



Dentistry and Oral Health in Online Media Sources: A Discourse Analysis

Alexander C L Holden

The University of Sydney School of Dentistry, Faculty of Medicine and Health, Australia

Background: This analysis examines the discourses within online media that relate to dentistry and oral health, contributing to developing understanding of the underlying social and political contexts that may affect the promotion of oral health. The increased mediatisation of society means that media representations of the dental profession and oral health are of increasing importance. **Methods:** A search for online media sources relevant to dentistry and oral health was carried out using Google News. Discourse analysis was used to explore online media sources that discussed oral health, the dental profession and dentistry more generally. **Results:** 171 articles were included, and three overarching discourses were identified from the selected online sources; 1) Power and Professional Status; 2) Advancement of Social Control and; 3) Neo-liberal Attitudes Towards Oral Healthcare. **Conclusions:** The theory of the social contract provides a conceptual framework to explore the relationship between the dental profession and society, the nature of this is discoverable through analysis of the discourses within online media. Within the sources examined, the dental profession frequently invokes neo-liberal discourses that place personal responsibility to be an important factor in preventative oral health. There was also frequent suggestion of a stronger link between oral and systemic health than is evidenced within the academic literature. Analysis of the media sources examined also suggests that the representations of oral health and dentistry also serve to reinforce the artificial separation of the mouth and the body, with dental services being separate from other healthcare activities.

Keywords: Oral Health, Dentistry, Social Contract, Media, Discourse Analysis

Background

The public pays attention to the media and subsequently, specific health issues may be influenced through exposure and discussion in this arena (Zini *et al.*, 2013). Barker, Lowe and Reid (2006) report that 75% of people claim they rely on the media's coverage of health issues to make health decisions. This may be on an individual-level, affecting change on attitudes and behaviours, or on a larger, societal-level where social norms, customs, values and health policy are developed through being featured within the media (Schou, 1987). The media is not only a conduit for transmitting information about the healthcare industry, but it is also responsible for developing narratives, setting agendas and constructing realities (Blomberg and Stier, 2016; Fairclough, 1995). Due to the increasing mediatisation of society, the health professions have been highlighted as being under greater scrutiny than ever before (Schillemans, 2012). This makes analysis of the media exposure of oral health and the dental profession an important exercise in order to build understanding of how the profession interacts with, and is perceived by, society. Understanding how oral health is presented in the media is also essential to contribute to future health promotion strategies. Blomberg (2019) suggests that the media is an important influence on the public image of a profession. It is therefore essential for professions and their members to be aware of how the media is portraying them, and take appropriate action where necessary, in order to maintain their professionalism (Mendes, 2001).

This article examines media portrayals of dentistry and oral health to develop understanding of the hidden messages relating to the dental profession and the provision of oral health services that exist within the mass media. Previous research examining oral health messages in the mass media has taken a content analysis approach (Jones *et al.*, 2016). This highlighted a narrow breadth of oral health material examining print and television media, noting that there was a lack of social context given for preventative or health-promoting behaviours in dentistry. This research will use discourse analysis to explore the social, cultural and political context of dentistry and oral health more deeply, examining how the language of the texts might speak to the rules, conventions and institutions within which the discourse around oral health and the dental profession is produced and circulated (Nead, 1988). The quality of information within articles reporting on oral health are also important; work examining articles in UK newspapers that featured oral cancer found that stories missed opportunities to provide key public health messages (Kelly *et al.*, 2016). Whilst the focus of this work is not to examine the quality of oral health information, understanding how systemic and oral health are discussed in relation to one another is important, being an important discourse within the dental profession.

In order to examine the relationship between the dental profession and society, this discourse analysis will be conducted within the conceptual framework of the social contract (Starr, 1982; Cruess and Cruess, 2014;

Welie, 2004; Holden, 2017). This unwritten agreement between the profession and the public is characterised by an exchange of obligations and promises, that is fluidic in nature, and therefore subject to evolution and restatement. How the media sources analysed present this relationship will be of great importance to helping develop understanding of the trajectory of dentistry's status as a health profession, as well as informing how dentistry should seek to be presented in the media.

Methodology

Online media was chosen for analysis in this project as this is an area of media showing increasing growth and relevance (Pew Research Center, 2008). On the 25th June 2018, the terms 'dentistry', 'dental' and 'oral health' were searched for using Google News as a function to collect relevant news articles relating to dentistry and oral health. The search strategy took the first 100 most relevant results from each search, which was the entirety of the first results page. Research by van Deursen and van Dijk (2009) suggests that 91% of searchers using Google do not look beyond the first page of results. No date parameters were set within the search. Articles appearing multiple times in searches were only included within the corpus once.

