# Workplace violence against medical staff in healthcare facilities in Barbados

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Background	Anecdotal evidence suggests increasing workplace violence against healthcare workers in the Caribbean, but the prevalence is largely undocumented.
Aims	To determine the prevalence of workplace violence reported by medical staff at primary care clinics in Barbados.
Methods	A study utilizing a modified version of the standard World Health Organization Workplace Violence Questionnaire, designed to assess the incidence, types and features of workplace violence. All nursing and physician staff on duty at the island's eight primary care clinics during the study period were invited to participate.
Results	Of the 102 respondents (72% response rate), 63% of nursing and physician staff at the polyclinics in Barbados reported at least one episode of violence in the past year. The majority reported being exposed to verbal abuse (60%) and 19% reported being exposed to bullying. Seven percent of the staff reported incidents of sexual harassment, 3% physical violence and another 3% reported racial harassment. Patients emerged as the main perpetrators of violence (64%). Logistic regression showed statistically significant associations between gender and workplace violence. Females and nurses were more predisposed to experience violent incidents than males and physicians.
Conclusions	Over a half of medical staff surveyed reported experiencing some type of violence in the past year, female gender being a significant predictor of abuse. Adequate documentation and implementing clear policies and violence prevention programmes in health institutions are crucial steps towards addressing this issue.
Key words	Healthcare; violence; workplace.

## Introduction

Workplace violence is a well-recognized occupational hazard with physical, emotional and behavioural consequences for victims [1]. The increasing prevalence of violence against healthcare workers is recognized as a major health priority by the World Health Organization, the International Council of Nurses and Public Services International [2,3]. The Bureau of Labor Statistics reports that in 2011 more than half of US healthcare workers (over 2 million) reported exposure to violence in a year, and nurses experienced the highest rate of aggression exposure of all clinical workers [4]. Such exposure strongly influences the recruitment, stress, anxiety and rate of sickness absence of clinical staff [5].

The Caribbean region has one of the world's highest rates of societal injury and violence, yet a literature

review revealed little data on the frequency of violence against healthcare workers [6].

This paper provides evidence on the prevalence and types of workplace violence experienced by medical staff in public primary care clinics in the Caribbean island state of Barbados. It assesses some of the risk factors and characteristics of perpetrators and victims as a precursor to more in-depth analyses to inform the development of preventive strategies.

#### **Methods**

The cross-sectional study was conducted in the eight government-owned primary care clinics in Barbados. Ethical approval was obtained from the Institutional Review Board of the University of the West Indies and from the Ministry of Health in Barbados. We targeted all

nurses and physicians working at these clinics at the time of the study, 15 June–31 July 2014. The self-administered questionnaire was derived from a validated research survey questionnaire developed by ILO/ICN/WHO/PSI1 [7]. The questionnaire was adjusted to be solely quantitative and pilot tested for face validity.

Data entry and analysis were conducted using Epi Info<sup>TM</sup> 7 (www.cdc.gov/epiinfo/). Descriptive statistics were performed relating to the respondents' characteristics. The 1-year prevalence rates for each type of violence were calculated. Risk factors for the different types of violence were examined using simple logistic regression analysis. Staff awareness and perception of violence-specific policies and safety measures were assessed. The proportion of staff experiencing anxiety concerning violence was calculated. Chi-squared tests were used to determine any differences in the social distribution of staff anxiety.

## **Results**

A total of 102/141 (72%) medical staff (97 nurses and 44 doctors) participated in the study. The majority of respondents were females (74%) and nurses (72%) (Table 1). Most of the participants (33%) were in the 40–50 age range. Verbal abuse was the most common type of violence experienced by 60% of participants. Females experienced more verbal abuse than male participants: 67% versus 21%, respectively (P < 0.01). The prevalence of reported bullying was 19%. The percentage of respondents reporting sexual harassment, racial harassment or physical abuse was <10%. There was no

gender difference in experience of the other types of violence.

Crude odds ratios (ORs) showed that females were 11 times more likely to experience verbal abuse than males [OR = 11; 95% confidence interval (CI) 3–43]. After adjustment for age and staff category, this association was strengthened (OR = 13; 95% CI 3–68) (Table 2). Nurses were twice as likely to experience verbal abuse as physicians (OR = 2; 95% CI 1–5), although after adjustment for age and gender, this association was not significant (Table 2). Females were nine times more likely to experience any type of violence than males (OR = 9; 95% CI 2–34). Adjusted ORs for any type of violence confirmed that gender was a significant predictor of violence (OR = 9; 95% CI 2–45).

