



# Workplace violence against nurses at Minia district hospitals

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## ABSTRACT

**Introduction:** Violence against nurses at the workplace is an alarming problem in both developed and developing countries affecting the quality of their work. The aim of this study is to assess the prevalence of external (patient initiated) and internal violence (initiated by staff members) against nurses and studying the violence-associated factors such as perpetrators, the attitude of nurses following aggression incidents, consequences, and impact on nurses and work.

**Methods:** A cross-sectional study included 385 nurses from three different hospitals in Minia district was agreed to participate in the study. These hospitals included Health Insurance Hospital, Minia University Hospitals (Minia University Gynecological, Obstetric, and Pediatric Hospital and Minia Renal Hospital), and Minia general hospital. The well-structured questionnaire covered four main domains; sociodemographics, lifetime working experience of violence, external and internal violence and its effects on work, the perpetrators of violence, and attitude of nurses following violent incidents.

**Results:** More than half of nurses (55.8%) were exposed to workplace violence during their working lifetime. Experiencing external violence (patient initiated) during the past year was significantly higher (57.4%) than the internal (staff initiated) type (33.5%). Verbal violence was the most common type of violence. Reporting violence incidents were done by 68.3% and 38.7% of the nurses who were exposed to external and internal violence, respectively.

**Conclusion:** Violence against nurses working in different health-care facilities at Minia district was prevalent and has a significant impact on nurses and their work.

**Keywords:** Workplace violence; against nurses; Minia; Egypt

## INTRODUCTION

Violence against health care workers is highly prevalent, the World Health Organization (WHO)

defines the workplace violence that the staffs are abused, threatened, or assaulted in circumstances related to their work (1). Workplace violence against nurses has significantly increased in the past decade or so, with some studies suggesting 110% spike in the rate of violent injuries against health care workers in the past 10 years. According to the National Institute for Occupational Safety and Health, there are four types of workplace violence in the health-care field. Type I: The perpetrator has criminal

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Submitted: 04 January 2020/Accepted: 19 March 2020

DOI: <https://doi.org/10.17532/jhsci.2020.865>



intent and has no relationship to the business or its employees. Type II: A customer, client, or patient becomes violent when receiving care or services. Type III: Employee-to-employee violence. Type IV: Personal relationship violence (2). Workplace violence considered an endemic problem in health care (6, 18) and nurses are considered at a higher risk of abuse (3,4,5). Nearly one-quarter of the world's workplace violence occurs in that sector (6). The WHO defines workplace violence as, "Incidents where the staff is 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." The WHO considers both physical and psychological harm, including attacks, verbal abuse, bullying, and both sexual and racial harassment, to be workplace violence (7). Health workers are at high risk of violence all over the world. Between 8% and 38% of health workers suffer physical violence at some point in their careers. Many more are threatened or exposed to verbal aggression. Most violence is perpetrated by patients and visitors. Furthermore, in disaster and conflict situations, health workers may become the targets of collective or political violence. Categories of health workers most at risk include nurses and other staff directly involved in patient care, emergency room staff, and paramedics (7). Nurses are most available personnel in the hospital exposed to stressful situations such as accidents, deaths, waiting to visit a physician, or transfer of patients to a ward or another hospital, these situations expose them to more abuse from patients or their relatives besides the verbal and non-verbal aggression, they sometimes face from hospital staff (9). During the professional lifetime, half of health care workers experience at least one incident of physical or psychological violence, violence rate among nurses reported to be as high as 75.8% in Bulgaria, 67.2% in Australia, 61% in South Africa, 37% in Portugal, 54.0% in Thailand, and 46.7% in Brazil (10). Regarding different forms of violence against nurses, the physical abuse represents about one-third while the sexual ones represent one-quarter and about two-thirds are verbally and emotionally assaulted, in the Middle East; non-physical was the highest, whereas the USA and Europe are particularly prone to violence of all types including

even sexual harassment. The most common perpetrators of violence against nurses were found to be patients' family and friends (9). In Lower Egypt, the prevalence rates of violence against nurses that were detected by two studies showed marked discrepancies; 86.1% in Cairo University (11) and 27% in Ismailiya (1). In Upper Egypt, a study was conducted in BeniSuef and found that 92.8% of BeniSuef nurses were exposed to workplace violence at least once during their working lifetime (9). The study aims to assess the prevalence of external (patient initiated) and internal violence (initiated by staff members) against nurses and studying the violence-associated factors such as perpetrators, an attitude of nurses following aggression incidents, consequences, and impact on nurses and work.