The collected articles were then cyclically read and re-read to develop understanding of the themes within the articles and the entire corpus. A discourse analysis was then performed. This discourse analysis follows the methodological principles outlined by Lupton (1992) in using this technique to analyse texts relating to health and illness. Rose (2016) defines discourse as referring, 'to groups of statements that structures the way a thing is thought, and the way we act on the basis of that thinking. In other words, discourse is a particular knowledge about the world which shapes how the world is understood and how things are done in it.' Through discourses, people, objects, places, relations and scenes are produced in a way that discourse understands it (Rose, 2016).

The essence of discourse analysis is similar to that of literary criticism, with simultaneous consideration of the broader sociological, political perspectives influencing and framing the texts (Chapman and Lupton, 1994). Central to this analysis is establishing where any patterns within the texts exist, either in similarities or differences in form or content of accounts, and whether any of these are shared and how they may contribute to the function and consequences of accounts. As a Foucauldian methodology, there is an interest in examining and understanding the power relations that exist within the texts. One aspect of discourse analysis is not only examining the discourses that appear in the textual corpus, but also reading for what is not said; invisibility may have as powerful an effect as visibility (Rose, 2016).

The value of discourse analysis in this examination of media articles relating to dentistry and oral health is the potential to gain insight into matters of importance to dental public health. Discourse analysis has been infrequently used within public health research but is useful in studying a variety of issues of public health importance (Lupton, 1992). In particular relevance to this research, this method may give insight into; the relationships between patients and health professionals; health

beliefs of patients and health consumers and; the portrayal of health and health-related issues in the mass media.

Methodological Limitations

Foucault's methodology in conducting discourse analysis is noted to be vague (Rose, 2016) with some stating that he often did not follow his own directions (Andersen, 2003). The methods in discourse analysis have been described as 'emergent' (Phillips and Hardy, 2002) with the observation that the best way to conduct such an analysis becomes apparent during the process itself (Potter, 1996). Phillips and Hardy (2002) warn that researchers must be aware of their role in the formation of discourses and practice in a way that allows for reflexivity. In developing a discourse analysis, the arguments that surround power, truth and discourse are as applicable to the analysis as they are to the materials being analysed. It is therefore important that researchers in this area engage in critical reflection of their work. This nature of discourse analysis is summarised by Tonkiss (1998) who states; 'It would...be inconsistent to contend that the analyst's own discourse was...wholly objective, factual or generally true.' In context, Lupton (1992) suggests in her methodological presentation of discourse analysis, that no 'scientific' research can boast that it is completely objective due to the inevitability of theoretical interpretation. The validation of this research is assisted through the use of examples from the texts within the results. This will allow the reader to follow the process of data interpretation to the drawing of conclusions. An audience with different cultural, ethnic, socio-economic backgrounds, or those of a different age or gender, might interpret the same corpus in a different way. Fundamentally, this analysis has been developed with analytical modesty, in recognition that discourse analysis should aim to be persuasive, rather than truthful in its claims (Tonkiss, 1998).

Results

A total of 182 articles from news outlets (out of a potential 300) were identified as fulfilling the inclusion criteria. The inclusion criteria were; 1) articles that discussed an issue in dentistry, involving oral health or the dental profession, and; 2) articles within the popular media, that did not originate from dental trade media. After the removal of duplicates and triplicates, 171 articles were included within the data corpus for analysis. These spanned from a period between 18th March – 25th June 2018 inclusive of both dates. The 22 countries from where the articles originated are shown in table 1. Some topics or stories appeared in articles from different media outlets, where different sources covered the same event, these were counted as separate incidences and all relevant sources were included. A wide range of different online media were included within the results including online articles from large and well-known newspapers, stories from local or provincial newspapers and online pieces from consumer groups and groups with a special interest in health. Stories from dentistry-focused publications were excluded as they focus upon dentistry and oral health in a manner that is unbalanced and not representative of the discourses that exist between society, dentistry and oral health within the social contract.

Table 1. Countries of origin of news items

| <i>Location</i> | <i>Number of items (n=182, before removal of duplicates)</i> |
|-----------------|--|
| Australia | 40 |
| New Zealand | 13 |
| UK | 28 |
| Ireland | 6 |
| Malta | 1 |
| Netherlands | 1 |
| Armenia | 1 |
| Turkey | 1 |
| US | 55 |
| Canada | 5 |
| India | 17 |
| Bangladesh | 1 |
| Nigeria | 3 |
| South Africa | 1 |
| Ghana | 2 |
| Soweto | 1 |
| Rwanda | 1 |
| South Korea | 1 |
| Singapore | 1 |
| Philippines | 1 |
| Qatar | 1 |
| Fiji | 1 |

Following data collection, the articles were grouped and coded by theme and this gave rise to six separate categories: Dentists and Community; Dentistry in Society; Advocacy of Oral Health; Dentists Behaving Badly; The Business and Cost of Dentistry and Issues of Access. These results and the themes are displayed in more detail in table 2. The initial themes used to code the articles within the corpus were based upon the shallow category of topic that appeared through superficial reading of the media. Following exploration and analysis, three overarching discourses materialised that spanned across the themes reported with a large degree of commonality; 1) Power and Professional Status; 2) Advancement of Social Control and; 3) Neo-liberal Attitudes Towards Oral Healthcare.

