

RPW Kwok 郭佩璋
 YK Law 羅婉琪
 KE Li 李君婷
 YC Ng 伍裕川
 MH Cheung 張文康
 VKP Fung 馮啟邦
 KTT Kwok 郭子迪
 JMK Tong 湯文傑
 PF Yen 嚴鵬飛
 WC Leung 梁永昌

Prevalence of workplace violence against nurses in Hong Kong

護士於工作場所內面對暴力的比率

Objectives. To determine the prevalence and nature of workplace violence against nurses, and how nurses deal with such aggression; and to identify the risk factors related to violence in the hospital environment.

Design. Cross-sectional questionnaire study.

Setting. University teaching hospital, Hong Kong.

Participants. All nursing staff in the hospital, except nurses who were unable to read Chinese or who did not have patient contact (eg those worked in administrative positions), were invited to complete a questionnaire.

Main outcome measures. Demographic data of the respondents, incidence of and risk factors contributing to workplace violence.

Results. A total of 420 nurses returned the completed questionnaire (response rate, 25%). Three hundred and twenty (76%; 95% confidence interval, 72-80%) nurses reported abuse of any kind—verbal abuse, 73%; bullying, 45%; physical abuse, 18%; and sexual harassment, 12%. Most (82%) nurses who experienced verbal abuse tended to confide in friends, family members, or colleagues. Some (42%) ignored the incident. Risk factors for workplace violence included: working in male wards and in certain specialties such as the Accident and Emergency Department, Community Nursing Service, and the Orthopaedics and Traumatology Department.

Conclusion. Workplace violence against nurses is a significant problem in Hong Kong. Further large-scale studies should be conducted to more closely examine the problem.

Key words:

Nursing staff, hospital;
 Occupational health;
 Questionnaires;
 Violence;
 Workplace

關鍵詞：

護士，醫院；
 職業健康；
 問卷；
 暴力；
 工作場所

Hong Kong Med J 2006;12:6-9

Faculty of Medicine, University of Hong Kong, Pokfulam, Hong Kong

RPW Kwok
 YK Law
 KE Li
 YC Ng
 MH Cheung
 VKP Fung
 KTT Kwok
 JMK Tong
 PF Yen

Department of Obstetrics and Gynaecology,
 University of Hong Kong, Queen Mary
 Hospital, Pokfulam Road, Hong Kong

* WC Leung, MRCOG, FHKAM (Obstetrics and
 Gynaecology)

Correspondence to: Dr WC Leung
 (e-mail: leungwc65@hotmail.com)

* WC Leung has moved to the Department of
 Obstetrics & Gynaecology, Kwong Wah
 Hospital, Waterloo Road, Kowloon, Hong
 Kong

目的：研究護士在工作場所內面對暴力的比率、不同的暴力行為、應付方法，以及在醫院環境內與暴力有關的風險因素。

設計：橫面問卷調查。

安排：大學教學醫院，香港。

參與者：醫院內所有護士均獲發一份問卷。參與者不包括不懂中文或工作上不需與病人直接接觸（如行政級）的護士。

主要結果測量：填寫問卷者的基本資料，涉及的事件，及與暴力有關的風險因素。

結果：共有420名護士填寫問卷，回應率達25%。其中320名護士（76%；95%可信區間為72至80%）表示曾經歷不同的侮辱，包括辱罵（73%）、欺負（45%）、身體攻擊（18%）、或性騷擾（12%）。大部份遭辱罵的護士（82%）會向朋友、家人或同事傾訴。部份（42%）會當作若無其事。工作場所暴力的風險因素包括工作於男性病房，及某些部門如急症科，社區護士服務和骨科。

結論：香港護士面對工作場所暴力是一項不容忽視的問題。需進行大型調查以更仔細研究此問題。

Introduction

Workplace violence against health care workers is a common and widespread phenomenon. According to the World Health Organization, violence includes “physical assault, homicide, verbal abuse, bullying/mobbing, sexual and racial harassment, and psychological stress”.¹ The National Institute for Occupational Safety and Health defines workplace violence as “violent acts (including physical assaults and threats of assaults) directed towards persons at work or on duty”.² Violence is present in all work environments but nurses are on the frontline of the health care system. They have the closest contact with patients and their relatives, and thus are at greatest risk of being abused

in the hospital environment.³ International studies have reported that the prevalence of workplace violence against nurses in the hospital setting varied from 10% to 50%, and even up to 87%.⁴⁻⁶ These studies nonetheless varied in their definition of workplace violence and the recall period.

Despite the variable range of reported violence, there is a consensus that the most commonly encountered violence is verbal abuse.^{6,7} The highest incidence of workplace violence occurs in psychiatric wards, accident and emergency departments, and high dependency units.⁸ The reported percentage of nurses being abused in psychiatric wards and accident and emergency departments is an astonishing 98%⁶ and 100%⁹, respectively, due largely to the characteristics of patients.

