Biobehavioral Processes

1 Cultural Issues in Dental Education

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Key points

- Populations are becoming increasingly heterogeneous, migrating longer distances, and bringing with them different cultural expectations and needs.
- The cultural heterogeneity impacts on the management of oro-dental diseases, including etiological risk factors (related to harmful lifestyle habits) through behavioral differences displayed by patients from different cultures.
- Training a dental workforce that is culturally and linguistically competent and that values the behavioral and psychosocial needs of multicultural populations is important.
- A dental workforce that will not only have the potential to reduce oral health inequalities, but also to deliver any communication, training, and clinical management with understanding, respect, and dignity needs to be developed.

Incorporating Culture into Dentistry

The word "culture" has several meanings. The two most relevant to dental education that can be considered is "development or improvement of the mind by education or training" and "the behaviors and beliefs characteristic of a particular social, ethnic, or age group" (Dictionary.com). These definitions of culture have direct implications in dentistry and are being incorporated into undergraduate curricula internationally. The American Dental Education Association (ADEA) has prompted the need to train culturally competent fgraduates to tackle widening oral health inequalities in the United States (Haden et al., 2003). Similarly in the UK, the General Dental Council (General Dental Council, UK, 2008) stipulates that UK graduates should

- have knowledge of managing patients from different social and ethnic backgrounds
- be familiar with the social, cultural, and environmental factors which contribute to health or illness
- be familiar with social and psychological issues relevant to the care of patients.

These are aspects of culture related to oral health and those directly relevant to patients. The General Dental Council and ADEA take this further and extends it into professional development, further stipulating that graduates should have "respect for patients and colleagues that encompasses, without prejudice, diversity of background and opportunity, language and culture" (Haden et al., 2003; General Dental Council, UK, 2008). Consequently, cultural issues in dentistry not only impact and include clinical care of patients, but also aspects of interaction between students and staff of different social and ethnicity backgrounds.

Given these requirements, dental institutions have a responsibility to introduce these elements into their training programs. Indeed, the word social responsibility has become de rigor

in professional development. In its broadest sense, social responsibility is "the obligation of an organization's management towards the welfare and interests of the society in which it operates" (Business Dictionary.com). The key objectives of this chapter will therefore be to focus on the impact and need of introducing culture and social responsibility into dental education using three main viewpoints related to the following.

- *Impact of Culture on Patient Management:* Impact of presence of dental institutions on the oral health of patients within migrating populations and multicultural communities.
- *The Need for a Culturally Diverse Teaching Staff and Dental Training Courses:* Ability of dental education to address the needs of culturally diverse dental student communities.
- *The Need for a Culturally Balanced Academic Environment:* Ability to impact on both clinical and societal teaching and learning and on recruitment and interview process for students.

Impact of Culture on Patient Management

Migration always carries serious risks for both human rights and health. As the global population becomes more mobile and more people travel greater distances, societies are becoming more culturally and socially complex. This in turn creates the requirement for new changes in public health, and consequently, for both clinical medical and dental delivery. The UN estimates that migrant populations total about 290 million (Carballo & Nerukar, 2001). However, it fails to account for rural–urban, irregular, circular, and seasonal migration, as well as trafficked women and children. The figure is probably closer to 1 billion (Carballo & Nerukar, 2001). Such populations carry with them the major challenge of integrating into new countries and communities, which has a major impact on their

healthcare provision and access to services. They are known to have higher levels of communicable and noncommunicable diseases (including dental disease), given their exposure to behavioral, environmental, and occupational risk factors. It is these social determinants of health that are major causes of the observed inequalities associated with oral health that are prevalent among migrating populations (WHO Commission for Social Determinants of Health, 2008). Yet dental healthcare services do little to comprehend these complex factors that can influence compliance and adherence to both preventive and therapeutic programs for oral diseases. The current dental healthcare system needs to be alert to the fact that its populations are becoming increasingly heterogeneous, migrating longer distances and bringing with them different profiles and needs. These groups usually become increasingly marginalized and have poorer outcomes for oral health. This in turn has a broader impact on dental public health (WHO Commission for Social Determinants of Health, 2008). Current reports (Marmot, 2010; Fuller et al., 2011) suggest that although overall oral health of populations is improving, oral health inequalities are worsening. Despite this, training in dental schools tends to follow a very biomedical approach of "diagnose-treat-cure." This tends to focus on the mouth or individuals' teeth rather than the person as a whole. Many issues faced by migrants and those from ethnic minority backgrounds are psychosocial and need a deeper understanding of their social history and culture. A lack of understanding of these psychosocial and cultural behaviors can adversely affect clinical care of such patients. Dental anxiety and phobia is a strong predictor of postoperative pain following dental procedures rather than the procedure itself (Tickle et al., 2012). This is an indication of how psychosocial factors can influence postoperative pain, and an empathetic approach to patients is important prior to undertaking dental procedures. Awareness of the range of behaviors that are associated with cultural differences should be an important component of undergraduate dental education. Such awareness will also allow an understanding of how these complex behaviors can be targeted to alleviate dental anxiety and phobia. This will not only influence compliance and adherence to operative procedures, but also preventive and therapeutic programs for oral diseases.