Power and Professional Status

Within the corpus, dentists are portrayed as being powerful, both in their relationships with patients and employees, but also, through the absence of the rest of the dental team within stories, dentists are positioned in a position of dominance over other members of the dental team. Despite the dominant positioning of dentists, dentistry itself is positioned as being subordinate to medicine. Through lack of funding and poor access to services, dentistry is presented as being of lower priority in comparison to other elements of healthcare that are provided for through public health systems. This connects closely with the discourse of neo-liberalism and personal responsibility within dentistry that also runs throughout the analysed corpus.

Dentistry is often portrayed as struggling to maintain relevance and awareness within consideration. This is demonstrated in the story of a female dentist-turned-politician, Dr Luveni, who had won an award for her work from the Royal Australasian College of Dental Surgeons, stating ‘This award has brought dentistry yet again to the lime-light and I’m happy to continue this legacy’. Dr Luveni discusses dentistry being ‘tagged along’ with other services

Table 2. Narrative Themes from Online Media

| <i>Major Narrative Themes</i> | <i>Occurrence (n=171)</i> |
|---|---------------------------|
| <i>Dentists and Community</i> | <i>Theme Total - 30</i> |
| Winning awards | 5 |
| Dentists in sports | 5 |
| Dentists and charity work | 5 |
| Helping victims of domestic violence | 3 |
| Providing free treatment | 12 |
| <i>Dentistry in Society</i> | <i>Theme Total - 23</i> |
| Celebrity damages teeth | 1 |
| New dental clinics opening | 3 |
| Dentist mesmerises child | 1 |
| New technologies | 18 |
| <i>Advocacy of Oral Health</i> | <i>Theme Total - 51</i> |
| Engaging in community-based prevention programs | 1 |
| Promoting oral health | 19 |
| World Oral Health Day | 20 |
| Holistic mouth and body | 6 |
| Child-focused oral health program | 4 |
| Water fluoridation | 1 |
| <i>Dentists Behaving Badly</i> | <i>Theme Total - 20</i> |
| Dentist found guilty of criminal activity or misconduct | 6 |
| Dentists acting fraudulently in business | 5 |
| Poor infection control | 3 |
| Member of the public – fake dentist | 2 |
| Malpractice | 2 |
| Self-interested profession | 1 |
| Dentists can ‘smell’ fear | 1 |
| <i>The Business and Cost of Dental Care</i> | <i>Theme Total - 5</i> |
| The business of dentistry | 2 |
| Dentists earn a lot | 2 |
| Dentist motivations | 1 |
| <i>Issues of Access</i> | <i>Theme Total - 42</i> |
| Cannot access dental treatment | 7 |
| Poor dental provision for children | 7 |
| Cost of care | 8 |
| Public resorting to DIY dentistry | 2 |
| Poor oral health due to unmet needs | 14 |
| Funding cuts | 3 |
| Funding subsidies | 1 |

in the public health services. The struggle of dentistry is paralleled to the struggle of women within the male-dominant dental profession. The article also states that in being conferred an honorary fellowship, she becomes one of only three female recipients of this honour, one of the other recipients being the late Lady Diana Spencer.

In several articles, dentistry is focused upon in a way that positions the professional practice of dentistry and oral health itself as being trivial. Dentistry is presented as a craft hobby when discussed in an article featuring the Coach of the Icelandic soccer team, who is a dentist in his spare time; ‘I just do it now and again to keep my fingers and brain working in dentistry...some coaches play golf. I do dentistry.’ Dentistry is also trivialised in a story about a celebrity who damaged her teeth before a fashion event. The article states; ‘Omg, can you imagine, adhering your teeth with DUO eyelash glue borrowed from the person doing your makeup ahead of a fashion week show yesterday – it was funny!’

