

# ***EMERGENCY DEPARTMENT WORKPLACE VIOLENCE***

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**A research report submitted to the Faculty of Health Sciences, University of  
the Witwatersrand, Johannesburg, in partial fulfilment of the requirements for  
the degree of Master of Medicine in Emergency Medicine.**

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## DECLARATION

I, Amer Jaffal, declare that this research report is my own work. It is being submitted for the degree of Master of Medicine (Emergency Medicine) at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination at this or any other University.

## DEDICATION

To my family.

## ABSTRACT

**Objectives:** The aim of the current research was to determine the perception and experience of different emergency department occupational groups regarding workplace violence in the past 12 months and to determine the effect that it had on them in two government hospitals in Johannesburg, South Africa.

**Materials and Methods:** The current research was a cross sectional, retrospective qualitative survey.

**Results:** Eighty-six surveys (43%) out of the distributed 200 questionnaires were returned. Five surveys were unfilled leaving 81 surveys (40.5%) that are included in the analysis. Psychological violence was experienced by 73 % (n=51) of the participants while physical violence was experienced by 34.2% (n=27). Patients were the perpetrators of 61% and 67.9% of psychological and physical violence against staff members, respectively. Friends and family members who accompanied patients in the emergency department accounted for 27.4% psychological violence while this same set of people caused 17.3% of physical violence. Ninety-one percent of the participants reported that they did not receive any training courses on how to handle workplace violence incidents. Medical staff (doctors and nurses) were found to be at an increased risk to psychological violence.

**Conclusions:** Workplace violence was commonly experienced by ED staff members. Majority of the incidents were in the form of psychological violence; however, a considerable percentage of the participants experienced physical violent incidents. Most of the violent incidents experienced were perceived to be preventable by majority of participants. This research supports the need for practical training and education of the ED staff members, on how to prevent and deal with issues related to ED WPV.

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## **Chapter 1 INTRODUCTION**

### **1.1 Emergency department (ED) operation**

This is a general brief description of how emergency department system operates. This part of the introduction may help to understand, at least partially, triggers and risk factors of ED workplace violence (ED WPV) and possibly target correctable risk factors to successfully mitigate ED WPV.

ED is an area in hospitals that is dedicated to ideally provide medical care in an expeditious manner to acutely or potentially critically ill individuals. Generally, EDs are accessible to the community 24 hours a day. The level of medical care provided in the ED ranges from providing reassurance and referral to performance of critical diagnostic and therapeutic procedures such as, but not limited to, cardiopulmonary resuscitation, administration of electrical shock, and administration of medications to treat brain and heart attacks.

The ED has its own dedicated staff members that generally includes doctors, nurses, porters, clerks and security personnel. Other healthcare providers such as radiographers and phlebotomist may help with the ED work when needed but they are not necessarily part ED staff members.

Unlike the rest of departments in the hospital, ED patients do not need to make appointments with doctors prior to their arrival at the ED neither do the doctors necessarily know what medical issues patients may present when they come into the ED. In addition, due to the nature of the ED in which case an individual may seek medical help at any time without prior appointment and because of the 24-hour open

policy, the exact number of patients visiting the ED at a given period of the day is not regular and thus difficult to predict.

A patient's journey in the ED usually starts in an area called triage area. The purpose of the triage area is to classify ED patients into categories based on the predicted need to medical attention so that time to provide medical care is shortened as the severity of the medical conditions of the ED patient is increased.<sup>1,2</sup> The idea of categorising patients based on the severity of their medical conditions has been shown to reduce the risk of unfavourable incidents such as delays in providing medical care to the very sick patients.<sup>2</sup> That is patients are attended to depending on the severity of their conditions and therefore the time period from the patients' arrival at the ED to their receiving medical care is reduced.<sup>2</sup>

Depending on the implemented triage system, a brief clinical information about the patient is usually obtained in the triage area, and certain vital parameters such as blood pressure, heart rate, rate of breathing, saturation of oxygen in blood, and/or body temperature are measured by a medical member of staff. At the end of this process, the ED patient falls into one of the triage categories based on the severity of the presented medical condition.

The South African Triage Scale (SATS) is the standard triage system used in the ED of hospitals in South Africa. When using SATS, each ED patient normally falls into one of five colour-coded categories- Red, Orange, Yellow, Green or Blue.<sup>1,3</sup> Red category refers to an acutely unstable patient who requires immediate medical care.<sup>1</sup> Orange refers to a seriously ill patient who should ideally receive medical attention within 10 minutes while Yellow refers to a relatively stable patient whose medical condition can wait for medical care for up to 60 minutes.<sup>1</sup> More so, Green refers to a

patient with a minor disease who should receive medical care in less than 4 hours or alternatively can be referred to the outpatient unit or primary care centre while Blue refers to those who are clearly dead.<sup>1,3</sup>

Following the process of triaging, the patient either receives treatment and/or undergoes further radiological and blood tests as part of the medical evaluation. Individuals such as relatives and friends that accompany such patients are usually asked to wait in a designated waiting area.

The time taken to perform diagnostic tests in the ED varies according to the nature of required investigations, personnel and volume of work in the laboratory and radiology departments. Once the results which show the state of health of the patient become available, the ED doctor can then decide if the patient's condition needs admission to the hospital, further treatment or observation in the ED, or the patient can be discharged.

Furthermore, the ED doctor may ask for specialty consultation which is a process in which a doctor seeks the opinion of a doctor from another area of specialty for an opinion or involvement in a patient's medical condition.<sup>4</sup> Specialty consultation is a key part of the care of ED patients.<sup>5</sup> Woods et al reported their findings in a prospective study of the ED of two hospital that 38% of ED patients received a minimum of one specialty consultation.<sup>5</sup> They also reported that out of ED patients to whom specialty consultations were requested, 54.3% were admitted to the hospital.<sup>5</sup>

## 1.2 Background

Workplace violence is prevalent in the healthcare sector worldwide.<sup>6</sup> On average, ED staff member is expected to experience WPV 5.5 times annually.<sup>7</sup> Review of literatures that studied WPV indicated that ED staff members are among most frequently targeted victims of physical and psychological violence in the healthcare sector.<sup>8,9</sup> Kowalenko et al found in a study carried out in the United States of America (USA) in 2012, during which 213 ED staff members were surveyed, that there were high rates of physical violence incidents against ED staff members.<sup>7</sup> The study reported a total of 827 incidents of physical violence with an average of about 5.5 incidents per staff member annually.<sup>7</sup>

In order to shed more light on the depth of ED WPV, Knowles et al in a more recent study carried out in England, questioned some members of staff of four EDs in regarding their perception and experience of WPV.<sup>10</sup> The study reported that most of the participants (no statistics were provided in the article) experienced violence in the ED and that majority of these incidents were not even reported because ED staff thought they were part of their job.<sup>10</sup>

A high rate of ED WPV compounds an already challenging working conditions in the ED. factors such as, the risks of contracting infectious diseases, patients with unpredictable medical problems, overcrowding, inadequate resources and shortage of personnel make working in the ED a stressful job.<sup>7-9,11</sup>

Succinctly put, research sums it up by reporting that ED WPV is one of the significant sources of stress to members of staff working in the ED.<sup>9,11-13</sup> In 2011, Nielsen et al examined the sources of stress in the ED and the impact of experiencing stress on the performance of members of staff of the ED in Denmark.<sup>11</sup> The study concluded that

ED WPV was one of 12 stressors that could make ED staff prone to making work-related errors while on duty.<sup>11</sup> It also reported that a strong relationship exists between experiencing stress by staff members of the ED and occurrence of work-related errors.<sup>11</sup> Sixty three percent of the 214 members of staff of the ED that were surveyed had made at least one error in a period of 4 weeks and a total of 214 work-related errors such as incorrect use of medications and equipment were also reported during this same period.<sup>11</sup> Therefore, ED WPV has the potential to affect the ability of members of staff of the healthcare sector to deliver healthcare services of adequate quality which subsequently affects safety of patients.<sup>8,14-16</sup>

Bureau of Labor Statistics (BLS), which is a branch of the U.S. Department of Labor, has been studying information regarding marketing and working conditions since 1884. In its latest report in 2013, BLS reported an increase of 6% in non-fatal violent incidents in the health care sector when compared to incidents in 2012. BLS also reported that non-fatal injuries were the most common reasons why healthcare workers take some days away from work.<sup>17</sup> When this occurs following an experience of ED WPV, the workload on other members of staff of the ED becomes heavy. This, may subsequently further affect the delivery of quality healthcare service, as the number of staff members available to attend to patients is reduced which could potentially lead to an increase in the time that patients have to wait before receiving care in the ED.

In addition to this, physical injuries such as fractures, bite wounds and lacerations are usually sustained by healthcare workers and these have been widely reported in literatures.<sup>12,15,18</sup> Physical injuries and their consequences will be discussed in more details under the literature review section.

### **1.3 Statement of the problem**

There is a maximum utilisation of the ED as a result of an increased number of patients that attend the ED or are being admitted through it. This invariably leads to overcrowding and prolonging the times that patients have to wait before they are attended to in the ED.<sup>19,20</sup> A study conducted in a teaching hospital in Toronto, Canada, reported that, due to a limited bed capacity and increased ED admissions, both times ED patients have to wait before being mobilised to a ward bed and occurrence of overcrowding in the ED are progressively increasing.<sup>20</sup> The number of admissions from the ED to the general medical wards increased over four years from 2103 in 2004 to 3120 in 2007.<sup>20</sup> This progressive increase in admissions was associated with a similar increase in waiting times, from 12,3 hours in 2004 to 14 hours in 2007.<sup>20</sup> Overcrowding occurred because a great number of beds and seats in the ED were occupied for prolonged periods of time by patients that were already admitted which resulted into a decreased availability of beds and space for the incoming patients.<sup>20</sup> Overcrowding in the ED and increased waiting times, as will be presented later, were recognised as significant risk factors for ED WPV.<sup>18,21,22</sup>

Literatures that report the prevalent workload in the EDs and the nature of patients that visit this sector of hospitals in South Africa are scarce. However, available reports as presented below, suggest that the members of staff in this department are under increasing pressure due mainly to high rates of injuries in the community, particularly those sustained as a result of road traffic accidents and homicide.

In its 9<sup>th</sup> annual report in 2007, the South African Medical Research Council estimated the rate of mortality caused by injuries in South Africa to range from 60,000 to 70,000 fatalities annually.<sup>23</sup> Homicides and road traffic accidents were the

leading causes of fatal injuries and were collectively responsible for 68% of the rate of mortality caused by injuries in South Africa.<sup>23</sup> Furthermore, It was also reported that injuries from interpersonal violence and road traffic accidents were responsible for 2,3 million disabilities in this same country.<sup>24</sup>

When compared with international standards, the rate of mortality due to injuries in South Africa were found to be higher. The rate of homicides among South African males and females were reported to be more than six times higher than what obtained internationally while fatal injuries from road traffic accidents were about double the global numbers.<sup>24</sup> In addition to increasing the number of patients that are presented to the ED, high rates of violence in the community were reported to be associated with high rates of violence in the ED.<sup>9,10,21</sup>

An increased utilisation of the ED in South Africa (SA) is also expected to be high based on the following: the reported clinical significance of medical conditions of patients that are generally presented in the ED; mechanism of referring patients to this sector and the limited resources in a lot of the healthcare facilities. In their study on nature of patients presented to the ED and workload in the ED in Cape Town, South Africa, Wallis and Twomey reported that 62.7%--75.4% of patients who were presented to the EDs during the period of study came with serious medical conditions and were hence triaged as urgent or emergent cases.<sup>25</sup> This means that significant period of time was spent by staff members of the ED to perform diagnostic tests and provide treatment, which made patients to stay longer than necessary in the department.

Self-referral of patients to the ED can make the numbers of patients visiting this department to be considerably high resulting in overcrowding and increased waiting



times. This can lead to unnecessary increase in the workload of the members of staff. An occurrence of this nature is likely in developing countries like South Africa where resources to healthcare system are constrained.<sup>26</sup> A study carried out in the Western Cape Province, South Africa, by Hanewinckel et al demonstrated that 88.2% of the patients who were presented to the ED of a secondary level hospital were self-referred.<sup>27</sup> The authors of the study concluded that a significant number of the self-referred could have managed in primary healthcare facilities as 81.8% of the such patients were triaged as green and yellow.<sup>27</sup>

In summary, injuries resulting from high rates of violence, in addition to frequent inappropriate self-referral and serious presenting medical problems lead to overcrowding and prolongation of the times that patients need to wait in the ED of hospitals and medical facilities in SA. Overcrowding and prolonged waiting times have also been demonstrated to be significant risk factors for ED WPV. Therefore, it is expected that rates of ED WPV in the EDs of medical facilities in SA would be high.

Studies that address WPV in the EDs of hospitals in SA are lacking in the review of literatures, therefore the purpose of this study was to examine the perception of WPV and the effect it has had on different occupational groups of ED staff members of two hospitals in Johannesburg, South Africa.

## **1.4 Aim and objectives**

### **1.4.1 Study aim**

The aim of this study was to determine the perception and the experiences of ED staff members (doctors, nurses, clerks, porters, and security personnel) regards ED WPV in the ED of 2 government hospitals in Johannesburg, South Africa. This study further aimed to determine the effect that WPV had on the same occupational groups in the ED and to identify the perpetrators and the nature of ED WPV.

### **1.4.2 Study objectives**

1. To assess the perception of members of staff (doctors, nurses, clerks, porters and security personnel) of the ED of 2 government hospitals in Johannesburg, South Africa with respect to WPV.
2. To describe the demographic features of the same ED staff members, whose perception of workplace violence in the ED was sought.
3. To examine the experience of the members of staff of the ED with respect to physical and psychological violence.
4. To identify the main perpetrators of violence in the ED.
5. To determine the effect that WPV had on members of staff of the ED.

## **Chapter 2 LITERATURE REVIEW**

WPV is progressively becoming a source of worry to employers and employees in all sectors.<sup>6</sup> It is considered to be the third most frequent cause of fatal injuries to all workers while on duty.<sup>28</sup> It is estimated that 2 million persons are victims of WPV in USA each year.<sup>28</sup> Review of the international literature as will be presented in this section showed that ED staff members are significantly exposed to high rates of physical and psychological violence.

### **2.1 Definition of workplace violence (WPV)**

WPV in the health care sector has been studied widely in literatures, however a universally-accepted definition for it is still not found. Even in prominent dictionaries written in the English language, the meanings of the word 'violence' do not exactly match. The Cambridge English( online) dictionary defines violence as 'actions or words that are intended to hurt people'<sup>29</sup> while the( online) Oxford Dictionary defines it as 'behaviour involving physical force intended to hurt, damage, or kill someone or something'.<sup>30</sup>

The Online Oxford Dictionary considers the use of physical force a condition to the use of word 'violence'.<sup>30</sup> However, restricting the definition of violence to the use of physical force is inappropriate as it underestimates the significant consequences of psychological violence particularly as it relates to verbal abuse, threatening and sexual harassment.

Gerberich et al examined WPV among 4891 nurses in Minnesota, USA, and reported in this study that 8% of nurses who experienced physical violence subsequently experienced significant emotional consequences including depression, stress, hallucinations and disturbed concentration.<sup>12</sup> On the other hand, 13% of

nurses who experienced psychological violence subsequently experienced the same emotional consequences. As a result, 128 nurses permanently left their workplace as a result of experiencing psychological violence while only 2 nurses permanently left their workplace for experiencing physical violence.<sup>12</sup> Therefore, psychological violence has the potential of causing significant consequences and should be considered as an integral part of the overall definition of violence.

