ADDRESSING VIOLENCE AGAINST HEALTH CARE IN PESHAWAR

A MIXED METHODS STUDY

VIOLENCE AGAINST HEALTH CARE MUST END

IT'S A MATTER OF LIFE & DEATH

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ACKNOWLEDGEMENTS

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The research study was made possible through the efforts and support of the Health Department, Khyber Pakhtunkhwa (KP), and administration of the health-care facilities involved.
We are grateful to the honourable Vice Chancellor of Khyber Medical University, Professor Arshad Javaid, and Registrar of Khyber Medical University Professor Saleem Gandapur for their support and facilitation.

Lastly, we want to acknowledge all health-care personnel who participated in this study and gave their valuable time to make this research document possible.

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FOREWORD

Health Care in Danger (HCiD) is an initiative of the International Red Cross and Red Crescent Movement aimed at addressing the issue of violence against patients, health workers, facilities and vehicles, and ensuring safe access to and delivery of health care in armed conflict and other emergencies. Under the HCiD initiative, the International Committee of the Red Cross (ICRC) has engaged in humanitarian diplomacy with States, multilateral organizations and other key parties concerned in diverse settings and has been able to introduce measures for the protection of health care.

Safeguarding health care against violence is imperative for ensuring safe and efficient access to and delivery of health-care services. With emphasis on consolidating evidence-based practices, stimulating systems thinking and sustainability for strengthening local health-care systems in Pakistan, the ICRC has been able to forge partnerships and working relations with local health-care authorities, public health institutions, medical academia, health-care facilities and civil society. This approach has given us an insight into the issue of violence against health care and helped us come up with some tangible measures in the form of training sessions for health staff, awareness campaigns aimed at general public, new legislation protecting health care, publications and tools for protection of health care against violence. The success of these ICRC-supported initiatives for protection of health care stems from contextual relevance of the responses, crafted in collaboration with a set of immensely talented experts, and the receptiveness of provincial health-care authorities.

The current report is a continuation of the ICRC's efforts to increase evidence base and develop a deeper understanding of the dynamics of violence against health care. We believe that the development of effective and impactful practical measures, relevant policies and legislation, and potent advocacy and awareness tools for protection of health care against violence needs to be guided by evidence and understanding of the context.

The ICRC's relationship with Pakistan, and particularly with the people of KP, is decades old. From the establishment of first-aid posts along the Afghan border in 1980s and directly running hospitals in KP to partnering with the government health authorities for cultivating excellence in health-care practices and working towards respect for health care – we have covered a long way.

Currently, the ICRC is running a training programme with the help of public and private medical teaching institutes for improving clinical management of the weapon wounds. We have also collaborated with Lady Reading Hospital to strengthen the response to mass casualty through an integrated approach and are developing a referral system that takes quality health care to hospitals in districts of former Federally Administered Tribal Areas (FATA). Besides these, we are also helping the KP government integrate physical rehabilitation of people with disabilities in the existing health-care setup. The journey does not end here. Together, with health departments and other partners, we will continue achieving milestones on the road leading to a health-care system in Pakistan that will be on par with international standards in all respects.

We are thankful to the academics, field research team and administration of Khyber Medical University for conducting this study that will hopefully be translated into policy and legislative and practical measures for safeguarding health care in Peshawar and the rest of KP. We are grateful to the KP Health Department, health-care personnel and administrators of health-care facilities for facilitating this study.

Ending violence against health care is a challenge beyond the undertaking of any single institution and requires local ownership, engagement and involvement of all stakeholders concerned. The dedication of our partners, the responsiveness of health-care administrators and authorities, and the activism of civil society fills one with the hope that success is not beyond us.

Reto Stocker
Head of Delegation
ICRC Pakistan

Message from the Minister of Health, Government of Khyber Pakhtunkhwa

It gives me immense pleasure to felicitate the Institute of Public Health and Social Sciences, Khyber Medical University and the ICRC for undertaking this groundbreaking research study. I am certain that this report will serve to guide policymakers in ensuring a safe and secure health-care environment where patients benefit from high quality health-care services.

I will take this opportunity to reiterate the commitment of the Government of Khyber Pakhtunkhwa (KP). Working towards prevention of all forms of violence in health-care settings is underlined by the dedication of the Government of KP to enhance the quality of health-care services and to improve the access to these services. The Department of Health, KP, will take all measures to bring about relevant policy and legal changes identified in the review of legal framework of KP, jointly conducted by the ICRC and Department of Health, to improve the working conditions of health-care personnel. The Department of Health will continue to raise awareness among the general community so that due respect is accorded to health care.

Congratulations to Dr Zia ul Haq and his team.
May Almighty Allah make our endeavours successful.

Mr Hisham Inamullah Khan
Minister of Health, Government of Khyber Pakhtunkhwa

Message from the Vice Chancellor, Khyber Medical University, Peshawar

I am extremely delighted that the Institute of Public Health & Social Sciences, Khyber Medical University (KMU), in collaboration with the ICRC, has successfully completed this valuable research providing insights into a much neglected issue. This report is also a continuation of KMU delivering on its mandate to lead the improvement of medical education and to undertake rigorous research to guide health-care policies in the province.

Based on my experience as a clinician, I can relate to the findings of this report. In an over-burdened health-care system, it is imperative to ensure an efficient delivery of services, an objective that cannot be achieved without providing a safe work environment to health-care personnel.

The need for implementing policies and measures ensuring protection of health care and raising awareness in the general community regarding the workings of the health-care system and the respect of health care is high. It is also important that health-care workers continue to improve their skills and adherence to ethical practices to further augment the respect and honour that has been traditionally afforded to them.

I hope that the findings of this research will be translated into effective measures for the prevention of violence against health care.

Prof Dr Arshad Javaid
Vice Chancellor, Khyber Medical University

EXECUTIVE SUMMARY

"Incidents of violence create a chaotic environment in the institution. It has a very bad impact on health sector as a whole. Every other day, doctors are leaving the country and moving abroad to avoid this." – A health care worker from Peshawar.

Violence against health care, including patients, health-care providers, health-care facilities and transport, is a phenomenon that hinders and negatively affects the provision of health care across the globe, and Pakistan is no exception. Beyond the immediate material and human consequences such as injury, loss of life and damage to infrastructure, violence against health care also has far reaching, long-term consequences affecting the access of population to health-care services, and ultimately a catastrophic impact on public health.

As part of the Health Care in Danger (HCiD) initiative, since 2011 the ICRC has been working towards the prevention of all forms of violence against health care. The HCiD initiative has adopted an evidence-based approach aimed at designing relevant activities to reduce and prevent violence, fostering awareness about the problem, and to leading efforts for policy and legal changes that protect health care against violence.

Expanding the evidence base regarding violence against health care is a cornerstone of the HCiD initiative in Pakistan. In the absence of institutional data collection and reporting of violent incidents, research studies play a pivotal role in understanding the issues and designing counter measures. Previous HCiD research study in Karachi, Sindh Province, has already shaped responses that are now being used by leading universities, hospitals and ambulance services to protect health care. The research has also served as a concrete and successful advocacy tool for new policy and legal measures introduced by the Sindh Provincial Assembly in 2018.

In the absence of previous studies on the prevalence, types and risk factors of violence against health care in Khyber Pakhtunkhwa (KP) province, this study was conducted to fill the evidence gap and to enable policymakers and planners to reach evidence-based decisions. The objectives of this study were to determine the prevalence of violence against health care and its associated factors, and to explore the perceptions of health care regarding violence in Peshawar district, KP.

The study was conducted in Peshawar district from 15 April till 30 November 2017. This was a mixed method research with quantitative and qualitative components. A total of 842 questionnaires were collected through random sampling. Ten focus group discussions and three in-depth interviews were conducted. The participants included in the study were doctors, nurses, physiotherapists, paramedics, ambulance staff, health-care administrators, ward staff, computer operators, media representatives and police personnel.

The findings of the study reflect the magnitude and frequency of violence against health care and the burden that this problem imposes upon an already overburdened system. The results of the study show that more than half (51%) of the participants had experienced and/or witnessed violence in the 12 months preceding the study. Instances of verbal aggression or violence (49.98%) being witnessed and/or experienced were higher than physical violence (23.67%). The main perpetrators of violence were attendants of patients, the patients themselves, members of the general public and members of security escorts. As many as 61% of the respondents were worried about violence at their workplace while around two-thirds of those who had witnessed and/or experienced violence reported various degrees of psychological effects. The findings of the study reveal that the likelihood of health-care personnel witnessing and/or experiencing violence had a significant association with public sector health-care facilities, increasing number of co-workers and the cadre of health-care worker, with doctors and support staff being more vulnerable.

Among the health-care personnel who had witnessed and/or experienced violence, 88% reported having witnessed and/or experienced multiple incidents. Multiple perpetrators were responsible in most incidents of violence against health care. Emergency rooms and hospital wards were the areas where violence against health-care personnel was most likely to occur. Most health professionals surveyed thought that the violent incident could have been prevented. The findings of the study show that there is a lack of a uniform reporting and response system to help health-care personnel following a violent event. The qualitative results reveal that there is a "desensitization and habituation" of health-care workers whereby violence is accepted as a part of their daily routine.

Communication failure, unreasonable expectations, substandard care, management failure and human error were identified in the quantitative part of the study as the major factors responsible for violence against health care. The qualitative component of the study identified socio-economic indicators, delay in patient care, the role of media, self-directed care (patient insisting on treatment unnecessary for their condition), a lack of relevant policies, a lack of proper security systems, a lack of a proper referral system within and between health facilities, and political interference as additional factors causing violence against health care. Lack of awareness in the general community, the lack of sufficient facilities and shortages of staff, unreasonable expectations of patients and attendants and "VIP culture" were major contributors to the occurrence of violence against health care.

As a result of the research, the main recommendations for preventing and reducing violence in KP include:

1) Raising awareness of the general public regarding the respect and protection of health care against violence; spreading awareness about the existing laws protecting health care; and continuous advocacy with lawmakers and policymakers .
2) Training of health-care personnel in communication skills and on techniques to de-escalate violence.
3) Ensuring provision of health-care services appropriate to the needs of the population and reduction in health-care staff workload.
4) Developing institutional policies, standard incident reporting forms, standard operating procedures for managing incidents, and provincial legislation for the protection of health care.
5) Enhancing the preparedness of health-care facilities through improved passive security, recruitment and training of security staff and improved coordination mechanisms with government security forces, such as the police.
6) Using media and religious and community leaders in order to change the perceptions regarding health care.
7) Further research into the dynamics of violence against health care, sharing of best practices between health facilities and within health system, and integration of modules on respect for health care in relevant disciplines of educational curriculum.

ACRONYMS

ASRB	Advanced Studies and Research Board
BHU	Basic Health Unit
GHQ	General Heath Questionnaire
HCiD	Health Care in Danger
HMC	Hayatabad Medical Complex
ICRC	International Committee of the Red Cross
ILO	International Labor Office
KMU	Khyber Medical University
KP	Khyber Pakhtunkhwa
KTH	Khyber Teaching Hospital
LRH	Lady Reading Hospital
RHC	Rural Health Centre
THQ	Tehsil Headquarter Hospital
VIP	Very Important Person
WHO	World Health Organization

INTRODUCTION

About Peshawar

Peshawar is the capital city of the province of Khyber Pakhtunkhwa (KP) with an area of 1,257 square kilometres and a population of 4,269,079 according to the recently concluded census of Pakistan. Peshawar is the largest city of the province and almost half (46%) of the population is urban in this metropolitan city[1]. Peshawar is situated just 15 kilometres from the east end of Khyber Pass and stretches out to the western banks of River Bara. It is circularly bounded on the north and north-east by hills (the Peshawar Valley). In the north-west are the mountains of Khyber, and to the south is the continuation of the spur of Sufaid Koh (the famous White Mountain on the Afghan border) that runs to Indus. The lower portion of this branch separates the district of Peshawar and Kohat[2].