It is also important for dental professionals to appreciate how psychosocial factors can themselves influence the onset and persistence of chronic dental diseases. The classical example of this includes chronic orofacial pain conditions like temporomandibular pain and persistent idiopathic orofacial pain. Such conditions are known to be associated with underlying psychosocial distress and maladaptive health-seeking behaviors (Aggarwal et al., 2010) and will be discussed in detail later in the book. They require early recognition to avoid invasive and irreversible treatments. Diagnosis of these conditions presents a huge challenge for most dental practitioners and will be even more challenging in patients from different cultural backgrounds. Similarly, procedures like the use of hypnosis and sedation that are highly sensitive to patient behaviors also need a deeper understanding of cultural differences if they are to be implemented successfully in migrant populations.

Other chronic dental diseases have their etiologies embedded in cultural habits; the classical example being oral cancer which has an increased risk in Asian populations particularly from the Indian subcontinent due to the high rate of paan consumption (a mixture of tobacco, slaked lime, and betel nut). Dental practitioners need to be aware of the increased risk and to be vigilant when screening the oral soft tissues in these populations (Vora, Yeoman, & Hayter, 2000). Incorporation of culturally dependent risk factors in history taking will allow appropriate preventive advice. The challenge is in getting patients to reverse harmful habits, and language can be a key barrier in communicating the risk of continuing with such harmful behaviors. Practitioners also need to be aware of increased prevalence, in some cultures, of

systemic diseases that can affect dental management of patients, for example, type-2 diabetes that is prevalent in southeast Asians (Bhopal, 2012) and is discussed later in the book. Perhaps dental institutions need to do more to ensure that the pool of patients that their students treat during undergraduate training are culturally diverse so that they can gain appropriate experience in managing such patients, in particular gaining experience at reversing harmful lifestyle habits that lead to life-threatening diseases like oral cancer.

A third of the population of the United States belongs to cultural and ethnic diverse groups. They modify their diet by incorporating American food and portion size, adding this to their native eating and into their cultural habits, and diet. Their disease pattern shows increased diabetes, stroke, and cardiovascular disease. This configuration is similar to major morbidity patterns in ethnic groups in the UK. Diabetes on its own increases a patient's chance of developing cardiovascular disease, kidney failure, blindness, and limb amputation. Dental healthcare workers are in a prime position to give health information to patients who may not seek medical care. Dentists, when trained, are excellent at providing and giving culturally appropriate health messages with good results.

Therefore, in following the current biomedical approach and ignoring cultural issues, we are in danger of creating a workforce that may widen oral health inequalities if it ignores the needs of such populations which, as discussed earlier, are different both from a biological and psychosocial perspective (Garcia, Cadoret, & Henshaw, 2008). Such a workforce may lack the appropriate skills to tailor their clinical management according to the behavioral differences of the culturally heterogeneous populations around them. Indeed, the paradigm of "what can we get" rather than "how can we serve" seems to have taken a hold of the health profession. There is emerging evidence that health workers including dentists' clinical decision making is increasingly influenced by contractual and financial incentives rather than being

evidence based and that these "changes to financial incentive structures can produce large and abrupt changes in professional behaviors" (Tickle et al., 2011). This highlights the need for embedding the principles of professionalism and social responsibility into our dental undergraduates and postgraduates.

