ORIGINAL ARTICLES

Workplace violence against healthcare workers: a case study in a general hospital, South of Vietnam

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ABSTRACT

Objectives: To describe the exposure of healthcare workers (HCWs) to different forms of violence penetrated by patients/clients or their relatives and analyze some factors affecting violence against HCWs in Thap Muoi Regional General Hospital, Dong Thap province in 2021.

Methods: This study employed cross-sectional design with quantitative and qualitative research. The quantitative research is conducted through a survey of 139 HCWs using the revised ILO/ICN/WHO/PSI questionnaire. The qualitative research was conducted through 09 in-depth interviews and 2 focus group discussions with stakeholders to analyze the factors affecting violence against HCWs.

Results: 10.8% of HCWs experienced at least 1 time of physical violence by patients/relatives; 71.9% of HCWs suffered psychological violence includes verbal abuse (100.0%); bullying (67.0%), threats (76.0%) and sexual harassment (19.0%). Some factors that increased the risk of violence against HCWs include perpetrators were men, adolescents, drug users and lack of awareness of hospital rules; HCWs were young, inexperienced, had poor attitudes and communication skills; high pressure and overload working environment. Meanwhile, some factors such as reasonable procedures for receiving and handling emergencies, the coordination of the security team combined with the equipped hospital security system and the continuous improvement of the quality of services had contributed to decrease violence against HCWs.

Conclusion: Our results indicated that the prevalence of HCWs' experience of violence has been still high and related to personal characteristics such as age and level of expertise, and hospital characteristics such as high patient admission rates. In order to minimize violence to HCWs, improving workplace security associated with training for HCWs on handling violence should be continuous implemented.

Keywords: *violence, healthcare workers, emergency department, health facilities.*

INTRODUCTION

The National Institute for Occupational Safety and Health (NIOSH) defines workplace violence (WPV) as "violent acts (including physical assaults and threats of assaults) directed toward persons at work or on duty" (1). WPV can be classified as physical violence (the use of physical force against another person or group, that results in physical, sexual, or psychological harm; includes beating, kicking, slapping, stabbing, shooting, pushing, biting, pinching, among others) and psychological violence (intentional use of power, including threat of physical force, against another person or group, that can result in harm to physical, mental, psychological, moral or social

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Submited: 01 April, 2022
Revised version received: 20 March, 2022
Published: 30 April, 2022
DOI: https://doi.org/10.38148/JHDS.0602SKPT22-029

development; includes verbal abuse, bullying/ mobbing, harassment, and threats) (2).

Violence against healthcare workers (HCWs) is a form of WPV in which HCWs are affected (1). Violence against HCWs has not only a negative impact on the psychological and physical well-being of health-care staff, but also affects their job motivation. Consequently, this violence compromises the quality of care and puts health-care provision at risk. It also leads to immense financial loss in the health sector. Violence against HCWs tends to increase all over the world, both in quantity as well as seriousness. However, it is regularly not reported fully. A systematic review by James P.Phillips (2018) indicated that in the USA, every year, about 18,000 assaults of HCWs are reported officially, occupying 75% of total physical violence cases at workplace (3). A study conducted in Germany in 2018 in 81 health centers over 1984 HCWs indicated up to 94.1% and 69.8% HCWs suffered from verbal violence and physical attack over the past 12 months (4). In Vietnam, according to the statistics provided by the Medical Services Administration, from 2011 to 2018, the whole country recognized at least 45 cases in which HCWs were assaulted by patients or their relatives. Most of the victims are nurses and doctors (5). Studies also identified risk factors of this situation, including working in remote health care areas, understaffing, emotional or mental stress of patients or visitors, insufficient security, and lack of preventative measures (6-9).