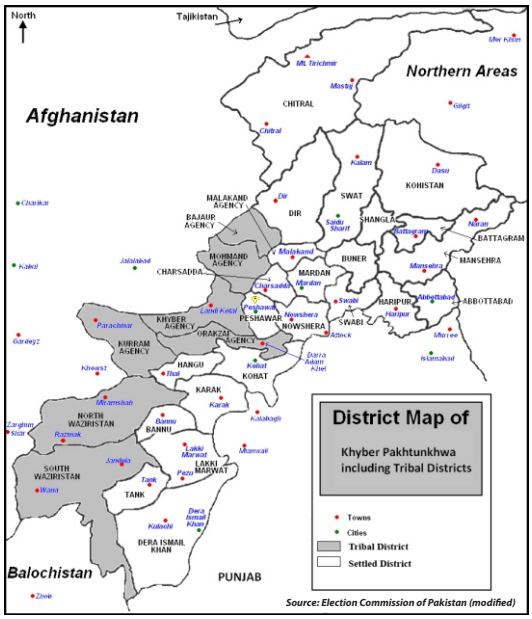


Figure 1: Map of Khyber Pakhtunkhwa showing location of Peshawar District

Peshawar district has a total of 107 public health-care facilities including 48 basic health units (BHU), and three tertiary health-care facilities, namely Lady Reading Hospital, Khyber Teaching Hospital and Hayatabad Medical Complex[3]. These tertiary-level facilities are referral hospitals for the entire province and help treat complicated health conditions with advanced equipment and trained human resources.

Background

The World Health Organization (WHO) defines violence as "the intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community that either results in or has a high likelihood of resulting in injury, death, psychological harm, mal-development, or deprivation"[4]. Similarly, the WHO defines workplace violence as "incidents where staff are abused, threatened or assaulted in circumstances related to their work, including commuting to and from work, involving an explicit or implicit challenge to their safety, well-being or health"[5]. Health-care personnel are ranked as one of the most exposed groups experiencing violence and aggressive behaviour. According to the International Labor Office (ILO), though workplace violence threatens all sectors and workers, the health sector remains the worst affected[6]. Therefore, violence against health personnel is a major public issue. Workplace violence can be physical, sexual or psychological in nature and can be actual or threatened[5].

Violence against health-care personnel is a global phenomenon and studies have been conducted to report its prevalence and associated factors. Research studies have reported violence in the West[7,8], Middle East[9], and Sub-Saharan Africa[10]. In Pakistan, violence against health-care personnel is not a completely new research area and has been studied previously. A nationwide study in the major tertiary hospitals of Pakistan found that over 70% health-care personnel in the emergency departments had faced workplace violence in some form or the other during two months preceding the study. While 65% had faced verbal abuse, 12% of emergency care physicians[11] had suffered from physical abuse. There were more male physicians who had faced violence than female physicians. Similar findings were reported from another study in Karachi, in which one in six and three in five physicians reported physical

and verbal abuse, respectively, in the previous 12 months[12]. The study also reported Post-Traumatic Stress Disorder, depression and anxiety as the effects of violence on the mental health of health-care personnel.

The International Committee of the Red Cross (ICRC), in collaboration with APPNA Institute of Public Health, Jinnah Sindh Medical University, Karachi, conducted a research study on violence against health care from January 2015 to August 2015. The findings of the study show that almost two-thirds of the participants had experienced and/or witnessed some kind of violence over the period of one year preceding the study. Similar to other studies in Pakistan, verbal violence was experienced more than physical violence. The different forms of violence included abusive language, physically pushing or pulling, threats and use of fists and feet. The main reasons for violence included unreasonable expectations, communication failure, human error, unexpected outcomes and perception of substandard care. According to the study, emergency departments and wards were the most common sites of violence[13]. Due to the front-line nature of the work, violence in the emergency department is more prevalent than in other areas of health-care facilities[14].

Violence has harmful effects on the mental and physical health of staff, and can lead to reduced job satisfaction and a heightened sense of fear. Lack of preventive policies, poor education, unwillingness to report assaults (as a result of violence being considered a routine phenomenon by the staff) and unmet expectations of patients and their attendants are some of the reasons for violence[15].

Health-care personnel, including doctors, nurses and paramedics, play a critical role in caring for the community. They face particular risks as they are at the front line while dealing with people in stressful, unpredictable and potentially volatile situations. The community on the other hand has its own expectations and perceptions regarding health care. To our knowledge, a study has not been previously conducted on the prevalence, types and major causes of violence against health-care personnel in Peshawar district, KP province. Therefore, the current study was carried out to bridge the knowledge gap and establish an evidence base to guide policymakers and administrators regarding the prevention and control of violence against health care in future.

METHODOLOGY

Objectives

The main objectives of this study were to:

1. Determine the prevalence of violence against health care in Peshawar district.
2. Determine factors associated with violence against health care in Peshawar district.
3. Measure the association of violence with symptoms of psychological distress among health-care personnel in Peshawar district.
4. Explore the perceptions of health-care personnel about violence in Peshawar district.

Operational definitions

Violence: Violence was assessed through a questionnaire previously used by the ICRC in a study in Karachi[13,16]. This tool has been used in another study in Karachi and internationally[12]. Violence was established as any individual or group aggressive behaviour or exercise of power which is socially non-acceptable, turbulent and often destructive. It was assessed whether the respondent had experienced and/or witnessed any form of violence in the last 12 months. Physical violence was established as the use of "physical force against another person that results in physical, sexual or psychological harm and includes beating, kicking, slapping, stabbing, shooting, pushing, biting and pinching, among others. For operational purpose, verbal abuse comprised "bullying, mobbing, harassment and verbal abuse that humiliates, degrades or otherwise indicates a lack of respect for the dignity and worth of an individual".

Health-care personnel: Health-care personnel were grouped into four main categories, i.e. doctors, nurses, paramedical staff and support staff (administrative staff, computer operators, ward orderlies, ambulance drivers and security personnel).

Psychological distress: This was measured through the General Health Questionnaire (GHQ-12), a twelve item scale used for measuring psychological distress[17,18]. Its score ranged from 0 to 36; score < 12 was coded as normal, 12-20 as distress and more than 20 as severe distress.

Study design and settings

The study was conducted in Peshawar district from 15 April 2017 till 30 November 2017. This was a mixed methods research study with quantitative and qualitative components. Data was collected from primary health-care facilities, i.e. basic health units (BHUs) and rural health centers (RHCs), and from tertiary-care hospitals in Peshawar. The sampling frame for these health-care facilities was retrieved from the Department of Health and consisted of all the health-care facilities, public and private, which were part of the vaccine preventable diseases surveillance system in Peshawar district. Based on this, a list consisting of 127 public and private health-care facilities was drawn.

Lady Reading Hospital, Khyber Teaching Hospital and Hayatabad Medical Complex, the three major public tertiary hospitals of Peshawar, were included in the study. Two private tertiary hospitals – Mercy Teaching Hospital and Kuwait Teaching Hospital – were also part of the study. Nine BHUs and three RHCs representing the primary health-care facilities were randomly selected from the list of primary health-care facilities for inclusion in the study.

Sample size calculations were based on the anticipated frequencies of verbal and physical abuse taken from previous study conducted in Karachi, Pakistan, with a 65.9% prevalence of violence[13]. The sample size based on these assumptions and the actual number in each category was calculated through Open Epi version 3.01[19]. The total sample size for doctors was 293, for nurses it was 284, for paramedics it was 274 and for support staff (including administrative staff) it was 270. Assuming a non-response rate of 10%, additional sample was enrolled within each of the four main categories, making the total sample

size 1,233. The final sample was proportionately selected from each of the main tertiary hospitals. In RHCs, 50% of the staff was enrolled for the study. All the staff of the sampled BHUs were invited for participation in the study. The participants in each of the four main categories of health-care personnel were selected from staff of tertiary health-care facilities and RHCs using random sampling techniques.

Health-care personnel with at least one year of work experience in health-care settings were enrolled in the study. Health-care personnel with less than a year of professional experience were excluded from the study. Health-care personnel on sick / maternity leave, transferred or retired during the period of data collection could not be followed for data collection. Based on the proportionate sampling, the highest number of health-care personnel were interviewed from LRH (272), followed by HMC (177) and KTH (170). As many as 148 participants were selected from the two tertiary private hospitals. Table 1 shows the facility-wise break-up of the participants of the study.

Table 1: Facility-wise number of health-care personnel in the study

HEALTH-CARE FACILITY (PESHAWAR)	NUMBER	PER CENT
Khyber Teaching Hospital	170	20.2
Lady Reading Hospital	272	32.3
Hayatabad Medical Complex	177	21.0
Mercy Teaching Hospital	38	4.5
Kuwait Teaching Hospital	110	13.1
Basic Health Units	45	5.3
Rural Health Centres	30	3.6
Total	**842**	**100.0**

The main data collection tool for the dependent variable, i.e. violence against health care, was culturally and locally adapted for delivery in Peshawar district. Relevant information was also added from published literature. The questionnaire was finalized after further adaptations following pre-testing among a sample of health-care personnel. The GHQ-12 Questionnaire has previously been used and validated in the local settings[18].

The quantitative component was used to determine the first three objectives of the study. For the qualitative part, multiple case study approach was chosen. Health-care personnel including doctors, nurses, physiotherapists, support staff (ward orderlies, ambulance drivers and gate keepers), administrative staff, media personnel and police were included for exploring perceptions regarding violence against health-care personnel in Peshawar district. Ten focus group discussions and three in-depth interviews were conducted with a total of 83 participants.

To maintain integrity using qualitative methods, the consolidated criteria for reporting qualitative research[20] was used when planning the focus group study. In addition, Guba and Lincoln's criteria for judging the quality of qualitative evaluation were followed[21]. The criteria they outline are credibility, transferability, dependability and conformability. Credibility is parallel to internal validity and was achieved through building rapport with the stakeholders and using audio recordings of their responses. Transferability is parallel to external validity, which must be evidenced in future studies, but was accommodated by using participants from a wide sample of representative areas. Dependability is parallel to reliability, concerned with stable data over time. By outlining the data collection methods, replication may be achieved and dependability is supported. Finally, conformability is parallel to the

criterion of objectivity and was achieved through the use of audio recordings and direct quotes displayed in the following section.

Ethical Considerations

The proposal of the study was submitted for approval to the Graduate Committee of Institute of Public Health and Social Sciences, Ethical Board and Advanced Studies and Research Board (ASRB) of Khyber Medical University. Administrative approval for conducting the study was also sought from the administration of the sampled health-care facilities.

Informed written consent was obtained from each participant after explanation of the purpose of the study and provision of written information. The right to withdraw from the study at any time without providing a reason was reinforced to all participants during consent and prior to conducting the survey.

RESULTS

QUANTITATIVE RESULTS

Demographic & job characteristics of the study participants from Peshawar district

Table 2 shows the demographic and job characteristics of participants and their association with gender. Of the 842 individuals, 268 (32%) were women and 574 (68%) were men. While the male health-care workers were relatively older, had more job experience and a higher presence in both public and private health-care facilities, the female participants had a higher presence in the nursing cadre.