The Need for a Culturally Diverse Teaching Staff and Dental Training Courses

Perhaps the onus lies with our dental academic workforce. A recent study (Haider et al., 2011) showed that the majority of first year medical students had an implicit preference for white persons and those in the upper class, and these implicit preferences were significantly different from the participants' stated preferences. The development of implicit association tests that can identify unconscious biases early will enable timely intervention in recognizing these unconscious biases and help neutralize them at an early stage of students' careers. These biases may not only be related to race, gender, and social standing but also to inherent attitudes and expectations of dental graduates to want to earn money rather than give back to the community (Tickle et al., 2011). As Norman Bethune (Gordon & Allan, 2009) put it, "Medicine, as we are practicing it, is a luxury trade. We are selling bread at the price of jewels. . . . Let us take the profit, the private economic profit, out of medicine, and purify our profession of rapacious individualism. . . . Let us say to the people not "How much have you got?" but "How best can we serve you?"

However, the process needs to begin with training the staff that teaches the students. Over the last 20 years, dental schools have seen increased enrollment of students from ethnic minority backgrounds, resulting in almost half of the student body in any given year from these minority groups. There has also been an increase in the number of female students. These changes in the diversity of dental stu-

dents are encouraging and are an important step in achieving a culturally diverse dental workforce. Indeed, there has been recognition of the fact that an increase in student numbers from ethnic minority backgrounds requires institutions to make their environments more welcoming to these diverse student populations (Institute of Medicine, 2004; Veal et al., 2004). However, there is still much to do with regard to achieving this. A qualitative study (Veal et al., 2004) of underrepresented minority dental students showed that "many minority students were disappointed by the lack of diversity among dental school faculty." Students also felt isolated and experienced subtle forms of discrimination (Haider et al., 2011). An Institute of Medicine Report (Institute of Medicine, 2004) recommends that "enhancing racial and ethnic diversity of health professionals education faculty can provide support for underrepresented minority students in the form of role models and mentors."

Although this should be addressed by changing the faculty profile of existing teaching staff within dental institutions, the use of unconscious bias training is now readily available and may be extended to existing staff to increase their awareness of cultural diversity. Other measures may include blinded recruitment procedures for new graduates where references to names, race, religion, and gender are removed from the applicant's details before the short-listing of candidates. This will minimize preconceptions arising from these areas. Interview panels for recruiting new graduates should also include staff from diverse backgrounds so that there is fair representation for the underrepresented ethnic minority applicants. Where possible, examinations and assessments should be anonymized. The difficulty arises during clinical assessments and vivas (oral tests) where biases can still influence the grades of students.

Therefore, not only is there a need for culturally aware, diverse, and linguistically competent students, but also culturally competent staff who can deliver teaching courses that imbibe the values of cultural diversity and social responsibility within all aspects of training. A study investigating dental students' perception of time devoted to cultural competency showed that while the majority of respondents thought that the time devoted to cultural competency education was adequate, the underrepresented minorities rated the time spent on the same was inadequate (Hewlett et al., 2007). The same study showed that culture-related content would be better incorporated into existing courses rather than as a stand-alone component (Hewlett et al., 2007).

One way to achieve this would be to integrate a bio-psychosocial approach into the teaching and training of clinical dentistry. Recently, more patient-focused approaches have tended to be replaced by quantitative rather than competency outcome measures. The majority of teaching in dentistry currently tends to follow a model whereby the number of procedures performed takes priority. Students are assessed on the quality and quantity of, for example, restorative procedures, and this often leads them into thinking of their patient as a "filling patient" or a "denture patient." This teaching itself is following a biomedical approach, which is usually very prescriptive to clinical disease indicators. It fails to adopt an all-inclusive approach discussed earlier. Dental students graduating from such teaching systems tend to carry these models forward into their everyday working lives; that is, their responsibility stops short of restoring the dentition in a patient. In doing so, they also fail to recognize the differing needs of their local populations and of the patient as a whole. It is our responsibility to change the attitudes of the students during their medical/dental courses. In other words, we need to "modify" their conscious and unconscious biases through cultural competency training. As discussed earlier, increasing the pool of patients that students treat from culturally diverse backgrounds may achieve this, although outreach teaching centers based among culturally diverse communities may be preferable. Students then get to travel to these

communities and understand their needs better and have the added benefit of applying cultural awareness training into their clinical work.

