Workplace violence among home healthcare workers in KSA: Prevalence, predictors, action, and response 2021

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Abstract

Objectives: This study aims to identify the prevalence and predictors of workplace violence among home healthcare workers in KSA.

Methods: Home healthcare workers employed by government sectors in KSA are invited to fill an electronic questionnaire, covering background information, exposure and response to workplace violence, documentation, and the availability of workplace violence policies and training.

Results: A total of 1,054 Home healthcare workers completed the questionnaire. Approximately 68% and 50% reported no training and lack of workplace violence policies, respectively. The overall prevalence of workplace violence was 67.7%. The prevalence rates of verbal aggression, workplace aggression (non-physical), and workplace violence (physical) were 61.6%, 41.6%, and 31.1%, respectively. Sexual harassment and sexual aggression was experienced by 3.6% and 5.7% of the respondents, respectively. Exposure to workplace violence was higher among the younger age groups (p = 0.010), nurses (p < 0.001), and those with intermediate (1–7 years) working experience (p = 0.003).
Introduction

According to the American National Institute for Occupational Safety and Health, workplace violence is defined as the ‘act or threat of violence ranging from verbal abuse to physical assaults directed toward persons at work or on duty’.

Professional and regulatory authorities have recognised workplace violence in healthcare as a serious occupational hazard. In the United States of America (USA), approximately half of workplace violence incidents leading to nonfatal injuries occur in the healthcare and social service sectors. In the United Kingdom (UK), workplace-related incidents leading to non-fatal injuries are four times greater in healthcare than in the private industry. Survey results have shown that between 5% and 61% of home healthcare workers experience workplace violence during their careers. However, due to under-reporting, the actual prevalence is thought to be even higher.

The uncontrolled work environment in clients’ homes poses a higher risk to health workers when compared to the environment of health facilities. In the setting of home healthcare, health workers are isolated while performing their jobs and the protection of security personnel and co-workers is lacking.

Based on the type of assault, workplace violence in the home healthcare setting can be classified into four types: workplace aggression, workplace violence, sexual harassment, and sexual aggression.

Workplace aggression refers to the threatening acts of violence or non-physical violence, while workplace violence refers to the actual occurrence of physical assault or a physically threatening behaviour. Verbal aggression, such as yelling and insulting, is categorised separately from workplace aggression in some studies. Sexual harassment denotes the occurrence of intimidating or offensive non-physical acts of a sexual nature, while sexual aggression refers to the actual occurrence of sexual physical acts.

The most prevalent type of workplace violence is verbal aggression, which is reported by 18–59% of home healthcare workers. On the other hand, 7%–16% of home healthcare workers reported workplace aggression or threatening behaviour, and 2%–44% of them reported physical violence or assaults. Approximately 26%–58% of workers’ reports are exposed to sexual harassment behaviors.

Workplace violence can arise from numerous sources in the home healthcare setting, including employers, co-workers, patients, family members, and other individuals in the community.

Workplace violence can have direct or indirect consequences for home healthcare workers. Death is the most severe consequence of workplace violence affecting home healthcare workers, but nonfatal injuries are more prevalent. The consequences of nonfatal injuries include poor physical and mental health outcomes, such as traumatic stress disorder, depression, anxiety and anguish, anger, depersonalisation, flashbacks, lack of sleep, shame, and emotional exhaustion.

Furthermore, in addition to affecting individual health workers’ job processes, workplace violence also affects the entire work organisation, specifically by increasing the interruption of jobs, occupational stress, absenteeism, and the intention of the health workers to quit their jobs.

In the KSA, the Green Crescent Hospital launched home healthcare services in 1980. Since then, many government sectors have introduced home healthcare as part of their healthcare packages. The aim was to reduce the load on hospital beds, reduce hospital care, and provide services to a wider range of patients, in addition to contributing effectively to the stability of the physical and psychological condition of patients and the comfort of their families. The Ministry of Health is striving to improve the quality of home healthcare by increasing the coverage and range of services provided within the HHC package. Achieving these targets necessitates the availability of an adequate number of dedicated, committed, and satisfied HHC staff. One approach to attracting such staff is to ensure a safe environment conducive to working. This is important to ensure that current HHC staff are motivated and satisfied, and to encourage potential staff to join the service.