Generally, there are two widely accepted definitions of WPV. The European Commission (EC), defined WPV as “Incidents where persons are abused, threatened or assaulted in circumstances related to their work, involving an explicit or implicit challenge to their safety, well-being and health”.<sup>31</sup> The World Health Organization (WHO) defines violence as “intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community, which either results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment, or deprivation.”<sup>32</sup>

The EC and the WHO further divided WPV into:

1. Physical Violence: application of physical force to physically injure one or more individuals. Physical violence includes, and is not limited to spitting on, hitting and kicking, beating, pushing, biting, slapping, stabbing and shooting.<sup>31,32</sup>
2. Psychological Violence: The application of power or physical force to threaten, one or more individuals causing mental, spiritual, moral or social harm. Psychological violence includes, and is not limited to verbal abuse, bullying, sexual harassment, yelling and swearing at and threatening behaviours.<sup>31,32</sup>

This research study focused on both physical and psychological forms of WPV against members of staff of the ED by individuals visiting or working in the department.

## **2.2 Risk factors for workplace violence**

### **2.2.1 ED factors**

The National Institute for Occupational Safety and Health (NIOSH), a research agency belonging to the Centre for Disease Control and Prevention (CDC) in the USA acknowledged that the physical design and the geographic location of the ED within a community can affect the amount of violence in the ED.<sup>33</sup>

ED staff members whose workplace has poorly designed; passages, examination rooms and waiting rooms particularly when these are combined with poor lightening are at risk of WPV.<sup>33,34</sup> In a cross-sectional study carried out by Lin et.al during which group discussions and interviews were conducted in six EDs in Taiwan, the members of staff( no statistics were provided by the author) reported that WPV in the ED was caused, to a large extent, as a result of inadequate physical design of the ED, uncomfortable waiting areas and unrestricted movement of the public into the ED, which led to overcrowding and high levels of noise that subsequently provoked violent incidents against the members of staff.<sup>35</sup>

Literatures examining the rates of violence in EDs located within certain areas in communities where the rate of violence is high, are lacking. However, high rates of homicide and firearms use in the community are thought to be associated with high rates of ED WPV.<sup>33,34,36</sup>

The 24- hour accessibility of the public to the ED creates difficulties, for security personnel and ED staff members because it becomes extremely difficult for them to

distinguish between patients and their companions and criminals.<sup>18,37</sup> Therefore, even criminals who have no medical reasons to be present in the ED and individuals carrying weapons can move in and out of the ED freely.<sup>37</sup> Gates et al, in a study conducted in five EDs in the USA, reported that 10% and 25% of the participants respectively, complained of the involvement of a gang of criminals and accessibility to firearms as important contributing factors to ED WPV.<sup>36</sup>

More so, the absence of surveillance cameras, lack, of constant presence of security personnel and the use of metal detectors to control the entry and exit points of EDs are also thought to influence the rate of ED WPV. It has been observed that a significant proportion of violent incidents in the ED are committed by using detectable weapons. Benham et al in a survey that involved specialist emergency physicians in the USA found that 10% of the respondents were victims of ED WPV incidents in which the weapon used against them was either a knife or a gun.<sup>39</sup>

In an investigation carried out by Chapman et al among 332 nurses in Australia, 36% of the respondents reported that they were threatened with knives and guns at least twice in the preceding twelve months.<sup>38</sup> Data showing reduction in the rate of ED WPV as a result of implementing adequate security measures in the ED are lacking. However, due to the nature of weapons used against members of staff of the ED and involvement of gangs in ED WPV, the presence of security personnel in the ED; use of metal detectors and searching for weapons are expected to be effective measures of eliminating metallic weapons and objects from people entering the ED and may therefore decrease occurrence of ED WPV incidents.<sup>38,39</sup> Benham et al reported that 23% of respondents who worked in EDs with constant presence of security personnel experienced no violent incidents in the 12 months prior to the study, while 100% of the respondents who worked in EDs with intermittent presence

of security personnel experienced at least one violent incident during the same period.

Furthermore, factors such as understaffing and overcrowding of the ED were recognised to be important contributors to occurrence of ED WPV.<sup>21,22</sup> Once the ED is overcrowded or understaffed, the number of patients in the ED disproportionately starts to exceed the number of ED staff members and subsequently impairs their ability to sufficiently recognise and treat the very sick patients early enough.<sup>40</sup> Therefore, patients will have to wait for a longer period of time before receiving medical care.<sup>40</sup> Patients and their companions, when subjected to prolonged waiting time in the ED, tend to become hostile and involved in violent incidents against ED staff members.<sup>40</sup> Jenkins et al, in a survey that involved 233 EDs in the United Kingdom (UK), reported that 86% of the respondents attributed ED WPV to prolonged waiting times.<sup>41</sup>

ED WPV tends to occur in overcrowded EDs also due to the lack of time for proper communication between ED staff members, patients and their companions.<sup>16,19</sup> Tang et al investigated ED WPV in the EDs of eleven hospitals in Taiwan and reported that prolonged waiting times and lack of communication (89% and 82% respectively) between ED staff and patients and/or their companions were among the most frequent risk factors for the occurrence of ED WPV.<sup>18</sup> The uncertainty with respect to the amount of time to be spent, in addition to concerns regarding their medical conditions, normally provoke patients and their companions to become hostile against ED staff members especially when they are not regularly informed about the approximate amount of time that they have to wait and the plan of action of the management in the ED.<sup>40</sup>

### 2.2.2 Staff factors

As a member of staff of the ED, the risk factor for exposure to ED WPV increases. Unrestricted openness of the ED to the public; violent patients presented with altered mental status; overcrowding; and long waiting times are factors which contributed to the greater occurrence of violence against ED staff members when compared with what is experienced by members of staff in other departments in an hospital.<sup>21,22,38</sup> Chapman et al found that members of staff in the ED were significantly more exposed to violence, in that 46.43 violent incidents per ED staff member occurred annually when compared with the number of violent incidents per annum (40.39, 19.74, 4.00, and 3.73 incidents) which occurred per member of staff who work in the psychiatric, medical, paediatric and surgical departments respectively.<sup>38</sup>

Age was traditionally connected with experience, wisdom, and abilities to solve conflicts, thus it was thought to play a role in the ability to effectively handle ED WPV.<sup>9,18,30,42</sup> The older a person, the more likely s/he is expected to be experienced at solving and avoiding conflicts at work.<sup>9,18,42</sup> Ayranci examined ED WPV in 18 EDs in Turkey and reported that the highest rate of ED WPV was experienced by members of staff of the ED aged between 30-39 years.<sup>42</sup> Eighty-two percent of this category of staff members were reported to have experienced ED WPV when compared with what was experienced by 64.3% of those aged between 40-49 years.<sup>42</sup> However, these findings were not consistent with other studies.<sup>7,38,42</sup> Lin YH and Liu HE found that age does not really matter when it comes to experiencing violence at work.<sup>43</sup> Studies by Chapman et al and Anderson & Parish showed similar results to that reported by Lin & Liu in regards to the relationship between age of staff members and the risk of being victim of ED WPV.<sup>38,44</sup>



Years of work experience and training in dealing with WPV were expected to improve the ability of the members of staff of the ED to safely handle work conflicts, thus preventing violence before it occurs. Kowalenko et al in their study in Michigan, USA, reported that emergency physicians who work in the ED and with less than 10 years of experience were more exposed to violent incidents than those had worked longer.<sup>9</sup> Incidents constituting 61% of psychological violence and 79.1% of physical violence were experienced by members of staff with less than ten years of work experience while members of staff who have worked in the ED between 11-20 years experienced 28% and 20.2% of psychological and physical violence incidents respectively.<sup>9</sup>

Several studies reported that lack of training and a fewer years of work experience were associated with increased risks of experiencing ED WPV.<sup>9,18,42,45</sup> Tang et al found a strong association ( 0.68/0.44;  $p < 0.005$ ) between experiencing ED WPV and lack of being trained about violence in the workplace.<sup>18</sup> However, period of ED experience and prior training on handling violence at work were shown in other studies to have no influence on occurrence of violence at work.<sup>38,43,44</sup> Anderson & Parish, in a study that investigated the occurrence of WPV against Hispanic nurses, reported that basic training and number of years at work had no influence on occurrence of WPV.<sup>44</sup>

Gender also was thought to affect the rate of ED WPV, however, results of previous studies are conflicting. Kowalenko et al showed that female physicians who work in the ED, possibly because of their smaller physical built, were more exposed to physical violence than their male peers.<sup>9</sup> Physical violence was experienced by 48.1% and 51.9% respectively of the male and female physicians who work in the ED.<sup>9</sup>

In contrast, Anderson & Parish found the male gender to be a more predisposing factor to both psychological and physical violence ( $F = 6.50$ ;  $p = .013$ ) while Kowalenko et al and Behnam et al found that gender of the members of staff had no significant influence on rate of occurrence of WPV.<sup>7,39,45</sup>

Further studies are needed to clarify the role that the aforementioned indices regarding members of staff of the ED could play in the occurrence of ED WPV, as the results of previous studies in this aspect are conflicting.

### **2.2.3 Perpetrator Factors**

Patients and their companions were identified as the main perpetrators of violence against members of staff of the ED in many studies.<sup>7,12,18,46,47</sup> Gates et al found that patients were the perpetrators of 83% of psychological violence and 78% physical violence against doctors while this same category of people perpetrate 67% and 51% of psychological and physical violence respectively against nurses.<sup>36</sup> They also reported that people who come to visit patients in the ED were perpetrators of physical violence against 8% of nurses and 6% of doctors. Ayranci also indicated that patients and their companions (52% and 89% respectively) were the main perpetrators of ED WPV in Turkey.<sup>42</sup>

Patients and their companions who were reported to be involved in violent incidents against members of staff of the ED are usually those whose cognition are altered by abuse of substance or a disease process.<sup>22,36,46</sup> Gates et al found that alcohol abuse, drug abuse, psychiatric disorders, and brain disorders (80%, 76%, 63%, and 56% respectively) are the most frequently reported perpetrating factors that predisposed certain individuals to ED WPV.<sup>36</sup>

Alcohol is one of the most frequently abused substances that predisposes people to ED WPV.<sup>22,36,46</sup> Gilchrist et al investigated the etiology of ED WPV in the ED of two hospitals in Australia and reported that 78% of participants who were victims of WPV stated that the perpetrators of physical and psychological violence were under the influence of alcohol.<sup>46</sup> It has also been reported that abuse of drugs and mental disorders were contributors of 70% and 56% WPV respectively.<sup>46</sup>

Patients with altered cognition either due to either psychiatric or medical disorders also tend to be involved in violent incidents against ED staff members. Gates et al found that the incidence of physical violence to be high in both psychiatric and general EDs (50% and 48% respectively).<sup>23</sup> Dementia was shown to be the most common medical disorder contributing to violence in the ED.<sup>47</sup> Speroni et al showed in an online survey of 762 nurses in the USA, that 45.7% of nurses in the ED reported that dementia was the main factor leading to WPV.<sup>47</sup> Only 1.1% reported delirium as a factor in WPV. Due to the nature of their diseases and noncompliance, patients with dementia and psychiatric disorders often present to the ED with acute flare of their illnesses, during which they are likely to display violent behaviour and acts against ED staff members.<sup>12,45</sup>

In several studies, colleagues at work represented a smaller but considerable number of perpetrators of mainly psychological WPV.<sup>8,12,43</sup> Gerberich et al found that doctors, other employees, and supervisors were the perpetrators of 12.8%, 10.9%, and 10.4%, respectively of psychological WPV.<sup>12</sup> In another relevant study, Lin & Liu reported that 19.9% of psychological WPV was perpetrated by doctors and other colleagues.<sup>43</sup> This kind of violence that occurs among colleagues is likely to occur as a result of interpersonal conflicts or as means to shift blame when work-related problems take place.<sup>43</sup>

## **2.3 Consequences of workplace violence**

Working in environments where ED WPV is prevalent can lead to negative consequences on staff members, perpetrators, and other ED patients.

### **2.3.1 Consequences on ED staff**

Exposure of the members of staff of the ED to WPV has psychological (non-physical) and physical consequences.

#### **2.3.1.1 Psychological (non-physical) consequences**

ED WPV (psychological and physical) is one of the significant sources of stress to members of staff in the ED.<sup>9,11-13</sup> They are prone to make work-related errors as a result of being stressed by WPV.<sup>11</sup> Nielsen et al found a strong relationship between experiencing stress by members of staff of the ED and occurrence of work-related errors.<sup>11</sup> Sixty three of the 214 ED staff in Denmark had made at least one error in the ED in a period of 4 weeks and a total of 214 work-related errors such as incorrect use of medications and equipment were reported during the same period.<sup>11</sup> Stress experienced by ED staff members particularly from ED WPV and unfriendly interpersonal relationships had a great negative emotional influence on them and contributed to the occurrence of these errors.<sup>11</sup>

Feeling stressed following an experience of ED WPV was also reported by the participants in a study carried out by Kowalenko et al.<sup>7</sup> The participants reported that their ability to give medications correctly and communicate appropriately with patients in order to focus properly on their medical conditions, was impaired following their experiences of WPV incidences ( $P < 0.05$ ) in the ED.<sup>7</sup> This may significantly compromise the quality of healthcare service delivered to ED patients.<sup>7</sup> In the same way, Tang et al also found that ED WPV negatively affected the quality of nursing

care provided by 56% of the ED nurses in the ED of eleven hospitals in Taiwan following their experiences of ED WPV.<sup>18</sup>

Another negative consequence of WPV is that it could worsen the way those who experience it relates with their colleagues, patients and their companions.<sup>15,36</sup>

Job satisfaction of a member of staff was also reported to be negatively affected by WPV.<sup>15,36,48</sup> Kathryn et al in a study investigated the relationship between WPV and job satisfaction among members of staff in some hospitals in Alberta and British Columbia and found that nurses who experienced WPV reported the lowest job satisfaction level. In a similar study May & Grubbs showed that 65.2% of nurses reported decreased job satisfaction after experiencing violent incidents.<sup>48</sup> Chapman et al reported that decreased job satisfaction level of a member of staff due to an experience of ED WPV could cause a refusal or inability to create interest in caring for patients, particularly the violent ones in the ED.<sup>15</sup>

Decreased job satisfaction does not only affect the quality of care given to patients in the ED, it also negatively affects the health of the ED member of staff.<sup>49</sup> Lloyd et al examined the relationship between job satisfaction, burnout, and depression among 268 Canadian emergency physicians.<sup>49</sup> Using the Centre for Epidemiologic Research Self- Report Depression Scale (CES-D), the researchers found that decreased job satisfaction significantly predisposed Canadian emergency physicians to depression.<sup>49</sup> Fifteen percent of the 268 physicians surveyed exhibited symptoms of depression.<sup>49</sup>

Members of staff of the ED normally experience additional negative psychological consequences due to ED WPV. These consequences are usually in form of negative emotions such as fear, frustration and anger. May and Grubbs reported that anger,

anxiety, fear, and diminished confidence were experienced by 66.3%, 53.5%, 36%, and 19.8%, respectively, of the 86 nurses that were surveyed following experiences of WPV incidents.<sup>48</sup> Similarly, Gerberich et al found that frustration, anger, fear, and sadness were among most psychological consequences experienced by members of staff as a result of experiences of physical and psychological WPV.<sup>12</sup>

These negative emotions that are brought about as a result of the stress experienced from WPV, interferes with the ability of members of staff to stay focused while working in the ED and therefore make them susceptible to make errors.<sup>15,18,48</sup>

Furthermore, ED WPV predisposes ED staff members to more violence.<sup>15,48</sup> May & Grubbs reported in their study that nurses including those who worked in the ED and were victims of WPV incidents were susceptible to be involved in further violent incidents with patients and their colleagues.<sup>48</sup>

### **2.3.1.2 Physical consequences**

Exposure of staff members to physical violent incidents while on duty was reported to result in various types of injuries including abrasions, bruises, bites, scratches, broken bones, and wounds.<sup>15,18,36</sup> The main physical consequences of ED WPV experienced by members of staff that were surveyed in the study of Kowalenko et al, were bruises, bites, abrasions, and scratches. Similarly, in a study by Gerberich et al, it was reported that bruises and contusions; joint injuries and smack marks; and cut/bite wounds and scratches were experienced by 33%, 22%, and 32%, respectively, of the 3738 nurses including ED nurses, that were surveyed, following their experiences of physical WPV.<sup>12</sup>

The different parts of the body on which injuries were sustained by staff members during WPV incidents were also reported in few studies.<sup>12,13,15</sup> Head, face, chest,

upper and lower extremities were body parts in which injuries were sustained most frequently. Chapman et al reported cases of WPV during which injuries were sustained in the head and neck, upper extremity, lower extremity, by 21.4%, 32%, 5.5%, respectively, of the nurses who experienced physical WPV incidents. Seven percent of the nurses sustained injuries to more than one part of their bodies.<sup>15</sup> Similarly, the injuries reported in a study carried out by Gerberich et al involved mainly upper extremity, face, leg, head, and chest of the nurses (including nurses who work in the ED) who experienced physical WPV incidents.<sup>12</sup>

The physical injuries sustained as a result of physical WPV have the potential to cause pain and damage to the affected parts of the body of the ED member of staff. These definitely interferes with the ability of the ED staff to function properly while on duty. May & Grubbs reported that 3.5% of the nurses that were surveyed, including ED nurses, indicated that WPV incidents made them to sustain bone fractures.<sup>48</sup>

Wolf et al also reported, in a study that investigated the experience of 46 nurses with respect to ED WPV, that physical ED WPV can have serious negative effects on the function of ED nurses.<sup>13</sup> Chronic pains from permanent injuries inflicted on vital joints such as shoulder, knee, and hip were report in the same study.<sup>13</sup> One of the nurses who experienced physical ED WPV needed a knee replacement.<sup>13</sup>

The physical injuries due to ED WPV does not only lead to pain and disability, but can also cause fatal injuries to the ED member of staff. In a study that reviewed the reports of documented gunfire incidents in hospitals in the USA over 12 years (2000-2011), Kelen et al found that 29% of 154 incidents of shootings occurred in the ED.<sup>50</sup> The shootings were mainly carried out by either a patient or a patient's relative.<sup>50</sup> Of the 235 victims of these shootings, 8 doctors and 12 nurses sustained fatal injuries.