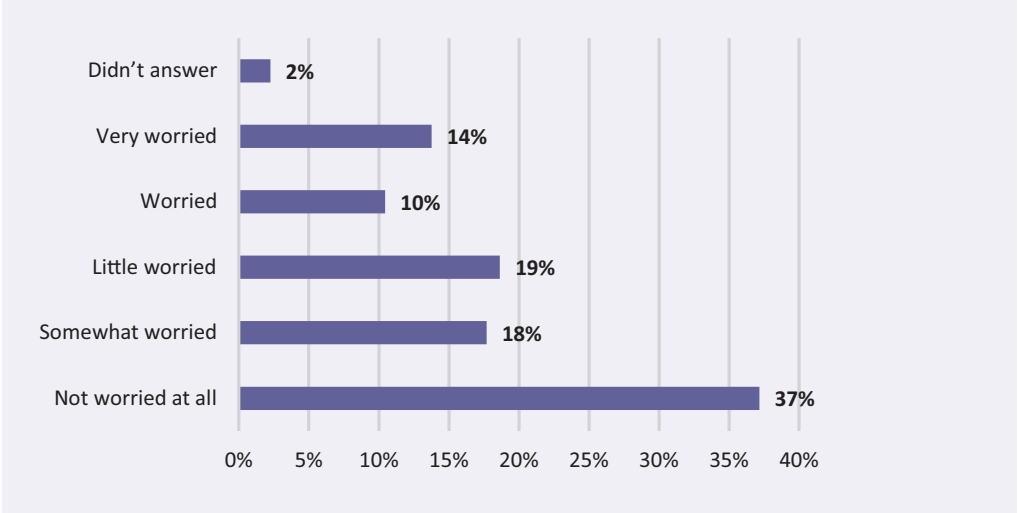
Table 2: Demographic & job characteristics of the participants

VARIABLES	OVERALL	WOMEN	MEN
N, (%)	842 (100)	268 (32)	574 (68)
	Mean	**Mean**	**Mean**
Age (years)	35 (10)	33 (9)	37 (10)
Work experience (years)	10 (9)	9 (8)	10 (9)
No. of co-workers	6 (11)	6 (10)	6 (11)
	N, %	**N, %**	**N, %**
LEVEL OF HEALTH-CARE FACILITIES			
Primary	75 (9)	27 (36)	48 (64)
Tertiary	767 (91)	241 (31)	526 (69)
TYPE OF HEALTH-CARE FACILITIES			
Public	694 (82)	232 (33)	462 (67)
Private	148 (18)	36 (24)	112 (76)
MARITAL STATUS			
Single	231 (27)	95 (41)	136 (59)
Married	603 (72)	166 (28)	437 (72)
Separated /divorced	1 (0.1)	0 (0)	1 (100)
Widow / widower	4 (0.5)	4 (100)	0 (0)
undisclosed	3 (0.4)	3 (100)	0 (0)
CATEGORY OF EMPLOYMENT (SECTOR)			
Private	157 (19)	33 (22)	124 (78)
Public sector	685 (81)	235 (34)	450 (66)
CATEGORY OF RESPONDENTS			
Doctor	172 (20)	43 (25)	129 (75)
Nurse	193 (23)	167 (87)	26 (13)
Paramedic	215 (26)	47 (19)	168 (81)
Support staff	262 (31)	11 (4)	251 (96)
CURRENT DESIGNATION			
Senior doctor	54 (6)	9 (17)	45 (83)
Junior doctor	118 (14)	34 (29)	84 (71)
Head nurse	23 (3)	21 (91)	2 (9)
Staff nurse	170 (20)	146 (86)	24 (14)
Sr. paramedic	51 (6)	4 (8)	47 (92)
Jr. paramedic	164 (20)	43 (26)	121 (74)
Ward boy	180 (21)	5 (3)	175 (97)
Computer operator	69 (8)	6 (9)	63 (91)
Ambulance driver	13 (2)	0 (0)	13 (100)

Concern about workplace violence

Participants were asked to rate their concern about workplace violence from 1 (not worried at all) to 5 (very worried). Figure 2 shows the responses and the apprehensions that prevail among health-care personnel regarding occurrence or possibility of occurrence of violence in their workplace. Around two-thirds (61%) of the participants were worried to some extent (little worried to very worried) about violence in their current workplace.

Figure 2: How worried are you about violence in your current workplace? (n=842)



Prevalence of violence

One of the objectives of the survey was to determine the magnitude and patterns of different types of violence against health care – verbal, physical and damage to facility. Figure 3 shows that the exposure to violence among health-care workers in Peshawar district was 51% (every second health-care worker) over a period of one year. More than a quarter of the respondents (26%) had both experienced as well as witnessed violence against health care. Figure 4 shows a break-up of the various manifestations of violence against health-care personnel in Peshawar district among all respondents. Figure 5 shows that among the respondents who had witnessed and/or experienced violence, verbal violence remained the most prevalent form (45%), followed by a combination of physical and verbal abuse (23%), and all three, that is, physical, verbal and facility damage (22%).

Figure 3: Percentage of health-care personnel witnessing and/or experiencing violent events (n=842)

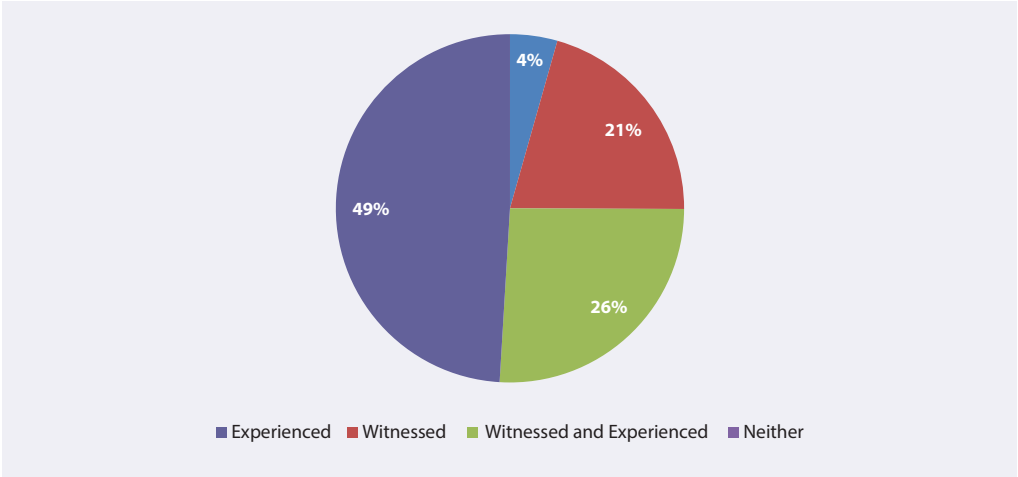


Figure 4: Experienced and/or witnessed violence (n=842)

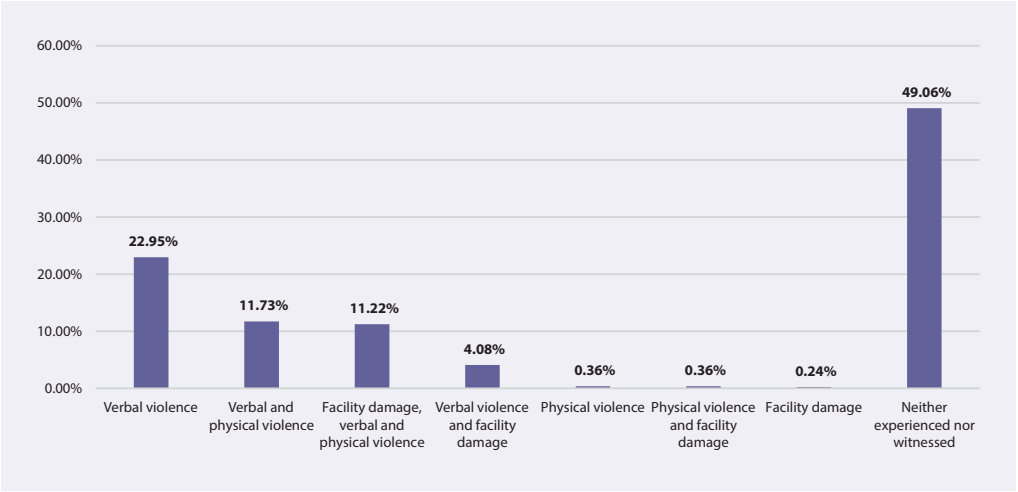


Figure 5: Patterns of violence among those who experienced and/or witnessed violence (n=427)

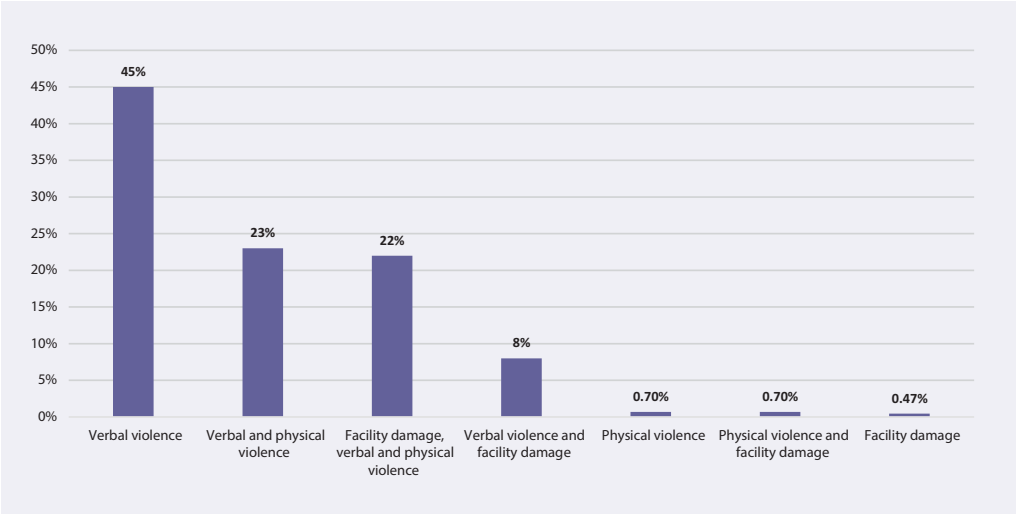
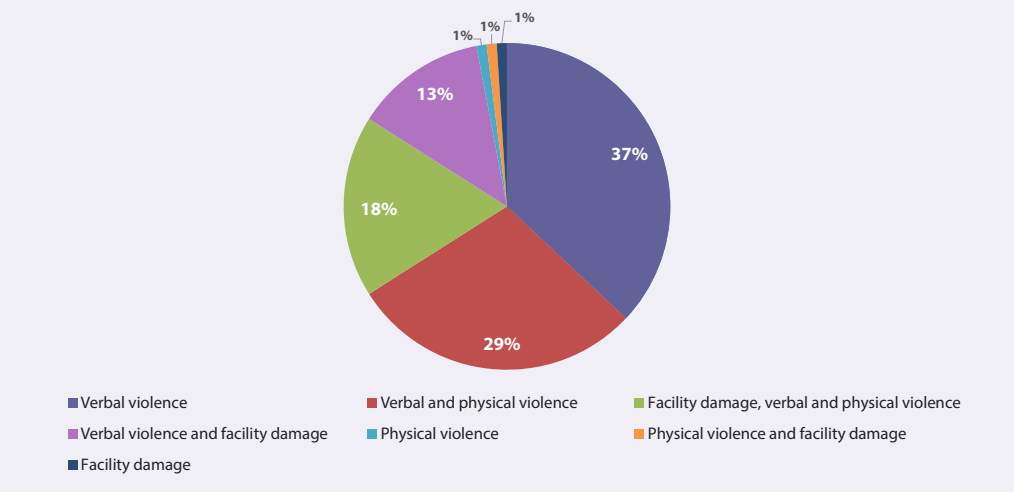
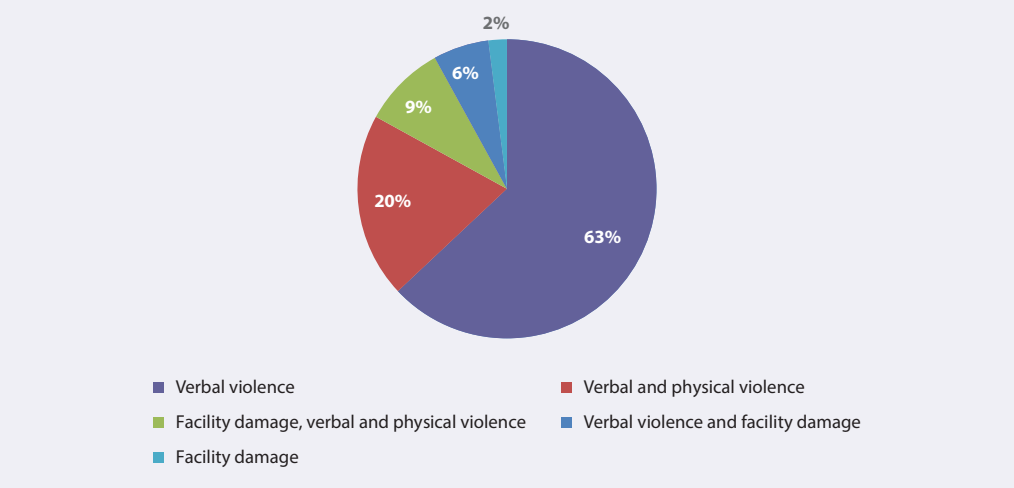


Figure 6: Patterns of violence (Experienced)



Figures 6 and 7 illustrate the different forms of violence experienced and witnessed, respectively, by health-care personnel. Verbal violence (37%) was the most prevalent form of violence experienced by health-care personnel, followed by a combination of verbal and physical violence (29%). Among health-care workers who had witnessed violence, verbal violence (63%) remained the predominant form, followed by a combination of verbal and physical violence (20%) and a combination of all three – verbal, physical violence and damage to facility (9%).