The power and status of becoming a dentist is presented in an article about an Indian-born Australian dentist, Dr Sonia Sonia, who is reported to have escaped domestic violence, using her dental degree as a 'weapon' against her abusive father. Most discourses that relate to the power of dentists appear within the thematic category of Dentists Behaving Badly; a category that was devoted to the practices of dentists, both within and outside of the practice of dentistry, where dentists were portrayed as having acted inappropriately, or lacking skill. Several stories featured an Irish dentist, who, along with his daughter, a barrister, had been caught and pleaded guilty of illegally exporting cancer drugs. One article reported how the Judge presiding over the case had; 'noted their professions and said there were high standards expected of people in the area of law and dentistry.' One of the three articles featuring this story only referred to the father's profession, 'Dentist and daughter spared prison', with another of the articles stating in the story's headline that the dentist involved was 'Prominent'. In another article, a Virginian newspaper details how; 'To stay in business, a Chesapeake dentist confessed to being an alcoholic and drug abuser'. The story details the case of dentist Dr James Rhodes, who obtained anxiolytic medication, lorazepam, from India without a prescription. The article suggests that his actions were motivated by laziness, quoting that he; 'got tired of requesting refills.' The article details that he is still in practice, having 'struck a deal' with the state. The story begins with an account of Rhodes having been seen by an employee under the influence of drugs in the practice, 'breath smelling of alcohol', as well as examples of two cases of malpractice that had been brought against him. It is only towards the end of the article that it is briefly mentioned that Rhodes had reported himself to the State Board of Dentistry. Rhodes is not portrayed as someone with mental illness who raised his own condition to the regulators; he is presented as a deviant health practitioner who causes harm to his patients. The underlying suggestion is that it is both a threat to public safety and a failure of justice for him to still be in practice.

Several stories featured dentists as employers who had abused their employees, who were reported to be of low-status and vulnerable. One article tells the story of Sydney 'celebrity dentist' Dr David Carr who was found guilty of indecently assaulting a woman who had worked for him as a dental assistant. The story is written from the perspective of the victim, seeking to empower other victims of similar offences to speak out and seek justice. Whilst Carr is the feature of the article, the emphasis of the story is upon the merits of the victim's accounts of Carr's behaviour in contrast to his own defence for his actions. Several stories featured the tale of a Melbourne dentist who repeatedly failed to pay his migrant staff an appropriate wage. The discourses focus on the power of the respective employers in the stories, not on their statuses as dentists. The story of Carr channels the sentiments of the #MeToo campaign in raising awareness of misconduct involving the sexual harassment of women. One of the features of this campaign is the highlighting of the fact that those perpetrators previously represented as being untouchable due to their status and profile, will now be held to account. The focus of Carr as a 'celebrity' dentist, including referencing his past high-

profile 'clients', is an important component of the narrative of the story that contributes to the alignment of the piece to the predominant #MeToo movement; he was a powerful and authoritative figure, in part due to his professional status, who was held to account.

Malpractice featured in several articles, reporting where patients had suffered harm resultant from their dental treatment. An example of this featured former-dentist Andy Mancini, who was reported as being the subject of legal action initiated by the mothers of two of his patients. Previous investigations into his practice, dropped due to Mancini voluntarily surrendering his professional licence, had found him accused of, 'unnecessary tooth extractions, unnecessary caps placed on teeth and improper anesthetic treatment.' The article ends with the litigant's attorney stating that they had been contacted by a further 70 families alleging similar issues with treatment and that; 'a class-action "is a possibility."'

Advancement of Social Control

The attempted advancement of dentistry's reach into the more general area of medicine and health is also visible within the corpus, contributing to the widening of dentistry's social control (Zola, 1972). Within dentistry, the perceived contribution of poor oral health to general health was reported and promoted throughout the corpus as part of the justification of why the public must invest in their oral health and attend for regular dental examinations.

Most of the articles relating to World Oral Health Day (20th March) discussed the importance of oral health, but this was framed to focus upon the implications of this in relation to general health. Diabetes and its relationship to oral health was highly referenced, in several cases being the sole focus of the article. In other articles, the idea of the mouth being a window into the rest of the body was evoked; 'World Oral Health Day: 6 ways your tongue is warning you about your health'. Frequently these articles would be directed at parents looking to safeguard the oral health of their children. Topics included; 'Experts to parents: Ensure children's oral health', 'Dental care tips for school children' and 'Don't panic: what do if you find your child with a dental emergency'. Water fluoridation was mentioned by only one article, from the US, that discussed how recent research demonstrated the safety of community water fluoridation as an intervention to improve oral health. The purpose of most articles in this arena was to raise awareness of dental health and in most cases, referenced a systemic link to general health. Articles talked about the links between a healthy mouth and a healthy body, drawing parallels between gum health and heart health, as well as other general health issues such as diabetes and kidney health.

There were relatively few articles (18) that featured stories about technological advances in dentistry. Seventeen of these reported research from the UK that demonstrated a new break-through in 're-growing' dental enamel. Many of the articles talk about 'hope' and state that the research; 'could help regenerate tooth enamel – and prevent tooth decay or sensitivity in the future.' Chapman and Lupton (1994) found that many news reports relating to medicine would focus upon medical miracles and new breakthroughs. This study found a much lower proportion of similarly-focused stories relating to dentistry.

The presentation of dentists within the discourse here focuses on the efforts of the dental profession to promote links between oral health and systemic health, but underlying this, the struggle that dentists face in highlighting and developing knowledge of this link within the attitudes of the public, the medical profession and policymakers is clearly present. The subordination of oral health, and therefore dentistry, helps to further neo-liberal discourses surrounding the provision of dental services.

