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BRIEF COMMUNICATION

The future of Aboriginal and Torres Strait Islander oral health lies in the footprints of the past: Re-framing oral health discourse

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Abstract

Objective: The history of oral health research and dental care provision for Aboriginal and Torres Strait Islander Peoples has been framed by oppressive colonial values and wrought with maltreatment and unethical behavior. This commentary aims to collate evidence regarding the healthy history of Aboriginal and Torres Strait Islander oral health, the implications of colonization on oral health, and the current portrayal of oral health.

Conclusion: We argue the need to reframe deficit focused discussions of Aboriginal and Torres Strait Islander oral health to strengths-based narratives by critically engaging with the ways in which the future of Aboriginal and Torres Strait Islander oral health lies in the footprints of the past.

KEYWORDS
Australian Aboriginal and Torres Strait Islander Peoples, deficit discourse, oral health, public health dentistry, strengths-based narrative

INTRODUCTION

It is widely acknowledged that both the history of research and the provision of healthcare for Indigenous Peoples globally has been framed by oppressive colonial values and wrought with maltreatment and unethical behavior. Oral health research and dental care provision for Aboriginal and Torres Strait Islander Peoples is not exempt from colonial influence [1]. This commentary aims to counteract the stories often told of Aboriginal and Torres Strait Islander oral health by collating evidence that discusses the healthy history of oral health, the implications of colonization on oral health, and the current portrayal of oral health. We argue the need to reframe discussions of Aboriginal and Torres Strait Islander oral health by critically engaging with the ways in which the future of Aboriginal and Torres Strait Islander oral health lies in the footprints of the past.

ABORIGINAL AND TORRES STRAIT ISLANDER ORAL HEALTH

A healthy history

Despite current biomedical understandings of oral health and dentistry that tend to view teeth and oral health as an entity separate from the body, Aboriginal and Torres Strait Islander Peoples have long considered the mouth as an interconnected component of well-being. Culturally, teeth have played a significant role in many Aboriginal and Torres Strait Islander traditional practices, including men's business, initiation, weaving, and fishing. Tooth removal is an important aspect of initiation ceremonies for some Communities, whereby young men are bestowed the status of manhood [2, 3]. Biting bags are small, looped woven string bags used by Aboriginal men in Arnhem Land that are clenched between one's teeth for a variety of reasons, including ritual fighting. Biting bags are believed to be powerful objects whereby biting

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down enables access to spiritual power [4]. Prior to colonization, fermentable carbohydrates were scarce and Aboriginal and Torres Strait Islander Communities relied on numerous plant and animal foods for nutritional substance [5]. Cooking and eating practices are thought to have contributed to oral hygiene; for example, side effects of chewing the marrow and bones of animals contributed to tooth cleaning. As a result of cooking foods in an oven of ash and hot sand, meals often had a level of charcoal remaining at the time of consumption. A combination of these factors accounts for the comparative freedom from oral diseases experienced by Aboriginal and Torres Strait Islander communities at this time [3].

Anthropological studies have identified that Aboriginal and Torres Strait Islander Communities were almost entirely free from periodontal disease and dental caries prior to colonization [3, 5]. The oral health of Communities was so strong that one anthropologist reflected on the likely experience of a dental surgeon in Communities during the 1800s, "For one thing, [the dentist] would have practically no periodontal disease to treat… Again, caries would be infrequent… Most astonishing of all, he would have no dentures to make. The number of teeth lost would be so few that he could forget all his knowledge of prosthetic dentistry without harming his patient" [3]. In reflecting on the oral health of Aboriginal and Torres Strait Islander Peoples today, we see a stark difference both in clinical indicators as well as common notions of oral health related fatalism.

Colonization of oral health

With colonization came impoverishment, dispossession, exploitation of land, disruption of social networks, and the destruction of subsistence livelihoods for Aboriginal and Torres Strait Islander Communities. Importantly, the point of "contact" between Aboriginal and Torres Strait Islander Peoples and colonizers is not a static place in time or geographic location. Rather, the experience of colonization is an ongoing and enduring period of deterioration in Aboriginal and Torres Strait Islander living conditions, quality of life, and eventuated in disrupted wellbeing, including oral health. The majority of documented records from the initial arrival of colonizers in Australia reflect European encounters with Communities; limited health records exist from this time [6]. Linear enamel hypoplasia (LEH) and defects of the dental enamel (DDEs) are measures anthropologists use to assist with general health inferences and socioeconomic circumstances [7], and the presence of physiological stress during child development [8], respectively.