Figure 7: Patterns of violence (Witnessed)



Frequency of incidents and number of perpetrators and victims:

Figure 8 provides information about the frequency of violent incidents against health care witnessed and/or experienced by health-care personnel (HCP) in the 12 months preceding the study. Only 12% of health-care personnel who had experienced and/or witnessed violence reported witnessing and/or experiencing a single violent event. As many as 55% of the participants reported having witnessed and/or experienced two to five events while 33% reported having witnessed and/or experienced violence against health care more than five times in the year preceding the study. In 72% of the incidents, two to five perpetrators were involved while in 13% of the events more than five perpetrators committed violence against health care (figure 9). Two or more health-care personnel were victims of violence in 60% of the violent events (figure 10).

Figure 8: Numbers of violent incidents experienced and/or witnessed over 12 months

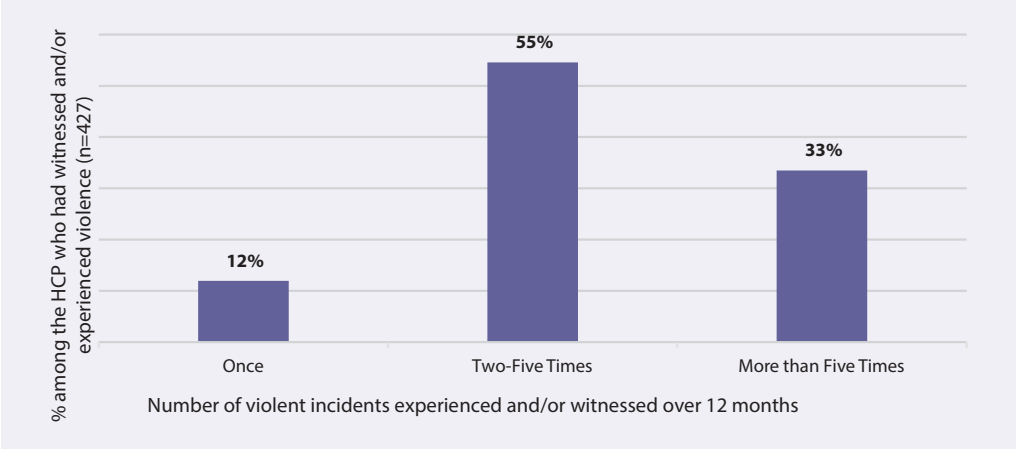


Figure 9: Number of perpetrators involved in violent incidents

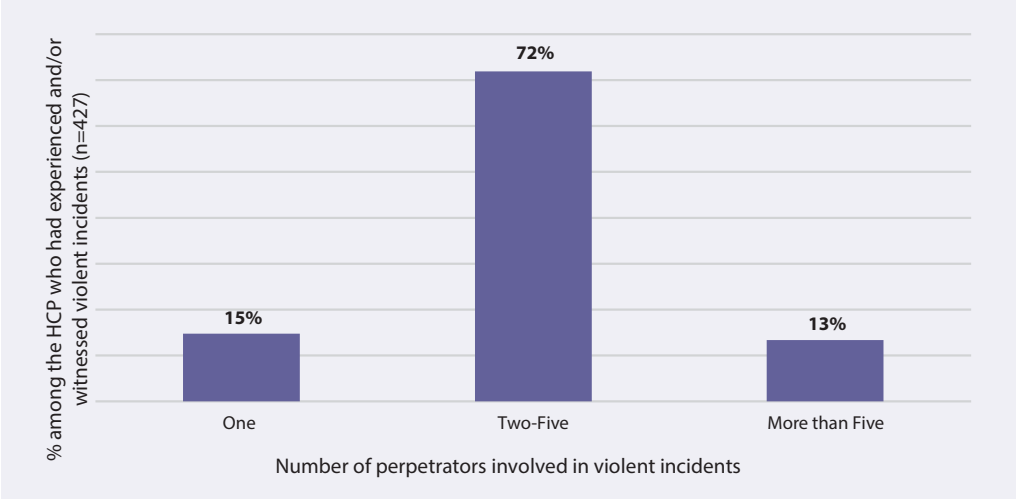
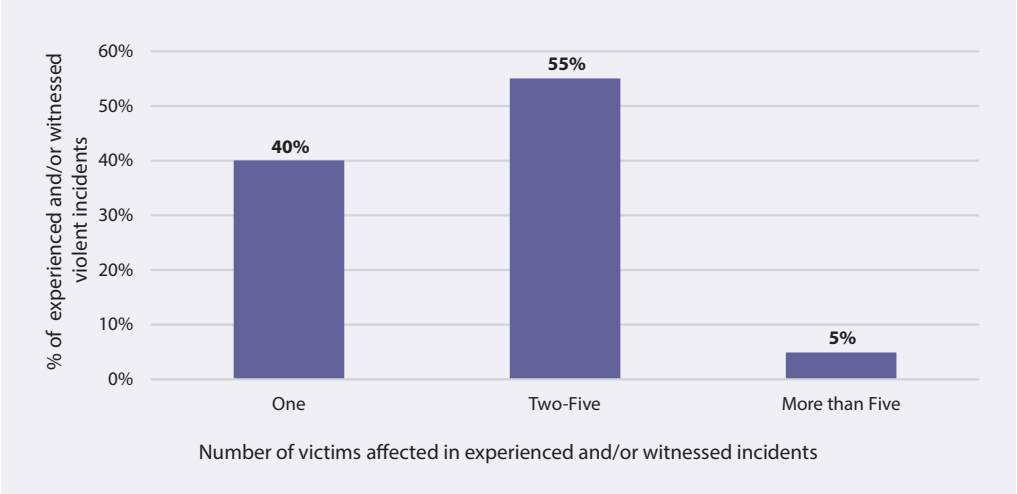


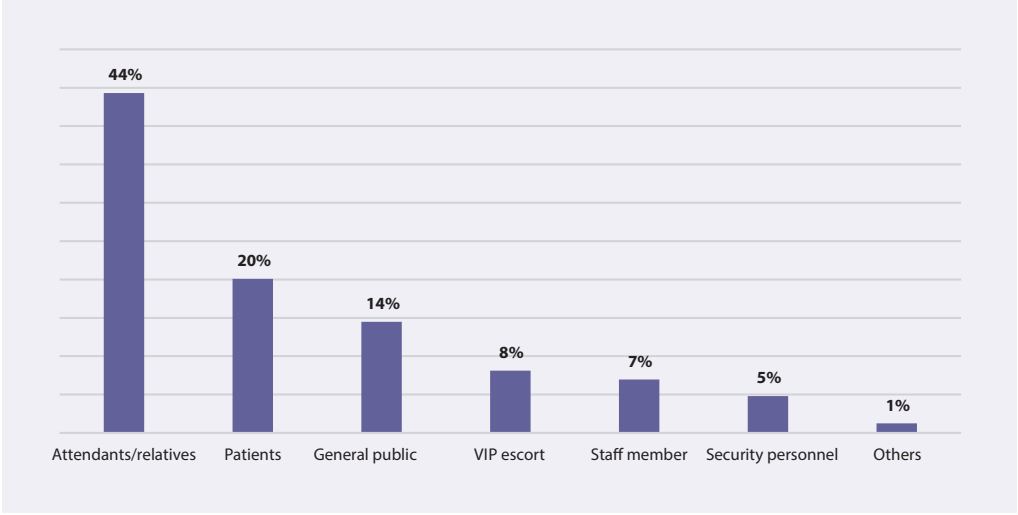
Figure 10: Number of victims affected in violent incidents



Perpetrators of violence

The study explored the major categories of perpetrators of violence against health care. In a disturbing finding of the study, it was revealed that attendants and relatives of patients were responsible for 44% of the incidents of violence against health care. This was followed by patients themselves (20%) and general public (14%) who were responsible for committing a significant proportion of violence against health-care personnel. The disruptive influence of VIP escorts (escorts comprising security personnel or private guards accompanying VIPs to ensure their safety) in health-care settings is reflected by their accounting for a relatively high percentage (8%) of perpetration of the incidences of violence against health care. Figure 11 shows the major categories of perpetrators of violence against health care as identified in the study.

Figure 11: Perpetrators of violence



Violence against health care: Location and Timing of occurrence

Identifying the timing and locations within and outside health-care facility where incidences of violence against health-care personnel occur more frequently is important for short and long-term policy recommendations. The study revealed that within health-care facilities, emergency rooms (34%) and wards (30%) were places most exposed to violence and majority of the incidents were reported to have occurred during morning shifts. Outside the health-care facilities, majority of the incidents took place on the roads and in open public places. (Figures 12 to 14)

Figure 12: Place of violence within health-care facility

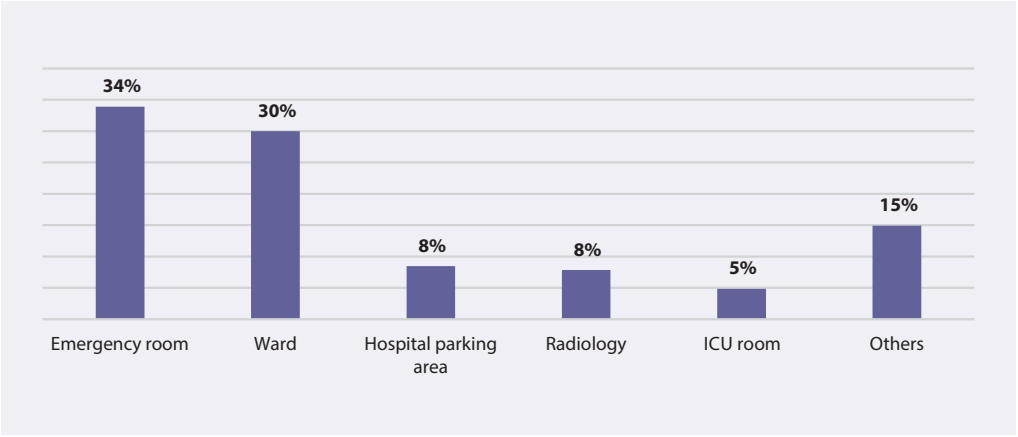


Figure 13: Place of violence outside the health-care facility

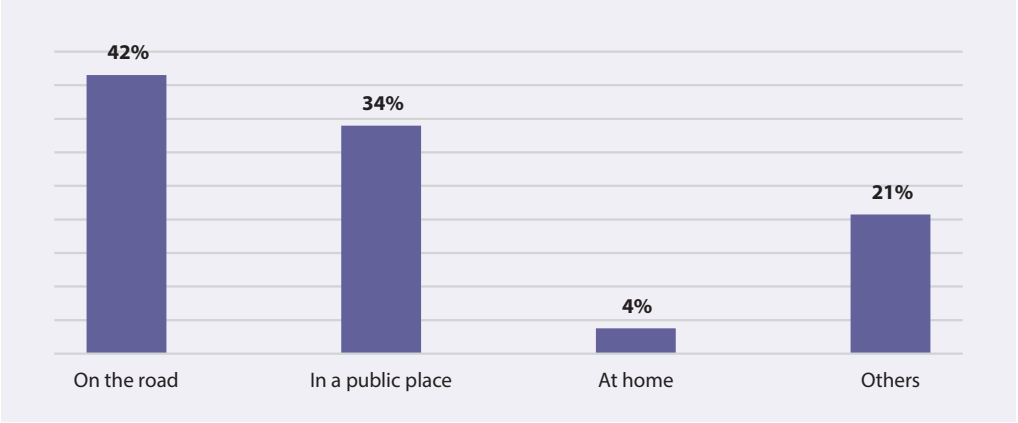
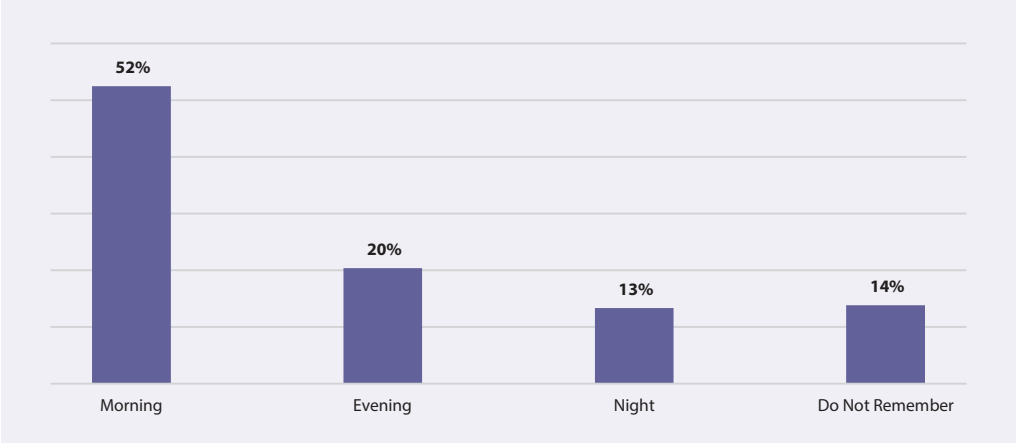


