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WORKPLACE VIOLENCE AGAINST EMERGENCY RESIDENTS AND
NURSES IN THE ADULT EMERGENCY DEPARTMENTS OF TIKUR
ANBESSA SPECIALIZED HOSPITAL AND AaBET (ADDIS ABABA BURN
EMERGENCY AND TRAUMA) HOSPITAL

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NURSES IN EMERGENCY DEPARTMENTS OF TIKUR ANBESSA
SPECIALIZED HOSPITAL AND AaBET (ADDIS ABABA BURN,
EMERGENCY, AND TRAUMA) HOSPITAL

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Below the alpha & the omega God's constant wisdom & blessing imparted on me, I would like to utter thanking words to my parents to be the reason for me to help my patients continue to live their beautiful life.

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ACRONYMS

AaBET Hospital	Addis Ababa Burn, Emergency and Trauma hospital
AfJEM	African Journal of Emergency Medicine
BLS	Bureau of Labor Statistics
BLSH	Black Lion Specialized Hospital
CI	Confidence Interval
DRB	Departmental Review Board
EM & CC	Emergency Medicine and Critical Care
ED	Emergency Department
ET	Exact test (p)
GP	General Practitioner
HCW	Health Care Worker
ILO	International Labor Office
ICN	International Council of Nurses
NEJM	New England Journal Of Medicine
NIOSH	The National Institute for Occupational Safety and Health
NVDRS	The National Violent Death Reporting System
OR	Odd's ratio
OSHA	Occupational Safety and Health Administration
PGY-I/II/III	Post graduate Year-I/II/III
PSI	Public Services International
SPMMCH	St. Paul Millennium Medical College and Hospital
TASH	Tikur Anbessa Specialized Hospital

X²

Chi Square

WHO

World Health Organization

WPV

Work Place Violence

ABSTRACT

Background: Violence is a common day to day occurrence in the Emergency Department, locally as well as globally. It has negative effects on health care workers career, and therefore on the quality of care patient receives; however, it is under studied, and down played problem. Its extent is not equally felt across all stakeholders.

Objectives: Explore the incidence, characteristics, associated factors and inciting causes of workplace violence experienced by the Emergency Residents and Nurses and explore the formal reporting of these incidences in TASH and AaBET hospital Adult Medical, surgical and trauma ED in the last 05 months.

Methods: Cross sectional Survey study was performed on Emergency physicians and Nurses in Adult Emergency Departments in Tikur Anbessa and AaBET Hospitals. Standardized questionnaire developed by the WHO, which is modified and applied it to the current project, was used to collect data.

Results: A total of 181 subjects were studied. Most of them (>70%) were BSc. Nurses. In the last 05 months, 86.75% of health care workers were subjected to violence; and furthermore, 86.6% were subjected to psychological violence and 19.9% to physical violence. For physical violence, being married and more year of experience were found to be victimized by 1.66 times and 5.18 times less likely than living with a partner and a less year of experience. However, for psychological violence, being single was 3.070 times less chance of being attacked psychologically than being married. Overall, relatives were the most common perpetrators. Only 13.9% of the physically attacked and 5.1% of the psychologically attacked have reported their assault; and in only 22.2% of the physical assault and 10.9% of the psychological assault were formal investigation done. More than half of the psychological violence and more than two thirds of the physical violence victims claimed it could have been prevented. The commonest reasons from the ED related reasons for the attack were overcrowding, inadequate security and negative media coverage.

Conclusion: Violence was shown to be a rampant event in the ED and underreporting makes it undermined. However, it is shown to be preventable.

Recommendation: Preventive strategies should be thoroughly sought and applied.

Key words: ED, WPV, Residents, reporting

SUMMARY TABLE

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CHAPTER ONE

BACKGROUND OF THE STUDY

INTRODUCTION

According to the WHO report, every year, worldwide, beyond 1.6 million people die accredited to violence with bumper amount of people more being injured. This figure maps to 2.5% of the total number of deaths of all human beings. Especially in the young aged 15-44, violence has become one of the leading causes of death in all parts of the world. Based on the state based surveillance system of NVDRS, in the United States alone, more than 160 and more than 55,000 human beings lost their lives due to violence daily and annually, respectively. Alone, homicide and suicide were the fourth leading cause of years of potential life lost in the US. As to the WHO 2004 report, the after coming economic costs were also elephantine; the US spends more than \$300 billion for interpersonal conflicts. [1,2,3]

Indeed, WPV is one among the other violence types. This WPV is expanding worldwide. In the US alone, more than 2 million workers report that they have become a victim of WPV. However, yet many go unreported. [4, 18] Violence in work places is often pervasive where there is a stressful condition to deal with. Hence, one of the mostly disturbed and violence hosting fields of work is the health sector; along with law enforcement. [5, 6, 12, 13]

In contrary to being overstatement, in the healthcare industry, incidence of WPV requiring days away from work is 3.8 times exceeding (3% Vs 10-11%) than all other private industry. Moreover, between 1993 and 2009, overall, there is a 20% surplus of WPV in the health care workers than all other workers. The European agency for safety and health also substantiated that, in the European Union nations, health care and social care sectors have the highest amount of risk of violence with a rate of 15.2%. These all demonstrated health care professionals are vulnerable to experience higher risk of WPV than any other professionals. [4-10]

Besides, multitude of evidences justify why this workplace violence towards health service professionals can't just be undermined. Rather, nowadays, it is drawing an attention to become a global public health issue. According to the BLS, between 2011 and 2013, workplace assaults were more than 23,000 annually, with 70-74% accounted by healthcare and social service settings. Additionally, in 2013, 27 out of the 100 fatalities in healthcare and social service

settings were due to assaults and violent acts. It is globally considered to be a significant occupational hazard, especially among the service sectors. Moreover, it is gradually being perceived as a fundamental human rights issue with its underscored negative repercussions on the achievement of goals of an organization. [5, 6, 7]

Despite being acknowledged as a public health problem, there are inconsistencies in definitions of WPV which resulted in fluctuations in data surveillance and under recognition. As to *The National Institute for Occupational Safety and Health (NIOSH)* definition, workplace violence is “violent acts (including physical assaults and threats of assaults) directed toward persons at work or on duty.” They can be any act or threat of physical violence, harassment, intimidation, or other threatening and disruptive behavior at work. There are also 04 types of work place violence in general. [5, 7, 8]

1. Type I: Criminal Intent; the perpetrator has no legal relationship to the worker.
2. Type II: Customer/Client i.e. patient: the attacker has a legitimate relationship with the business
 - A large portion of customer incidents occur in the health care industry and the victims are patient caregivers.
 - About 20% of all workplace homicides resulted from type II violence in 2014, but this category accounts for a majority of non-fatal WPV.
3. Type III: Worker-on-worker violence: Can be former or current worker
4. Type IV: Inter personal relationship violence

In the health institutions, WPV occurs primarily in workers of in the emergency department and psychiatric department of hospitals, as well as general care fields. Moreover, ED, the central location for health sector WPV, is an exposed section, entry point and ‘open door’ of a hospital. The apparition of openness of EDs 24 hours a day, 7 days a week, and the provision of care to patients from all age groups and the entire spectrum of illness, including undifferentiated medical diseases, psychiatric illnesses as well as social issues makes it under unpredictable but constant exposure of violence and intimidation. These all diseases have a common denominator of acuteness. Studies conducted across the world also support and show that WPV is a common occurrence of ED personnel. [5, 11, 12, 13]

ED is a stressful place to work. This stressful nature increases the chance of violence of a patient or visitors for a multitude of reasons. The reasons overall can be physiological and non-physiological (psychological). These reasons can be because of an exquisite pain the patient is suffering, the acuity of an illness, tension that follows injuries, the long waiting times to see a physician or receive a

medication despite the rushing feeling patients can have, the frustration among family members or visitors with health care system and many more. Furthermore, the various range of kinds of patient populations seen on the ED also matter. They constitute belligerent individuals with a great tendency toward violence including patients who are seeking drugs or are on drugs including alcohol, or patients who are in police custody, or patients coming to the ED after a quarrel. Additionally, patients with underlying dementia or psychosis frequently present to the ED for acute treatment. All of these factors increase the possibility of violent acts occurring in the ED. [5, 6, 13]

In different parts of the world, different researches indicated one profession to be more at risk for violence over the other. In many parts of the world, **nurses are the** highest risk group for violence, due to a possible reason of a superfluous time they spent with their patients; while at some nations, like Turkey, physicians and dentists were reported to be superior in terms of being a highest risk group for workplace violence. The possible reason mentioned was due to the physicians being regarded as the primary representatives of healthcare system in the country as well as the unrealistic expectations of patients and their families from physicians. [11, 13-16]

In various surveys of different parts the globe, the ED staff, including residents were exposed to a number of different types of violence. To the worst, in one of the largest surveys of US EDs, it was found that as high as 20% of EDs were facing against either guns or knives at daily or weekly basis. There are also reports that show that ED is the most frequent site for hospital shootings, shifting itself into battlefield. [18] Nevertheless, even non-physical or verbal threats to any ED staff can be a serious problem, as they have been shown to increase the risk of future serious incidents of violence. Besides, those workers can be harassed sexually imparting a dire psychological and emotional consequence throughout their lives. [17, 18]

It is enormously true that the ED must be equipped to be a **low violence, low hostility center and setting**. Lessening occupational violence and ensuring safety of the staff members is an **obligation that hospitals have to their staff** as well as patients. The sad reality is, however, this obstacle is underappreciated and down played. As it was fore mentioned, nobody in the hospital is more exposed than the ED personnel. They are the most vulnerable people in a health care system, and yet, have overall got less training and knowhow on how to manage such conditions. And hence, the staff may be arming themselves with the insight

of calming themselves in the calamitous environment and be expertise in mediating and troubleshooting chaos and hostility in their work area, so that they can make their career and work place safer, peaceful and rewarding.

Nevertheless, the worst part of these incidences is that they are **underreported** due most of the times to the wrong perception among many physicians and nurses of the ED. Mostly, there is an **overstated and deeply enrooted “culture of acceptance” amidst** the HCWs. They accept these hardships, altercations and those aggressors as expected part of their job to deal with. Even it is far reaching and impacting them deeply, the medical staff often misunderstood it and fails to report to the respective body. [5, 7, 11]

In fact, there are many more reasons for not reporting. These can be because they don't know where to report or they have not sustained any injury or reporting might be considered futile or they might feel that reporting is laborious or it is destructive to their CV reckoning it as a sign of incompetence. Misunderstanding it is a legitimate right to report, they may also fear the reactions and censures of the manager or employer and keep the attack absorbed and undisclosed. [5, 16, 20]

Those physicians with a fewer years of training or work experience, in particular, are subjected more to these violence but yet fail to report it that often. Besides, emergency residents may also be less urged and barricaded to document & report violent events to their respective senior or officers for fear of the consequences. This and the aforementioned all reasons may mislead to the notion that it is not a significant problem. So long as recognizing it as a pervasive problem is a first step towards a solution, administrative bodies did not seem to bind themselves into interventional strategies. [5, 16, 19, 20]

As this problem remains unsolved, the **unwanted repercussion** it has on the medical staff become flagged up. The damage violence can have on the **health care workers is enormous**. It can negatively affect the HCWs psychologically, physically and professionally. Not exclusively, it is associated with increased risk of physician **burn out**.

