Dentists must consider the impact on future function and appearance along with what is in the patient's best interests.

Geddis-Regan A, Walton G: A guide to treatment planning in complex older adults. *Br Dent J* 225:395-399, 2018

Reprints available from A Geddis-Regan, Newcastle Univ, Framlington Pl, Newcastle upon Tyne, NE2 4BW; e-mail: andrew.geddis-regan@ncl.ac.uk

HIV

Managing HIV-positive patients

Check for updates

BACKGROUND

With our current awareness of bacteria and viruses, protocols have been developed to prevent these agents from being transmitted in health care delivery settings. HIV infection remains associated with many fears concerning its possible transmission risks. Unlike the flu or even the common cold, the risk of spreading HIV virus in the dental setting is minimal as long as appropriate precautions are in place. The legal status afforded patients with HIV, proper protocols and training for health care providers, and confidentiality concerns were addressed.

LEGAL STATUS OF HIV PATIENTS

Refusing to treat a patient based on his or her HIV status or perceived status can provide grounds for a claim of discrimination. This legal protection is afforded patients by the federal Americans with Disabilities Act as well as state legislation. Patients are not required by law to reveal their HIV status, nor are practitioners prohibited from asking. Sometimes the patient may not be aware of his or her HIV status. Additionally, patients may fear discrimination and choose not to disclose their status on the medical history form. However, dentists should remind patients that some medicines can affect oral health and may produce negative interactions. Therefore they should be told of any medications the patient is taking, including those that provide treatment for HIV.

PROTOCOLS AND TRAINING

Dentists, as well as other health care providers, should use standard infection control precautions at all times. The Centers for Disease Control and Prevention (CDC) has set forth the minimum infection prevention practices that apply to patient care for blood-borne and airborne pathogens. Staff should be educated about these pathogens and undergo training so that they can take precautions to prevent transmission.

The standard precautions to be observed include the following:

- Practice hand hygiene.
- Wear personal protective equipment, which includes gloves, masks, and eyewear.
- Observe respiratory hygiene/cough etiquette behaviors.
- Handle sharps safely.
- Practice safe injection techniques.
- Clean and disinfect environmental surfaces.

Staff may be hesitant or actually refuse to treat patients with HIV. The Dentists Insurance Company (TDIC) recommends that all staff members attend training courses and classes that address HIV transmission and proper barrier procedures. If staff members continue to refuse to provide care for an HIV-positive patient, disciplinary action may be required. Such a refusal is not a defense in a discrimination claim against an employer.

CONFIDENTIALITY ISSUES

A patient's HIV status carries special confidentiality protections. Dental staff must not release the information without express written permission from the patient or his or her legal representative. Some states do not recognize a general release or records form for HIV status unless the release specifically states that HIV status is included.

The dental office should include these issues in the practice's privacy protocol manual and ensure that all staff members are aware of the policy. Patients can then be reassured that

Clinical Significance

The owners of a dental practice should be aware of their responsibility to follow antidiscrimination policies, which are outlined in state and federal laws. In addition, they should train staff to consider all patients as infectious and use standard infection precautions in all situations, which will avert a possible liability claim.

their status will remain confidential and will not affect any staff member's willingness to provide treatment. Patients should consider the dental office a safe environment where they can be truthful about their medical condition and not fear any judgmental reactions.

TDIC Risk Management Staff. Managing patients with HIV. *CDA J* 46:723-724, 2018

Reprints not available

HUMAN ENGINEERING

Addressing musculoskeletal pain in dental care providers

Check for updates

BACKGROUND

Work-related musculoskeletal disorders (MSDs) are a common occupational health hazard among dental professionals, largely because of the need for adequate visualization of the oral cavity. This need results in the dental professional adopting fixed and sometimes awkward positions of the neck and upper limbs, as well as a forward-right inclined position, which has been associated with a higher prevalence of MSDs and pain. The use of ergonomic saddle seats and dental loupes for magnification has been advised as a way to avoid postures that can cause MSDs and pain. The best available empirical evidence was sought to determine if ergonomic dental saddle seats and magnification loupes can alleviate musculoskeletal pain or correct dental professionals' posture.

METHODS

A search of the Medline via Ovid, CINHAL via EBSCO, Web of Science, OpenGrey, and EThOS electronic databases was conducted to identify prospective experimental studies addressing the 2 ergonomic questions. The Effective Public Health Practice Project Quality Assessment Tool (EPHPP) was used to evaluate the methodological quality of the 8 studies identified.

RESULTS

Four studies evaluated the effect of loupes on posture and musculoskeletal pain, 4 addressed the effect of saddle seats on posture, and 1 of the latter focused on the combined effect of magnification and saddle seat use on posture.

Magnification Loupes

Similar magnification (2.5×) was used in the 4 studies of the effect of dental loupes on musculoskeletal pain or posture. Three of the studies used the flip-up design and 1 used the "through the lens" type of loupe. Two studies used a within-subjects design and found that posture assessments using Branson's Posture Assessment Instrument (BPAI) favored the use of magnification loupes. The dental hygiene students in these studies adopted significantly better posture when using the loupes than when using traditional safety glasses. Most of the students reported that the use of loupes improved their posture, increased visual acuity, and were acceptable in terms of their weight and the time needed to adjust to them. During adjustment, some of the students reported experiencing some vertigo and eye soreness.

Two studies adopted a pre-post test design comparing musculoskeletal discomfort in dental hygienists wearing loupes with final-year dental hygiene students not wearing loupes in a non-simulated clinical situation. The subjects completed surveys before and 6 months after the intervention. The dental hygienists who wore loupes had significantly reduced discomfort, whereas the control group had increased discomfort. However, the dental hygienists wearing the loupes did not perceive any improvement in neck pain. A physiotherapist provided an assessment of the participants, noting improvements in those using loupes in terms of cervical range of motion and deep neck muscle endurance.

Saddle Seats

Two studies evaluated the Salli saddle seat and 2 used the Bambach seat. Although the studies evaluated the effect of the seats on posture, none addressed their impact on musculoskeletal pain or MSDs.

Two studies used a between-subject format to study preclinical dental students performing simulated dental tasks on phantom heads. Students who used the saddle seats selected a more favorable posture than those using conventional seats, with a statistically significant difference between the 2 groups. When the posture of practicing dentists in their dental offices was observed during patient treatment, dentists using the saddle