Thap Muoi Regional General Hospital is a provincial hospital, with 250 beds, 24 divisions and 272 HCWs. Every day, the Hospital receives from 900 to 1,500 arrivals of patients. The Hospital is always in overloaded state, which increases working pressure of HCWs and possibly leads to errors in service. In 2020, the Hospital recognized about 60 assaulted HCWs at workplace (about one fifth of them are physically assaulted), mainly caused by the patient's relatives; most of the assaulted HCWs were doctors and nurses in clinical departments, which affected the medical examination and treatment as well as causing anxiety to the HCWs at work (10). This study was conducted to describe the exposure of HCWs to different forms of violence penetrated by patients/clients or their relatives and analyze some factors affecting violence against HCWs, whereby proposing adequate solutions in order to improve security at the hospital.

METHODS

Study design: A cross-sectional design with combination of quantitative and qualitative research.

Study site and study time: the study was conducted from March 2021 to August 2021, at Thap Muoi Regional General Hospital, Dong Thap province, Vietnam.

Study participants

Healthcare workers (including doctors, nurses, and technicians) currently working in the Thap Muoi Regional General Hospital.

Hospital leader, head of clinical department, representative of the trade union executive committee, staff at the social work division, security guard, patients and their relatives.

Sample size and sampling

In the quantitative research: Selecting all 139 HCWs who have contact with patients of patient-relatives (including doctors, nurses, and technicians) at the Hospital.

In the qualitative research: using purposed sampling method. Conducting 09 in-depth

interviews (IDIs) (including 01 hospital leader, 02 leaders of clinical department, 01 representative of the trade union executive committee, 01 staff at the social work division, 01 security guard and 03 HCWs seriously assaulted) and 02 focus group discussions (FGDs) with HCWs and patients/ their relatives.

Study tools

In the quantitative research: Using the questionnaires were developed by ILO/ICN/ WHO/PSI (2) in which violence against HCWs is classified as physical violence (the use of physical force against another person or group, that results in physical, sexual, or psychological harm; includes beating, kicking, slapping, stabbing, shooting, pushing, biting, pinching, among others) and psychological violence (intentional use of power, including threat of physical force, against another person or group, that can result in harm to physical, mental, psychological, moral or social development; includes verbal abuse, bullying/ mobbing, harassment, and threats). Questions were linked with previous work examining risks of violence to health worker in Vietnam health facilities (11). After testing the questionnaire, it was revised and used officially.

In the qualitative research: In-depth interview/ group discussion instructions are established as per main subjects including actual violence against HCWs (physical and psychological violence), affecting factors (risk factor, protection factor) to the actual violence against HCWs at the hospital (including individual factor, hospital factor and policy/ social factor, etc.).

Data collection and statistics analysis

Data processing and analysis: quantitative data was entered by Epidata 3.0 software, descriptive analysis was applied to describe healthcare worker experiences with violence by SPSS 22.0 software.

Information processing analysis: Recordings of in-depth interviews/group discussions are converted into word files and then encoded and analyzed by themes.

Ethical approval: The study is approved by the Research Ethics Committee by the Hanoi University of Public Health (Decision No. 266/2021/YTCC-HD3).

RESULTS

General information of participants

Table 1. Characteristics of the HCWs involved in the study (n=139)

Characteristics of HCWs		Frequency (n)	Percentage (%)
Age	18 – 35	58	41.7
	Over 35	81	58.3
Sex	Male	49	35.3
	Female	90	64.7
Profession	Doctor	42	30.2
	Nurse	85	61.2
	Technician	7	5.0
	Other	5	3.6

Characteristics of HCWs		Frequency (n)	Percentage (%)
Highest qualification	Postgraduate	15	10.8
	University graduate	40	28.8
	College graduate	49	35.2
	Vocational education	35	25.2
Working position	Department leader	16	11.5
	Attending doctor	25	18.0
	Chief nurse	10	7.2
	Caring nurse	78	56.1
	Other	10	7.2
Working seniority	Under 1 year	2	1.4
	From 1-3 years	13	9.4
	> 03 years	124	89.2
Night shift/ night duty	Yes, 1-4 times/month on duty	17	12.2
	Yes, over 4 times/month	80	57.6
	No	42	30.2
	Total	**139**	**100**

Among 139 HCWs involved in the study, 41.7% is at the age of 18-35 and 58.3% at the age of over 35; 64.7% is female; 61.2% is nurses, 30.2% is doctors and 5.0% is technicians. In terms of qualifications, 35.2% has college degree, 28.8% has university degree, 25.2% has vocational degree and 10.8% has postgraduate degree. Most of the HCWs have over 3 years of experience (98.2%) and work on night shift (on night duty) (69.8%).

