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Dental Public Health in Action

Use of Jamaican Sign language in the provision of dental health care

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Abstract: The United Nations Development Assistance Framework for Jamaica 2012-2016 identifies as an outcome increased access to improved quality health and education services for socially excluded and at risk populations. The Deaf Jamaican population can be categorised as a socially excluded population. The communication barrier resulting from their deafness often leads to difficulties in accessing healthcare. The Faculty of Medical Sciences at The University of the West Indies, Mona Campus, implemented a programme aimed at overcoming this communication barrier and improving direct communication between Deaf patients and health professionals treating them. Competence in Jamaican Sign Language is integrated into the curricula of programmes offered by the faculty and mandated in the dentistry programme, and extends to the clinical training at the dental polyclinic where Deaf patients are seen by student dentists who can communicate with them in Jamaican sign language. This paper outlines the policies and systems employed worldwide for interacting with and treating Deaf patients at dental health care facilities, and focuses on the policies and practices governing the dental care of Deaf patients at the Mona Dental Polyclinic with a view to providing a model for government facilities locally and regionally.
Public health competencies: Communication, management

Key words: *deaf, dental healthcare, accessibility, polyclinic, dental health policy, dental health inequality, Jamaica*

Introduction

Before presenting the policies and practices of the UWI Mona Dental Polyclinic (UMDP) on the provision of dental healthcare to Deaf patients, terms should be defined. Cumberbatch (2014: 11-12) explains how persons are categorised based on their hearing ability:

- *hearing* – able to perceive a sound in the range of -10 to 15dB
- *deaf* – has a hearing loss
- *deaf Deaf* – has a hearing loss and adheres to norms and values of a community which uses a signed communication system
- *hearing Deaf* – does not have a hearing loss and adheres to norms and values of a community which uses a signed communication system

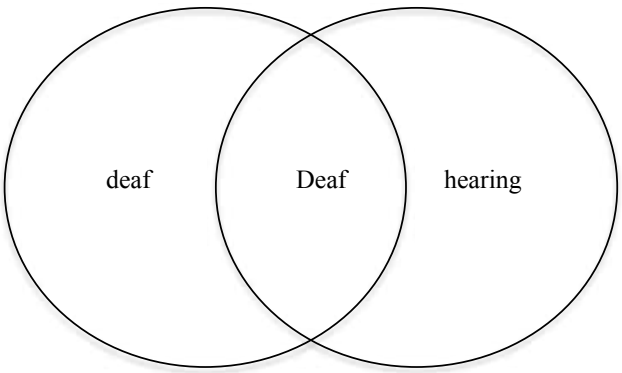

Figure 1 *The relationship between deaf, Deaf and hearing*

This distinction of *deaf* versus *Deaf* is a tenet of Deaf studies (Woodward, 1972). It was created to account for all members of a Deaf community, including its hearing members. A person can therefore be deaf, deaf Deaf or hearing Deaf. Coined by hearing persons, the term *hearing-impaired* is offensive to many Deaf communities who feel it promotes a medical/pathological view of deafness in which hearing is the norm and those without the sense are unfit (Cumberbatch, 2014). The opposing approach is the anthropological/cultural view of deafness which sees the Deaf community as a subculture with its own norms and values located within a larger hearing culture (Cumberbatch, 2014).

A guiding philosophy of the initiative described in this paper is that there must be coherence between the Medical/Pathological and Cultural/Anthropological approaches to deafness in the health sector (Cumberbatch, 2014). Healthcare practitioners must first accept that a deaf patient has the rights to live without medical intervention to reverse the diagnosed hearing loss as well as to be advised both of the treatment options and the existence of a Deaf cultural community. It must also be acknowledged that patients who have hearing assistive devices or cochlear implants do not necessarily have normal hearing and so, will need support in accessing information related to their healthcare. At UMDP, all the patients with hearing loss fall into the deaf Deaf category and are referred to as 'Deaf' in this paper.