Any object that has the potential to cause harm could be used as a tool to attack ED staff members. Information from the literatures that reviewed the mechanisms of injury, reported that; the mouth, hands, and feet appeared to be the most frequently used tools to attack ED staff members.<sup>22,45,48</sup> In the study of Gacki-smith et al, more than 50% of the participants who experienced physical WPV stated that they were spat on, pushed, scratched, and kicked.<sup>22</sup> Similarly, May and Grubbs reported that kicking, pinching, and spitting on, was experienced by 55.3%, 58.1%, 52.3%, respectively, of the participants who experienced physical WPV.<sup>48</sup>

More so, equipment and furniture in the ED were frequently used as tools to attack ED staff members. Use of Intravenous (IV) lines, syringes, and furniture as tools of attack were also reported by Lyneham in a study of ED WPV in New South Wales.<sup>51</sup> In addition to the aforementioned equipment, 32% of WPV incidents that were recorded in a study carried out by Chapman et al were perpetrated using chairs and patients files as objects of attack.<sup>38</sup> Electrocardiograph (ECG) machines and wooden sticks were reported to be used by Behnam et al.<sup>39</sup> Adiba et al in their own study, reported that headgears and shoes were used as tools of attack on 21% of the participants who experienced physical WPV.<sup>45</sup> Essentially any object that is not firmly fixed in a place can be used as a tool to attack an ED member of staff.<sup>51</sup>

Guns and knives were also commonly used weapons against ED members of staff particularly in countries where people have right to own firearms.<sup>34,38,39</sup> knives and guns( 3% and 6% respectively) were reported by Chapman et al to be used as tools of attack on ED members of staff.<sup>38</sup> Behnam et al reported that guns and knives were more commonly used as weapons against ED staff members , than any other equipment in the hospital.<sup>39</sup> Majority (60%) of the participants in the study done by Behnam et al, worked in EDs that did not screen patients and their companions for



weapons.<sup>39</sup> This may explain why guns and knives were the most frequently reported weapons in the study.<sup>39</sup>

### **2.3.2 Consequences on patients**

ED WPV adversely affects the quality of care that is provided to patients by members of staff who have experienced WPV at one time or the other. A strong relationship exists between experiencing WPV incidents and occurrence of errors such as incorrect prescription of medications and improper use of medical equipment. This was reported by Neilsen et al.<sup>11</sup> In addition, Kowalenko et al found that ED WPV reduces the ability of the ED member of staff to effectively handle work-related issues, to perform procedures while taking appropriate anti-infection measures, and to give medications correctly.<sup>7</sup>

All of these negative effects of WPV are thought to compromise patients' safety in the ED.<sup>7,15,18</sup> Patients are exposed to an increased risk of contracting infection when particular attention is not paid to maintaining anti-infection measures. Giving patients inaccurate dose of medication may leave them undertreated or expose them to unnecessary toxicity, as well.

A patient's medical conditions can also be adversely affected when provision of medical care is delayed. Participants in the study of Chapman et al reported that because of the time and personnel used to control violent patients, there was a delay in providing care to violent patients and other patients seeking medical care.<sup>15</sup>

A delay in providing care were also reported to occur when members of staff who have been victims of WPV become fearful of and tend to avoid patients and situations that remind them or put them at risk of violence.<sup>15</sup>

In addition, negative consequences were reported to occur when physical and pharmacological restraints are used to control violent patients with altered mental status during clinical examination and provision of treatment.<sup>52</sup> In a study that examined ED WPV in the USA, Lavoie et al reported that out of the 127 EDs that were surveyed, 32 of them restrained at least a patient in a day.<sup>52</sup> The study reported the occurrence of significant injuries to the head and to the bones, in the course of restraint in 17 EDs.<sup>52</sup> The same study reported the strangulation and death of an extremely violent patient after physical restraints.<sup>52</sup>

Non-violent patients and companions are not spared of the effects of ED WPV. In a study that reviewed the reports of documented gunfire incidents in hospitals in the USA, over a period of 12 years (2000-2011), Kelen et al found that the second most likely victims of shootings were patients and visitors.<sup>50</sup>

#### **2.4 Problems of previous studies**

The majority of studies and surveys that examined the different aspects of workplace violence were mostly centred on nurses. Studies that investigated the experience of other members of staff groups such as clerks, porters, and security personnel, in the ED, were lacking. A prospective study, that investigated WPV among healthcare workers including technicians, ED doctors, patient care assistants (PCAs), paramedics, social workers, physician assistants in the ED of six hospitals, was carried out in 2012. This study, which was one of very few studies to investigate WPV among different categories of ED staff groups, found that all categories of staff in the ED were at high risk of experiencing violence at their places of work.<sup>7</sup> Another study carried out in 2002, in Michigan by Kowalenko et al found that majority (74.9%) of 171 emergency physicians that were surveyed, had experienced ED WPV.<sup>9</sup>

There is still a deficit of information, particularly the true prevalence of WPV in the ED. This deficit in information can be attributed to the following factors:

- Variable definitions of WPV.<sup>8</sup>
- Different study designs.<sup>9</sup>
- Different study samples.<sup>9</sup>
- Tendency of ED staff to under report ED violent incidents.<sup>7,18,36</sup>

## 2.5 Conclusion

Workplace violence is common in the ED and this can have profound negative consequences on members of staff and patients alike.<sup>7,10,12,15,18</sup> Many factors, mainly the high rates of violence and injuries in South Africa together with frequent inappropriate self-referral, and the seriousness of presented medical problems are likely to cause an overcrowding and prolongation of patients waiting times in the ED of South African hospitals. Overcrowding and prolonged waiting times have been demonstrated to be significant risk factors for ED WPV and hence it is expected that rates of ED WPV in the ED of South African hospitals will be high.

In addition, and based on data from the South Africa Police Service (SAPS), more than 30000 cases of murder and attempted murders were reported in South Africa between April 2011- March 2012.<sup>53</sup> Furthermore, 192 651 cases of assault with the intention to cause severe bodily harm were reported by SAPS during the same period.<sup>53</sup> If the incidence of violence in a society is high, it is expected that the incidence of WPV in the ED of the hospitals of such places will be high.<sup>9,10,21</sup>

In the review of literatures, the researcher could not find any study that addresses ED WPV in South African hospitals. Therefore, the purpose of the current research was to examine the perception and effect that WPV had on different occupational groups in the emergency department of two hospitals in Johannesburg, South Africa. Additionally, although the research was limited to the EDs of two government hospitals in Gauteng, it was appropriate to conduct and an important step towards building an awareness of the magnitude of workplace violence faced by ED personnel in the public sector.

## **Chapter 3 METHODOLOGY**

### **3.1 Design**

The current research was conducted as a cross-sectional, retrospective qualitative paper-based survey

### **3.2 Site of the study**

The ED of Leratong Hospital and the ED of Tambo Memorial Hospital. Both hospitals are secondary Level urban regional hospitals in Gauteng and have a bed capacity of 755 and 540 functional beds, respectively. Each ED provide acute medical and trauma care to a full spectrum of patients including children, adults, and elderly with approximately 75,000 patient visits annually.

### **3.3 Study population**

- Staff members working in the ED of the two hospitals were invited to participate in the study.
- Sample size: Previous studies that examined ED WPV had used different methods and were conducted on the background of variable definitions of WPV. Using the sample size formula to estimate study population size would not be possible. Therefore, for this study the researcher used convenience sampling.

### **3.4 Inclusion criteria**

- Any member who was employed in the emergency departments that were surveyed during the period of data collection.

### **3.5 Exclusion criteria**

- Students who were still undergoing training and employees who could not speak English were excluded from participating in this study.

### 3.6 Data collection

Collection of data was done by using paper-based questionnaires (see Appendix A) which were completed by the participants who volunteered to partake in the survey.

The following steps were followed:

- Data were collected using a self-reported questionnaire that was only available in the English language. The questionnaire was developed by the researcher after review of the relevant literature. Information sheets were available to the participants (Appendix A).
- Eligible ED staff members who were willing to participate in the study and were present in the EDs during the intermittent visits of researcher, were handed identical envelopes by the researcher in person each of which contained information sheet and hardcopies of the study questionnaire.
- The managers of the surveyed EDs helped distributing the survey to the staff members who were doing late afternoon or night shifts and encouraged them to participate in the study.
- The participants were asked to insert the questionnaire in an envelope and seal it up,
- A secured box was allocated to each of the selected EDs with extra copies of the survey, where the sealed envelopes containing the questionnaire (completed or not) were dropped.
- The survey was conducted over a period of four weeks.
- The contact details of the researcher were available to the participants in order to answer any queries about the questionnaire and/or if a participant would like to hand over the completed questionnaire directly to the researcher.

- A psychologist was made available in case any of the participant may wish to consult with him.

### **3.7 Ethics**

Participation in this survey was made voluntary and all data were treated as strictly confidential. The completed questionnaires were placed into secured boxes that in the EDs that were used for the study. The information gathered were protected by a coded numbering system, then captured and stored in a password protected computer that could only be accessed by the researcher. Permission to conduct the study was obtained from the managers of the EDs and from the CEOs of the hospitals (Appendix B). Ethics Clearance (Appendix C) was also obtained from the Human Research Ethics Committee (Medical) of the University of the Witwatersrand.

### **3.8 Data analysis**

- All data captured from the returned questionnaire were entered into an electronic spreadsheet (Microsoft Excel™, Microsoft Office 2007™, Microsoft Corporation).
- Data cleaning was performed to detect any missing values, extreme cases, and inconsistency. Data coding, to facilitate analysis, was performed.
- Data was imported into and all the analyses are carried out using the SPSS (Statistical Packages for Social Sciences) version 13.
- Percentage and frequencies were computed for categorical variable such as sex, race, and professional group.
- Means and standard deviation were computed for numerical variables such as age and years of experience.

- Potential significant relationship between experiencing physical violence/psychological incident with demographic aspects of the participants, also with characteristics of the ED, were examined.
- The test of significance used was the chi square test of independence, which is applied when you have two categorical variables. Whether gender, marital status, religion, profession and race were related to violence (physical and psychological) experienced was examined. The null hypothesis was tested :

H<sub>0</sub>: Variable A and Variable B are independent (that, knowing the level of variable A does not help to predict the level of variable B) against the alternative hypothesis

H<sub>a</sub>: Variable A and Variable B are not independent (knowing the level of variable A can help you to predict the level of variable B).

- All the statistical tests were carried out with 5% significance level. So, H<sub>0</sub> was rejected if p-value (the probability of getting the observed result by chance alone) is less than 0.05 in favour of the alternative hypothesis, otherwise the researcher fails to reject it. One of the conditions of the use of chi square test is that, expected frequency count (row-total multiplied by column-total divided by the grand-total) for each cell, in the contingency table, must be at least 5. So, some of the p-values for the relationship were not reported because the condition above was violated. Some of the levels of variables were grouped to circumvent it.



### **3.9 Summary**

This research is a cross-sectional, retrospective qualitative paper-based survey. It was conducted in 2 government hospital EDs in Johannesburg with the aim of determining the perception and experience of emergency department occupational groups regarding workplace violence in the past 12 months in two government hospitals in Johannesburg. The permissions to conduct the study as well as the ethics Clearance certificate were obtained from the relevant parties.

The data of the results shown in the next chapter were collected using a self-reported questionnaire that was only available in the English language. The questionnaire was developed by the researcher after review of the relevant literature and used for the first time. All data captured were entered into an electronic spreadsheet, and all analyses were executed using SPSS software (v. 13.0, SPSS, Inc.). Chi-square test was used to test whether subjects' demographic data relate to the violence experienced.

## Chapter 4 RESULTS

### 4.1 Introduction

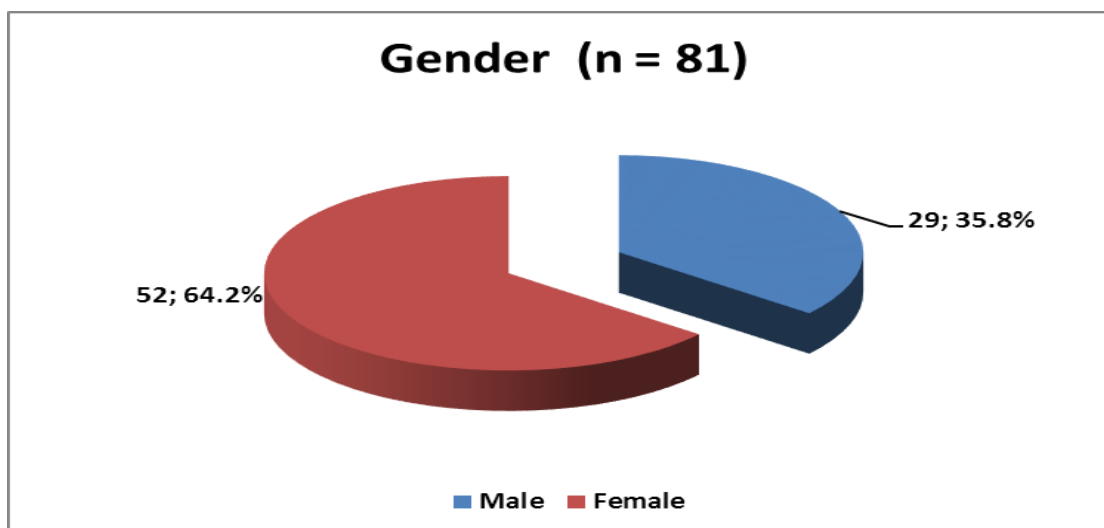
In this section the researcher presents the results of the data analysis. Firstly, the researcher describes the demographic aspects of the participants, then the characteristics of the emergency department. The characteristics of physical violence and psychological incidents are presented in table formats, and the general questions in table format as well. Lastly, significance of the relationship between experiencing physical /psychological violent incidents and demographic aspects is examined.

### 4.2 Response rate

By the end of data collection period of 4 weeks, 86 surveys (43%) out of 200 surveys were returned. Five surveys were unfilled leaving 81 surveys (response rate=40.5%) available for analysis.