Personal experiences with violence

Physical violence

Among 139 HCWs involved in the study, 15 persons (occupying 10.8%) have been physically assaulted over the past 12 months.

Table 2. Characteristics of physical violence against HCWs over the past 12 months (n=15)

Content	Frequency (n)	Percentage (%)
Number of physical violence times		
1 time	8	53.3
2 times	7	46.7

Content	Frequency (n)	Percentage (%)
Latest physical violence		
Within 06 months	4	26.7
From 06 months to 12 months	11	73.3
Physical violence perpetrators		
Patients	6	40.0
Patient's relatives	9	60.0
Form of physical violence		
No using murder weapons (eg. pushing, slapping, punching, beating, kicking, biting, etc.)	15	100.0
Using murder weapons (beating, stabbing, and shooting, etc.)	0	0.0
Time of physical violence		
From 7am - before 1pm	6	40.0
From 1pm - before 6pm	0	0.0
From 6pm - before 12am	9	60.0
From 12am - before 7am	0	0.0
Work at the time of physical violence		
Treating/caring patients	9	60.0
Instructing/explaining/advising the patients/their relatives	6	40.0
Taking a rest outside working hours	0	0.0
Physical consequences		
Slight injury without absence from work	14	93.3
Injury to the extent of absence from work from 1-6 days	1	6.7
Psychological consequences		
Fear without absence from work	10	66.7
Fear to the extent of absence from work from 1-6 days	5	33.3

Among 15 HCWs suffering from physical violence over the past one year, there are 8 persons (53.3%) suffering from physical violence one time and 7 persons (46.7%) suffering from physical violence two times; 11 HCWs (73.3%) were assaulted 06 to 12 months ago, 4 HCWs (26.7%) were attacked within 06 months; 6 cases (40.0%) were caused by patients, the rest caused by the patient's relatives. 100% of the cases didn't use murder weapons. Violence occurred at two points of time, 06 cases (40.0%) occurred from 7am to before 1pm and 9 cases (60.0%) occurred from 6pm to before 12am. At the time of violence, 60.0% of HCWs said that they were treating/caring patients; 40.0% were instructing/explaining/advising patients/their relatives. Physical violence caused certain impacts or consequences to the victims. For physical consequences, 16 HCWs suffered from slight injury; 1 healthcare worker suffered from such serious injuries that they

had to be absent from work from 1 to 6 days. For psychological consequences: 5 HCWs were so afraid that they had to be absent from work from 1 to 6 days; 10 HCWs were afraid but they didn't have to be absent from work.

Psychological violence

100 out of 139 HCWs (71.9%) said that they have suffered from psychological violence over the past 6 months.

Table 3. Characteristics of psychological violence against HCWs over the past 6 months (n=100)

Content	Frequency (n)	Percentage (%)
Frequency of psychological violence		
Several times within 6 months	68	68.0
1-2 times/ month	21	21.0
1-2 times/ week	11	11.0
On most days	0	0.0
Latest psychological violence		
Within 01 month	74	74.0
From 01 month to 06 months	26	26.0
Psychological violence perpetrators		
Patients	13	13.0
Patient's relatives	43	43.0
Both patients and their relatives	44	44.0
Form of psychological violence		
Verbal violence	100	100.0
Bullying	67	67.0
Threatening	67	67.0
Sexual harassment	19	19.0
Psychological consequences		
No consequences	45	45.0
Fear without absence from work	54	54.0
Fear to the extent of absence from work from 1-6 days	1	1.0

Among 100 HCWs suffering from psychological violence over the past 6 months, 68.0% suffered from violence for several times, 21.0% suffered from violence for one or two times a month and 11.9% suffered from violence for one or two times a week. Most of them (74%) had the latest violence one month ago. For psychological violence perpetrators, 13.0% is caused by the patients, 43.0% is caused by their relatives and 44.0% is caused by both patients and their relatives.