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Initial impetus for action

Effective communication is critical to patient management, and deafness can be a barrier to this (Cumberbatch, 2014; Haualand and Allen, 2009). At present, the Jamaican health sector is satisfied with the information provided by those accompanying Deaf patients and build treatment plans based on this information. Often, the Jamaican healthcare worker is misinformed and it is likely that miscommunication could easily and adversely affect treatment outcomes. There is now an impetus at the Faculty of Medical Sciences at The University of the West Indies, Mona Campus (UWI Mona), to overcome this communication barrier and ensure that all Deaf patients have access to the same quality of healthcare as hearing patients by being able to communicate directly with a practitioner in their native language.

Article 25 of the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) states that "…persons with disabilities have the right to the enjoyment of the highest attainable standard of health without discrimination on the basis of disability" (United Nations, 2006). It is considered that the present, common practice of employing interpreters to facilitate communication between dental healthcare practitioners and their patients does not allow for the highest attainable standard of healthcare, particularly in the Caribbean where sign language interpreting is a fledgling industry at best. Most persons who function as sign language interpreters within the region do so in the role of helpers. Helpers are untrained interpreters whose only skill is language competence in the languages to be used in the interaction (Mindess, 2004). Their vocabulary may not include the terminology used in the health domain. Further, they do not possess the skills required for moving from a source language to a target language while maintaining semantic equivalence. This often leads to loss of information and misinformation, with the helper passing on incomplete and/or inaccurate messages to the dentist and patient. The pioneering approach of the UMDP employs direct communication between dentist and patient in the sign language of the Deaf patient. Communication in the native language of the patient fosters trust between patient and dentist and is likely to contribute to improved treatment outcomes, thus attaining that high standard of care directed by the UNCRPD.

Under the sphere of social empowerment and equity, the United Nations Development Assistance Framework (UNDAF) for Jamaica 2012-2016 targets an outcome of socially excluded and at risk populations gaining more access to improved quality health and education services. The Deaf community could be considered as a socially excluded and at risk population.

Outside of Jamaica, the use of family, relatives and school teachers had been the mainstay of how the Deaf communicate with the dentist and other healthcare workers, but this resulted in communication barriers that were reflected in the less than standard dental care for patients. Dental care improved with the introduction of trained interpreters. However, global trends in communicating with the deaf in the dental setting have not been advancing since the introduction of interpreters/ interpreting services.

The standards and range of dental healthcare provided in the Caribbean are on par with those in the rest of the world. One difference is that there is no existing legislative policy in the Caribbean regarding the use of direct communication, interpreters or auxiliary aids in the healthcare setting.

Generally, at dental schools worldwide, most student dentists are not exposed to deaf patients during training. They are trained that they should have an interpreter present if they have a deaf patient.

In the Caribbean today, a Deaf patient attending a dental healthcare facility is normally accompanied by a parent, guardian, teacher or friend as an interpreter or they may also choose to write notes to the dental practitioner. Dentists expect Deaf patients to bring along an interpreter. No dentist has an interpreter on staff and no interpreting services are available to dentists.

In Jamaica, the now closed Ministry of Health's Dental Auxiliary School included basic sign language competence in its programme and so its graduates are able to serve as interpreters where they work. These dental auxiliaries (nurses, assistants, laboratory technicians and hygienists) can communicate in Jamaican Sign Language, but cannot engage in a full discussion on dental procedures and other technical matters under the oversight of the dentist.

Solution

Haualand and Allen (2009) advocate sign language interpreting as the means for providing healthcare access to Deaf persons. However, the approach described here takes efforts a step further with direct communication between dentist and patient as a means of providing access. This method is suggested by San Bernardino-Alsmark *et al*. (2007) and Champion and Holt (2000). In Table 1, the first column lists key policies of the UWI Mona Dental Polyclinic (UMDP) and the second, the practices implemented in line with those policies. The third column shows an extrapolation of said policies and practices to minimum standards of dental healthcare.