## METHODS

A cross-sectional study was conducted during the period from August 2016 to December 2016. A convenience sample was used and 385 nurses from three different hospitals in Minia district were agreed to participate in the study. These hospitals included Health Insurance Hospital, Minia University Hospitals (Minia University Gynecological, Obstetric and Pediatric Hospital and Minia Renal Hospital), and Minia general hospital. Face-to-face interviewing was used for data collection. Finally, the questionnaire was designed to cover four main domains; sociodemographics of the surveyed nurses, lifetime working experience with aggression, external aggression and its effects on work and emotional consequences, and internal aggression and its impacts on work. We also focused on the perpetrators and attitude of nurses following aggression incidents. The questionnaire included also a variety of pre-defined response options, including questions that asked respondents to check the frequency of the occurrence of violence, once, 2–5 times, 6–10 times, or >10 times (2). The study was approved by the Ethical Committee of the Faculty of Medicine, Minia University. Before data collection, official permissions were obtained from the authorities of Minia district hospitals. Following the ethical guidelines of epidemiological research, written informed consent was taken from each participant. A full explanation about the research

objectives to the interviewees and their willingness to participate in this study, keeping confidentiality, and personal interview in a private place was among these commitments. Data were analyzed using the software, Statistical Package for the Social Sciences (SPSS) version 19. Qualitative data were presented as frequency distribution and quantitative data were presented as mean and standard deviation. Chi-square and Z tests were done.  $p < 0.05$  was considered as a cutoff for significance.

## RESULTS

The majority of the studied nurses were women (87.3%) and men represent 12.7%. Their ages ranged from 19 to 38 years, with a mean of  $27.7 \pm 5.4$  years. Approximately 50% of the participants were married and 2.6% were divorced. Only a small proportion (1.3%) of the sample had less than secondary or more than a university degree (1.3%), whereas almost half (50.6%) possessed a bachelor's degree in nursing. The mean experience of working was  $1.8 \pm 1.3$ , with the category of 1-5 years which is the most prevalent (83.9%) (Table 1).

Table 2 shows that more than half of nurses (55.8%) were exposed to workplace violence during their working lifetime, of which 50.9% faced violence twice to fifth times. Experiencing external violence during the past year was significantly higher (57.4%) than the internal type (33.5%), and 59.7% and 83.7% of those who experienced external and internal violence, respectively, faced it twice to fifth times (Table 2).

Verbal violence was the most common type of violence that nurses were exposed to during their life, reaching about 52.6%, followed by sexual type 18.1%, psychological 17.7%, and finally, physical assaults 11.6%.

During the past year, the most common reported external aggression was the verbal type representing more than two-thirds (72.4%), followed by psychological (15.8%), sexual (4.5%), and finally physical (2.3%). About 82.2% of the reported internal violence incidents for nurses were of the verbal type, 15.5% for psychological aggression, 1.6% for sexual aggression, and 0.8% for physical aggression.

Reporting violence incidents were done by 68.3% and 38.7% of the nurses who were exposed to

**TABLE 1.** Distribution of the studied nurses according to their demographic and professional characteristics, Minia district hospitals

Data	Total=385
Age	
Range	19–38
Mean±SD	27.7±5.4
Sex	
Male	49 (12.7%)
Female	336 (87.3%)
Residence	
Urban	138 (35.8%)
Rural	247 (64.2%)
Marital status	
Single	190 (49.4%)
Married	185 (48.1%)
Divorced	10 (2.6%)
Education	
Less than secondary	5 (1.3%)
Secondary	180 (46.8%)
University	195 (50.6%)
More than university	5 (1.3%)
Day shift	60 (15.6%)
Mid shift	26 (6.8%)
Night shift	299 (77.7%)
<1 year	62 (16.1%)
1–5 years	323 (83.9%)

external and internal violence, respectively. Nurses who were exposed to external violence reported their incidents to the administration (36.4%), security (27.2%), or physician (23.2%), and colleagues and relatives (13.2%); whereas, nurses who faced internal violence reported the incidents to the administration (68%), security (14%), and colleagues and relatives (18%), ( $p = 0.003$ ). Regarding causes none reporting, 72.8% and 63.3% of nurses exposed to external and internal violence report that there was no effect from reporting (Table 3).