Patients were the most frequent perpetrators: accounting for 77% (95% CI 65–87%) of verbal abuse, 100% of physical violence, 71% (95% CI 29–96%) of sexual harassment and 39% (95% CI 17–64%) of bullying. Co-workers accounted for 21% of the total violence experienced with bullying comprising 61% (95% CI 36–83%) of this co-worker perpetrated violence. Nursing staff reported anxiety about abuse 4.5 times more frequently than physicians (OR = 4; 95% CI 1–18). There was no significant association between the level of staff anxiety and age group or gender. Approximately half (53%) of staff in the clinics perceived alcohol and drug abuse as the main factors or contributing causes to workplace violence.

When asked about options for workplace violence reduction, staff viewed increasing security (48%), conflict resolution training (44%) and reduction in patient waiting times (43%) as viable options. Less than 40% of

**Table 1.** Demographic characteristics of Barbados primary care clinic staff surveyed, and prevalence (%) of physical and psychological violence reported by clinical staff in Barbados in 2014

	Male % (95% CI)	Female % (95% CI)	$\frac{\text{Total } \% \text{ (95\% CI)}}{n = 102}$	
	n = 14	n = 88		
Age group				
20–30	0	11 (6–20)	10 (5–17)	
30–40	43 (18–71)	31 (21–41)	32 (23–42)	
40-50	29 (8–58)	34 (24–45)	33 (24–43)	
50-60	21 (5–51)	223 (15–33)	23 (15–32)	
60–70	7 (0–34)	1 (0-6)	2 (0-7)	
Staff category				
Nurse	21 (5–51)	81 (71–88)	73 (63–81)	
Physician	79 (49–95)	19 (12–29)	28 (19–37)	
Violence type				
Physical violence	7 (0–34)	2 (0–8)	3 (0–8)	
Verbal abuse	21 (5–51)	67 (56–77)	60 (50–70)	
Sexual harassment	7 (0–34)	7 (3–14)	7 (3–14)	
Bullying	7 (0–34)	21 (13–31)	19 (12–28)	
Racial harassment	7 (0–34)	2 (0–8)	3 (0–9)	
Any violence	21 (5–51)	71 (60–80)	63 (53–72)	

Table 2. Factors associated with verbal abuse and any type of abuse in Barbados polyclinics in 2014, according to multiple logistic regression analysis

	Verbal abuse crude	Verbal abuse adjusted	Any violence crude	Any violence adjusted
	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)
Age group				
20-29	1	1	1	1
30-39	2 (0-13)	2 (0-8)	2 (0-13)	2 (0–96)
40-49	2 (0–9)	1 (0-7)	1 (0-9)	1 (0-8)
50-59	2 (0–13)	1 (0–9)	4 (0–25)	3 (0–22)
60–69	4 (0–96)	1 (0-43)	4 (0–96)	1 (0–50)
Staff category	,	,	` '	,
Nurse	2 (1–5)	1 (0-3)	2 (0-4)	1 (0-3)
Physician	1	1	1	1
Gender				
Female	11 (3–43)	13 (3–68)	8 (2–34)	9 (2–45)
Male	1	1	1	1

staff viewed improving physical surroundings and training in handling aggressive or violent patients as effective violence reduction measures.

# Discussion

A significant proportion of clinical staff in Barbados' primary care clinics reported experiencing abuse at work (63%). Although most of the violence experienced was verbal abuse (60%), bullying, physical abuse and harassment were also present. This study is comparable to previous reports in the literature indicating that verbal abuse is the dominant form of violence reported [8]. The results of this research indicate that female staff and nurses experienced more abuse, and consequently were more anxious about violence, than males and physicians. Gender and staff category are known predictors for violence in health sectors in the literature [9].

This study was limited by its small sample size. We did, however, achieve a relatively high response rate and the demographic characteristics of the non-responders were similar to participants. Staff under- or over-reporting of the violence could also be a limitation. Advocacy, educational programmes and appropriate training are needed to heighten awareness of this problem among health service managers, healthcare providers and the general public in the Caribbean. Paying attention to specific security concerns, such as having dedicated security personnel and panic buttons, would be helpful.

This study is the first of its kind to be undertaken for publication in Barbados and one of very few studies from the Caribbean. As healthcare provision and models of its delivery throughout the region are similar, the results very probably also have policy implications for other English-speaking Caribbean countries. Violence against women has a major effect on women's physical and mental health and their ability to participate in the workforce

[10]. Further qualitative research is needed to explore the effects of violence against healthcare staff.

# **Key points**

- Violence against clinical staff in primary healthcare clinics in Barbados was most commonly verbal abuse.
- Female gender was a significant predictor of being a recipient of workplace violence.
- Workplace interventions, policy implementation and staff training may help to decrease violence against clinical staff.

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## **Conflicts of interest**

None declared.

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