the original MAVAS questionnaire that questioned staff on the use of restraints. As restraints are not used in the four psychiatric hospitals included in this study, the researcher substituted this question.

Question 11 was rephrased to suit the situation in the hospitals chosen for this study. Therefore, for the purpose of this research, the question was adapted from the original question, i.e. "Patients who are violent are often restrained for their own safety." to "Patients who are violent are often physically restrained to administer medication."

Due to this change to the original questionnaire, it was necessary to run a pilot test on the adapted questionnaire to confirm the validity and reliability thereof. Burns and Grove (1997:44) encourage a pilot study, as it allows the researcher to detect any problems and make the necessary changes before conducting a large scale study.

### **3.5 DATA COLLECTION, MANAGEMENT AND ANALYSIS**

#### **3.5.1 Data collection**

The researcher collected data by means of a structured MAVAS questionnaire. The MAVAS questionnaire is a self administered assessment tool to assess staff's attitudes towards the management of aggression and violence. Separate from, the MAVAS questionnaire, the respondents each completed a consent form prior to participation in the research.

Due to the researchers prolonged employment at one of the four hospitals included in this study (hospital C), the researcher used an assistant to distribute and collect the questionnaires and consent forms to the two acute admission units in that hospital. The researcher opted for this procedure to avoid bias, as the presence of the researcher in that situation may have effected the completion of the questionnaires, due to her acquaintance with the participants, possibly causing the respondents to model their answers as to what they thought the researcher might have expected (Leedy & Ormrod, 2005:209). The assistant was a friend of the researcher and a registered nurse, who was unacquainted with staff in that hospital. The researcher trained and prepared the assistant regarding all the expectations and procedures to follow, prior to delivering the questionnaires and consent forms.

The researcher personally delivered and collected the questionnaires to the acute admission units of the remaining three psychiatric hospitals included in this study.

The questionnaires were placed in one envelope and the consent forms in another for each of the four hospitals. Each participant was given an envelope in which to place the questionnaire after completion to ensure confidentiality. Distribution at the wards started from 07:00 on the Monday morning. The researcher spent 3 hours at each of the three hospitals. The researcher and assistant explained the aim of this study and made follow up visits to the wards on the Wednesday to meet and inform the other staff, whose shifts commenced that morning. The researcher followed this procedure in order to ensure direct contact with both groups of staff. The researcher and assistant collected the completed questionnaires on the Thursday between 10:00 - 14:00. This gave all respondents one and a half days to complete their questionnaires by the end of their respective shifts at 18:00. The respondents were

asked to place the completed questionnaires into the provided envelope and to seal it.

Since dr. Duxbury indicates on the MAVAS questionnaire that it takes 10 minutes to complete, the researcher and assistant informed participants of the time it would take to complete the questionnaire and that they would have a shift of 11 hours in which to complete it, making it possible for the researcher to collect the questionnaires on completion of the day or night shift.

### **3.5.2 Acceptable response rates**

Babbie *et al*, (2003:261) explain that a higher response rate in a survey will decrease response bias. They further indicate that a response rate of 50% is adequate for analysis and reporting (Babbie *et al*, 2003:261). The researcher adhered to a guideline by Babbie *et al*, (2003:261) of accepting a response rate between 60% and 70%, as these authors point out that a 60% response rate is “good” and a 70% response rate is “very good”. The researcher distributed 143 questionnaires and received back 143 questionnaires but only 92 questionnaires were completed. The response rate for this study was 64.3% (n=92) that fell within the norm set by the researcher. The return of the questionnaires will be further discussed in chapter 4.

## **3.6 RELIABILITY AND VALIDITY**

The researcher avoided researcher bias by requesting the assistance of an independent, registered nurse to distribute the questionnaires in the hospital where the researcher was acquainted with staff.

The researcher also submerged herself into reading as much of the literature and findings of other researchers in order to clear her mind of preconceived ideas.

Validity was further ensured by means of the researcher avoiding controlling the research conditions, as suggested by Marshall *et al*, (2006:204). The researcher

handed out the questionnaires to be self administered in the natural environment where staff were employed.

Content validity had been an important consideration in the design of the questionnaire by dr. Duxbury, as well as in adapting the one question by the researcher, to ensure representation of the whole of the definition of the research problem (Rossouw, 2003:122). The proposed questionnaire had been used in similar studies and two minor amendments were made to the existing questionnaire in order to comply with practices in the relevant province of South Africa where the four hospitals are located.

Face validity was tested by asking experts to express their opinion as to whether the questionnaire would test what it should be testing. De Vos *et al*, (2005:161) use face validity and content validity interchangeably. Face validity exists, according to De Vos *et al*, (2005:161), if “the measure instrument *looks as if* it measures what it is supposed to measure”. The validity and reliability were determined by the preliminary pilot study.

Validity and reliability was ensured by Duxbury during a pilot of the questionnaire. Duxbury (2003:46) reports that factor analysis was performed to test the validity of the MAVAS instrument and 4 themes were identified set at an eigenvalue of 1.8. According to Duxbury (2003: 48) the overall factor analysis was favourable as each theme loaded at 0.8 and above thus giving credibility to the questionnaire.

Duxbury further determined reliability by means of test-retest, done after a month's lapse. The test was administered to the same group at two different occasions. (Duxbury 2003:49). The scores of the repeated tests were compared by means of a Pearson's r correlation coefficient and a reliability coefficient of 0.89 using Pearson's r was found (Duxbury 2003:50).

The correlation coefficient measures the strength of a relationship between two variables (Brink 1989:78). According to Brink (1989:78) the possible values for a correlation coefficient, ranges from -1.00 to + 1.00. A perfect correlation would

amount to 1.00, if the two variables are unrelated the correlation coefficient will be equal to 0 (Brink 1989:78).

Taking into consideration the Pearson's  $r$  of 0.89 calculated for the MAVAS instrument this instrument will be considered reliable.

### **3.7 ETHICAL CONSIDERATIONS**

Ethical considerations received huge exposure during the Nuremburg trials when it became evident that atrocities had been committed in the name of science, by uncovering experiments that had been performed on Jewish prisoners in Nazi concentration camps (National Committee for Protection of Human Subjects of Biochemical and Behavioural Research, 1979). This committee published the Belmont report (United States:1979) and since its publication all forms of research have had to be approved by research committees.

The researcher adhered to the following ethical principles as specified in the Belmont report throughout the research process:

#### **3.7.1 Beneficence**

The principle of beneficence requires the researcher not to expose participants to undue physical or emotional harm (Leedy *et al.*, 2005:101).

Because the questionnaire consisted of questions sometimes asking judgment of situations and patients, questions of that nature could potentially cause some emotional discomfort in participants, due to the possible recollection of previous incidences of violence that they had been exposed to. The researcher was, however, convinced that the possible benefit(s) of the research project would outweigh any possible discomfort that research participants could experience, as the research was expected to lead to improved patient care practices.

However, in the event of any participant indicating discomfort with the research project, the researcher would inform the participant that (s)he had the right to withdraw from further participation in this study, without the risk of penalty. The

researcher would also conduct supportive interviews and if necessary refer clients to the Independent Counseling and Advisory Services (ICAS), the official, employee's assistance programme of the four psychiatric hospitals included in this study.

### **3.7.2 Informed consent**

All participants were requested to sign an informed consent form prior to answering the questionnaire. Before signing these consent forms, the nature of the research was explained. Furthermore, participants were informed that participation was voluntary and that no incentives would be given for participation in this study.

The researcher ensured that participants knew that they had the right to withdraw from this study at any time without being penalised, by informing them of this both verbally and in writing, prior to signing consent for participation in this study.

### **3.7.3 Right to privacy, confidentiality and anonymity**

Participation in this study was anonymous, as no names were linked to the questionnaires. Anonymity was further ensured by requesting participants to place signed consent forms into a sealed box. Completed questionnaires were each placed in an envelope and sealed by the respondents prior to collection by the researcher and assistant.

As mentioned, the researcher was familiar with most of the participants in hospital C, therefore questionnaires and consent forms were distributed and collected by a research assistant. As the researcher was formerly employed at this hospital, this method was followed to further ensure confidentiality.

As per Van den Hoonaard (2003:142), the larger a sample, the better the chance to ensure anonymity. For this reason, the researcher involved the whole population of all acute admission units in the four psychiatric hospitals included in this study.

Privacy was ensured through individual completion of questionnaires and placement of each completed questionnaire in a sealed envelope, whilst the informed consent

forms were placed in a separate sealed box with only an opening through which to deposit these forms.

The researcher undertook to and kept all data being collected confidential. Raw data and this study results would be kept in safe keeping for the duration of 5 years after completion of this study. Data would be kept in a locked cabinet at the researcher's residence. All data related to this study would be made available in the event of any formal enquiries or audits pertaining to findings of the research project. After a lapse of 5 years the data and any identifiers would be destroyed by the researcher.

#### **3.7.4 Internal review boards**

The researcher submitted the proposal to the Health Research Ethics Committee (HREC) of Stellenbosch University (SU) for approval. On approval of this study by the HREC, the researcher obtained the permission of the Director and Chief Executive Officers of the four psychiatric hospitals included in this study to conduct the research in their hospitals (Annexure 4). Proof of the HREC of SU approval is attached (Annexure 4).

This process was required by the provincial government of the province where the proposed study was to be conducted, before any approval was granted.

#### **3.7.5 Honesty**

The researcher adhered to all the principles as stipulated in the SU Research Policy of March 2009. The researcher cited all references as per the Plagiarism Policy of SU.

Permission was obtained from Dr. J.A. Duxbury beforehand to use the MAVAS questionnaire, designed by her. The MAVAS questionnaire is attached in Annexure 1.

### **3.7.6 Publication of results**

Results would be published and made public to the associated psychiatric hospitals region.

On completion of this research the results would be made public in an accredited research journal as per the SU policy in fulfillment of the requirements of the degree.

## **3.8 IMPLICATIONS FOR RESEARCH AND PRACTICE**

The four psychiatric hospitals chosen for this study are no exception to the rule as far as the occurrence of patient related violence and aggression is concerned. Unfortunately, there has been no scientific evidence to date with regards to the attitudes of staff of the four psychiatric hospitals included in this study, regarding the management of aggression and violence in their work environments.

The lack of scientific data in this regard has made it difficult to implement any intervention aimed at assisting staff to deal with patient related aggression and violence. The problem of patient related violence and aggression has been a neglected area within the four hospitals chosen for this study.

This research project was the first scientific study of staff's attitudes towards the management of aggression and violence in psychiatric hospitals. It was expected that this research project would establish baseline data that could be used in the future development of training programmes to help staff members deal with aggressive and violent patients.

## **3.9 CONCLUSION**

In this chapter the researcher described the research design and methodology of this study. The research process, data collection and criteria used for sampling of participants in the pilot- and primary studies were discussed and explained. The instrumentation, validity and reliability were described. The chapter concluded with a description of the ethical principles the researcher adhered to during the entire research process.



## CHAPTER 4

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### RESULTS AND DISCUSSION OF RESULTS

#### 4.1 INTRODUCTION

This chapter first provides an overview of the demography of the respondents and then compares the different categories of respondents in the population and their responses to the different questions in the questionnaire.

The researcher discusses each question individually, by analysing the responses and by making subsequent inferences, based on the outcomes of the literature overview and the data being collected *via* the questionnaire.

#### 4.2 RETURN OF THE QUESTIONNAIRES

The questionnaires were hand delivered to the eight acute admission units in the four hospitals included in this study. The researcher explained the purpose of the research to both day and night shift staff, on 28 June and 29 June 2010. The hospitals were labelled A, B, C and D for the purpose of collecting data.

Questionnaires were collected on 1 July 2010, as arranged with the respective hospital management teams.

The total population for this study was  $N = 143$ , after a sample of  $n = 15$  was used for the pilot study. Since the pilot study the total staff members decreased by 4. The response rate was 64.3% ( $n = 92$ ), which was within the acceptable response parameters initially set by the researcher, namely between 60% to 70%.

The researcher included all questionnaires for the data analysis, and where all questions were not completed, calculations were done proportionately. The researcher hence did not discard any partly completed questionnaires.

Following is the discussion, based on the outcomes of the survey.

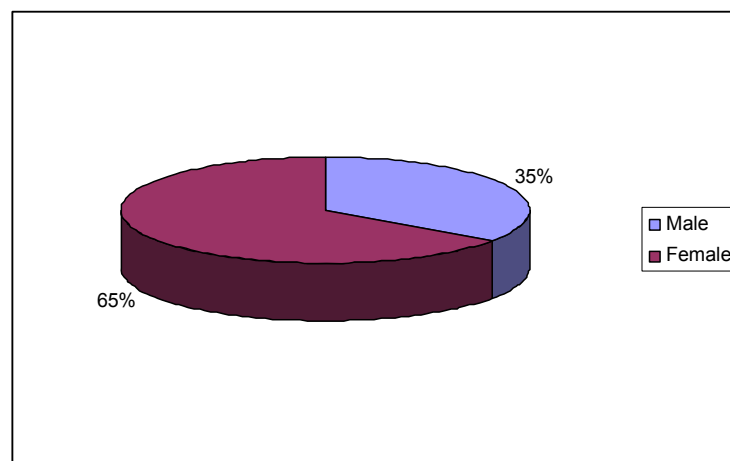
### 4.2.1 Management and analysis of data

After collecting the completed questionnaires, the researcher transferred the numeric data from the questionnaires onto a self designed spreadsheet template. The researcher coded all answers pertaining to years of service, age and qualification by assigning a numeric value to it to facilitate calculations. The researcher calculated the mean, mode, median and standard deviation of responses before sending it to prof. Kidd to perform further statistical analysis.

The captured data was also analysed by means of the Statistical Package for Social Sciences (SPSS). This package was used to perform univariate- and subgroup analyses. All results were presented in tables of means, bar charts and graphs for subsequent use in the discussions, interpretations and the drawing of clear inferences of the population tested (Babbie *et al.*, 2003:427).

## 4.3 ANALYSIS OF THE DEMOGRAPHIC DATA

### 4.3.1 Gender distribution of the respondents question.



**Figure 4.1: Gender distribution of respondents.**

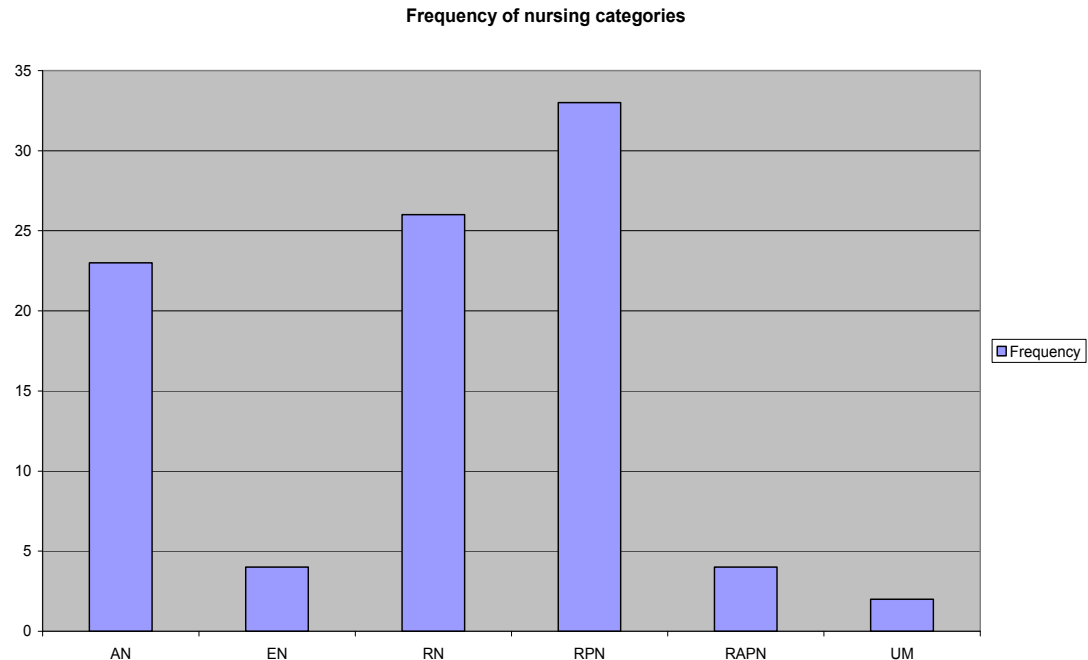
According to Duxbury (2002:325) in quoting Vanderslott (1998), male nursing staff are more frequently attacked than female staff, most probably due to male nursing staff being more involved in the containment of outbursts. The results from the four

hospitals chosen for this study, differed significantly from that report. In the four hospitals, 65% (n=60) of the respondents in the acute admission units were female, adding to the concerns being raised by numerous authors, such as Cooper *et al*, (n.d.) in quoting Arnetz (1998), that younger female workers pose a higher risk for being the victims of violence.

The gender profile of the respondents to the questionnaire was a representative reflection of the total staff profile of the four hospitals.

Figure 4.1 illustrates the gender ratio of the staff in the acute admission units. This outcome confirmed the concerns of the researcher regarding the staff in the four psychiatric hospitals being predominantly female, hence complicating the management of violent male patients as stated in chapter 2, section 2.8; paragraph 4 of this thesis.

#### 4.3.2 Professional qualifications of the participants.

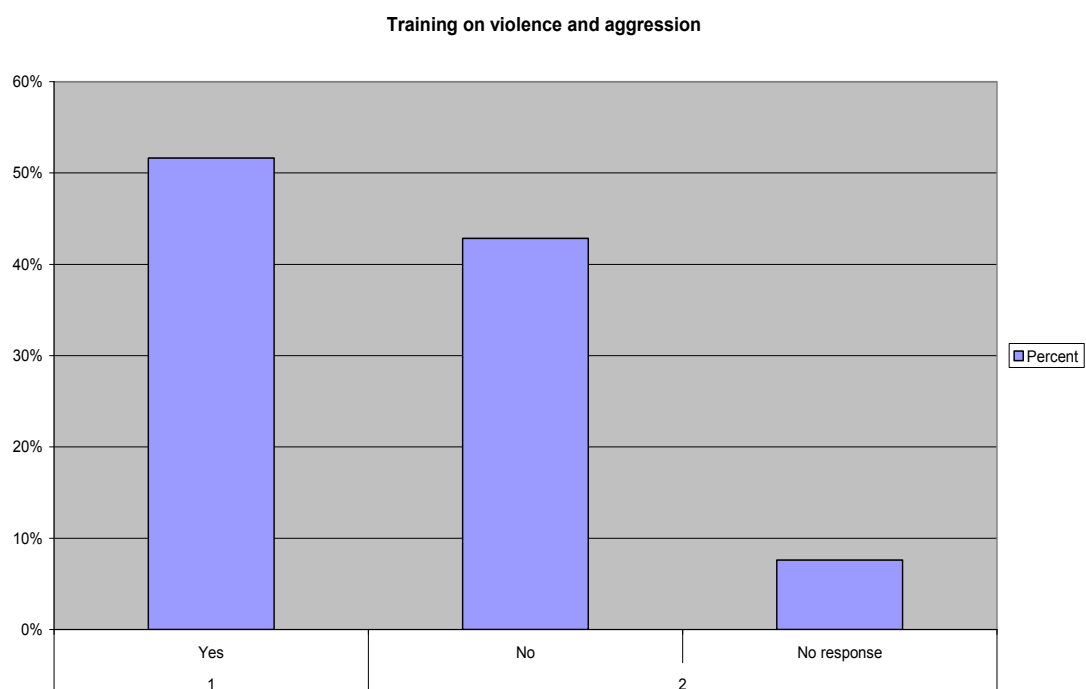


**Figure 4.2: Number and categories of nursing staff taking part in the research.**

Of the N = 92 respondents, the categories of nurses included in this study were n = 23 assistant nurses (AN), n = 4 enrolled nurses (EN), n = 26 registered nurses (RN), n = 33 registered psychiatric nurses (RPN), n = 4 registered, advanced, psychiatric nurses (RAPN), and n = 2 unit managers (UM). The sample appeared to be a representative cross section of all categories of nurses in psychiatry and of the proposed allocation of categories to admission units. All of the respondents were directly involved in providing mental healthcare.

Of importance was that 66.6% (n=60) of respondents had no qualification in psychiatric nursing science, whilst a reported 33.3% (n=30) were trained as psychiatric nurses. This high percentage raised a question as to the impact that the absence of a qualification in psychiatric nursing may have on the ability to deal with mental healthcare user related violence and aggression.

#### 4.3.3 Training in the management of aggression and violence.



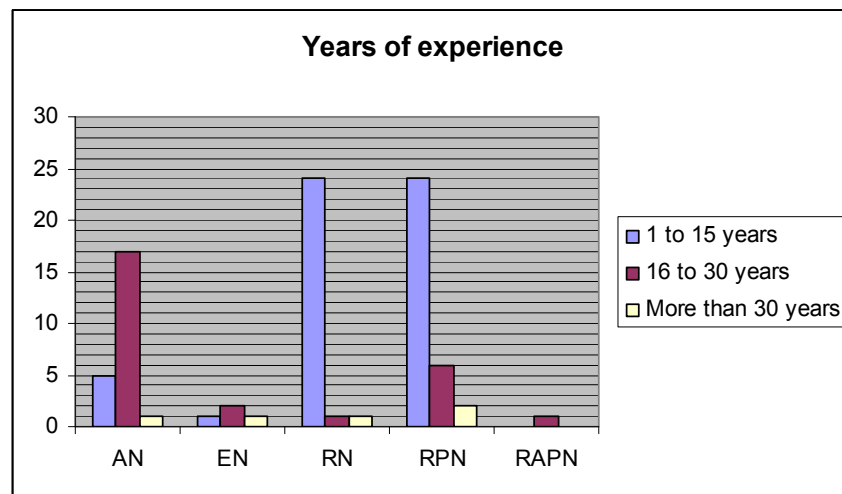
**Figure 4.3: Respondents trained in the management of violence and aggression.**

The feedback from respondents indicated that 52% (n=47) of the staff in the acute admission units had received some form of training relating to the management of aggression and violence.

The nature of the type of training had not been investigated, thus making it impossible to make specific inferences regarding the reported training. More specific analysis with regards to the form of training received should provide more insights.

#### 4.3.4 Experience of respondents

The number of years of experience, as indicated in Figure 4.4, may provide some information about the level of experience and of the age groups of nurses, practicing in psychiatric units in the four hospitals included in the study, at the time. The researcher narrowed the categories down from 5 year increments to 15 year increments for the purpose of presenting the data.



**Figure 4.4: Years of experience of nurses in psychiatry.**

The following table depicts the years of service in 5 year increments.

**Table 4.1: Years of experience of nurses in psychiatry**

Experience	Category of staff (par. 4.3.2)						Total N	%
	AN	EN	RN	RPN	RAPN	UM		
Less than 1 year	-	-	4 (2.17)	2 (2.17)	-	-	6	6.52
1 to 5	1 (1.08)	1 (1.08)	12 (13.04)	11 (11.95)	-	-	25	27.17
6 to 10	2 (2.17)	-	14 (15.2)	2 (2.17)	-	-	18	19.56
11 to 15	-	-	2 (2.17)	3 (3.26)	1 (1.08)	-	6	6.52
16 to 20	4 (2.17)	-	1 (1.08)	1 (1.08)	-	-	6	6.52
21 to 25	9 (9.78)	-	-	4 (2.17)	-	-	13	14.13
26 to 30	5 (5.43)	2 (2.17)	-	2 (2.17)	1 (1.08)	1 (1.08)	11	12.22
More than 30	1 (1.08)	1 (1.08)	1 (1.08)	2 (2.17)	-	-	5	5.43
Total	22 (23.9)	4 (2.17)	34 (36.95)	27 (29.34)	2 (2.17)	1 (1.08)	90**	98.07*

\*\* 2.17% of respondents did not indicate their years of experience.