Table 4 shows that males were the most common perpetrators of the violent incidents against nurses (62.4% for external and 76% for internal types). Patient's relatives were the perpetrators who committed the incidents of external violence against a nurse. Supervisors (58.1%), colleagues (34.1%), and administrative staff (7.8%) were the reported perpetrators who committed internal violence against nurses (Table 4).

**TABLE 2.** Prevalence of lifetime exposure to violence prevalence, external and internal violence against nurses during the past year, Minia district hospitals

Data	Lifetime exposure violence against nurse	Last 12 months		
		Exposure to violence		p
		External	Internal	
Prevalence (no. 385) (%)	215 (55.8)	221 (57.4)	129 (33.5)	Z=4.3 p=0.007*
Frequency	215	221	129	X <sup>2</sup> =20.6
Once (%)	84 (39.1)	89 (40.3)	21 (16.3)	p=0.005*
Twice to fifth (%)	131 (50.9)	132 (59.7)	108 (83.7)	
Type	215	221	129	X <sup>2</sup> =10.6
Physical (%)	25 (11.6)	5 (2.3)	1 (0.8)	p=0.03*
Verbal (%)	113 (52.6)	160 (72.4)	106 (82.2)	
Psychological (%)	38 (17.7)	35 (15.8)	20 (15.5)	
Sexual (%)	39 (18.1)	10 (4.5)	2 (1.6)	
More than one type (%)	0	11 (5)	0	

A comparison was done between external and internal violence

**TABLE 3.** Frequency of reporting of external and internal violence against nurses and causes of non-reporting, Minia district hospitals

Reporting	External no. 221 (%)	Internal no.129 (%)	p
Reporting	151 (68.3)	50 (38.7)	Z=3.7 p=0.008*
Reported to	151	50	X <sup>2</sup> =23.3
Administrator	55 (36.4)	34 (68)	p=0.003*
Security	41 (27.2)	7 (14)	
Physician	35 (23.2)	0	
Relatives and friends	20 (13.2)	9 (18)	
Cause of non-reporting	70 (31.4)	79 (61.3)	X <sup>2</sup> =2.8
Fit the situation from the periphery	10 (14.2)	20 (25.3)	p=0.2
Apology of the aggressor	9 (12.8)	9 (11.4)	
Reporting has no effect	51 (72.8)	50 (63.3)	

**TABLE 4.** Sociodemographic characters of violence perpetrators against nurses, Minia district hospitals

Characters of violence perpetrators	External no. 221	Internal no.129
Age	35.7±10.4	32.1±7.4
Sex		
Male (%)	138 (62.4)	98 (76)
Female (%)	83 (37.6)	31 (24)
Who		
Administrator (%)	0	10 (7.8)
Colleagues (%)	0	44 (34.1)
Nurse supervisor (%)	0	75 (58.1)
Patient relative (%)	221 (100)	0

The most reported consequences of external violence by exposed nurses were anger (32.1%), whereas no effect represented by 28.6% of exposure to internal type. Regarding the impact of exposure to violence on work performance, of the nurses who faced external and internal aggression last year, 38.5% and 45.7% reported that their work has not been affected by the violence incidents; however, 61.4% and 54.5%, respectively, reported that exposure to violence incidents affected their work in various levels; about 23.1% of nurses who experienced external violence reported being not satisfied with the job, bored of work, 18.6% of nurses who experienced

internal violence reported decreased interest and efficiency at work (Table 5).

## DISCUSSION

The prevalence results showed that 55.8% of Minia nurses were exposed to workplace violence during their working life and during the past year, 57.4% and 33.5% of them experienced external “patient initiated” and internal violence “staff-initiated violence” (Table 2). This is similar what found in Canadian hospitals in Alberta and British Columbia, nearly half of those surveyed had experienced one or more types of violence in the past five shifts worked (11) and these findings were lower than the study of workplace violence against nurses in Benisuef and found that the majority of their nurses (92.8%) had been exposed to violence at work (9), and the finding of Iranian studied violence against nurses: A neglected and health-threatening epidemic in the university-affiliated public hospitals in Shiraz, Iran, and found that 89.6% of nurses had experienced at least one kind of violence (14). The finding of the current study was higher what found in Ismailia governorate, Egypt, and determined its prevalence to be about 27% (2). The reasons for such differences are referred to as the different methodologies of different studies, especially inquiring about violent incidents in various periods of work.