To this end, a study conducted among primary health workers in KSA reported that approximately 28% of these workers had experienced at least one type of workplace violence in the previous year. However, no data is currently available regarding the level of workplace violence in the context of HHC in the country. This type of information is critical for developing training programs and policies to prevent workplace violence and reduce the associated negative outcomes. This study aims to identify the prevalence, predictors, response, and action of workplace violence against workplace violence among home healthcare workers in KSA.

Materials and Methods

Study population and setting

We conducted a cross-sectional analytical study among home health workers from all specialties, from both sexes, whose primary job was to work with patients in their homes and who had been practicing home healthcare for at least 6
months. The study included home healthcare workers employed by the governmental sectors, including the Ministry of Health, Ministry of Defense, Ministry of Interior Affairs, Ministry of National Guard, and some higher education institutions. The total number of home healthcare workers employed by these institutions was 3144. The study covered all regions of KSA. We calculated the sample size using OpenEpi (version 3.01–2013. Centers for Disease Control and Prevention, Emory University, Atlanta, United States of America) assuming a 50% frequency of study outcome (proportion of home healthcare workers experiencing workplace violence), margin of error of 5%, and 99.9% confidence level. This yielded a sample size of 1023 Home healthcare workers.

Data collection

Data were collected using an electronic online self-administered questionnaire. The questionnaire was adapted from a survey developed and used by Barling et al. to assess workplace violence among in-home workers. The questionnaire is composed of four sections: Section 1: Background information of the home healthcare workers, including demographic variables, work experience related variables; Section 2: Experience of verbal aggression (three questions, e.g. someone cried to make you feel guilty, been yelled or shouted at), workplace aggression (six questions, e.g. cornered or placed in a position that was difficult to get out of, a door abruptly shut in your face, someone tried to hit you), workplace violence (seven questions e.g. someone tried to hit you but failed, been spat at, been slapped), sexual harassment (four questions e.g. told suggestive/offensive sexual stories or jokes, been asked intrusive or personal questions), and sexual aggression (two questions; had an arm around you in a way that made you uncomfortable, been touched inappropriately). Responses to each of these questions were dichotomous (1 = yes, 2 = no). Participants were considered to have been exposed to workplace violence if they had responded with (1 = Yes) to at least one question within each type of workplace violence. Section 2 of the questionnaire also included questions about the perpetrator, workplace violence policies, and training. Section 3 includes questions about the response to and reasons for workplace violence. Governmental institutions providing home healthcare services distributed the links to the electronic questionnaire to their home healthcare workers through the preferred electronic media (WhatsApp - email). Versions of the questionnaire in Arabic and English were available for healthcare workers to choose from.

Data analysis

Data entry and analysis were performed using Statistical Package for Social Sciences (SPSS) version 21 (International Business Machines Corporation, New York, United States of America). The outcome of the study was the proportion of home healthcare workers exposed to any type of workplace violence during the previous five years. Unadjusted odds ratios (ORs) were calculated using binary regression analysis to assess the association between the background characteristics of the study participants and the outcome variables of the study. The outcome variable used for the regression analysis was a categorical variable with a binary response format (exposure to workplace violence during the previous five years (Yes/No). For variables found to be significantly associated with the study outcome in at least one category, multivariate regression analysis was used to evaluate the effect of these variables on the outcome of the study. A p-value of less than 0.05, at a 95% confidence interval, was considered significant.