In terms of form of psychological violence: among 100 HCWs suffering from psychological violence, 100% suffered from verbal violence, 67.0% suffered from bullying, 67.0% were threatened and 19%

was sexually harassed.

In terms of psychological consequences: 54% HCWs suffering from violence said that they were afraid, but they didn't have to be absent from work, only one person (1.0%) was so afraid that he/she had to be absent from work from 1 to 6 days and 45% replied that such psychological violence hardly affected their health.

Some factors affecting violence against HCWs

Factors relating patients and their relatives

The study result shows that some factors such as individual characteristics; use of stimulants and sense of compliance with the hospital's rules by the patients/their relatives are risk factors leading to violence against HCWs.

Individual characteristics of patients/their relatives:

Qualitative information indicates that in physical violence situations, violence perpetrators are often men who are young and self-employed. However, in psychological violence situations, violence perpetrators may be old persons with wide knowledge and relationships.

"Adolescents often perpetrate more physical violence situations that are more aggressive. Workers often don't have as gentle speech as intellectuals. However, intellectuals, even old people, still curse and threat HCWs." (FGD-HCWs).

Patients/their relatives use stimulants:

The study result shows that recently, the fact that the patients/their relatives use stimulants and perpetrate violence situations tends to occur more frequently:

"The fact that the patients/their relatives use stimulants and perpetrate violence recently occurs more frequently and more complicatedly. In particular, stimulants are not only alcohol but also methamphetamine. At that time, the perpetrators cannot control themselves." (IDI-HL).

Awareness of the patients/their relatives:

Although the hospital and the department have issued regulations on the number of relatives for each patient, many people fail to observe the hospital rules. One patient is accompanied by three or four relatives and when they are warned, they cause pressure to HCWs.

"One patient is accompanied by 2 - 3 relatives. Maybe they don't understand and know the hospital rules. However, when they are warned, they cause pressure and violence against HCWs, possibly cursing or even beating…" (IDI-ST).

In the context of Covid-19 pandemic, the hospital also requires wearing masks, distancing and other epidemic prevention measures. However, in many cases, the patients/their relatives failed to observe such rules. When they were warned by HCWs, they cursed or assaulted HCWs.

"For example, for such very simple things as wearing masks and standing in lines with distancing to ensure epidemic prevention, the patients or their relatives failed to observe. When they were warned by HCWs, they cursed or even assaulted HCWs." (IDI-HCWs).

As such, it can be seen that violence against HCWs often comes from patients/their relatives. The following situation 1 illustrates this fact more clearly:

Situation 1: *This situation occurred in June 2021 when the patient was taken by their relatives to the General Emergency Department for emergency. As stipulated,*

only one relative is allowed to accompany the patient. However, this patient was accompanied by 4-5 very aggressive relatives (using alcohol with very strong smell). When the security team invited them to go outside, these relatives accepted to stay outside but they scolded noisily. About 15 minutes later, when the doctor went out of the room, these relatives showed their aggression such as cursing, snatching the doctor by the collar, beating the doctor with keys. Immediately after that, the security team timely controlled them and reported the case to the public security and the hospital leader.

After this situation, the doctor had psychological panics.

(IDI, Social works department and the assaulted HCW)

Factors relating to HCWs

The study result shows that some factors belonging to HCWs affect the actual violence at the hospital such as working experience, behavior attitude, communication, and problem-solving skills.

Working experience

The study result shows that violence against young HCWs is more frequent than violence against old experienced HCWs:

"HCWs are often assessed by age. Maybe the perpetrators think that young doctors have lower professional qualifications or the perpetrators regard such doctors as their children, so they have improper words or behaviors"… "those who experienced such situations have better solving experience than us, so if they fall into such violence, the degree of violence is slighter" (FGD- HCWs).