Before the arrival of colonizers in Australia, evidence demonstrates low levels of LEH and DDEs [6, 9]. The rapid expansion of colonial presence, along with the introduction of assimilation policies, and the mandating of missions across Australia, saw a significant increase in the levels of LEH and DDEs. The development of missions paralleled a uniform and dramatic increase in LEH prevalence, with earlier and longer occurrences [9]. The uniform levels of LEH are attributed to the uniform environments of increased control, forced sedentism, increased nutritional deficiencies, and infectious diseases characteristic of missions. For Aboriginal and Torres Strait Islander Peoples, LEH is an indication of changing morbidity that demonstrates chronic and long-term effects of colonial settlement not otherwise visible during this initial period [9]. Nearly identical to the rise in LEH, impacts on child development, as measured via DDEs, occurred earlier and persisted over a longer period of development, with prolonged exposure to colonization and the environments of missions. Using measures of both individual teeth and total counts of teeth, a consistent rise in the frequency of LEH and DDEs from infrequent occurrences to a ubiquitous experience parallels increasing strength of the colonial goal of assimilation [6].

The historical relationships of domination over Aboriginal and Torres Strait Islander Peoples that began with colonial contact is maintained through the biomedical provision of modern-day dental services. The contrast in epistemological understandings of oral health are reflected in the characterization of dental professionals as "heroic" and "benevolent," and patients as passive recipients. The perceived passive involvement of Aboriginal and Torres Strait Islander Peoples in oral health is furthered by an apparent "lack" of oral hygiene practices or "failure" to follow expert advice [1, 10]. However, if we consider the relationships between Country, Community, food, and knowledges, as well as the historic evidence, we are compelled to believe another story. The history of Aboriginal and Torres Strait Islander oral health is one of preventive health that moves beyond individual behaviors and instead, extends to the wellbeing of entire Communities.

ABORIGINAL AND TORRES STRAIT ISLANDER ORAL HEALTH DEFICIT DISCOURSE

A mix of biomedical understandings of disease and neoliberal ideologies of individual responsibility for health have surmounted in immense personal blame surrounding Aboriginal and Torres Strait Islander oral health [1]. The current portrayal of Aboriginal and Torres Strait Islander oral health largely contributes to and upholds the deficit discourse that creates expectations of poor oral health even among Community members themselves. Problematically, this narrative fails to recognize the forced assimilation of Aboriginal and Torres Strait Islander Peoples during colonization that initiated and rapidly increased the experience of oral diseases. Reinforcing the deficit discourse surrounding oral health

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outcomes for Aboriginal and Torres Strait Islander Peoples is a damaging practice that demotivates communities and sustains experiences of oppression. This narrative of deficit discourse infiltrates to the provision of oral health services, where health care providers have unjust assumptions about Aboriginal and Torres Strait Islander Peoples, as evidenced by experiences of racism at dental services. Further, the assumption of "poor oral health" is based on biomedical understandings of oral diseases that is limited in scope to Western understandings. By comparison, Aboriginal and Torres Strait Islander understandings of oral health reflect more holistic notions of teeth as central to one's day to day life, rather than an acute focus on problems limited to the oral cavity [1]. The biomedical view fails to recognize the whole person in relation to their oral health, as well as their Community, knowledges, and histories.

REFRAMING ABORIGINAL AND TORRES STRAIT ISLANDER ORAL HEALTH

To reframe the narrative of Aboriginal and Torres Strait Islander oral health, we identify two key steps: [1] the recognition, appreciation, and embodiment of Aboriginal and Torres Strait Islander self-determination, knowledges, and leadership in oral health programming and provision, and [2] the utilization of a strengths-based approach in all Aboriginal and Torres Strait Islander oral health research. It is a great limitation and loss of opportunity to not include Aboriginal and Torres Strait Islander knowledges in relation to dentistry; currently, Aboriginal and Torres Strait Islander oral health is limited to the scope of dental professionals. It is clear from the evidence that Aboriginal and Torres Strait Islander oral health flourished prior to colonization. As such, reframing our approach to the provision of oral health that honors self-determination and Community knowledges would create the opportunity to learn from the past. Opportunities could include ongoing Elder consultation with dental services, extended appointment times with Aboriginal and Torres Strait Islander patients to build relationality and allow for considerations of oral health in relation to the whole person, or co-designing oral health promotion campaigns and training for Community, but also for dental professionals. Several research groups and collaborators have been working in this space, as led by Elders and Community members, for many years; we must recognize and build upon this strong leadership and resistance. We caution the reduction of our second key step, a strengths-based approach, to symbolic gestures fulfilled through superficial inclusion of statements within manuscripts. Therefore, employing a strengths-based approach to oral health research must move beyond reporting of results and extend to study design, data capturing tools, Community engagement, and meaningful translation that honors Community needs and contributes to policy change. A fundamental acknowledgment of the continual impact of colonization and discrimination on the oral health outcomes of Aboriginal and Torres Strait Islander Peoples is needed to encourage achievable and meaningful program outcomes that move beyond individual responsibility.

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