### 4.3 Demographics of participants.

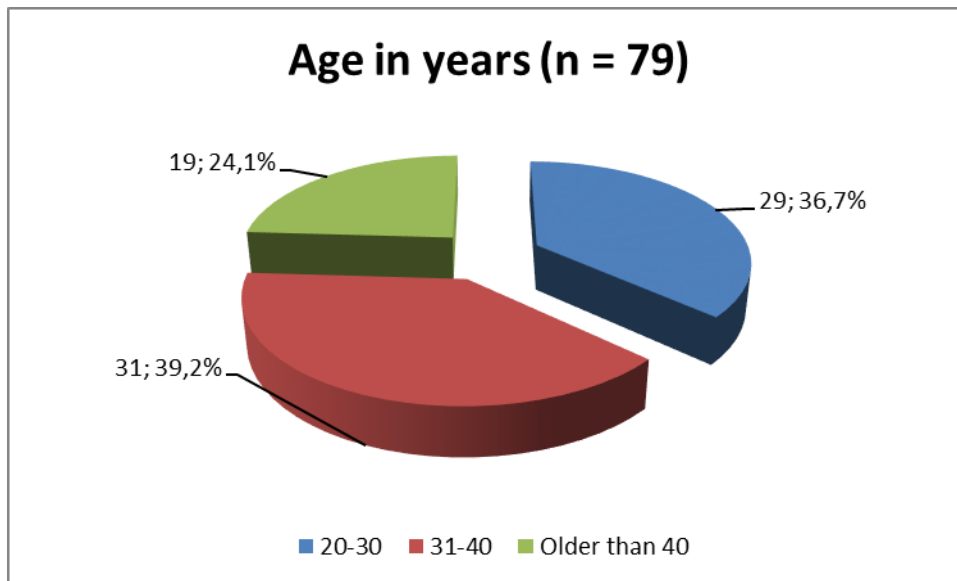
#### 4.3.1 Gender



**Figure 4-1: Gender of participants.**

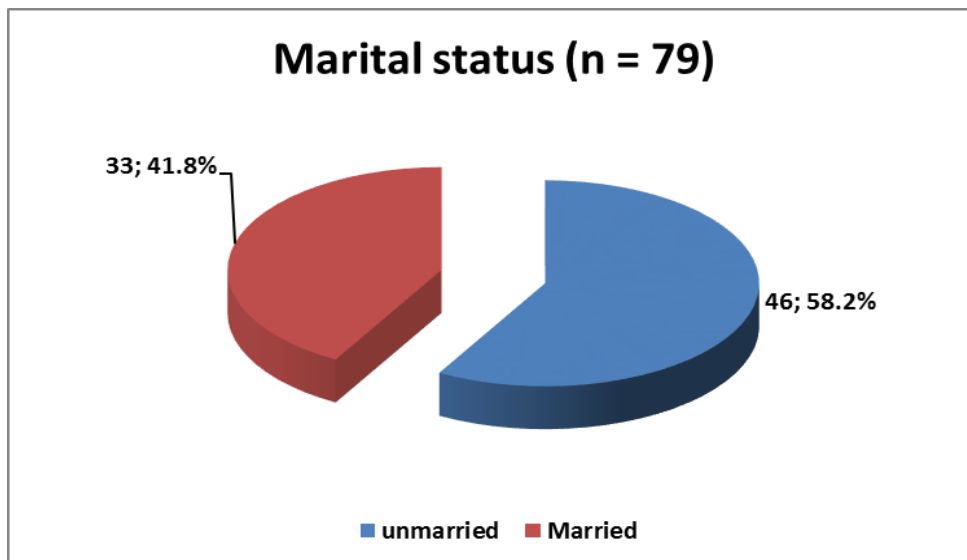
### 4.3.2 Age of participants

The mean age of the participants was 35 years (Standard deviation=9.05).



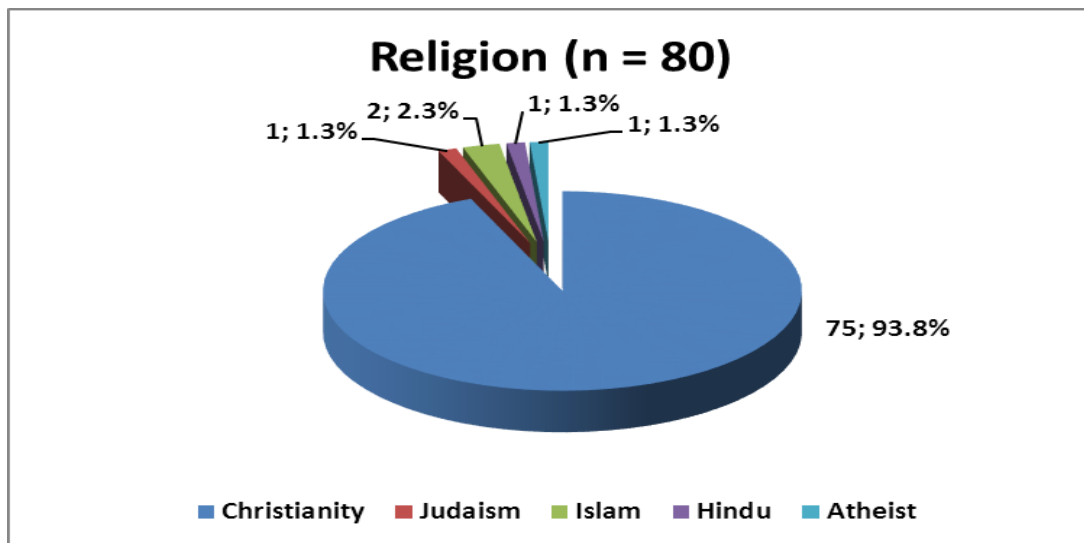
**Figure 4-2: Age of participants.**

### 4.3.3 Marital status



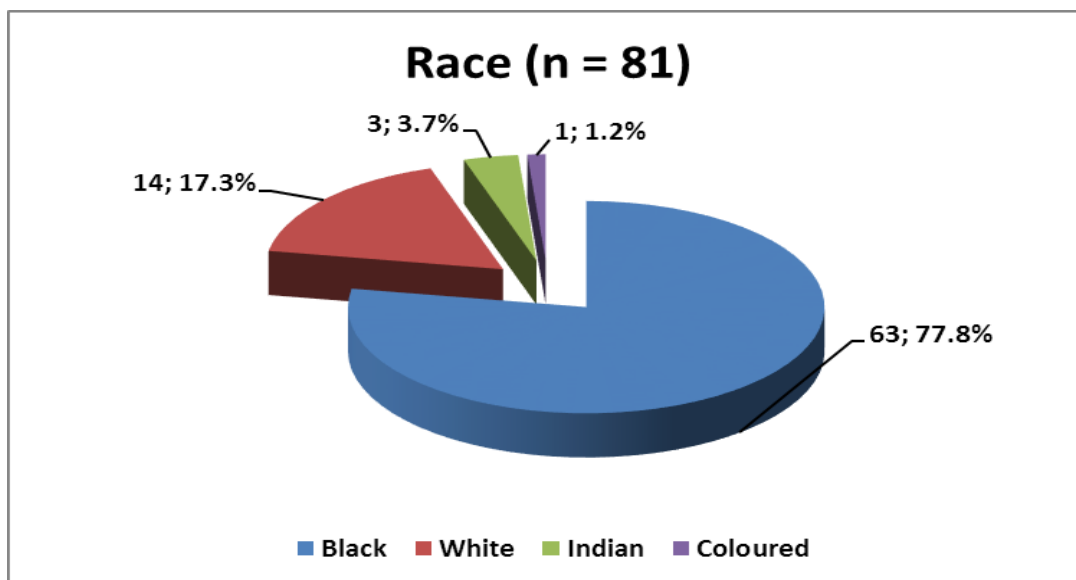
**Figure 4-3: Marital status of participants.**

#### 4.3.4 Religion



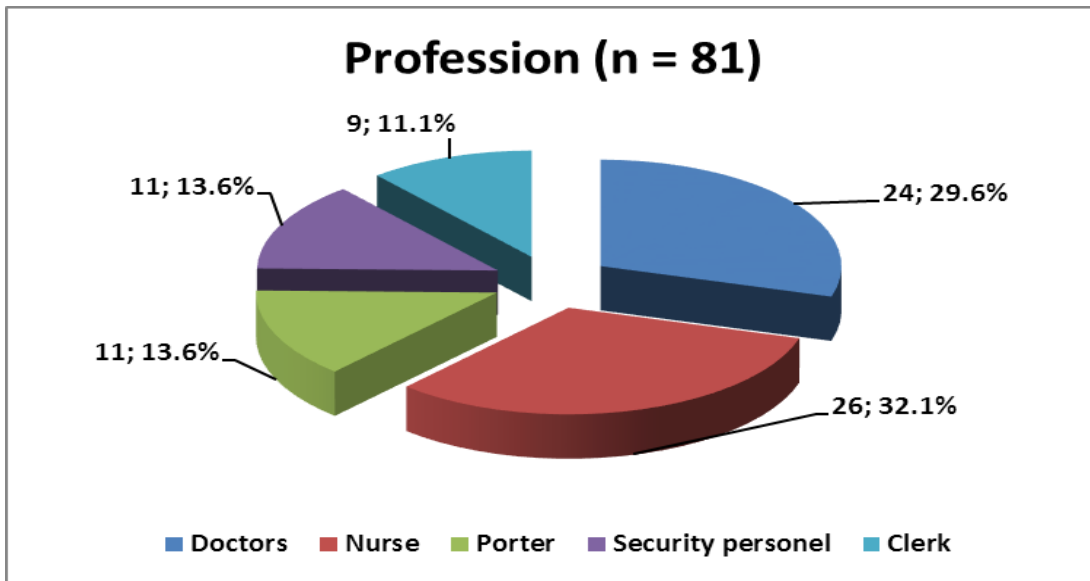
*Figure 4-4: Religion of participants.*

#### 4.3.5 Race



*Figure 4-5: Race of participants.*

#### 4.3.6 Profession



*Figure 4-6: Profession of participants.*

#### 4.3.7 Working experience



*Figure 4-7: Working experience of participants.*

#### 4.4 Characteristics of Emergency Department

Feature	Yes	No	Not Sure	Total
Metal detectors are used to screen visitors for weapons	4 (4.93%)	74 (91.35%)	3 (3.72%)	81
Emergency department is equipped with security cameras	5 (6.17%)	74 (91.35%)	2 (2.48%)	81
The emergency department has visible security personnel	56 (69.13%)	22 (27.16%)	3 (3.72%)	81
The emergency department has protocol that guides in situations of violent incidents	19 (23.45%)	59 (72.83%)	3 (3.72%)	81
The emergency department offers training courses/workshops on how to recognize and deal with violent/armed persons	3 (3.72%)	74 (91.35%)	4 (4.93%)	81

**Table 4-1: Workplace characteristics of the emergency department.**

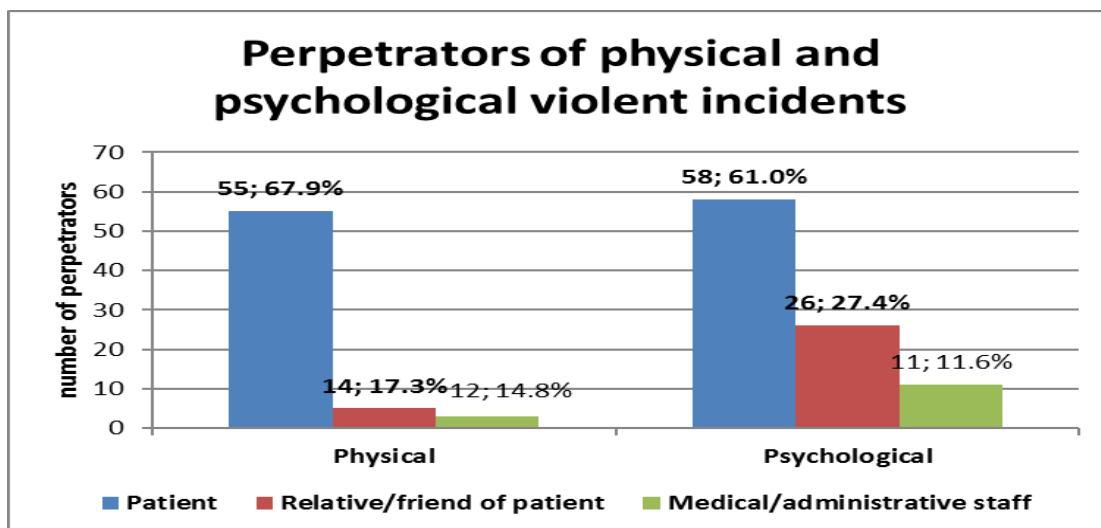
## 4.5 Descriptions of emergency department workplace violence

### 4.5.1 Experience of emergency department workplace violence

	Yes	No	Total									
Have you been physically assaulted in your emergency department in the previous year?	27; 34.2%	52; 65.8%	79									
Have you experienced psychological violence in your emergency department in the previous year?	51; 73%	27%	70									
Number of times you experienced (in the previous year)												
Number of incidents	1	2	3	4	5	6	7	8	9	10	>10	Total
Physical assault	7; 25.9%	7; 25.9%	4; 14.8%	3; 11.2%	2; 7.4%	0; 0.0%	0; 0.0%	0; 0.0%	0; 0.0%	0; 0.0%	4; 14.8%	27
Psychological violence	10; 19.6%	6; 11.8%	9; 17.6%	5; 9.8%	0; 0.0%	3; 5.9%	0; 0.0%	0; 0.0%	1; 2.0%	2; 3.9%	15; 29.4%	51

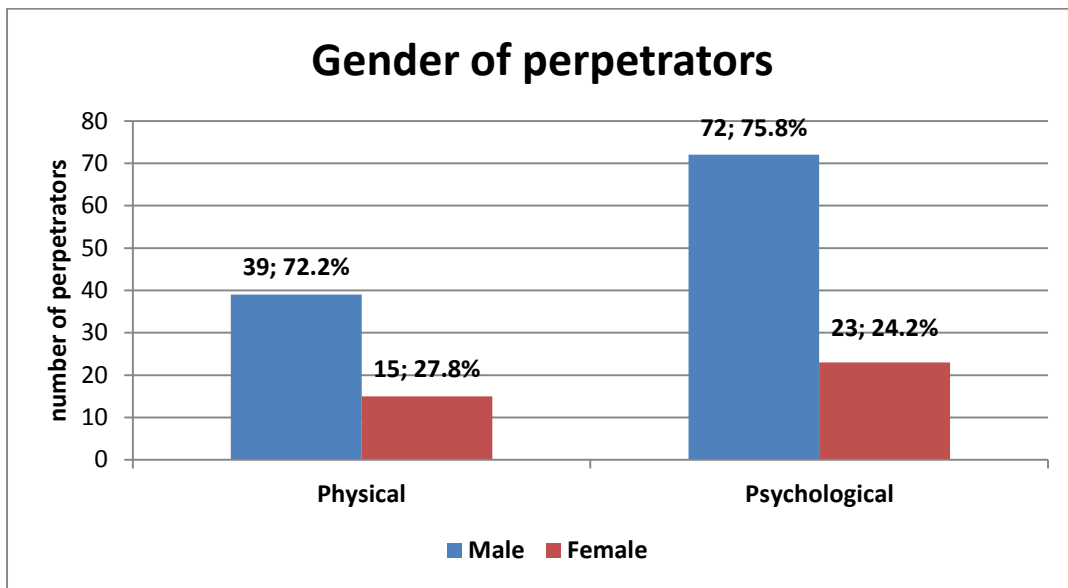
**Table 4-2: Percentage of participants who experienced physical and psychological emergency department workplace violence.**

### 4.5.2 Perpetrator of emergency department workplace violence



**Figure 4-8: Perpetrators of emergency department workplace violence.**

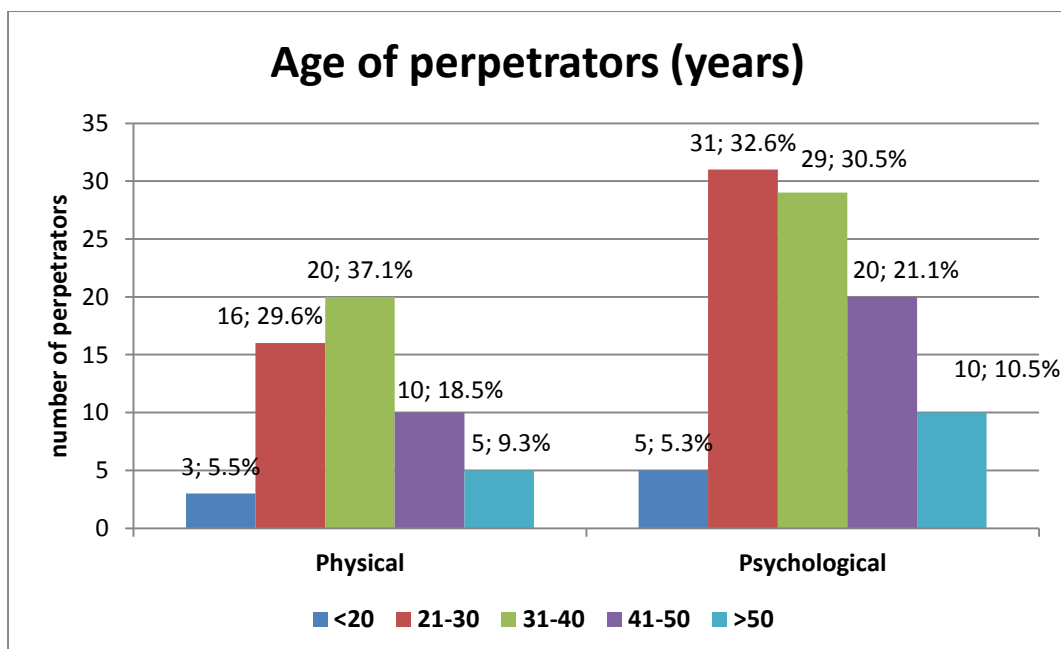
#### 4.5.3 Gender of perpetrators of emergency department workplace violence



**Figure 4-9: Gender of perpetrators of emergency department workplace violence.**

#### 4.5.4 Age of perpetrators.

The mean age of the perpetrators was 30 years.