Behavior attitude, communication and problem-solving skills of HCWs

Way of receiving, attitude and problem-solving of HCWs are very important while the patients/their relatives are anxious about emergency. If HCWs fail to explain and ignore them, it is very likely to lead to such acts as quarrelling, fighting or even more serious acts.

"If we speak loudly or tell the patients "wait" with grudge or even have unpleasant attitude, the relatives may misunderstand that we don't pay attention to their relatives, depending on the awareness of each person and each situation. At that time, hot-tempered persons will have negative reactions such as quarrelling with HCWs." (IDI-Department Leader).

Factors relating to healthcare institution

These factors don't cause violence situations but contribute to increasing or reducing the degree of violence against HCWs at the hospital, including: stressful and overloaded working environment, especially at the Emergency Department; receipt process and the patients as well as the coordination of security team.

Stressful and overloaded working environment at the hospital

Stressful and overloaded working environment at the hospital has led to many conflicts between related parties that are not timely solved, which increases the risk of violence:

"The hottest point is the Emergency Department, the Obstetric Department and the Examination Department. The persons taking patients to the hospital will have very high demands. The patients are often seriously ill, of various classes and diseases." (IDI-CD)

Patient receiving and treating procedure

Until now, the patient receiving and treating procedure at the Hospital has been established

and improved, whereby classifying patients in emergency or patients with priority; together with improving medical examination and treatment quality, this process has minimized the violence at the hospital:

"At the Clinical Department where patients are screened and classified, the patients in need of actual emergency are referred to the Emergency Department and other patients will be referred to the Consulting Department to reduce pressure at the Emergency Department, concurrently avoiding complaints from patients/their relatives". (IDI-CD).

Coordination by the security team

The Hospital has quick response security team on duty at the Emergency Department and the Consulting Department. The security team coordinates and solves contingencies quickly and timely through camera system in the room and in the corridor; warning system through alarm bells located inside the administrative divisions in the Departments. This has created a security fence to minimize the violence against HCWs at the Hospital:

"The Hospital has established a security fence: security team, camera system and alarming system so that the security system, in case of emergency, will isolate objects to other places" (IDI-HL)

"If the violence against HCWs is interfered by the security team and attending people, it will not become serious. Otherwise, the consequences will be unforeseeable" IDI-ST)

The following situation 2 illustrates the factors belonging to healthcare institutions with positive impact on the actual violence against HCWs at the Emergency Department:

Situation 2: *At the beginning of 2019, after being examined by the doctor at the General Emergency Department, two hours later, the patient and his/her relatives were taken by the nurse to the General Surgery Department. While taking the patient into the elevator because the elevator door closed striking against the stretcher, the patient's son got angry. He used a murder weapon (grip) to beat on the head of the nurse while scolding her rudely. Upon identifying the situation via the corridor camera system, right after that, the security team was present to control and take the son to the public security, while reporting the case to the hospital management. The hospital management coordinated with the public security in extracting camera to collect proof and take the nurse to the emergency department. As a consequence, the nurse got head trauma and was hospitalized for 7 days. The perpetrator of such violence was administratively punished and detained for 24 hours.*

(IDI, Social Works Department and the assaulted healthcare worker)

DISCUSSION

Discussion on situation of violence among HCWs

The study result shows that 10.1% of HCWs met at least one physical violence situation over the past 12 months, including 26.7% attacked within 6 months. This prevalence is medium compared with the world studies: lower than the study by Anja Schablon (2018) conducted on 1984 HCWs at 181 healthcare institutions in Germany (69.8%) (4), or the study by Basak Bayram (2017) on 713 doctors at the Emergency Department in Turkey (29.3%) (7); but higher than the study by Krystyna Kowalczuk (2017) on 1624 HCWs in Poland (ranging from 1.01% to 3.17%) (8) or lower than the rate in the countries such as Bulgaria (7.5%), Brazil (6.4%), Mozambique (6.3%), Lebanon (5.8%) and Portugal (3.0%) in the summary report by Vittorio di Martino

from 7 countries using the Questionnaire ILO-INC-WHO-PSI (12). The reason may be the difference in terms of toolkit, definition and way of violence classification as well as time and scope of studies.