Health care workers' experience of workplace violence must certainly have a negative correlation with job satisfaction and performance.⁸ Such a decrease in performance will directly impact on patient care and consequently the effectiveness of the health care system. Despite the acknowledgement by international committees and governing bodies that workplace violence is a significant and serious problem in the nursing population, it has not been studied in Hong Kong. We conducted a pilot study with three aims: to determine the prevalence and nature of workplace violence against nurses in Hong Kong; to identify the risk factors related to violence in the hospital environment; and to determine how nurses deal with patient/relative aggression.

Methods

A cross-sectional study was performed to determine the prevalence and nature of workplace violence experienced by nurses at Queen Mary Hospital over a 1-year period from April 2003 to April 2004. Queen Mary Hospital is a regional hospital with approximately 1400 beds and 3800 staff. It is the teaching hospital for the Faculty of Medicine of the University of Hong Kong, and provides an extensive range of services, from 24-hour accident and emergency (A&E) cover through different specialties to rehabilitation. It also serves as a tertiary referral centre for many advanced technology services such as radiotherapy, transplantation, assisted reproduction, renal dialysis, coronary care, neonatal intensive care, oral maxillofacial surgery, burns and reconstructive surgery, paediatrics, and neurosurgery.

All nurses working in the hospital were invited to answer a questionnaire that requested demographic data and information about workplace violence. All grades of nurses working in the wards and out-patient departments were approached. As the majority of nurses were Chinese, the questionnaire was written in Chinese. Nurses who were unable to read Chinese and who worked in administrative positions without patient contact were excluded from the study.

Box. Definition of workplace violence¹

Verbal abuse—vulgarity, insult, snigger
Bullying—unreasonable workloads or shifts
Physical abuse—physical assault, slapping, kicking, other forms of physical damage
Sexual harassment—any form of verbal, physical, psychological remarks of a sexual nature

The questionnaire was derived from the one used in a previous study: "Workplace violence in the health sector country case studies research instruments survey questionnaires" (English version) by ILO/ICN/WHO/PSI project.¹⁰ Substantial modifications were made during translation of the questionnaire to Chinese so that it was appropriate for Hong Kong. The definitions of workplace violence were included in Chinese to avoid confusion (Box).

The first section of the questionnaire collected demographic data. The second part of the questionnaire comprised questions related to workplace violence. This included separate subsections about verbal abuse, bullying, physical abuse, and sexual harassment. If a nurse responded positively to questions about violence, further information on the perpetrator and frequency of violence was sought. Nurses were also asked to state how they handled the abuse.

The reliability and consistency of the questionnaire were validated by asking 20 nurses to complete the questionnaire on two occasions, 2 weeks apart. Results of each set of questionnaires were compared to confirm their reliability and consistency.

The questionnaires, together with a cover letter and a self-addressed return envelope, were distributed to nurses by the central nursing department of the hospital. Nurses were asked to return the completed questionnaire via the internal mail system within 2 weeks. The anonymous nature of the questionnaire was emphasised at the time of distribution.

Data were analysed using the Statistical Package for the Social Sciences (Windows version 12.0; SPSS Inc, Chicago [IL], US). Chi squared test was used to compare categorical variables. A P value of less than 0.05 was considered statistically significant. The study protocol was approved by the hospital ethics committee.

Results

Questionnaires were distributed to 1650 nurses. A total of 420 questionnaires were received in the following 2 weeks (response rate, 25%). The female to male nurse ratio was 34:3. Violence had been experienced by 320 of 420 nurses (76%; 95% confidence interval [CI], 72-80%) over the 12-month period (Fig 1). The prevalence of any kind

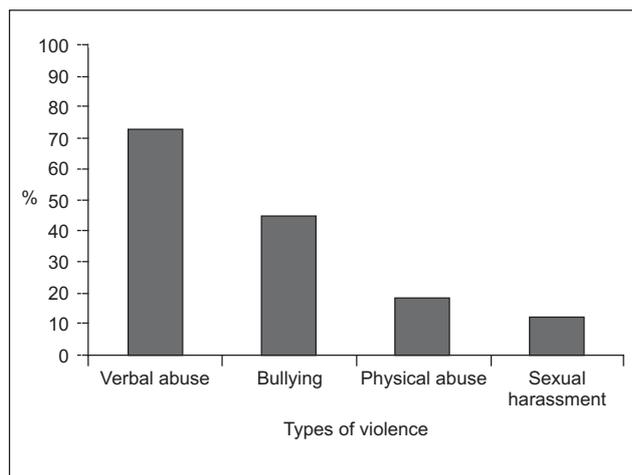


Fig 1. Prevalence of different types of workplace violence*
* Respondents could choose more than one type of violence