Table 4.1 indicates that 59.78% (n=55) of respondents had 15 years and less experience, whilst 38.04% (n=35) of staff members had more than 16 years of experience in psychiatric nursing. A total of 5.43% (n=5) of staff had more than 30 years of experience.

A total of 66.6% (n=60) of staff working in the acute admission units have no qualification in psychiatric nursing. However, of concern was that the experienced staff, having 16 and more years of service, consisted of a majority of 54.2% (n=19) of assistant nurses (AN), 8.5% (n=3) enrolled nurses (EN) and 5.7% (n=2) registered nurses (RN) who lacked a formal qualification in psychiatric nursing.

Furthermore, the majority of the population with less than 16 years of experience namely 65.4% (n=36) also had no qualification in psychiatric nursing science.

Acknowledging the fact that 38.8% (n=35) of the reported categories had between 16 and 30 plus years of experience in psychiatric nursing, the researcher realised that a large number of staff members may exit the services through natural attrition, such as retirement, implying a potential loss of valuable experience from the acute admission units over the next 10 years.

The literature review being conducted during this study, did not confirm a relationship between years of experience and levels of competence. According to an online encyclopaedia, Wikipedia (1989), competence is shown in “action in a situation”, but cautions that the context of the situation may vary and that a competent person will react to the situation based on previous experience. Wikipedia (1989) further points out that regardless of training, competence grows through experience and the extent of an individual to learn and adapt.

This implied that those staff members with more years of experience should be able to cope better with patient related aggression and violence.

#### **4.4 ANALYSIS AND DISCUSSION OF SPECIFIC QUESTIONS ON THE MAVAS QUESTIONNAIRE**

When coding the questions, the researcher rated responses between 1 - 4, with 1 indicating totally agreeing with a statement, 2 agreeing with a statement, 3 disagreeing with a statement and 4 total disagreement. Therefore scales 1 and 2 indicated agreement with the statements in the questionnaire, whilst scales 3 and 4 indicated disagreement. The lower the score, the more the respondent agreed with the statement / question.

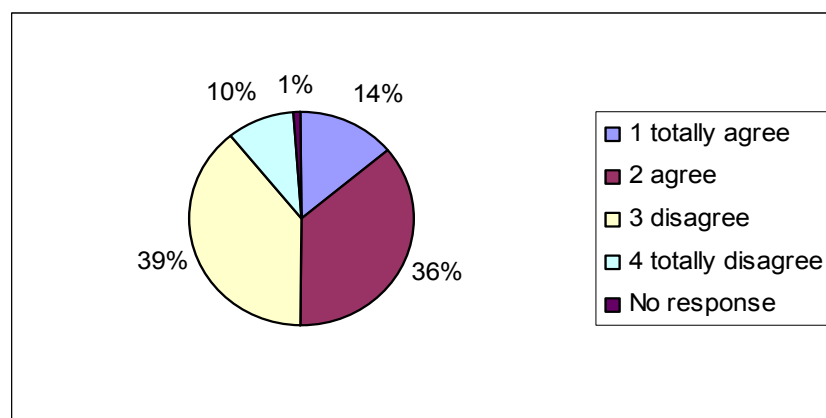
The researcher made use of the services of a renowned professor in statistics to calculate the scores for the different categories of respondents, in order to determine if there were any significant differences in responses between different categories of staff.

The tests being performed to calculate any significant differences among the response groups, were the Kruskal-Wallis analysis of variance (ANOVA), or *H* test (Brink, 1989:142). This non-parametric test is used when the difference in the median of three or more groups are compared. This test indicates the evidence against the null hypothesis. According to Brink (1989:143) “the greater the discrepancies, the greater the evidence against the null hypothesis”.

The null hypothesis for the purpose of this study was that there were significant differences in attitudes between assistant nurses (AN), registered nurses (RN) and registered psychiatric nurses (RPN) with regards to the management of aggression and violence. The categories enrolled nurses (EN), registered advance psychiatric nurses (RAPN) and unit managers (UM) could not be analysed, as these samples were too small to perform the *H* test.

The statistical analysis of all questions indicated effective hypothesis decomposition. This happened because some cells had data missing, therefore the null hypothesis could neither be proven, nor discarded.

**Question 1: Patients are aggressive, because of the environment they are in.**



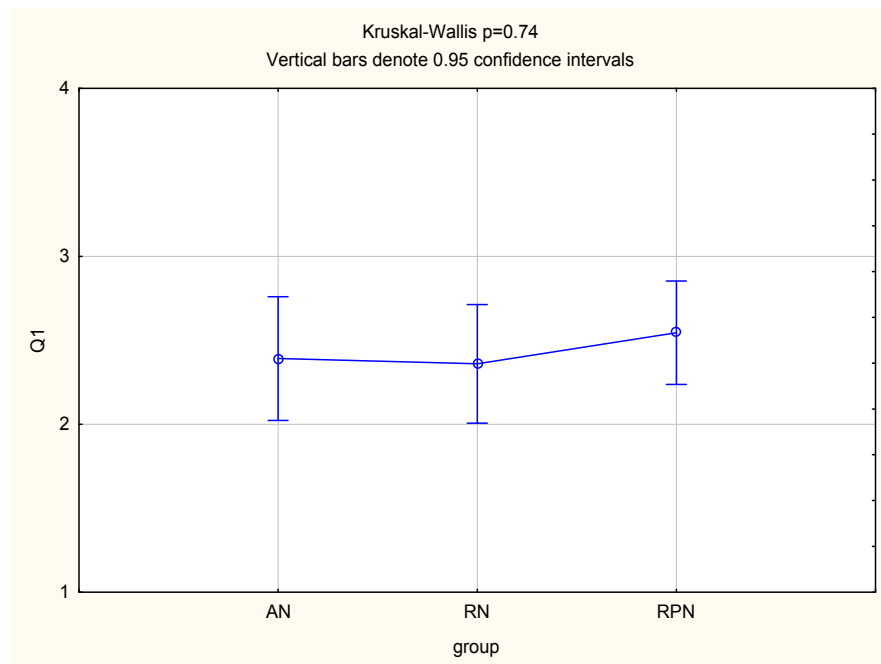
**Figure 4.5: Response distribution to question 1.**

In view of 50% (n=46) of respondents agreeing that the environment may impact on patient related aggression, opposed to 49% (n=45) disagreeing with this statement, the researcher regarded this 1% (n=1). This indicates two definite viewpoints as to the impact of the environment on aggression and violence. However, the influence of



environment on aggression had been cited by Duxbury (2005:470) as a precursor to patient related aggression.

Respondents in Duxbury's study (2005:472) had agreed that the environment could be a cause of patient related violence.



**Figure 4.6: ANOVA in respect of environment and patient violence.**

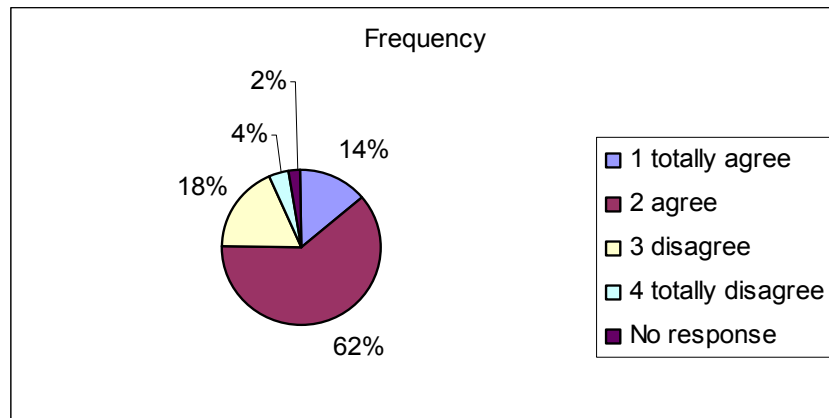
**Table 4.2: Group; LS Means**

Cell No.	group; LS Means (Spreadsheet2)					
	Current effect: F(2, 78)=.36823, p=.69315					
	Effective hypothesis decomposition					
	group	Q1 Mean	Q1 Std.Err.	Q1 -95.00%	Q1 +95.00%	N
1	AN	2.391304	0.185031	2.022936	2.759672	23
2	RN	2.360000	0.177475	2.006674	2.713326	25
3	RPN	2.545455	0.154472	2.237924	2.852985	33

There was no significant difference between the perceptions of assistant, registered and registered psychiatric nurses, with regards to patients being aggressive, because of the environment they were in. There was a slightly higher level of disagreement with this statement amongst registered psychiatric nurses.

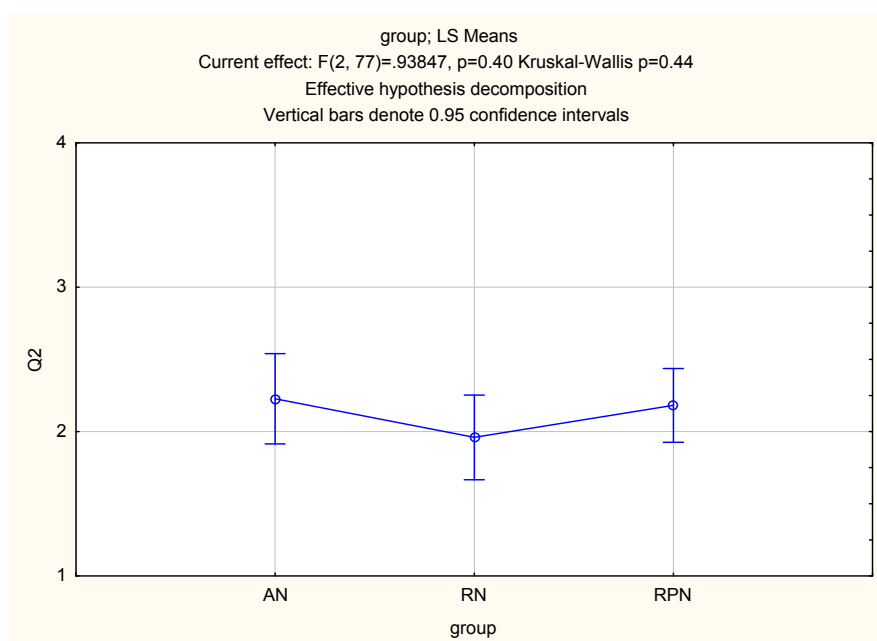
Within the groups, the assistant nurses showed the highest differences in opinion among them regarding this statement, namely a difference of 0.7367 between the highest and lowest level of agreement with this statement.

**Question 2: Other people make patients aggressive, or violent.**



**Figure 4.7: Response distribution to question 2.**

Compared to the responses in the study by Duxbury (2005:471), where staff disagreed with this statement, a larger proportion of 76% (n=69) of respondents in this study felt that aggression had sometimes been caused by other people. Further investigation into this statement was indicated, as it was unclear whom staff had deemed “other people” to be, although the findings and question leads the researcher to deduce that staff had excluded themselves from this statement.



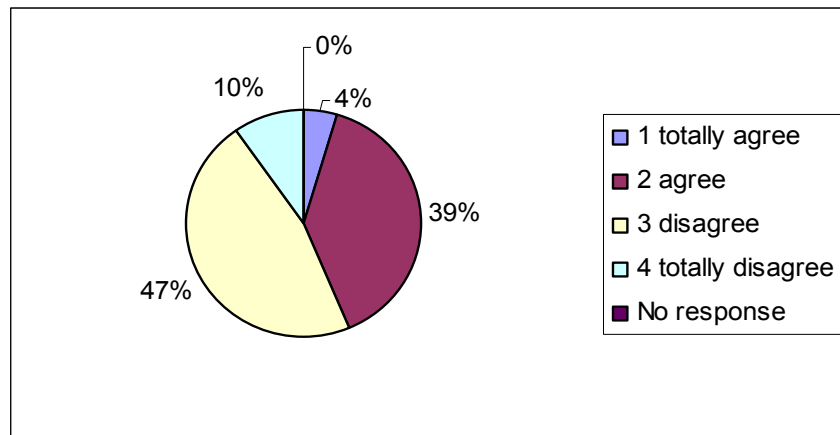
**Figure 4.8: ANOVA in respect of other people and patient violence.**

**Table 4.3: Group; LS Means**

group; LS Means (Spreadsheet2)						
Current effect: $F(2, 77)=.93847, p=.39565$						
Effective hypothesis decomposition						
Cell No.	group	Q2 Mean	Q2 Std.Err.	Q2 -95.00%	Q2 +95.00%	N
1	AN	2.227273	0.156957	1.914731	2.539815	22
2	RN	1.960000	0.147239	1.666810	2.253190	25
3	RPN	2.181818	0.128155	1.926629	2.437008	33

Although there were no significant statistical differences  $p= 0.39565$ , between the categories, there was a slight difference between the registered nurses, compared to the assistant - and registered psychiatric nurses as seen by the mean scores for both groups in table 4.3, possibly indicating that the registered nurses were slightly more convinced that other people had made patients aggressive, or violent. This may be explained by the fact that this group had the least amount of experience in comparison with the other two groups, as only 5.8% ( $n=2$ ) of this group had more than 16 years of experience.

**Question 3: Patients commonly become aggressive, because staff do not listen to them.**



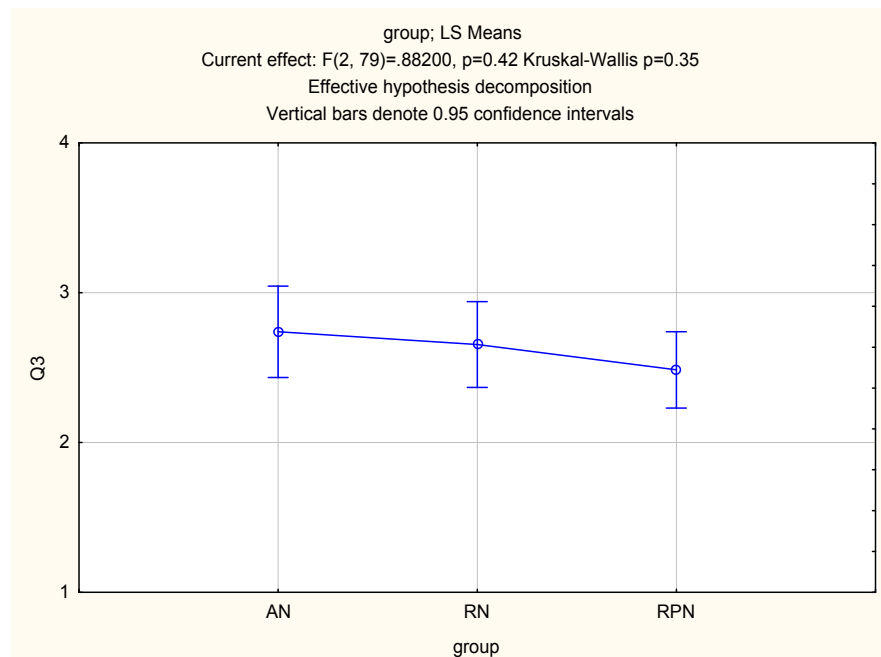
**Figure 4.9: Response distribution to question 3.**

A small majority of 57% (n=52) of respondents disagreed with this statement, compared to 49% (n=40) of respondents agreeing. This almost equal division of responses depicting agreement and disagreement with the statement, indicated that respondents had lacked consensus, hence the researcher regarded this response as indicative of the existence of two distinct opinions.

Furthermore, it may have been possible that staff felt that listening to a patient meant being manipulated by a patient. In order to obtain clarification on this matter, the concept of listening to a patient could be further investigated by means of a qualitative research project.

During the Duxbury study (2005:471), an overwhelming number of respondents had also disagreed with this statement. However, patients in the Duxbury study felt that aggression had stemmed from staff not listening to them.

In elaboration of this statement, Duxbury (2005:470) quoted Sheriden *et al*, (1990), who had found that patients had commonly seen conflicts with staff as contributory to aggression. Furthermore, Whittington and Wykes (1994) suggested that certain staff were prone to being assaulted, indicating problematic, rather than therapeutic relationships (Harris & Morrison, 1995:204). Therefore, the role of communication in the management of aggression and violence should never be underestimated.



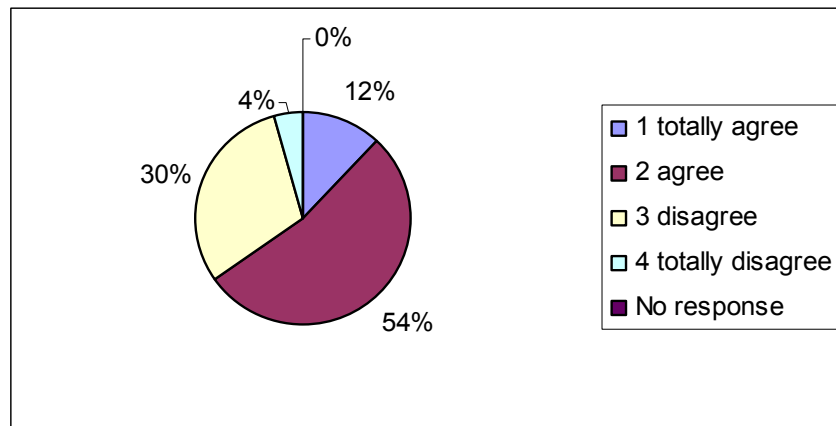
**Figure 4.10: ANOVA in respect of staff not listening and patient violence.**

**Table 4.4: Group; LS Means**

group; LS Means (Spreadsheet2)						
Current effect: $F(2, 79)=.88200$ , $p=.41799$						
Effective hypothesis decomposition						
Cell No.	group	Q3 Mean	Q3 Std.Err.	Q3 -95.00%	Q3 +95.00%	N
1	AN	2.739130	0.153050	2.434493	3.043768	23
2	RN	2.653846	0.143949	2.367322	2.940370	26
3	RPN	2.484848	0.127773	2.230522	2.739175	33

There seemed to be no significant differences in the response rates as seen by the  $p$ - value in the table between the categories. However, the assistant - and registered nurses were slightly more in disagreement with this statement if the mean scores for all three groups are taken into consideration.

**Question 4: It is difficult to prevent patients from becoming violent, or aggressive.**

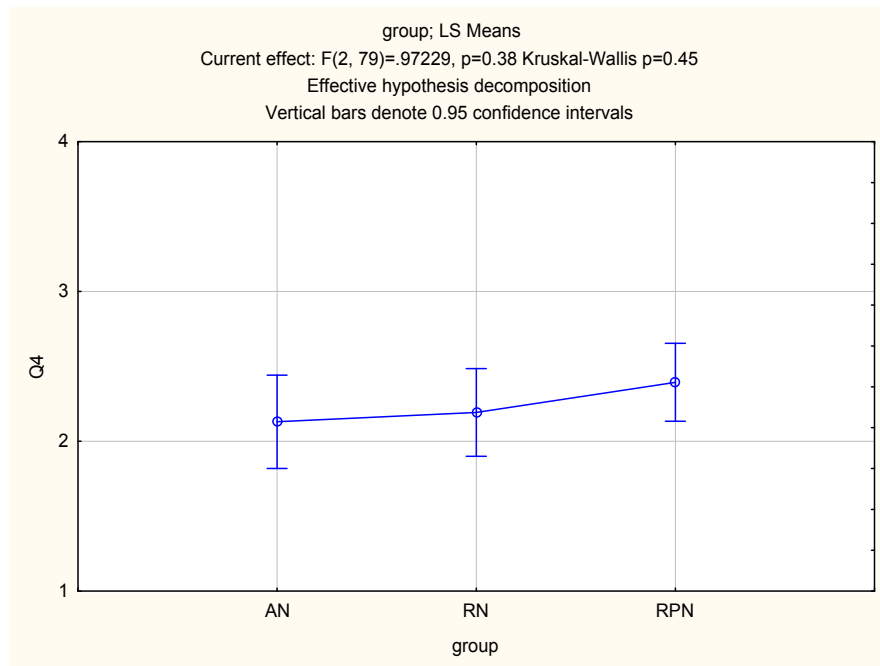


**Figure 4.11: Response distribution to question 4.**

A reported 66% (n=60) of respondents felt that it had been difficult to prevent mental healthcare users from becoming violent. Even though this perception had been shared by nurses from the Netherlands in a study by Smith and Hart (1994:645) it differed from the findings by Duxbury (2005:471), where nurses from the United Kingdom had reported that it had not been difficult to prevent violence and aggression.

Taking into cognisance that 52% (n=32) of the respondents in this study underwent training in the management of aggression and violence, it left the researcher with the impression that either the offered training programme may not have addressed the needs of the respondents with regards to the management of aggression and violence, or the respondents may have been in need of further training, or annual top up programmes.

Smith *et al*, (1994:645) reported that most nurses had experienced emotional arousal in the presence of patient related aggression, with the result being that it had interfered with their ability to process the patient's anger and react in a professional manner.



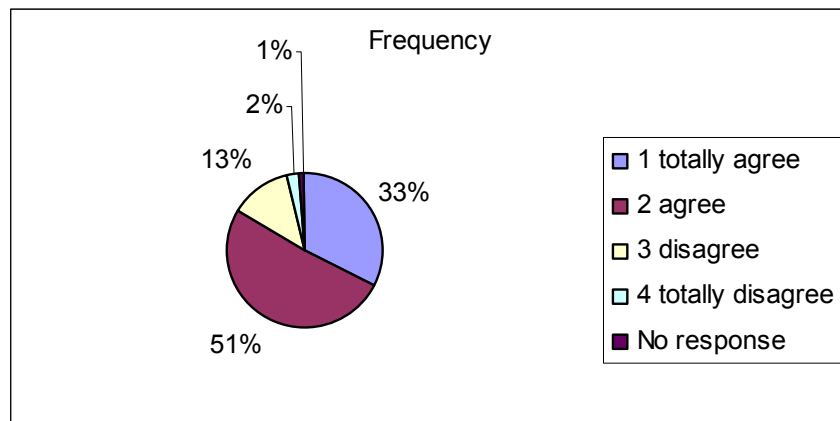
**Figure 4.12: ANOVA in respect of difficulty of prevention and patient violence.**

**Table 4.5: Group; LS Means**

group; LS Means (Spreadsheet2)						
Current effect: $F(2, 79)=.97229, p=.38269$						
Effective hypothesis decomposition						
Cell No.	group	Q4 Mean	Q4 Std.Err.	Q4 -95.00%	Q4 +95.00%	N
1	AN	2.130435	0.156541	1.818847	2.442023	23
2	RN	2.192308	0.147233	1.899247	2.485368	26
3	RPN	2.393939	0.130688	2.133811	2.654068	33

Of the respondents, the group of registered psychiatric nurses were slightly more in disagreement with the notion that it had been difficult to prevent patients from becoming aggressive or violent. However, there was no significant statistical difference between the groups as seen by the p- value of ( $p=0.38269$ ) in table 4.5.

The group of assistant nurses showed the highest level of agreement with this statement and furthermore showed a higher degree of variance within the group, with regards to the highest and lowest scoring rate for this question as per table 4.5.