Apart from the physical injury, even inadvertent verbal abuses can cause significant psychological trauma and stress which can **persist for up to 12 months** following an incident. The emotions commonly reported are feelings of guilt, despair, irritability, apathy, self-blame, fear, loss of sleep, nightmares, flashbacks as well as anxiety. [20,21]

Exposure to violence has shown to **dishearten and shatter the work morale** and satisfaction from a patient care. Compounded with the high work load, less reward and appreciation, occupational violence will leave the physicians and nurses **into burnout, loss of work productivity, reduced job satisfaction, & may indeed curtail their professional life short** as well. The NACNEP 6th annual report suggested that shortage of HCWs, in particular, nurses will be a crisis long before 2020 in the developed nation United States; bringing the notion “more is needed but more is not enough”. Emotional exhaustion and dissatisfaction, added to dysfunctional organizations will largely contribute to burn out. Beyond this, they may even not want their children to be engaged in healthcare practices. This all can lead to difficulty of recruiting health personnel as well as retaining for long, impacting the health system of the nation. [12, 20, 21, 22]

Although those violent incidents on the healthcare workers and hospitals are a valid concern, the damage it can have on the patients is also excessively tremendous. Indeed, the patients are the ultimate victims. Exposure to patient-related violence can have an impact on the way HCWs approach their patients. The HCWs can feel less empathic, can have feelings of avoidance and want to expunge themselves out of the threatening area and thus decline the great benevolent and tender quality of care they can provide to their patients. These failures include late administration of medications, an increase in the number of medication errors, rejecting the patient for an information and inhumane care towards the patient or visitors at the end of the day. [7, 11, 12, 23]

STATEMENT OF THE PROBLEM

Today hospital violence against health care providers and hostility filled ambiances in the Emergency Department is becoming a **major worry**. However, the actual magnitude of the problem is largely unknown. This becomes an impetus for current worldwide surveys. [5] There were several reports and researches which specifically tried to address the hugeness of the problem in the ED nationwide, such as in countries like China, United States, Taiwan, Turkey and other several nations. Nevertheless, not all studies were inclusive in their incorporation of the associated factors as well as potential solutions, apart from the magnitude. [7, 15, 16, 21]

Albeit the figure **still needs to be explored extensively in Africa** as a continent, there is impressive progress of violence care in east African nations. A

report from South Africa showed there is an increasing concern from work place violence in HCWs and indicated that it reached an epidemic level. [25] There was a report from Nigerian nurses showing as high as 88.9% of respondents witnessing violence, while 15.8% of the violence towards nurses includes a weapon. [24] Besides, a study from Egypt, Ismailia showed approximately 60% of the respondents (HCWs) experienced WPV. [13]

On the other hand, in Ethiopia, there are only few reports. One of them is amidst nurses of north western Ethiopia showing overall WPV of only 26.7%, and among nurses of Hawassa City Administration public health facilities showing prevalence of 29.9%. For unexplained reason, the incidences were much lower than the reports from other African nations as well as the developed world nations. However, among Oromia Region Referral Hospital nurses, the WPV rate was a much higher one, reaching up to 82.2%. [19, 26, 27]

On the other hand, in parallel to the time this research was undertaken, there was another unpublished survey which is started in Addis Ababa Hospitals aimed to find frequency and nature of physical and verbal WPV against nurses working in the ED; and it showed a prevalence of 59.3% of psychological violence and 25% of physical violence. It was aiming at only emergency nurses throughout all kinds of hospitals. Hereby, compared to the former Ethiopian researches, the later advocates how elephantine violence is in the Emergency Department to bear attention on. [43]

SIGNIFICANCE OF THE STUDY

Considering understanding the pervasiveness of the problem is a first answer to a solution, this study examines the magnitude of the problem, HCW's amount of experience, violence characteristics, reporting status of the problem, and associated factors that are risks to the incidences, as well as causes or inciting factors engendering violence which may be key in studying the preventive strategies. It is a local study in Tikur Anbessa Specialized Hospital as well as AaBET Hospital; it will however, become a stepping stone for a conduction of large scale and comprehensive survey of the EDs throughout the country; and more importantly, it will be an armamentarium to the provision of a safety of the staff members and indirectly to the procurement of maximized quality care a patient receives when tertiary hospitals, trauma centers or Emergency Medicine teaching hospitals with big Emergency Department are built.

CHAPTER TWO

LITRATURE REVIEW

So far, there have been multitude qualitative and quantitative researches conducted over the globe, including Ethiopia. This infers that violence among health care workers, emergency department specifically, is abundant in amount worldwide and it shows a mounting concern too. Verbal abuse, physical assaults as well as sexual battery are common in the EDs [2, 7, 11]. Working in the ED also was demonstrated to have a higher risk of workplace violence than in non-emergency setting of a hospital. [5, 6, 8]

Violence Against Nurses

According to the Australasian College for Emergency Medicine 2011 report, **more than 90% of emergency staff** has experienced some type of violence in their careers. However, overall from the ED, nurses were more likely to be involved in WPV. They are even 2.26 times more likely to be physically assaulted than their co-workers. They also feel five times less safe than their co-workers. This was explained possibly with the large amount of time nurses spent with their patients as well as their relatives, on day to day basis. [15, 17, 22, 24, 30, 32, 33]

In different countries, the range of prevalence of work place violence in ED nurses ranged from around 10% till as **overwhelmingly high as 100%**. In Londrina, Paraná, Brazil, the 100% of the nurses were battered with WPV in the prior 07 years while it is 85% for doctors. [33] In Australian ED nurses, the prevalence was 94% among the medical staff, amidst which nurses experienced violence in 88.1% of cases [30, 32]. In Nigeria, a study conducted on 2012 showed 88.9% of respondents witnessing ED violence while 65.0% had been the direct victims. Similar studies in china, Taiwan, United States and other countries show similar results when we come to nurse violence rate. [21, 24, 34]

Two studies of prevalence of violence among nurses (overall in hospital) done in Ethiopia, however, showed a significant but much less number than the other studies undertaken elsewhere. A study in Northwestern Ethiopia which used a multivariate analysis to predict risk factors showed a 26.7% prevalence of WPV among nurses in Northwestern Ethiopia Hospitals; while similar result of 29.9% was found in Hawassa City Administration Public health facility nurses. [19, 27] Nonetheless, these Ethiopian surveys were conducted among nurses, working in

different parts of a hospital as well as other public health facility; where a lone or pair of nurses may be the only health care providers. However, another survey in Oromia region referral hospitals found an accrued incidence of 82.2%; which gap may still be explained by the setting of the study and type of the patients the health care workers take care. [26]

Meanwhile, while this research was being conducted, there was another un-published survey done in Addis Ababa, and elevated the prevalence of violence in the General Hospitals' ED nurses to be close to 60%. This phenomenon conforms much more to the international studies. [43]

Different types of violence happened on ED nurses. They can be physical or non-physical (psychological). The physical violence includes person to person contact such as slapping, punching or kicking. Internationally, in majority of researches done on ED nurses, verbal abuse was the leading type of violence. It sometimes peaks to the level of 90%. [35] In the Australian study, more than 40% of ED medial staff was physically harmed, from which the incidence among nurses was more than 50%. More than 20% of nurses were assaulted with body fluids while more than 10% were assaulted with weapons. [30, 32] In both Nigeria and China, Verbal threat was the leading type of violence: while weapon accounts for 15% of Nigerian ED nurse violence, physical violence overall accounts for 11% of all chines ED nurse violence. [15, 24]

On the other hand, in Ethiopia, as to the research done at Southern Regional states City of Hawassa public health facilities, the rate of physical violence was 18.22% while non-physical violence was close to 90% and sexual harassment around 13%. In the Oromian referral hospitals, physical threats were around 23.2% of all nurses. The ongoing un published survey done in Addis Ababa also showed similar result with 25% and around 60% prevalence rate of physical and non-physical violence respectively. On the contrary, in Northwestern Ethiopia, physical threat (60%) was the leading type of violence; and the non-physical threats were close to 40%. This was higher than that of its contraries in other parts of the country; which could probably be explained by the setting the surveys were done and the preventive strategies the health care facilities provide to their staff. [19, 26, 27]

Contested to the belief that ED should be violent free zone, unfortunately, some studies showed that type- III violence occurs in several times. The medical staff by themselves might be responsible for emotional, verbal, sexual as well as physical abuse to one another. [13, 23] In fact, this contributed to the notion that

oppression either verbally or physically is an accepted and expected part of their job; so that they will either get acclimated to such unhealthy relationship and environment; or reject it and pull themselves out of ED to change to other departments for once and all. [11, 12, 22, 23] This culture of acceptance also led to under reporting such incidents.

One of the common denominator of the various studies performed throughout the world is the common associated factors they mentioned, although not absolutely equivalent. The associated factors can generally be **classified into patient related, or nurse related or ED environment related**. Triage area was identified as highest risk location in the ED, with almost 3 times increased risk for violence. Next to triaging, long waiting times was considered as a risk factor with paramount significance. Drug and alcohol intoxicated patients, mentally ill patients, adolescent patients, restrained patients, unrealistic expectations of the patient, understaffing, overcrowding, inadequate system of security or prevention, lack of training staff on recognizing or managing such condition, or spread of gang fights to the ED were mentioned as risk factors for these incidents. [5, 15, 17, 30, 34-37].

However, the employee nurse age, years of experience, prior history of WPV, and length of stay with the patient were also attributed as risk factors. The less years of experience was related to the inability to read cues or warning signs, lack of communication skills and lack of experience of managing such chaotic situations. The negative media coverage was also regarded by some respondents as a force which makes the nurse-patient relationship into rough one. [15, 17, 19, 35, 36]

In the **Ethiopian Northwestern region study, marital status was additionally regarded as having an independent association; single nurse employees have 8-9 times more likely** to have WPV **than those who are married**; this can possibly be associated with the cultural virtue of the society. Working in inpatient and long waiting hours were three and four times respectively more likely to cause WPV, as to the Oromia Region Referral Hospitals survey. This can be explained by the gap between the health care expectation and delivery. On the Hawassa city public health care facilities, short work experience, working in the emergency department, younger age, and working in the inpatient were 8.86 times, 4.28 times, 4.17 times, and 2.11 times more likely to predict WPV than their counterpart nurses. [19, 26, 27]

One of the surveys checked the frequency of **reporting** the problem to respective body and it showed there was very poor culture of reporting over the whole medical stuff. However, nurses, in particular experienced ones, have a better reporting tendency than their counterpart physicians (18% Vs 1%). Especially when the violence type is physical, there was a higher likelihood of reporting. It was only 9% of the verbal abuses that were reported, while it was 30% when it comes to physical abuse. The reasons mentioned included the ED stuff being time poor, a workplace culture that discourages reporting, not knowing where to report & a belief that there will be no effect of the reporting. [5, 7, 11, 32]

Violence against residents, physicians and ED personnel as a whole

A study conducted in Greece in 2013 had additionally different motive. It was to see the effects of the economic crisis on WPV. On that study, physicians and nurses equally are at serious risk of violence. The nurses accredited **economic crisis** to be a major inciting factor for violence. The crisis imposed a bumper amount of challenge on the day to day activities of each citizen; thus, the medical staff admitted that they have no courage to confront any depraving and frustrating patient or visitor threats. Possibly due to the economic crisis; reduction in salary, downsizing medical personnel, large work overload on the understaffed health care workers and lack of medical supplies are also mentioned as inciting factors. Additionally, the visitor was more demanding and skeptical in fear of inadequacy of medical care. All in one, the main reason for the incidents was unmet patient satisfaction. [38]

Besides, this Greece study showed the violence was not time dependent i.e can occur during the day, evening or night shift. The type of violence was similar as other studies with verbal threat accounting for majority of the violence (80.2%). Almost similarly to long waiting hours, smoking prohibition per se was a significant perceived cause of violence (88.8% Vs 82.4%). Victim with a lower height had increased odds of predisposition to physical and sexual violence ($p < 0.000$). Unlike others, nurses working on internal medicine had increased risk of experiencing violence. However, those on ED had increased odds of experiencing sexual violence ($p < 0.033$). The culture of reporting was also poor due to most nurses' perception that the administration would never reply even after reporting. Lack of policies and security rules also maximized the problem. [38]

The perpetrators are majorly patients or patient relatives, with the study of nurses in china having higher relative attackers (more than 82%). The Nigerian study showed overwhelmingly male attackers (76%) than other researched areas. It happens usually during evening and night times. However, in majority, sensation of safety was high when security officer is around. The respondents

believed security officers respond in a timely manner and are helpful in de-escalating situations before they run out of control to be violence. [15, 24].

