Occupational violence against dental professionals in southern Nigeria

*Azodo CC¹, Ezeja EB², Ehikhamenor EE³

1. Department of Periodontics, University of Benin Teaching Hospital, Benin City, Nigeria.

2. Department of Preventive Dentistry, University of Benin Teaching Hospital, Benin City, Nigeria.

3. Department of Restorative Dentistry, University of Benin Teaching Hospital/Save Accident, Victim of Nigeria (SAVAN)

Abstract

Objective: To determine the prevalence of workplace violence in Oral healthcare centres against Nigerian dental professionals. **Methods:** A questionnaire-based cross-sectional survey of 175 randomly selected dental professionals working in Oral healthcare centres of University Teaching Hospitals in Southern Nigeria was conducted.

Results: The survey response rate was 78.9%. The respondents were dentists (58.0%), dental nurses (18.1%), dental technologists (12.3%), dental therapists (8.0%) and dental record officers (3.6%). The prevalence of violence in Nigerian Oral healthcare centres was 31.9%. There was no statistically significant difference in the prevalence of violence against dentist and dental auxiliaries. Violence was often associated with long waiting time (27.3%), cancellation of appointment (13.6%), outcome of patient's treatment (11.4%), alcohol intoxication (9.1%), psychiatric patient (6.8%), patient's bill (4.5%) and others (27.3%). Non-physical violence in form of loud shouting (50.0%) threat (22.7%), sexual harassment (6.8%) and swearing (2.3%) constituted the majority while physical violence in form of bullying and hitting constituted the remaining 18.2%. The main perpetrators of the violence were patients (54.5%) and patient's relatives/friends (18.2%). The expressed impact of violence among the respondents include fear (18.2%), impaired job performance (15.9%), psychological problems (13.6%) and off duty (9.1%). No impact was declared by 43.2% of respondents.

Conclusion: The prevalence of workplace violence in Oral healthcare centres against dental professionals in Southern Nigeria was significant and had a substantial effect on dental professionals' well-being thus necessitating urgent attention. **Keywords:** Occupational violence, oral healthcare, dentist, dental auxiliaries.

African Health Sciences 2011; 11(3): 486 - 492

Introduction

Violence in the workplace is a multi-faceted, multicausal, public health, social and legal problem facing all occupations worldwide¹⁻⁶. It is considered to be a reflection of the level and wave of violence suffered in the whole society. Violence is an everyday reality for many workers, substantiating the prevalence as an epidemic in all continents of the world⁷⁻⁸.

*Corresponding author

Dr Clement C. Azodo Department of Periodontics New Dental Complex University of Benin Teaching Hospital P.M.B. 1111 Ugbowo Benin City, Edo State Nigeria 300001 Phone: +2348034051699 Email: clementazodo@yahoo.com Violence is the third leading cause of death in the workplace⁹ and also accounts for 16% of more than 6.5 million acts of violence experienced by individuals age 12 and over¹⁰. The quantification of economic costs of work place violence showed that almost two million workdays and millions of dollars are lost annually because of non-fatal assaults suffered at the work place¹¹.

Violence at the workplace is a serious safety and health issue as it increases anxiety and undermines the health worker's ability to focus on the delivery of safe, effective and competent care¹². Many healthcare workers will experience work place violence at least once during their professional career. Nearly a quarter of the world's work place violence occurs in the health sector and this has led the Australian Institute of Criminology to certify the health sector as the most violent industry in 1999. World Health Organization, International Council of Nurses and Public Services International have also recognized workplace violence as a major health priority¹³. In America, Centers of Disease Control and Prevention has declared violence in the workplace, a national epidemic because of the pervasive nature¹⁴.

The impact of violence at work has widespread consequences. It not only affect the employees but also the work places, colleagues, employers, families and society as a whole. It exhibits a dramatic impact on the health, safety and welfare of workers¹⁵. It has a substantial effect on staff wellbeing and job satisfaction^{15,16}. Physicians have reported that violence experienced at the work place had a negative impact on their family and on their quality of life¹⁷. Work related violence also hampers work performance and causes employee attrition¹⁸. It causes low morale and decreased worker productivity which in turn results in monetary loss for businesses and the worker^{1,19,20}. Violent incident at a work place leading to anger, humiliation, shame, frustration, fearfulness, stress, flashbacks, sleeplessness, burnout, lack of motivation, loss of confidence, reduced self-esteem, anxiety, depression, irritability, increased job stress, poor job performance, lower commitment to work, increased sickness absence, post-traumatic stress disorder, psychological disorders, tobacco, alcohol and drug abuse^{18,20-28}. It may even culminate in occupational accidents, invalidity and suicide.