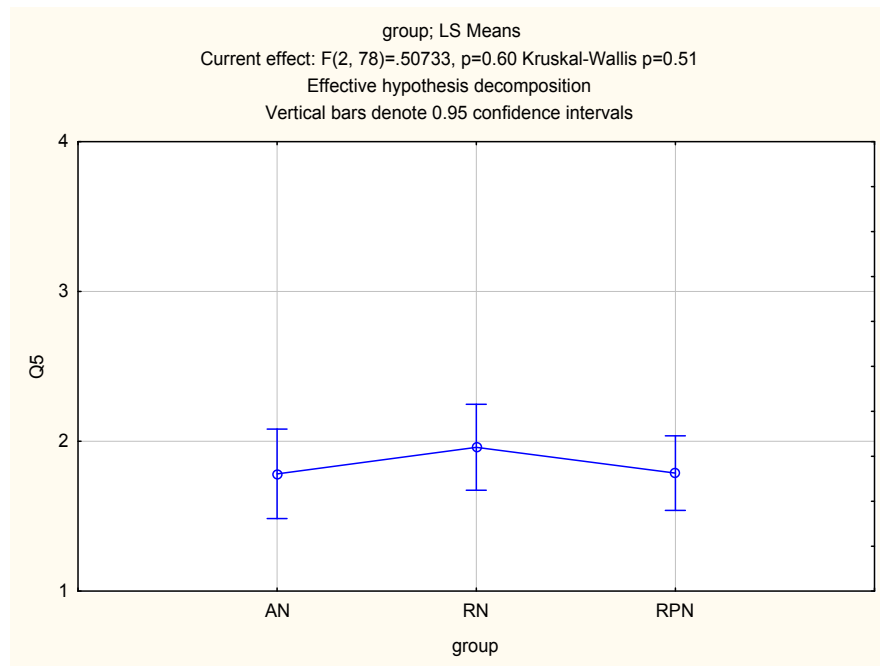
**Question 5: Patients are aggressive, because they are ill.****Figure 4.13: Response distribution to question 5.**

The high response rate of 84% (n=77) indicated that the cause of mental healthcare user related violence and aggression had been caused by the illness. This corroborated well with findings by Duxbury (2005:471), where the respondents felt that the main cause of aggression had been caused by the illness.

This type of finding is a normal reaction among people, as cited by Duxbury (2005:470) in quoting Morrison (1998), claiming that this reaction by staff members is referred to as “fundamental attributional bias”, where there is a “tendency to blame the “other party” in explanation of problematic social interactions”. In addition, Link and Stueve (1995:173) also confirmed findings by Koen *et al*, (2003:254), acknowledging a link between psychopathology and incidences of violence.

Although there is a proven link between illness and aggression, illness *per se* is not enough to explain mental healthcare user related violence.





**Figure 4.14: ANOVA in respect of being ill and patient violence.**

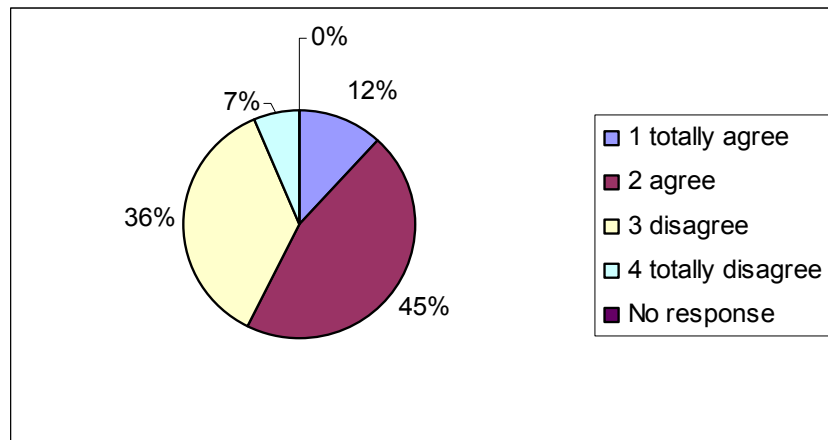
**Table 4.6: Group; LS Means**

Cell No.	group; LS Means (Spreadsheet2) Current effect: $F(2, 78) = .50733$ , $p = .60408$ Effective hypothesis decomposition					
	group	Q5 Mean	Q5 Std.Err.	Q5 -95.00%	Q5 +95.00%	N
1	AN	1.782609	0.150043	1.483896	2.081322	23
2	RN	1.960000	0.143916	1.673485	2.246515	25
3	RPN	1.787879	0.125263	1.538499	2.037258	33

The statistics showed a slightly larger difference between the perceptions of registered nurses, compared to the other two groups of nurses. The registered nurses were less in agreement that patients had been aggressive, because they had been ill, compared to the other two groups. In order to explain this phenomenon, further exploration as to which categories of staff had received training with regards to the management of aggression and violence, was indicated.

Overall, there was, no significant statistical differences between the three categories of nurse responses as seen by their mean scores and p-value of  $p = 0.60408$  in table 4.6.

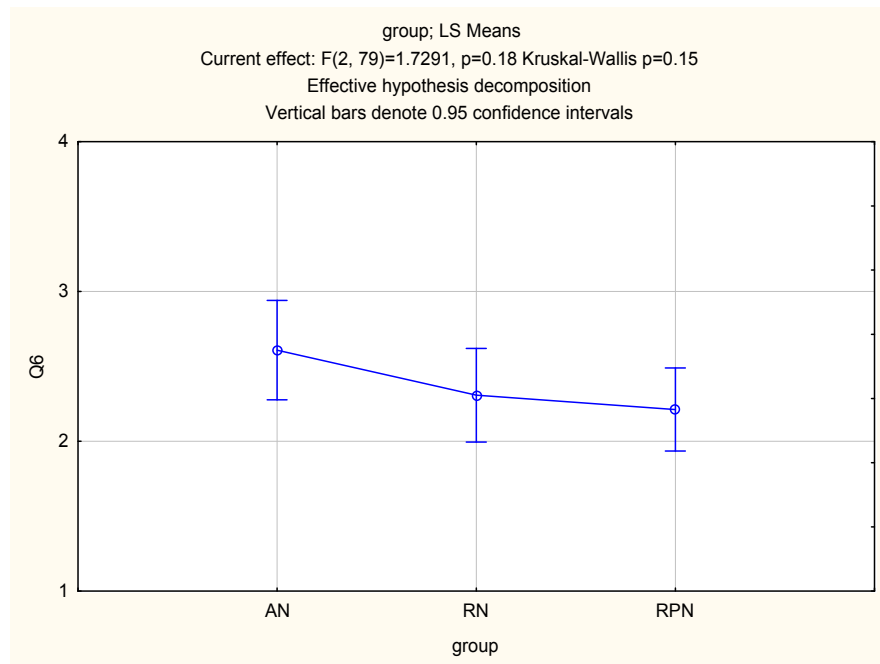
**Question 6: Poor communication between staff and patients leads to patient aggression.**



**Figure 4.15: Response distribution to question 6.**

57% (n=53) of respondents felt that poor communication between staff and patients may have contributed to aggression on the side of the mental healthcare user, compared to the response to question 3, where 57% (n=52) had indicated that staff had listened to mental healthcare users. It left the researcher to conclude that staff may have indicated that the poor communication had to be attributed to the mental healthcare users, as opposed to the “inability of nurses to identify inter personal communication skills and competencies, effective in the creation of a therapeutic relationship with the client” (Uys, 2004:150).

In addition, Duxbury (2005:472) reported findings, where staff had not viewed communication between themselves and patients as a cause of aggression, whilst the patients, however, had identified poor communication as a cause of aggression.



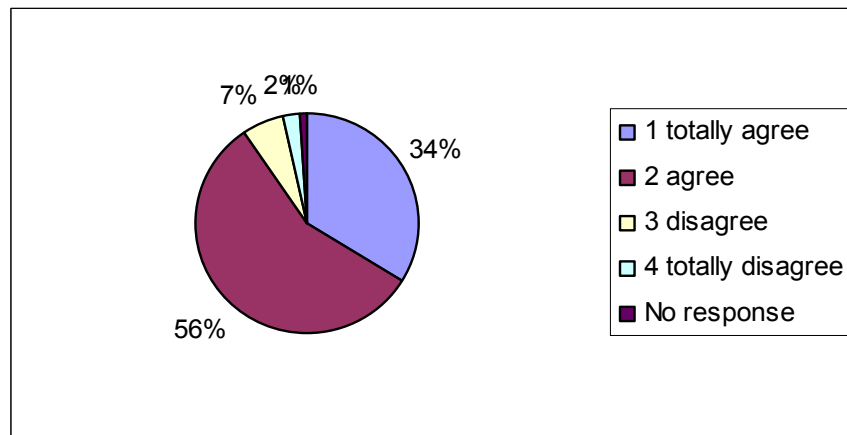
**Figure 4.16: ANOVA in respect of poor communication by staff and patient violence.**

**Table 4.7: Group; LS Means**

group; LS Means (Spreadsheet2)						
Current effect: $F(2, 79)=1.7291$ , $p=.18409$						
Effective hypothesis decomposition						
Cell No.	group	Q6 Mean	Q6 Std.Err.	Q6 -95.00%	Q6 +95.00%	N
1	AN	2.608696	0.166765	2.276758	2.940633	23
2	RN	2.307692	0.156849	1.995492	2.619893	26
3	RPN	2.212121	0.139223	1.935004	2.489238	33

The registered nurses and registered psychiatric nurses were more in agreement with this statement. Even though the groups differed slightly, there was no significant statistical difference between them. On average, the assistant nurses were least in agreement as shown by their mean score of 2.608696 on this question in comparison with the other two groups; this might possibly be explained by a lack of interpersonal skills training in their curriculum but could only be substantiated through further research.

**Question 7: There appears to be types of patients, who frequently become aggressive towards staff.**



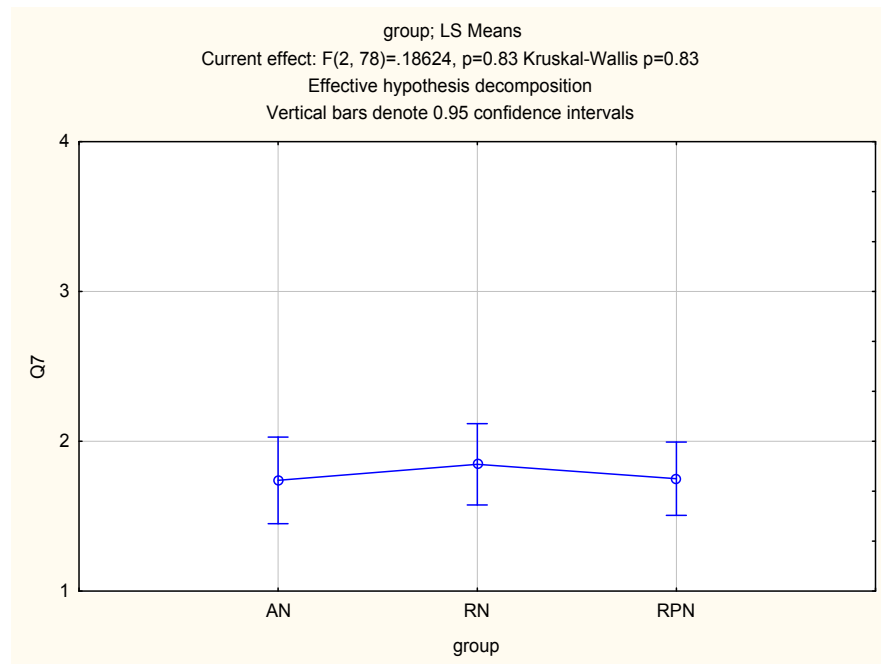
**Figure 4.17: Response distribution to question 7.**

A majority of 90% (n=83) of the respondents agreed that there were “types” of patients who were more prone to aggression. This finding strongly corresponded to the findings in respect of both staff and patients in the Duxbury (2005:471) study.

This occurrence may be explained by the reported changes in the client population, namely that more persons with substance induced psychosis were being admitted to the four hospitals included in the study. This staff perception was further confirmed by the study by (Koen *et al.*, 2005:254), where male schizophrenic patients, with co-morbid substance abuse, were being identified as highly prone to aggression and violence.

Further investigation into the possible existence of counter transference among staff was indicated, as this may reveal more about the relationship between staff perception of substance abuse in relation to incidences of violence and aggression.

Duxbury (2005:470) touches on this notion when she refers to Whittington *et al.*, (1994:85), who indicated that staff falling victim to an assault might be at an increased risk of future assaults.



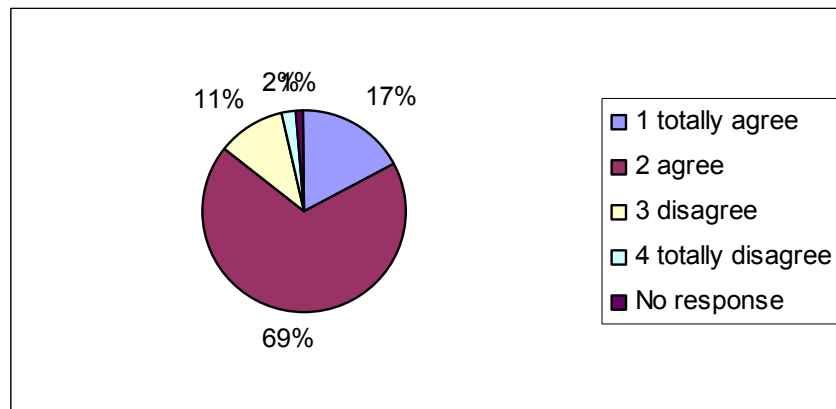
**Figure 4.18: ANOVA in respect of type of patient and patient violence.**

**Table 4.8: Group; LS Means**

Cell No.	group; LS Means (Spreadsheet2)					
	group	Q7 Mean	Q7 Std.Err.	Q7 -95.00%	Q7 +95.00%	N
1	AN	1.739130	0.145193	1.450073	2.028188	23
2	RN	1.846154	0.136560	1.574284	2.118024	26
3	RPN	1.750000	0.123093	1.504940	1.995060	32

Figure 4.18 showed no significant statistical differences between the three groups in table 4.8. However, the group of registered nurses leaned slightly more towards a lesser degree of agreement with the notion that there had been types of patients who had frequently become violent towards staff members.

**Question 8: Different approaches are used on this ward to manage patient aggression and violence.**

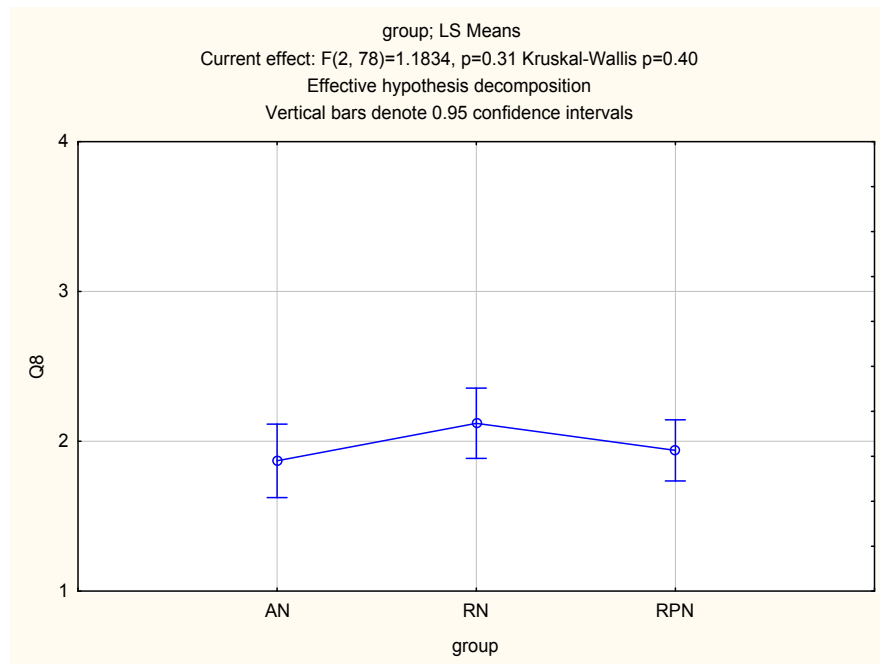


**Figure 4.19: Response distribution to question 8.**

86% (n=79) of respondents indicated that different approaches had been used to manage patient aggression and violence, implying that more than mere seclusion were being used. It was unclear, however, what the different approaches were. Follow up research, or interviews, would allow for clarity on this statement.

Noteworthy, was the reported response to question 21, where the majority of 82% (n=75) respondents reported that more effective means to manage aggression and violence could be used. This almost contradicted the response to question 8.

These type of dichotomous responses were noted with regards to various questions in this study.



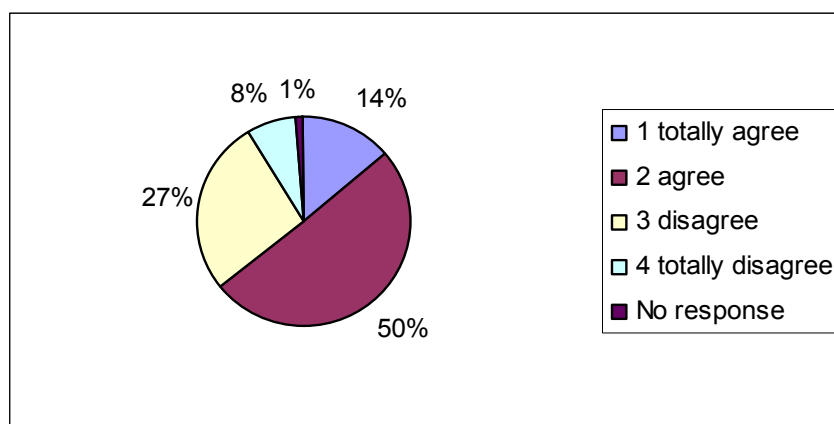
**Figure 4.20: ANOVA in respect of violence management approaches and patient violence.**

**Table 4.9: Group; LS Means**

group; LS Means (Spreadsheet2)						
Current effect: $F(2, 78)=1.1834, p=.31168$						
Effective hypothesis decomposition						
Cell No.	group	Q8 Mean	Q8 Std.Err.	Q8 -95.00%	Q8 +95.00%	N
1	AN	1.869565	0.122968	1.624754	2.114377	23
2	RN	2.120000	0.117947	1.885185	2.354815	25
3	RPN	1.939394	0.102660	1.735014	2.143774	33

The  $p$ -value of  $p=0.31168$  allows the researcher to deduce that no significant statistical differences were found. However, the registered nurse category had a slightly lesser degree of agreement with this question, opposed to the nursing assistants with the most years of experience, and the qualified psychiatric nurses, who indicated that different approaches had been used as can be seen by the slight difference in their mean scores on this question.

**Question 9: Patients who are aggressive towards staff should try to control their feelings.**



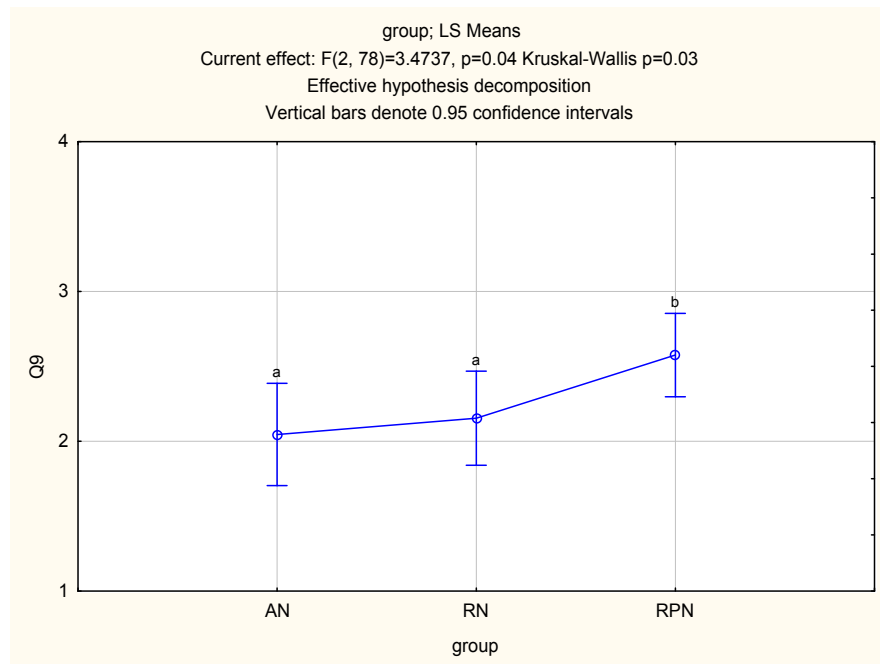
**Figure 4.21: Response distribution to question 9.**

The 64% (n=72) agreement with this statement placed a responsibility on patients to manage their own aggression. This outcome indicated that, regardless of the 84% (n=77) response rate to question 5, where respondents had claimed that the aggression and violence had been due to illness, there may be a perception amongst respondents that aggression being caused by illness, could be controlled by the patient, therefore not exempting patients from their responsibility towards expressions of violence and aggression.

In addition to this perception, the response to question 6, where respondents had felt that communication problems may lead to aggression, the “blame” was also placed on the client.

Further complicating interpretations of these findings was the response to question 14, where 77% (n=71) of respondents indicated that aggressive persons would not calm down if left alone and therefore would need some form of intervention. This controversial reporting of “patients should try to control their feelings, but staff intervention was inevitable” reflected the uncertainties with which staff had to deal with, regarding aggression and violence.





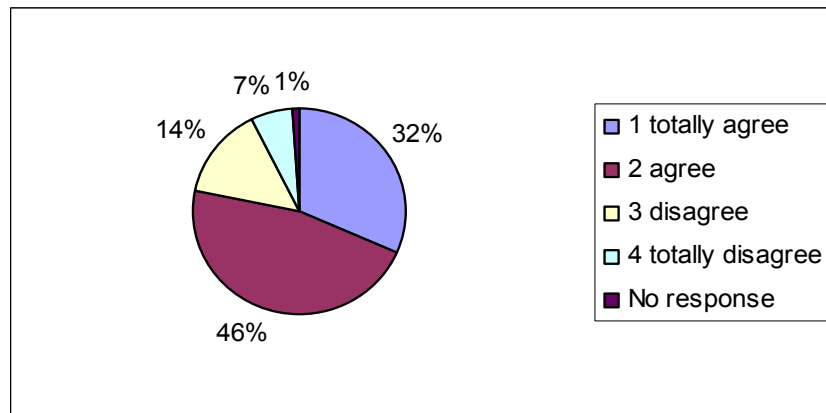
**Figure 4.22: ANOVA in respect of controlling feelings and patient violence.**

**Table 4.10: Group; LS Means**

Cell No.	group; LS Means (Spreadsheet2) Current effect: $F(2, 78)=3.4737, p=.03588$ Effective hypothesis decomposition					
	group	Q9 Mean	Q9 Std.Err.	Q9 -95.00%	Q9 +95.00%	N
1	AN	2.045455	0.171378	1.704267	2.386642	22
2	RN	2.153846	0.157645	1.839999	2.467693	26
3	RPN	2.575758	0.139930	2.297179	2.854336	33

According to the mean scores in table 4.10 the group of registered psychiatric nurses mostly disagreed with the notion that patients should try to control their feelings, yet the findings support a significant statistical difference between the three categories of respondents as seen by a low  $p$ -value of  $p=0.03588$ . These possible differences in perceptions might have been linked to the formal qualification in psychiatric nursing that this group had as opposed to the other two categories who had no training in psychiatric nursing.