The Dentistry Programme at UWI Mona is unique in including of sign language competence in its curricula, thereby equipping its students to communicate with their Deaf patients without assistance from a third party (Jones and Cumberbatch, forthcoming). Students attend two courses in Jamaican Sign Language and a practical module that equips them for clinical interactions with Jamaican Deaf patients. Through the courses and module, the students acquire intermediate level competence in Jamaican Sign Language so that they can communicate about self, daily life and matters related to the domain of oral healthcare.

All face-to-face communication with the Deaf patient would be signed. The front line staff and student dentist should initiate the use of a natural sign language, in this case, Jamaican Sign Language (JSL). The student dentist should switch to a form of Signed English for those patients who express a preference for that type of communication system.

Table 1. UWI Mona Dental Polyclinic standard operating procedures, policies and practices for Deaf patients

Policy at UMDP	*Practice at UMDP*	*Minimum standard of care*
1. Quality of dental healthcare The same quality of dental healthcare provided to hearing patients must be the same quality available to Deaf patients. This requires overcoming the communication barrier caused by the hearing loss of Deaf patients.	Each dental student must have the communicative competence required to interact Deaf patients using Jamaican Sign Language.	Each public dental clinic must have one practitioner fluent in the sign language(s) of the Deaf community of the country.
2. Dental surgery layout The layout of the dental operatory must facilitate interaction in a visual-gestural mode.	The surgery setup has to be such that there is direct vision between the operator and the Deaf patient without obstruction from equipment or glare.	Surgery layout ensures direct vision between the operator and the Deaf patient without obstruction from equipment or glare.
3. Standard operating procedures The cultural norms and values of the Deaf community must be recognised and acknowledged.	The Standard operating procedures must be tailored to accommodate communication in a visual-gestural mode, for instance, removing mask to communicate with patient so that the patient can perceive any facial grammatical cues.	Standard operating procedures are modified to facilitate visual-gestural communication.
4. Patient education programme There must be a patient education programme to inform the Deaf patients of dental procedures and good oral self-care practices.	While Deaf patients are seated in the waiting area of the UWIMDP, videos in Jamaican Sign Language showing dental procedures and good self-care practices will be shown.	Basic information on dental health must be provided in the sign language(s) of the Deaf community of the country.
5. Deaf culture All clinic staff members must be sensitive to the ethical standards of treatment of the Deaf patient.	The receptionist, cashier and other staff members must be aware of Deaf cultural norms and values and have basic competence in Jamaican Sign Language.	All staff members who will interact with a Deaf patient must be able to use the sign language(s) of the Deaf community of the country to: introduce themselves; provide date, time and location information; give directions.
6. Communication channels The clinic must have a communication system in place for Deaf patients to contact the clinic directly.	A cellular phone is dedicated to text and Whatsapp messaging with Deaf patients. The electronic patient management system has a facility that allows online appointment bookings for as well as E-mail queries.	The Deaf patient must be able to contact the clinic directly using a system that does not rely on voiced communication.

Actual outcomes

Implementation of the UMDP standard operating procedures, policies and practices for Deaf patients is briefly discussed below.

Each student was able to communicate in JSL while delivering patient care although patients' assessed the students' levels of competence as variable.

Regarding the layout of dental surgeries, typically cubicles were larger than the standard 10' x10' (3m x 3m) with ergonomically designed dental chairs that provided a direct lines of vision between student and staff operators that facilitated the direct interaction needed and between patient and clinician Appointment duration times were increased to allow for the signing to be effective.

The showing of patient education sign language videos on dental treatment procedures and oral hygiene practices was delayed due to the challenges in procuring the equipment. Initially the videos were displayed on a computer in the waiting room, but not consistently so, placing more pressure on students to explain the procedures. This prolonged procedures - sometimes to multiple sessions.

A *Deaf Patient Facilitator* (DPF) post was created for a receptionist fluent in JSL, to handle all front desk interactions with Deaf patients and their appointments on Deaf Clinic days. The turnover rate of other polyclinic staff was so high that effective training in signing could not be conducted.