When **we shed lights** upon ED residents, we can see WPVs existing in a **gigantic** way due to the less experience they have at handling such situations. A New York City study showed that nearly all ED residents (97%) experienced verbal harassment, majority of them (66%) reported physical violence and 52% of them sexual harassment. Of these, 41.9% of the male and 68.9% of the female residents reported sexual harassment. Majority the attacks come from the patients and only a few fraction from the visitors. From the New York ED residents, half of them are very or somewhat dissatisfied with their current securities in the ED and quarter of them felt unsafe at least occasionally. It was only 7.2% of the residents who always felt safe in the ED. [39] As to Turkish study, attaching residents from other departments and GPs working in the ED were 6.67 times and 5.20 times more likely to be involved in violence than other academic staff. This was backed with a notion that physicians who specialize in the field are more successful at incident handling. [16] On the other hand, study from state of Michigan stated that residency program is not significantly associated with specific type of violence; rather, female emergency physicians being more prone to physical violence. [29]

The results of studies among ED senior physicians still echo that of the above results with prevalence ranging from 45% to as high as 99% [12, 38, 39]. Even if it is still substantial in amount, the risk physicians have towards violence is slightly lower than other medical staff of the ED. This was unexplained but potential reasons were their absence in the waiting area and perception of the society towards them. However, this is not inclusive; because studies from Turkey showed physicians to be at highest risk than others. [6, 40]

The type of violence was reiterated to be majorly verbal. 21% up to 65% of them were victimized more than once. [20, 34, 37] In most of the incidents, security was involved, apart from 17% of them, where there was no security participation. Night shifts were mostly associated with physical violence. [34] Those emergency physicians who were verbally threatened tend to be less experienced. Most of the times (89%), the attack comes from the patient. Especially, the access to firearms in the US makes the fear for violence of the physicians' earnest one [5, 6, 18].

Similarly to the solitude studies of nurses, studies on overall medical staff of the ED showed almost similar associated factors or risk factors of violence. As foresaid, the factors can be patient related, physician related or ED environment

related, all occurring with various frequencies in various studies. Substance abuse, alcohol intoxication, psychiatric illness, dementia, sociocultural and educational status are enrolled under factors associated with the patients. Meanwhile, long waiting hours, lack of security, EDs with annual volumes over 60,000 patients, and were among the ED environment related factors. Lack of workshop and trainings of physicians, less experience in the ED and physician's mental health were also enlisted under physician's factors. The Ministry of health's policy regarding violence was also mentioned as contributing factor. Overall, there were mixed views regarding gender and physical characteristics of the physicians. [6, 13, 16, 34, 39]

Most of the perpetrators were families and patients, with one dominating over the other in different areas; however, worker on worker violence (Type III violence) was also pervasive. Different types of weapons were also utilized, with guns and knives accounting for majority of tools used in violence. [5, 6] In Pakistan, Karachi, out of the 16.5% of HCWs who reported to be inflicted physically, 29.6% of the victimizers came at them with a weapon. [31]

In a study in the United States, State of Michigan, Physicians react to those incidents with variety of ways. In response to fear, they took personal protections (42%) including guns and knives. And 31% of them used other ways like security escort. 16% of them considered leaving their hospital and 19% of them considered leaving emergency medicine out and out due to violence. However, yet, many of the physicians desired resources to help them cope with the problem. [29] The results from Turkey were also similar showing 49.6% of them doing naught while 33% of them took a short break. 37% of the attacked physicians reported the enforcement of law. Most (97%), none the less, distrusted the legislation regarding violence. **In Turkey, a robust number** of emergency medicine training programs were made available; however, in 2013, 70% of the openings went unfilled. Lack of security for the ED and the high rate of violence directed at residents and physicians were pointed out as the reasons for why new trainees don't join the department. [12, 16, 40]

According to the study in Egypt, Ismailia, fewer fractions of the victimized physicians reported to authorized staff. Only 29.5% of those who experienced verbal threats and 23.4% of those who experienced physical violence notified the authority. Regardless, 60% of those who reported said there was no action taken. [13] This low reporting culture is also pervasive elsewhere. However, a study from West Virginia showed 24% of participants' reports of ED violent incidents resulted in a change in a policy of security. This includes increasing presence of security, badge-protected check points, locks on the ED

and use of metal detectors. 14% of the participants believed that security issues globally and nationally per se led to a change in security policy. [41]

According to the Guidelines for preventing workplace violence for healthcare and social service workers, 2016, in general WPV can be prevented. This is accredited to the findings of surveys performed locally as well as globally. However, no measure is proven 100% effective and long standing. Overall, prevention programs are more credited to be focused on. Understanding the prevalence of WPV, as well as the associated factors is **sine qua non** for future prevention efforts. [5, 7, 16, 39]

To make the ED safer, the measures recommended include management policy of '**zero**' **tolerance** attitude to workplace violence, effective **reporting** systems, adequate security, staff capacity building and training on leadership, prevention of violence, **de-escalating techniques**, conflict management, early recognition of violence, and even "submission" techniques. One study claimed a verbal abuse to be a **precursor** in almost all threat of physical violence, and recommended the prevention programs to emphasize on training employees how to confront verbal abuse. Changing attitude & approach of the medical staff towards one another as well as their patients including availability, respectfulness, supportive and responsiveness were given special emphasis. Lack of reporting is also an important issue to be addressed by the authority. More training will also make the medical staff to be confident and equipped to deal. [13, 29, 34, 38]

Some authorities advocated self-defense training and even some EDs were providing such trainings to their staff. Physicians and other medical staff have also shown a tendency to train self-defense techniques. However, a study showed that those that have attended self-defense trainings were more likely to experience verbal threats. From those physicians who reported all kinds of violent acts, those working in an EDs with a self-defense training available to its staff, **were more likely to be involved in violence**. Rather, interestingly, self-defense training was not associated with reduction in violence, but **reduction in reporting by more than five times**. [6]

Furthermore, reconstructing the ED, equipping them with cameras, using metal detectors, and widening its area have also been advocated. Other suggestions are coding system to group the staff into violent management team, working less than 8 hours shift per day, as well **as supervising of the media** by a government for soothing the relation between medical staff and patients. [7, 15, 24, 42] However, some factors can be significant and unavoidable.

Comprehensive organized prevention programs should be implemented. According to OSHA, an effective prevention program should include management commitment and employee participation, worksite analysis, hazard prevention and control, safety and health training, and recordkeeping and program evaluation. [7, 16]

CHAPTER THREE

OBJECTIVES

3.1) General Objective

Explore the incidence, characteristics and associated factors of workplace violence experienced by the Emergency Residents and Nurses within the last 05 months in TASH and AaBET hospital Adult Medical, surgical and trauma ED

3.2) Specific Objective

- To explore the magnitude of WPV among Residents and Nurses
- To characterize the types of WPV
- To determine the associated factors of WPV
- To assess the formal reporting of WPV incidents
- To determine the inciting reasons for violence

CHAPTER FOUR

MATERIALS AND METHODS

4.1) Study Area

Addis Ababa, the capital of Ethiopia, has a total of 13 public hospitals in which all of them comprise 24 hour service providing emergency department. However, it is only 02 out of them which provide Emergency Medicine Residency Program. These are Tikur Anbessa Specialized Hospital (TASH) and AaBET Hospital (Addis Ababa Burn and Trauma hospital) operating under St. Paul Millennium Medical College and Hospital (SPMMCH).

Tikur Anbessa is the pioneer and largest referral hospital in Ethiopia. It was established in 1964. However, it has started Emergency Medicine and Critical Care specialty program lately in 2010 and had graduated 04 batches. Currently, it sheltered 06 Emergency Physicians and around 30 residents.

St. Paul Millennium Medical College and Hospital was established by 1968 as a hospital by the late Emperor Haile Selassie and was established in 2007 as a medical school by the decree of Council of Ministers. It is administered under Federal Ministry of Health. It has many departments within, one of the youngest of which is Emergency Medicine. The Emergency Medicine Residency training commenced in 2016 & works in different branch of St. Paul Millennium Hospital with a name of Addis Ababa Burn and Trauma hospital (AaBET Hospital). Its residency program incorporates 08 Emergency Physician Seniors and more than 20 Residents.

4.2) Source population

These were all nurses and emergency and critical care residents working in Emergency Departments of TASH and AaBET Hospital, in Addis Ababa, Ethiopia.

4.3) Study Population

The study population was all nurses and emergency and critical care residents working in Emergency Departments of TASH and AaBET Hospital, in Addis Ababa, Ethiopia, who have fulfilled eligibility criteria.

4.4) Study Design and period

A cross sectional Survey study was designed aimed to cover the ED residents as well as nurses in Tikur Anbessa and AaBET hospitals.

The project was designed to be a yearlong project (September 2017- July 2018); and the data was collected within two weeks.

4.2) Inclusion and Exclusion Criteria

4.2.1) Inclusion Criteria

- Willing-to-participate healthcare workers which includes Emergency residents, BSc. and MSc. nurses who are currently working under Emergency Department for at least 05 months
- Those who are currently on month leave.
- Nurses and physicians who shifted their work from emergency department to other departments within the last 05 months

4.2.2) Exclusion Criteria

- Those staff currently working in the ED but as on and off type (who don't take care patients fully due to their full-time education program)

4.3) Sampling

- There are a total number of 249 Emergency department residents and nurses (MSc. And BSc) in both hospitals. A total number of nurses is 197 and total number of residents is 52. Other ED members such as the management, security guards, pharmacists, sanitary members and others are excluded.
- A sample was taken with a single proportion formula adjusted to a finite number of populations. For a good representation, the same formula was used to both residents and nurses each. The incidence was taken as $P = 0.5$, level of confidence of 95% and margin of error as 5%.

- $$n = \frac{[Z]^2 \times P(1-P)}{d^2}$$

Where;

n = Minimum sample size for a statistically significant survey

Z = Normal deviant at a portion of 95% confidence interval two tailed test

P = Incidence of WPV= taken as 50% for maximum sample size

$q = 1-p$

d = margin of error taken as 5%= 0.05

So the $n = 384$

Adjusting it to finite population for both nurses and residents

$$n_{\text{nurses}} = m / [1 + (m-1/N)]$$

$$= 384 / [1 + (384-1/52)]$$

$$= 46$$

$$n_{\text{residents}} = m / [1 + (m-1/N)]$$

$$= 384 / [1 + (384-1/197)]$$

$$= 130$$

Total sample of 176

Response rate of 95%; then total sample is 185

- The nurses and residents are sampled using convenience sampling.
- The samples taken were distributed randomly across both hospitals.

4.4) Variables

4.4.1) Dependent Variables

- Workplace Violence (physical or non physical)
- Characteristics of the violence

4.4.2) Independent Variables

- Age
- Sex
- Professional Status
- Marital status
- Years of experience
- Knowledge that a procedure of reporting avails

4.5) Data Collection

A data collector was placed at each site, and data was collected using a self-administered standardized questionnaire developed by the ILO/WHO/ICN/PSI joint program which is however modified to be applied to the current project. The questionnaire included four sections of sociodemographic

data, physical violence, psychological violence and preventive strategies. Assessment of 05 months was utilized in an attempt to minimize recall bias.

A pilot study among random ED workers was done to check for completeness and any vague writings and then suggestions were included into the final version.

The questionnaire was then distributed throughout the volunteer emergency residents and nurses found during the time of data collection working in Tikur Anbessa Specialized Hospitals and AaBET/SPMMCH. The data was then collected within two weeks from May 10 to May 25. No participant names were recorded, and consent was implied by returning a completed survey

4.6) Data processing and analysis

The questionnaire was reviewed and checked for completeness by the data collector and supervisor. The collected data were then entered, and analyzed with IBM SPSS Statistics V21.

Descriptive statistics were produced for all items of sociodemographic data. All data were examined at a 95% CI, and $p < 0.05$ was deemed statistically significant.

Pearson's chi square (χ^2) tests were used to produce the associations between different categorical variables: for these, the Monte Carlo simulation and exact tests were added when applicable. To determine the effect sizes, cramer's V was used.

Several binary logistic regression models were used to predict the association between 1) experiencing and witnessing physical assault 2) age with psychological and physical assault 3) marital status with psychological & physical assault 4) age of experience with psychological & physical assault; 5) sense of safety and profession; in these models the predictor variables were age, years of experience, and marital status. Odds ratio and 95% were calculated. Furthermore, by calculating ORs with CIs using the complete model, a multivariate binary logistic regression analysis was conducted to see the effect sizes of predictor variables which showed a $p < 0.2$ in the univariate model.

For those who reported an incidence, two multinomial logistic regression models were conducted to predict satisfaction rate after the offers provided by the management. However, due to very small sample size of those who reported the incidents, the model was not fitting and not statistically significant.

4.7) Ethical Consideration

Ethical clearance will be obtained from the Departmental Review Board (DRB) of Addis Ababa University College of health science, school of medicine, department of emergency medicine.

4.8) Dissemination of the result

The study result will be presented to Addis Ababa University, Faculty of Medicine department of emergency medicine

The outcomes and main findings of the study are going to be disseminated to stakeholders the incidence, including participants, the management office of the Emergency Departments, responsible stake holders of the Hospitals, Ministry of Health as well as international offices such as PanAfrican Medical Journal, NEJM, AfJEM, BioMed Central, WHO and International Labor Office.