**Question 10: When a patient is violent, seclusion is one of the most effective approaches to use.**

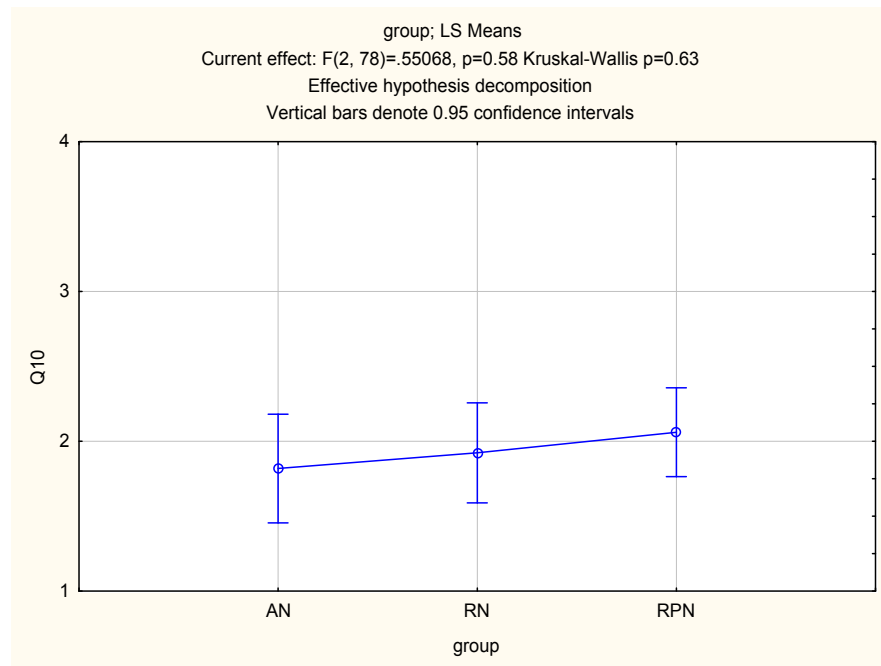


**Figure 4.23: Response distribution to question 10.**

Due to the fact that 78% (n=72) of respondents felt that seclusion was one of the most effective approaches to manage violence and aggression, the researcher was of the opinion that the 86% (n=79) agreement that different techniques had been used to manage aggression and violence in the four hospitals included in the study, should be investigated more accurately.

Confirming this deduction by the researcher, was a report by Duxbury (2002:328), referring to Mason *et al*, (1999), who reported that “despite a perceived value of some approaches, aggressive and violent incidents continues to be managed in a reactive way... the use of medication, seclusion and or restraint”.

Duxbury (2005:473) reported similar responses from staff included in her study, to those of the participants in this study. However, the patients in the Duxbury (2005:474) study had opposing views with regards to the use of seclusion to manage aggression and violence.



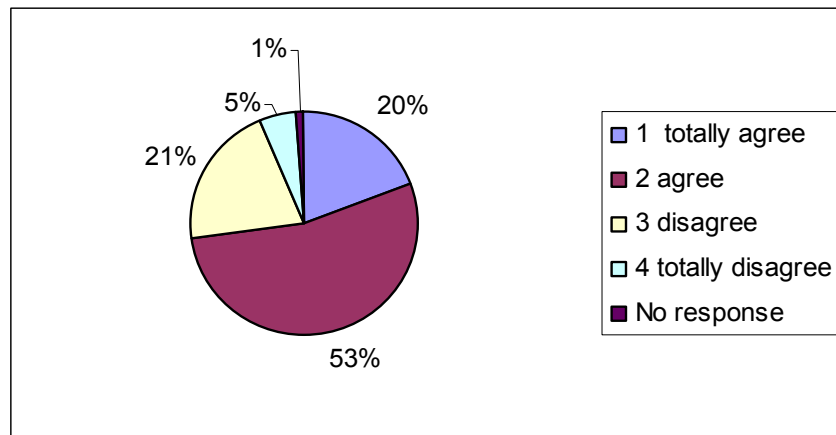
**Figure 4.24: ANOVA in respect of seclusion and patient violence.**

**Table 4.11: Group; LS Means**

Cell No.	group; LS Means (Spreadsheet2)					
	Current effect: F(2, 78)=.55068, p=.57879					
	Effective hypothesis decomposition					
	group	Q10 Mean	Q10 Std.Err.	Q10 -95.00%	Q10 +95.00%	N
1	AN	1.818182	0.182251	1.455348	2.181016	22
2	RN	1.923077	0.167647	1.589318	2.256836	26
3	RPN	2.060606	0.148807	1.764353	2.356859	33

Regardless of the insignificant statistical differences between the groups of respondents as noted in table 4.11, the assistant nurses were more strongly in agreement with this statement. This might be explained by the fact that through the nature of their job descriptions, assistant nurses were more in contact with mental healthcare users, compared to the other categories of staff.

**Question 11: Patients who are violent, are often physically restrained to administer sedation.**

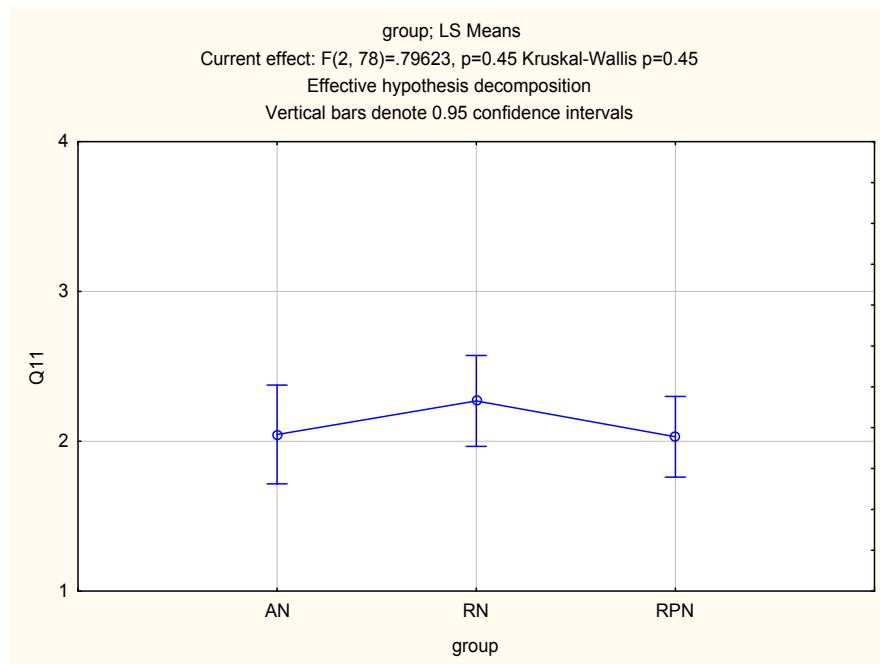


**Figure 4.25: Response distribution to question 11.**

The 73% (n=67) agreement regarding the regular use of physical restraints to administer sedation to violent patients, may render a possible explanation as to the reported incidences of staff injuries in the acute admission units included in the study.

Importantly, the use of physical restraint has been associated with mental healthcare user deaths (Paterson, Bradley, Stark, Saddler, Leadbetter & Allen, 2003:3), indicating that the use of this method should only be undertaken by knowledgeable staff.

However, research has revealed that it had often been very difficult for staff to implement different techniques to manage aggression and violence, especially if it occurred unexpectedly and when there had not been enough time to consider all possible interventions (Finnema, Dassen & Halvens, 1994:1092).



**Figure 4.26: ANOVA in respect of physically restraint to administer sedation and patient violence.**

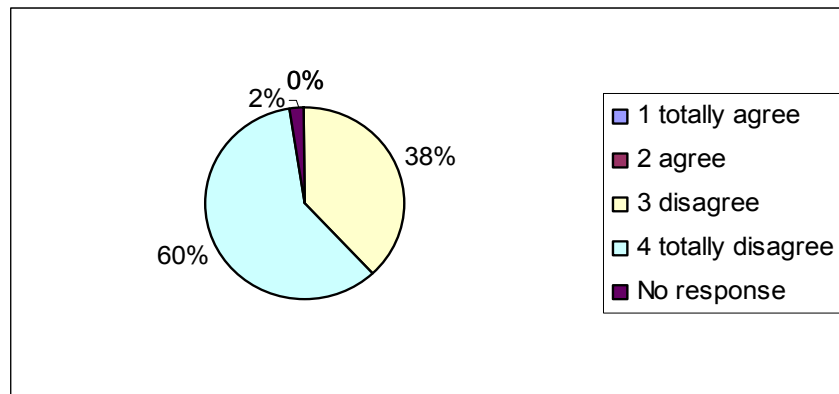
**Table 4.12: Group; LS Means**

group; LS Means (Spreadsheet2)						
Current effect: $F(2, 78)=.79623, p=.45466$						
Effective hypothesis decomposition						
Cell No.	group	Q11 Mean	Q11 Std.Err.	Q11 -95.00%	Q11 +95.00%	N
1	AN	2.045455	0.165567	1.715836	2.375073	22
2	RN	2.269231	0.152299	1.966026	2.572435	26
3	RPN	2.030303	0.135185	1.761171	2.299435	33

Registered psychiatric nurses and assistant nurses were more in agreement with this statement. However noteworthy is that the variance within the groups differed and were highest amongst assistant nurses and registered nurse. For assistant nurses it was set at 0.65920, registered nurses at 0.606409 and the least for registered psychiatric nurses namely 0.53828.

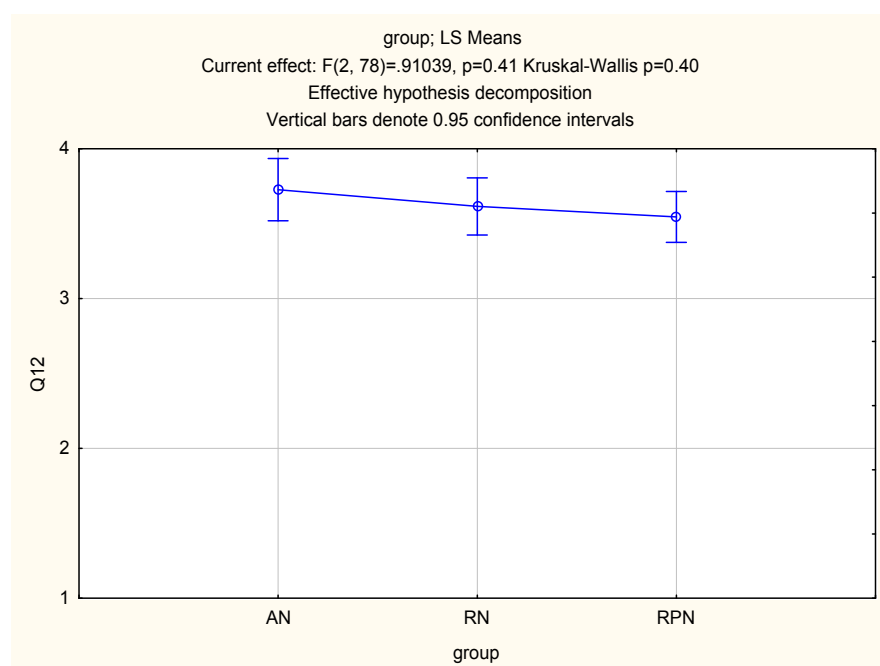
No significant differences were being reported between the three categories.

**Question 12: The practice of secluding violent patients should be discontinued.**



**Figure 4.27: Response distribution to question 12.**

An overwhelming 98% (n=90) of respondents were opposed to the discontinuation of the use of seclusion to manage mental healthcare user related violence. This response was contrary to the findings by Duxbury (2005:473), where staff had showed favour towards the discontinuation of the practice of seclusion.



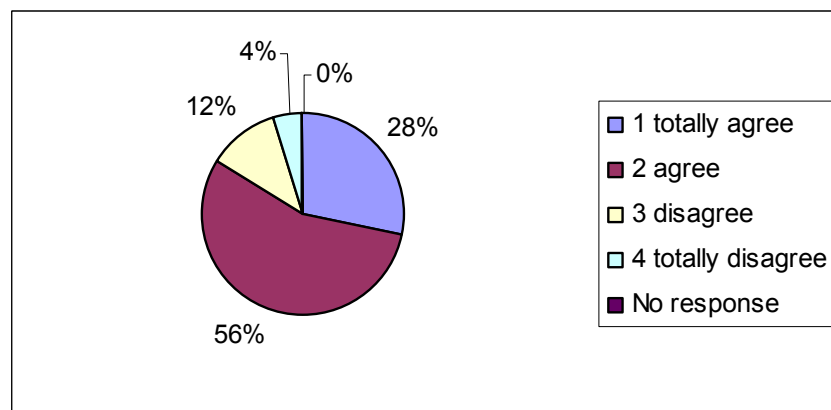
**Figure 4.28: ANOVA in respect of discontinuing seclusion and patient violence.**

**Table 4.13: Group; LS Means**

group; LS Means (Spreadsheet2)						
Current effect: F(2, 78)=.91039, p=.40660						
Effective hypothesis decomposition						
Cell No.	group	Q12 Mean	Q12 Std.Err.	Q12 -95.00%	Q12 +95.00%	N
1	AN	3.727273	0.104389	3.519451	3.935095	22
2	RN	3.615385	0.096024	3.424216	3.806553	26
3	RPN	3.545455	0.085233	3.375768	3.715141	33

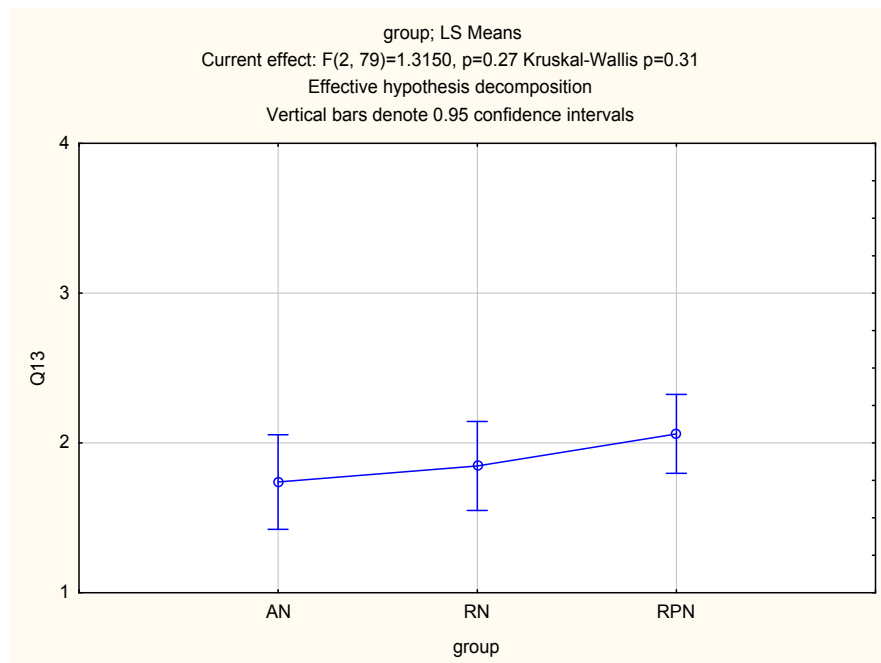
Regardless of the insignificant statistical differences  $p=0.40660$  between the group responses, it was noted that the assistant nurses were slightly more in favour of not discontinuing the practice of seclusion. A possible explanation for this tendency could be that the lower category of assistant nurses, due to the nature of their work, were more in contact with the mental healthcare users and possibly felt that the use of seclusion would be more beneficial to their safety.

**Question 13 Medication is a valuable approach for treating aggressive and violent behaviour.**

**Figure 4.29: Response distribution to question 13.**

A significant 84% ( $n=77$ ) of respondents agreed with the use of medication to treat aggression and violence. There had been a similar report by Duxbury (2005:473), although the patients had disagreed with the use of medication as approach to

manage aggression. These differences in perceptions may possibly have been due to the differences in perceptions of the causes of aggression, as reported by patients and staff.



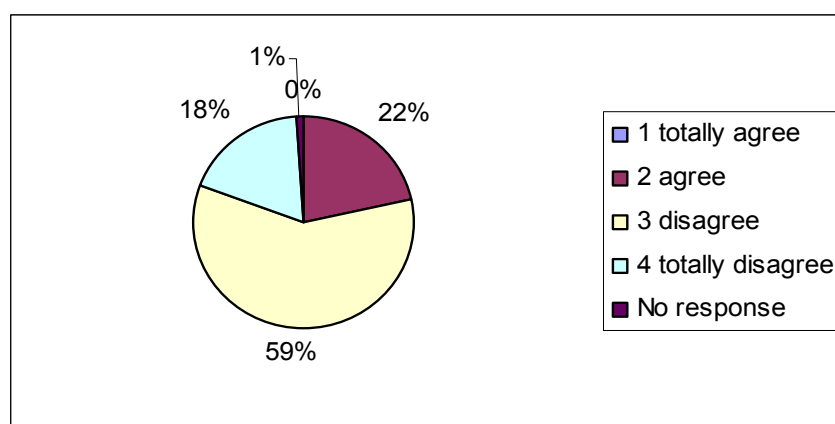
**Figure 4.30: ANOVA in respect of medication and patient violence.**

**Table 4.14: Group; LS Means**

group; LS Means (Spreadsheet2)						
Current effect: F(2, 79)=1.3150, p=.27429						
Effective hypothesis decomposition						
Cell No.	group	Q13 Mean	Q13 Std.Err.	Q13 -95.00%	Q13 +95.00%	N
1	AN	1.739130	0.158589	1.423468	2.054793	23
2	RN	1.846154	0.149159	1.549260	2.143047	26
3	RPN	2.060606	0.132397	1.797076	2.324136	33

No significant statistical differences were proven among respondents. Notably, the assistant nurses were more strongly in agreement with this statement, possibly due to the fact that assistant nurses do not administer medication, nor do they receive official training with regards to pharmacology, in accordance with the Nursing Act no. 33 of 2005 (South Africa, 2005), as it falls outside of their scope of practice. The use of medication as a possible means to prevent aggression, may thus have been regarded as a means of providing a safer environment for staff.



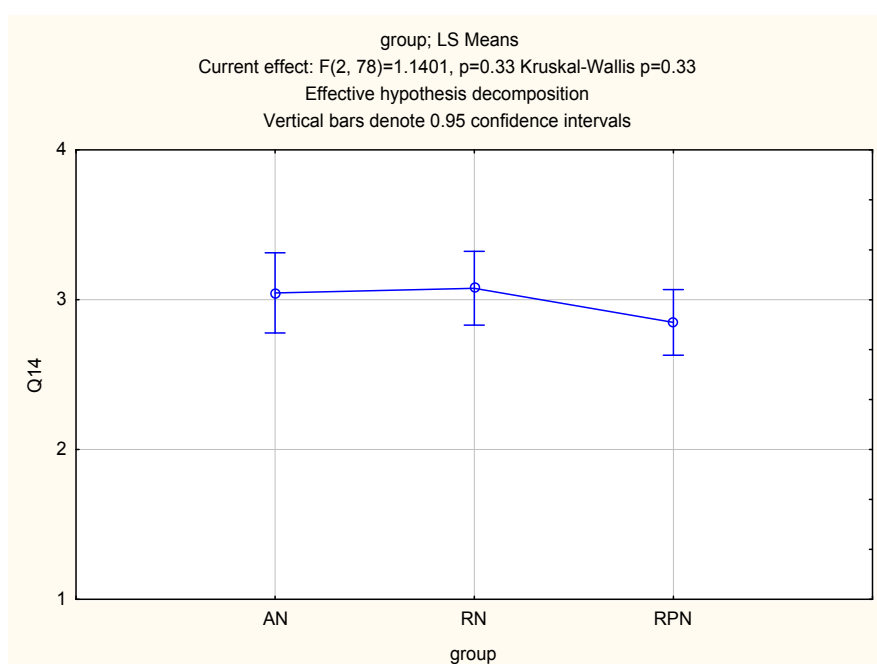
**Question 14: Aggressive patients will calm down automatically, if left alone.****Figure 4.31: Response distribution to question 14.**

A majority of 77% (n=71) of staff felt that some form of intervention might be necessary, as aggressive patients would not automatically calm down if left alone. This contradicted the opinions of patients, who participated in the research performed by Duxbury (2005:471), where patients had felt that they would indeed calm down if left alone.

This report left the researcher with a question as to whether nurses might be prone to “over intervening” when it was not really required.

To elaborate, nurses are taught to “never leave a person who is aggressive alone as the patient might experience this as rejection, which in its turn may increase the risk of self harm” (Smeltzer, Bare, Hinkle & Cheever, 2007:2188). This type of teaching is reinforced, but it might contribute towards confusion as to how to manage the individual person. It may perhaps also contribute to increased pressure on an inexperienced person to intervene in a situation of aggression, whilst the lack of developed skills may impinge on the person’s ability to deal with aggression and violence.

The respondents in this study showed an understanding that some form of intervention was needed. However, the respondents should be made aware of the appropriate times to intervene and what early intervention entails.



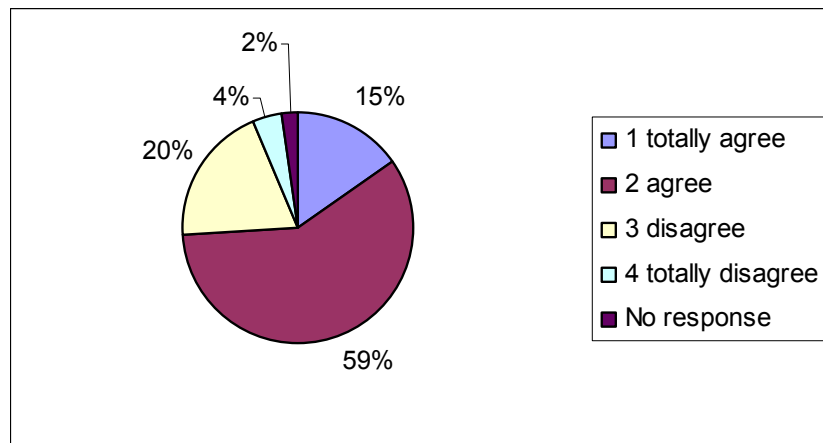
**Figure 4.32: ANOVA in respect of leaving to calm down automatically and patient violence.**

**Table 4.15: Group; LS Means**

group; LS Means (Spreadsheet2)						
Current effect: $F(2, 78)=1.1401$ , $p=.32506$						
Effective hypothesis decomposition						
Cell No.	group	Q14 Mean	Q14 Std.Err.	Q14 -95.00%	Q14 +95.00%	N
1	AN	3.045455	0.134501	2.777685	3.313225	22
2	RN	3.076923	0.123723	2.830610	3.323236	26
3	RPN	2.848485	0.109819	2.629852	3.067118	33

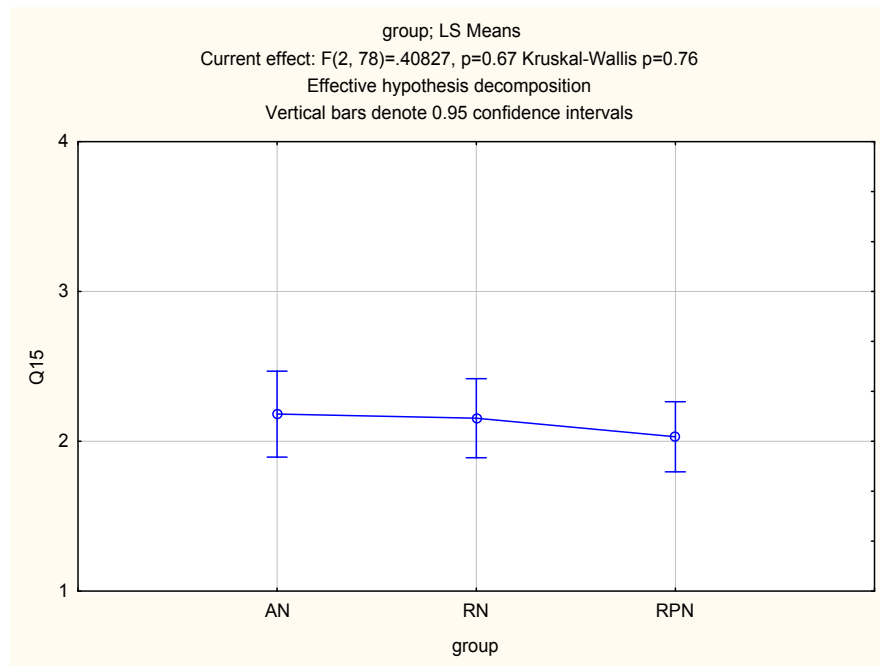
The group of registered psychiatric nurses showed a lower level of disagreement with this statement as compared to the other two categories who strongly disagreed with the statement as can be seen in figure 4.32. There was however little variance within the groups and no significant statistical differences between the groups were detected.