Violence come from outside as well as from inside the workplace and ranges from threats and verbal abuse to physical assaults and homicide but Health care employees are more likely to experience verbal abuse¹². In the health sector, the perpetrators are mainly patients and their relatives¹². Others include supervisor, hierarchical superiors, fellow-workers, subordinates or even complete strangers^{29,30}.

Violence gainst health workers is found in all areas of practice and constitutes a serious hazard. A variety of factors make health workers particularly prone to the acts of violence and they include; working with people under the influence of drugs or alcohol, mentally ill people, unrestricted movement of the public in clinics and hospitals, the increasing presence of gang members, long waits in emergency or clinic areas that lead to client frustration over an inability to obtain needed services promptly and lack of staff training and policies for preventing and managing escalating hostile and assaultive behavior^{3,17,28,31-35}. Aggression management training has been shown to result in fewer incidents, less serious incidents, a reduction in the psychological sequalae following incidents, improved response to incidents and better staff morale³⁶.

Numerous studies on occupational violence have been conducted for medical doctors^{17,37-42}, nurses^{24,25,28}, mental health staffs^{43,44} and emergency department staffs⁴⁵⁻⁴⁸ but there are only a few studies for dental professionals⁴⁹. To the best knowledge of the researchers, there is no information on occupational violence in Nigerian oral healthcare centres in published literature. The objective of this study was to determine the prevalence of workplace violence in Oral healthcare centres against Nigerian dental professionals.

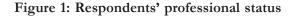
Methods

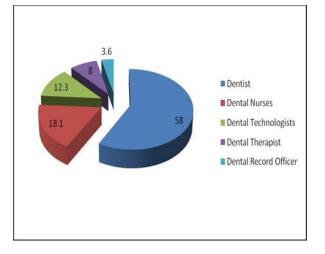
A questionnaire-based cross-sectional survey of 175 randomly selected dental professionals working in Oral healthcare centres of University Teaching hospitals in Southern Nigeria was conducted in 2009. The hospitals were University College Hospital, Ibadan; University of Benin Teaching Hospital, Benin City; Lagos University Teaching Hospital, Idi-Araba and Obafemi Awolowo University, Ile-Ife. All these five Teaching Hospitals are actively involved in undergraduate and postgraduate training of dental workforce and have all cadres of dental professionals in their employment.

The sampling technique employed was systematic sampling. In each of the study locations, a list of dental professionals present at work was obtained. Every third person on the list was selected until a total of 35 in each were selected. Dental professionals that were on leave or absent at work for any reason on the day of the study were excluded. The questionnaire elicited information on demography, prevalence of violence in the last 12 months, types, perpetrators, reasons and expressed impacts of the violence. Informed consent was obtained prior to the onset of the survey, the survey was anonymous and participation was voluntary. Ethical approval for this study was obtained from University of Benin Teaching Hospital Ethics committee. Data analysis was done using Statistical Package for Social Sciences (SPSS version 15.0). The test for significance was done using chi square statistics and a p < 0.05 was considered significant.

Results

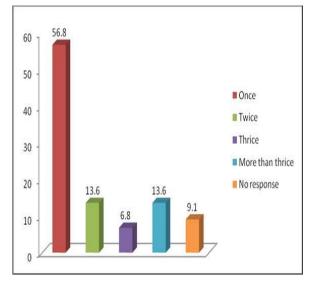
The survey response rate was 78.9%. The respondents were dentists (58%), dental nurses (18.1%), dental technologists (12.3%), dental therapists (8.0%) and dental record officers (3.6%) as shown in figure 1.





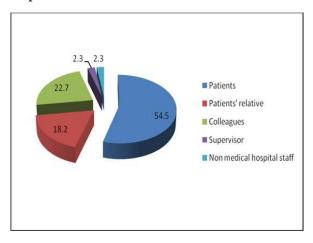
The prevalence of violence in Nigerian Oral healthcare centres was 31.9%. More than half of the dentists and dental auxiliaries in this survey experienced violence only once in the last 12 months as indicated in figure 2.