Figure 14: Distribution of violent events by time (n=427)

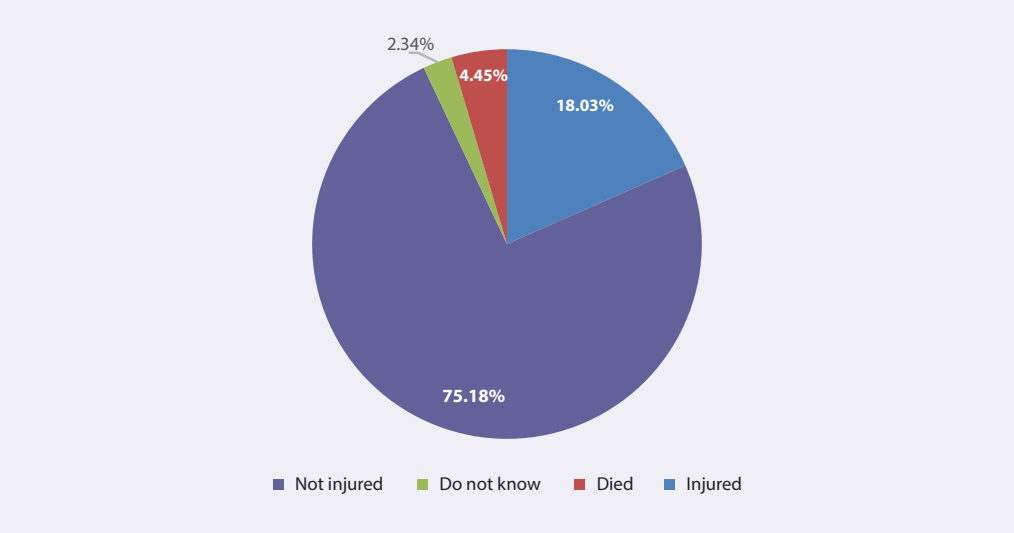


Consequences of violence

Participants who had experienced and/or witnessed violence were asked about the consequences of violence. 75.18% of the participants who experienced and/or witnessed physical violence did not suffer any physical injury as a consequence of the incident. However, 18.03% of the participants who had experienced and/or witnessed violence reported the victim suffering physical injury. Figure 15 is a representation of the participants' responses regarding the consequences of violence for the victim of

the event. The percentage reported as "deaths" is not the number of deaths occurring as a result of violence but represent the participants who had witnessed violent events that led to the death of the victim. Hence, these incidents may be few but a significant number of the respondents could have witnessed such incidents.

Figure 15: Consequences of violence (n=427)



75% of the victims injured during the violent event had to seek treatment for their injuries while 56% had to take time off work (Figures 16-17).

Figure 16: Injured victims requiring treatment (n=77)

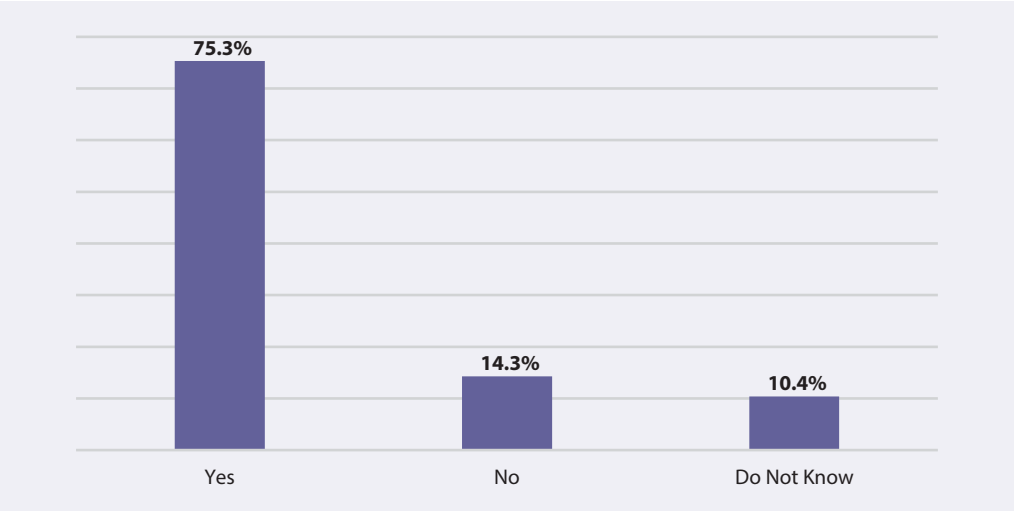
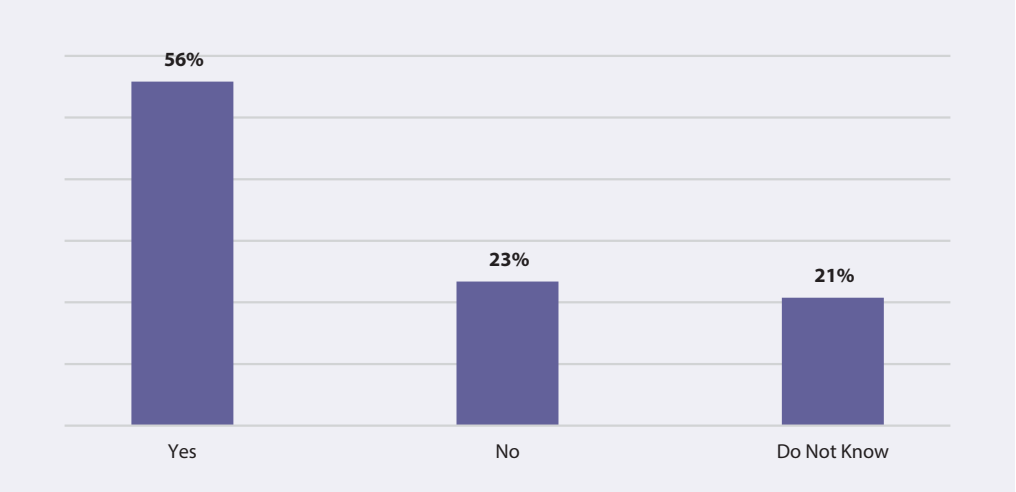


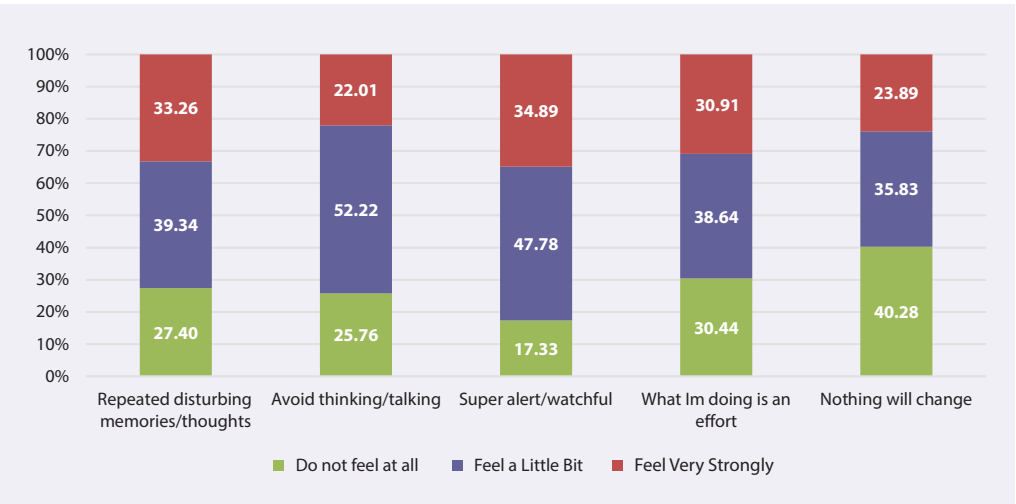
Figure 17: Injured victims requiring time off work (n=77)



Mental health effects of violence

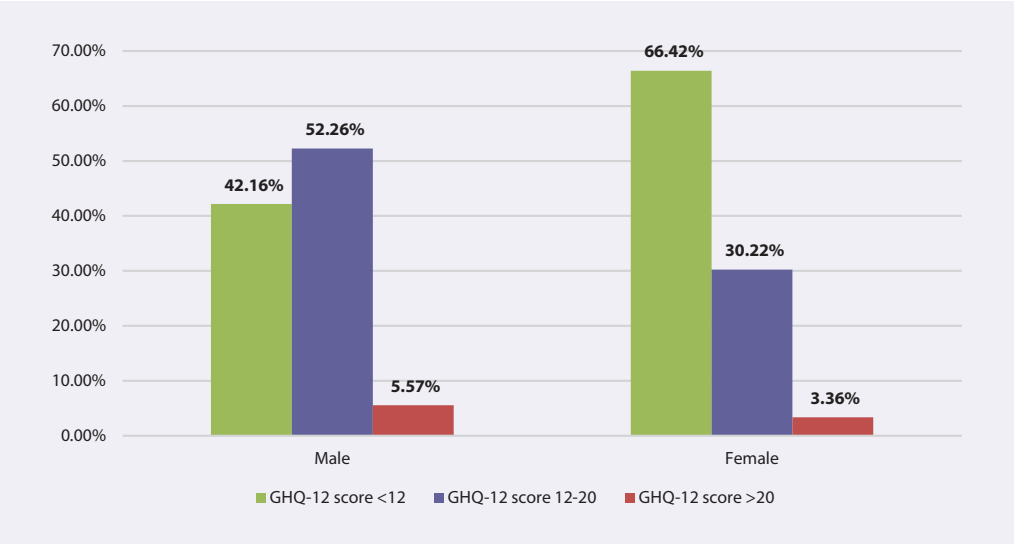
The study establishes the mental health effects of violence on respondents who had experienced and/or witnessed violence. The findings of the study (Figure 18) show that around two-thirds of the respondents had suffered either somewhat or very strong mental health consequences after the incidents. A majority of the respondents who had witnessed and/or experienced violence against health care reported having repeated disturbing memories / thoughts about the events, tendency to avoid thinking / talking about the incidents and an inclination to remain super alert / watchful after violent incidents. A majority of the participants reported having experienced a decline in their motivation to work and a sense of hopelessness (70% and 60%, respectively).

Figure 18: Mental health effects of violence (n=427)



Similarly, the level of distress that the health-care personnel were experiencing at the time of the survey was assessed through the General Health Questionnaire (GHQ-12), a scale used to assess psychological distress. While around half (49.8%) of the participants had normal score of <12 on the GHQ-12 scale, 45.3% of the participants reported as being somewhat distressed, with a GHQ score of 12-20. Around 5% of health-care personnel were categorized as severely distressed (GHQ score > 20). This distribution is presented below in Figure 19 with stratification through gender. The figure shows that male participants were relatively more distressed as compared to female health-care personnel.