The findings help in exploring the general picture of violence towards ED medical staff as well as the general attitude of the society towards the medical personnel. They contribute a lot to the administrative bodies and policy makers in revising what has been under dog problem so far & help launch or continue working on the possible solutions. Additionally, it helps the medical personnel to understand about the prevalence of the problem and make sure its safety for a healthier, satisfactory as well as rewarding work as well as its provision of best care to the patient.

4.9) Operational Definition

1. Work place Violence is any intentional act or threat of physical violence, harassment, intimidation, or other threatening disruptive behavior that occurs at the work site. It ranges from threatening & verbal abuse to physical assaults & even homicide.
2. Physical violence refers to the use of physical force against another person or group that results in physical harm sexual or psychological harm. It can include beating, kicking, slapping, stabbing, shooting, pushing, biting, and/or pinching, among others.
3. Psychological or non-physical violence is defined as: Intentional use of power, including threat of physical force, against another person or group that can result in harm to physical, mental, spiritual, moral or social development. Psychological violence includes verbal abuse, bullying/mobbing, insults, racial harassment, and threats. It also includes inappropriate sexual approaching and harassments.

4. Police: Any force granted the legal authority of enforcing law and order whose can include security guards of the emergency offices or governmental police officers.
5. A weapon: is any type of physical instrument or tool that is used to attack the HCW; it can include plastic bottles, chairs, papers, knives, guns and so on.
6. Relatives of patient/Client: It does not necessarily meant to be related by blood; but anyone who accompanied the patient related by blood or not.
7. Metal and gun screening at the door: This does not necessarily mean utilization of radiography or magnetometers (metal detector) to screen metal or gun at the door; but can include a security guard screening customers by searching for metals and guns by bare hand.
8. ED: implies medical, surgical adult emergency department and trauma centers only. It excludes pediatric, psychiatric or gynecologic emergency departments.

CHAPTER FIVE

RESULTS

5.1) Sociodemographic data

A total of **181** medical personnel have participated in our survey, with a response **rate of 97.8%**. Sex ratio was almost one with female: male ratio of (1:1.05). The mean age was 27.19 (SD $\pm$ 1.966, R = 22-37). The participants were eminently BSc nurse (70.7%) followed by Emergency year II residents. (See *Table 1*)

The mean **year of experience** was 3.79 years with the maximum year of experience being 14 years. About two third of subjects of TASH (66.7%) HCWs claimed they spend more than 50% of their time with terminally ill pts; while nearly all (98.1%) subjects from AaBET claimed they spend more than 50% of their time with trauma patients. However, the types of patients HCWs take care mostly were not factors in predisposing to have either type of violence. [After exclusion of those cells with 0 subjects: for physical violence: $p= 0.121$ and for psychological violence: $p= 0.791$]

Table 1: Demographic characteristics of AaBET and TASH ED HCWs, Addis Ababa, Ethiopia, June, 2018

		Where do you exactly work: n (% of all)		Total n (%)
		TASH	AaBET Hospital	
Sex	Male	44 (24.3%)	49 (27.1%)	93 (51.4%)
	Female	31 (17.1%)	57 (31.5%)	88 (48.6%)
Marital Status	Single	47 (26.0%)	39 (21.5%)	86 (47.5%)
	Living with partner	6 (3.3%)	4 (2.2%)	10 (5.5%)
	Married	22 (12.2%)	63 (34.8%)	85 (47.0%)
Professional Status	MSc. Nurse	4 (2.2%)	5 (2.8%)	9 (5.0%)
	BSc. Nurse	45 (24.9%)	83 (45.9%)	128 (70.7%)
	PGY-I	6 (3.3%)	4 (2.2%)	10 (5.5%)
	PGY-II	12 (6.6%)	14 (7.7%)	26 (14.4%)
	PGY-III	8 (4.4%)	0	8 (4.4%)
Type of work	Full-time	75 (41.4%)	95 (52.5%)	170 (93.9%)
	Part-time	0	10 (9.4%)	10 (5.5%)
	Casual	0	1 (0.6%)	1 (0.6%)
Routine Physical Contact	Yes	72 (39.8%)	106 (58.6%)	178 (98.3%)
	No	3 (1.7%)	0	3 (1.7%)
Type of <u>pts</u> ^a HCWs spend >50% of their time	Terminally ill	50 (27.6%)	0	50 (27.6%)
	Trauma pts	21 (11.6%)	105 (58.0%)	126 (69.6%)
	Others	4 (2.2%)	1 (0.6%)	5 (2.8)
Are there any procedures you know? ^b	Yes	16 (8.8%)	17 (9.4%)	33 (18.2%)
	No	59 (32.6%)	89 (49.2%)	148 (81.8%)
Is there any encouragement to report a work place violence	Yes	25 (13.8%)	74 (40.9%)	99 (54.7%)
	No	50 (27.6%)	32 (17.7%)	82 (45.3%)
Total		106 (58.6%)	75 (41.4%)	181 (100%)

a= patients

b= for reporting

Majority (42.5%) of the HCWs are a little worried about violence in the ED followed by a group who are very worried (25.4%). (See Figure 1) Out of the studied sample, 57.5% of them do not feel **safe**. Sense of safety was, however, not statistically different among nurses and physicians; p= 0.195.

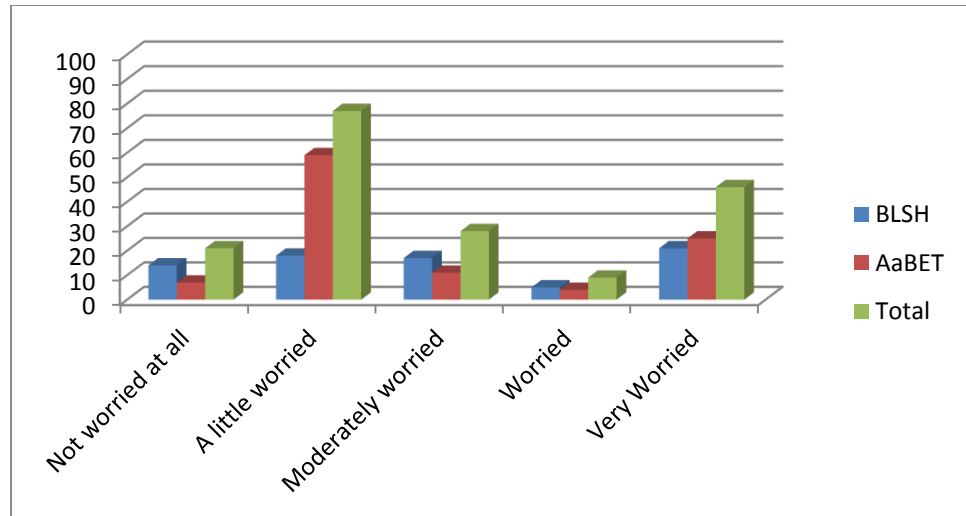
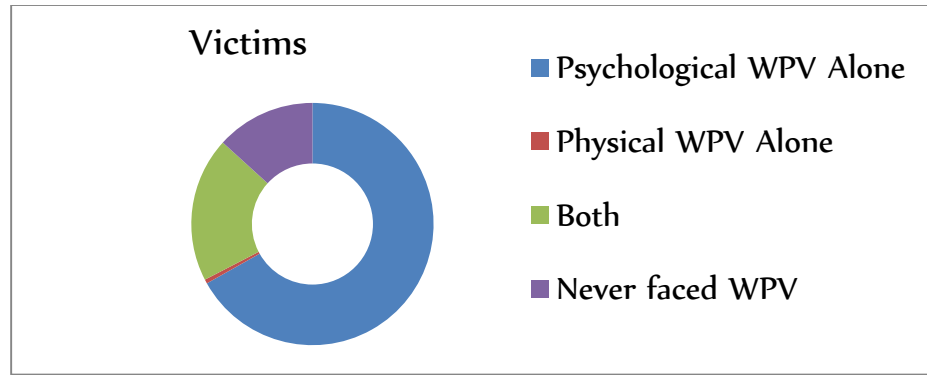


Figure 1: How worried were you? among AaBET and TASH ED HCWs, Addis Ababa, Ethiopia, June, 2008

Predominant HCWs 81.2% (147/181) claimed there is no reporting procedure if such violence befalls. Moreover, even out of the 18.2% who said there is a reporting procedure, it was only 87.9% of them who know how to use the procedures. (See Table 1) A little more than half (54.7%) of the participants believed that there is an encouragement for a reporting a violence; and out of the prevailing encouragement, half (49/99 cases, 49.5%) was accredited to the management followed by a union or an association.

5.2) Overall prevalence of violence

Overall, **86.75% (157/181)** of HCWs has **faced violence**; 19.3% of the total sample faced both types of violence; physical and non-physical; otherwise, of the total sample, 86.6% were subjected to non-physical violence alone and 19.9% to physical violence alone. 13.25% of the total samples have never faced violence and 4.97% have never faced nor witnessed any violence.



Pie Chart 1: Overall Status of experienced Violence among AaBET and TASH ED HCWs, Addis Ababa, Ethiopia, June, 2008

5.3) Physical violence

5.3.1) Overall characteristics, magnitude and associated factors of physical violence

We found out that 19.9% (36/181) of the HCWs were subjected to physical attack. Additionally, in the last 12 months, 34.3% (62/181) of the HCWs have witnessed physical violence in the ED; with most of them (23/62; 38.7%) witnessing only once followed by 33.9% of them witnessing several times a month; and also a single 1 subject claiming of physical violence witness weekly. Nevertheless, there is no significant association between witnessing and experiencing physical violence; $p=0.150$ & exact $p=0.172$.

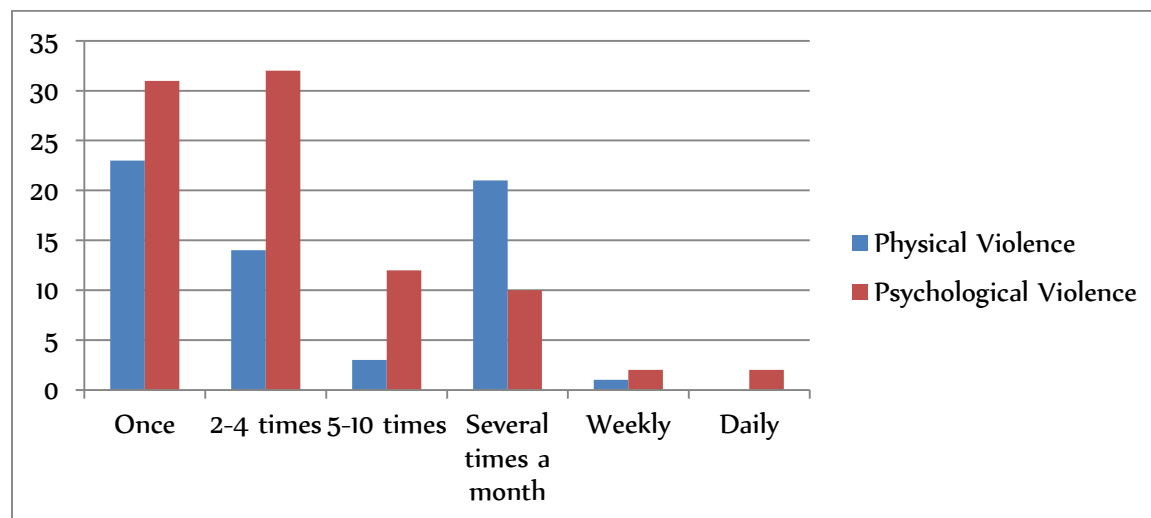


Figure 2: Overall Status of Witnessed physical and psychological Violence among AaBET and TASH ED HCWs, Addis Ababa, Ethiopia, June, 2008

Furthermore, BSc. Nurses account for 58.3% (21/36) of the physical attack cases; while no emergency year-III resident was physically attacked. However, there was no statistically significant association between being physically attacked and professional status; Exact $p=0.058$. (See Table 2) Neither there was statistically significant association of physical violence with place of work; $p= 0.430$.