Verbal violence was the most common type of violence that nurses were exposed to, reaching about 52.6%, followed by sexual aggression 18.1%, psychological 17.7%, and finally physical assaults 11.6%, these findings support the finding of Benisuef study which found that verbal and psychological violence incidents were the most common types of violence that nurses were exposed to, reaching about 97.6% and 74.6%, respectively, followed by physical aggression 33.4% and finally sexual assaults 19.8% (9). Psychological violence was the most common form (78.1%) of workplace violence against a nurse in Cairo hospitals, Egypt (12). Health care workers in Palestinian public hospitals have a higher rate of exposure to non-physical violence (59.6%) followed by physical violence (20%) (13). Furthermore, in Hong Kong, it was reported that the most prevalent violence was verbal abuse (73%) followed by physical and sexual abuse (14). Regarding the type of workplace violence in Iran, the highest proportion of abuse was in verbal nature (10). In the present external and internal violence incidents were done by 68.3% and 38.7% of the nurses respectively, external and internal violence incidents were reported to administration by 36.4% and 68% of nurses exposed to, respectively (Table 3), these results were in agreement with the study in Ghana and found that (35.8%) of violence

**TABLE 5.** Consequences of violence on nurses and its impact at work, Minia district hospitals

Consequences of violence	External no. 221 (%)	Internal no.129 (%)
No effect	70 (31.7)	37 (28.6)
Fear	10 (4.5)	5 (3.9)
Anger	71 (32.1)	34 (24.5)
Stress	36 (16.3)	32 (24.8)
Humiliation feeling	15 (6.8)	7 (5.4)
Depression	14 (6.3)	1 (0.8)
Guilty sensation	4 (1.8)	4 (3.1)
Desire to leave work	9 (4.1)	5 (3.9)
Desire to take revenge	0	4 (3.1)
Impact at work		
No impact	85 (38.5)	59 (45.7)
Not satisfied and pored	51 (23.1)	13 (10.1)
Decreased interest and efficiency at work	5 (2.3)	24 (18.6)
Stressed job	19 (8.6)	23 (17.8)
Humiliation feeling at work	15 (6.8)	0
No right and lost justice	33 (14.3)	10 (7.8)
Feeling fear at work	13 (5.8)	0

incidents was reporting to a senior staff member, followed by telling a colleague about the incident (32.1%) and then taking no action (18.8%) (15). These findings approximate what found in Benisuef in which 56.4% and 47.1% of the nurses who were exposed to external and internal violence, respectively (8), and prevalence of violence against nurses in Ethiopia found that 48.2% of them report their violence (2). Underreporting tendencies might vary across world regions, and violence among nurses is frequently underreported, at least officially (16). The Middle Eastern women would be quite hesitant to admit to sexual harassment (17). Perpetrators who committed most of the external and internal violence incidents against nurses were males. Patients' relatives were the perpetrators who committed the incidents of external violence against a nurse. Supervisors (58.1%), colleagues (34.1%), and administrative staff (7.8%) were the reported perpetrators who committed internal violence against nurses (Table 4). The previous studies reported that patient and their relatives were the most frequent propagators of violence against nurses (2). More than half (58.5%) of violence preparators were patients' relatives (15, 19). Aligned with our findings, an Australian study, representative of Jordan nurses found that patients and their relatives were the most frequent propagators of verbal and physical violence (19). The most reported consequences by exposed nurses after being exposed to external violence were anger (32.1%), whereas nurses who were exposed to internal violence reported no effect (28.6%) (Table 5). Consequences and reactions of nurses after being exposed to external or internal violence incidents are various including; stress, anger, fear, depression, humiliation, lost rights, and injustice, almost one-third of the sample had an angry reaction (8). About 61.4% and 54.5% of nurses who experienced external and internal violence, respectively, reported that exposure to violence incidents affected their work at various levels (Table 5). The majority of nurses (87.2%) who were exposed to violence believed that workplace violence had a negative effect on their work (19).

## CONCLUSION

The results of this study revealed that violence against nurses working in different health-care facilities at

Minia district was prevalent and the patient-initiated type was the highly prevalent type. Safety training programs for the prevention of violence and to help nurses to understand violence-related reasons and risk factors, warning signs, procedures for its avoidance, prevention and management, and reporting if it occurs should be established in the organization. Policies and legislation targeting violence acts should be instituted and developed, and a high percentage of nurses need training in violence management.

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