Figure 2: Frequency of experienced violence among the respondents



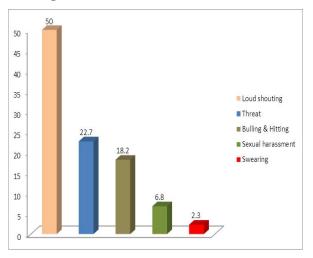
There was no statistically significant difference in the prevalence of violence against dentist and dental auxiliaries. The main perpetrators of the violence were patients (54.5%) and patient's relatives/friends (18.2%) as indicated in figure 3 below.

Figure 3: Perpetrators of violence against the respondents



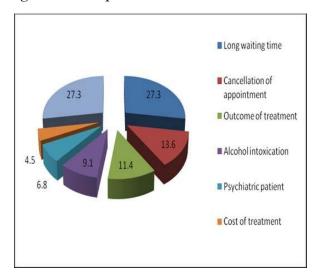
Non-physical violence in form of loud shouting (50.0%) threat (22.7%), sexual harassment (6.8%) and swearing (2.3%) constituted the majority while physical violence in form of bullying and hitting constituted the remaining 18.2% as shown in figure 4.

Figure 4: Nature of violence experienced by the respondents



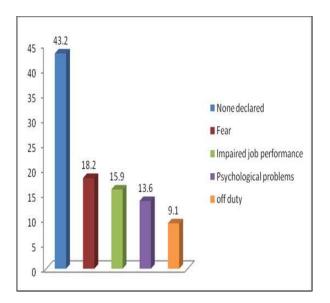
Violence was often associated with long waiting time (27.3%), cancellation of appointment (13.6%), outcome of patient's treatment (11.4%), alcohol intoxication (9.1%), psychiatric patient (6.8%), patient's bill (4.5%) and others (27.3%) as shown in figure 5

Figure 5: Reasons for the perpetrated violence against the respondents



The expressed impact of violence among the respondents include fear 8 (18.2%), impaired job performance 7 (15.9%), psychological problems 6 (13.6%) and off duty 4 (9.1%). No impact was declared by 19 (43.2%) as shown in figure 6.

Figure 6: Expressed impacts of violence among the respondents



Discussion

The economic downturn, poverty, rising unemployment and easy firearm accessibility have made the society, more violent and dangerous than ever before. There exists mounting evidence to suggest that workplace violence towards healthcare professionals is a common and widespread problem.

Disturbance in the social fabric of the society accounts for increasing levels of violence in the work place. In this study, the prevalence of violence in Nigerian Oral healthcare centres was 31.9% which is lower than the 38% violent incidents recorded among public health field workers⁵⁰, 49.5% recorded among health workers in Turkish health care settings⁵¹ and 63.7% documented among general practitioners working in urban areas of New South Wales, Australian³⁸. This is higher than the 21% documented among general practitioners in Dublin, Ireland⁵², 24.3% documented among health-care workers in an Obstetrics and Gynaecology unit of a Nigerian University Teaching Hospitals⁵³ and 24.6% documented among health workers in their first year of employment⁵⁴. Frequent contact of oral healthcare workers with people in distress and pain may be responsible for the level of violence reported in this survey. Widespread poverty and inequality may also have eroded friendly disposition of patients and their relatives thereby manifesting with violence against oral healthcare professionals in Nigeria.

Studies have shown that females are more common victims of violence in the health care setting^{38, 49,51,55}. In this survey, there is no significant difference in the prevalence between males and females. Occupational violence is not acceptable, no matter how frequently or infrequently it occurs. In this study, 56.8% had experienced violence only once within the last 12 months. The workplace in general has traditionally been viewed as a relatively benign and violence-free environment. In hospitals, health care workers believe their mission is healing and are usually caught unaware by violence during the discharge of their duty or anywhere in the workplace.

Patients and their relatives or friends are most common perpetrators of workplace violence in health sector^{3, 4, 12,27,28,32,33,51,56}. In this study, the main perpetrators of the violence were patients (54.5%) and patient's relatives/friends (18.2%).

Uneven distribution of oral health centres, manpower shortages and the increasing level of oral diseases among the Nigerian populace result in crowding in waiting room. Long waiting time accounted 27.3% of violence in this survey. Violence in the health sector has been associated with long the waiting time in previous studies^{35,57}. In emergency departments in Denizli, Turkey, the second most frequent reason for violence was long waiting times³⁴.

Cancellation of appointments occurs when the optimal working environment for successful delivery of oral health services is hampered. It is usually associated with distress and may manifested by violence because a patient would have sacrificed the day's work in order to receive dental treatment. In this study, cancellation of appointments was responsible for 13.6% of the reported violence.