Table 2: Demographic characteristics of AaBET and TASH ED HCWs exposed to physical and non-physical violence WPV, Addis Ababa, Ethiopia, June, 2018

Variables		Physical Violence				Non-physical Violence			
		Yes(n)	No(n)	X^2	P	Yes(n)	No(n)	X^2	P
Professional Status	MSc N.	4	5	7.381	0.061	8	1	0.288	0.866
	BSc N.	21	107			106	22		
	PGY-I	4	6			8	2		
	PGY-II	7	19			26	0		
	PGY-III	0 ^b	8			8	0		
Sex	Male	19	74	0.035	0.851	79	14	0.248	0.671
	Female	17	71			77	11		
Marital Status	Single	21	65	6.621	0.045	68	18	5.519	0.019
	LWP ^a	4	6			10	0		
	Married	11	74			78	7		
Do you feel safe?	Yes	17	60	0.403	0.526	70	7	2.509	0.113
	No	19	85			86	18		

a= living with a partner

b= those cells with 0 number of subjects are excluded in the X2 calculation.

The mean **age** for being physically attacked was 26.69 (± 1.327) while it is 27.31 (± 2.080) for not being attacked. The female to **male** ratio of those victims of physical abuse was 1:1.11. However, age and sex were shown to have no statistical significant relationship with physical abuse; (age: OR = 1.200, 95% CI (0.970 – 1.483); $p= 0.093$) and (sex: $p=0.851$).

Out of those who are abused physically, most of them were single (21/36). And it showed there was a statistically significant weak effect of marriage towards being physical abuse victim; $P=0.045$, Cramer's V = 0.185. With a closer scrutiny, those living with a partner were found to be 4.48 times more likely to be

physically abused than those married; OR = 4.484, 95% CI (1.089 – 18.51); p= 0.038. (See Table 2)

The mean year of experience was lower with physical abuse victims with 3.19 ($\pm$ 1.489) years while it is 3.94 ($\pm$ 1.784) years for those not physically abused. Further, there was an association of being a victim of physical abuse with year of experience. A person with a year more experience has 1.4 times less chance to be a victim of physical attack; OR = 1.387, 95% CI (1.059 - 1.817), p = 0.018.

A multivariate binary logistic analysis with complete model was conducted to calculate AORs, for those variables with $p < 0.2$. Hence, a less year of experience (AOR = 1.655, with 95% CI 1.059-2.587) and living with a partner (AOR = 5.181, with 95% CI, 1.09-24.39, $p=0.039$) were found to be associated significantly with physical abuse with 1.6 times and 5.18 times respectively. Otherwise, there was no statistically significant difference between being a nurse Vs resident or single Vs married.

Notably, majority of the valid participants (82.9% (29/36)) reported encountering the physical **violence 1-5** times; while 8.6% (3/36) reported to have the violence 6-10 times. Small fraction of the victims (12.1% (4/36)) claimed they were physically attacked with a weapon. Near half (52.8%) of the victims consider this type of attack to be typical of their ED. Relatives account for 54.3% of the attacks followed by staff member by 28.6%. The attacks predominantly (91.4%) happened with in the compound of the hospital.

5.3.2) physical violence; the reaction of the victim, reporting and repercussions

Overall, out of all who witnessed and/or experienced physical violence (82), the culture of reporting was found to be lower; it was only 20.7% (17/82) of them who reported the witnessed or experienced physical violence. Being a nurse or a physician was not significantly associated with reporting; $p=0.848$. (see Table 3)

Out of all those who experienced physical violence (36), 44.4% of them responded to the incident telling the attacker to stop; 41.7% of them took no action after the encounter; and 11.1% of them defended themselves physically. It was only 13.9% who reported to their senior or management staff. Only one (2.8%) sought transfer and no HCW prosecuted or claimed compensation.

The repercussions of the physical attack had an earnest impact on the mental as well as physical health of the victims after the incident. Due to the encounter, 55.6% (20/36) of them have said they were injured and 19.4% (7/36)

of them required even formal treatment. Repeated disturbed memories, and thoughts, avoidance of thinking or talking about the incident and being unusually super alert were punctuating in the lives and career time of the victims; with a range of a little to an extreme mental battery.

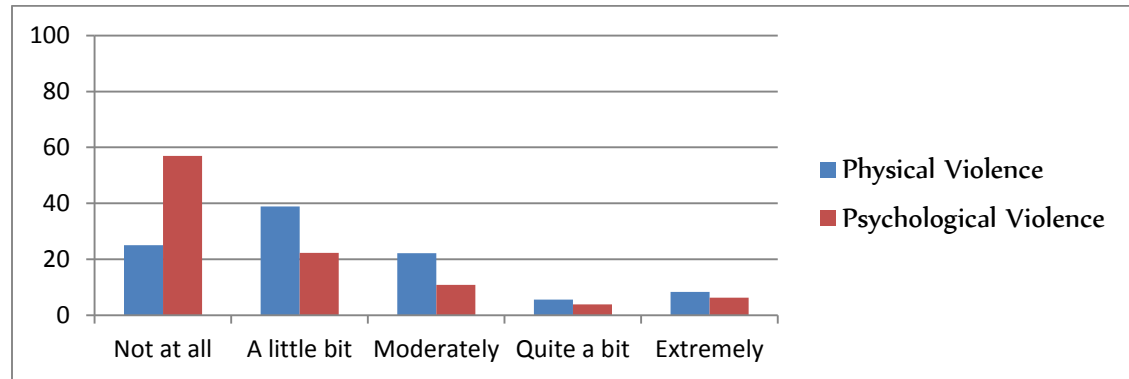


Figure 3: Repeated disturbing memories, thoughts, or images of the attack; Repercussions of the Physical and Psychological attack on HCW victims in the ED, Addis Ababa, Ethiopia, June 2018

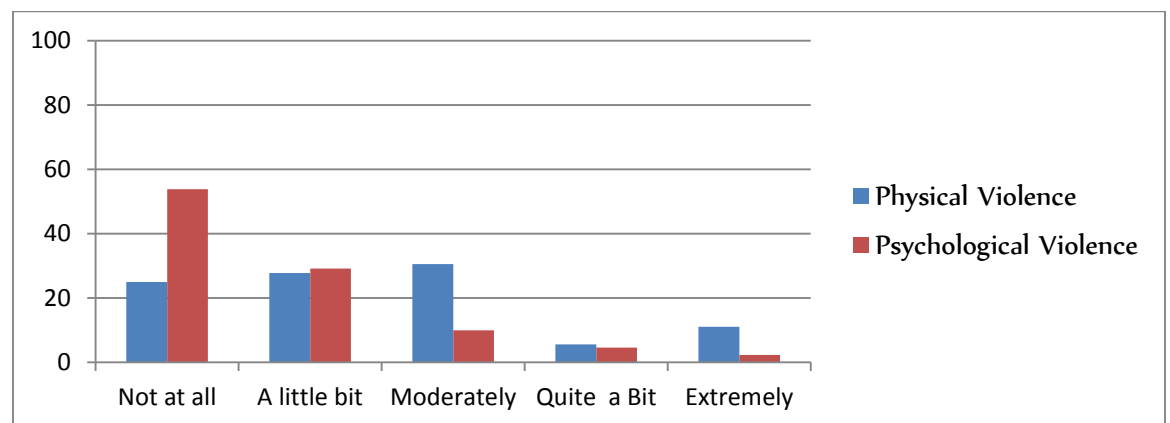


Figure 4: Avoiding thinking about or talking about the attack or avoiding having feelings related to it?; Repercussions of the Physical and Psychological attack on HCW victims in the ED, Addis Ababa, Ethiopia, June 2018

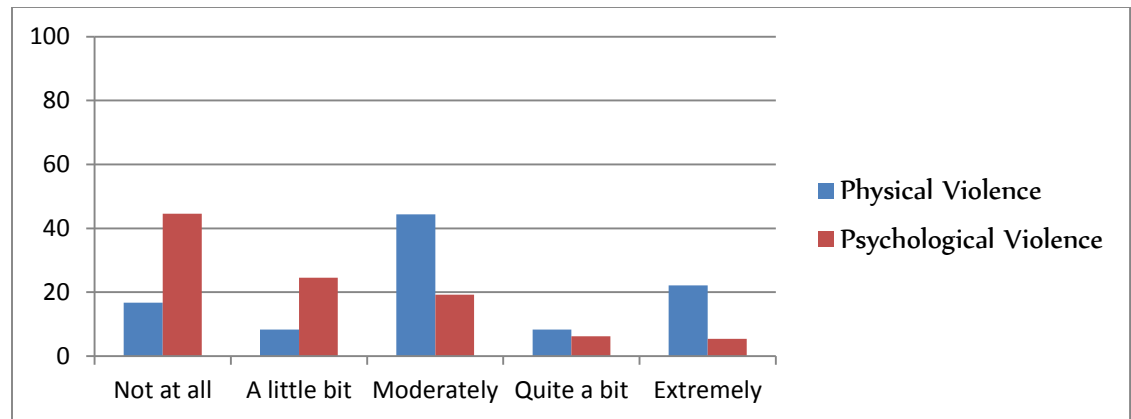


Figure 5: Being "super-alert" or watchful and on guard?; Repercussions of the Physical and psychological attack on HCW victims in the ED, Addis Ababa, Ethiopia, June 2018

In fact, after the physical battery, 30.6% (11/36) of the victims took a time off from work; which ranges from only a day to more than a month (single subject).

Despite this, it was only on 22.2% (8/36) cases in which formal investigation was undertaken. Half were conducted by Management and half by police (security guards). As a consequence, 13.8% (5/36) were reported to the police and another 5% (2/36) of the attackers had a verbal warning; and in another 2 cases, the HCW decided to discontinue the care of the patient. (See Table 3)

From those that let their case informed and investigated, 62.5% of them were provided with counseling. However, majority 62.5% (5/8) of those who reported were very dissatisfied in how the situation was handled; 25% (2/8) were dissatisfied and 12.5% (1/8) was indifferent. From overall cases of physical violence (those whose case was investigated & was not investigated), 61.1% (22/36) of them were very dissatisfied; 30.6% (11/36) of them were dissatisfied.

Using a chi square, association between satisfaction and offers by the management was statistically insignificant. A model conducted to establish an association using multinomial logistic regression was not statistically significant; $p=0.71$. This can be due to the small sample size which is 22 cases where formal investigation was conducted and management was involved.

Out of the 28 cases whose case was not investigated, the common reason for not reporting the case were commonly they feel that it is useless (15/28; 55.4%), they feel it is not important (12/28; 44.4%), and they don't know where to report (11 cases; 40.7%).

Table 3: Reporting status after WPVs among AaBET and TASH ED HCWs, Addis Ababa, Ethiopia, June, 2008

<i>Variables</i>		<i>Physical Trauma (n=36) (%(n))</i>	<i>Non-physical trauma (n=156) (%(n))</i>
<i>Proportion of HCWs^a who reported after experiencing the incident</i>		13.9% (5 cases)	5.1% (8 cases)
<i>Proportion of cases^b where formal Investigation was handled^c</i>		22.2% (8 cases)	10.9% (17 cases)
<i>Investigation by whom</i>	<i>Management or employer</i>	50%	53.3%
	<i>Police or Security</i>	50%	46.7%
	<i>Union/Association</i>		

a= after experiencing the physical assault, those victim HCWs who directly contacted the responsible person to report to.

b= Out of total cases of physical assault, in which formal investigation was done following a report directly from the victim or any one witnessing.

c= the rest are either nay or don't know.

5.3.3) physical violence; A common ground for prevention: reasons of attack

Despite the pervasiveness of the attacks, 72.2% of the victim HCWs said the physical violence could have been **prevented**; while the rest considered it to be unpreventable.