Table 1 presents the background information of the study population. A total of 1,054 home healthcare workers responded to the questionnaire. Females constituted approximately 51%, while males constituted approximately 49.9%. The majority of the study population (82.2%) were married. More than half (56.9%) of the study population fell in the age group 31–40 years, approximately one-fifth (20.5%) were in the 20–30 age group, and another fifth were in the over 40 age group. Approximately two-thirds (60.3%) of the study population were nurses. Doctors and physiotherapists constituted 17.2% and 9.10% of the patients, respectively. The remainder of the study population fell into other clinical practitioner categories (nutritionists, respiratory therapists, and pharmacists) and managerial/clerical positions and drivers. More than one-third (35.5%) of the study population had more than seven years of work experience in home healthcare services, and only 6.40% had less than one year of experience. Half of the study respondents stated that their workplace had a workplace

| Specialty                        | Frequency | %  |
|----------------------------------|-----------|----|
| Nurse                            | 636       | 60.3|
| Physician                        | 181       | 17.2|
| Physiotherapist/respiratory therapist | 100     | 9.50|
| Social/psychological worker      | 41        | 3.90|
| Nutritionist/pharmacist          | 15        | 1.40|
| Manager/clerk/driver             | 56        | 5.30|
| Other                            | 25        | 2.40|
| Years of experience              |           |    |
| Less than 1 year                 | 67        | 6.40|
| 1 year to less than 3 years      | 298       | 28.3|
| 3 years to less than 5 years     | 176       | 16.7|
| 5 years to less than 7 years     | 139       | 13.2|
| more than 7 years                | 374       | 35.5|
| Workplace violence (WPV) policy and Training |           |    |
| Have WPV policy                  | 527       | 50.0|
| Trained in WPV safety procedures | 335       | 31.8|

Table 1: Background information of home healthcare workers, KSA, 2020.
violence policy; however, only approximately one-third of the respondents reported receiving training on safety procedures regarding workplace violence.

Table 2 shows the respondents' exposure to workplace violence during the previous five years. More than two-thirds (67.7%) of the respondents reported that they had been exposed to workplace violence. The percentages of home healthcare workers reporting the different types of violence were as follows: verbal aggression (61.6%), workplace aggression (41.6%), workplace violence (31.1%), sexual harassment (3.6%), and sexual aggression (5.7%).

In more than half (52.7%) of the cases, the offender was a relative of the patient, while the patient was responsible for workplace violence in approximately one-quarter (26.2%) of the cases. Approximately (65.0%) of those exposed to any type of workplace violence reported having documented the incident. Of these, the highest proportion (69.4%) reported the incident to a supervisor, 20.6% reported it to a colleague, and another 0.4% reported the incident to a social worker, followed by different methods for documenting the incident.

Table 2: Exposure to workplace violence among home healthcare workers, KSA, 2020.

| Frequency | % |
|-----------|---|
| **Exposure to WPV** | |
| Yes | 714 | 67.7 |
| No | 340 | 32.3 |
| **Type of WPV** | |
| Verbal Aggression | 650 | 61.6 |
| Workplace Aggression | 438 | 41.6 |
| Workplace Violence | 328 | 31.1 |
| Sexual harassment | 38 | 3.6 |
| Sexual aggression | 60 | 5.7 |
| **Person committing WPV** | |
| Patient | 187 | 26.2 |
| Co-patient | 376 | 52.7 |
| Another person | 10 | 1.4 |
| Patient and co-patient | 6 | 0.8 |
| Not mentioned | 135 | 18.9 |
| **Total** | 714 | 100 |

In a binary logistic regression model that included all the factors that had a significant association with exposure to workplace violence, the following results were found:

- Females were found to be more exposed to workplace violence than men (p = 0.002). Respondents from the younger age group reported more workplace violence compared to the older age groups (p = 0.018). Nurses were more exposed to workplace violence than the other categories of home healthcare workers (p < 0.001). Table 3 also shows that respondents with less than one year of experience and those with more than seven years of experience reported less exposure to workplace violence compared to those with intermediate years of experience in home healthcare.