The mouth functions in mastication, deglutition speech and also contributes to facial aesthetics and psychological well being of an individual. An error in from dental treatment adversely affects social interaction, quality of life and facial aesthetics. It is therefore not surprising that the outcome of treatment emerged as the third single most common reason for violence in this study. Studies revealed that dissatisfaction with treatment and failure to meet patients' expectations are among chief causes of violence in health care settings^{3,17}.

Research studies consistently find that alcohol use is associated with verbal and physical violence in the work place58. Increasing drug and alcohol use have also been implicated in the rise in violence⁵⁹. In this survey, alcohol intoxication accounted for 9.1% of the violence. Mental illness contributes to violence against healthcare workers. Several oral conditions manifesting in mentally ill patients making them frequent recipients of oral care. In this survey, psychiatric patient were responsible for 6.8% of the reported violence. Furthermore cost of treatment was the reason for 4.5% of the violence in this survey. Deprivation, poverty and unemployment and lack of health insurance are common among people seeking dental care in Nigeria. It is assumed that perception of the cost of care as being expensive will trigger a violent reaction from patients and relatives.

Health care workers are at risk of both fatal and non-fatal violence-related injuries. Violence may also consist of repeated actions which, by themselves may be relatively minor, but which can cumulatively come to constitute serious forms of violence such as sexual harassment, bullying or mobbing. Verbal abuse has long being recognized as the most prevalent form of violence in workplace worldwide^{5,12.15,16,34,35,38,46}. In this study, the nonphysical violence form constituted the majority.

Workplace violence is one of the most complex and dangerous occupational hazards facing people working in a healthcare environment. Violence at work not only has an immediate effect on the victim, but also expands in progressively larger ripples, affecting other people directly or indirectly, as well as the enterprise and the community²⁸. In this survey, no impact was declared by 43.2% of the respondents, while expressed impacts include fear (18.2%), impaired job performance (15.9%), psychological problems (13.6%) and being off duty (9.1%). An urban inner-city tertiary care centre survey in Vancouver showed that about three quarters of emergency departments staff that have experienced violence were afraid of patients as a result of violence and almost half hid their identities from patients¹⁶. A study on health care workers in emergency departments in Denizli, Turkey also revealed that 36.1% of workplace violence victims developed psychological problems after the incident³⁴. Variability in the impact of violence could be due to the fact that victims respond differently to violence and also the support received may be contributory.

Conclusion

The prevalence of workplace violence in Oral healthcare centres against dental professionals in Southern Nigeria was significant and had a substantial effect on dental professionals' well-being thus necessitating urgent attention. Improved patient care efficiency and communication may clarify expectations and prevent frustration and angry verbal outbursts. These data would also serve as valuable data for health care managers and policy makers in planning violence reduction intervention.

References

- Olson NK. Workplace violence: theories of causation and prevention strategies. AAOHN J. 1994; 42(10):477-82.
- Brakel SJ. Legal liability and workplace violence. J Am Acad Psychiatry Law. 1998; 26(4):553-62.
- Jenkins MG, Rocke LG, McNicholl BP, Hughes DM. Violence and verbal abuse against staff in accident and emergency departments: a survey of consultants in the UK and the Republic of Ireland. J Accid Emerg Med. 1998; 15(4):262-5.
- Greene J. Legal issues. After an assault. *Hosp Health* Netw. 2002; 76(6):16.
- Alexander C, Fraser J. Occupational violence in an Australian healthcare setting: implications for managers. J Healthc Manag. 2004; 49(6):377-90; discussion 391-2.
- Mayhew C, Chappell D. Workplace violence: an overview of patterns of risk and the emotional/ stress consequences on targets. *Int J Law Psychiatry*. 2007; 30(4-5):327-39.
- World Health Organization. World report on violence and health. Geneva: WHO, 2002. http:/ /www.who.int/violence_injury_prevention/ violence/world_report/en/FullWRVH.pdf.