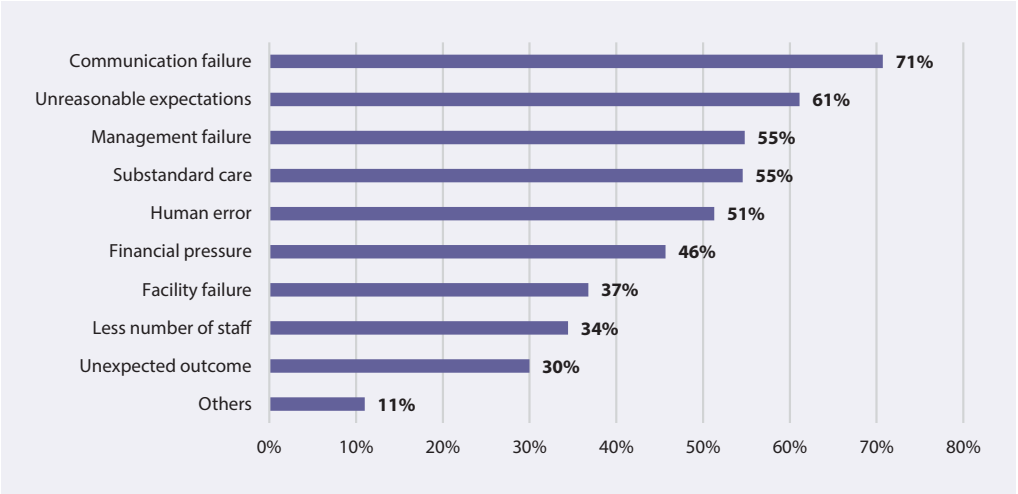
Figure 19: Distress status of male and female health-care personnel (GHQ-12 scores) (n=842)



Factors responsible for the violent incidents

In order to chalk out effective strategies to prevent violence against health care, it is imperative to understand the factors that are responsible for the development of violent events. A majority of the respondents who had experienced and/or witnessed violence against health care pointed out that multiple factors were responsible for the violence (Figure 20). Communication failure (71%), unreasonable expectations (61%), substandard care (55%), management failure (55%) and human error (51%) were the main factors responsible for the development of the violent incidents. Financial pressure (46%), facility failure (37%), less number of staff (34%) and unexpected outcome (30%) also contributed to the occurrence of violence against health care. When further asked whether the incident could have been prevented, the majority (82%) of health professionals surveyed responded in the affirmative.

Figure 20: Factors responsible for violent incidents (multiple responses)



Responses following the incidents

In order to understand the existing institutional mechanisms and pathways for responding to violence against health care, the health-care personnel who had experienced and/or witnessed violence against health care were asked about the responses that the victims had to resort to in the aftermath of a violent event. As shown in the chart below (Figure 21), around one-eighth of the participants took no action following the violent incident while the remaining respondents took some action to cope with and respond to the incident as explained in Figure 22 below. In majority of the incidents, the response of the victims comprised a combination of actions. The majority (61%) defended themselves or told the attacker to stop (52%). In nearly half of the cases, the victim sought counselling or help from unions or associations. Similarly, about half tried to report the incident as First Information Report to police (Figure 23). Only 11% of the respondents who had witnessed and/or experienced violence reported that an institutional incident/accident reporting form was filled out following a violent incident.

Figure 21: Response of the victims following the violent incident (n=427)

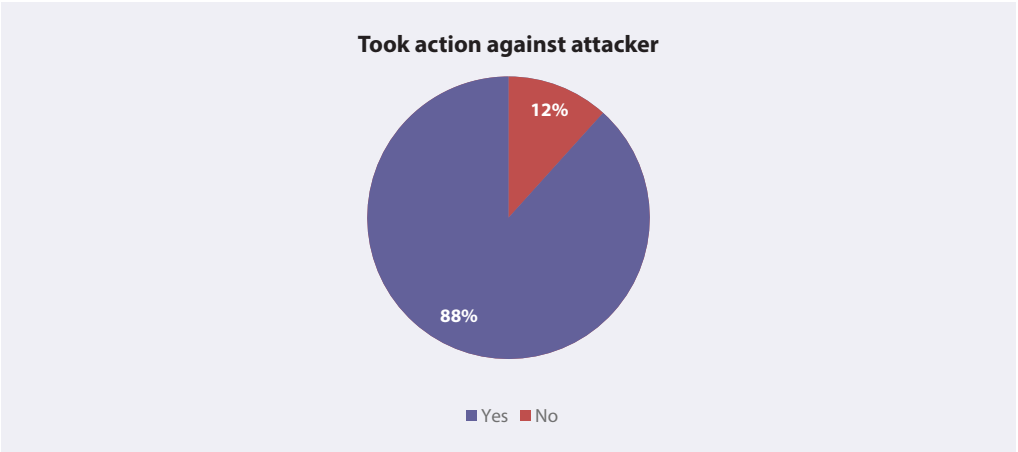
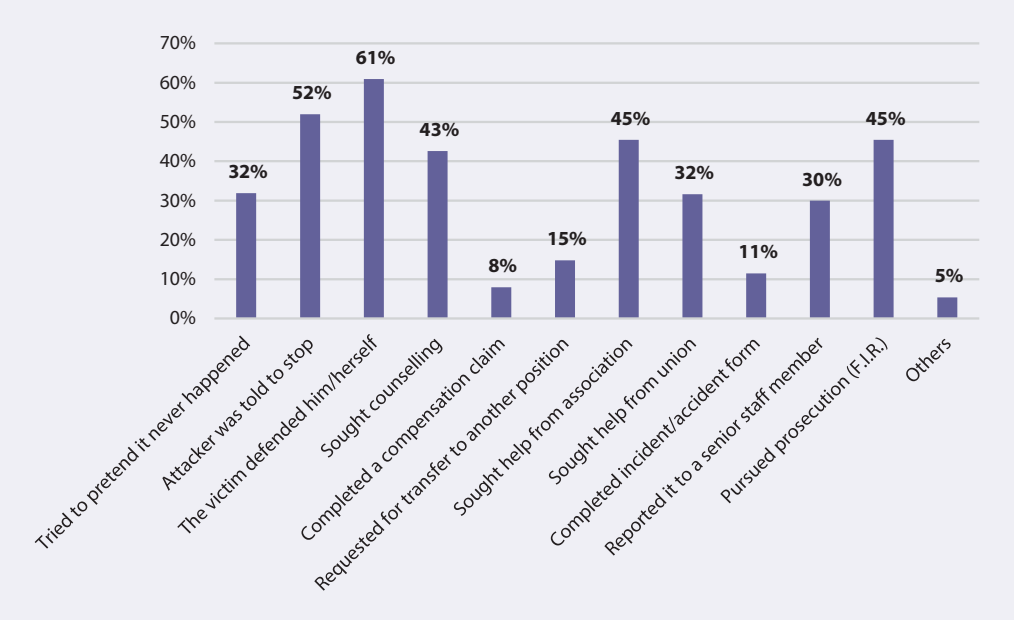
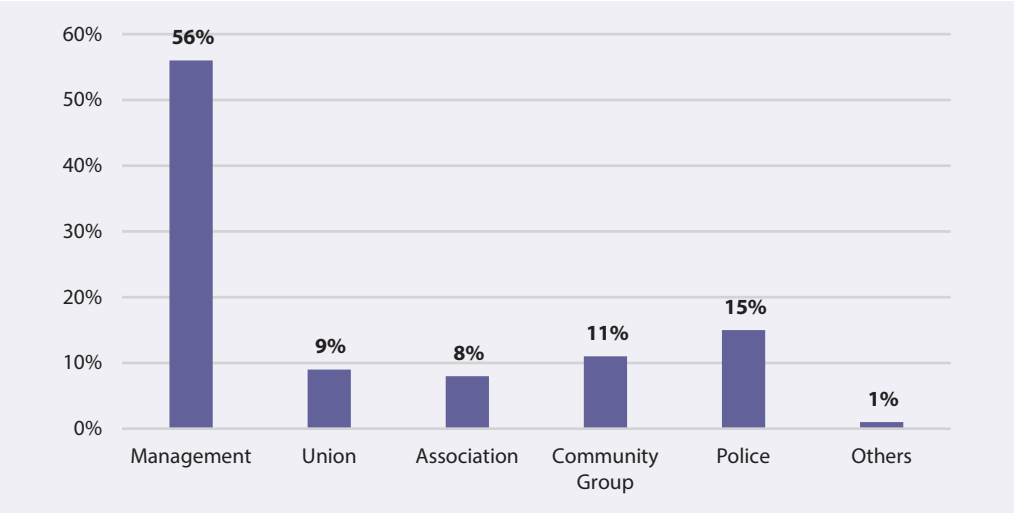


Figure 22: Details of responses of the victims following the violent incident (multiple responses)



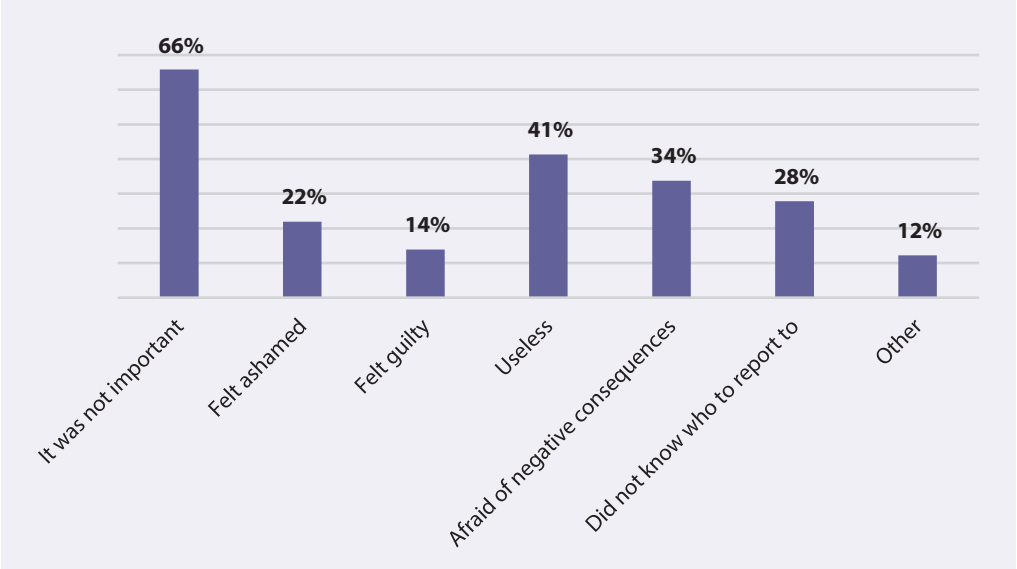
From the responses of the participants, management of health-care facilities emerged as the primary source to which the incident was reported in more than half (56%) of the cases. Police (15%), community (11%), unions (9%) and associations (8%) remained the other major sources to whom incidences of violence against health care were reported.

Figure 23: To whom was the incident reported?



Participants who had witnessed and/or experienced a violent event against health care that was not reported cited a combination of reasons for the same (Figure 24). Around two-thirds of the participants did not consider reporting the incident as important and hence didn't report. Additionally, 41% participants considered reporting the incidents as useless. Apprehensions about potential negative consequences accounted for not reporting the incident in 34% of the cases. In more than a quarter of the cases, the victim did not know to whom the incident should be reported. Feelings of shame (22%) and guilt (14%) experienced by the victim of a violent event were associated with a significant number of unreported incidents.