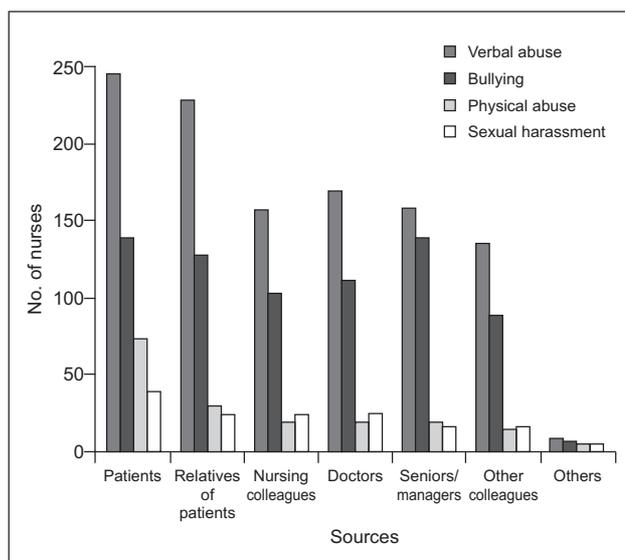


Fig 2. Source of workplace violence in the previous 12 months*
* Respondents could choose more than one source

of violence was 75% and 88% for female and male nurses, respectively with no significant difference between the two groups (Chi squared test, $P=0.084$). Subjects were allowed to identify more than one type of workplace violence. The most prevalent violence was verbal abuse (73%), followed by bullying, physical abuse, and sexual harassment. As many as 20% of nurses recalled more than 10 instances of various types of workplace violence over the previous 12 months.

Subjects who had experienced workplace violence within the previous 12 months were asked to indicate the source of violence (Fig 2). Patients and their relatives were the main perpetrators in all cases. Other major perpetrators included nursing colleagues, seniors, managers, and doctors.

Nurses working in the A&E Department ($n=16$), Community Nursing Service ($n=13$), and Orthopaedics and Traumatology Department ($n=14$) were most

susceptible to workplace violence (Fig 3). All nurses from these specialties who returned their questionnaires reported workplace violence in the previous 12 months. The next two specialties with a high prevalence of violence were Private and Specialty Services (85%) and Psychiatry (84%) [Fig 3].

Significantly more abuse was reported by nurses working in male wards. A total of 91% of nurses on male wards reported workplace violence compared with 82% on female wards and 72% on mixed male with female wards (Chi squared test, $P=0.012$).

Most nurses (82%) who experienced verbal abuse tended to cope with the problem by confiding in friends, family members, or colleagues. The response was similar for other types of abuse. The second most common response by nurses was to ignore the incident (42%);

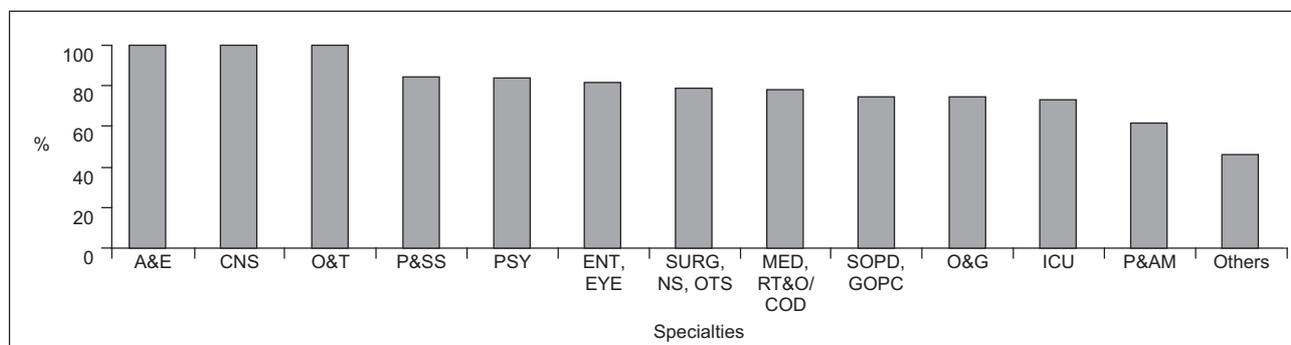


Fig 3. Prevalence of any kind of abuse against nurses in different specialties*
* A&E denotes Accident & Emergency; CNS Community Nursing Service; O&T Orthopaedics & Traumatology; P&SS Private & Specialty Services; PSY Psychiatry; ENT Ear, Nose and Throat; EYE Ophthalmology; SURG Surgical; NS Neurosurgery; OTS Operating Theatre; MED Medical; RT&O/COD Clinical Oncology; SOPD Specialty Out-Patient Department; GOPC General Out-Patient Clinic; O&G Obstetrics & Gynaecology; ICU Intensive Care Unit; and P&AM Paediatrics & Adolescent Medicine

very few (1-3%) chose to seek help from the union. Other means of coping with the problem included shopping, praying, or taking revenge. In one extreme case, a nurse attempted suicide following verbal and physical abuse.