**Question 15: The use of negotiation could be used more effectively, when managing aggression and violence.**



**Figure 4.33: Response distribution to question 15.**

Similarly to Duxbury's findings (2005:473), 74% (n=68) of respondents from the hospitals included in this study felt that negotiations could be used more effectively in order to manage aggression and violence. When compared to the findings in question 3, where communication had been reported to not being a cause of aggression, and question 6, where 58% (n=53) of respondents had reported that poor communication skills may have contributed towards aggression, the response to question 15 indicated that staff were aware of the value of negotiations and therefore also their responsibility to communicate with patients as a means to manage aggression and violence.



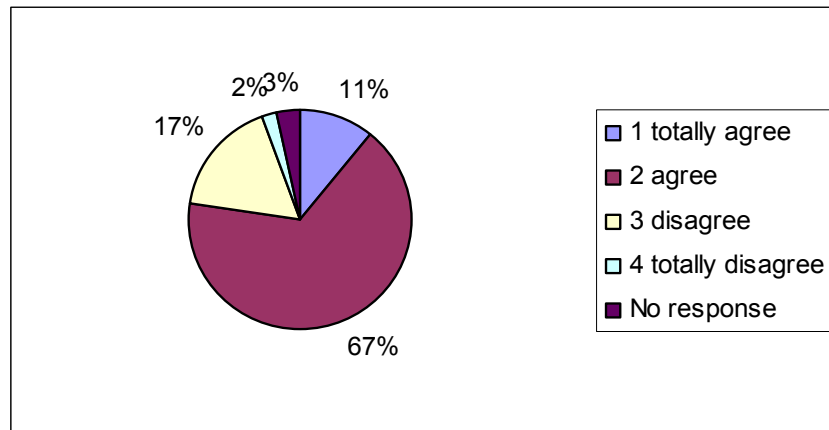
**Figure 4.34: ANOVA in respect of the use of negotiation and patient violence.**

**Table 4.16: Group; LS Means**

group; LS Means (Spreadsheet2)						
Current effect: $F(2, 78) = .40827, p = .66621$						
Effective hypothesis decomposition						
Cell No.	group	Q15 Mean	Q15 Std.Err.	Q15 -95.00%	Q15 +95.00%	N
1	AN	2.181818	0.144089	1.894959	2.468678	22
2	RN	2.153846	0.132543	1.889974	2.417718	26
3	RPN	2.030303	0.117648	1.796083	2.264523	33

Even though all three categories of staff agreed with this statement assistant nurses showed a slightly lower level of agreement that negotiations could be used more effectively this can be seen in the mean scores in table 4.16, although it was not statistically significant. The responses, however, correlated with the findings on poor communication (question 20) as a cause of patient related aggression, where assistant nurses slightly disagreed more with the statement.

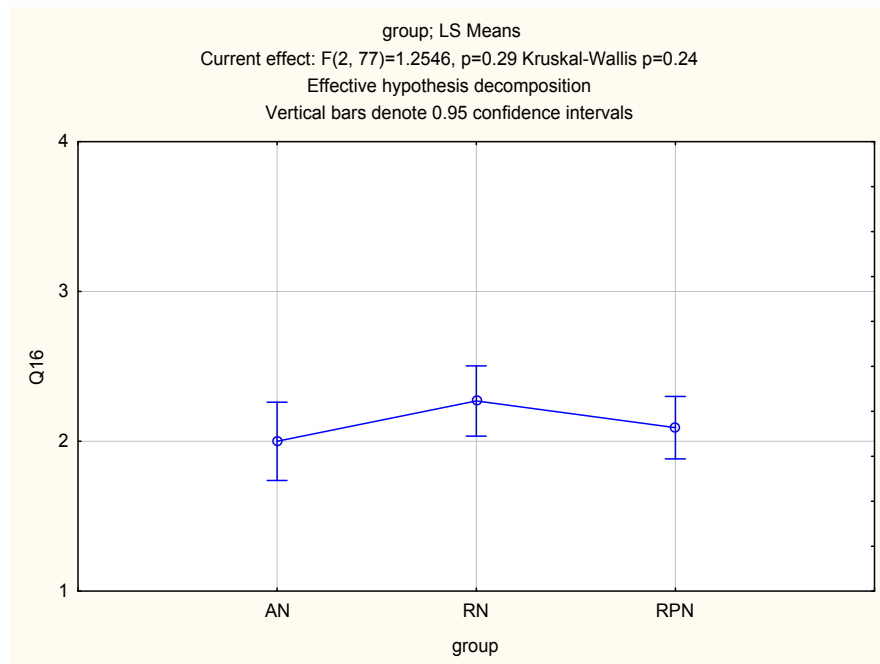
**Question 16: Restrictive care environments can contribute towards aggression and violence.**



**Figure 4.35: Response distribution to question 16.**

When comparing the 78% (n=71) of respondents acknowledging the restrictive environment as being a contributing factor in mental healthcare user related violence and aggression, it contradicted the responses to question 1, where only 50% (n=46) of respondents had reported aggression as being caused by the environment of the patient. A possible reason for this response might have been an interpretation that the social environment had meant the place where a patient lived, and not the hospital as part of the environment.

Restrictive environments and involuntary incarceration have been cited by numerous authors as a predictor of potential violence, for example, by Canatsey *et al*, (1994:13), stating that some therapeutic matters that often include managing an aggressive person in a confined area, can actually increase aggression in the client, thus impinging on the therapeutic plan devised for the client.



**Figure 4.36: ANOVA in respect of using restrictive care environments and patient violence.**

**Table 4.17: Group; LS Means**

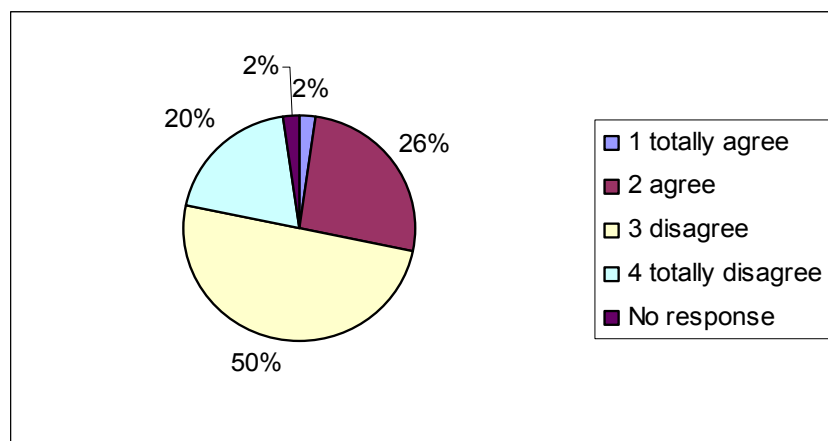
Cell No.	group; LS Means (Spreadsheet2)					
	Current effect: F(2, 77)=1.2546, p=.29094					
	Effective hypothesis decomposition					
	group	Q16 Mean	Q16 Std.Err.	Q16 -95.00%	Q16 +95.00%	N
1	AN	2.000000	0.131220	1.738707	2.261293	21
2	RN	2.269231	0.117930	2.034403	2.504059	26
3	RPN	2.090909	0.104677	1.882470	2.299348	33

There was more variance among the responses of assistant nurses with regards to this statement, compared to the other two categories. The variance within the groups is calculated as the difference between the +95.00% and the -95.00% which resulted in the following variances for the groups. Assistant nurses 0.522586, registered nurses 0.469656 and registered psychiatric nurses 0.416878. The assistant nurses were more strongly in agreement with the statement in comparison with the registered nurses and registered psychiatric nurses.

Regardless of the insignificant statistical differences between the three groups, it was observed that the restrictive care environment might have been perceived by

the assistant nurses as creating a safe environment for staff. It, however, did not explain the similar findings for registered psychiatric nurses.

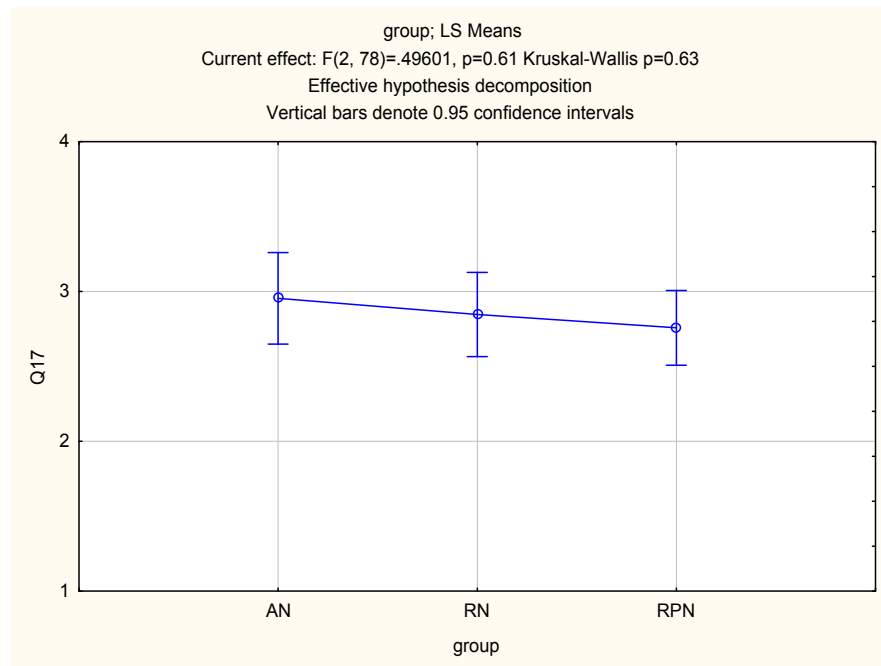
**Question 17: Expressions of aggression do not always require staff intervention.**



**Figure 4.37: Response distribution to question 17.**

A minority of 28% (n= 26) of respondents felt that the expression of aggression had not required staff intervention. This confirms the responses to question 14, where 77% (n=71) of respondents had indicated that a patient would not automatically calm down, but would require staff intervention.

The findings left the researcher with the perception that staff were unsure as to whether they should intervene at the first signs of aggression, or not and might be inclined to over intervene.



**Figure 4.38: ANOVA in respect of staff intervention and patient violence.**

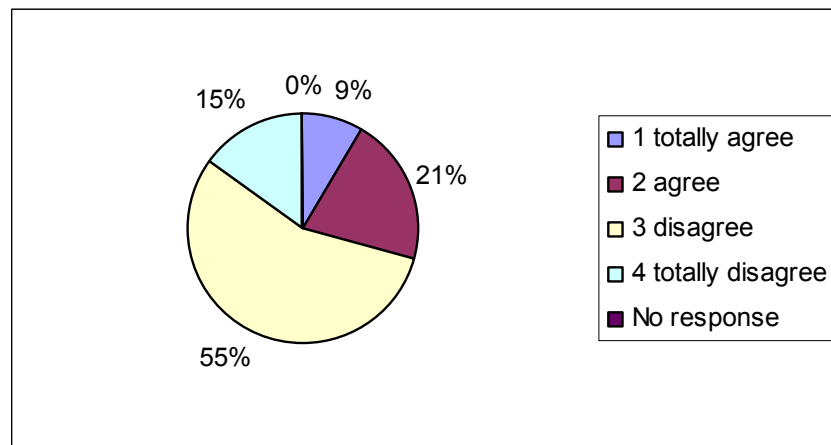
**Table 4.18: Group; LS Means**

Cell No.	group; LS Means (Spreadsheet2) Current effect: $F(2, 78)=.49601, p=.61086$ Effective hypothesis decomposition					
	group	Q17 Mean	Q17 Std.Err.	Q17 -95.00%	Q17 +95.00%	N
1	AN	2.954545	0.153437	2.649075	3.260016	22
2	RN	2.846154	0.141142	2.565162	3.127145	26
3	RPN	2.757576	0.125281	2.508160	3.006991	33

The group of assistant nurses were slightly more in favour of intervention at the first signs of aggression. However they also showed a slightly larger variance within the group, in comparison with the other categories namely 0.610925 for assistant nurses, 0.561983 for registered nurses and 0.4998831 for registered psychiatric nurses. These responses correlated with the findings, where the assistant nurses had been more in favour of the use of seclusion as indicated in question 10.

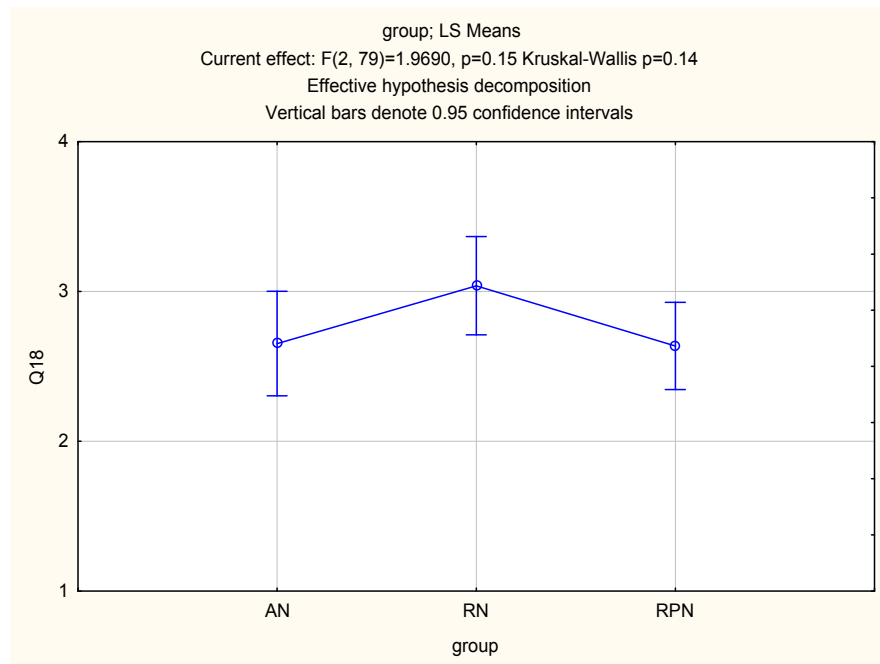
These outcomes increased the credibility of the statement that assistant nurses were probably more in contact with mental healthcare users, due to the nature of their job descriptions, and might therefore feel more threatened by aggressive mental healthcare users.



**Question 18: Physical restraint is sometimes used more than necessary.****Figure 4.39: Response distribution to question 18.**

In view of the 30% (n=27) of respondents agreeing that physical restraint had sometimes been used more than necessary, it confirmed a statement by Saverman *et al*, (1999:43) that “if staff fear the population they serve, aggressive patients in long term care may be treated more forcibly by staff, be restrained more frequently and face the possibility of abuse by care givers”.

With reference to question 11, where 73% (n=67) of respondents had indicated that patients had often been restrained in order to administer sedation, the researcher felt that the statement by Saverman *et al*, (1999:43) might explain the reason for the practice of physical restraint, and that, despite staff being aware of the value of negotiations, they possibly lacked these skills.



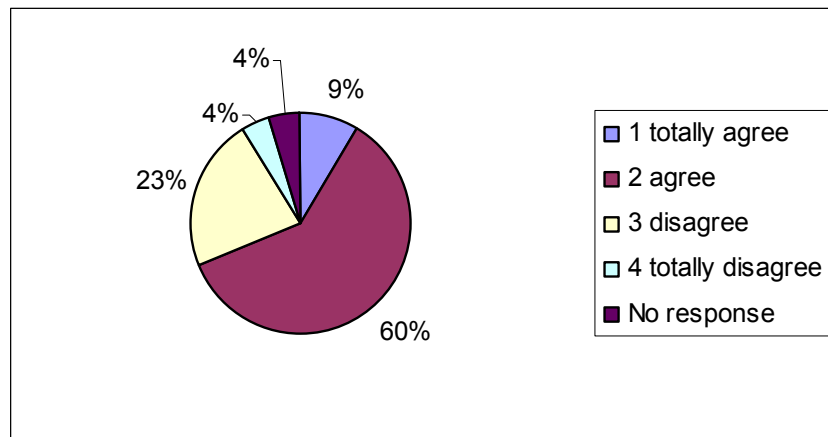
**Figure 4.40: ANOVA in respect of physical restraint and patient violence.**

**Table 4.19: Group; LS Means**

group; LS Means (Spreadsheet2)						
Current effect: $F(2, 79)=1.9690, p=.14639$						
Effective hypothesis decomposition						
Cell No.	group	Q18 Mean	Q18 Std.Err.	Q18 -95.00%	Q18 +95.00%	N
1	AN	2.652174	0.175267	2.303314	3.001033	23
2	RN	3.038462	0.164845	2.710345	3.366578	26
3	RPN	2.636364	0.146321	2.345119	2.927608	33

The registered nurses were more strongly in disagreement with this statement as is seen by their mean score in table 4.19 the assistant nurses however showed a slightly larger variance within the group. Variance was set for the three groups as follows: assistant nurses 0.697719, registered nurses 0.656233 and registered psychiatric nurses 2.927608. However, there were no significant statistical differences between the groups of respondents.

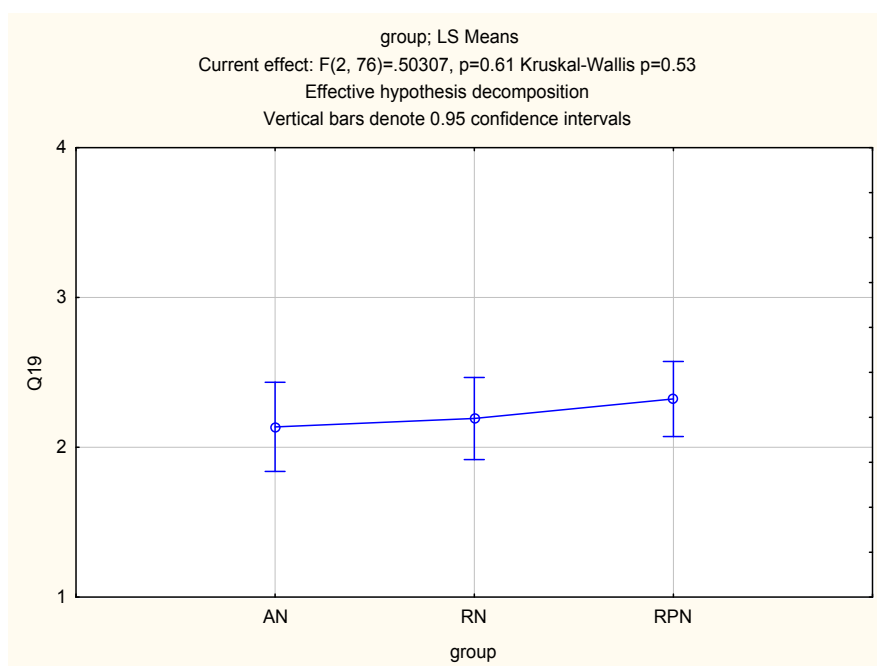
**Question 19: Alternatives to the use of containment and sedation to manage patient violence, could be used more effectively.**



**Figure 4.41: Response distribution to question 19.**

69% (n=63) of respondents were in favour of the use of alternatives to containment and sedation, thus indicating that staff empathised with the situation of mental healthcare users and were willing to explore alternative methods. However, certain factors may prevent the implementation of alternatives to manage aggression and violence, as had been reported in other studies.

The type of intervention used by the mental healthcare provider depends largely on the way the nurse assesses the situation, previous experience and the “unwritten” rules of the ward (Finnema *et al.*, 1994:1091).



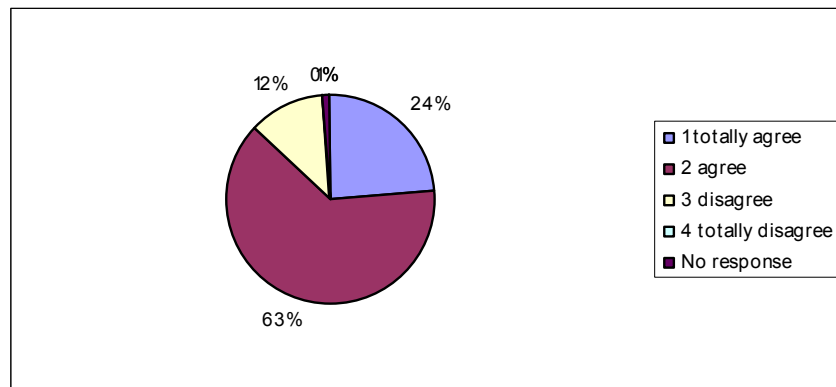
**Figure 4.42: ANOVA in respect of alternatives to the use of containment and sedation and patient violence.**

**Table 4.20: Group; LS Means**

Cell No.	group; LS Means (Spreadsheet2)					
	Current effect: F(2, 76)=.50307, p=.60667					
	Effective hypothesis decomposition					
	group	Q19 Mean	Q19 Std.Err.	Q19 -95.00%	Q19 +95.00%	N
1	AN	2.136364	0.149568	1.838473	2.434254	22
2	RN	2.192308	0.137582	1.918289	2.466327	26
3	RPN	2.322581	0.126000	2.071631	2.573530	31

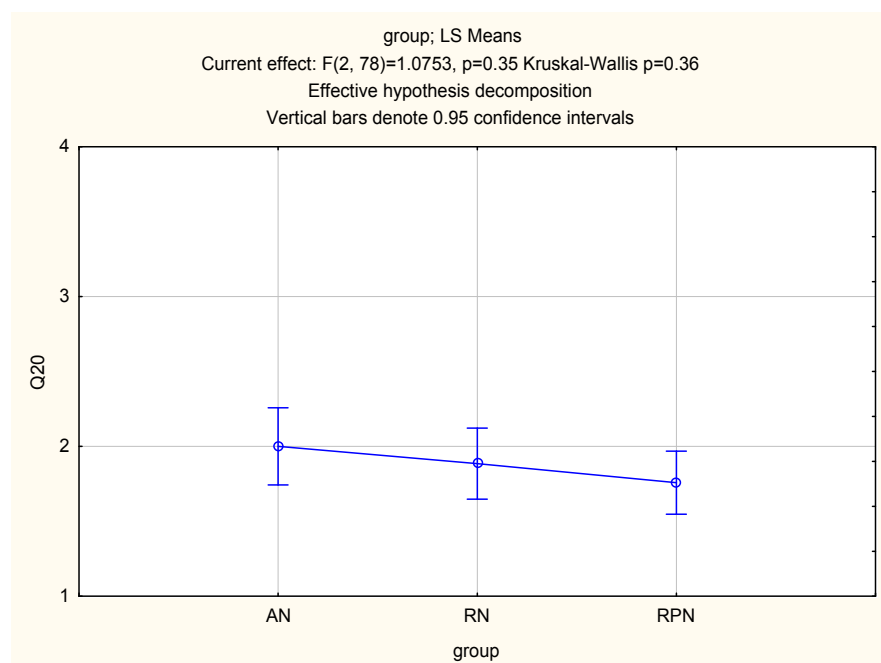
Assistant - and registered nurses were more strongly in favour of using alternatives to containment and seclusion as can be seen in figure 4.42. This same trend was found among all categories, with no significant statistical differences among them.

**Question 20: Improved one to one relationships between staff and patients can reduce the incidence of patient aggression and violence.**



**Figure 4.43: Response distribution to question 20.**

87% (n=75) of the respondents agreed that one-to-one communication could improve. However, based on the responses to question 1, it seemed as though respondents were unclear as to their role in improving the communication between themselves and patients.