**Figure 4-10: Age of perpetrators of emergency department workplace violence.**



#### 4.5.5 Place of emergency department workplace violence incidents

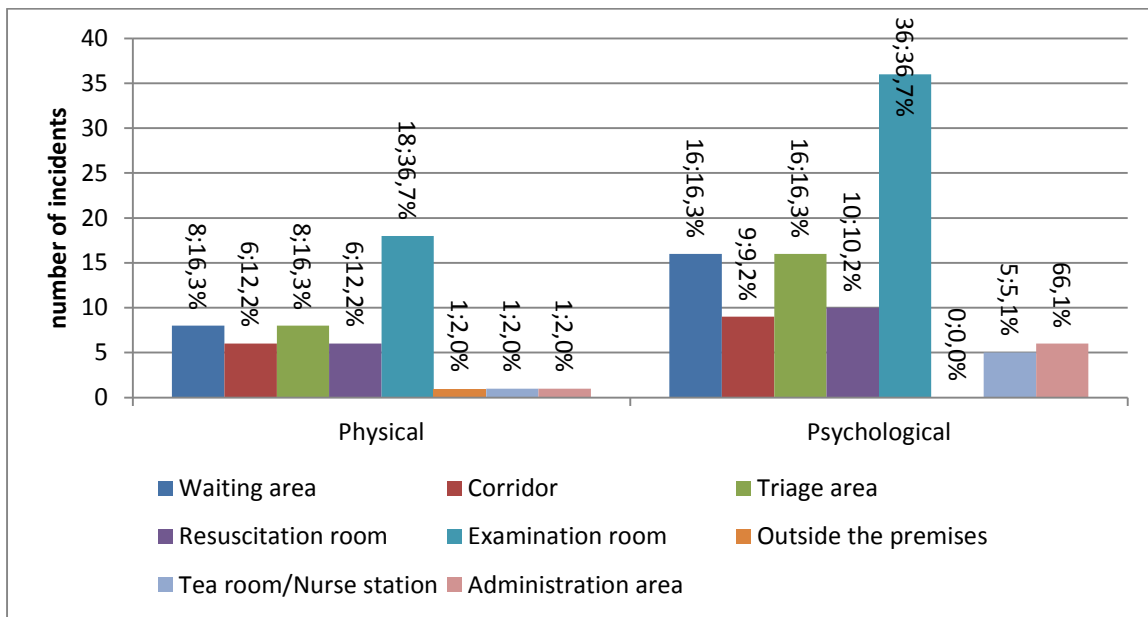


Figure 4-11: Place of emergency department workplace violence incidents.

#### 4.6 Response to emergency department workplace violence

##### 4.6.1 Response to physical emergency department workplace violence

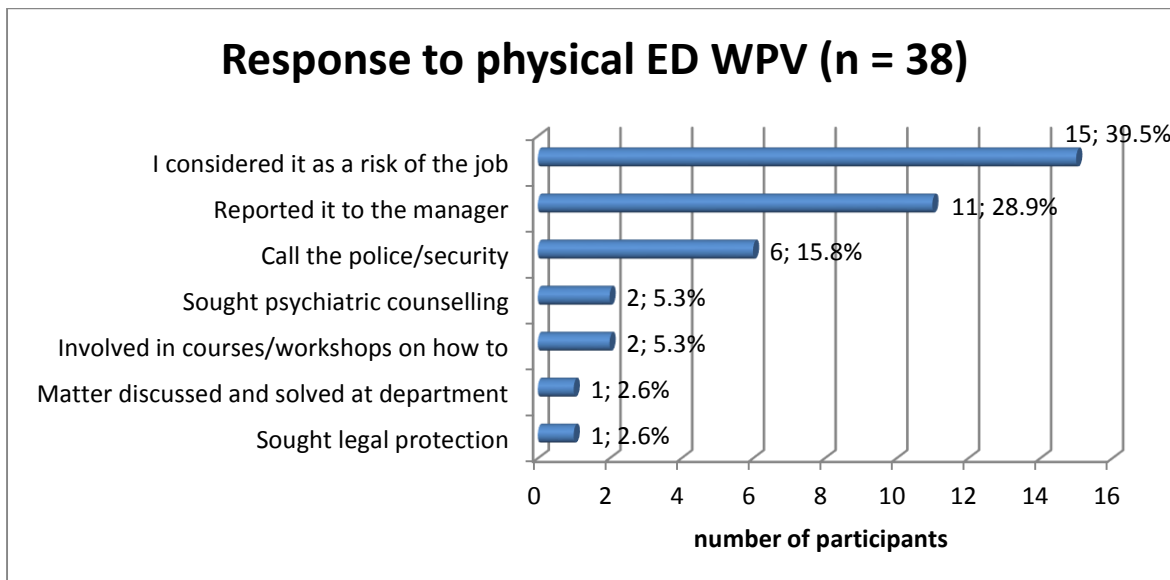
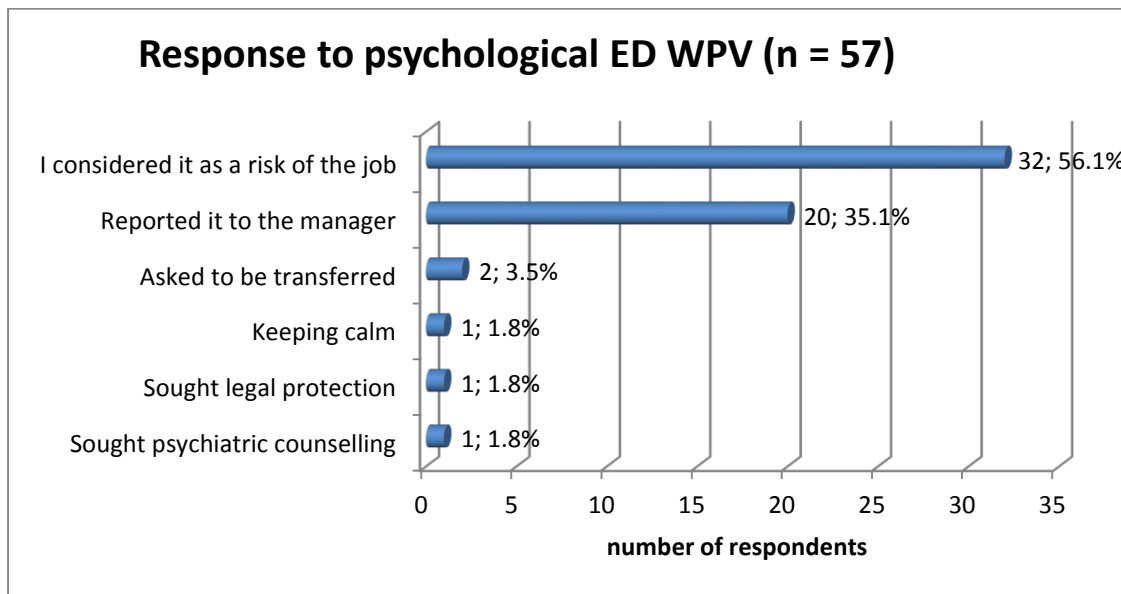


Figure 4-12: Response to physical emergency department workplace violence.

#### 4.6.2 Response to psychological emergency department workplace violence



**Figure 4-13: Response to psychological emergency department workplace violence.**

#### 4.7 Impact of emergency department workplace violence

In addition to reporting the impact of physical and psychological ED WPV on ED staff members in the table below, Wilcoxon test, the non-parametric version of two paired sample T test, was used to test whether there is a significant difference in the impact of physical and psychological ED WPV on the surveyed ED staff members. From all the p-values it can be seen that there is no difference, at 5% significance, in the consequences of physical and psychological violence (p-value > 0.05).

	Yes	No	Total			
Sustained injuries as a result of physical violence in the last year.	4; 20%	16; 80%	20; 100%			
Have to take a sick leave as a result of physical violence.	4; 20%	16; 80%	20; 100%			
Have to take a sick leave as a result of psychological violence.	1; 2.1%	46; 97.9%	47; 100%			
After experiencing/witnessing incidents of physical/psychological violence in your emergency department:						
N	Percentiles			Test of significance		
	25th	50 <sup>th</sup> (median)	75th	Z	P-value	
Was your sleep disturbed after experiencing/witnessing incidents of physical violence?	24	1,00	4,00	5,75	- 1.913	0.056
Was your sleep disturbed after experiencing/witnessing incidents of psychological violence?	49	,00	4,00	5,00		
Did you experience upsetting feelings/memories as a result of physical violence?	24	2,25	5,50	7,75	- 1.200	0.230
Did you experience upsetting feelings/memories as a result of psychological violence?	48	1,00	6,00	8,00		
Did you feel your concentration was decreased while working in your ED?	24	2,00	3,50	6,00	- 0.680	0.496
Did you feel your concentration was decreased while working in your emergency department as a result of psychological violence?	47	2,00	4,00	6,00		

**Table 4-3: Impact of emergency department workplace violence.**

## 4.8 Prevention of emergency department workplace violence

	Yes	No	Total
The violence you experienced could have been prevented	39; 65%	21; 35%	60
Description of how the violence could have been prevented			Frequency
Calm the patient			3; 7.9%
Trained security personnel in the emergency department 24/7			21; 55.3%
Train emergency department staff how to deal with violence			6; 15.8%
More staff to speed up the process			4; 10.5%
Educate patients about the emergency department rules and regulations			4; 10.5%
Total			38

**Table 4-4: Measures to prevent emergency department workplace violence.**

## 4.9 Relationship

### 4.9.1 Relationship/association between emergency department workplace violence and demographic aspects

- The test of significance used is the chi square test of independence.
- There was no relationship between age and years of ED work experience of participants and experiencing ED WPV– physical ( $P=0.470$ ,  $P=0.650$  respectively) or psychological ( $P=0.454$ ,  $P=0.519$ ).
- There was no relationship between gender of participants and experiencing physical ( $P=0.965$ ) or psychological ( $P=0.981$ ) ED WPV.
- There was no relationship between marital status, religion, and race of participants and experiencing ED WPV- physical or psychological as the

majority say no, they did not experience physical assault but they say yes to the psychological violence.

- Comparing all ED WPV incidents by type of profession showed that there is an association between the type of profession and predisposition to either physical, psychological violence, or both. The statistical significant for the relationships between ED WPV and type of profession could not be tested as there fewer data (frequency) for many of the categories of the demographics. To circumvent shortage in some data, the researcher combined the doctors and nurses under 'medical' and combined porters, security personnel, and clerks under 'nonmedical'. Medical staff are more exposed to psychological violence than the non-medical staff ( $P=0.001$ ).

### **Summary of the results**

A total of 81 ED staff members participated in the current research of which the majority were doctors and nurses. Participants were mainly women and black, and around the age of 35 years. Majority of participants were unmarried and worked in the ED for 3 years or less. The great majority of participants agreed that their EDs had no metal detectors, or security cameras. They also had no protocols or training courses to assist in dealing with ED WPV in their EDs. However, the majority of participants were aware of visible security personnel in their EDs. Psychological violence was experienced by most of the participants while physical violence was experience by a smaller but a significant proportion of participants. The perpetrators of ED WPV were mostly males around the age of 30 years, and were either patients or patients' companions. Examination room, triage area, and ED waiting area were the places where most of psychological and physical ED WPV incidents against ED staff occurred. A significant part of participants considered WPV as a risk associated

with the job and only a minority of them reported the incident to their managers. Physical injuries were sustained by a small proportion of participants who experienced physical violence. There was no significant association between experiencing ED WPV and demographic features (age, years of experience, gender, marital status, religion and race) of ED staff members, however, medical staff (doctors and nurses) were found to be at an increased risk to psychological ED WPV violence when compared to non-medical staff (porters, security personnel, and clerks). Most of the participants think that the violence they experienced in the ED is preventable and suggested that training ED staff to handle ED WPV incidents (15.8%), continuous presence of trained security personnel (55.2%), and taking measures to speed up the process of issuing ED files to patients (10.5%) would decrease ED WPV incidents in the surveyed EDs.

Studies that examined WPV against different groups of staff that work in the ED of healthcare facilities are scarce. However, the findings of this study support the conclusions of the majority of studies that reported and highlighted WPV as a common problem in EDs.

## **Chapter 5 DISCUSSION**

### **5.1 The experience of emergency department workplace violence**

The majority of previous studies which examined the different forms of workplace violence were mostly centred on nurses.<sup>12,18,22,38,43,45</sup> Even the few studies that included staff members of the ED other than nurses did not include the other occupational groups that were considered in the current research.<sup>7,9,42,49</sup> This dissimilarity in the surveyed ED occupational groups makes comparison of the findings of the current research with those of previous studies difficult, therefore, could limit interpretations and generalisation of the findings that were obtained. However, it is still possible to make deductions and comparisons with these previous studies based on the fact that the current research was carried among members of staff in the ED.

As evident from the findings of the current research, ED WPV was a common problem in the surveyed EDs. Psychological violence was experienced by the majority of participants while physical violence was experienced by a smaller but a significant proportion. Of the 81 ED staff members who participated, psychological violence was experienced by 73 % while 34.2% experienced physical violence.