Communication channels for the management of the patients eventually used SMS and WhatsApp (a cross-platform mobile messaging service) on a phone donated by a telecommunications company. In the absence of an electronic patient management system those systems proved effective in making appointments – the first step in the patient management protocol (Figure 2). The online patient registration forms were also not implemented due to the lack of the complete patient management system.

Some patients had difficulty in finding the polyclinic on their first visit due to the lack of a sign outside the building and this delayed their initial treatment planning visit.

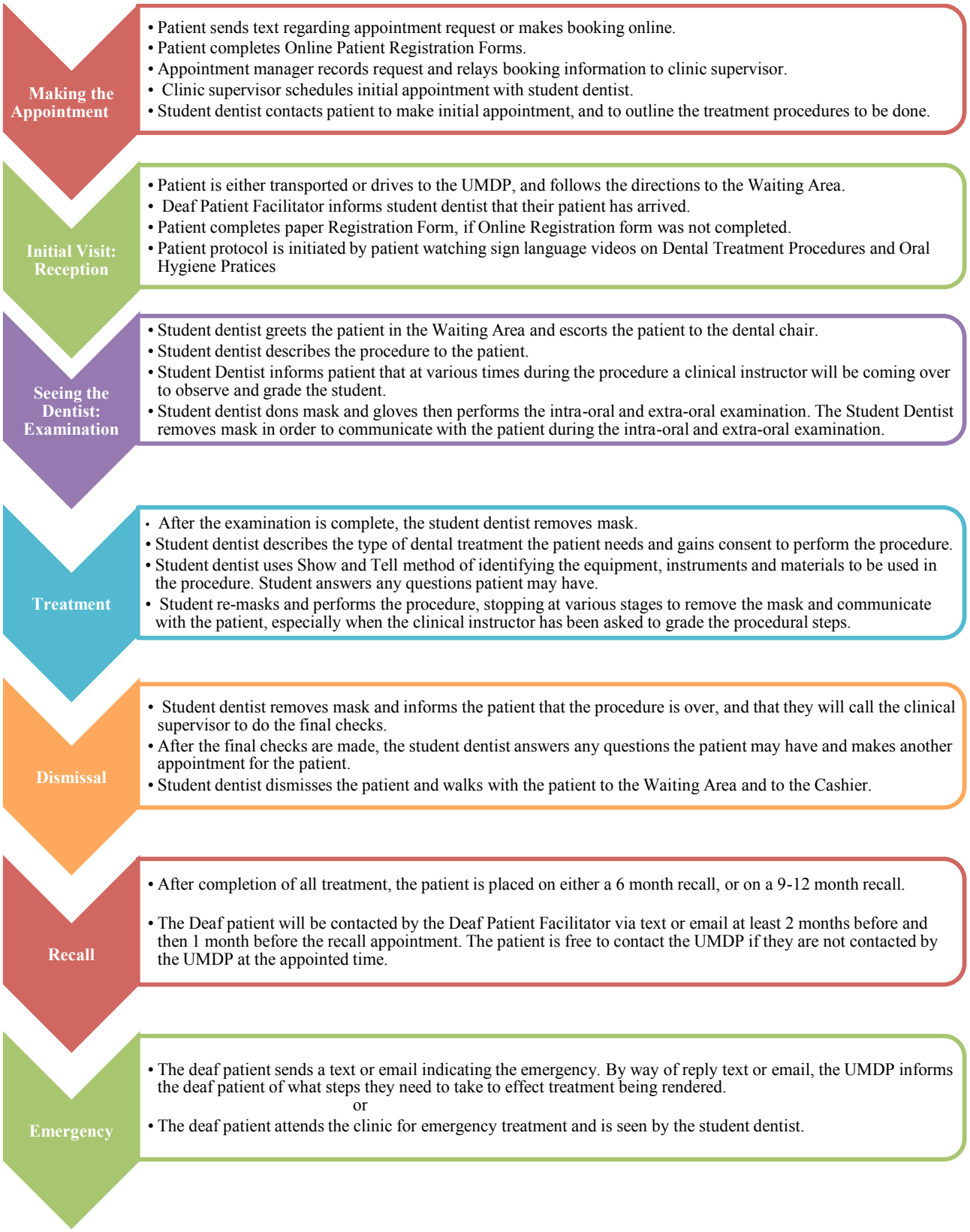

Figure 2. *The UMDP and the Deaf Patient*

The dental students' interactions with the patients from the waiting area to the chair followed an agreed format to allay the fears of both patient and student by establishing direct communication. At times dental students forgot that the patient was Deaf and did not use the Show and Tell Method and mask removal technique throughout the procedures. This made the Deaf experience less interactive and decreased the initial confidence placed in the student who used the methods extensively at the start of each procedure. Likewise, on completion of treatment when dismissing patients, the student dentists despite signing, at times forgot to move their masks from their mouths. Also, some failed to invite questions from their patients before the patients left the dental chair.

Patients ended up telephoning the polyclinic for recall appointments as the management of patients between visits took some time to be effected. Patients freely contacted the Deaf Clinic Coordinator and/or the DPF to find out about their next appointment.

So far there have been no Deaf patients seen on an emergency basis.

Challenges addressed

The second and fourth Fridays of each month were designated Deaf clinic days but these were not suitable for all patients. Some patients were unable to obtain leave from their employment to attend clinic consistently and needed to attend on their days off. Given that most of these patients worked at the same company, we were able to allocate another day once monthly for them instead. Other patients were accommodated at their convenience.

The twice monthly Deaf clinics were originally scheduled with paediatric patients in the morning sessions and adults in the afternoon. This regimen could not be strictly followed as the number of paediatric patients attending overflowed into the afternoon sessions. However, adult patient cancellations allowed us to do this without adverse effects on adult patients. When the DPF was absent, staff were not always as sensitive to the communication needs of the Deaf patients as hoped. For instance, checking the dedicated phone and responding to text messages was not as efficient. Subsequently, the DPF kept the phone with them even outside working hours which proved more effective in maintaining communication.

