



WORKING IN A CLINIC: MORE HAZARDOUS THAN YOU THOUGHT?

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This is part of a series on workplace safety and health for healthcare institutions.

MOCHI IS a delicate sticky rice cake, usually filled with sweet red bean paste and eaten as a dessert in Japan. Although it is available in the country throughout the year, it is most often served during the New Year. Mochi might be a soft, sweet and lovely treat, but it is also a deadly health hazard.

Every year, several people choke to death after consuming mochi in Japan. I found out about this interesting fact when I came across a report in a local newspaper, which said that nine people choked and died in January this year. This

food has caused a fair bit of concern with the folks at the Tokyo Fire Department, as they had to respond to almost 100 emergency calls of choking every year in the Japanese capital alone. In response, they even put up a webpage on the choking hazards of mochi, complete with uniquely Japanese kawaii cartoon figures doing the Heimlich manoeuvre.

Since this article is about workplace safety and health, I bring up this reference because it illustrates three important characteristics of workplace health hazards:

1. Hazards occur so infrequently that they are easy to ignore, but they can happen even in seemingly innocuous situations.
2. When accidents occur, they can be unexpectedly dangerous and even fatal.
3. Awareness and simple preventive steps alone can prevent most accidents (in this case, please cut mochi into smaller pieces, eat mochi slowly, chew mochi carefully and enjoy the taste).



Conflagration at the fire station

There are many types of workplace hazards, and for the healthcare sector, awareness of biological hazards and the importance of infection control was acutely brought home during the SARS pandemic in 2003. Many clinics had to implement strict measures for hand washing and the use of personal protective equipment (PPE) practically overnight.

Physical hazards in the clinic, however, are not immediately apparent. Before the Workplace Safety and Health (WSH) Act came into force in 2008, covering all workplaces including healthcare establishments, I would venture a guess that most people did not classify medical clinics as dangerous workplaces. Clinics are places where patients turn to for treatment of illnesses and injuries. Like an outbreak of fire in a fire station, the idea of getting injured in a clinic seems odd. Now that the WSH Act is in place, doctors as employers have a legal obligation to ensure that their clinic premises provide a safe working environment for all workers. Employers need to inculcate a safety culture in their organisations, and institute a system of risk assessment to manage hazards.

Ergonomics

Given the amount of time some of us spend sitting on our consultation chairs,

ergonomics is a major hazardous risk factor that we simply cannot afford to overlook. Used incorrectly, ergonomics is the silent killer that will slowly and insidiously lead to chronic debilitating conditions such as lower back pain, neck strain, tension headaches, eye strain, frozen shoulders, and wrist strains – to name only a few. Such musculoskeletal disorders are a result of mismatch between the worker, the equipment, and the task.

For doctors, inferior ergonomics means adopting poor posture in the sitting position for long periods. During consultation, patients are often seated on one side of the desk, while the office computer is located on the opposite side, causing doctors to make frequent twisting spinal movements. The increasing use of electronic records means that doctors frequently need to type and click on the computer, often thrusting the head forwards to glare at the monitor, resulting in problems with the cervical spine and musculature.

For the nurses and clinic assistants, ergonomics come into play with long hours of standing and sitting at the counter, retrieving medical records, carrying stores, and physically handling patients.

Prolonged duties at the registration counter lead to static posture and repetitive movements of the upper limbs. This increases the risk of neck and lower back pain as well as strains of

the wrist and shoulders. The answering of phone calls is a common cause of musculoskeletal strain from poor posture especially when the handset is grasped between the neck and the shoulders.

Handling of stocks and movement of stores are part of the clinic staff's duties, but many are not properly trained to handle large cartons of drugs that can be very heavy (eg, those containing glass bottles filled with liquids). Stocks may have to be lifted onto high shelves and cabinets for storage. This introduces the risk of overstretching of the upper limbs when trying to reach heights above the shoulder level, while the use of ladders to reach higher shelves may result in accidental falls from elevated heights.