These rates of ED WPV are not unique to EDs in South African hospitals but they support findings of other studies that reported high rates of ED WPV against staff members of the EDs in other countries.<sup>9,18,42,45</sup> In a survey conducted In Turkey, Ayranci U found that psychological and physical ED WPV were experienced by 69.5% and 8.5% of ED staff members including doctors, nurses, security, clerks, and unit coordinators in the past 12 months while in Taiwan they were experienced by 91.5% and 29.7%, respectively, of ED participants in a nurse-based study in the past

12 months.<sup>18,42</sup> In USA, psychological violence was experienced by 74.9% of the surveyed emergency physicians while physical violence was experienced by 28.1% in the past 12 months.<sup>9</sup> In Kuwait, 48% and 7% of nurses experienced psychological and physical ED WPV, respectively, in the past 6 months.<sup>45</sup> Thus, previous studies found that psychological violence was the predominant form of ED WPV.<sup>7,9,12,18,22,38,43-45</sup>

The findings of the current research agree with previous studies.<sup>9,18,42</sup> Despite South Africa is being viewed as a country with a lot of violence in the community, the rate of ED WPV in South Africa fits within the rates of ED WPV reported in other studies.<sup>9,18,42</sup> However, it was noted that the rate of ED WPV in Kuwait was remarkably lower than that reported by the current research and other studies.<sup>9,18,42</sup> This is likely because Kuwait forbids selling and buying alcohol for religious reasons. Alcohol was shown to be one of the most commonly abused substances predisposing to WPV against ED staff members.<sup>22,36,46</sup>

The minor differences in the rates of ED WPV between this study and previous studies can be explained by several factors.<sup>9,18,42</sup> In addition to methodological differences, the current research and most of the previous studies relied on participants' recalling of past ED WPV incidents they experienced over the past several months.<sup>7,12,18,22,38,43-45</sup> This could have affected the accuracy of recalling ED WPV incidents by studies participants and contributed to the difference in the rates of ED WPV. A prospective study with researchers permanently based in the EDs to report ED WPV incidents is likely to solve the problems of recall bias.<sup>46</sup>



## **5.2 Demographics of participants and their relationship with emergency department workplace violence**

### **5.2.1 Gender**

Gender of participants in the current research was not an important factor in predisposing ED staff members to ED WPV. The participants included male and female staff members of the EDs that were considered. Results of previous studies with respect to whether gender of ED staff members predisposes them to ED WPV, were conflicting. Kowalenko et al showed that female specialist emergency physicians, possibly because of their smaller physical body built than male physicians, were slightly more exposed to physical violence than their male counterparts.<sup>9</sup> However, Kowalenko et al included only emergency physicians in his study with 39.2% of them worked in tertiary hospitals while the current research surveyed a wide range of ED staff members but not emergency physicians in only two secondary Level hospitals. This difference in the sampled populations and type of hospitals makes comparison difficult but could partially explain the difference in the findings between the two studies. Emergency physicians are the people who are much more likely than the rest of the ED staff to be involved in the care of critically ill and unstable ED patients, therefore, more likely to be exposed to patients who tend to show violent behaviour. The female emergency physicians, possibly because of their smaller physical body built and their feminine nature, are more likely than male physicians to be affected and subsequently report ED WPV incidents. In addition, 5% of the surveyed emergency physicians worked in the ED of hospital that had no security personnel. This complete lack of security personnel could also contribute to a higher number violent incidents against female emergency physicians as they

become easier targets for angry patients, patients' companions, or gangs than male peers.

In contrast, Adib et al and Gacki-Smith et al showed the male nurses were more likely to experience physical and psychological violence, respectively, than female nurses.<sup>22,45</sup> However, again, these two studies did not look at different occupational groups of ED staff members but both were centred on nurses and were on a national level in U.S.A and Kuwait. In addition, the proportion of Kuwaiti to non-Kuwaiti people and the history of Kuwait may have contributed to having higher rates of violence against male nurses in the study of Adib et al. The facts that the non-Kuwaiti represent the majority of the population and that Kuwait was exposed to a military invasion by Iraq close to the end of the past century may have created a fear and hostility among Kuwaiti people towards male foreigners. Adib et al found that male foreign nurses, who represented about 19.5% of the surveyed foreign nurses, were at highest risk of physical violence than female foreign nurses.<sup>45</sup>

Despite few variations, the ED personnel surveyed in the study of Kowalenko et al is more comparable with that of the current research. Several medical and non-medical occupational groups in the ED such as doctors, nurses, and social workers were surveyed.<sup>7</sup> In line with the finding of the current research, Kowalenko et al found that the gender of a staff member had no significant influence on predisposition to WPV.<sup>7</sup>

### **5.2.2 Age**

In consonance with the findings of previous studies, this present research found that there was no relationship between age of the participants and their predisposition to physical and psychological ED WPV.<sup>7,38,43</sup> Lin & Liu found that age had no influence on the occurrence of violence at work.<sup>43</sup> Studies by Chapman et al and Anderson

and Parish showed no significant relationship between WPV and age of healthcare workers.<sup>38,44</sup> However, few studies found young age to predispose members of staff to ED WPV because they are likely to be less experienced at solving and avoiding conflicts at work.<sup>18,42</sup>

The participants in this present research were mainly young population with majority below the age of 40 years. This could explain why age of ED staff members did not appear to be an important factor in predisposing ED staff members to WPV in this present research. However, the majority of participants in the studies that found age of ED staff to be a predisposing factor to WPV were also below the age of 40 years.<sup>18,42</sup> Therefore, it is unlikely that having mainly relatively young participants could have masked the relationship between age of ED staff and ED WPV.

The discrepancy in the importance of the age as a factor in ED WPV may be attributed to the larger scale of the studies that are not supporting the finding of the current research.<sup>18,42</sup> Ayrançi U conducted his study across West Turkey in 18 EDs, two of which were EDs in private hospital and another two EDs in tertiary Level hospitals.<sup>42</sup> Type of patients and level of staffing and training in private and tertiary hospital EDs are likely to be different from those in secondary Level hospital EDs. Furthermore, In addition, conducting the studies in different countries may partially explain this discrepancy in the findings. It is possible that because of high rates of violence in South Africa, ED staff members in South Africa perceive violence similarly regardless of their age and this led to the lack of relationship between ED WPV and the age the surveyed ED staff members.

### **5.2.3 Marital status**

Unmarried staff members of the ED who participated in this present research were at no additional risk of ED WPV than the married ones. This is in contrast to the finding of only study found to report on this demographic.<sup>18</sup> Tang et al that found nurses who were married experienced fewer verbal abuse than single nurses.<sup>18</sup> The inconsistency between the finding of the current research with the of Tang et al may be reasonably because of the dissimilarity of the studied ED populations. Tang et al included only nurses while the current research surveyed a wide range of ED staff members that included doctors, nurses, porters, security personnel, and clerks. In addition, Tang et al partially attributed this finding to the possibility that married nurses were less likely to perceive verbal abuse as WPV, therefore, they were less likely to report verbal abuse incidents as WPV incidents in their study which led this difference in rates of ED WPV between married and unmarried nurses.<sup>18</sup>

### **5.2.4 Race**

No specific racial group in the current research was at a higher risk of experiencing ED WPV. The majority (77.8%, n=63) of participants in this present research were Black who represent the majority of the population in South Africa. Participants in the current research also included staff members from other racial South African groups, namely; White, Indian, and Coloured. Studies addressing the role of race in predisposing ED staff members to WPV could not be found and therefore reasonably compared with the findings of the current research. However, in a mainly White nurses-based study by May & Grubbs in a regional hospital in Florida, USA, 41.9% of nurses thought that they their race was an important factor in predisposing them to physical and psychological WPV.<sup>48</sup> The significance of the relationship between race and WPV was not statistically tested by May & Grubbs and therefore it is difficult to

compare their findings with the current research. The findings of the current research support that of Chapman et al that observed that, factors related to place of work rather than the demographics of nurses including those who work in the ED, determined the risk of violent incidents against ED staff members.<sup>38</sup>

### **5.2.5 Religion**

The majority (93.8%) of participants in the current research were Christians. The religions of the remaining participants were almost equally distributed between Muslims, Jews, Hindus, and Atheists. The religion of participants in the current research was not an important factor in predisposing ED staff members to ED WPV. Tang et al found that whether being religious or irreligious (having no religion) does not influence risks of exposure to ED WPV among nurses in Taiwan.<sup>18</sup> It may be that violent incidents based on differences in religious backgrounds are unlikely to occur in countries where freedom of religion is permitted by the constitution such as South Africa and Taiwan. There were no comparable studies found to address the relationship between the religions of ED staff members and the risk of exposure to ED WPV. Further research is needed to clarify the role of the religions of ED staff members in predisposing them to WPV.

### **5.2.6 Experience**

It was found in the current research that years of work experience in the ED are not an impotent risk factor in predisposing ED staff members to increased rates of ED WPV. This result is consistent with that of previous studies.<sup>38,43,44</sup> Anderson & Parish, in a study that investigated WPV against Hispanic nurses, found that number of years at work had no influence on occurrence of WPV.<sup>44</sup> Similarly, Lin & Liu found that years of work experience were not related to increased risks of experiencing ED WPV in Taiwan.<sup>43</sup>

On the other hand, a few studies found that staff members with longer years of ED experience were at lower risk of experiencing ED WPV than members with relatively shorter duration of ED experience.<sup>9,18,42</sup> However, it is not clear in these studies whether years of ED experience affected the predisposition of ED staff to WPV incidents or they just affected the manner this category of ED staff perceive WPV. It may be that those participants with relatively longer years of ED experience in the studies of Ayranci U, Tang et al and Kowalenko et al did not report violent incidents as they were capable to deescalate and solve potential violent incidents, therefore, they did not perceive them as violent incidents that need to be reported. On the other side, and as was speculated by Chapman et al who showed that years of experience do not affect predisposition of ED staff to WPV incidents, it could be that participants with relatively a fewer years of ED experience in the current research did not like to report their experiences with ED WPV which could affected the accuracy of the finding.

Furthermore, the current research investigated the relationship between years of experience in particular EDs and WPV while Ayranci U and Kowalenko et al investigated the total years of work experience.<sup>9,42</sup> Therefore, the relationship between years of experience in particular EDs and the risk of being exposed to WPV may not necessarily be similar to the relationship between the total years in practice and ED WPV. Further research is needed to investigate the role of both, number of working years in particular EDs and total years in practice, with the risk of being exposed to ED WPV.

### 5.2.7 Training

In the findings of this present research, only 9% of the participants have received training on the handling of workplace violence in their EDs in the past 12 months.

This figure is significantly lower than what was reported in other studies.<sup>7,18,22,36,39</sup>

Thirty-six percent of the participants in a study carried out by Gates et al stated that they were trained on managing ED WPV in the past 12 months while 53.4% of the participants in the study done by Tang et al recounted that they received training on the same topic.<sup>18,36</sup>

Fifteen percent of participants in the current research, contrary to 11% in the study of Gates et al, believed that adequate training of staff members on how to handle cases of WPV would decrease incidents that might result from it.<sup>36</sup>

The role of training programmes on how to prevent ED WPV is still not yet clear.<sup>7,18</sup>

Tang et al reported that training was not found to be a factor in preventing ED

WPV.<sup>18</sup> Gacki-Smith et al used the data from their study and reported that the role of

training nurses on the strategies of preventing WPV incidents against them was

indecisive.<sup>22</sup> On the other hand, Behnam et al found that the surveyed emergency

medicine residents and physicians who joined a WPV workshop were five times less

likely to experience psychological violent incidents in the ED.<sup>39</sup> The authors of this

study speculated that WPV workshops may provide ED staff members with

communication skills that helped them to control and solve potentially violent

situations before they worsen.<sup>39</sup> Furthermore, Behnam et al and Gates et al stressed

that the training staff members on how to handle WPV would help them to promptly

recognise and deal with incoming violent situations provided these WPV workshop

contained appropriately practical contents that target certain violent circumstances in the ED.<sup>36,39</sup>

### **5.2.8 Profession**

Nurses represented the biggest group (32.1%) of participants in current research. Other occupational groups included doctors (29.6%), porters (13.6%), security personnel (13.6%), and clerks (11.1%). The results of the current research support the findings of other studies showing that all ED occupational groups are at increased risk of experiencing physical and psychological ED WPV.<sup>7,36,42</sup> When comparing all ED WPV incidents by type of profession, medical (doctors and nurses) and non-medical ED staff members (porters, security personnel, and clerks) were shown to be equally exposed to physical violence. However, medical staff were exposed to psychological violence more than the non-medical staff. The majority (86.4%) of ED medical staff (nurses and doctors) experienced psychological ED WPV in comparison to 51.9% of non-medical staff (porters, clerks, and security personnel). That is may be because doctors and nurses are normally involved in the medical care of patients. Therefore, patients and/or their companions are more likely to become abusive towards medical staff when their expectations in terms of the speed in providing care and disposition of their patients in the ED are not met

Consistent with the findings of the current research, a study by Kowalenko et al also had similar results in that there was no significant difference in the incidence of physical ED WPV among different ED occupational groups.<sup>7</sup> However, their study showed that nurses were exposed to psychological ED WPV more than doctors.<sup>7</sup> This is likely because nurses usually deal with ED patients earlier and for a longer period of time than doctors as was speculated by the authors of the study.<sup>7</sup> In



addition, participants the Kowalenko study were paid for each monthly survey they completed to help with recruitment. It could be argued that the payment influenced the way nurses perceive violence and motivate them to report violent incidents each month so they could increase the amount of money they could get from participation.<sup>7</sup> Therefore, the payment for taking part in the study could threaten the accuracy of some of its results. However, these data may be more accurate than my findings due to collecting data on ED WPV monthly, therefore, reducing the risk of recalling bias. On the other hand, because of relatively small number of nurses and doctors answering this section in the current research, the risk of exposure of doctors to physical and psychological ED WPV could not reliably be compared to that of nurses. A reliable comparison could potentially be done in a larger future study comparing the rates of ED WPV between ED doctors and nurses.

In contrast to the findings of the current research, Ayranci U found that doctors and nurses experienced a higher rate of psychological and physical ED WPV than their comparative group.<sup>42</sup> A number of factors may explain why medical staff did not appear to be exposed to relatively more physical violence than other ED occupational groups in the current research. It may be that medical staff who experienced physical violence chose to not report these incidents because they considered them as part of the ED job. Others did not report possibly because of workload and lack of time. It could also be that some of the surveyed medical staff feared that they would be identified or exposed when reporting their experience on physical ED WPV.

### **5.3 Source of emergency department workplace violence**

The current research found that the main perpetrators of psychological and physical ED WPV workplace were patients and patients' companions (family and friends).

This finding is consistent with the results of several studies that reported that patients and their companions were the main perpetrators of WPV.<sup>7-10,12,18,22,36,46,47</sup> Gates et al found that patients were the perpetrators of 83% and 78% of psychological violence against doctors and nurses respectively while this same category of professionals experienced 67% and 51% of physical violence respectively from their patients in the ED.<sup>36</sup> Companions of patients in the ED were perpetrators of physical violence against 8% of nurses and 6% of doctors.<sup>36</sup> Ayranci also indicated that patients and their companions were the main perpetrators (52% and 89% respectively) of ED WPV in Turkey.<sup>42</sup>

In line with other studies, this present research found that colleagues were responsible for a smaller but considerable proportion of psychological (11.6%) and physical (5.5%) ED WPV.<sup>12,43</sup> Gerberich et al found that doctors, supervisor, and other employees were the perpetrators of 12.8%, 10.4%, and 10.9%, respectively of psychological WPV.<sup>12</sup> In another study relevant to the current research, Lin & Liu reported that 19.9% of psychological WPV against ED staff members was perpetrated by doctors and other colleagues.<sup>43</sup>

Majority of perpetrators of physical and psychological violence, in the present research, were males (77.2%, and 75.8%, respectively) whose ages were estimated to range from 21-40 years with a mean age of 30 years. This result was close to the finding of Gilchrist et al which reported that the majority (93%) of the participants who answered questions on the issue of demographics of perpetrators of ED WPV indicated that young males whose age varied from 26 to 40 were the main culprits of ED WPV.<sup>46</sup> Gerberich et al also implicated the males as the main perpetrators of workplace violence.<sup>12</sup> They however observed that the majority (58%) of the perpetrators of physical violence fall within the age of 66 years or older.<sup>12</sup>

Perpetrators of an older age category reported by Gerberich et al may be due to the fact that, aside from ED staff members, healthcare providers from general medical and geriatric units of the hospitals were also included in their research work.<sup>12</sup>

Most of the violent incidents reported in the current research were observed to have taken place in the patients' examination room and triage area. Although no data was collected with respect to the exact distribution of security personnel in the ED of the hospitals that were surveyed, it is likely that the patients' examination rooms and triage areas recorded higher rates of ED WPV incidents than other areas in the ED as a result of inadequate security measures in these areas.