Directions to the UMDP were provided in videos in JSL which were posted to the Facebook page of the Jamaica Association of the Deaf.

Future implications

The following are key areas where changes in dental healthcare facilities and Deaf communities can be focused for the improvement of the provision of dental healthcare to Deaf patients.

1. Each dental clinic having at least one dentist competent in sign language could improve the quality of dental healthcare as evidenced by the positive experiences of the Deaf in this polyclinic.
2. Dental surgery design needs to allow clear line of sight between the Deaf patient and the clinician.
3. Dental standard operating procedures need to be developed with accompanying JSL vocabulary and audits to ensure adherence to these procedures.
4. Deaf schools' science curricula need to include the dental JSL language to prepare future patients for easier communication dental clinics.
5. Signing training for all dental staff in JSL is needed, including support staff, as all staff members will at some point interact with the Deaf.
6. A round the clock system of on-time real-time communication between the Deaf and dental clinics is required for effective communication.

Learning points

Careful consideration must be given to the scheduling of Deaf patients at the clinic. A decision must be made on whether they will be seen at any time or will be seen in sessions dedicated to their care.

- All staff must be sensitive to the requirements of Deaf patient care and be able to communicate basic greetings and courtesies.
- At least one administrative staff member must be assigned to have primary responsibility for Deaf patients.
- Such staff must have near-native fluency in the sign language of the Deaf community served by the clinic.
    - This fluency may not be required of clinical staff where student dentists have adequate signing competence to communicate with their patients
    - In the training context, it must be made clear to the patient that a dental student dentist, a supervisor and the Deaf Clinic Coordinator (visiting to check if there is ongoing effective communication between patient and dentist) may all visit the operatory during treatment and they should not be anxious at such an 'invasion'.

Conclusion

The UMDP continues to develop an environment in which the Deaf patient would feel comfortable. By using direct communication dental students will engender the development of mutual trust with the Deaf patient. Hopefully, the Deaf will then through 'the power of the signed word' encourage other Deaf patients to engage in regular and preventive treatments rather than purely emergency care.

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