Ergonomic risk is increased when patients are handled improperly and repetitively. Some common situations to note are: staff adopt an awkward position while helping patients, use too much force, and attempt to do the task alone without assistance from others.

Having identified ergonomic risk factors, suitable control measures need to be established. Using a comfortable chair with adequate back support and smooth swivel, and adjusting the desktop workflow such that the computer is at a comfortable distance and height, will pay off in the long term. Staff need to be aware of possible hazards, shown the correct postures,



Photos

1. Clear and present danger – transparent glass doors need to be marked
2. Tripwire – wires running across floors must be properly secured
3. Watch your head – observe and be on the lookout for unsafe practices in the clinic
4. Keep clear – ensure safe distances and clearance between items

taught proper lifting techniques, and given appropriate tools (such as trolleys and stepladders) to ease the physical demands of the job.

Physical hazards

Physical hazards, ubiquitous and intrinsic to the physical world that we occupy, lie in wait for us to lower our guard in a moment of carelessness to cause injury and pain. Doctors as employers and team leaders have a responsibility to walk through their clinic premises to record physical hazards that are present.

Sharps such as needles and surgical blades are the most obvious physical hazard because they carry infectious risk as well. Most healthcare workers are trained and aware of these dangers when handling and disposing of sharps.

Hazards in the clinic premises are apparent as soon as one opens the main glass door. If there are no stickers or markings, people can walk into clear glass panels. Steps at the front entrance need to be clearly marked to prevent trips. In the waiting area, take note of sharp corners on furniture and defective seats that may cause injury. Some water dispensers have a hot water tap and these must be marked and kept away from children. Coffee machines, televisions and other electrical appliances present risks of electrical shock if the wires and sockets are exposed. Wires running along the floor

have to be secured and covered. Carpets and floor tiles must be smooth and flat to prevent tripping. Filing cabinets and drawers must be closed as soon as users have assessed the contents.

Equipment hazards

Clinic staff not only need to be trained on how to properly operate clinic equipment but also know the possible hazards present. Common equipment include ECG machines, autoclave machines, and cardiac defibrillators.

Most defibrillators installed in outpatient clinics today are automated external defibrillators (AEDs). They are generally safe for the operator as they adopt a “hands-off” approach, and do not require manual firing of the electrical current. However, risks of electrical burns and electrical shocks still exist if the equipment is not used correctly. Faulty ECG machines also have the potential to cause electrical shocks.

Any defective electrical equipment or appliances may cause electrical fires. Clinic premises are required by legislation to have smoke detectors and fire extinguishers. These must be placed in visible areas and clearly marked. Some premises also have hose reels and sprinklers installed. All staff must be trained to operate the fire extinguishers and other firefighting equipment in the premises.

Conclusion

It should be clear by now that every type of work carries occupational hazards and healthcare is no exception. As healthcare workers, we sometimes pay too much attention addressing the healthcare needs of others while neglecting to look into our own needs and safety.

Having a good workplace safety policy at your clinic is good for both your staff and patients. Awareness of physical and equipment hazards is the first step in planning a workplace safety policy. Since every practice is different and unique, with different premises and equipment used, we must conduct our own risk assessment based on our local configurations.

The following procedure is a useful guide to adopt:

1. Identify hazards – conduct a walk-through and see the clinic from the perspective of the staff or patients.
2. Evaluate risks and existing control measures in place – what is the likelihood of injury and if it occurs, how serious could it be?
3. Evaluate the tolerability of residual risks – even with control measures in place, accidents can still happen.
4. Identify any other risk control measures – the hierarchy of controls (with the most preferred first) being:
 - a. Elimination – remove the physical hazards entirely.
 - b. Substitution – use safer equipment.
 - c. Engineering and administrative controls – isolate hazards and restrict usage and access to hazards.
 - d. PPE – use these when risks are still present.
5. Evaluation and feedback – close the loop and provide a mechanism for continuous improvement. ■



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