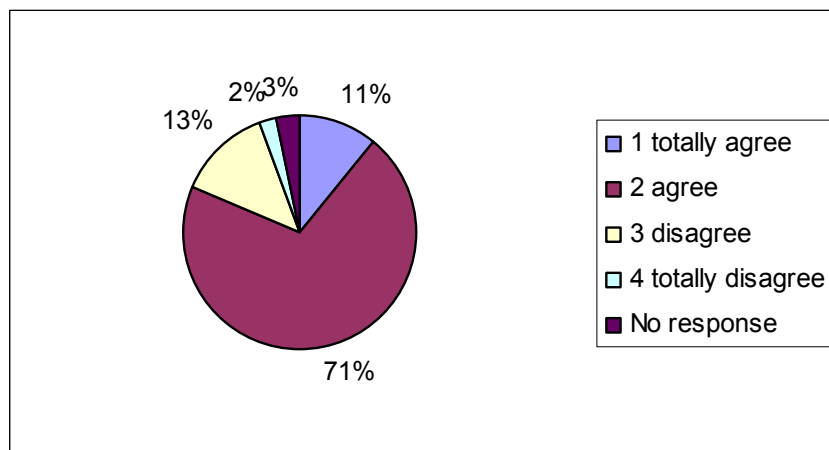
**Figure 4.44: ANOVA in respect of one to one relationships and patient violence.**

**Table 4.21: Group; LS Means**

group; LS Means (Spreadsheet2)						
Current effect: F(2, 78)=1.0753, p=.34619						
Effective hypothesis decomposition						
Cell No.	group	Q20 Mean	Q20 Std.Err.	Q20 -95.00%	Q20 +95.00%	N
1	AN	2.000000	0.129358	1.742469	2.257531	22
2	RN	1.884615	0.118992	1.647721	2.121509	26
3	RPN	1.757576	0.105620	1.547303	1.967849	33

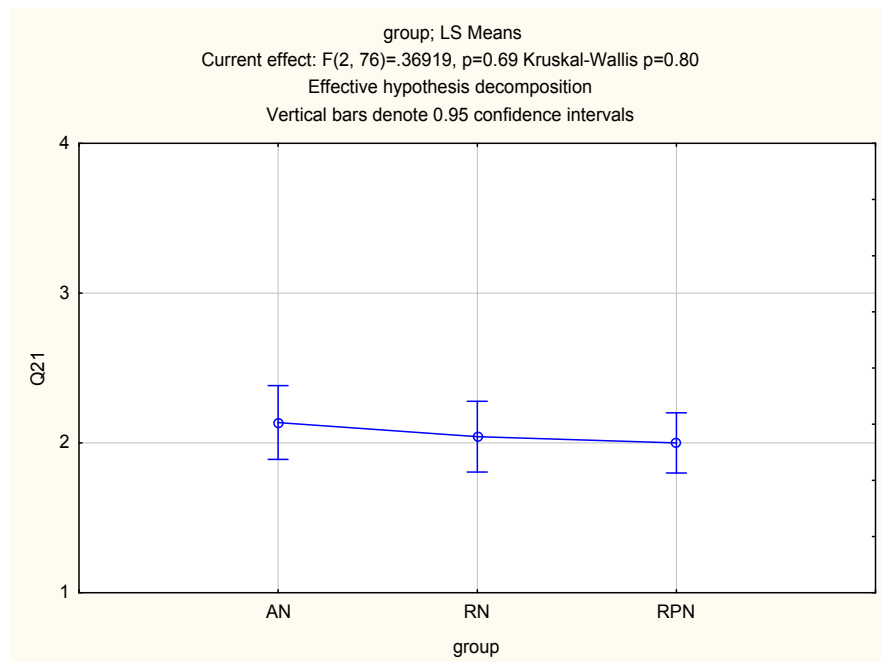
Registered psychiatric nurses and registered nurses were more in agreement with this statement, thus corroborating the findings, where both these groups agreed with the statement in question 6, indicating that poor communication could lead to aggression and violence. Figure 4.44 provides a graphic display on how all categories of staff agrees with this statement.

**Question 21: Patient aggression could be handled more effectively on this ward.**

**Figure 4.45: Response distribution to question 21.**

Considering the fact that 82% (n=75) of respondents agreed that patient aggression could be managed more effectively, it left the researcher with the impression that respondents were aware that the current method of managing aggression and violence should be re-evaluated.

Finnema *et al*, (1994:1088) reported that staff tended to use “the same interventions to prevent and stop aggression”, which might explain why the respondents in this study showed this response.



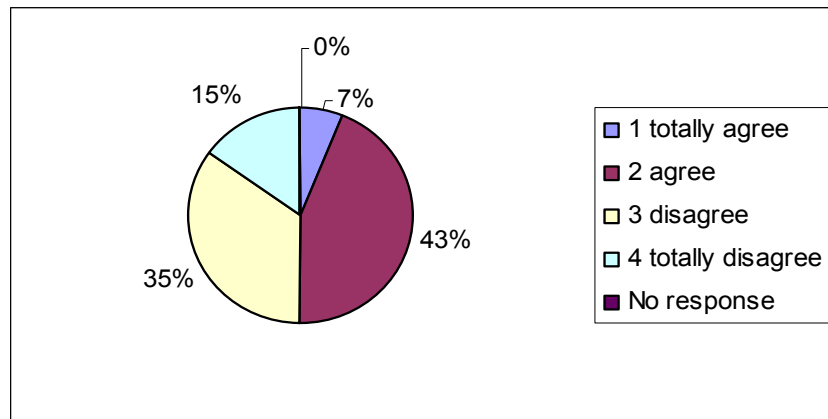
**Figure 4.46: ANOVA in respect of improving the handling of aggression and patient violence.**

**Table 4.22: Group; LS Means**

group; LS Means (Spreadsheet2)						
Current effect: F(2, 76)=.36919, p=.69253						
Effective hypothesis decomposition						
Cell No.	group	Q21 Mean	Q21 Std.Err.	Q21 -95.00%	Q21 +95.00%	N
1	AN	2.136364	0.123615	1.890163	2.382564	22
2	RN	2.041667	0.118352	1.805948	2.277386	24
3	RPN	2.000000	0.100931	1.798978	2.201022	33

Both registered - and registered psychiatric nurses tended to agree more strongly that patient related aggression could be handled more effectively. Contrary, assistant nurses tended to agree to a lesser degree as can be seen by the mean scores in table 4.22 with the statement. These small differences in opinions amongst the different groups were statistically insignificant as  $p = 0.69253$ .

**Question 22: Prescribed medication can in some instances lead to patient aggression and violence.**



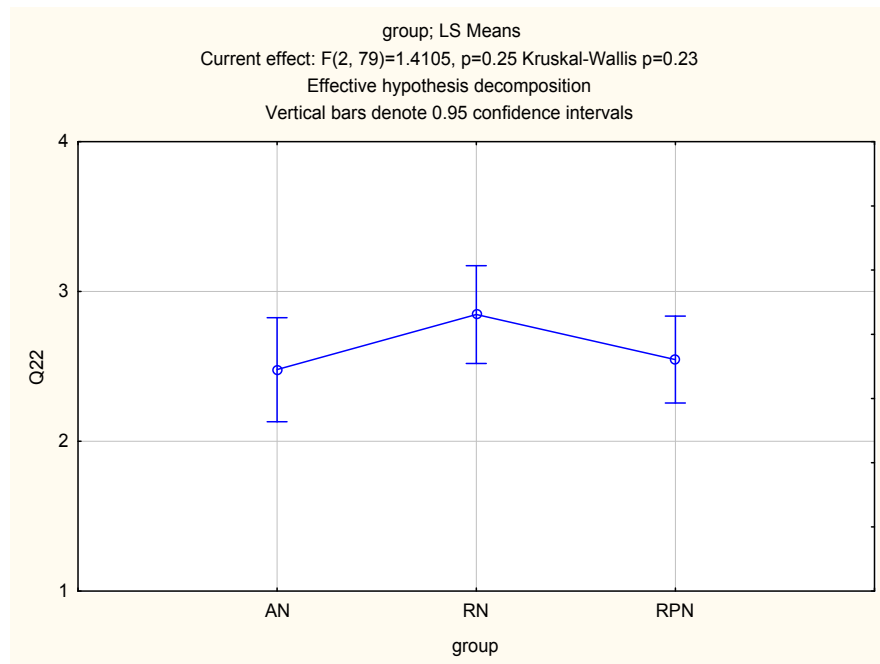
**Figure 4.47: Response distribution to question 22.**

Only 50% (n=46) of respondents were aware that medication could lead to patient aggression.

It was unclear, however, whether respondents had understood that medication could have a “paradoxical effect” (Ashton,1989), or whether the mere idea, perhaps, of having to comply with doctors prescripts might have been a cause of aggression and violence. Both patients and staff had agreed with this statement in Duxbury’s study (2005:473).

Further exploration into the use of medication as measure to manage aggression and violence, might provide more insight as to the perceptions of both staff and patients on this issue.





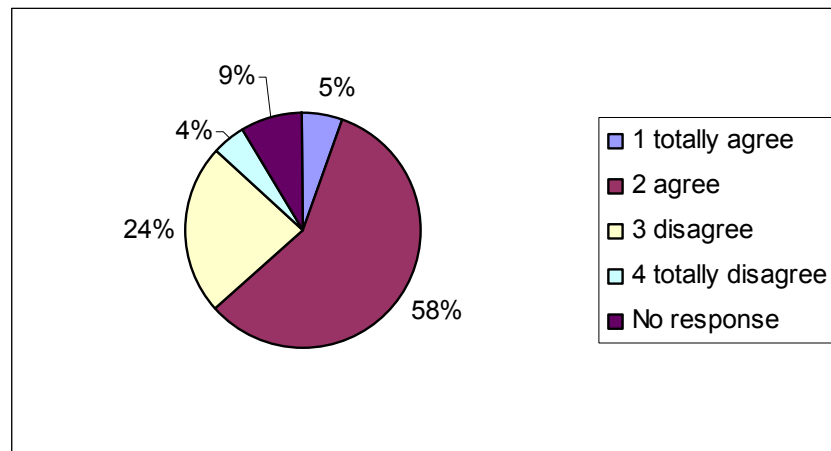
**Figure 4.48: ANOVA in respect of prescribed medication and patient violence.**

**Table 4.23: Group; LS Means**

group; LS Means (Spreadsheet2)						
Current effect: $F(2, 79)=1.4105, p=.25009$						
Effective hypothesis decomposition						
Cell No.	group	Q22 Mean	Q22 Std.Err.	Q22 -95.00%	Q22 +95.00%	N
1	AN	2.478261	0.174464	2.130998	2.825524	23
2	RN	2.846154	0.164091	2.519539	3.172768	26
3	RPN	2.545455	0.145651	2.255543	2.835366	33

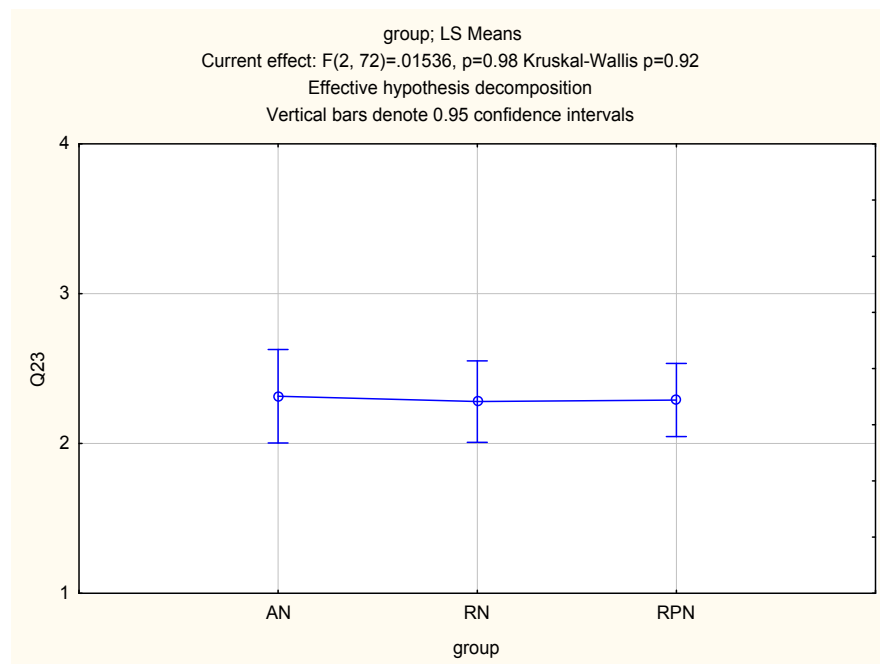
All respondent groups tended to agree that medication could lead to patient aggression. However, the group of registered nurses were slightly less convinced than the other two groups as can be seen in figure 4.48. There was, however, no significant statistical difference between the three groups as can be seen in the mean scores in table 4.23 and the p-value of  $p= 0.25009$ .

**Question 23: It is largely situations that contribute towards the expression of aggression by patients.**



**Figure 4.49: Response distribution to question 23.**

63% (n=58) of respondents agreed that situations had led to the expression of aggression and violence, thus confirming previous responses on questions 1, 2 and 5 that the cause of patient related aggression had been either due to the situation, or because of the patients themselves.



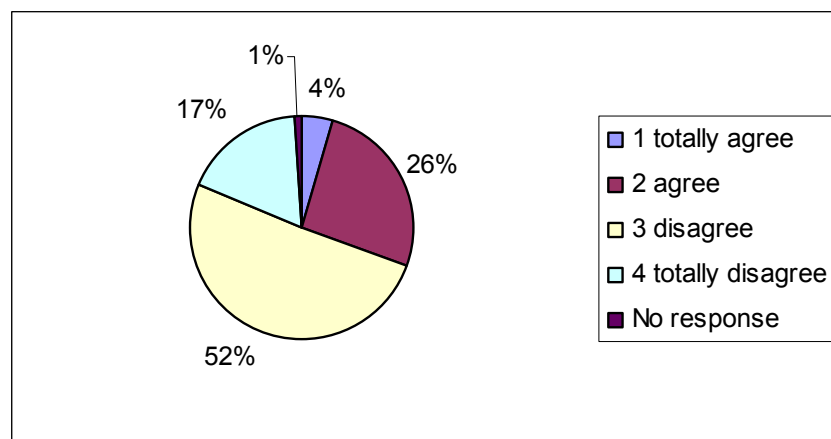
**Figure 4.50: ANOVA in respect of situations and patient violence.**

**Table 4.24: Group; LS Means**

group; LS Means (Spreadsheet2)						
Current effect: $F(2, 72) = .01536, p = .98476$						
Effective hypothesis decomposition						
Cell No.	group	Q23 Mean	Q23 Std.Err.	Q23 -95.00%	Q23 +95.00%	N
1	AN	2.315789	0.156563	2.003687	2.627892	19
2	RN	2.280000	0.136488	2.007915	2.552085	25
3	RPN	2.290323	0.122570	2.045983	2.534662	31

All three groups had similar responses to this question, by agreeing with this statement as can be seen in figure 4.50. No statistical differences among the respondents were shown with a strong p-value of  $p = 0.98476$ .

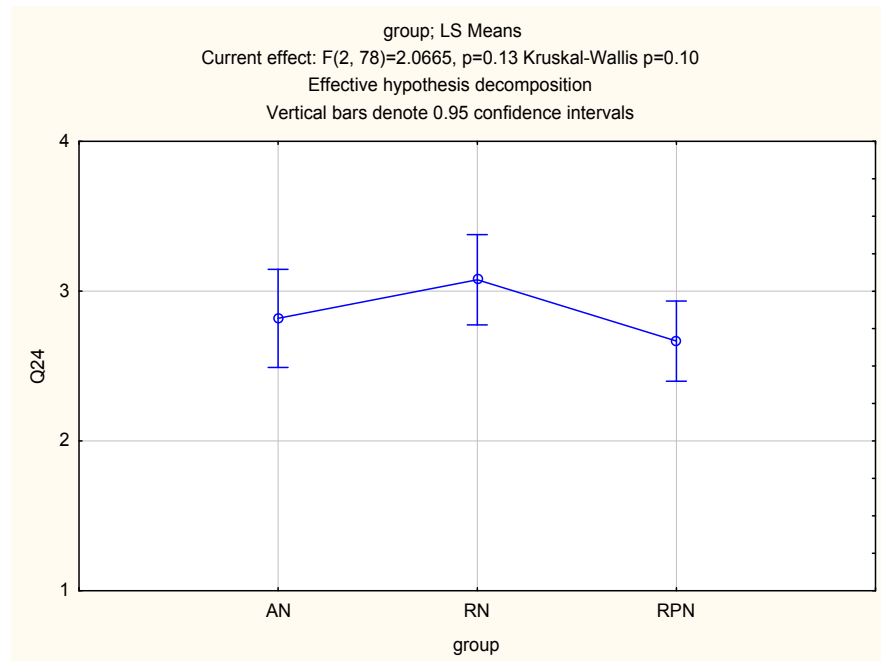
**Question 24: Seclusion is sometimes used more than necessary.**

**Figure 4.51: Response distribution to question 24.**

30% ( $n=28$ ) of the respondents felt that seclusion had been used more than necessary, indicating that respondents had agreed with the use of seclusion as a method of managing aggression and violence. However this created the impression that at times, the use of seclusion had possibly not been a therapeutic intervention.

The high percentage of 69% ( $n=63$ ) of the respondents disagreeing with this statement, contradicted the responses to question 19, where 69% ( $n=63$ ) of respondents had indicated that alternatives to manage seclusion should be used.

The researcher believed that this response confirmed the existence of ambivalence as to how aggression and violence should be managed.



**Figure 4.52: ANOVA in respect of unnecessary use of seclusion and patient violence.**

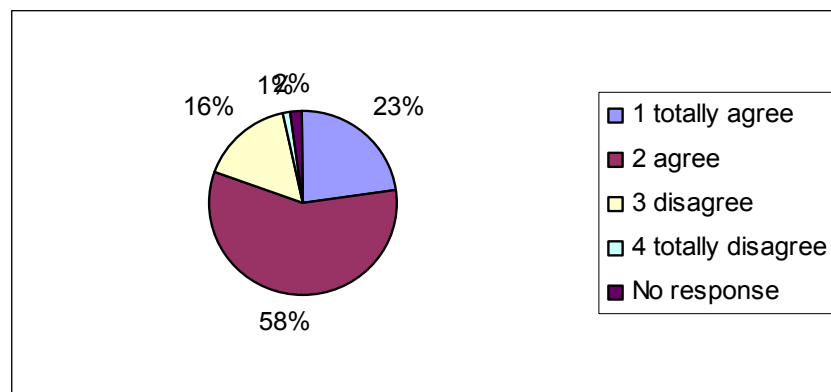
**Table 4.25: Group; LS Means**

group; LS Means (Spreadsheet2)						
Current effect: $F(2, 78)=2.0665$ , $p=.13351$						
Effective hypothesis decomposition						
Cell No.	group	Q24 Mean	Q24 Std.Err.	Q24 -95.00%	Q24 +95.00%	N
1	AN	2.818182	0.164530	2.490628	3.145735	22
2	RN	3.076923	0.151345	2.775618	3.378229	26
3	RPN	2.666667	0.134338	2.399220	2.934113	33

The group of registered nurses tended to disagree to a larger extent with this statement, in comparison with the assistant nurse and registered psychiatric nurses. However, the variance in responses to this question was slightly higher among the group of assistant nurses namely  $p = 0.655107$ , whilst there was the least amount of variance among the group of registered psychiatric nurses set at  $p = 0.534893$ .

Overall, the differences in the results between the three groups were of no statistical significance.

**Question 25: Prescribed medication should be used more frequently to help patients who are aggressive and violent.**

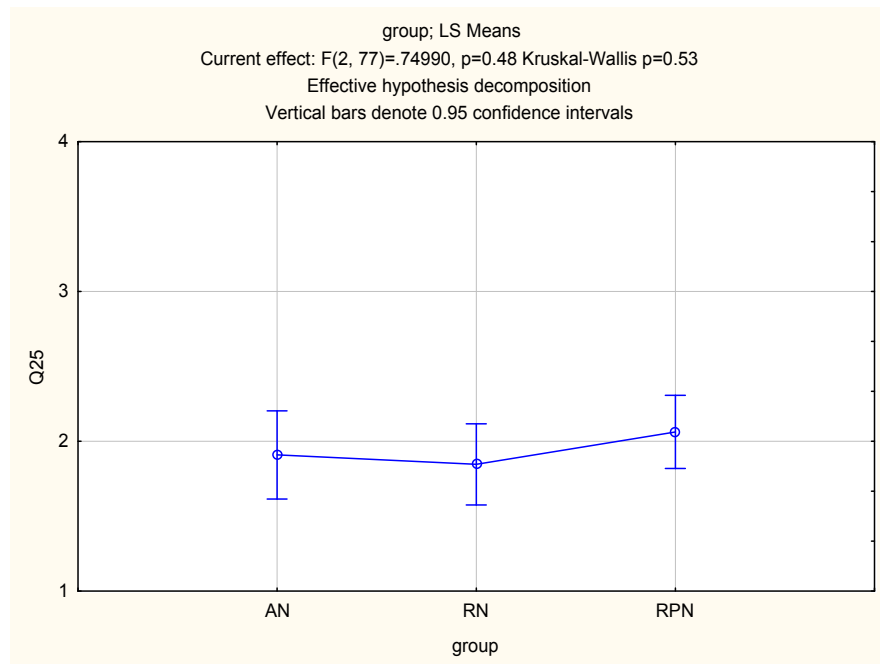


**Figure 4.53: Response distribution to question 25.**

The 81% (n=80) of respondents who indicated that medication should be used more often, further confirmed the existence of uncertainty, as 50% (n=46) of respondents had agreed in question 22 that medication may be a cause of aggression.

Furthermore, this inclination by the respondents was contrary to the current policy in the four psychiatric hospitals included in this study where Viall & Johns (2001:1) quotes the director of the four hospitals included in this study, stating that “We’re also noticing that patients are much more aggressive, which is a burden on our staff, and on our policy of not over-medicating patients.”

Importantly, Duxbury (2005:473) reported that patients had strongly disagreed that medication should be used more often.

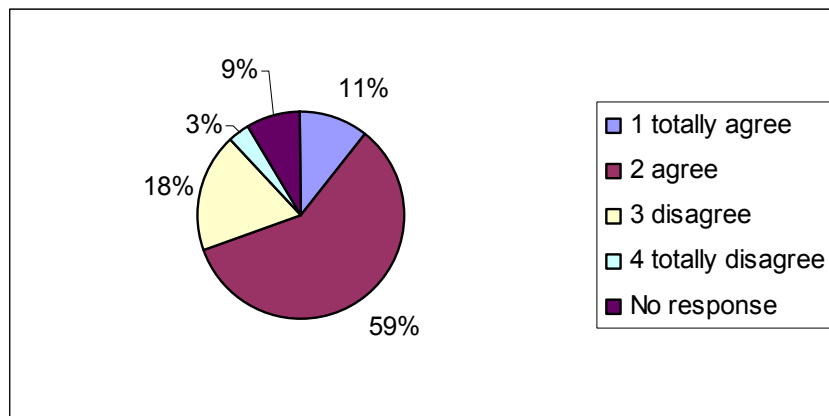


**Figure 4.54: ANOVA in respect of need to use prescribed medication more frequently and patient violence.**

**Table 4.26: Group; LS Means**

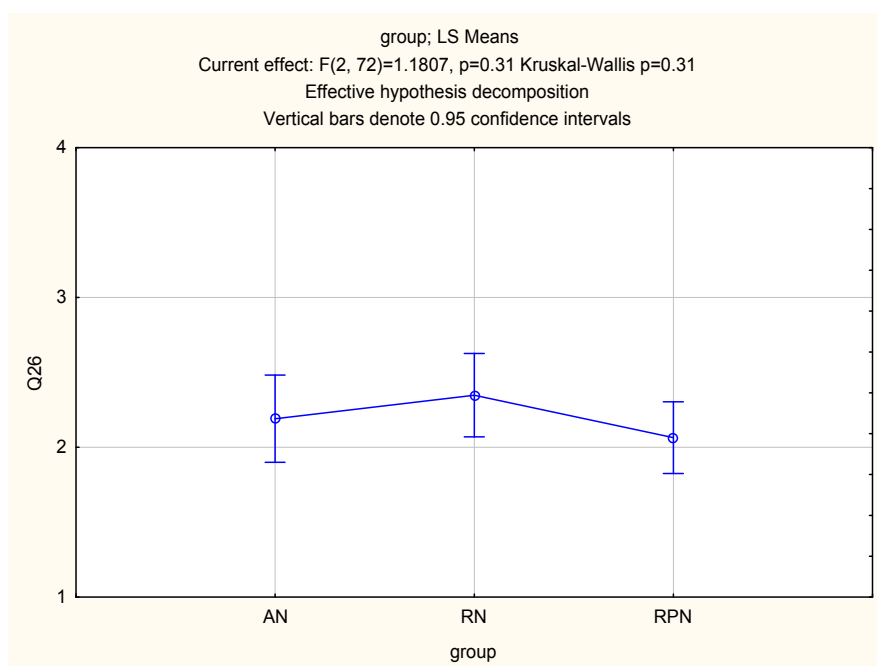
group; LS Means (Spreadsheet2)						
Current effect: $F(2, 77)=.74990, p=.47583$						
Effective hypothesis decomposition						
Cell No.	group	Q25 Mean	Q25 Std.Err.	Q25 -95.00%	Q25 +95.00%	N
1	AN	1.909091	0.147945	1.614495	2.203687	22
2	RN	1.846154	0.136090	1.575165	2.117143	26
3	RPN	2.062500	0.122670	1.818234	2.306766	32

All three groups strongly agreed that prescribed medication could be used more effectively. However variance within the group of assistant nurses of  $p = 0.589192$  was slightly higher than in the group of registered nurses,  $p = 0.541978$ . The group of registered psychiatric nurses showed slightly less variance namely  $p = 0.488532$  in response rates within the group. This may be explained by the level of education with regards to psycho pharmacology, as the group of registered psychiatric nurses agreed slightly less with this statement. The group of registered psychiatric nurses were slightly less strongly in agreement with this statement in comparison with the assistant nurses and registered nurses.