Table 3: Association between respondent characteristics and exposure to workplace violence among home healthcare workers, KSA, 2020.

| Gender | Frequency | Unadjusted Odds Ratio | 95% C.I. for Unadjusted Odds Ratio | Adjusted Odds Ratio | 95% C.I. for adjusted Odds Ratio |
|--------|-----------|-----------------------|-----------------------------------|-------------------|--------------------------------|
|        |           | Lower | Upper | Lower | Upper | Lower | Upper |
| Female | 539       | 1     |       | 1     |       | 1     |       |
| Malea  | 515       | .660  | .509  | .855  | .772  | .583  | 1.023 |
| **Marital Statusb** | |
| Single | 188       | 1     |       | 1     |       | 1     |       |
| Married | 866       | .843  | .597  | 1.190 |       | 1     |       |
| **Age** | |
| 20–30 yearsa | 216 | 1     |       | 1     |       | 1     |       |
| 31–40 yearsa | 600 | .589  | .397  | .875  | .501  | .313  | .801  |
| More than 40 yearsa | 238 | .688  | .504  | .940  | .635  | .448  | .902  |
| **Specialty** | |
| Nursea | 636       | 1     |       | 1     |       | 1     |       |
| Physiciana | 181       | .243  | .107  | .552  | .276  | .118  | .642  |
| Physiotherapist/respiratory therapist | 100 | .420  | .179  | .988  | .392  | .162  | .950  |
| Social/psychological workera | 41 | .242  | .060  | .980  | .248  | .059  | 1.040  |
| Nutritionist/pharmacist | 15 | 1.298  | .491  | 3.434  | 1.334  | .493  | 3.610  |
| Manager/clerk/drivera | 56 | .272  | .110  | .676  | .331  | .130  | .841  |
| Othera | 25        | .385  | .138  | 1.069 | .381  | .132  | 1.095  |
| **Years of experience** | |
| Less than 1 yeara | 67 | 1     |       | 1     |       | 1     |       |
| 1 year to less than 3 yearsa | 298 | 1.904  | 1.118  | 3.244  | 2.295  | 1.315  | 4.006  |
| 3 years to less than 5 yearsa | 176 | 1.439  | 1.039  | 1.992  | 1.749  | 1.214  | 2.521  |
| 5 years to less than 7 yearsa | 139 | 1.357  | .926  | 1.989  | 1.521  | 1.016  | 2.276  |
| More than 7 years | 374 | .777  | .495  | 1.219  | .800  | .500  | 1.279  |

a Statistically significant.
b Not statistically significant in bivariate analysis, excluded from multiple regression analysis.
workplace violence, age, specialty, and work experience were significantly associated with exposure to workplace violence (Table 3).

Regarding the response to workplace violence, in around one-fourth of the cases, written or verbal commitment was obtained from the patients and their families to not repeat the assault. In another fourth of the incidents, the visit was cancelled (12.0%), or the patient was dismissed from the home healthcare service (12.0%). In one-third of the cases, no action was taken in response to the incident of workplace violence.

Based on the opinions of the respondents exposed to workplace violence, the reason for the assault was dissatisfaction with the service on the part of the patients or their families in about one-fifth of the incidents. Dissatisfaction with visit time and the mental condition of the patient or a family member were the reasons behind 13.7% and 13.4% of the incidents, respectively. Other reasons included high unmet expectations by the patient and family, lack of awareness regarding the nature and scope of home healthcare services by the patient and family, being in the middle of a family conflict, and being female. In 1.80% of cases, no apparent reason was noted.

Discussion

The aim of this study was to quantify the occurrence of workplace violence among home healthcare workers and identify the associated factors in KSA. Our results indicate that home healthcare workers experience considerable levels of workplace violence during their work. Approximately two-thirds of our participants were exposed to at least one type of workplace violence during the last five years. This level lies above the upper limit of the range of 5%–61% reported in other countries.7

Verbal aggression, reported by approximately two-thirds of our respondents, was the most prevalent type of workplace violence. This prevalence was higher than that reported in other countries (18%–59%).1,2 On the other hand, our results showed a prevalence of workplace violence or physical assaults situated within the range of (2%–44%) reported in other countries.1,2 In our study, verbal aggression was less than physical assaults; this pattern is similar to that in other countries, where home healthcare workers experienced verbal abuse more often than physical abuse.1,6

The prevalence rates of sexual harassment and sexual aggression were lower than those reported in other countries. Studies of home healthcare workers have found that between 30% and 41% of home healthcare workers reported being sexually harassed and 4–14% were exposed to sexual violence.1,3 The lower prevalence of these types of assaults is most likely due to the nature of the Saudi community and its compliance with religious values and rules.