The Need for a Culturally Balanced Academic Environment

We have already discussed many of the issues surrounding isolation of underrepresented minority dental students and some potential solutions to these. We have also highlighted the benefits to the community of a culturally diverse dental workforce. However, it is not only the community that will benefit from culturally competent graduates but the graduates themselves. One would hope that graduates who have been through cultural diversity and social responsibility training may see the concept of service as that of healthcare delivery as one of being "a serving is a relationship between equals." The current attitude of dentists and doctors toward patients can often be simplified into "we know what's best for you." This gives students the experience of mastery and expertise over the patient. This is based on a kind of inequality—it is not a relationship between equals which is experienced by patients as inequality. When trying to resolve their problems, dentists inadvertently take away from patients more than they give them. Depending on the nature of the clinical problem, dentists may diminish their patients' self-esteem, their sense of worth, and their integrity. Litigation in the dental profession has soared in recent years and often starts with a breakdown in communication between the patient and the dentist. If service is seen as a relationship between equals, then in adopting this approach, the patient is not only allowed to take ownership of their problem but may realize that the dentist has their best interests at hand. This can help avoid potential communication problems and future litigation.

Other advantages for culturally competent graduates may be opportunities gained by involvement in oral health exchange programs both within migrant and socially deprived communities locally, as well as overseas student exchanges and voluntary work. Exchanges offer immense personal satisfaction, as well as valuable clinical experience of learning to manage populations with different needs. This experience becomes invaluable when healthcare professionals, including dentists, are involved in the management of natural disasters and other emergencies with internally displaced populations. Experience gained from working overseas and in a different cultural involvement may then directly impact on care for local populations. Offering overseas programs as part of dental undergraduate training is an invaluable part of cultural competency training. It offers an opportunity to apply the knowledge gained from cultural awareness training programs.

Future Challenges

One of the key challenges faced will be to increase the pool of culturally diverse dental academic staff. We will need to be innovative and break existing barriers, particularly those between primary dental care and academia. Currently, much of clinical teaching within dental schools is delivered by part-time general dental practitioners who are busy with their principal practice and who can only afford the time to teach for one or two sessions per week. Their commitment to the student is therefore realized only during the time that they spend in the clinics at dental schools. However, it is these very practitioners who are engaged with local communities, and many of them are from culturally diverse backgrounds and are linguistically competent in relation to the communities they serve. Their generalist background also means that they are involved in every aspect of the patient's dental care. They offer a golden opportunity to increase the critical mass of culturally diverse staff within dental schools. We have recently proposed a career pathway for academic general dental practitioners (Aggarwal et al., 2011) that will allow dental institu-

tions to embed these generalists into their pool of clinical academic staff. These generalists might also have the added advantage of supporting and leading outreach student teaching centers in their local communities so that teaching and clinical cases provide a true reflection of the cultural diversity of the population in which the vast majority of students will spend their working lives post qualification.

Future research also needs to take into account the views of patients from underrepresented minority groups. Currently, we have good data showing the needs of underrepresented minority dental students. However, the ultimate goal of creating culturally competent graduates is to improve patient care. Therefore, the views of patients from underrepresented minority groups need to be integrated into cultural awareness courses so that they can be tailored toward the needs of the patient. Views of staff, students, and patients from well-designed qualitative studies are needed to inform and improve training in cultural diversity.

Conclusion

Given the increasing heterogeneity of populations through global migration, there has been no better time to challenge staff and students' values and beliefs, and allow them to celebrate diversity. We need to develop a dental workforce that is culturally and linguistically competent and that understands the cultural and psychosocial needs of multicultural populations to reduce oral health inequalities. We have shown how culture can affect management of dental diseases right from etiological risk factors (related to harmful lifestyle habits) through to behavioral differences displayed by patients from different cultures. As readers progress through this volume, it would seem sensible for them to explore, in relation to our discussions earlier, how the added dimension of culture might affect management of specific disease entities discussed in each chapter.

It is important that training in cultural competency does not become a mere tick-box exercise but that it is incorporated into existing courses and patient care and that it changes behavior of staff and students. Indeed, both staff and students have much to benefit by training in this area. As pointed out, student populations are becoming increasingly diverse, and it is these students that are the lifeblood of dental institutions. They need to be nurtured, respected, and made to feel welcome.

We need to develop teaching models to be embedded in training of individuals within healthcare systems. Furthermore, we need innovative tools to monitor and assess continuously how these are integrated within our current systems. Everyone—students, patients, and staff—has the right to expect and provide any communication, training, and clinical treatment with understanding, respect, and dignity.

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