Neo-liberal Attitudes Towards Oral Healthcare

Within the corpus, several discourses arise that feed neo-liberal narratives relating to oral health and dentistry. Lupton (2013) states; 'Neoliberalism...is characterised by an emphasis on citizens' opportunities to make free choices, albeit guided by the state, and which promotes the concept of citizens voluntarily seeking to take responsibility for their own health and welfare.' Where publicly funded health services exist, these typically do not fund dentistry to the same extent as general healthcare. The corpus collectively represented a society that is acutely aware of this, it being frequently noted that a dearth of access to affordable services exists in many jurisdictions and social contexts.

Dentists are presented within the corpus as expressing anger and disappointment at issues related to access to dental services. Articles highlighting this disparity in access discuss a wide range of interconnected issues, all relating to the central issue that dental care is not typically accessible, either due to location or cost. Several articles discussed the poor accessibility of dental services for children. This is described as 'completely unacceptable', the British Dental Association being quoted as stating that the rise in the number of children on waiting lists for dental extractions being; 'symptomatic of Government failure to tackle a wholly preventable disease'. An Irish article, titled; 'Dental health – time to stop the rot' is the online publication of a letter written to the newspaper by a dentist. The emphasis is on the lack of perceived access to dental services for patients who receive subsidised or fully-funded care. The letter states; 'The demand for dentures is increasing with the rate of dental extractions and many providers have had to introduce waiting lists for dentures for medical card holders.' Whilst articles recognise the need for the management of oral health inequities; 'The vast oral health inequalities we are seeing between rich and poor are not inevitable', there is also a trivialisation of how these really impact oral health for those afflicted with deprivation, stating; 'This is about getting simple things right, making sure that children brush their teeth twice a day, visit the dentist regularly and reduce their sugar consumption.' There is no recognition that the behaviours attributed here as being 'simple', are unlikely to be straightforward for all. Similar messages persist throughout the corpus that demonstrate the dental profession's belief that the education of society on the need to regularly visit dental services is the key to the improvement of population oral health; 'There is no doubt that (parents)...need to be...educated in the need for themselves and their children to visit their dentist at least once a year, while also reducing their own rates of drinking and smoking.'

Neo-liberal attitudes within the dental profession were common within the corpus. Statements recognising the importance of prevention are frequent, in one case a dentist being interviewed about her first job in an area of deprivation states; 'I feel like there is such a high need of preventative measures.' But this is followed by a statement that suggests an approach to oral health that places value on individual responsibility; 'Not enough people value dental hygiene'. Tooth decay is described as being a; 'silent epidemic' in an article from Vermont, USA. The President of the Vermont Dental Society is quoted, explaining the reasons for some struggling to access treatment; 'Most of the causes are structural and systemic and deal with ability to pay.' The article also reinforces the idea that is common within the corpus; that poverty and dental disease are closely linked, 'People who live under the federal poverty level have more tooth extractions and visit the dentist less frequently...those who have no college education are more than twice as likely to have had a tooth pulled than those who have a college degree.' The article finishes with a familiar warning to readers; 'Residents ignore dental care at their own peril... oral infections have been linked to development of diabetes, heart disease and stroke.' The message here echoes others appearing in this corpus; dental health is reliant upon personal responsibility, despite close links to deprivation; failing to attend routinely for dental check-ups is due to lack of prioritisation of competing interests.

Within the corpus, there is a plethora of stories reporting extreme measures people deployed in managing their dental health, from Australians having to fly interstate to access public services, to a woman who had to wait three years for emergency dental care. A common discourse in this area related to how desperate people would resort to carrying out their own dentistry; 'My tooth is that loose that I think that I could rip it out myself'. In other stories, the effects of deprivation on ability to access services is stark; 'With a mouthful of tooth pain and struggling to make ends meet, a single dad felt he was out of options... He took a pair of pliers and crushed one of the troublesome teeth, then pulled out broken bits of enamel... But there were still sharp shards stuck in there, so he bought bits for his drill, got drunk and ground the rest of the tooth down into his gum.' The corpus again emphasises how dental disease is related to socio-economic status, one article states that in New Zealand; 'dental problems are now at a 'third-world' level.' The articles relating to lack of access frequently feature dentists arguing for more public funding towards dental care; 'Everyone in New Zealand should have the right to go and see a highly qualified dentist and not be charged the full price, just as you do when you go to the doctor.'

Dentists are typically keen advocates for improved access within the corpus. However, clinical dentistry, rather than integrated dental and general public health measures, is portrayed as the solution to managing dental disease in disadvantaged groups. Dentists were frequently reported to be involved in the provision of voluntary dental services. Some of these services were for veterans or for the needy and disadvantaged. Other services stated that they were open on a 'first-come, first-served' basis, but readers are told to 'expect queues'. One service in the US offering free

treatment was specifically targeting children. Some articles recognised cost as being a major barrier to accessing services, but normalised this, almost presenting this as an objective point of fact. These articles, whilst clearly demonstrating the dental profession's willingness to help, did not express any concern or anger that voluntary dental services were necessary within first-world countries. The neo-liberal discourse was clearly visible within these articles; those seeking free treatment should be prepared to wait and be grateful for the treatment they receive.