**Question 26: The use of de-escalation is successful in preventing violence.****Figure 4.55: Response distribution to question 26.**

The 70% (n=64) of respondents agreeing with the use of de-escalation techniques confirmed the notion that alternative methods should be used to manage aggression. It was, however, unclear if staff used de-escalation techniques. Duxbury quoted Cowen *et al*, (2003), who identified that de-escalation was a poorly defined concept, because it had been used only as a measure to prevent further “escalation”.

Compared to Duxbury (2005:473), the respondents in both studies reported that the use of de-escalation techniques had been effective. However, contrary to the perception of staff, patients in the Duxbury study reported that staff had not been very effective in the use of de-escalation techniques.



**Figure 4.56: ANOVA in respect of de-escalation and patient violence.**

**Table 4.27: Group; LS Means**

group; LS Means (Spreadsheet2)						
Current effect: $F(2, 72)=1.1807, p=.31294$						
Effective hypothesis decomposition						
Cell No.	group	Q26 Mean	Q26 Std.Err.	Q26 -95.00%	Q26 +95.00%	N
1	AN	2.190476	0.146219	1.898994	2.481958	21
2	RN	2.347826	0.139717	2.069306	2.626347	23
3	RPN	2.064516	0.120346	1.824611	2.304422	31

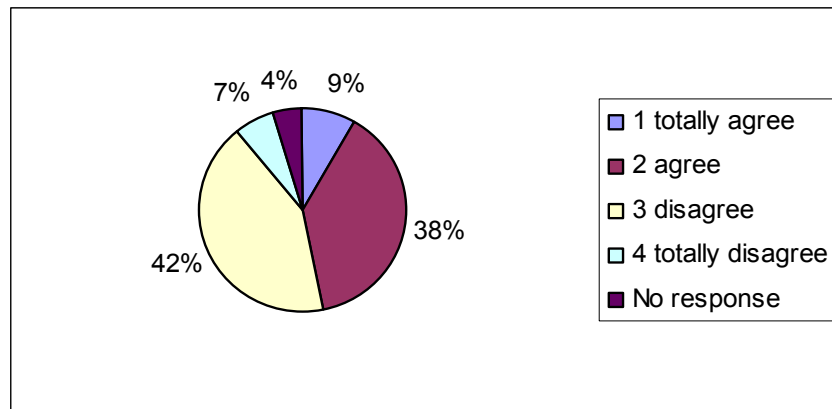
Although there were very little differences between the three groups' responses as seen in the mean scores of the categories in table 4.27, the registered psychiatric nurses more strongly agreed that the use of de-escalation had been successful in the prevention of violence, whilst the assistant nurses agreed less, but slightly more than the registered nurses.

This may be explained by the fact that 86% (n=19) of this group of assistant nurses had between 16 and 30 plus years experience in psychiatric nursing, opposed to the 5.8% (n=2) of registered nurses with the same level of experience. 33.3% (n=9) of the group of registered psychiatric nurses had the same level of experience and in addition had a qualification in psychiatric nursing, which might explain why they were most in agreement with this statement. Also, they showed the smallest variance



within the group, i.e. a 0.479811 difference between those in agreement with and those less in agreement with the statement.

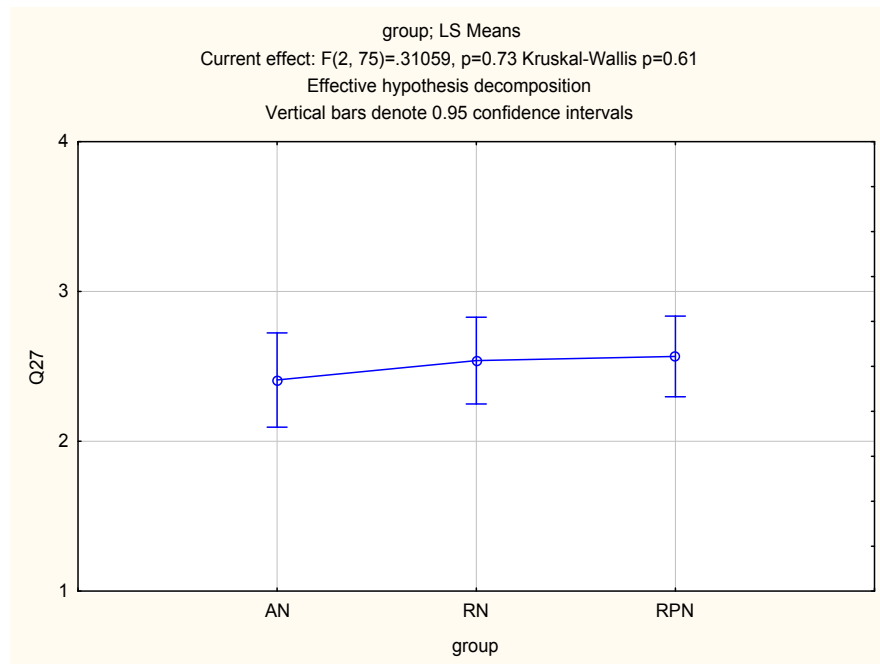
**Question 27: If the physical environment were different, patients would be less aggressive.**



**Figure 4.57: Response distribution to question 27.**

47% (n=43) of respondents agreed that if the physical environment were different, patients would be less aggressive. These responses indicated that the majority of respondents felt that the current physical environment had not added to incidences of patient related aggression. Noteworthy, the admission units of the four hospitals in this study were restricted environments, where patients could not leave the ward and move around on the hospital premises. This was cited by Johansen and Lundman (2002:640) in previous research as contributing towards feelings, such as anger and aggression, since patients felt trapped due to losing personal freedom and the right to make decisions.

Compared to the study by Duxbury (2005:472), it had been reported that staff had not overwhelmingly regarded the restrictive environment as a possible cause of aggression, whilst the patients had significantly differed in opinion from the staff.



**Figure 4.58: ANOVA in respect of changing physical environment and patient violence.**

**Table 4.28: Group; LS Means**

group; LS Means (Spreadsheet2)						
Current effect: F(2, 75)=.31059, p=.73395						
Effective hypothesis decomposition						
Cell No.	group	Q27 Mean	Q27 Std.Err.	Q27 -95.00%	Q27 +95.00%	N
1	AN	2.409091	0.157915	2.094508	2.723674	22
2	RN	2.538462	0.145261	2.249087	2.827836	26
3	RPN	2.566667	0.135230	2.297274	2.836060	30

The group of registered psychiatric nurses were leaning towards a lower level of agreement with the statement, compared to the other two groups as seen in table 4.28. However, there were no significant statistical differences in the responses among the three groups whereas  $p = 0.73395$ .

## 4.5 CATEGORIES IDENTIFIED IN THE MAVAS QUESTIONNAIRE

Duxbury (2005:469) identified different causes of aggression, which she labelled, internal causes, external causes, situational causes and management options.

These categories were identified when developing the MAVAS questionnaire. The responses of participants to the questions in the MAVAS questionnaire can be categorised, thus determining the attitudes towards the possible causes of aggression and ways to manage it.

#### **4.5.1 Internal causes of aggression and violence**

Questions 4, 5, 7, 9, 14 and 17 related to internal causes of aggression. Based on the responses to the questionnaire by the respondents working in the acute admission units of the four hospitals included in this study, the researcher deduced that the majority namely 66% (n=60) respondents had found it difficult to calm patients down and 64% (n=59) of respondents had expected patients to control their aggression, even though it was the perception that patients would not calm down automatically if left alone.

The respondents further felt that certain types of patients were more prone to aggression, whilst reporting illness as the main cause of patient related aggression and violence.

#### **4.5.2 External causes of aggression**

Questions 1, 16 and 27 dealt with external causes of aggression

The identification of external causes of aggression resulted in indistinct findings, as only half of the respondents had recognised the hospital environment as a possible cause of aggression. Yet, a majority namely 78% (n=71) of the respondents had indicated restrictive care as playing a role in aggression and violence among patients.

Further confirmation of the ambiguous results, possibly depicting a lack of understanding of the role of the environment in the manifestation of aggression and violence, was a minority reporting that changes in the environment would improve aggression.

### **4.5.3 Situational causes of aggression**

Questions 2, 3, 6, 15, 20 and 23 pertained to situational causes of aggression.

The 76% (n=69) of respondents agreed that other people may have been the cause of patient related aggression. In comparison, a smaller percentage 63% (n=58) of respondents agreed that situations had caused patient related aggression.

Regardless of only 43% (n=40) of respondents feeling that aggression may be caused because staff had not listened to patients, the vast majority of 85% (n=80) confirmed that one to one communication could improve and that negotiations with patients could be better. This was in support of the 58% (n=53) of respondents who felt that poor communication could lead to patient related aggression.

### **4.5.4 Management of aggression and violence**

Questions 8, 10, 11, 12, 13, 18, 19, 21, 22, 24, 25, and 26 addressed staff attitudes towards the management of aggression and violence.

Importantly, 86% (n=79) respondents reported the use of different approaches to manage aggression and violence, but contrary, seclusion had been reported by 78% (n=72) of respondents as being the most effective approach and that it had often been necessary to restrain patients in order to administer sedation. This was confirmed by the findings that 98% (n=90) of respondents felt that the use of seclusion should not be discontinued and that medication had proven valuable in the management of aggression.

Contrary to these findings, 82% (n=75) of respondents felt that aggression and violence could be managed more effectively. To elaborate, a small majority, i.e. 69% (n=63) of the respondents felt that alternatives to the use of sedation and seclusion should be considered. Medication had been identified by half the respondents as a potential cause of aggression.

An outcome that was reason for concern was that 30% (n=28) of the respondents claimed that seclusion and physical restraint had sometimes been used unnecessarily.

Although 70% (n=64) of participants had reported the use of de-escalation as an effective means to manage aggression and violence, this could not be corroborated by the rest of the findings, if taken into consideration that the respondents had not identified poor communication as a possible cause of aggression and violence.

## **4.6 CONCLUSION**

In comparison, there were no significant statistical differences as seen in the table depicting the results of the responses for each question, in attitudes towards the management of aggression and violence among assistant -, registered - and registered psychiatric nurses as corroborated by the Kruskal-Wallis test for each question.

Staff had identified internal causes as the main cause of patient related violence and aggression, with illness being identified as the biggest cause.

This corresponded with the study being conducted by Duxbury (2005:465), wherein it had been reported that patients had viewed the environment and poor communication as main causes of aggressive behaviour, whilst nurses had been of the opinion that the patients' mental illnesses were the main causes of aggressive behaviour.

The reported attitudes of the respondents in this study, corresponded well with the findings by Duxbury (2005:474-476).

Respondents had different opinions as to how aggression and violence should be managed. This may have contributed to the confusion as to how to manage aggressive and violent patients. Of note was that inconsistent management by staff members would have impacted on services rendered to clients, causing misunderstandings between staff and patients and subsequently resulting in an escalation in reports of patient related violence.

Different staff opinions may lead to different interpretations of aggression and violence and therefore inconsistent implementations of strategies. Marangos-Frost and Wells (2000:363) explain this when quoting Yarmesch and Sheafor (1982), who

identified that staff related factors had influenced the nurses' judgments of potentially violent, or aggressive patients and the implementation of seclusion, or physical restraint. The staff related factors being identified included training, emotional reaction, years of experience and experiencing fear or helplessness, when caring for potentially violent patients (Marangos-Frost & Wells, 2000:363).

Staff had confirmed the use of de-escalation as being effective in managing patient violence, despite no guidelines being available in the units on how to apply de-escalation techniques. Subsequently, staff has only been reactive in their management of aggression and violence, instead of pro-active.

The findings of this study pointed out that staff had been aware that the environment had influenced patient aggression. However, the findings further led to a belief that staff had not been fully aware of the influence of containment in the escalation of aggression and violence.

Communication between the nurse and patient had not been as effective as it should be, as staff felt that they had not listened to patients, acknowledging that there could be improvement.

Of importance was that the research findings by no means identified one single problem, or attitude, as being associated with the phenomenon of violence and aggression, but rather a multitude of factors. This conclusion by the researcher was confirmed by similar research by Duxbury (2005:475), who cited Shepherd and Lavender (1999), reporting a similar finding.

# CHAPTER 5

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## RECOMMENDATIONS AND CONCLUSION

### 5.1 INTRODUCTION

The recommendations being made are based on the findings from the survey, conducted in the eight admission units of the four psychiatric hospitals included in this study.

### 5.2 RECOMMENDATIONS BASED ON THE STUDY

The researcher has made recommendations, based on the data being generated during this study and acknowledges that there is no single solution to the problem of mental healthcare user related violence and aggression.

The recommendations below focus on training courses that should equip nursing staff to effectively manage psychiatric patient violence, by acquiring the necessary knowledge and coping skills.

#### 5.2.1 Training courses

The researcher is of the opinion that all staff should benefit from training programmes, focused on the management of violent and aggressive patients, because of the findings from questions 3, 4, 5, 6, 9, 10, 14, 20, 21, 22 and 27. These findings indicated that, compared to trained staff with a qualification in psychiatric nursing science, staff without a qualification in psychiatric nursing science had found it difficult to calm patients down, had not understood the effect of the environment on a patient, had felt that patients should control their feelings and had lacked the perception of trained nurses, with regards to the effect of negotiation and poor communication on violent and aggressive mental healthcare users.

Training should therefore focus on improving the staff's ability to manage violence and aggression through improved communication and negotiations, and by adapting the restrictive environment to such an extent that nursing care of the highest possible standards and staff safety would be ensured.

The researcher has since commencement of this study, implemented a three days training course, focussing on the management of aggression and violence. The contents and outline of the training course is in annexure 6 of the thesis.

Based on the findings of the data being collected, training programmes should further focus on awareness of causes of patient related aggression and violence. Noteworthy is that Collins (1993:127) evaluated the effect of training courses and quotes Robinson and Barnes (1989), stating that "staff who underwent training failed to apply the newly acquired skills due to attitudes of their colleagues towards new techniques, lack of regular practice, staff shortages and poor support from management." However, those respondents who underwent training programmes reported a decrease in anxiety when confronted by escalating patient anger (Collins, 1993:127).

The researcher therefore further proposes that training packages should focus on one unit at a time, as this would provide training to the whole of the staff complement in one ward at a time. The use of this method would ensure that all staff in one unit are exposed to changing philosophies simultaneously. This method therefore should attempt at preventing the negative impact of staff that have not undergone training, on the attempts of those who have received training on how to change the method of managing violence and aggression in the unit.

Furthermore, training packages should focus on the perception of the individual with regards to aggression and violence. It would therefore be necessary to enquire about individual perceptions, prior to the commencement of the training, in order to build onto staff's current experiences.

Through making the attendance of the proposed training course a part of the individual performance plan and career path development, the researcher envisages



better compliance with the attendance of the course and application of new knowledge obtained.

### **5.2.2. Recommendations for future research**

This study has created baseline data related to staff's attitudes towards the management of aggression and violence. The researcher is of the firm belief that a follow up study, investigating the perceptions of mental healthcare user related experiences with regards to the management of aggression and violence, could create better insight and understanding amongst mental healthcare providers. This notion of the researcher is supported by a statement by Duxbury (2005:469), indicating that through understanding the view of the aggressor, mental healthcare providers would be able to deal with aggression more effectively.

The researcher also recommends a follow up study, after all staff in the four psychiatric hospitals have undergone a training programme focussed on the management of aggression and violence. This form of research would allow a comparative cohort study to determine if there had been any significant change in the staff's attitudes towards the management of aggression and violence after training.

### **5.2.3. Recommendations to management**

The findings of this study can be used to implement new policies that would direct staff in the management of aggression and violence and the creation of standard operating procedures throughout the four hospitals included in the study.

The majority of the respondents (65.21%) in this research project reportedly have had no qualification in psychiatric nursing science. It is strongly advised that the persons working in high risk areas should at least be registered psychiatric nurses, as this qualification would provide staff with a basic understanding of the nature of aggression and therapeutic interventions.

The researcher further advises that in view of the fact that 5.43% of the respondents have more than 30 years of experience and are therefore nearing retirement age and would within the next ten years leave the services thus contributing to a decrease in experienced staff, methods on how to attract staff to these four psychiatric hospitals, as employers of choice, should be pro-actively investigated.

Further complicating the issue of adequate staff, are the new qualifications being proposed for nursing, with a subsequent phasing out of the current year-course in psychiatric nursing science. This would in effect mean that staff who are currently employed as registered nurses, would soon not have the opportunity to do this course. This would impact on psychiatric nursing, as there would be insufficient nurses entering into this specialised field, as opposed to those leaving, with a resultant imbalance.

### **5.3 STUDY LIMITATIONS**

The limitations of this study stem from the fact that this study could not be applied to all psychiatric nurses, since only participants from acute admission units were involved. These findings therefore only relate to acute admission units.

Obtaining the perceptions of patients in these acute admission units also, would have contributed to an even better understanding of the current situation in these acute admission units. The inclusion of patients in this study would have possibly generated data that would be beneficial to creating insight from a patient perspective.

This study would have contributed more if staff were allowed to elaborate on answers given, as this would have added depth in creating a better understanding of staff perceptions and experiences.

### **5.4 CONCLUSION**

Aggression has been noted as being a common occurrence in psychiatric health services, as it stems from society. Staff tend to transfer the blame for aggression to

the client, as opposed to acknowledging a possible deficit in skills on their side (Smith *et al.*, 1994:648).

This study has revealed that staff had been aware that the way in which aggression and violence had currently been managed, could improve. This reinforced the authors' belief in the statement by Emeritus State President Nelson Mandela, claiming that "Violent cultures can be turned around" (Mandela 2002: foreword to the WHO report on violence).

This study was not unique, as a similar study had been conducted by Duxbury (2005:469-478), the developer of the MAVAS questionnaire. However, the value of this study has been the creation of baseline data for the four psychiatric hospitals in one of the provinces in South Africa. Of importance is that this study has pointed out some similarities between the attitudes and experiences of psychiatric nurses in the United Kingdom and those working in the acute admission units of the four psychiatric hospitals chosen for this study.

This study can contribute towards the identification of attitudes that would require more training, in order to improve mental healthcare providers' insights and skills. It is believed that findings from this study could be used as guidelines for the implementation of new policies pertaining to the management of aggression and violence, as it has become evident that staff in the admission units have opposing perceptions as to how to deal with aggression and violence.

Ultimately this study directs towards potential follow up research projects that could contribute towards the creation of a body of knowledge, specifically aimed at improving the management of aggression and violence.

The reported findings of this study should motivate management to implement training courses and to ensure that follow up courses are presented, since 52% of the respondents had reportedly received training on the management of aggression and violence. It has, however, become evident that the training courses either had not addressed their training needs, or these courses had been presented, but without any measures being implemented to ensure continuous professional development.

The fact that 52% of respondents had reported having received training, further confirmed that the management structures of the four hospitals have indeed been aware of the need expressed by staff to receive training. Since management has reportedly reacted by trying to address the need, the statement by staff that “management does nothing about the situation” could not have been a true reflection of the situation in the four hospitals, specifically pertaining to the management of aggression and violence.

As 59.78% of the population were staff members having been employed for less than 16 years, it was still a young population. To elaborate, most often the newly appointed staff are recently qualified nurses, doing their compulsory community service year, before qualifying as registered nurses. This relates to no formal experience in psychiatric nursing, apart from psychiatric nursing science training being a compulsory component of a four-year, integrated, basic nursing qualification.

Consequently, the curriculum of the four-year, integrated course should be investigated to determine if it addresses the management of aggression and violence effectively, or adequately enough to provide learners with the necessary basic skills to deal with mental healthcare user related violence and aggression during their first year(s) in practice.

Finally, the main objective of this study was to establish baseline data with regards to the current attitudes of staff in the admission units of four psychiatric hospitals in one of the provinces in South Africa, towards the management of aggression and violence among mental healthcare users. The researcher achieved this by means of a survey, using an adapted MAVAS questionnaire. The researcher has established that there were no significant differences between the attitudes of the different categories of nursing staff, participating in the survey. It is believed that the baseline data being generated can be used in future studies.

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# ANNEXURE 1

---

## Permission to use the MAVAS questionnaire

Happy to help Teresa

There are two versions - you may have a preference for layout but the content is the same.

My permission is granted subject to you citing me in any papers/docs you produce. If you ever would like to share your data to do some comparisons that would also be helpful but not a requirement.

Kind regards

Good luck

Joy

Dr Joy A Duxbury

Reader in Mental Health Nursing

Divisional Leader for Mental Health

Tel: 01772 895110

[JDuxbury@uclan.ac.uk](mailto:JDuxbury@uclan.ac.uk)

>>> "Teresa Bock" <[Terebock@pgwc.gov.za](mailto:Terebock@pgwc.gov.za)> 2/25/2010 6:56 pm >>>

\*\* High Priority \*\*

Dear Dr Duxbury

My name is Theresa Bock, I am a registered Psychiatric Nurse working in Stikland hospital (a Psychiatric hospital near Cape Town in South Africa). I have been

employed as a registered psychiatric Nurse for 24 years.

I am currently registered as a Masters student with Stellenbosch University. I have submitted a research proposal to Stellenbosch University titled: "The effectiveness of policy implementation as strategy to manage Mental Health Care User related aggression.

I am proposing a quantitative study with an experimental group and a control group with a post test only design. I intended to draw up a questionnaire to test if the policy and guidelines (in the form of a training course outlining theories with regards to aggression, calming strategies, break away techniques and restraining techniques) have changed the perception and attitudes of staff with regards to aggressive mental health care users. My supervisor Dr Abel Pienaar however advised that I make use of existing questionnaires.

I have read through your research titled "The Management of Aggression and Violence Attitude Scale (MAVAS): a cross-national comparative study" Published 23 January 2008. The scale you designed would suit the purpose of my study.

I herewith request your official permission to use your scale. Acknowledgement of use thereof will be done according to the University Stellenbosch plagiarism policy. If permission is granted could you kindly indicate any other information required prior to the use of your scale.

