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Occupational Hazards in Nursing

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Dear editor,

Nurses continue to report high levels of job-related injury and illness. Working environment, responsibilities, and duties of nurses put them in the frontline of numerous occupational hazards. Some common occupational hazards that nurses might face are listed here:

1- The vast majority of nurses experience persistent job-related pain. In a study in Iran, on average, the nurses reported musculoskeletal pain in 3.33 regions and 89% had musculoskeletal pain, mainly in lower back (74%) and knees (48.5%) (1). In a study in the Netherlands, 57% of nurses had musculoskeletal pain in at least one region (2). In another study in Brazil, 80.7% of nurses complained of musculoskeletal pain (3). Upper extremity, shoulder, and neck injuries are also common among nurses (4). It seems that work-related musculoskeletal pain and injuries are common among nurses all over the world. Most of these pain and injuries are due to lifting and moving patients manually (5).

2- Work overload and stress are other factors that threaten the health of nurses and can cause burnout and fatigue. Working in three shifts (6, 7), in difficult settings such as oncology or emergency wards (8, 9), and caring of incurable patients puts a considerable psychologic, spiritual, and physical pressures on nurses (7). As a result, fatigue is a common feeling among nurses. In a study, 43.4% of nurses reported excessive fatigue (6). Raftopoulos et al. also reported that 91.9% of Cypriot nurses had fatigue (10).

3- Communicable and contagious diseases and exposure to blood-borne pathogens (e.g., HIV, HCV, HBV, etc) due to needle-stick injuries also threaten the health of nurses. It is estimated that 600000 to 800000 needle-stick injuries occur each year in all healthcare settings. Injections (21%), suturing (17%), and drawing blood (16%) are the main causes of exposures (11). Severe acute respiratory syndrome (SARS), tuberculosis, and methicillin resistant staphylococcus infection are other infectious diseases that can afflict nurses.

4- Chemical materials are other hazardous sources to nurses. Disinfectants and sterility products such as glutaraldehyde and ethylene oxide, hazardous drugs such as drugs that are used during chemotherapy, and latex exposure are among other occupational hazards for nurses (12).

5- Nurses, especially in emergency department, continue to experience high rates of on-the-job violence. According to a 2011 study by the Emergency Nurses Association (ENA), the 53.4% of nurses reported experiencing verbal abuse and more than one in 10 (12.9%) reported experiencing physical violence (13).

These occupational hazards along with many other problems such as night shifts and sleep deprivation have changed nursing to a dangerous occupation that may explain the high rate of stopping the work in nursing. Some interventions including greater access to patient lifting and transfer devices and more use of safe needle devices can improve the situation. Every healthcare setting should address this important issue and give priority to the safety of nurses.

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