Many articles covering World Oral Health Day demonstrated the prominence of big business within the provision of dental services and care. The Unilever corporation was heavily featured, with reference to their community dental health program, the 'Brush Day and Night campaign' being made in several articles covering events. This program is endorsed by the World Dental Federation (FDI) that organises World Oral Health Day and partners with Unilever. There was no evidence of direct funding from Unilever to sponsor the media coverage of World Oral Health Day. World Oral Health Day was covered by articles from ten countries. The evidence of Unilever's partnership with the World Dental Federation was far stronger in articles from developing countries. An article from Nigeria covered a press conference where the panel consisted of the President of the Nigerian Dental Association and the Director of Dentistry at the Ministry, of Health alongside three representatives from Unilever.

Discussion

The theory of the social contract within the context of medicine (Starr, 1982; Cruess and Cruess, 2014) has been applied to dentistry (Welie, 2004; Holden, 2017) and details the exchange of obligations between society and the dental profession, principally centring on society's need for the profession's specialist knowledge and skills. Dentistry has struggled in the past to justify to the public why it needs the status of a profession to manage oral disease. Dussault and Sheiham (1986) discuss how dentists utilised the theory of focal infection (the notion that infection from the mouth was responsible for distant pathologies elsewhere in the body) to build legitimacy in dentistry's successful bid to develop into an autonomous, high-status health profession at the start of the twentieth century. Garant (2013) states that the lasting legacy of the focal infection is a public sensitivity to the need for a clean mouth and the damaging effects of gum diseases. Some have argued that community-based water fluoridation has been adopted, almost universally, by the dental profession for similar reasons relating to the enhancement of professional prestige (Picard, 2009; Carstairs, 2015). More recently, the dental profession has justified the value of oral health through the promotion of oral health's contribution to systemic health, despite a dearth of high-quality evidence to support this position (Pihlstrom *et al.*, 2018). Zola (1972) sets out how medicine acts as a method of social control. Through judgements made in the name of health by supposedly objective and neutral experts, the medical professions are able to exert and expand the political role of healthcare throughout other aspects of life. Through attempts to increase the scope and legitimacy of dentistry and oral

health, most recently through the linkage of oral disease to other, systemic diseases, we may draw parallels to Zola's ideas of social control to the dental profession as well.

Within the analysed media, dentists are seen to advocate for oral health and improved access to services, positioned as allies with society against the inequities of oral health. Despite this, there is no advocacy expressed by the dental profession for the integration of dentistry into other services, this parallels Illich's observation in 'Medical Nemesis' (1975) that the medical profession seeks to create and sustain monopolies of practice. The monopoly of the dentist over the dental profession is apparent within this analysis through the absence of other members of the dental team. Only one article featured a dental professional other than a dentist (a dental therapist) discussing the oral health of her community. Within the corpus, this absence provides evidence of demarcatory strategies (Witz, 1992) through which dentists exercise inter-professional power over low- and mid-level dental professionals. Other references were only made in the context of dentists acting poorly as employers; either being abusive, being intoxicated whilst at work or failing to pay their staff. There are parallels to be drawn here between the historic dominance of the medical profession over the midwifery profession which have also been explored through discourse analysis (McIntyre *et al.*, 2012). A small number of sources discuss the integration of oral health considerations into general healthcare, for example, the provision of oral hygiene promotion within a hospital setting for cancer sufferers. However, most of the media analysed discuss the importance of the oral-systemic link in the context of why the public should seek regular dental care. The assumption made is that the physical action of practice-based dentistry, by dentists, is the most effective approach to managing dental disease. This focus on downstream interventions in dental practice is dominant throughout the articles examined.

Throughout the corpus, across all themes, support for a model of personal responsibility for oral health was apparent. Diseases of the dental tissues and oral cavity, like most chronic health conditions, disproportionately afflict those with greater levels of social deprivation. Several sources with a strong emphasis upon the promotion of public health perspectives in dental care display clear messages that poor oral health is a matter of personal neglect and a lack of ability to set priorities. Within the corpus, dentists and others peripheral to the profession expressed their strong belief in the importance of oral health, accompanied by a disbelief that sections of the public were not congruent with this viewpoint. This perspective relates closely to the discourse of 'no legitimate dependency' reported by Peacock, Bissell and Owen (2014) in their qualitative study of neoliberal discourses from interviews with women from Salford in the UK. They found that every participant, to one degree or another, expressed that everything about their life was their responsibility; turning to others and relying on outside help was a sign of weakness.