The situation in the Psychiatric Hospitals in the Western Cape: South Africa is a cause of great concern with regards to staff and occasionally patient related injuries due to aggression and violence and a lack of policies and guidelines directing staff in the management of aggression and violence.

Subsequently I am currently in the process of designing a training programme for which we will obtain continuous professional development accreditation, furthermore I am part of a team of psychiatrists and managers trying to influence the development of Provincial Policy that would make attendance of this course and bi-annual updates compulsory for all staff dealing with Mental Health care users and all other potential violent patients. through my proposed

research I wish to determine the efficacy of the proposed training programme and where possible make the necessary changes to the proposed programme after analysis of the data collected.

I have developed a keen interest in the phenomenon of aggression as I have witnessed several occasions where it was my perception that incidences of aggression was either caused by the way a client was managed by staff or due to environmental factors that must definitely be adapted.

I am an admirer of your work.

Sincerely

Theresa M Bock

Head of Campus

Metro East Campus of the Western Cape College of Nursing

Tel 021 940 4567

Fax 021 940 4543

[Terebock@pgwc.gov.za](mailto:Terebock@pgwc.gov.za)

"A love affair with knowledge will never end in heartbreak."

## ANNEXURE 2

### QUESTIONNAIRE ON THE MANAGEMENT OF MENTAL HEALTH CARE USER RELATED AGGRESSION.

**NB** Participation in this research project is **anonymous and voluntary**.

Findings of the research project will be made available to the four psychiatric hospitals included in the study; no hospital name shall be mentioned.

### DEMOGRAPHIC DATA

Highest level of education		Tick off ✓
Current rank	Auxiliary Nurse	
	Enrolled Nurse	
	Registered Nurse	
	Registered Psychiatric Nurse	
	Registered Advanced Psychiatric Nurse	
Other		

### GENDER

Male	Female

Yes	No

Gender Tick off ✓

Have you received training with regards to the management of patient related aggression?

Tick off relevant experience in years working in a psychiatric Unit with a ✓

Less than 1 year	1 to 5 years	6 to 10 years	11 to 15 years
16 to 20 years	21 to 25 years	26 to 30 years	More than 30 years



### The Management of Aggression and Violence Attitude Scale (MAVAS)

- The purpose of this questionnaire is to obtain your perceptions of aggression and the management of aggression at this facility.
- For each item, please darken the circle that reflects your opinion about the statement. If you wish to change your rating, place an X completely through the circle and then darken another circle.
- This is an anonymous survey. Do not write your name on this form.

		<u>Strongly</u> <u>Agree</u>	<u>Agree</u>	<u>Disagree</u>	<u>Strongly</u> <u>Disagree</u>
1	Patients are aggressive because of the environment they are in.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2	Other people make patients aggressive or violent.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3	Patients commonly become aggressive because staff do not listen to them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4	It is difficult to prevent patients from becoming violent or aggressive.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5	Patients are aggressive because they are ill.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6	Poor communication between staff and patients leads to patient aggression.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7	There appear to be types of patients who frequently become aggressive towards staff.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8	Different approaches are used on this ward to manage patient aggression and violence.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9.	Patients who are aggressive towards staff should try to control their feelings.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10	When a patient is violent, seclusion is one of the most effective approaches to use.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11	Patients who are violent are often physically restrained to administer sedation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12	The practice of secluding violent patients should be discontinued.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

		<u>Strongly</u> <u>Agree</u>	<u>Agree</u>	<u>Disagree</u>	<u>Strongly</u> <u>Disagree</u>
13	Medication is a valuable approach for treating aggressive and violent behaviour.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14	Aggressive patients will calm down automatically if left alone.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15	The use of negotiation could be used more effectively when managing aggression and violence.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16	Restrictive care environments can contribute towards patient aggression and violence.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17	Expressions of aggression do not always require staff intervention.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18	Physical restraint is sometimes used more than necessary.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19	Alternatives to the use of containment and sedation to manage patient violence could be used more frequently.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20	Improved one to one relationships between staff and patients can reduce the incidence of patient aggression and violence.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21	Patient aggression could be handled more effectively on this ward.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22	Prescribed medication can in some instances lead to patient aggression and violence.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23	It is largely situations that contribute towards the expression of aggression by patients.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24	Seclusion is sometimes used more than necessary.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25	Prescribed medication should be used more frequently to help patients who are aggressive and violent.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
26	The use of de-escalation is successful in preventing violence	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
27	If the physical environment were different, patients would be less aggressive.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Thank you for your participation in this research project.**

## **ANNEXURE 3**

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### **PARTICIPANT INFORMATION LEAFLET AND CONSENT FORM**

## PARTICIPANT INFORMATION LEAFLET AND CONSENT FORM

**TITLE OF THE RESEARCH PROJECT:** Assessment of health care workers' attitudes towards the management of aggression and violence of patients in the associated psychiatric hospitals

**REFERENCE NUMBER:** N10/04/128

**PRINCIPAL INVESTIGATOR:** Theresa Melodie Bock

**ADDRESS:** 89 Joubert street , Joubert park, Bellville, 7530

**CONTACT NUMBER:** 0836027097

You are being invited to take part in a research project. Please take some time to read the information presented here, which will explain the details of this project. Please ask the study staff or doctor any questions about any part of this project that you do not fully understand. It is very important that you are fully satisfied that you clearly understand what this research entails and how you could be involved. Also, your participation is **entirely voluntary** and you are free to decline to participate. If you say no, this will not affect you negatively in any way whatsoever. You are also free to withdraw from the study at any point, even if you do agree to take part.

This study has been approved by the **Health Research Ethics Committee (HREC) at Stellenbosch University** and will be conducted according to the ethical guidelines and principles of the international Declaration of Helsinki, South African Guidelines for Good Clinical Practice and the Medical Research Council (MRC) Ethical Guidelines for Research.

### What is this research study all about?

- *The study will be conducted in the four Associated Psychiatric Hospitals located in the Western Cape. The Hospitals are Alexandra Hospital, Lentegeur Hospital, Stikland Hospital and Valkenberg Hospital. Only staff working in the acute admission unit will take part in the stud. The acute admission units have been reported to have the highest rates of patient related violence and aggression. The total number of nurses included in the study is as follows: Alexandra Hospital 17 nurses, Lentegeur Hospital 58 nurses, Stikland Hospital 19 nurses and Valkenberg Hospital 24 nurses. Altogether a total of 118 nurses will be included in the study. The study will include both day and night nursing staff.*
- *This research study aims to describe the attitudes of all categories of nurses towards the management of aggression and violence. Currently the statistics shows an increase in incidences of violence and aggression towards nursing staff, by conducting this study data will be collected to show how the nursing staff feels about the way aggression and violence is currently dealt with in APH. The data will be used to develop training programmes and suggest new ways of dealing with aggression in the APH hospitals.*

- Research participants will be given a consent form to complete before they participate in the research project. Participation is entirely voluntary and anonymous. On completion of consent forms each participant will place the consent form in a sealed envelope and slot it into a special box provided by the researcher. Once the consent form has been completed the participant will be given a questionnaire with 27 questions. No names or hospital names are attached to this questionnaire; the answers to questions are in the form of a multiple response tick off column. The questionnaire will take about 10 minutes to complete. Once the questionnaire has been completed it will be slot into a second box marked questionnaires also provided by the researcher. All questionnaires will be completed in the ward where the nurses are working, the researcher and an assistant will deliver and collect all the consent forms and questionnaires in person.

**Why have you been invited to participate?**

- As a nurse employed by APH and currently working in an acute admission unit your perception of how we are currently dealing with patient related violence and aggression is important. This research project cannot be completed without your valuable input

**What will your responsibilities be?**

- You will be requested to complete a consent form and place it in a box marked "Consent forms" After completion of consent you will be given a questionnaire to be completed and placed in a box marked "questionnaires". There will be no names affixed to the questionnaire therefore the study will be done anonymously. There is no way the researcher will be able to identify the participants by neither hospital nor individual names.

**Will you benefit from taking part in this research?**

- The data generated through your participation in this research project will benefit both staff and patients as it might lead to an adaptation in the way in which aggression and violence is currently managed. New training programmes will be developed as will new policies to ensure the safety of both the client and staff members

**Are there in risks involved in your taking part in this research?**

- No risks have been identified by means of your participation in this project, however if you should feel discomfort when answering the questions due to recollection of an incident where you were the victim of patient related violence or aggression, the researcher encourages you to call her at 021 940 4567 and she will see you in an interview or do a formal referral to ICAS to ensure that you can speak to a qualified therapist to help you resolve unresolved trauma.

**If you do not agree to take part, what alternatives do you have?**

- Your participation in this research project is entirely voluntary and if you select not to participate you will not be penalised in any way.

**Will you be paid to take part in this study and are there any costs involved?**

No you will not be paid to take part in the study. There will be no costs involved for you, if you do take part.

**Is there anything else that you should know or do?**

- You can contact the **Health Research Ethics Committee** at 021-938 9207 if you have any concerns or complaints that have not been adequately addressed by your study doctor.
- You will receive a copy of this information and consent form for your own records.

**Declaration by participant**

By signing below, I ..... agree to take part in a research study entitled *(insert title of study)*.

I declare that:

- I have read or had read to me this information and consent form and it is written in a language with which I am fluent and comfortable.
- I have had a chance to ask questions and all my questions have been adequately answered.
- I understand that taking part in this study is **voluntary** and I have not been pressurised to take part.
- I may choose to leave the study at any time and will not be penalised or prejudiced in any way.
- I may be asked to leave the study before it has finished, if the study doctor or researcher feels it is in my best interests, or if I do not follow the study plan, as agreed to.

Signed at *(place)* ..... on *(date)* ..... 2009.

.....  
**Signature of participant**

.....  
**Signature of witness**

**Declaration by investigator**

HREC General ICF V1, Sept 2009

Page 3 of 4

I (name) ..... declare that:

- I explained the information in this document to .....
- I encouraged him/her to ask questions and took adequate time to answer them.
- I am satisfied that he/she adequately understands all aspects of the research, as discussed above
- I did/did not use a interpreter. *(If an interpreter is used then the interpreter must sign the declaration below.*

Signed at (place) ..... on (date) ..... 2009.

.....  
**Signature of investigator**

.....  
**Signature of witness**

#### **Declaration by interpreter**

I (name) ..... declare that:

- I assisted the investigator (name) ..... to explain the information in this document to (name of participant) ..... using the language medium of Afrikaans/Xhosa.
- We encouraged him/her to ask questions and took adequate time to answer them.
- I conveyed a factually correct version of what was related to me.
- I am satisfied that the participant fully understands the content of this informed consent document and has had all his/her question satisfactorily answered.

Signed at (place) ..... on (date) .....

.....  
**Signature of interpreter**

.....  
**Signature of witness**

## **ANNEXURE 4**

---

### **HREC APPROVAL OF RESEARCH**





UNIVERSITEIT • STELLENBOSCH • UNIVERSITY  
jou kennisvenoot • your knowledge partner

07 June 2010

**MAILED**

Ms TM Bock  
Department of Nursing  
2nd Floor  
Teaching Block  
Tygerberg Campus

Dear Ms Bock

**Assessment of attitudes related to the management of aggression and violence in the associated psychiatric hospitals.**

**ETHICS REFERENCE NO: N10/04/128**

**RE : APPROVAL**

It is a pleasure to inform you that a review panel of the Health Research Ethics Committee has approved the above-mentioned project on 7 June 2010, including the ethical aspects involved, for a period of one year from this date.

This project is therefore now registered and you can proceed with the work. Please quote the above-mentioned project number in ALL future correspondence. You may start with the project. Notwithstanding this approval, the Committee can request that work on this project be halted temporarily in anticipation of more information that they might deem necessary.

Please note a template of the progress report is obtainable on [www.sun.ac.za/rds](http://www.sun.ac.za/rds) and should be submitted to the Committee before the year has expired. The Committee will then consider the continuation of the project for a further year (if necessary). Annually a number of projects may be selected randomly and subjected to an external audit.

Translations of the consent document in the languages applicable to the study participants should be submitted.

Federal Wide Assurance Number: 00001372  
Institutional Review Board (IRB) Number: IRB0005239

The Health Research Ethics Committee complies with the SA National Health Act No.61 2003 as it pertains to health research and the United States Code of Federal Regulations Title 45 Part 46. This committee abides by the ethical norms and principles for research, established by the Declaration of Helsinki, the South African Medical Research Council Guidelines as well as the Guidelines for Ethical Research: Principles Structures and Processes 2004 (Department of Health).

Please note that for research at primary or secondary healthcare facility permission must still be obtained from the relevant authorities (Western Cape Department of Health and/or City Health) to conduct the research as stated in the protocol. Contact persons are Ms Claudette Abrahams at Western Cape Department of Health ([healthres@pgwc.gov.za](mailto:healthres@pgwc.gov.za) Tel: +27 21 483 9907) and Dr Hélène Visser at City Health ([Helene.Visser@capetown.gov.za](mailto:Helene.Visser@capetown.gov.za) Tel: +27 21 400 3981). Research that will be conducted at any tertiary academic institution requires approval from the relevant hospital manager. Ethics approval is required BEFORE approval can be obtained from these health authorities.

07 June 2010 08:36

Page 1 of 2



Fakulteit Gesondheidswetenskappe • Faculty of Health Sciences



Verbind tot Optimale Gesondheid • Committed to Optimal Health  
**Afdeling Navorsingsontwikkeling en -steun • Division of Research Development and Support**  
Posbus/PO Box 19063 • Tygerberg 7505 • Suid-Afrika/South Africa  
Tel.: +27 21 938 9075 • Faks/Fax: +27 21 931 3352

## **ANNEXURE 5**

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### **PERMISSION TO PERFORM RESEARCH IN THE FOUR PSYCHIATRIC HOSPITALS**

## Regional Hospitals, APH & WCRC

MEMORANDUM

19<sup>th</sup> May 2010

**The Heads of Associated Psychiatric Hospitals  
Research Committee**

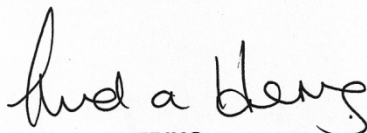
Dear All

**Research Proposal T. Bock: Assessment of attitudes Related To the management Of  
Aggression And Violence In The Associated Psychiatric Hospitals**

I refer this proposal to your internal Research Committees for approval.

I fully support this research and believe it will provide the service with valuable information in addressing the management of Aggression and Violence in our facilities and other units that manage mental health care users. It is hoped that this will assist in drawing up relevant policies for effective management of these patients, which has addressed the concerns of the nursing staff designated to provide first line management.

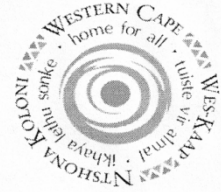
Yours Faithfully



**DR. L.M.HERING  
DIRECTOR**



PROVINCIAL GOVERNMENT  
WESTERN CAPE:  
Department of Health  
Departement van Gesondheid  
Isebe lezeMpilo



Verwysing:  
Reference:  
Isalathiso:

Navrae:  
Enquiries: **DR J BENTLEY**  
Imibuzo

Telefoon:  
Telephone: **(021) 503 5057**  
Ifowuni

Date:

Ms TM Bock  
Metro East Campus  
Western Cape College of Nursing

Dear Ms Bock

**RE: NURSING RESEARCH AT ALEXANDRA HOSPITAL**

Thank you for your application to do research at Alexandra Hospital. It is always very encouraging to see nursing research happening within the psychiatric services and we would be happy to allow you to do the planned research at Alexandra.

However, we do agree with your reviewer that it would be preferable to include night staff in the survey and hope that you will be able to extend your proposal to include this.

Many thanks for including us in your proposal. We are looking forward to receiving feedback as to the outcome of the survey.

Yours sincerely

**J Bentley**

Dr JM Bentley  
for Research Committee, Alexandra Hospital

Address all correspondence to The Chief Executive Officer  
Rig alle korrespondensie aan Die Hoof Uitvoerende Beampte  
Idilesi eya kumphathi sibhedlela Intloko Mpathi Kwezonyango



Cnr Annex and Alexandra Roads, MAITLAND  
Private Bag X1, MAITLAND, 7404  
TEL: (021) 503 5000  
FAX: (021) 511 1919

Teresa Bock - Research Approval

Page 1

**From:** Granville Marinus  
**To:** Teresa Bock  
**Date:** 2010/06/08 03:52:26 PM  
**Subject:** Research Approval

Dear Teresa

I have been informed by Dr Allen that an Adhoc LGH Research & Ethics Committee approved your Research Proposal.

Apologies for the delay; however we received your request days after the Research & Ethics Committee officially convened and then Dr Allen went on an overseas conference.

Regards

GM

Dr GG Marinus  
Senior Medical Superintendent  
Lentegeur Psychiatric Hospital  
Department of Health  
Western Cape  
Tel: 021 370 1411  
Fax: 021 371 7359  
Cell: 083 725 7962

**CC:** Linda Hering; Robin Allen

Verwysing  
Reference  
Isalathiso

24/1

Navrae  
Enquiries  
Imibuzo

Mr J P M Visser

Telefoon  
Telephone  
Ifowuni

940 4403



Departement van Gesondheid  
Department of Health  
iSebe lezeMpilo

31 May 2010

Ms T.M. Bock  
Metro East Campus  
Western Cape College of Nursing  
Bellville  
7530

**RESEARCH PROJECT : ASSESSMENT OF ATTITUDES RELATED TO THE MANAGEMENT  
OF AGGRESSION AND VIOLENCE IN ASSOCIATED PSYCHIATRIC HOSPITALS**

1. Your proposal was discussed at the Exco Committee meeting held on 18 May 2010. The necessary approval was granted for the research project on condition that all the findings are only made public to APH.
2. Please make the necessary arrangements with the Head of Nursing, Ms Z du Preez for the delivering of questionnaires to Wards.
3. You are requested to keep to the conditions as discussed.

Good luck with the project. Looking forward to the results.

  
.....  
**MR J P M VISSER**  
**SENIOR MEDICAL SUPERINTENDENT(ACT)**

STIKLAND HOSPITAL/HOSPITAAL  
De la Haye Avenue, De la Haye, Bellville 7530  
Private Bag X13, Bellville 7530  
De La Haye Weg, De La Haye Bellville 7530  
Privaatsak X13, Bellville 7535  
Tel : 021 940 4400 Fax : 021 940 4559





Departement van Gesondheid  
Department of Health  
iSebe lezeMpilo

Reference:

Enquiries: Dr B. Eick

Telephone: (021) 4403306

Facsimile:

Email:

Date: 1<sup>st</sup> June 2010

Ms TM Bock  
Metro East Campus  
Western Cape College of Nursing  
Department of Nursing  
2<sup>nd</sup> Floor  
Teaching Block  
Tygerberg Campus

1<sup>st</sup> June 2010

Dear Ms Bock

RE: Nursing Research in Valkenberg Hospital

Thank you for your request to include Valkenberg Hospital in your research proposal regarding management of aggression and violence in the APH.

In line with our Operational and Plan and Workskills Development Plan we would like to inform you that we support your research project in principle, in line with Senior Management's approval. Understanding current attitude and practice will assist all APH Hospitals to improve interventions towards better management.

While we understand that this project is directly aimed at nursing in line with your academic work, it was pointed out in discussions that understanding the holistic attitude and practice of all appropriate multidisciplinary team members might be useful of the ultimate intervention plan. Maybe this can be considered later.



VALKENBERG HOSPITAL  
PRIVATE BAG X1  
OBSERVATORY, 7935  
TEL: 021 – 440 3111  
FAX: 021 – 447 6041

In line with the documentation presented it would appear that final US Research Ethics approval is still outstanding and will be obtained prior to starting with the data collection.

It would facilitate the process if you could meet with the Head of Nursing/Delegate directly and discuss logistics regarding the questionnaire distribution, filling in and collection etc.

Looking forward to receiving a copy of your findings and recommendations in this matter

Yours sincerely



Dr BMM Eick  
Senior Medical Superintendent  
Valkenberg Hospital

---

cc hof/kelster  
dr. Kuyper  
dr. Kenter





Verwysing 24/1  
Reference  
Isalathiso

Navrae  
Enquiries T M BOCK  
Imibuzo

Telefoon  
Telephone: 021 940 4567  
Ifowuni

**Departement van Gesondheid**  
**Department of Health**  
**iSebe lezeMlilo**

4 June 2010  
Mr M.J. Visser  
Stikland Hospital  
Bellville

**Research project N/10/4/128 request not to make findings public**

My sincere thanks for approving the conduction of the research project in Stikland Hospital.

Your concerns are noted and respected.

1. As per proposal approved by HREC Stellenbosch University it would be unethical conduct on the part of the researcher to mention any hospital names or the province when the findings of the research project are written up.
2. The findings of the research project must be made public to the facility where the research was conducted. As the research is conducted in APH and the whole of the population of the acute admission units through APH will be used the research findings will be made public to APH. The Director will receive a copy of the proposed thesis. Furthermore the researcher intends to make the findings known to APH in the form of an official presentation to APH.
3. The nature of the research is a Descriptive survey and not a comparative study, therefore none of the hospitals within APH will be compares. The only comparison of variables would be between the different categories of staff.
4. The findings of the study will be published in an academic journal, however as indicated in bullet 1 it will be a contravention of the ethical

code to publish any hospital names or the province where the research was conducted in the academic article.

I herewith declare that I will keep the conditions of the research project as requested by Exco. The original copies of the permission granted will form part of the submission of the thesis to Stellenbosch University and not of the publication in a research journal hence maintaining the confidentiality.

Sincerely

T M Bock



## **ANNEXURE 6**

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**EXPOSITION OF THE TRAINING COURSE  
CURRENTLY PRESENTED TO STAFF  
WORKING WITH PSYCHIATRIC PATIENTS.**

## TRAINING COURSE FOR THE MANAGEMENT OF AGGRESSIVE AND VIOLENT PATIENTS.

The course focuses on the **following**:

- **Theories of aggression.** The content is aimed at creating an understanding and familiarity with the phenomenon of aggression, and the motive(s) behind aggressive behaviour.
- **Predictors of aggression and violence.** The aim is to equip staff with skills in reading subtle signs of potential aggression, and in assessing the patient and the situation in order to predict the possibility of violence. Collins (1993:12), in quoting Rice *et al*, (1989), emphasises that the ability of staff to predict patient aggression resulted in a reduction of the number of incidents of assaults on staff.
- **Talk down and de-escalation techniques.** The aim of this component is to teach staff how to identify subtle signs of aggression and techniques that can be used to prevent aggression from flaring up into full blown violence. Staff are also made aware of their own feelings and the importance of appropriate, non-verbal communication in the management of violence and aggression.
- **Dignified break away techniques.** The researcher understands that the use of de-escalation techniques and communication skills often is not effective in all situations, hence the inclusion of techniques to break free, whenever a staff member finds him / herself in a situation where a mental healthcare user is physically endangering a staff member. The focus of these techniques is aimed at breaking free from a hold in order to get to safety. The techniques, however, should prevent injury to either the staff member, or the mental healthcare user.
- **Restraining techniques.** Restraining techniques include safe, physical restraining in the event where a violent mental healthcare user must be sedated when (s)he is out of control. It focuses on providing staff with the skills in restraining without injury, and on preventing the threatening of the safety of the mental healthcare user and care giver by ensuring the use of correct techniques. Paterson *et al*, (2003:3) define physical restraint as “restriction of

movement by physically holding a person down.” In a survey done by Paterson *et al*, (2003:12), evidence pointed to physical restraint in the prone position, i.e. face down, with additional pressure to either the thorax or abdomen, having resulted in the death of 12 persons in the United Kingdom between 1979 - 2000. These statistics have lead to a plea from Patterson that the use of this technique should “categorically be avoided.” The researcher therefore advocates the use of four point restraint, in the supine position, with no pressure being exerted on the patient’s abdomen, or thorax in order to prevent the potential of asphyxiation.