According to our results, a family member of the patient was the person committing workplace violence in more than half of the cases, while the patient was the perpetrator in one-fourth of the cases. This result was consistent with the results of studies conducted in Egypt, Iran, and Turkey,1 but they disagree with the results of other studies, where the patient was reported as the greatest source of workplace violence.1,4 This finding could be explained by the fact that, unlike Western countries, in KSA and other similar countries, patients receiving home healthcare services are customarily living within the context of an extended family, where other family members act as care providers and are always present with the patient during the home healthcare visit.

Although most international guidelines recommend a zero-tolerance policy, our results showed that one-fifth of home healthcare workers did not report the incidence of workplace violence. This finding was consistent with previous studies that showed an under-reporting of workplace violence ranging from 46% to 80%.9–11 The literature cited many reasons for not reporting workplace violence, such as lack of a clear definition of workplace violence, lack of guidelines for reporting incidents, and lack of awareness of these guidelines, fear of inadequate complaints, and being disciplined, absence of witnesses, feelings of humiliation and shame, lack of trust in the investigation process, and consideration of workplace violence as part of the job.1,3,9–11

An interesting finding of this study was the difference in the methods of documenting incidents, which might indicate the lack of a unified system for reporting workplace violence. This emphasises the importance of establishing guidelines for incident reporting with more accessible reporting methods coupled with compassion from management. Adhering to best practices in reporting an incident can help minimise risks in the future, keep home healthcare personnel safe, and improve the estimation of workplace violence prevalence.1,3

Our results showed that in approximately one-third of workplace violence incidents, no action was taken in response to the assault. This could act as a deterrent to denounce such behaviours, and a perception by patients and their families that violence was tolerated and the action not being taken in response will encourage them to repeat it.1,2

Moreover, home healthcare workers might perceive their employers as unfair if they do not take satisfactory actions in response to their complaints about workplace violence.1,2 This may affect home healthcare workers’ performance and cause them to quit their posts, leading to negative effects on the quality of home healthcare.3,6 In addition, workplace violence has been associated with poor health outcomes that require a response in the form of medical and psychosocial support.2,3

Proper response and evaluation of workplace violence incidents are essential in identifying the causes of these incidents and developing appropriate prevention measures to avoid future assaults.7

The under-reporting of incidents and the response to workplace violence can be improved by the availability of prevention and response policies specific to workplace violence in the home healthcare setting. However, our results indicated that half of the participants were unaware of the availability of such policies, while approximately two-thirds reported not receiving training in workplace violence. This was found to be a common problem in other countries where policies and procedures were underdeveloped or lacking, and
workplace violence prevention training was limited or outdated. This was thought to increase the risk of workplace violence in healthcare organizations.

It is vital to develop and implement safety policies and procedures related to homecare, with regular evaluations and updates. These policies should include guidelines on initial and ongoing risk assessment, guidelines for incident reporting, and the consequences and sanctions for workplace violence against home healthcare workers. This is in addition to planning follow-up programs and support, including psychological and physical care, for home healthcare workers who have experienced workplace violence.

Policies should be complemented by training home healthcare workers on workplace violence prevention. This type of training was among the interventions shown to be effective in reducing workplace violence incidents against home healthcare workers, increasing their confidence and knowledge about workplace violence, and equipping them with the required skills to prevent and deal with it effectively. Training should be a mandatory requirement not only for home healthcare workers but also for the patients and their families. A significant proportion of our respondents reported that the reason for workplace violence was dissatisfaction with the service, the high and often unrealistic expectations of the patients and their families, and their misconceptions regarding home healthcare services. This indicates the need to educate these consumers about the nature, scope, and limits of home healthcare services, in addition to clearly communicating the sanctions associated with workplace violence.

Our findings were consistent with those of previous studies in that some workers were at increased risk of violence, such as nurses. These types of health workers should be prioritised in workplace violence training programs.

**Limitations**

The use of electronic online self-administered questionnaire with the related challenges of the sampling bias and response rate, however, it enabled us to conduct a national survey covering homecare health workers from all regions of the country.

In conclusion, our results indicate that workplace violence is very common among home healthcare workers, especially verbal violence. There was under-reporting of workplace violence incidents, no unified system for documenting workplace violence incidents, and suboptimal levels of training on workplace violence prevention. There is a need to develop policies related to workplace violence in the home healthcare setting, escalating the training of workers, and improving the reporting and response to workplace incidents.

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**Conflict of interest**

The authors have no conflict of interest to declare.

**Ethical approval**

The cross-sectional study was approved by the Security Forces Hospital Program Institutional Research Board number 21-493-06 date 16/02/2021.

**Authors contributions**

AI, KAS, FAW, MHH, and ASQ conceived and designed the study, conducted research, provided research materials, and collected and organised the data.

AI, KAS, FAW, MHH, and ASQ, analysed and interpreted the data, wrote the initial and final drafts of the article, and provided logistic support. All authors have critically reviewed and approved the final draft and are responsible for the content and similarity index of the manuscript.

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**References**

1. Small FT, Gillespie GL, Kean EB, Scattaglia M, Dimonte V, Gianino MM. Workplace violence interventions used by home healthcare workers: an integrative review. Int J Environ Res Public Health 2020; 38. https://doi.org/10.3390/ijerph17238807.
2. Hanson GC, Perrin NA, Moss H, Laharnar N, Glass N. Workplace violence against Home healthcare workers and its relationship with workers health outcomes: a cross-sectional study. BMC Publ Health 2015; 15. https://doi.org/10.1186/s12889-014-1340-7.
3. Clari M, Conti A, Scacchi A, Scattaglia M, Dimonte V, Gianino MM. Prevalence of workplace sexual violence against healthcare workers providing home healthcare: a systematic review and meta analysis. Int J Environ Res Public Health 2020; 17. https://doi.org/10.3390/ijerph17238807.
4. Al-Sagheir A. Home healthcare current situation and future direction. Saudi Arabia. Ministry of Health; 2017. Unpublished results.
5. Homecare Directorate in Ministry of Health, https://www.moh.gov.sa/awarenessplatform/Patientsrights/Pages/HomeHealthCare.aspx [accessed 12 December 2020].
6. Barling J, Rogers AG, Kelloway EK. Behind closed doors: in-home workers’ experience of sexual harassment and workplace violence. J Occup Health Psychol 2001; 6: 255–269. https://doi.org/10.1037/1076-8998.6.3.255.
7. Abdel-Salam DM. Violence against physicians working in emergency departments in Assiut, Egypt. Bull High Inst Publ Health 2014; 44: 98–107. https://doi.org/10.21608/jhp4.2014.20334.
8. Bussing A, Hoge T. Aggression and violence against home healthcare workers. J Occup Health Psychol 2004; 9: 206–219. https://doi.org/10.1037/1076-8998.9.3.206.
9. El-Gilany AH, Wehady AE, Amr A. Violence against primary healthcare workers in Al-Hassan, Saudi Arabia. J Interpers Violence 2010; 25: 716–734. https://doi.org/10.1177/0886260509334395.
10. Fazzone PA, Barloon LF, McConnell SJ, Chitty JA. Personal safety, violence, and home health. Publ Health Nurs 2000; 17: 43–52. https://doi.org/10.1111/1077-0886260509334395.
11. Flynn L. The state of the nursing workforce in New Jersey: findings from a statewide survey of registered nurses. Newark, NJ: New Jersey: Collaborating Center for Nursing; 2007. https://www.policyarchive.org/handle/10207/21522. [Accessed 12 December 2020].

12. Occupational Safety and Health Administration. Guidelines for preventing workplace violence for healthcare and social service workers. Washington: Department of Labor; 2016 (OSHA Publication 3148–06R), https://www.osha.gov/sites/default/files/publications/osha3148.pdf. [Accessed 12 December 2020].

13. Workplace Violence Fact Sheet[Internet]. United States of America: Occupational Safety and Health Administration (OSHA) U.S. Department of Labor, https://www.osha.gov/workplace-violence. https://www.osha.gov/workplace-violence[accessed 12 December 2020].

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