The most common inciting factors for being physically attacked from patient related factors were patient intoxication 44.4% (16/36) followed by adolescence age of the patient (36.1%; 13/36), educational and sociocultural factors of the attacker (22.2%; 8/36 cases each) and high expectation (16.7%; 6/36 cases). Out of the health care related factors, the commonest inciting factor was lack of training (36.1%; 13/36 cases), followed by less experience (19.4%; 7/36 cases), and understaffing (13.9%; 5/36 cases). And out of the environmental

related factors, the commonest reasons for physical violence were inadequate security (58.3%, 21/36 subjects), overcrowding (47.2%, 17/36 subjects), and negative media coverage (16.7%, 6/36 subjects). (See Figures 7, 8, 9)

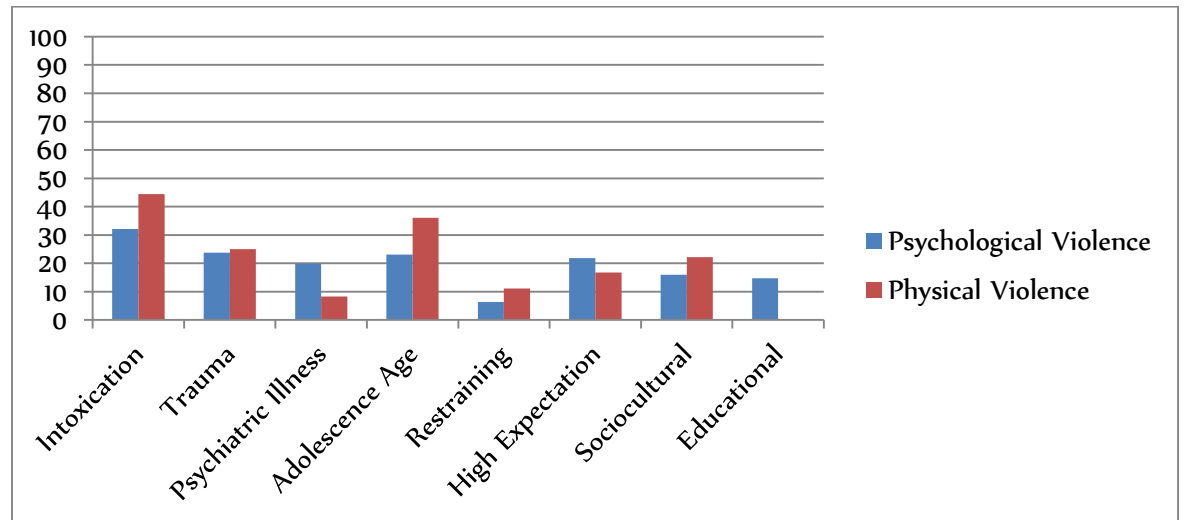


Figure 6: Patient related inciting causes of physical and psychological trauma in AaBET and TASH ED HCWs, Addis Ababa, Ethiopia, 2018

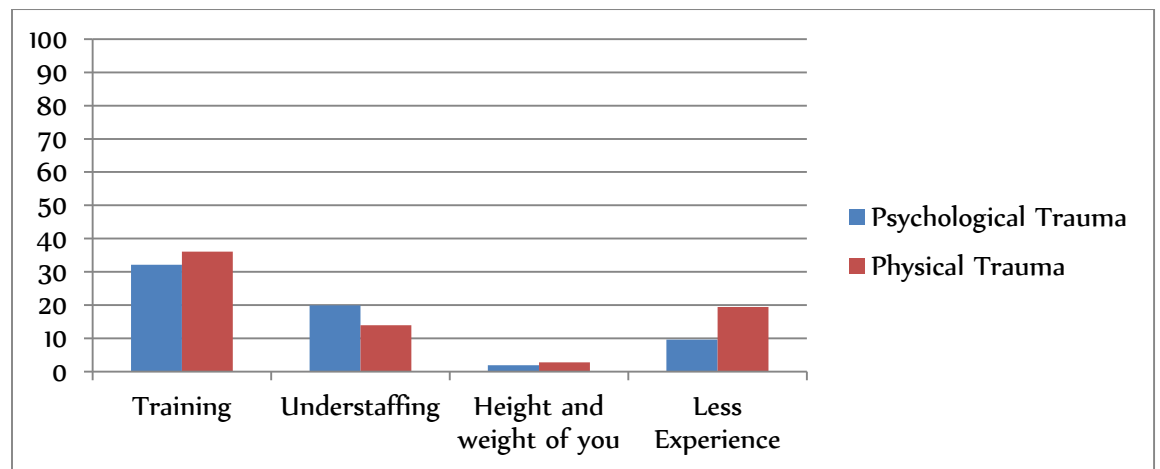


Figure 7: Health Care Worker related inciting causes of physical and psychological trauma in AaBET and TASH ED HCWs, Addis Ababa, Ethiopia, 2018

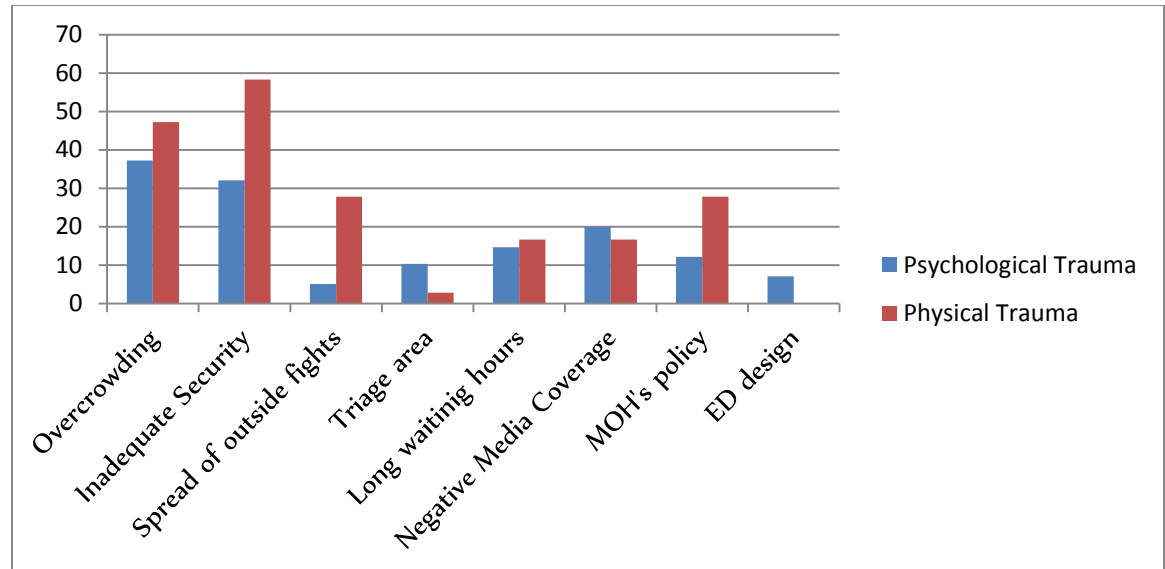


Figure 8: ED environment related inciting causes of physical trauma in AaBET and TASH ED HCWs, Addis Ababa, Ethiopia, 2018

5 4) Psychological Violence

5.4.1) Overall characteristics, magnitude and associated factors of physical violence

Majority of the HCWs (86.6%-156/181) were subjected to psychological violence. And besides, in the last 12 months, 45.3% (82/181) of all HCWs declared they have witnessed a psychological violence; with 35.4% (29/82) of them claiming only once; 34.1% (28/82) claiming 2-4 times; and other 2.4% (2/82 subjects) said they witness it daily.

Out of the psychologically attacked victims, around two third (67.9% (106/156)) of them were against BSc. Additionally, all (100%) of the PGY-IIIs and PGY-IIIs faced the non-physical trauma; while overall >80% of each profession of the rest were victimized psychologically. However, there was no statistically significant association between being psychologically attacked and professional status; $P=0.866$ & exact $p=0.912$. (See Table 1)

The mean age for being psychologically attacked was 27.24 (± 1.717) while it is 26.84 (± 3.132) for not being attacked. The female to male ratio of those victims of psychological abuse was 1:1.02. However, age and sex were shown to have no statistical significant relationship with psychological abuse; (age: OR = 0.892, 95% CI (0.705 – 1.128); $p= 0.339$) and (sex: $p=0.619$; exact $p=0.671$).

From those who are attacked psychologically, most of them (50%, 78/156) were married, 43.6% (68/156) single and 6.4% (10/156) living with a partner. All of those living with their partner (100%) were attacked psychologically. Marriage was having statistically significant weak effect on being psychological attack victim; $P=0.019$, exact $P=0.029$ and Cramer's $V=0.180$; Cox & snell R^2 and Nagelkerke $R^2=3.3-5.8\%$. In a closer look, being married was associated 2.9x more likely to be psychologically assaulted than being single. (See Table 2)

The mean year of experience is higher with psychological abuse victims with $3.90 (\pm 1.523)$ years while it is $3.08 (\pm 2.722)$ years for those not victims. Unexpectedly, the less experience is, the less chance of being a psychological victim with a strong effect size; OR = 0.689, 95% CI, 0.504 – 0.943, $p=0.020$.

A multivariate binary logistic analysis with complete model was again conducted to calculate AORs, for those variables with $p < 0.2$. Hence, being single has a 3.070 times less chance to be a victim of psychological attack than being married; with AOR=3.070, with 95% CI 1.100-8.567, $p=0.032$. Otherwise, there was no statistically significant difference between being a nurse Vs resident or those who feel safe or not.

Otherwise, 61.4% (94/156) of the victims claimed being attacked 1-5 times; 27.5% (42/156) of them 6-10 times; and 10.5% (17/156) of them >10 times. Majority (84.2%) consider this kind of attacks to be a typical incident of their ED. Most (38.5%: 60/156) of the attacks were performed by staff members themselves and 36.5% (57/156) by relatives. Alike physical trauma, nearly all (96.8%) of the incidents happened inside the hospital.

5.4.2) Psychological violence; the reaction of the victim, reporting and repercussions

After the psychological violence incident, 50.6% (79/156) of them responded to the incident telling the attacker to stop; 41.7% (65/156) took no action; and 16.0% ignored the incident as it never happened and did nothing. It was only 5.1% (8/156) cases that followed reporting and only 0.6% (one/156 case) that prosecuted the attacker.

The same as physical violence, the psychological attack, sexual harassments, racial harassments, slighting, insults, bullying and other non-physical assaults were found to have a dire effect on the HCW wellbeing and career. Mentally, the ranges of impact were varying in degree and are illustrated in figures 7, 8 and 9. In fact, owing to the encounter, 13.5% (21/156) of the victims have taken time off; and often, it was a day in 38.1% (8/21) and 2-3 days in another 38.1% (8/21) of cases.

Again, despite the large abundance, it was only on 10.9% of cases (17/156) that formal investigation was done following the incident. Mostly it was the management which handled the case (47.1%: 8/17 cases); followed by the police or security guard (35.3%: 6/17 cases). As an aftermath, in 41.2% of the cases, the attacker was warned verbally and in 23.6% (4/17 cases) patient care was discontinued. And in 11.8% (2 of the cases out of 17), nothing was done.

The management offered counseling to 41.2% of them (7/17 subjects). But still, 41.2% of cases (7/17 subjects) were very satisfied and 29.4% of them (5/17 subjects) were very dissatisfied. Counseling provided by the management, besides, did not show statistically significant association to satisfaction: $p = 0.528$ and exact $P = 0.467$. Nonetheless, the provision of the platform to report or speak and other support has a tendency to satisfy the victims highly; with $p = 0.038$ $p_{ET} = 0.044$ and $p = 0.014$ respectively. The model was, however, not fitting for multinomial logistic regression to establish association (p was > 0.05); due probably to very small number of the reporting subgroup.

Out of the 129 cases whose case was not investigated, the commonest reasons **for not reporting** were that they feel it is not important (70 cases; 54.3%), they feel it is useless (32 cases; 24.8%) and they don't know where to report (17 cases; 13.2%).

5.4.3) Psychological violence; A common ground for prevention: reasons of attack

However, 57.7% (90/172) of the health care workers said it could have been prevented; while the rest considered the psychological violence to be unpreventable.

The most common reasons for being psychologically attacked from the patient related factors are patient intoxication in 32.1% of cases (50/172 cases) followed by trauma (23.7%, 37/172 cases), adolescence age of the patient/relative (23.1%; 36/172 cases), high expectation (21.8%, 34/172 cases) and psychiatric illness (19.9%, 31/172 cases). Out of the health care related factors, the commonest attributing reason was lack of training (32.1%; 50/172 cases), followed by understaffing (19.9%; 31/172 cases). Height and weight of the HCW was only claimed to be a reason in $<2\%$ (1.9%, 3/172 cases). And out of the environmental related factors, the three most common reasons for psychological violence were overcrowding (37.2%, 58/172 cases), inadequate security (32.1%, 50/172 cases), and negative media coverage (19.9%, 31/172 cases). (See Figures 7, 8, 9)

CHAPTER SIX

DISCUSSION

6.1) Overall picture of violence

Nowadays, Workplace violence is one of the concerning global public health issues. It was found to be a factor contributing largely to the decrement in quality of care patient receives. For this, robust surveys done elsewhere in the globe showed WPV was abundant in volume and variety. In this research, the findings of violence in the ED of TASH and AaBET were neither eccentric. More than 86% of the ED HCWs were found to be victims of WPV in the ED. This was, however, non-conformist to the findings in the surveys done elsewhere in Ethiopia. The northwestern different hospitals and the Hawassan study showed 26-30% incidence; this difference in result was, however explicitly, produced by the difference in the settings the survey was done. The later both included all nurses in all departments a hospital, apart from the ED. Otherwise, comparing it to the international studies done elsewhere, where the prevalence ranges from 10% till overwhelmingly high as 100%, the finding in this survey showed there is a huge magnitude of violence in the ED in the respective hospitals.