At first instance, it can be difficult to dispute a desire to promote patient-centred care, autonomy through choice and accountability. However, a refocusing of the lens examining these objectives finds them to overtake social rights of universal access to quality care (Tritter *et al.*,

2010). Commercial discourses present within the corpus also compliment neo-liberal narratives; messages supporting top-down behaviour changes or commercial influences have been suggested to antagonise public empowerment (Green *et al.*, 2015). This focus promotes the narrative of victim-blaming that is often more apparent within the media (Cross *et al.*, 2017). The social contract is based on the fundamental need and importance of oral health to society and the dental profession's ability to provide care in a competent manner. The prominence of neo-liberal discourses portrays the dental profession as abdicating responsibility for issues of access to oral health services. While there were many instances of dentists providing pro bono services, the corpus does not present professional associations as having appetite for promoting sustained improvements to access to dental care, other than statements supporting greater investment to support dentist-provided care. The corpus presents a portrayal of the dental profession that risks breaching its social contract; if many in society cannot access oral health services, the principal justification for dentistry's position as a trusted and protected profession falls into question.

Nettleton (1994) describes dentistry as a disciplinary project that arose from the public health movement. The Foucauldian concept of discipline, described in *Discipline and Power* (Foucault, 1977), involves the development of sites of observation, referred to as hierarchical observation, that contributes to conformity to expected behaviours. The sources within the corpus frequently seek to develop conformity with oral health messages which simultaneously encourage the public to submit to the hierarchical observation of the dental profession. Where dentists are seen within the corpus to have abused disciplinary authority and privilege, either within their roles as clinicians (for example in the reported allegations of malpractice) or as powerful employers, society reacts strongly to these perceived breaches of the social contract. That these stories are reported at all is testament to the fact that dentists are generally highly trusted and respected (Armfield *et al.*, 2017) with this behaviour being recognised to deviate from this expected norm.

Conclusion

This research found that most discourses relating to oral health were confined to the context of dentists and dentistry, demonstrating the persistence of the isolation of the mouth from the rest of the body. Frequently, these messages perpetuate neo-liberal attitudes that relate the aetiology of dental disease closely to personal responsibility. The discourses surrounding oral-systemic health links suggest a need for greater reflection on how the dental profession might effectively discuss the importance of oral health with the public and the media. It is essential that the profession is able to do this without straying into unsubstantiated claims that appear as an attempt to expand the scope of dentistry's influence.

Many sources claim that the public lacks dental knowledge. This is better understood as the public having a lack of power over oral health, where oral health literacy is low and feelings of disempowerment in relation to dental health are high. A continuance of this disempowerment is likely to further encourage society's perceptions of a breakdown of its social contract with the dental profession. The social

contract recognises society's dependence upon the dental profession's skills and knowledge to manage dental disease. The privileges of professionalisation are linked to an obligation to provide access to care. Where many in society cannot access these skills, this is likely to be perceived as an abrogation of this duty and a breach of the social contract. Whilst dentists appear within the corpus as advocates for oral health, often demonstrating a great deal of altruism, their sincerity is often attenuated through advocacy statements being infused with neo-liberal discourses. Dental disease is a politically contested issue; the profession must be robust in promoting oral health as an issue that transcends individual responsibility and the confines of the context of dentistry.

Conflict of interest

The author has no conflict of interest to declare.

References

- Andersen, N.A. (2003): *Discursive Analytical Strategies: Understanding Foucault, Koselleck, Laclau, Luhmann*. Bristol: Policy Press.
- Armfield, J.M., Ketting, M., Chrisopoulos, S. and Baker, S.R. (2017): Do people trust dentists? Development of the Dentist Trust Scale. *Australian Dental Journal* **62**, 355-362
- Barker, K., Lowe, C.M. and Reid, M. (2006): *The Use of Mass Media Interventions for Health Care Messages About Back Pain: What Do Members of the Public Think?* Oxford: Nuffield Orthopaedic Centre NHS Trust.
- Blomberg, H. (2019): "We're not magicians!" On the use of rhetorical resources in Swedish news media narratives portraying the social services and social workers. *Qualitative Social Work* **18**, 229-246.
- Blomberg, H. and Stier, J. (2016): Metaphorical expressions used in Swedish news media narratives to portray the shortage of nurses and their working conditions. *Journal of Advanced Nursing* **72**, 382-395.
- Chapman, S. and Lupton, D. (1994): Freaks, moral tales & medical marvels: health & medical stories on Australian television. *Media Information Australia* **72**, 94-103.
- Cross, R., Davis, S., and O'Neil, I. (2017): *Health Communication: Theoretical and Critical Perspectives*. Cambridge: Polity Press.
- Cruess, S. and Cruess, R. (2014): Professionalism and medicine's social contract. *Focus on Health Professional Education: A Multi-disciplinary Journal* **16**, 4-19.
- Dussault, G. and Sheiham, A. (1982): Medical Theories and Professional Development: The Theory of Focal Sepsis and Dentistry in Early Twentieth Century Britain. *Social Science and Medicine* **16**, 1405-1412.
- Fairclough, N. (1995): *Critical Discourse Analysis. The Critical Study of Language*. London: Longman.
- Foucault, M. (1977): *Discipline and Power*. New York: Pantheon Books.
- Garant, P.R. (2013): *The Long Climb: From Barber-Surgeons to Doctors of Dental Surgery*. Hanover Park, IL: Quintessence Publishing Co, Inc.
- Green, J., Tones, K., Cross, R. and Woodall, J. (2015): *Health Promotion: Planning and Strategies*. 3rd ed. London: Sage.
- Holden, A.C.L. (2017): Dentistry's social contract and the loss of professionalism. *Australian Dental Journal* **62**, 79-83.
- Illich, I. (1975): *Medical Nemesis: The Expropriation of Health*. New York: Pantheon Books.
- Jones, K., Merrick, J. and Beasley, C. (2015): A content analysis of oral health messages in Australian mass media. *Australian Dental Journal* **61**, 16-20.
- Kelly, C.M., Johnson, I.G. and Morgan, M.Z. (2016): Oral cancer: exploring the stories in United Kingdom newspaper articles. *British Dental Journal* **221**, 247-250.