Compared with domestic studies, the rate of HCWs suffering from violence at Thap Muoi Regional General Hospital is lower than the study by Dao Ngoc Phuc (2017) with 30.7% of the nurses suffering from physical violence, 17.3% beaten, 8% having personal belongings damaged, 6% bitten, pinched, nipped; 3% suffering from violence with weapons (13). This difference may be because the study by Dao Ngoc Phuc only considers nurses and the central hospital where receives serious/ emergent patients from lower branches (13).

In terms of psychological violence, the study result shows that 71.9% suffered from at least one form psychological violence over the past 6 months, mainly "several times over the past 6 months" (68%), in which verbal violence occupies the highest rate (100%), followed by bullying and threatening (holding 67.0%) and sexual harassment occupies the lowest rate (19%).This was also a medium rate compared with other studies in the world and in Vietnam: lower than that in such countries as Germany (94.1%) (4), Turkey (78.1%) (7), higher than that in Brazil (39.5%), Bulgaria (32.2%), Portugal (from 27.4 – 51.0%); South Africa (52.0%), Lebanon (40.9%); Mozambique (38.0%) and Thailand (47.7%) (112-116) and similar to the study by Dao Ngoc Phuc (2017) at the National Pediatric Hospital (65.3%) (13) and Nguyen Ngoc Phu (2019) at the 115 Hospital (64,4%) (11). This difference was also explained by the difference in the study object, implementation year and measurement toolkit.

Discussion on factors affecting the violence among HCWs

Qualitative study result indicates that the actual violence against HCWs is affected by such factors as patients/their relatives; HCWs and healthcare institutions. This result is the same to many studies in the world. Male, young aggressive patients/relatives using stimulants are often perpetrators of physical violence situations, which has been shown in the study by Pompeii, L. or in the summary report by Vittorio di Martino from the data of 7 surveys on the countries using the Questionnaire ILO-INC-WHO-PSI (12). For the factors belonging to HCWs, the study result points out that young and inexperienced HCWs are often more likely to violence; especially many violence situations come from the attitude, communication and problem-solving skills of HCWs. This result is quite suitable with studies/surveys in the world and similar to the report by the Department of Medical Service Administration - Ministry of Health on the important reason of physical violence cases occurring in Vietnam from HCWs, including: unprofessional attitude of HCWs in communicating with the patients/relatives; lack of physiological skills towards patients/ relatives (5). For the factors belonging to healthcare institutions, the study result shows that the Emergency Department has stressful environment (receiving serious/dangerous patients) and has more risks of violence against HCWs than other departments, some factors may help to minimize this situation including organizing the patient organizing and receiving process, coordinating with security team and improving medical quality. These factors have been mentioned in the studies and reports in the world as well as in Vietnam (11, 13).

Discussion on limitation of the study

The study has some limitations including small scope within a hospital, so the representativeness remains low; the toolkit is established as instructed by the corrected ILO/ ICN/WHO/PSI Alliance; there are not many

study themes in Vietnam to be applied and standardized. Therefore, next studies should standardize the toolkit and be conducted at a larger scope with various objects (including hospital security guards).

CONCLUSION

At Thap Muoi Regional General Hospital, 10.8% of HCWs suffered from at least one physical violence perpetrated by patients/relatives; 71.9% of HCWs suffered from psychological violence in the form of verbal violence (shouting, insulting, etc.); bullying, threatening and harassing mainly for "several times over the past 6 months". Some factors increasing the risk of violence against HCWs include: male, young patients/relatives, using stimulants, lacking compliance with the hospital rules; HCWs are young, inexperienced, have bad attitude, communication and problem-solving skills; pressure and overload at the Emergency Department. However, some factors such as adequate emergent case receiving and treating process, the coordination between security team and the hospital camera system, nonstop improvement of medical quality at the Department/Hospital have contributed to improving this actuality.

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