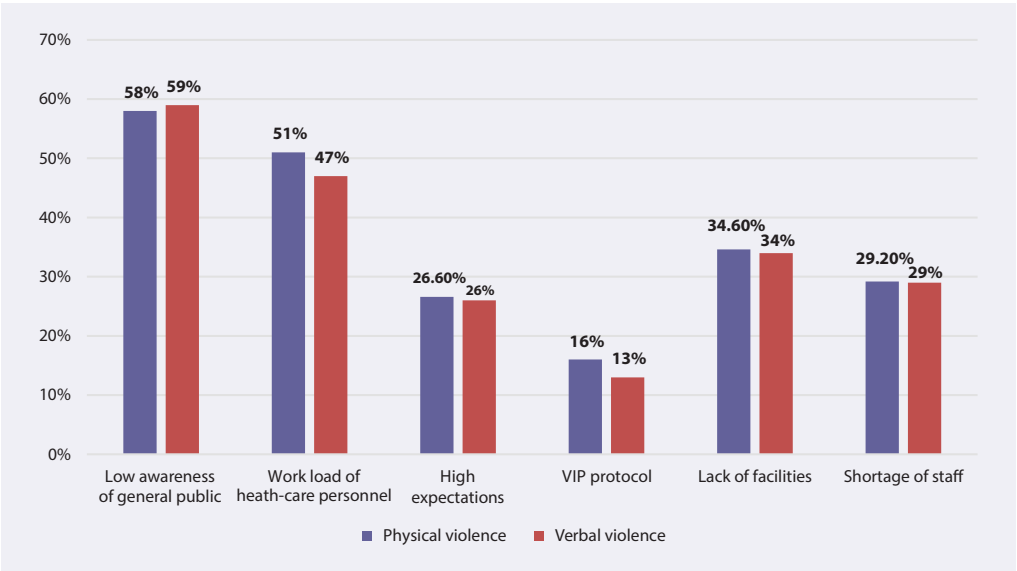
Figure 24: Main reasons for not reporting the incident (multiple responses)



Factors contributing to violence in health-care settings

The participants of the study were asked about three main factors contributing to the development of violence, verbal or physical, against health care. There was a correlation between the responses of the participants regarding the factors contributing to physical and verbal violence (figure 25). Low awareness among the general public was cited as a contributing factor by more than half the participants. Almost half the participants mentioned work load of health-care personnel as a major contributor to both physical and verbal violence in their work settings. Shortage of staff, lack of facilities, high expectations of patients and attendants, and preferential treatment (VIP protocol) were the other major factors for both physical and verbal violence in health-care settings.

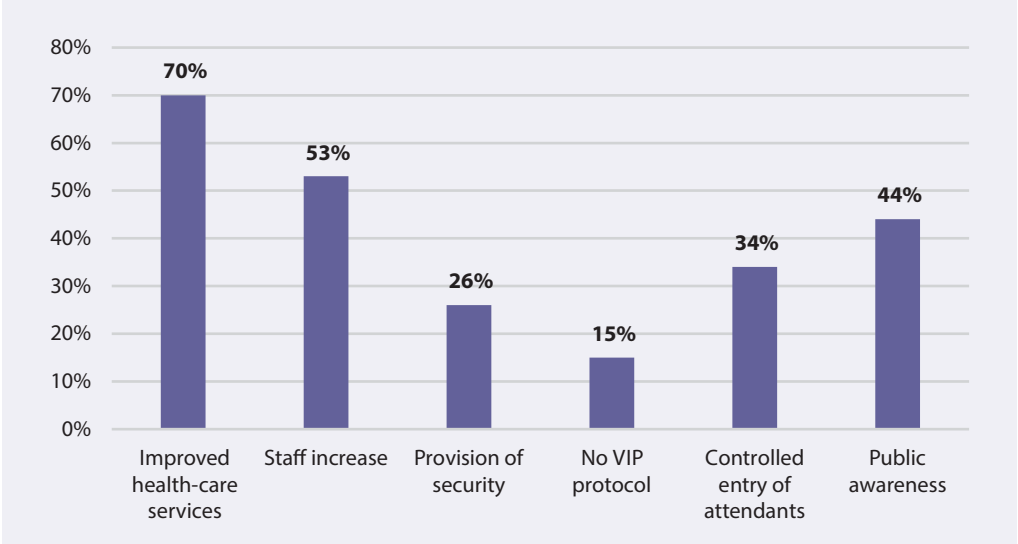
Figure 25: Factors contributing to violence (multiple responses)



Recommendations for the prevention of violence in work settings

During the study, participants were requested to propose three measures that would help in the prevention of violence in their work place. Improved health-care services, increase in the number of staff and enhancing public awareness emerged as the three major recommendations. Limiting the entry of attendants, provision of security and abolishing VIP protocols (preferential treatment) were also identified as important recommendations by health-care personnel for prevention of violence (Figure 26).

Figure 26: Recommendations for prevention of violence (multiple responses)



Predictors of violence in health-care settings

To determine the prevalence of violence against health-care workers, two separate questions were put forth, that is, whether they had experienced violence in the past 12 months or witnessed it. The prevalence of violence against health-care workers in Peshawar district was 51% (every second health-care worker). A regression analysis using STATA, version 14.1, was conducted keeping the dependent variable as violence. The dummy variable (no violence) was coded as "0" while experienced and/or witnessed violence was coded as "1". The regression analysis gives us the opportunity to adjust for potential confounders to get true multiple adjusted relationships.

Table 3: Predictors of violence

VARIABLES	EXPERIENCED and/or WITNESSED VIOLENCE N=427 Mean±SD	NO EXPOSURE TO VIOLENCE N= 415	OR	95% CI
	Mean±SD	**Mean±SD**		
Age (years)	35.44 (9.27)	35.5 (10.13)	0.99	0.96 to 1.01
Work Experience (years)	9.85 (8.88)	9.75 (8.67)	1.00	0.98 to 1.03
No of colleagues / co-workers	7.14 (7.22)	4.90 (4.68)	1.06	1.03 to 1.09
	N, %	**N, %**		
GENDER				
Women	131 (48.88)	137 (51.12)	Ref	
Men	296 (51.57)	278 (48.43)	0.99	0.65 to 1.53
Level of health facilities				
Primary	37 (49.33)	38 (50.67)	Ref	
Tertiary	390 (50.85)	377 (49.15)	1.21	0.71 to 2.03
TYPE OF HEALTH FACILITIES				
Private	31 (21.23)	115 (78.77)	Ref	
Public	398 (57.18)	298 (42.82)	5.20	3.34 to 8.11
MARITAL STATUS				
Single	116 (27.17)	123 (29.64)	Ref	
Married	311 (72.83)	292 (70.36)	1.22	0.85 to 1.77
JOB CATEGORY				
Doctor	104 (60.47)	68 (39.53)	Ref	
Nurse	84 (43.52)	109 (56.48)	0.66	0.38 to 1.15
Paramedic	89 (41.40)	126 (58.60)	0.49	0.31 to 0.78
Support staff	150 (57.25)	112 (42.75)	1.23	0.77 to 1.96
DISTRESS STATUS				
Normal	206 (49.05)	214 (50.95)	Ref	
Somewhat distressed	200 (52.49)	181 (47.51)	0.95	0.68 to 1.32
Severe distress	21 (51.22)	20 (48.78)	0.92	0.46 to 1.87

The table above shows the associations of violence against health-care personnel in the presence of various risk factors. The table elaborates that the likelihood of experiencing and/or witnessing violence was significantly associated with the public sector health-care facilities, larger number of co-workers/colleagues and job category. Working in public sector health-care facilities and having a larger number of co-workers/colleagues significantly increased the likelihood of a health-care personnel experiencing and/or witnessing violence while being a paramedic significantly reduced the risk as compared to doctors.

QUALITATIVE RESULTS

The qualitative arm of the study was conducted to explore the perceptions of health-care personnel about violence committed against health care in Peshawar district. This exploration was intended to provide a profound understanding of the causation and consequences, both overt and obscure, of violence against health care and to identify remedial measures for its prevention.

For the qualitative part, multiple case study approach was chosen. Health-care personnel including doctors, nurses, physiotherapists, support staff (ward orderlies, ambulance drivers and gate keepers), administrative staff, media personnel and police were included for exploring perceptions regarding violence against health-care personnel in Peshawar district. Ten focus group discussions and three in-depth interviews were conducted with a total of 83 participants.

To maintain integrity using qualitative methods, the consolidated criteria for reporting qualitative research[20] was used when planning the focus group study. In addition, Guba and Lincoln's criteria for judging the quality of qualitative evaluation were followed[21]. The criteria they outline are credibility, transferability, dependability and conformability. Credibility is parallel to internal validity and was achieved through building rapport with the stakeholders and using audio recordings of their responses. Transferability is parallel to external validity, which must be evidenced in future studies, but was accommodated by using participants from a wide sample of representative areas. Dependability is parallel to reliability, concerned with stable data over time. By outlining the data collection methods, replication may be achieved and dependability is supported. Finally, conformability is parallel to the criterion of objectivity and was achieved through the use of audio recordings and direct quotes displayed in the following section.

More than 50 open codes were identified using open coding technique, one of the processes for analysing textual contexts. It included labelling concepts, laying down and developing categories. The categories were later classified into sub-themes and their respective superordinate themes.

Three distinct recurrent themes emerged from the responses of different stakeholders. These were:

1. The hidden consequences of violence against health care
2. Causes of violence
3. Preventing violence

Each of these themes was further categorized into sub-themes and consensus was reached on seven broad categories.

Theme I: The hidden consequences of violence against health care

Sub-themes:

Five sub-themes were identified for Theme I and a consensus was reached on two broad categories, i.e. description of violence and its prevailing status (including experiences of workplace violence and nature, characteristics and frequency). The sub-themes were:

1. Perceived personalization of violence.
2. Verbal abuse as a weapon of choice.
3. Victimization of health-care personnel.
4. Psychological / emotional abuse – a hidden form of violence.
5. No excuse for physical abuse.

> *"Once a patient's attendant came charging towards me with the intention of hitting me as he was enraged that his loved one, who was suffering from end-stage organ failure, had passed away."* – Doctor

The first theme emerging from the present study described that violence is not merely physical but includes verbal or emotional abuse, hurting the feelings and affecting the health of an individual. It describes the nature, frequency and characteristics of violence against health-care personnel. All the stakeholders regarded verbal abuse as the most common form of violence.

It was found that incidents of verbal and psychological or emotional abuse occur more frequently at hospitals. The physical abuse may range from battery to homicide, one of the leading causes of job-related deaths.

> *"When the patients' attendants are asked to stay out of the emergency room, they mostly resort to misbehavior and intimidation."* – A nurse of an emergency department

In this study, it was found that health-care professionals often found themselves as victims of violence. They described that such situations were unavoidable and most of the time they felt scared and emotionally drained. They perceived emotional or psychological abuse as a hidden form of violence being practised routinely.

A few health-care professionals also spoke about people's misbehavior, sharing that most of the time people wanted self-directed care and insisted on getting injectables and infusions that were not necessary for their treatment. This disagreement often led to some sort of violence against the health-care professionals. It was also found that most of the victims of physical violence were those who were trying to stop the aggressors.

Theme II: Causes of violence

Sub-themes:

For this theme, three sub-themes were identified under perpetrators, causes & contributing factors and effects of violence on individual and institutions. These were:

1. Health-care institutions are no longer 'safe havens'.
2. Violence is the problem, not the solution.
3. A fear that's palpable.

> *"Incidents of violence create a chaotic environment in the institution. It has a very bad impact on health sector as a whole. Every other day, doctors are leaving the country and moving abroad to avoid this."* – Deputy Medical Superintendent

The second theme of the qualitative study indicated that though there are multiple causes that can provoke violence, it cannot be justified. The categories describing the perpetrators, causes / contributing factors and the consequences / effects of violence on individual and institutes were explored.

In the present study, it was explored that patients' attendants and relatives themselves were the perpetrators of violence in majority of instances. These people were either unschooled or were politically well-connected. They either knew a political party's representative elected from their district or were on good terms with powerful people who could use their influence to help them out in such situations. However, in some situations, the hospital staff and the administration were also involved, especially in cases of psychological abuse.

Different stakeholders provided their opinions regarding the causes and contributing factors of violence against health care. They believed that an absence of stringent policy, lack of security systems, inadequate management by administration and lack of collaboration among staff at health-care institutes create a chaotic workplace environment resulting in improper service delivery. Staff were desensitized to incidents of violence and considered them as a part of their daily routine.

Majority of stakeholders were of the opinion that lack of education is the most important cause of violence in the public arena, followed by delayed attention or long waiting time and increased expectations from the health-care institutes that spark situational triggers. According to a doctor interviewed,

> *"Lack of education is the major cause of such incidents. People do not understand the medical treatment and there is a communication gap between the patients and care providers. The incidents occur routinely. I think we are desensitized to such incidents now."*

Furthermore, lack of implementation of security acts and political involvement were found to be significant reasons for violence at the level of government.

The present study identified that such incidents of violence had an injurious impact on individual's health and institution's integrity. Victims suffered from psychological stress and remained silent most of the time. They said that such incidents affected their lives and patient care, which they were unable to cope with.