- Lupton, D. (1992): Discourse analysis: a new methodology for understanding the ideologies of health and illness. *Australian Journal of Public Health* **16**, 145-150.
- McIntyre, M., Francis, K. and Chapman Y. (2012): Critical discourse analysis: Understanding change in maternity services. *International Journal of Nursing Practice* **18**, 36-43.
- Mendes, P. 2001. Blaming the messenger: The media, social workers and child abuse. *Australian Social Work* **54**, 27–36.
- Nead, L. (1988): *Myths of Sexuality: Representations of Women in Victorian Britain*. Oxford: Blackwell.
- Nettleton, S. (1994): Inventing Mouths: Disciplinary power and dentistry. In Jones, C. and Porter, R. (Eds), *Reassessing Foucault: Power, Medicine and the Body*. Oxford: Routledge.
- Peacock, M., Bissell, P. and Owen, J. (2014): Dependency Denied: Health inequalities in the neo-liberal era. *Social Science and Medicine* **118**, 173-180.
- Picard, A. (2009): *Making the American Mouth: Dentists and Public Health in the Twentieth Century*. New Brunswick: Rutgers University Press.
- Pihlstrom, B.L., Hodges, J.S., Michalowicz, B., Wohlfahrt, C.J. and Garcia, R.I. (2018): Promoting oral health care because of its possible effect on systemic disease is premature and may be misleading. *Journal of the American Dental Association* **149**, 401-403.
- Pew Research Center (2008): *Audience Segments in a Changing News Environment: Key New Audiences Now Blend Online and Traditional Sources*. Available at: <https://www.peoplepress.org/2008/08/17/key-news-audiences-now-blend-online-and-traditional-sources/> (accessed 05/07/2019)
- Phillips, N. and Hardy, C. (2002): *Discourse Analysis: Investigating Processes of Social Construction*. London: Sage.
- Potter, J. (1996): Discourse analysis and constructionist approaches: Theoretical background. In: Richardson, J.T.E (ed.). *Handbook of Qualitative Methods for Psychology and the Social Sciences*. Leicester: British Psychological Society. pp. 125-140.
- Rose, G. (2016): *Visual Methodologies: An Introduction to Researching with Visual Materials*. 4th edn, London: Sage.
- Schillemans, T. (2012): *Mediatization of Public Service. How Organizations Adapt to News Media*. Frankfurt: Peter Lang.
- Starr, P. (1982): *The social transformation of American medicine*. New York: Basic Books.
- Tonkiss, F. (1998): Analysing discourse. In: Seale, C. (Ed). *Researching Society and Culture*. London: Sage. pp. 245-260.
- Tritter, J., Koivusalo, M., Ollila, E. and Dorfman, P. (2010): *Globalisation, Markets and Health Care Policy: Redrawing the Patient as Consumer*. London: Routledge.
- van Deursen, A.J.A.M. and van Dijk, J.A.G.M. (2009): Using the Internet: Skill related problems in users' online behaviour. *Interacting with Computers* **21**, 393-402.
- Welie, J. (2004): Is Dentistry a Profession? Part 3. Future Challenges. *Journal of the Canadian Dental Association* **70**, 675–678.
- Witz, A. (1992) *Professions and Patriarchy*. London: Routledge.
- Zini, A., Sgan-Cohen, H.D. and Vered, Y. (2013): Media exposure and oral health outcomes among adults. *Quintessence International* **44**, e146-e156.
- Zola, I. (1972): Medicine as an Institution of Social Control. *The Sociological Review* **20**, 487-504.