6.2) Magnitude and characteristics of physical violence

In this study, based on the aforementioned definitions, 19.9% of the HCWs in the ED were victims of physical abuse. And majority (82%) of the physical trauma subjects faced the trauma only 1-5 times. This figure bespeaks that these EDs are not violent-free environments, even if it may not be frequent and day to day phenomenon. Moreover, almost half (47.2%) of the subjects also clarified this type of violence to be typical of their EDs; and more than 34% have additionally witnessed a physical violence in the ED, intensifying the notion that physical violence is an animating problem.

The utilization of weapons in this survey was found to be low; but still concerning. It was 12.1% of the physical assault cases which involved a weapon. However, in other parts of the world a varying range of utilization of weapons were seen; In the US emergency departments, there is an enormously high incidences of shootings, use of knives and other dangerous materials; in which interestingly, reports claimed those materials are faced weekly or daily in as high as 20% of the EDs. Alike the findings of this study, in most other parts of the world, however, the use of weapons were lower; Nigerian ED nurses (~15%); Australian ED nurses (~10%) and Pakistan, Karachi (~30%).

For a physical trauma, relatives of the patient were the most attacking groups (54.3%); followed by staff members 28.6%. However, for non-physical trauma, which includes inappropriate sexual approaching, staff members were more commonly assaulting group than relatives; 38.5% Vs 36.5%. This was slightly different from that of the Chinese and Nigerian studies.

In the Chinese study, relatives were accounting for more than 80% of the attacks. However, this was owing to the national policy China has on compensation to the patient and his/her family after an alleged incident or event in medical proceedings. Otherwise, in Nigeria, relatives were also the dominating group of people to pose threat and attack.

Compounded with the culture of collectivism; which invites a lots of relatives to come when a single patient is sick; the lack of (or at least not practical) policy of attendant restriction to an ED and presumed belief among the society that it is at worse stage of a disease if any patient visits those tertiary hospitals might be an inciting entity for relatives to constitute large proportion of the attackers. Moreover, staff members were contributing largely in this study; may be because sexual assaults were not specified in the data collection; and/or the ED administration system, shortage of human power, and shortage of medical supplies might peak the staff member's contribution.

6.2) Magnitude and characteristics of non-physical/psychological trauma

Regarding non-physical trauma, the magnitude that was found counterforts the concern. Because more than 86% of the HCWs in the ED faced the psychological trauma, the pressure on the HCW to work in the emergency department seemed to be heavy. In fact, more than 80% of the HCWs consider this type of violence to be typical of the ED; and more than 60% of the HCWs faced it 1-5times.

The professional status does not seem to be conferring any protection towards psychological trauma; since in all types of profession, the prevalence was more than 80% and in the PGY-II and PGY-III, it was exactly 100%. However, the rate of physical violence was higher in BSc. Nurses and PGY-Is. From this standpoint, it is sound to say that there is a higher risk of having altercations in all ED HCWs, especially senior residents due to being the higher responsible body to decide difficult and ethically challenging tasks, and possible referrals they can get from their junior residents and nurses looking for a decision. However, owing to the notable ability of the senior residents to communicate and bargain as well as the experience they might have in reading cues of heightened confrontations with a potential of threading towards physical violence, none of the senior PGY-III

residents were attacked physically; so they might have a better tendency to quell physical contacts and attacks. However, overall, there was found to be no significant association between profession and WPVs type.

6.3) Associated factors of WPV

The association of physical attack with age, sex, place of work (TASH Vs AaBET), and marital status (*married Vs single*) was not statistically significant. The later implies that it is the same ambiances both ED departments carry, including the burden and acuteness of the type of ailments they treat. Apart from the year of experience which is protective, living with a partner was found to have statistically significant risk to be attacked physically than being married; AOR = 5.18 times. This was unexplained with any reason; but probably more samples might be needed for confident conclusion. In parallel, the northwestern Ethiopian study suggested for nurses, being married was protective to violence overall 8-9 times than being single; explained by the cultural virtue of the society.

On the other hand, in this study, near half of BSc. Nurses (44.4%) and PGY-I (40%) have been traumatized physically in the last 05 months; while none of PGY-III has experienced that. This was explained with the possibility that less years of experience and more time of exposure to the relatives and patients might make them easily liable to such violence. Each year of experience was found to be protective 1.65 times to physical trauma. However, profession by itself was found to have neither a predisposition nor a protective influence on physical violence.

Even if age and sex are not associated with psychological violence statistically significantly, being married was associated 3.07 times than being single to be attacked psychologically, and each year of experience has 1.45 times more risk for a psychological attack. Therefore, this could be explained by the inevitable nature of violence that happens in the ED in all HCWs without distinguishing. However, those who are experienced, and possibly married, become volunteered and take responsibility than the otherwise, and involve in the verbal or non-physical altercations. Plus, due to the ability ease a heightened hostility verbally and ability to read cues and quell when hostility reaches at climax, those who are experienced and possibly married have a tendency to have less physical trauma but more psychological trauma. It might also be explained by the society's intrinsic respect and lack of audacity to attack married HCWs physically.

6.4) Reporting

Alike the WHO report and other surveys, in this survey, cases were found to be way too much underreported. Overall, out of those who ever experienced and/or witnessed with in the last 12 months; it was only 20.7% of the HCWs who

reported the physical trauma. In fact, from the get go, more than 80% of the population claimed there is no or they don't know any reporting procedure; albeit most of those who know that there is a procedure (87.9%) know how to utilize it.

And out of those experiencing physical trauma within the last 05 months, the victim directly reported in only 13.9% (5) cases; and out of all cases, it was only 22.2% (8 subjects) of cases that formal investigation by police or management was conducted. [5, 7, 11] see table 2. It is also similar in psychological violence, in which only 5.1% of subjects directly went and reported; while only 10.9% of all the happenings will fall on the hands of the management or police for a formal investigation.

In one way or another, despite the fluctuant number, under reporting is believed to pervade throughout hospitals. In the US EDs, the actual reportable cases are thought to be three times than those who are reported or registered: which means it is around 25% that are reported. This data conforms to what we have in our survey. Moreover, physical trauma tends to be reported more than psychological trauma, (13.9% Vs 5.1%), as it was seen in the Australian ED nurses study (30% Vs 9%). [5, 7, 11, 30, 32]

In the study in Ismailia, Egypt, 29.5% and 23.4% of those with psychological trauma and physical trauma respectively were reported; for unexplained reasons, the reporting in Egypt was more common with psychological trauma than physical. Despite this, 60 % of these reports, simply go uninvestigated or ignored which makes the reporting less useful. In our survey, it was 22.2% and 10.9% of the physical and psychological traumas which were investigated; otherwise, are not. This shows the culture of acceptance that HCWs have towards violence; and above all, the acclimation of the management towards the belief that it is not something serious to deal with; despite the fact that it blights hugely to the productivity and career of the HCW as well as the quality of care patient receives.

In our study, several reasons were put forward for not reporting a physical violence in the ED, and most subjects (more than half) claimed it was useless to report; for not a change to come and 40% don't know where to report. With fluctuated number, these are also the common reasons in psychological trauma. This showed that a lot do not know even where to report and the hopelessness feeling they have towards the solving body.

6.5) Consequences on the victim and patient

After being a victim of the violence, the stress and ill picture residing in the minds of the HCWs was distraughting, daunting and counterproductive; in

particular, it was worse for physical violence. Even as high as 30.6% (11) and 13.5% (16) of the victims of physical and psychological trauma respectively were unable to bear the incident and took a time off; or got their duty covered; and to the worst took a month break as an annual leave. Stretching its effect to the patients, let alone the care, in some cases there were discontinued or delayed patient treatments, despite the acuteness of the disease of the patient.

Collection of these long lasting memories and traumas will finally grow feelings of apathy, dissatisfaction, carelessness for the quality of care they can give and finally possess a despairing career life. Moreover, inclusive of those whose violence case was investigated, more than 60% of those who faced physical trauma and 29% of those who faced non-physical trauma were extremely dissatisfied with the way the case was handled.

6.6) Understanding the inciting causes; a stepping stone for prevention

As mentioned, the ED is naturally or intrinsically vulnerable to violence. It can be due to the natural physiology and acuteness of a disease or it can have a reasonable background inviting aggression and hostility or just can have way different motive than patient-HCW relationship or it can be due to irrational and baseless incitation or belligerence. In fact, based on the definition taken, one of the largest WPV mentioned includes the 9/11 attack. Therefore, it is generally believed that WPVs can be prevented but can never be eliminated. What was seen in our survey too exemplifies this notion. It was only 72 % of the cases of physical attack and 57% of the cases of non-physical attack that might have been prevented; but otherwise were considered to be unpreventable by the victims.

The most common associated factors mentioned were liable to expose the HCW into violence were patient/relative related factors intoxication, adolescence age and educational and sociocultural background of the attacker. While from the HCW related causes, lack of training, less experience and understaffing were the commonly contributing factors; and from the ED environment causes, inadequate security, overcrowding and negative media coverage were the three most common causes of an attack. Reiterating the concept that ED violence cannot be completely eradicated but lessened; we can see the associated factors to be not all the time preventable. However, as in few surveys, such as china, negative media coverage was mentioned as contributing factor for rough patient HCW relation. So fair, balanced and authentic media information should be assured by MOH or else, to smoothen the relation and trust a patient have with his care taker.

CHAPTER SEVEN

CONCLUSION, RECOMMENDATION AND LIMITATION

8.1) Conclusion and recommendation

In summary, this survey showed that despite the God-granted right to live and work in harmony, the magnitude of WPV in the ED health care workers is huge; and, underreporting made it undermined. Despite the inevitable nature of violence inciting conditions in the ED, different associated factors and contributory factors were found; but majority of them were preventable. So preventive strategies should be thoroughly sought and applied. Reporting protocols should be made available in explicit manner and all members should be able to know the procedures. Trainings and educational programs for communication, smoothening relationships with the media to enhance awareness among the public, restriction of attendants and taking reported cases seriously should also be performed. Further surveys among the country are also needed for a better picture in different type of societies and for helping a program of launching trauma centers and huge emergency departments.

8.2) Limitation of the study

The first limitation is accredited to the study design; A cross-sectional study, here, it might beget a recall bias. The HCWs should have detailed memory of the incident either 05 months for experienced violence or 12 months for witnessed violence; which might aberrate the results. The other consequence of this study design was the fact that a cause and effect cannot be established. Besides, because of the very low number of reporting HCWs, associations of the level of help or support they are provided with satisfaction level was not made.

The second limitation arises due to the sampling. It was a convenience sampling; which might increase the selection bias; esp for nurses. Stratified quota sampling was performed for nurses overall and residents; but was not practical with in each year of residency or level of education of the nurses (BSc. Vs MSc.).

Data gathering procedure was utilized via self-report questionnaire. In order to cross check, and make the data gathered more credible and accurate, focused group discussion and interviews might have been added. Besides, sexual violence would have been better to study sexual violence in a different data collection tool than just adding it into non-physical violence; which gave us a vague picture of it.

The other limitation is due to the studied group. It was only the nurses and residents which were studied. This in somehow might give a different picture from the real one; because members such as in-service residents, interns, Emergency Senior physicians, pharmacy personnel, administration members, and security guards; and above all, sanitary personnel and porters are not included.

The external validity this survey can have may be is limited. Firstly, the set up this research was made was to EDs where there is a EM & CC teaching department. Additionally, the hospitals which are chosen are high level/tertiary hospitals in which the cases are more complicated and diseases are at very extreme end. Thirdly, the study excludes pediatrics EDs, psychiatric EDs and gynecologic and obstetric EDs (in which emotions and sensitivity is likely exuberant). No matter generalizing to other general or primary hospital EDs might be premature, the results of this survey, however, are a great input in revising policies and switching the plans of ED constructions where Ethiopia is heading towards more to quality and compassionate care than the mere buildings.