Studies that show a reduction in the rate of ED WPV as a result of putting security measures into place in the ED were lacking. However, due to the nature of weapons reported to be used against ED staff and possible involvement of gangs in ED WPV, the presence of adequate security personnel and the use of metal detectors to search for weapons and dangerous objects, are expected to be effective measures in eliminating metallic weapons and harmful objects from people entering the ED. These lines of action, if effectively implemented, might subsequently decrease the incidence of ED WPV.<sup>38,39</sup> Benham et al reported that 23% of the participants who worked in EDs equipped with constant presence of security personnel, did not experience violent incidents in prior twelve months, while all those who worked in EDs with intermittent presence of security personnel experienced at least one violent incident during the same period.<sup>39</sup>

Aside from the lack of adequate security measures, another vital reason why ED WPV were higher in the triage areas is because of its direct accessibility to the public.<sup>13,36</sup> The design of the workplace of the EDs that were surveyed, was not

examined in this study but further research is needed to investigate whether this might have contributed to a higher occurrence of violent incidents in the patients' examination room and triage area.

#### **5.4 Response to emergency department workplace violence**

In consonance with the reports of several studies, 55% and 39.4% of ED staff members in the current research viewed psychological and physical violence respectively, as risks associated with their job.<sup>10,13,12,22,38</sup> In a nurse-based study in Australia, Chapman et al found that 30% of the nurses considered violence as a part of the job in the ED.<sup>38</sup> Members of staff in the ED who view WPV as a part of their jobs were likely to overlook violent incidents and decide not to register such cases in the official report- forms' designed to record those kind of incidents.<sup>22</sup> This type of views that are normally held by many of ED staff members leads to an underestimation of the prevalence of ED WPV.<sup>12,22</sup>

In similarity to the findings of other studies, the current research found that only 35% of ED staff members officially reported WPV-related incidents to their managers.<sup>7,22,36,38,47</sup> Forty-two percent of the participants in a study done by Kowalenko et al completed official reports of WPV incidents that they encountered while Chapman reported that 16% of ED nurses completed those incident forms.<sup>7,38</sup> The rate at which WPV incidents were reported in the current study fits well between the rates reported by previous studies.<sup>7,12,38</sup> Several factors contributing to the phenomenon of under-reporting ED WPV incidents in previous studies.<sup>12,21,22,38</sup> ED staff members should be educated on the importance of reporting ED WPV incidents to their managers. If official reports are not made with respect to ED WPV incidents, it is unlikely that ED and hospital managers will be able to appreciate the magnitude of the problem and therefore will not be able to take effective measures to prevent

further occurrences. Completing official reports of ED WPV incidents is a necessary initial step to recognise its source and magnitude as indicated in some previous studies.<sup>7,36</sup>

## **5.5 Impact of violence**

The current research found that experiencing WPV resulted in negative emotional effects among the surveyed ED staff members. These negative effects included: being upset about memories of WPV incidents, decreased concentration while working in the ED, and disturbed sleep, were experienced by participants following their experiences of psychological or physical ED WPV. The negative emotional effects that psychological violence brought about as a result of ED WPV were examined in few studies.<sup>7,18</sup> Kowalenko et al reported that participants in their study stated that, their cognition involving their ability to focus on the medical condition of patients, to give medications correctly, and to communicate appropriately with patients, was negatively affected ( $P < 0.05$ ) following their experiences of ED WPV incidents. This impact on cognition is likely to compromise the quality of the healthcare service delivery.<sup>7,18</sup> Tang et al found that, following their experiences of workplace violence, the quality of nursing care provided by 56% of the nurses in the ED was adversely affected.<sup>18</sup>

In addition, several studies have reported that psychological and physical ED WPV are significant sources of stress to ED staff members.<sup>9,11-13</sup> ED staff members were prone to make work-related errors after feeling stressed by WPV.<sup>11</sup> Nielsen et al found a strong relationship between experiencing stress by an ED staff member and the occurrence of work-related errors.<sup>11</sup>

The current research found that the number of participants who took sick leaves from the ED as a result of their experiences of physical violence (14.8%; n=4) was higher than the number of those who took the same excuse after their experiences of psychological violence (2.1%; n=1). When one or more of the ED staff members is on sick leave as a result of experiencing WPV, then a shortage of staff will be evident. With a reduction in the number of staff members in the ED, the provision of adequate medical care could be delayed and patients' medical conditions can be adversely affected. Reports from a study carried out by Chapman et al revealed that because of the time and staff used to control violent patients, there was a delay in providing adequate care to other patients.<sup>15</sup> A shortage in the number of ED staff members does not only affect patients' outcomes adversely, but can also lead to further display of violent acts by patients and their companions against ED staff members. Gacki-Smith et al reported that 58.6% (n=2031) of a group of nurses in EDs across USA attributed ED WPV incidents to a shortage of members of staff.<sup>22</sup> When there is a shortage in the number of staff in the ED, patients and their companions will likely have to wait for longer periods of time before receiving medical care.<sup>40</sup> They in turn, tend to become hostile and subsequently involved in violent acts against ED staff members.<sup>40</sup> Jenkins et al, in a survey carried out in the United Kingdom( UK) which included 233 EDs, reported that 86% of the respondents attributed ED WPV to prolonged waiting times.<sup>41</sup> It is obvious from the aforementioned findings that a shortage in the number of staff members that work in the ED could expose them more to workplace violence by unsatisfied patients and companions.

## **5.6 Prevention of emergency department workplace violence**

Majority (65%) of the participants in the current research stated that their experiences of ED WPV could have prevented. Proper training of ED staff members on the strategies of anticipating and dealing with WPV and an assurance of adequate security measures in the ED were the most frequently suggested measures by them (55.3% and 15.8%, respectively) on how to prevent ED WPV incidents.

It is likely that the participants suggested these measures because of the fact that the great majority (91%) of them revealed that they did not receive any training on how to prevent ED WPV incidents. The findings of the current research in addition to those of previous studies, stress the need to implement effective training programmes customised towards meeting specific needs, particularly in recognising incoming violent situations that could worsen to violence.<sup>7,18</sup>

Other preventive measures such as the employment of more ED staff members, to speed up the process of issuing files and providing adequate healthcare delivery services and the introduction of a legislation that prohibits the sales of alcohol especially after midnight, were suggested in this present research. Limited resources and budgets in the purse of the government can be a limiting factor to the idea of employing more capable hands to enhance good service delivery in the EDs of hospitals in South Africa. However, the aim of mobilising members of staff who have lesser work schedule, from other departments of the hospital, particularly when there is a shortfall in the number of staff members in the ED may be a veritable alternative to employing more individuals.

## **Chapter 6 CONCLUSIONS**

### **6.1 Conclusions**

Workplace violence was commonly experienced by the staff members of the ED of the two hospitals that were surveyed. Majority of the incidents were in the form of psychological violence; however, there was a considerable percentage of the participants that also experienced incidents in form of physical violence. Most of the violent incidents experienced by the participants were perceived to be preventable by majority of them. Training of the members of staff in the ED on how to manage workplace violence, continuous presence of trained security personnel, and speeding up of the process of issuing files to patients were suggested as means of preventing workplace violence in the surveyed EDs.

### **6.2 Biases**

Self-reported surveys are liable to various biases particularly social desirability bias which is a tendency of participants to answer questions in a fashion that will be viewed favourably by others. These questionnaires can also be biased by the person's feelings at the time of filling out the questionnaire. If the person feels bad at the time they fill out the questionnaire, the answers may be more negative and vice versa.

### **6.3 Limitations**

- This study is a cross-sectional survey that made use of self-reported questionnaires, hence the accuracy of the information that were got could not be reliably verified.



- The study was conducted in the ED of only two government hospitals, thus the results are not representative enough of the cases of WPV that take place in the EDs of hospitals in South Africa.
- This questionnaire which was the main tool of research used in this study was only available in English language, thus members of staff who could not communicate adequately in the language or/and have been victims or have experienced instances of ED WPV and could have provided useful information, were inadvertently excluded from the study.

#### **6.4 Recommendations**

Although this research was limited to the ED of two government hospitals in Gauteng, few recommendations can be made based on the findings of the current research. ED staff members should be encouraged to complete official reports of ED WPV incidents and measures should be put in place to simplify the process of making such reports. This could be done by designing easy-to-complete report forms that would be used to make inventories of cases of WPV incidents and by placing such forms in a distinctive area in the ED of hospitals. This research supports the need for practical training and education of the ED staff members, including security personnel, on how to prevent, handle, and deal with issues related to ED WPV.

It should be noted however that this research is the first of its kind in an effort to investigate WPV among different occupational groups in the ED of hospitals in South Africa. Further research still needs to be conducted to establish the magnitude of the menace of ED WPV. Future studies are also required in order to examine whether a relationship exists between the demographics of ED staff members and the

occurrences of WPV, as the data got from previous studies in this regards are not decisive.

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## Appendix A

Greetings!

My name is Amer Jaffal. I am an emergency medicine registrar conducting a research project for my Masters Degree.

Research study title: *EMERGENCY DEPARTMENT WORKPLACE VIOLENCE*

Thank you for taking the time to read this information sheet.

### INTRODUCTION

You are invited to volunteer to complete a survey questionnaire. This information leaflet is to help you to decide if you would like to participate. Before you agree to take part in this study you should fully understand what is involved. If you have any questions, which are not fully explained in this leaflet, do not hesitate to ask the researcher.

### WHAT IS THE PURPOSE OF THIS STUDY?

- The aim of this study is to determine the perception and the experiences of ED staff (doctors, nurses, clerks and security personnel) regarding ED WPV in 2 government hospital EDs in Gauteng. This study also aims to determine the effect that violence may have on ED staff while on duty, and to identify the source and nature of violence in the selected EDs in Gauteng. The researcher will focus on violence as a result of intentional actions conducted by sane, mentally and physically well persons.

The results of this survey will shed light on the need for further research to examine all aspects of violence in the ED.

### WHAT IS THE RISK OF PARTICIPATION IN THE STUDY?

- If you have experienced violence in the emergency department, there is a risk that completing this questionnaire may bring back upsetting memories and feelings of past violent events you experienced at your ED. A psychologist will be made available if this study caused or identified participants with such adverse events.

- In order to avoid any stigmatization by co-workers about whether or not you have participated in this study, all ED staff members, whether they have completed the questionnaire or not, will place the questionnaire in a secure box allocated in the ED for the purpose of this study.

#### EXPLANATION OF PROCEDURES TO BE FOLLOWED

- 1- A sealed box will be allocated in the ED for a period of 4 weeks. The period of the study will be extended by two weeks to allow more data collection if needed.
- 2- All ED staff members will be handed identical envelopes and hardcopies of the study questionnaire by the researcher.
- 3- The questionnaire can be completed in your ED or at home.
- 4- It will take 35-45 minutes to complete the questionnaire.
- 5- No names to be written on the questionnaire and/or the envelope.
- 6- Whether you completed the study questionnaire or not, please place the questionnaire into the envelope, seal the envelope and place the sealed envelope into a secure box allocated in your ED and is designed for the purpose of this study.

The questionnaire has 3 main sections:

- Section 1 will ask you about certain personal data such as age, sex, profession and years of experience, as well as about security measures taken at your ED to minimise the risk of violence.
- Section 2 is subdivided into physical violence and psychological violence. In each subdivision, you will be asked to provide details about violent incidents you experienced in the past year such as number, nature, place of the violent incidents, and some features of who attacked you.
- Section 3 contains general and open ended questions that inquire about your perception of safety and violence in the ED, and how violence can be prevented.

- Participation in this study is voluntary and all obtained data are anonymous and confidential. You may choose to withdraw from the study at any time. There will be no money paid to you for participating in the study.
- If you are disturbed by upsetting memories and felling of past violent events in your ED and would like to receive counselling by a psychologist, the psychologist Zamo Mhele can be contacted on 011 933 9828/8838 for counselling.

❖ I really appreciate your time and help if you choose to volunteer for my research project.

❖ Please feel free to contact me if you have any questions on 0792162471 or email me at: [a.jaffal@yahoo.com](mailto:a.jaffal@yahoo.com)

Sincerely yours

Amer Jaffal

QUESTIONNAIRE

**A- PERSONAL AND EMERGENCY DEPARTMENT INFORMATION**

- 1- How old are you?  
\_\_\_\_\_ years\_\_
- 2- What is your sex?  
Male                  Female
- 3- Marital status?  
Single                  Married                  Divorced/Separated  
In a relationship                  Widow/Widower
- 4- What is your religion?  
Christianity          Judaism          Islam          Hindu  
Others, please specify -----
- 5- What is your race?  
Black                  White                  Indian  
Others, please specify -----
- 6- What is your profession?  
Medical                  Nurse                  Porter  
Pharmacist                  Security personnel  
Porter                  Clerk
- 7- How long you have been working in this ED?  
3-6 ms                  6-12ms                  1-3yrs  
4-7yrs                  8-10yrs                  >10yrs
- 8- Are metal detectors used, to screen ED visitors for weapons, in your ED?  
Yes                  No
- 9- Is your ED equipped with security cameras?  
Yes                  No
- 10-Does your ED have visible security personnel?  
Yes                  No
- 11-Does your ED have a protocol that guides you in situations of violent incidents inside your ED?  
Yes                  No
- 12-Does your ED offers training courses/workshops on how to recognize and deal with violent/armed persons?  
Yes                  No
-

**B- ED Violence**

**PHYSICAL VIOLENCE**

*Physical Violence is defined as the actual use of physical force to hurt or threaten someone and includes spitting on, hitting and kicking, beating, pushing, bunching, scratching, chasing, biting, slapping, stabbing and shooting.*

1- Have you been physically assaulted in your ED in the previous year?

Yes

No (if No, please move to psychological violence)

2- How many times you were physically assaulted in your ED during the previous year?

1 2 3 4 5 6 7 8 9 10. if >10 please

specify \_\_\_\_\_

3- Please complete the table next page regarding some details of the physical violent incidents encountered in the previous year?

Incident No	Attacker <ul style="list-style-type: none"> <li>• A patient,</li> <li>• A relative/ a friend of a patient,</li> <li>• Medical staff,</li> <li>• Administration staff,</li> <li>• Others, _____</li> </ul>	Sex of the attacker <ul style="list-style-type: none"> <li>• Male,</li> <li>• Female,</li> </ul>	Age of the attacker in years <ul style="list-style-type: none"> <li>• &lt;20</li> <li>• 21-30</li> <li>• 31-40</li> <li>• 41-50</li> <li>• &gt;50</li> </ul>	Was the assault <ul style="list-style-type: none"> <li>• Intentional,</li> <li>• Unintentional,</li> </ul>	Place of the incident <ul style="list-style-type: none"> <li>• Waiting area,</li> <li>• Corridor,</li> <li>• Triage area,</li> <li>• Resuscitation room</li> <li>• Examination room,</li> <li>• Others, _____</li> </ul>	Please briefly describe the incident in terms of how and what happened? For more writing space, go to next page.
No 1						
No 2						
No 3						
No 4						
No 5						
No 6						

4- What did you do when you experienced physical violence?

- I considered it as a risk of the job
- Involved in courses/workshops on how to deal with violent persons
- Carried weapon/object to myself
- Reported it to the manager
- sought psychiatric counselling
- Asked to be transferred
- Sought legal protection
- other: \_\_\_\_\_

5- Did you sustain any injuries as a result of experiencing physical violence in your ED in the last year?

Yes No

6- Did you have to take a sick leave as a result of experiencing physical violence in your ED?

Yes No

**For the questions 7-9 please choose a number to indicate your answer**

7- Was your sleep disturbed after experiencing/witnessing incidents of physical violence in your ED?

0	1	2	3	4	5	6	7	8	9	10
Not at all										Always

8- Did you feel your concentration was decreased while working in your ED?

0	1	2	3	4	5	6	7	8	9	10
Not at all										always

9- Did you experience upsetting feelings/memories as a result of physical violence?

0	1	2	3	4	5	6	7	8	9	10
Not at all										Always



**PSYCHOLOGICAL VIOLENCE**

*Psychological violence is defined as the use of power against and /or the use of physical force to threaten someone and includes verbal abuse, bullying, sexual harassment, yelling and swearing at and threatening behaviours.*

---

1- Have you experienced psychological violence in the previous year?