Discussion

Findings in this study suggest that a large proportion of nurses (76%; 95% CI, 72-80%) experience violence in the working environment. Although workplace violence is generally confined to verbal abuse, physical abuse and sexual harassment are not uncommon. Recognition of the severity of the problem is essential, and further investigation of the impact of such violence can benefit the whole profession.

It is apparent that the major sources of workplace violence are patients followed by their relatives, the primary people with whom nurses interact every day. Nonetheless they are not the sole perpetrators of workplace violence: nursing colleagues, seniors, managers, and doctors were also main sources of workplace violence and should not be overlooked.

Violence was more common on male wards. Traditional Chinese thinking dictates that men are at the top of a hierarchical structure in the society and considered superior to females. As most nurses are female, this traditional thinking may explain the more common occurrence of violence on male wards.

The prevalence of workplace violence in the A&E Department, Community Nursing Service, and Orthopaedics and Traumatology Department approached 100%. It may be argued that improved security is necessary in these high-risk areas.

The response rate of this study was relatively low (25%) compared with other studies (50% in Hegney et al's study⁵ and 87% in Uzun's study⁶). Voluntary questionnaires yield notoriously poor response rates. In addition, nurses who are constantly busy may have considered them time-consuming and tedious. Nonetheless despite the low response rate, the prevalence rate was comparable.

This study was a cross-sectional study that attempted to determine the prevalence of workplace violence within a certain past period of time. Nurses were asked about their memory of being abused in the previous 12 months, thus the estimated prevalence would have been subjected to recall bias. In addition, the feeling of being abused is very

subjective. Despite the inclusion of a range of definitions for different types of workplace violence that attempts to be objective, subjective interpretation cannot be avoided. It is also possible that nurses who returned the questionnaires were more likely to have been victims of workplace violence.

Findings of this study reveal that nurses are at high risk of workplace violence and most have been victims at one time or another. Although most violence is verbal abuse, physical abuse and sexual harassment are not uncommon. There is a need to heighten awareness of the problem among health service managers and the general public, and to carry out further studies in this area.

Acknowledgements

We would like to thank Mr Alan Wong (Hong Kong West Cluster General Manager of Nursing, Queen Mary Hospital) and Ms Agnes Lee (Central Nursing Department), who coordinated the distribution and collection of questionnaires and our statistical advisor, Dr LC Wong. This study was performed as a Health Care Project in the Year III Medical Curriculum under the supervision of Dr Sarah McGhee, Department of Community Medicine, University of Hong Kong.

References

1. Workplace violence. WHO website: http://www.who.int/violence_injury_prevention/injury/work9/en/print.html. Accessed 22 Nov 2005.
2. Violence — occupational hazards in hospitals. Centers for Disease Control and Prevention website: <http://www.cdc.gov/niosh/2002-101.html>. Accessed 22 Nov 2005.
3. A safer place to work: protecting the NHS Hospital and ambulance staff from violence and aggression. WHO website: http://www.nao.gov.uk/publications/nao_reports/02-03/0203527.pdf. Accessed 22 Nov 2005.
4. Wells J, Bowers L. How prevalent is violence towards nurses working in general hospitals in the UK? *J Adv Nurs* 2002;39:230-40.
5. Hegney D, Plank A, Parker V. Workplace violence in nursing in Queensland, Australia: a self-reported study. *Int J Nurs Pract* 2003;9:261-8.
6. Uzun O. Perceptions and experiences of nurses in Turkey about verbal abuse in clinical settings. *J Nurs Scholarsh* 2003;35:81-5.
7. Atawneh FA, Zahid MA, Al-Sahlawi KS, Shahid AA, Al-Farrah MH. Violence against nurses in hospitals: prevalence and effects. *Br J Nurs* 2003;12:102-7.
8. Hesketh KL, Duncan SM, Estabrooks CA, et al. Workplace violence in Alberta and British Columbia hospitals. *Health Policy* 2003;63:311-21.
9. May DD, Grubbs LM. The extent, nature, and precipitating factors of nurse assault among three groups of registered nurses in a regional medical center. *J Emerg Nurs* 2002;28:11-7.
10. Joint programme on workplace violence in the health sector. WHO website: http://www.who.int/violence_injury_prevention/violence/interpersonal/en/WVresearchprotocol.pdf. Accessed 22 Nov 2005.