8.3) Conflicts of interest

None

CHAPTER EIGHT

ANNEX

Annex 1) QUESTIONNAIRE⁴⁴

Please complete the questionnaire by either ticking boxes or writing in the spaces provided. The answers are completely confidential and are not intended to be shared with anyone.

If you don't know how to answer one question, just go on to the next one.

PERSONAL AND WORKPLACE DATA

1. What is your age: _____
2. Are you: ☐ Female ☐ Male
3. Your marital stat ☐ Single ☐ Living with partner
☐ Married ☐ Separated /divorced ☐ Widow/widower
4. Which category best describes your present professional group

☐	Emergency Senior Physician	☐	Emergency Resident Year I
☐	Msc Nurse	☐	Emergency Resident Year II
☐	Bsc Nurse	☐	Emergency Resident Year III
5. How many years of work experience in the health sector do you have:

6. In your main job, do you work:
☐ Full-time ☐ Part-time ☐ Temporary/casual
7. Do you have routine direct physical contact (washing, turning, lifting, & so on) with patients/clients?

☐ Yes ☐ No
8. Please indicate if you spend more than 50% of your time working with any of the following type of specialties:

☐	Physically disabled	☐	HIV/AIDS
☐	Terminally ill	☐	Trauma Patients
☐	Psychiatric	☐	Geriatric

Other, *please specify*: _____

9. Do you feel safe in your Emergency Department?
☐ Yes ☐ No

10. How worried are you about violence in your current workplace?
(Please rate: 1 = not worried at all; 5 = very worried)
☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

11. Are there procedures for the reporting of violence in your workplace?
☐ Yes ☐ No *If NO, please go to question number 12*

11.1. If YES, do you know how to use them?
☐ Yes ☐ No

Yes
12. Is there encouragement to report workplace violence?
☐ No *If NO, please go to next section or question number 13*

12.1. If YES, by whom
☐ Management ☐ Colleague ☐ Union/Association
☐ Own family/friend ☐ Other, *please specify*: _____

PHYSICAL WORKPLACE VIOLENCE

PLEASE NOTE: Physical violence refers to **the use of physical force** against another person or group that results in **physical harm sexual or psychological harm**. It can include beating, kicking, slapping, stabbing, shooting, pushing, biting, and/or pinching, among others.

13. In the last 05 months, have you been physically attacked in your workplace?

- ☐ Yes , *please answer questions 13.1 through 13.12*
☐ No , *if NO, please go to question number 14*

13.1. If yes, How many times

- ☐ 1-5 times ☐ 6-10 times ☐ More than 10 times

13.2. Please think of the last time that you were physically attacked in your place of work. How would you describe this incident?

- ☐ Physical violence without a weapon
☐ Physical violence with a weapon

13.3. Do you consider this to be a typical incident of violence in your workplace?

- ☐ Yes ☐ No

13.4. Who attacked you?

- ☐ Patient/client ☐ Relatives of patient/Client
☐ Staff member ☐ Management/Supervisor
☐ General public
Other, *please specify*: _____

13.5. Where did the incident take place?

- ☐ Inside health institution or facility
☐ Outside (on way to work / health visit / home)

13.6. How did you respond to the incident?

Please tick all relevant boxes

- ☐ Took no action
☐ Tried to pretend it never happened
☐ Told the person to stop
☐ Tried to defend myself physically
☐ Told friends/family
☐ Sought counseling

- ☐ Told a colleague
☐ Reported it to a senior staff member
☐ Transferred to another position
☐ Pursued prosecution
☐ Completed a compensation claim
 Other:_____

13.7. Do you think the incident could have been prevented?

☐ Yes ☐ No

13.8. Were you injured as a result of the violent incident?

☐ Yes ☐ No; if NO, please go to question 13.9

13.8.1. IF YES, did you require formal treatment for the injuries?

☐ Yes ☐ No

13.9. Listed below are a list of problems and complaints that people sometimes have in response to stressful life experiences like the event that you suffered. *For each item, please indicate how bothered you have been by these experiences since you were attacked. Please tick one option per question.*

Table

Since you were attacked, how bothered have you been by	Not at all	A little bit	Moderately	Quite a Bit	Extremely
Repeated disturbing memories , thoughts, or images of the attack?					
Avoiding thinking about or talking about the attack or avoiding having feelings related to it?					
Being "super-alert" or watchful and on guard?					

13.10. Did you have to take time off from work after being attacked?

☐ Yes ☐ No; if NO, please go to question 13.11

13.10.1. If YES, for how long?

☐ One day ☐ 2-3 days ☐ One week
☐ 2-3 weeks ☐ 1 month ☐ more than one month

13.11. Was any action taken to investigate the causes of the incident?

☐ Yes

☐ No

☐ Do not know

IF NO or DON'T KNOW please go to question 13.12

13.11.1. IF YES, by whom:

☐ Management

☐ Police

Other,

please

specify: _____

13.11.2. What were the consequences for the attacker?

N ☐

V ☐ warning

Ca ☐ discontinued

Reported to

pc ☐

Aggressor prosec ☐ Don't know

☐

Other: _____

☐

13.11.3. Did your employer or supervisor offer to provide you with:

Counseling

Y ☐

N ☐

Opportunity to speak /report it

Y ☐

N ☐

Other support?

Y ☐

N ☐

13.11.4. How satisfied are you with the manner in which the incident was handled?
(Please rate: 1 = very dissatisfied, 5 = very satisfied)

☐ 1

☐ 2

☐ 3

☐ 4

☐ 5

13.12. If you did not report or tell about the incident to others, why not?

Please tick every relevant box

It was not important

Felt ashamed

☐

Felt guilty ☐

Afraid of negative

☐ consequences

☐ Useless

Did

not know who to report to

Other,

please

specify: _____

14. In the last 12 months, have you witnessed incidents of physical violence in your workplace?

☐

Yes

☐

No; if NO, please go to question No 15

14.1. If YES, how often has this occurred in the last 12 months?

☐ Once ☐ 2-4 times ☐ 5-10
times

☐ Several times a month ☐ about once a week ☐ Daily

15. Have you reported an incident of workplace violence in the last 12 months?
(Witnessed or experienced)

☐ Yes ☐ No

16. What things do you think have contributed to that violence that happened to you
or witnessed by you?

16.1. Patient related factors

- ☐ Substance and alcohol intoxication
- ☐ Trauma
- ☐ Mental illness
- ☐ Dementia
- ☐ Adolescence age of the patient
- ☐ Restraining the patient
- ☐ Unrealistic expectations of the patient
- ☐ Sociocultural background of the patient
- ☐ Educational background of the patient
- Other: _____

16.2. Healthcare worker related

- ☐ Lack of training
- ☐ Understaffing
- ☐ Height and weight of you
- ☐ Less experience on the ED
- Other: _____

16.3. Emergency environment related

- ☐ Overcrowding
- ☐ Inadequate security
- ☐ Spread of outside fights
- ☐ Triage area
- ☐ Long waiting hours
- ☐ Negative media coverage
- ☐ Ministry of Health's policy towards violence
- Other: _____

PSYCHOLOGICAL WORKPLACE VIOLENCE

Please note: Psychological violence can include **verbal abuse, bullying, mobbing, insulting, sexual harassment or racial harassment.**

17. In the last 05 months, have you been verbally violated psychologically in your workplace?

☐
☐

Yes , *please answer questions 17.1 through 17.10*

No , *if NO, please go to question number 18*

17.1. If yes, How many times

☐

times

6- ☐ nes

M ☐ an 10 times

17.2. Do you consider this to be typical incident of violence in your workplace?

☐

Yes

☐

No

17.3. Please think of the last time that you were psychologically attacked in your place of work. Who verbally abused you?

☐

Patient/client

☐

Relatives of patient/Client

☐

Staff member

☐

Management/Supervisor

☐

General public

Other, *please specify:* _____

17.4. Where did the incident take place?

☐

Inside health institution or facility

☐

Outside (on way to work / health visit / home)

17.5. How did you respond to the incident?

Please tick all relevant boxes

☐

Took no action

☐

Tried to pretend it never happened

☐

Told the person to stop

☐

Tried to defend myself physically

☐

Told friends/family

☐

Sought counseling

☐

Told a colleague

☐

Reported it to a senior staff member

☐

Transferred to another position

☐

Pursued prosecution

☐

Completed a compensation claim

Other: _____

17.6. Listed below are a list of problems and complaints that people sometimes have in response to stressful life experiences like the event that you suffered. *For each item, please indicate how bothered you have been by these experiences since you were abused. Please tick one option per question.*

Table

Since you were attacked, how bothered have you been by	Not at all	A little bit	Moderately	Quite a Bit	Extremely
Repeated disturbing memories, thoughts, or images of the attack?					
Avoiding thinking about or talking about the attack or avoiding having feelings related to it?					
Being "super-alert" or watchful and on guard?					

- 17.7. Do you think the incident could have been prevented?
☐ Yes ☐ No
- 17.8. Did you have to take time off from work after being attacked?
☐ Yes ☐ No; if NO, please go to question 17.9

17.8.1. If YES, for how long?

- ☐ One day ☐ 2-3 days ☐ One week
☐ 2-3 weeks ☐ 1 month ☐ more than one month

17.9. Was any action taken to investigate the causes of the incident?

- ☐ Yes ☐ No ☐ Don't know

IF NO or DON'T KNOW please go to question 17.10

17.9.1. IF YES, by whom:

- ☐ Management ☐ Police

Other, please specify: _____

17.9.2. What were the consequences for the attacker?

N ☐ V ☐ warning Ca ☐ discontinued " Reported to
pc ☐ Aggressor prosec ☐
Other: _____
☐ Don't know

17.9.3. Did your employer or supervisor offer to provide you with:

Counseling Y ☐ N ☐
Opportunity to speak /report it Y ☐ N ☐
Other support? Y ☐ N ☐

17.9.4. How satisfied are you with the manner in which the incident was handled?
(Please rate: 1 = very dissatisfied, 5 = very satisfied)

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

17.10. If you did not report or tell about the incident to others, why not?

Please tick every relevant box

☐ It was not important ☐ Felt ashamed
☐ Felt guilty ☐ Afraid of negative
☐ consequences ☐ Useless Did
not know who to report to Other, please
specify: _____

18. In the last 12 months, have you witnessed incidents of physical violence in your workplace?

☐ Yes ☐ No; if NO, please go to question number 19

18.1. If YES, how often has this occurred in the last 12 months?

☐ Once ☐ 2-4 times ☐ 5-10
times
☐ Several times a month ☐ about once a wee ☐ daily

19. What things do you think have contributed to that violence that happened to or witnessed by you?

19.1. Patient related factors

- ☐ Substance and alcohol intoxication
- ☐ Trauma
- ☐ Mental illness
- ☐ Dementia
- ☐ Adolescence age of the patient
- ☐ Restraining the patient
- ☐ Unrealistic expectations of the patient
- ☐ Sociocultural background of the patient
- ☐ Educational background of the patient
- ☐ Other: _____

19.2. Healthcare worker related

- ☐ Lack of training
- ☐ Understaffing
- ☐ Height and weight of you
- ☐ Less experience on the ED
- ☐ Other: _____

19.3. Emergency environment related

- ☐ Overcrowding
- ☐ Inadequate security
- ☐ Spread of outside fights
- ☐ Triage area
- ☐ Long waiting hours
- ☐ Negative media coverage
- ☐ Ministry of Health's policy towards violence
- ☐ Environmental Design of the ED
- ☐ Other: _____

OPINIONS ABOUT PREVENTIVE STRATEGIES

20. Has your emergency developed policies on Preventive strategies?

☐ No (if your answer is No, go to ☐ question number 20)

20.1. What are the preventive strategies?

Security and legal measures against the perpetrator

☐ Health Care Staff only areas restricted to any other

Increasing staff members

Counseling

☐ Early notification of patient behavior

Trainings (Including Self Defense)

☐ Metal and gun screening at the door

Other: _____

21. In your opinion, what things should be done in order to reduce the risk of work place violence in your area?

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There are approximately 20 lines visible. The paper has a slight shadow on the right side, suggesting it's resting on a surface.

Thank You very much!

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Declaration

I the undersigned declare that this thesis is my original work and it has not been presented for a degree in any other University.

All source materials used have been duly acknowledged.

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