- 8. Litwin B. Analysis and application: A Conceptual Framework for A Multi-Factor, Multi- Level Analysis of the Origins of Workplace Violence ILSA. J Int'l & Comp L. 2002; 8: 825
- US Department of Labor. Bureau of Labor Statistics. National Census of Fatal Occupational Injuries in 2001, USDL 02-541, 2002. http:// stats.bls.gov/iif/oshcfoi1.htm.
- Bachman R. Violence and Theft in the Workplace, National Crime Victimization Survey. Washington, D. C.: U. S. Department of Justice, 1994 pp. 1-2.
- Anderson DG. Workplace violence in long haul trucking: occupational health nursing update. AAOHN J. 2004; 52(1):23-7.
- 12. Henderson AD. Nurses and workplace violence: Nurses' experiences of verbal and physical abuse at work. *Nursing Leadership* 2003; 16(4): 82-98.
- Hinchberger PA. Violence against female student nurses in the workplace. *Nurs Forum*. 2009; 44(1):37-46.
- Special report. Workplace violence: what all employers should know? *Hosp Secur Saf Manage*. 1994; 15(5):5-9.
- Gates DM, Ross CS, McQueen L. Violence against emergency department workers. J Emerg Med. 2006; 31(3):331-7.
- Fernandes CM, Bouthillette F, Raboud JM, Bullock L, Moore CF, Christenson JM, et al. Violence in the emergency department: a survey of health care workers. *CMAJ*. 1999; 161(10): 1245–1248.
- 17. Carmi-Iluz T, Peleg R, Freud T, Shvartzman P. Verbal and physical violence towards hospital- and community-based physicians in the Negev: an observational study. *BMC Health Serv Res.* 2005; 5:54.
- 18. Coles J, Koritsas S, Boyle M, Stanley J. GPs, violence and work performance 'just part of the job? *Aust Fam Physician*. 2007; 36(3):189-91.
- 19. Choe F. Violence in the workplace and ergonomic prevention. Work. 2000; 14(2):159-164.
- Johnson SL. International perspectives on workplace bullying among nurses: a review. Int Nurs Rev. 2009; 56(1):34-40.
- Zahid MA, Al-Sahlawi KS, Shahid AA, Awadh JA, Abu-Shammah H. Violence against doctors: 2. Effects of violence on doctors working in accident and emergency departments. *Eur J Emerg Med.* 1999; 6(4):305-9.
- Jackson D, Clare J, Mannix J. Who would want to be a nurse? Violence in the workplace—a factor in recruitment and retention. *J Nurs Manag.* 2002; 10(1):13-20.
- 23. 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(2):102-7.

- Celik SS, Celik Y, Aðirbas I, Uðurluoðlu O. Verbal and physical abuse against nurses in Turkey. *Int Nurs Rev.* 2007; 54(4):359-66.
- 25. Nachreiner NM, Gerberich SG, Ryan AD, McGovern PM. Minnesota nurses' study: perceptions of violence and the work environment. *Ind Health.* 2007; 45(5):672-8.
- 26. Kisa S. Turkish nurses' experiences of verbal abuse at work. *Arch Psychiatr Nurs.* 2008; 22(4):200-7.
- Chen WC, Hwu HG, Kung SM, Chiu HJ, Wang JD. Prevalence and determinants of workplace violence of health care workers in a psychiatric hospital in Taiwan. *J Occup Health.* 2008; 50(3):288-93.
- Kamchuchat C, Chongsuvivatwong V, Oncheunjit S, Yip TW, Sangthong R. Workplace violence directed at nursing staff at a general hospital in southern Thailand. *J Occup Health*. 2008; 50(2):201-7.
- 29. Acik Y, Deveci SE, Gunes G, Gulbayrak C, Dabak S, Saka G, Vural G, et al. Experience of workplace violence during medical speciality training in Turkey. Occup Med (Lond). 2008; 58(5):361-6.
- Sofield L, Salmond SW. Workplace violence. A focus on verbal abuse and intent to leave the organization. Orthop Nurs. 2003; 22(4):274-83.
- 31. U.S. Department of Labor Occupational Safety and Health Administration. Guidelines for Preventing Workplace Violence for Health Care & Social Service Workers. 2004. http:// www.osha.gov/Publications/OSHA3148/ osha3148.html
- Lyneham J. Violence in New South Wales emergency departments. *Aust J Adv Nurs.* 2000; 18(2):8-17.
- 33. 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(1):11-7.
- 34. Boz B, Acar K, Ergin A, Erdur B, Kurtulus A, Turkcuer I, et al. Violence toward health care workers in emergency departments in Denizli, Turkey. *Adv Ther.* 2006; 23(2):364-9.
- 35. Tang JS, Chen CL, Zhang ZR, Wang L. Incidence and related factors of violence in emergency departments—a study of nurses in southern Taiwan. J Formos Med Assoc. 2007; 106(9):748-58.
- 36. Beech B, Leather P. Workplace violence in the health sector: a review of staff training and integration of training evaluation models. *Aggress Violent Beb* 2006; 11(1):27-43