Yes

No

2- How many times did you experience psychological violence in the previous year?

1 2 3 4 5 6 7 8 9 10. If >10,

please specify-----

3- Please complete the table next page regarding the psychological violent incidents encountered in the previous year?

Incident No	<b>Attacker</b> <ul style="list-style-type: none"> <li>• A patient.</li> <li>• A relative/ a friend of a patient.</li> <li>• Medical staff.</li> <li>• Administration staff.</li> <li>• Others, _____</li> </ul>	<b>Sex of the attacker</b> <ul style="list-style-type: none"> <li>• Male.</li> <li>• Female.</li> </ul>	<b>Age of the attacker in years</b> <ul style="list-style-type: none"> <li>• &lt;20</li> <li>• 21-30</li> <li>• 31-40</li> <li>• 41-50</li> <li>• &gt;50</li> </ul>	<b>Was the incident</b> <ul style="list-style-type: none"> <li>• Intentional.</li> <li>• Unintentional.</li> </ul>	<b>Place of the incident</b> <ul style="list-style-type: none"> <li>• Waiting area.</li> <li>• Corridor.</li> <li>• Triage area.</li> <li>• Resuscitation room</li> <li>• Examination room.</li> <li>• Others, _____</li> </ul>	Please briefly <b>describe</b> the incident in terms of how and what happened? For more writing space, go to next page.
No 1						
No 2						
No 3						
No 4						
No 5						
No 6						

4- What did you do when you experienced psychological violence?

- I considered it as a risk of the job
- Involved in courses/workshops on how to deal with violent persons
- Carried weapon/object to myself
- Reported it to the manager
- Sought psychiatric counselling
- Asked to be transferred
- Sought legal protection
- other: \_\_\_\_\_

5- Did you have to take a sick leave as a result of experiencing psychological violence in your ED?

Yes                      No

***For the questions 7-9 please choose a number to indicate your answer***

6- Was your sleep disturbed after experiencing/witnessing incidents of psychological violence in your ED?

0	1	2	3	4	5	6	7	8	9	10
Not at all										Always

7- Did you feel your concentration was decreased while working in your ED?

0	1	2	3	4	5	6	7	8	9	10
Not at all										always

8- Did you experience upsetting feelings/memories as a result of psychological violence?

0	1	2	3	4	5	6	7	8	9	10
Not at all										always

**C- General questions**

1- Do you think the violence you experienced or witnessed could have been prevented?

Yes                      No

If yes, please tell us how-----

-----  
-----  
-----

2- Do you think physical injuries perpetrated by mentally unstable/intoxicated patients should not be considered as a part of ED violence as such people do not have the intention to harm?

Yes      No

If yes please tell us how can violence rates be decreased when dealing with such patients?-----

-----  
-----  
-----  
-----  
-----

3- Do you generally feel safe while working in your ED?

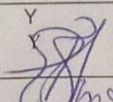
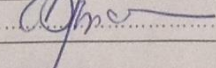
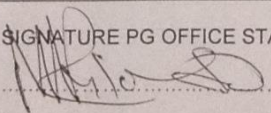
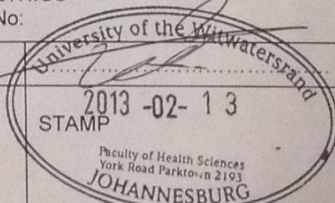
0	1	2	3	4	5	6	7	8	9	10
Not at all										always

4- Do you think of leaving working your ED because you feel unsafe while in the ED?

0	1	2	3	4	5	6	7	8	9	10
Not at all										always

*Thank you for completing the survey*

## Appendix B

CANDIDATE'S SURNAME: Jaffal <small>[Please print]</small>		FIRST NAME/S: Amer	STUDENT NUMBER: 558164
CURRENT QUALIFICATIONS: MBBCH			
TEL:	CELL: 0792162471	E-MAIL: a.jaffal@yahoo.com	FAX:
DEGREE FOR WHICH PROTOCOL IS BEING SUBMITTED: MMed(Emergency Medicine)			
PART-TIME OR FULL-TIME: Full time			
FIRST REGISTERED FOR THIS DEGREE:	TERM: January	YEAR: 2011	
DEPARTMENT: Division of Emergency Medicine			
TITLE OF PROPOSED RESEARCH: EMERGENCY DEPARTMENT WORKPLACE VIOLENCE			
CANDIDATE'S SIGNATURE:			DATE:
SUPERVISOR'S NAME: Professor Efraim Kramer			50% Supervision
SUPERVISOR'S QUALIFICATIONS: MBBCh (Wits), BSc(Hons), MScMed, FCEM(SA), Dip PEC(SA).			
SUPERVISOR'S DEPARTMENT: Division of Emergency Medicine, University of the Witwatersrand			
SUPERVISOR'S ADDRESS / TEL / E-MAIL: Cell: 0849111999 Email: Efraim.kramer@wits.ac.za			
SUPERVISOR'S NAME: Dr Zeyn Mahomed			50% Supervision
SUPERVISOR'S QUALIFICATIONS: MBBCH, FCEM(SA), MMed.			
SUPERVISOR'S DEPARTMENT: Division of Emergency Medicine, University of the Witwatersrand			
SUPERVISOR'S ADDRESS / TEL / E-MAIL: Cell: 0820746631 Email: zeynmahomed@gmail.com			
<u>SYNOPSIS OF RESEARCH:</u>			
<p>High rates of WPV in the ED are extensively documented in the international literature. However, studies that examined ED workplace violence did not distinguish between intentional (violence with the intent to harm) and unintentional (violence perpetrated by mentally ill patients) ED violence. The World Health Organization (WHO) defines violence as "intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community, which either results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment, or deprivation." Therefore, intent to harm is a key aspect of the definition. The aim of this study is to determine the perception and the experiences of ED staff (doctors, nurses, clerks and security personnel) regarding ED WPV in 2 government hospital EDs in Gauteng. This study further aims to determine the effect that WPV has on ED staff and to identify the perpetrators and nature of ED WPV in the selected EDs in Gauteng. The researcher will focus on WPV as a result of intentional actions conducted by a sane, mentally and physically well perpetrator.</p>			
ETHICS PENDING: ETHICS APPROVED: (circle appropriate symbol)	Y 	IF Y SUPPLY ETHICS CLEARANCE No:	
SIGNATURE OF SUPERVISOR/S:			
SIGNATURE PG OFFICE STAFF 	REGISTERED <input checked="" type="radio"/> YES..... <input type="radio"/> NO.....	 <p>2013 -02- 13 STAMP Faculty of Health Sciences York Road Parktown 2193 JOHANNESBURG</p>	

**APPROVAL OF RESEARCH PROPOSAL**

\* NOTE: ONLY PROTOCOLS WITH ETHICS APPROVAL WILL BE CONSIDERED

Site name of applicant	Researcher's Name (Principal Investigator) / Organisation / Institution Researcher's contact details	Acad. Title Whiteheadland University 0792151471 s.jiffell@whiteheadland.ac.za
Site name of applicant	Research Topic Summary of Aim / objectives	Emergency Department Workplace Violence To determine the perception and the experiences of emergency department staff regarding emergency department workplace violence, to determine the effect workplace violence has on staff, and to identify the perpetrators and nature of violence.
	Type of research (health system, student, etc)	Student Cross sectional, prospective, hard-copy questionnaire based survey
	If student, specify MA / PhD / Other	MA/Medical (Emergency Medicine)
	Name of supervisor	
	Purpose of research	
	a. Academic	X
	b. Commercial of project (if so, specify which)	
	c. Work related (if GDCU employee / joint appointment)	
	d. Independent / self initiated research	
	e. Funded research (if so, specify funder/s)	
	f. Commissioned research (if so, specify client)	
	Proposed methodology (number of interviews / focus groups / file review / combination)	Self-completed interviews. All members of the emergency departments at the two hospitals will be invited to participate (doctors, nurses, paramedics, clerks, porters, security personnel)
	Context/s and/or facilities where research will be conducted	Emergency department at Leaning and Tondo Memorial Hospital (not yet discussed)
	Are these facilities included in the Department's list of 'over-researched' facilities?	
	Name of ethics committee	Wits Human Research Ethics Committee (Medical)
	Ethics committee approval number / code	A133010 (provisional approval - with conditions)

Logistics	What resource implications are there for the study / device:	6 weeks for data collection ( envisaged to begin in April 2013)
	a. Time frame of study and commencement date	
	b. Specify the resource requirements	None
Intellectual property and ownership	- Space	None
	- Equipment	None
	- Staff (e.g. time required to fill in forms, etc.)	None
	- Additional lab tests	None
	- Other	None
	What measures will you implement to ensure that service delivery is not negatively affected?	The questionnaire can be completed in the employees' own time / at home.
	Have you read, understood and complied with the following Act: Intellectual Property Rights from Ability and Innovation Act (2008), Regulations (2011/2009), Regulations	
	1. Who will be the owner of the IP of the project?	
	2. Who will own the data?	

**FOR OFFICE USE**

Date submitted	09/05/2013
Date reviewed	15/05/2013
Name of Reviewer	Sue Le Roux
Date approved	

**Declaration by applicant**

I/We agree — (Full Name and surname) — agree to conduct the above mentioned research set out in the approved research proposal attached hereto, and confirm that the information therein is a true reflection of my / our work.

I/We will not hold the Department responsible for any damages, legal, financial or otherwise, during the course of the project.

I/We agree to keep all information obtained confidential, to use it only to fulfil the requirements of my / our work and not publish or disseminate it beyond this purpose.

I/We agree to inform the GDCU prior to the publication of any article(s) pertaining to the research conducted in the Department.

I/We agree to abide by the serious discipline policy of the HPCSA/GDCU

I/We hereby declare that the information supplied by me was correct. I/We understand the Intellectual Property

To whom it may concern

I am a registrar in emergency medicine. I would like to conduct a research study in your hospital for the purpose of my MMed thesis. I will be conducting the survey among the ED staff (doctors, nurses, pharmacists, porters and security personnel) to obtain views regarding workplace violence in the Emergency Department.

The method proposed is the use of an anonymous survey conducted among ED staff members. Each individual ED staff member will be give a form indicating the primary investigator, and the nature and the purpose of the study, and it will be stated up front that participation is not compulsory and that all information gathered is strictly anonymous. Ethics clearance will be applied for before commencing the study. Therefore I seek permission to conduct my study in this hospital ED


If there are any queries regarding the study please contact me. If you are satisfied and willing to grant me permission to conduct my study in your hospital ED, please kindly indicate this by signing below.

Amer Jaffal  
0792162471  
a.jaffal@yahoo.com

Hospital: LERATONG

Department: EMERGENCY UNIT

Head of Department: D. RM PHANZO

Signature: 

Date: 20/2/2013



**GAUTENG PROVINCE**  
HEALTH  
REPUBLIC OF SOUTH AFRICA

Leratong Hospital  
Private Bag X2078  
KRUGERSDORP  
1740

Enquiries: Mr G J Dube  
Tel: (011)411-3531  
Fax: (011)410-8421  
Email: [GreyD@gpg.gov.za](mailto:GreyD@gpg.gov.za)

Dr A Jaffal

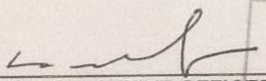
**REQUEST TO CONDUCT RESEARCH : WORKPLACE VIOLENCE IN THE  
EMERGENCY DEPARTMENT AT LERATONG HOSPITAL**

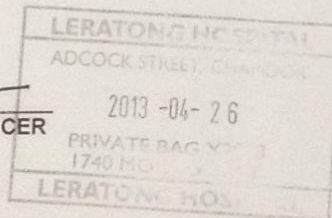
Permission has been granted to conduct research study entitled : Workplace violence in the Emergency Department at Leratong Hospital based on the conditions indicated from policy planning and research department.

It would be appreciated if you could share your results of the research with the Management of Leratong Hospital.

Thank you for showing interest in our Institution.

Kind regards

  
\_\_\_\_\_  
**CHIEF EXECUTIVE OFFICER**  
fjve  
2013/04/25





To whom it may concern

I am a registrar in emergency medicine. I would like to conduct a research study in your hospital for the purpose of my MMed thesis. I will be conducting the survey among the ED staff (doctors, nurses, pharmacists, porters and security personnel) to obtain views regarding workplace violence in the Emergency Department.

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If there are any queries regarding the study please contact me. If you are satisfied and willing to grant me permission to conduct my study in your hospital ED, please kindly indicate this by signing below.

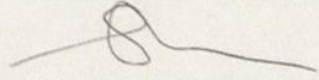
Attached with this request letter an approval letter from the head of the ED.

Amer Jaffal  
0792162471  
a.jaffal@yahoo.com

Hospital: TANSA MEMORIAL

Department: EMERGENCY DEPT

Head of the ED: S. CARIN

Signature: 

Date: 20/2/2013



## GAUTENG PROVINCE

HEALTH  
REPUBLIC OF SOUTH AFRICA

### OFFICE OF THE CEO

Dr. A. Naidoo  
Tambo Memorial Hospital  
☎ : (011) 898-8317  
☎ : (011) 892-0358  
✉ : [AvisN@gpg.gov.za](mailto:AvisN@gpg.gov.za)

# MEMO

**To** : Dr. Amer Jaffal  
**From** : Dr. A. Naidoo: Chief Executive Officer  
**Date** : 5 March 2013  
**Subject** : **Request to Carry Out Research at Tambo Memorial Hospital**

This serves to grant permission to Dr. Amer Jaffal to carry out a research study at Tambo Memorial Hospital for the purpose of completing his MMed (Emergency Medicine). This permission is granted in light of improving the skill capacity of the Gauteng Department of Health.

The permission is granted in line with the code of ethics or research.

The information of the Gauteng Health Department will be used for the purpose of research and it will be utilized discreetly and that confidentiality will be maintained at all times.

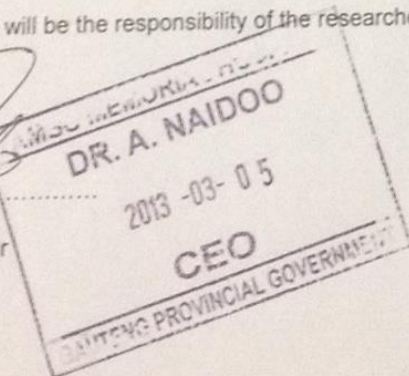
The permission is granted in good faith with the notion and understanding that the abovementioned clause is upheld.

Furthermore, there should be no financial implication to the hospital.

The collection of data will be the responsibility of the researcher.

Thank you,

Dr A Naidoo  
Chief Executive Officer



Appendix C



R14/49 Dr Amer Jaffal

**HUMAN RESEARCH ETHICS COMMITTEE (MEDICAL)**

**CLEARANCE CERTIFICATE NO. M130310**

**NAME:** Dr Amer Jaffal  
**(Principal Investigator)**

**DEPARTMENT:** Division of Emergency Medicine  
Leratong and Tambo Memorial Hospitals

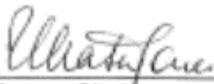
**PROJECT TITLE:** Emergency Department Workplace Violence

**DATE CONSIDERED:** 05/04/2013

**DECISION:** Approved unconditionally

**CONDITIONS:**

**SUPERVISOR:** Prof Efraim Kramer

**APPROVED BY:**   
\_\_\_\_\_  
Professor PE Cleaton-Jones, Chairperson, HREC (Medical)

**DATE OF APPROVAL:** 15/05/2013

This clearance certificate is valid for 5 years from date of approval. Extension may be applied for.

**DECLARATION OF INVESTIGATORS**

To be completed in duplicate and **ONE COPY** returned to the Secretary in Room 10004, 10th floor, Senate House, University.  
I/we fully understand the conditions under which I am/we are authorized to carry out the above-mentioned research and I/we undertake to ensure compliance with these conditions. Should any departure be contemplated, from the research protocol as approved, I/we undertake to resubmit the application to the Committee. **I agree to submit a yearly progress report**

Principal Investigator Signature \_\_\_\_\_

Date \_\_\_\_\_

**PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQUIRIES**