



An Integrative Review of the Reporting and Underreporting of Workplace Aggression in Healthcare Settings

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ABSTRACT

Objectives. Despite the prevalence of workplace aggression, workplace aggression is grossly underreported. The purpose of this paper is to review the state of the science for the reporting and underreporting of WPA enacted by patients and/or visitors and then make recommendations for increasing the reporting of WPA.

Design. An integrative review process was used to select peer-reviewed articles describing the state of the body of evidence for the reporting and underreporting of workplace aggression.

Data sources. Articles were extracted from the Scopus database, a robust search engine that simultaneously searches over 20,000 peer-reviewed journals from over 5,000 international publishers.

Review methods. Article inclusion criteria were publication date between January 1, 2000 and October 24, 2014, healthcare workers as the study population, and dependent variable related to workplace aggression reporting or workplace aggression underreporting. The initial search yielded 237 citations. All abstracts were read for direct or indirect relevance. At the conclusion of this initial review, 33 articles met inclusion criteria. The article reference lists were reviewed and seven additional articles were assessed for inclusion. Twelve articles were retained, read in full, and critiqued.

Results. Twelve articles were retained, read in full, and critiqued. The underreporting of workplace aggression was as high as 95%. Reasons for not reporting workplace aggression included perceived lack of organizational change after reporting, violence considered part of the job, and aggression not intentional. Reasons for reporting workplace aggression included workplace aggression that was perceived as intentional, when administrators took action based on incident reports, when the process for reporting was quick, easy, and efficient, when aggression was physical or resulted in an injury.

Conclusion. The reporting of workplace aggression is paramount to the future success of prevention interventions. Any changes made to increase the reporting of workplace aggression will require healthcare worker buy-in as well as organizational and administrator support to be effective.

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The incidence rate of workplace aggression (WPA) against healthcare workers (HCWs) is 14.6 per 10,000 full-time employees while only 3.8 per 10,000 full-time employees in all private industry per a recent Bureau of Labor Statistics (2012) report. WPA is “any form of verbal, physical and sexual aggression, and/or physical violence” (Franz, Zeh, Schablon, Kuhnert, & Nienhaus, 2010, p. 1) enacted against an employee while on duty by a patient, visitor, coworker, manager/supervisor, or intimate partner. While the incidence of WPA is expected to rise over the next decade, the incidence of WPA is likely to be underestimated because HCWs persistently underreport the WPA they experience (Gacki-Smith, Juarez, Boyett, Homeyer, Robinson, & MacLean, 2009; Gates, Gillespie, Kowalenko, Succop, Sanker, & Farra, 2011; Gillespie, Gates, Mentzel, Al-Natour, & Kowalenko, 2013; Kowalenko, Gates, Gillespie, Succop, & Mentzel, 2013; Papa & Venella, 2013). Sato, Wakabayashi, Kiyoshi-Teo, and Fukahori (2013) reported that about 70% of nurses experiencing WPA resulting in temporary stress did not report their incidents. In fact, less than 25% of nurses reported WPA even when the incidents were severe enough to result in physical injury or prevent them from safely performing patient care. Sato et al.’s (2013) study provides evidence of underreporting of WPA with nurses.

Gross underreporting of WPA can be particularly problematic for healthcare administrators attempting to evaluate the effectiveness of WPA interventions. Underreporting of WPA may lead administrators to incorrectly assume that their intervention efforts are effective. Understanding and mitigating both individual and organizational level barriers to the reporting of WPA will aide healthcare administrators to reliably measure the effectiveness of WPA intervention efforts. Until all HCWs, inclusive of nurses, physicians, allied health professionals, and unlicensed assistive personnel are consistently reporting WPA, efforts to evaluate interventions and ultimately halt WPA will be impeded. Therefore, the next step in WPA efforts needs to focus on increasing the reporting of WPA, a current gap in the science of WPA.

Statement of the Problem

HCWs working in emergency department (ED) settings are among the most victimized employees in all healthcare settings to experience WPA. During a recent cross-sectional study with 213 ED workers in the Midwest United States, Kowalenko et al. (2013) found that the mean number of physical threats extrapolated to 4 threats per worker per year and the mean number of assaults extrapolated to 1.5 assaults per worker per year. Despite this prevalence of WPA, WPA is underreported.

Healthcare administrators are likely aware that WPA is a problem and have implemented WPA programs to reduce or prevent this burden. However, their efforts to reliably measure the effectiveness of their WPA interventions will likely be thwarted until they are able to mitigate barriers to the reporting of WPA in their respective health systems. While multiple instruments and methods are available to track the incidence of WPA, the underreporting of WPA will minimize the scope of the problem and potentially lead to false conclusions about an intervention’s effectiveness. Therefore, the purpose of this paper is to review the state of the science for the reporting and underreporting of WPA enacted by patients and/or visitors and then make recommendations for increasing the reporting of WPA.

Methods

An integrative review process was used to select relevant peer-reviewed articles to describe the state of the body of evidence for the reporting and underreporting of WPA. Several criteria were used to select relevant articles. First, all study designs were included in the search. Second, study participants for selected articles needed to be HCWs such as physicians, nurses, pharmacists, allied health professionals, and support professionals. Researchers studying populations who were professionals and occupational groups who do not directly interact in-person with patients and patients’ visitors during the care delivery process were excluded. Examples of excluded participants were dietary, human resources, payroll, and office workers. Third, the dependent variable in the studies needed to be related to WPA reporting, WPA underreporting, or reasons for not reporting WPA. The types of aggression examined in the articles needed to be verbal abuse, threats of physical aggression, sexual abuse, and/or assaults.

Literature Search Procedures

The web-based search engine Scopus was used to search the literature. Scopus is a robust search engine that simultaneously searches Cumulative Index to Nursing and Allied Health Literature (CINAHL), Medline, and over 20,000 peer-reviewed journals from over 5,000 international publishers including Elsevier, Springer, Cambridge University Press, BioMed Central, Wiley Blackwell, and BMJ Publishing Group.

The search period parameter was January 1, 2000 to October 24, 2014. The search did not include published articles prior to 2000, because of the increased focus of WPA over the last decade. Given this increased focus, there is less acceptance of WPA today compared to over 10 years ago. In addition, there have been vast changes in healthcare such as the push towards electronic documentation versus paper documentation for incident reporting, and changes in healthcare related to use of EDs as a primary source of healthcare. As a result, the willingness to report WPA as well as the barriers to reporting will likely be different today than they were over 14 years ago.

Search terms were: “workplace violence” OR “workplace aggression” OR “patient aggression” OR “patient aggressive” AND “report”. The key word combination needed to appear in the article title, key words, and/or abstract. Articles of any language were accepted.

The search yielded 237 citations. Initially, all abstracts were read for direct or indirect relevance to the reporting of WPA in healthcare settings. Two citations were not in English. The abstracts for both citations were translated to English and then all abstracts were read for relevancy. The majority of citations including the two articles written in a language other than English were excluded, because the abstracts did not include information potentially related to the reporting/underreporting of WPA. One additional citation was excluded, because it was a duplicate. At the conclusion of this initial review, 33 articles met inclusion criteria.

The reference lists for the 33 articles were reviewed and seven additional articles were assessed for inclusion. The methodology and findings’ sections of each article were read. Twenty-eight of the articles then were excluded, because the articles’ authors did not report statistics or qualitative findings related to the reporting/underreporting of WPA. Twelve articles were retained, read in full, and critiqued.

Findings

This section provides a synthesis of the integrative review findings. A summary of the critiqued articles’ study designs, settings, samples, type(s) of aggression addressed, methods of data collection, instrument validity and reliability, relevant findings, and study implications or conclusions is presented alphabetically

Description of the Reporting/Underreporting of WPA Research

Researchers for the 12 included articles primarily used a cross-sectional survey design to study the reporting and underreporting of WPA. Researchers for two articles used qualitative research designs and one article used a prospective design. Mayhew and McCarthy (2005) did not declare the specific qualitative design used in their research; however, the methods described for their research was consistent with an inductive approach. St-Pierre (2012) used critical ethnography as the qualitative approach in her study. Thomas (2003) posited the purpose of critical ethnography as a method to reflect on the “relationship between knowledge, society, and freedom from unnecessary social domination” (p. 45). St-Pierre’s (2012) research is consistent with this definition of critical ethnography given the focus of WPA experienced by managers. A limitation of St-Pierre’s (2012) article is the lack of a clear depiction for how the research helped the respondents overcome the unnecessary social domination, although one could argue that this emancipatory action occurred even if not explicit. Iennaco et al. (2013) used a prospective design for their study. The researchers in this study shadowed 11 employees in a psychiatric setting documenting incidents of WPA as they occurred.

Data for the included articles were collected from a variety of settings and samples. Study populations included nurses from Australia, Turkey, Slovenia, Israel, or Japan (Chapman, Styles, Perry, & Combs, 2010; Deans, 2004; Erkol, Gökdoğan, Erkol, & Box, 2007; Kvas & Seljak, 2014; Natan, Hanukayev, & Fares, 2011; Sato et al., 2013), physicians from Australia or Turkey (Hills & Joyce, 2013; Erkol et al., 2007), and community-based HCWs from Germany, Australia, or United States (Franz et al., 2010; Mayhew & McCarthy, 2005; Snyder, Chen, & Vacha-Haase, 2007). While the variety of settings and samples was a general strength for the state of the science, a limitation of these studies was the researchers’ focus on one or just a few occupational groups rather than an interprofessional group of HCWs as would be seen in a typical ED.

Multiple types of aggression were explored in the published articles: verbal abuse, threats of physical aggression, sexual abuse, and assaults. The degree of reporting or underreporting of WPA was most commonly assessed through a survey completed by study respondents. Only Chapman et al. (2010), Deans (2004), Kvas and Seljak (2014), Natan et al. (2011), and Sato et al. (2013) discussed the psychometric properties of their instrumentation. Erkol et al.

(2007), Franz et al. (2010), Hills and Joyce (2013), and Snyder et al. (2007) did not discuss validity or reliability which limits the generalizability of their research findings.

Reporting/Underreporting of WPA

The underreporting of WPA was identified as a problem of great magnitude. Snyder et al. (2007) found that only 4.6% of all incidents of WPA were reported using a formal incident reporting system. Erkol et al. (2007) further defined the problem by identifying that 76% of Turkish HCWs never or rarely ever report incidents of WPA. However, what could be more problematic is the underreporting of WPA even when the negative consequence of the victimization was extreme. Sato et al. (2013) discussed that 30% of Japanese nurses in their study did not report WPA even though the nurses experienced severe physical and/or mental consequences as a result of WPA.

Multiple reasons account for why HCWs did not report the WPA they experienced. A predominant reason for the underreporting of WPA was the perceived lack of change that takes place when incidents are reported (Chapman et al., 2010; Deans, 2004; Kvas & Seljak, 2014; Sato et al., 2013; Snyder et al., 2007). In addition, the perception that violence is part of the job and aggressors did not intend to cause harm further prevented the reporting of WPA (Chapman et al., 2010; Natan et al., 2011; Sato et al., 2013; Snyder et al., 2007).

While the underreporting of WPA is evident, the reporting of WPA needs to become a priority for HCWs. Findings from Hills and Joyce (2013) indicated the greatest reason for HCWs to start reporting WPA: the use of an incident reporting system for WPA was negatively associated with physical aggression by patients. This finding reflects that organizations whose reporting system allows for HCWs to report WPA have lower odds for employee victimization. This finding alone could support the need for HCWs to begin the consistent reporting of WPA. For WPA interventions to be effective, healthcare administrators need a robust repository of incidents to analyze. When HCWs are selective in the reporting of WPA as the nurses were in Natan et al.'s study (2011), WPA interventions will not be as effective as they could be.

Several reasons were offered for why the reporting of WPA did occur. For example, Snyder et al. (2007) stated that reporting of WPA was most likely to occur when WPA was perceived as intentional, administrators took action based on incident reports, and the process for the reporting of WPA was quick, easy, and efficient (Snyder et al., 2007). Erkol et al. (2007) discovered that reporting occurred most often when WPA was physical (e.g., assault). However, some respondents indicated that the WPA needed to result in a physical injury for them to report (Chapman et al., 2010).

Summary of the Strengths and Limitations of the Study Methods

There were numerous strengths and limitations for the methodologies of the selected studies. Key strengths included data triangulation, valid and reliable instrumentation with the study samples, large sample sizes, diversity of the study samples, and computation of inferential statistics. No study had all five strengths.

A key strength of both Chapman et al. (2010) and St-Pierre (2012) was the triangulation of data from multiple sources. Researchers from remaining studies used a single survey or process for data collection. The validity of the study instrumentation was only reported by a few researchers: Chapman et al. (2010), Kvas and Seljak (2014), Natan et al. (2011), and Sato et al. (2013). The reliability of the study instrumentation was only reported by Deans (2004), Natan et al. (2011), and Sato et al. (2013). A limitation of the remaining studies was the absence of validity and reliability information for the study instrumentation with their respective study samples.

Another key strength in most of the studies was a large sample size ranging from 76 to 9,449. A limitation for three of the studies was a small sample size ranging from 11 to 40 (Deans, 2004; Iennaco et al., 2013; St-Pierre, 2012). Only a few of the studies had a diverse sample strengthening the study methodology (Erkol et al., 2007; Mayhew & McCarthy, 2014). The remaining studies had the limitation of a single occupational group such as only enrolling registered nurses (Chapman et al., 2010; Kvas & Seljak, 2014; Natan et al., 2011; Sato et al., 2013) or nursing assistants (Snyder et al., 2007). The sampling strategy most commonly used to recruit respondents was convenience sample, a limitation of their study methodology. The systematic random sampling strategy used by Mayhew and McCarthy (2005) was the strongest.

A critical limitation for most studies was recall bias. Chapman et al. (2010), Deans (2004), Franz et al. (2010), Hills and Joyce (2013), Kvas and Seljak (2014), and Mayhew and McCarthy (2005) measured their constructs based on

a one year recall period. The findings for Erkol et al. (2007) were even further limited and based on a five year recall period. Iennaco et al. (2013) had the most reliable strategy for data collection: in situ data collection by trained observers.

Another limitation of the studies was the data analysis plan. Most relied on descriptive or non-parametric statistics alone which limited their generalizability to other contexts. Researchers in a few studies used parametric testing (Kvas & Seljak, 2014) or inferential statistics (Franz et al., 2010; Hills & Joyce, 2013; Sato et al., 2013) allowing readers to generalize the findings to their local contexts.

Discussion

This integrative review of the evidence for the reporting/underreporting of WPA yielded a robust rationale for why HCWs do or do not report WPA. Given the negative association between a reporting system for WPA and the incidence of physical aggression (Hills & Joyce, 2013), a primary focus for healthcare administrators may need to be on the development and implementation of a reporting system that is quick and easy to use and relevant for the reporting of WPA which does not result in a physical injury. Iennaco et al. (2013) followed 11 HCWs tracking the incidence of WPA. While this method will capture all violent events, hiring persons whose primary role would be to track violent events is not financially feasible. An alternative systems approach to increasing the reporting of WPA is setting an alert feature within the electronic medical record. The alert could pop up after a HCW documents a patient's care asking if any safety event or near miss occurred during the course of care delivery. The alert could be used for all types of safety events and near misses (e.g., pharmacological, fall risk) and not be restrictive to WPA. This general use also may increase compliance and reliability for reporting. Once the "yes" link is clicked for the alert, a separate browser could open allowing the employee to immediately document the incident of WPA (or other type of safety event or near miss).

Additional efforts to increase the reporting of WPA need to focus on reducing barriers and increasing merits of reporting. For example, one barrier commonly identified in the integrative review was the lack of change that occurred despite the reporting of WPA by HCWs (Chapman et al., 2010; Deans, 2004; Kvas & Seljak, 2014; Sato et al., 2013; Snyder et al., 2007). When visible changes are witnessed by HCWs, the reporting of WPA is more likely to occur. An example of the overt commitment by healthcare administrators to the safety of HCWs leading to further reporting of WPA was discussed by Gillespie et al. (2013) where the increase in the reporting of WPA occurred in tandem with environmental changes in one emergency department.

Another strategy to address the benefits and barriers for the reporting of WPA is the use of a case study approach. A case study could be developed that describes a young child or older adult who strikes at the HCW but does not cause a physical injury. While the aggressor would commonly be perceived as not intentionally trying to harm the HCW, the incident should still be reported as an incident of WPA. Within the case study, the HCW could then receive information that the same patient had become equally aggressive during past care delivery episodes. The HCW would ultimately be led to the conclusion that if he or she had known about the prior history of aggression, the HCW would have requested additional help during patient care to prevent being struck at. This case study would therefore provide merits to the need for the reporting of WPA regardless an aggressor's intent.

Conclusions

As previously suggested, the reporting of WPA is paramount to the future success of WPA interventions. Any changes made to increase the reporting of WPA will require HCW buy-in as well as organizational and administrator support to be effective. Ultimately, a local, state, and/or national reporting system may need to be created and used to increase consistency in reporting and allowing for a comprehensive analysis of WPA trends.

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