A tabulated overview of the ***causes / contributing factors of violence*** is as under;

Table 4: Causes/contributing factors of violence against health care

Health-care institution no longer safe heaven (At institution level)	Violence is the problem, not the solution (At public level)	A fear that's palpable (At government level)
• Policy vacuum • Inadequate management / administration support • Heavy workload • Improper service delivery • Lack of cooperation / collaboration • Lack of proper security system • Deficiency of human resources and facilities • Chaotic workplace environment • Desensitization or habituation • Workplace negligence	• Illiteracy or lack of education • Delayed attention / long waiting time • Increased expectations resulting from "utopian" health-care awareness campaigns run by the government • Situational triggers • Impatience and intolerance • Increase poverty and unemployment • High rate of inflation • Role of social media	• Lack of implementation of security acts / policy • Culture of political intrusion • Culture of intercession • Top-bottom cultural assumption • Defamation of health-care institutes • High economic costs • Lack of proper referral system • Lack of proper monitoring • Lack of population control • Lack of assessment of data for planning and development

Theme III: Preventing violence

Sub-themes:

Four sub-themes were identified and a consensus was reached on two broad categories, that is, institutional response / existing services and prevention of violence. The sub-themes were:

1. Future without violence.
2. Establishment of institutional regime / model for safe working environment.
3. Strategies for trigger phase prevention.
4. Strategies for crisis de-escalation and protection.

> *"People should be made aware about the punishment for unleashing violence at a hospital or against health-care workers. There should be a proper security system in place."* – Nurse

The third theme emerging from the study described the various strategies for prevention of violence. These include strategies for prevention of violence in future, establishing institutional model for safe working environment and crisis de-escalation.

The current study identified that creating awareness among the general public regarding avoidance of violence could make a big difference. Advocacy for violence prevention and implementation of policies regarding security of health-care institutes were found to be an important step towards a safe working environment.

> *"A culture of respect should be promoted at hospitals and government institutions. Coordination among staff and different departments should be developed."* – Police personnel

It was found that staff education, collaboration and skill development were necessary for providing care and averting violence. Good communication skills and fostering resilience was found important for preventing and handling situational triggers. Facilitating hospital processes and managing attendants were identified as important factors in preventing violence.

The present study also identified that establishment of an effective emergency response and security system is important for crisis de-escalation and protection. There should be a 24-hour security surveillance system including scanners, cameras, security surveillance officers and a security centre at all hospitals. In addition, there should be a rehabilitation centre and compensation system for the victims of violence.

The following table summarizes the strategies for prevention of violence, as described by the respondents.

Table 5: Strategies for prevention of violence against health care

Future without violence (Primary prevention at government level)	Establishment of institutional regime / model for safe working environment (Primary prevention at institution level)	Strategies for trigger phase prevention (Secondary prevention)	Strategies for crisis de-escalation and protection (Tertiary prevention)
• Education • Peace education • Advocacy / awareness / outreach • Collaboration of all stakeholders / departments • Influencing policy and legislation • Increase in employment opportunities • Decrease in poverty • Positive role of social media	• Proper service delivery • Implementation of security act (making health-care institutions as zero-tolerance zones) • Establishment of 24-hour security surveillance system • Good environmental policy • Collegial awareness • Averting violence • Increase human resource • Increase institutional capacity • Staff education, training and skill development	• Empathizing with patients and their attendants / family • Conveying care • Fostering resilience • Situation analysis and problem solving • Development of good communication skills	• Establishment of rapid and effective emergency response system (REERS) • Establishment of counselling and rehabilitation centre • Development of compensation system

DISCUSSION

In terms of scale and profundity, this study is a first-of-its-kind endeavour to explore the issue of violence against health-care personnel in Peshawar District and KP. The study included health-care personnel from primary public health-care facilities, tertiary public health-care facilities and private hospitals, the major sources of health-care provision in Peshawar. Systematic stratified random sampling was employed for selecting the participants of the study.

The prevalence of violence witnessed and/or experienced by health-care personnel in Peshawar District was explored through the study. The overall prevalence of violence, either experienced, witnessed or both, in Peshawar District was 51% (every second health worker). More than a quarter (26%) of the health-care personnel reported witnessing as well as experiencing violence against health care. As many as 21% health-care personnel included in the study reported witnessing a violent event while 4% of the participants had experienced violence against health care. Verbal violence remained the predominant form of violence witnessed and/or experienced. Almost half the health-care personnel (49.98%) involved in the study had witnessed and/or experienced verbal violence. The qualitative arm of the study also underlined that emotional and psychological abuse through verbal violence remained the most common form of violence against health-care personnel. Almost a quarter of the respondents (23.67%) reported witnessing and/or experiencing physical violence alone or in combination with other forms of violence. The findings of the study are in conformity with results from other studies previously conducted in Pakistan[11,12]. The relatively higher prevalence of violence reported in these studies could be accounted for by the fact that the settings of these studies were the emergency departments while the current study surveyed various cadres across different units of health-care facilities. The results of the current study are more in conformity with the patterns of violence against health care identified in the study previously conducted in Karachi[13].

Almost two-thirds of the health-care personnel (61%) reported having some level of apprehension and worry regarding violence in their current work settings. Among the health-care personnel who had witnessed and/or experienced violence, more than half (55%) reported having witnessed and/or experienced two to five events in 12 months while a further 33% witnessed and/or experienced a frequency of more than five violent events in one year preceding the study. Almost a fifth of these respondents (18.03%) reported the victim of the event suffering a physical injury as a consequence of violence against health care among whom 75% had to seek formal treatment and 56% had to take time off work. Majority of the respondents who had witnessed and/or experienced violence against health care reported having repeated disturbing memories / thoughts about the events, tendency to avoid thinking / talking about the incidents and an inclination to remain super alert / watchful after violent incidents. A majority of the participants reported having experienced a decline in their motivation to work and a sense of hopelessness. The emotional and psychological harm caused by violence against health care also emerged as a strong finding of the qualitative component of the study. The findings of the study reflect the magnitude and frequency of violence against health care and the burden that this problem imposes upon an already overburdened system. From these numbers, it is easy to glean the degree of physical and psychological toll that violence against health care takes on health-care personnel. The findings of the study also lay bare the prevailing apprehensions and worries among health-care personnel regarding their safety and security at the workplace.

Health-care personnel were asked to identify the causes responsible for violent events witnessed and/or experienced. Communication failure, unreasonable expectations, substandard care, management failure and human error, financial pressure, facility failure, inadequate staff and unexpected clinical outcomes emerged as major factors responsible for violence against health care in the quantitative arm of the study. The qualitative component of the study identified poor socio-economic indicators, role of

media, self-directed care (patient insisting on treatment unnecessary for their condition), lack of relevant policies, lack of proper security systems, delayed attention and long waiting time, lack of proper referral system and political interference as additional factors causing violence against health care.

The study revealed that multiple perpetrators (two or more) were responsible in 85% of incidents of violence against health care. In only 15% of the incidents, a single perpetrator was involved. Attendants of patients (44%) and patients themselves (20%) were the perpetrators in almost two-third incidences of violence committed against health care. The perpetrators in 14% of violent events targeting health care were members of the general public. Emergency rooms and wards were the most common sites of this violence. Overcrowding in hospitals due to multiple attendants and ease of access/unrestricted entry increased the vulnerability of health care personnel to violence.

About an eighth (12%) of the victims of violence against health care took no action against the perpetrator. Only 11% of the victims completed an incident/accident reporting form. Close to 32% of the participants who took some action only made a recourse to a deliberate denial of the incident and reported trying to pretend as if it never happened. While the management of health-care facility remained the main source to whom the incident was reported, 15% of the victims who took some action following the event requested for a transfer to another position. The main factors responsible for not reporting the incident included the health-care personnel deeming reporting of event as not important (66%), and useless (41%). Fear of negative consequences, lack of information regarding whom to report to and feelings of shame and guilt remained the other major deterrents. Results from the qualitative arm of the study show that health-care personnel had become desensitized to incidents of violence and considered them a part of their daily work. From this description emerges the picture of a health-care worker who has little institutional support and clarity regarding response to a violent event and has to resort to developing coping mechanisms detrimental to the psychological well-being of an individual.

During the study, health-care personnel were able to identify key contributors to the development of violence and made recommendations for its prevention. The majority (82%) of health professionals surveyed responded in the affirmative when asked if the event could have been prevented. They were able to identify lack of awareness among the general community, heavy workload, lack of facilities and shortage of staff, unreasonable expectations of patients and attendants and VIP culture as major reasons behind the violence. Enhancing the provision of health-care services, increasing the number of staff, raising awareness in the general community, restricting the number of attendants, provision of security and abolishing preferential treatment were listed as the key recommendations to prevent violence against health care.

RECOMMENDATIONS

Violence against health care in hospitals of Peshawar district should be considered a serious public health issue. As demonstrated by the results of the current study, the prevalence of violence against health care is quiet high. The absence of an organized effort to curb this serious humanitarian concern is alarming. Safety of the wounded and the sick, health-care personnel, health-care facilities and medical vehicles is important for provision of essential services. Therefore, a holistic effort is needed to ensure that the wounded and the sick have timely access to health care and that the facilities and personnel to treat them are available, adequately supplied with medicines and equipment, and are safe and secure. It is also evident from the findings of the study that tackling this issue is not just the health-care community's concern, but also needs the support and facilitation from government, the administration, lawmakers, law enforcement, civil society, and international organizations.

The following are recommendations to prevent violence against health care:

1. Conduct a national representative study to know the full magnitude, patterns and dynamics of violence against health care in Pakistan.
2. There is an urgent need to raise awareness among the general public regarding respect and protection of the health-care community. The rights, roles and responsibilities of all stakeholders should be promoted on all fronts. The need for undertaking behavioural change communication campaigns to achieve this cannot be overemphasized. Such campaigns should also serve to remind health-care personnel of their responsibilities towards the wounded and sick.
3. Religious and community leaders should be engaged to play a greater role in changing perceptions, creating awareness and enhancing the respect for health care.
4. Violence against health care is a pressing public health issue and should be advocated for as such. While the realization of the problem exists within certain quarters, facilitation from health-care community, health-care administration, law enforcement authorities, civil society, international organizations, media and armed forces is required to ensure initiation of conscious and sustained efforts for safeguarding health care.
5. The skills of health-care personnel with respect to communication with patients and their attendants, ethical principles of health care, managing violence in health-care settings and dealing with the consequences of violence need to be enhanced.
6. Universities and other educational institutions need to be encouraged to incorporate modules on the implications of, and means to address violence against health care, in the curriculum of public health, political science, law and security studies.
7. Government of KP needs to ensure provision of health-care services suitable for the needs of the population and to ensure that the workload of personnel is in conformity with the recommended standards.
8. There is a need to strengthen the domestic legal framework for ensuring the protection of wounded and sick, health-care personnel and facilities and medical transport. In the context of KP, this means developing and promoting legislation protecting the rights of patients and the health-care personnel, facilities and transport. The bill for protection of health care, KP Healthcare Service Persons and Institutions (Prevention of Violence and damage to property) Act 2017, passed by the KP cabinet, needs to be revised and passed by the legislature.
9. The knowledge of existing legislation protecting health care should be spread among all the stakeholders, i.e. law enforcement authorities, civil servants, health-care personnel and the general public.
10. Institutional policies with no tolerance for violence against health care should be developed and implemented. The KP government should regularly collect data on violence against health care and take preventive measures based on the data. Institutional incident reporting systems and response mechanisms need to be developed and implemented in health-care facilities.

11. The preparedness of health facilities for avoiding violence and ensuring continuity of provision of services during or following a violent event should be enhanced. The recommended measures include carrying out security assessments, drawing up contingency plans, training staff, taking steps to protect patients, maintaining good community relations and taking security measures to ensure that health-care facilities and their supplies remain safe.
12. Experiences and best practices with proven effectiveness need to be incorporated in the KP health-care system.
13. Continuous engagement with the media to promote responsible, balanced and informed reporting on health care.
14. Engagement with law enforcement agencies to incorporate all aspects regarding the respect and protection of health care into their standard operating procedures to facilitate the passage of medical transport in traffic and at check-points.

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