- Tolhurst H, Baker L, Murray G, Bell P, Sutton A, Dean S. Rural general practitioner experience of work-related violence in australia. *Aust J Rural Health.* 2003; 11(5):231-6.
- Magin PJ, Adams J, Sibbritt DW, Joy E, Ireland MC. Experiences of occupational violence in Australian urban general practice: a cross-sectional study of GPs. *Med J Aust.* 2005; 183(7):352-6.
- 39. Koritsas S, Coles J, Boyle M, Stanley J. Prevalence and predictors of occupational violence and aggression towards GPs: a cross-sectional study. *Br J Gen Pract.* 2007; 57(545):967-70.
- 40. Arimatsu M, Wada K, Yoshikawa T, Oda S, Taniguchi H, Aizawa Y, et al. An epidemiological study of work-related violence experienced by physicians who graduated from a medical school in Japan. J Occup Health. 2008; 50(4):357-61.
- 41. Magin P, Adams J, Joy E, Ireland M, Heaney S, Darab S. Violence in general practice: perceptions of cause and implications for safety. *Can Fam Physician*. 2008; 54(9):1278-84.
- 42. Magin PJ, Adams J, Sibbritt DW, Joy E, Ireland MC. Effects of occupational violence on Australian general practitioners' provision of home visits and after-hours care: a crosssectional study. *J Eval Clin Pract.* 2008; 14(2):336-42.
- Powell RA, Lloyd KR. A national survey of violence experienced by community mental health researchers. *Soc Psychiatry Psychiatr Epidemiol.* 2001; 36(3):158-63.
- 44. Privitera M, Weisman R, Cerulli C, Tu X, Groman A. Violence toward mental health staff and safety in the work environment. *Occup Med (Lond)*. 2005; 55(6):480-6.
- 45. Ryan D, Maguire J. Aggression and violence a problem in Irish Accident and Emergency departments? J Nurs Manag. 2006; 14(2):106-15.
- Boyle M, Koritsas S, Coles J, Stanley J. A pilot study of workplace violence towards paramedics. *Emerg Med J.* 2007; 24(11):760-3.
- 47. Kansagra SM, Rao SR, Sullivan AF, Gordon JA, Magid DJ, Kaushal R, et al. A survey of workplace violence across 65 U.S. emergency departments. *Acad Emerg Med.* 2008; 15(12):1268-74.

- Ayers KM, Thomson WM, Newton JT, Morgaine KC, Rich AM. Self-reported occupational health of general dental practitioners. Occup Med (Lond). 2009; 59(3):142-8.
- Schulte JM, Nolt BJ, Williams RL, Spinks CL, Hellsten JJ. Violence and threats of violence experienced by public health field-workers. *JAMA*. 1998; 280(5):439-42.
- Ayranci U, Yenilmez C, Balci Y, Kaptanoglu C. Identification of violence in Turkish health care settings. J Interpers Violence. 2006; 21(2):276-96.
- O'Connell P, Bury G. Assaults against general practitioners in Ireland. *Fam Med.* 1997; 29(5):340-3.
- 52. Orji EO, Fasubaa OB, Onwudiegwu U, Dare FO, Ogunniyi SO. Occupational health hazards among health care workers in an obstetrics and gynaecology unit of a Nigerian teaching hospital. J Obstet Gynaecol. 2002; 22(1):75-8.
- 53. Hogh A, Sharipova M, Borg V. Incidence and recurrent work-related violence towards healthcare workers and subsequent health effects. A one-year follow-up study. *Scand J Public Health.* 2008; 36(7):706-12.
- Bernstein HA. Survey of threats and assaults directed toward psychotherapists. *Am J Psychother*. 1981; 35(4):542-9.
- 55. Hegney D, Eley R, Plank A, Buikstra E, Parker V. Workplace violence in Queensland, Australia: the results of a comparative study. *Int J Nurs Pract.* 2006; 12(4):220-31.
- McAneney CM, Shaw KN. Violence in the pediatric emergency department. *Ann Emerg Med.* 1994; 23(6):1248-51.
- Fisher BS, Gunnison E. Violence in the workplace Gender similarities and differences. *Criminal Justice* 2001; 29(2)145-55.
- Collins DJ, Lapsley HM. Counting the cost: estimates of the social costs of drug abuse in Australia in 1998–9. Canberra: Australian Government Department of Health and Ageing, 2000.
- 59. Knott JC, Bennett D, Rawet J, Taylor DM. Epidemiology of unarmed threats in the emergency department. *Emerg Med Australas* 2005; 17: 351-358.