Review article: Bridging a gap: the (lack of) a sociology of oral health and health care

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Abstract

This article provides an historical review of international research related to sociology and oral health and health care. I begin by considering the relevance of the mouth and oral health to social interactions and physical health, and outline existing inequalities in oral health and health care experiences. The paper examines critically some of the existing published research in the field – considering both what might be described as sociology *of* oral health and health care and sociology *in* oral health care – and demonstrates the dearth of sociological research related to this subject compared to other areas of interest within the field of sociology of health and illness. I conclude by suggesting some ways in which this area could be expanded and developed further. I suggest that sociological analyses of how individuals experience, understand and manage their mouth and oral health, can add to and enhance the broader field of the sociology of health and illness. Further, examining experiences and provision of oral health care may provide sociology with a new opportunity to explore the neglected field of private health care, but also to engage with health policy makers who seek to address oral health care needs.

Background and orientation

In 1965 Murray Ross, in an address to the International Association of Dental Research, reviewed the contribution of social sciences to health sciences, referring to the significant emerging body of knowledge developing in medical sociology. However, he noted "when one focuses on dentistry, it is quite obvious that there is little contact with the social sciences, few, if any, studies in the field of sociological dentistry are reported" (Ross, 1965 p1110). Ross ended his address calling for more collaborative work between dental clinicians and social scientists:

> "For many reasons, I would suggest that the dental profession should look to the social sciences for help. The social sciences will not solve all – or perhaps very many – of the problems dentists confront. But they will help in many specific situations, and, in any case, familiarity with the social sciences will bring an understanding of society and individual behavior that cannot be acquired otherwise" (Ross, 1965 p1111).

It is over 40 years since Ross' address, but, "sociology has shown relatively little interest in exploring the mouth, or in engaging with dentistry itself: a sociology of the mouth remains absent" (Graham., 2006 p53).

My own interest in this area stems from an on-going programme of multi-disciplinary research relating to individual experiences of oral health and health care, In this review article I seek to map the field of sociological work pertaining to oral health and health care – both sociology *of* oral health and health care and sociology *in* oral health care. I begin by considering briefly the relevance of the mouth to the individual and its social and physical functions, and some of the inequalities which exist in oral health and health care. I then document the range of research conducted by sociologists in the field, and end by suggesting some future directions for sociological research which may have academic, clinical and policy relevance. In preparing this review the literature was searched systematically, although it is not a systematic review. Neither is it my intention to provide a definitive review of all published work in the field, although I hope it provides a useful starting point for those new to this topic. The search included social science journals and books, as well as dental and 'health services research' journals and I have taken a broad definition of 'sociology'. Medline and Web of Science were searched using and combining the terms: *sociology* and/or *qualitative* with *mouth* and/or *oral health* and/or *dent**, as well as key authors' names. Targeted searches – authors and key terms – were also conducted on individual social science and dental journals (1). Also, I engaged in personal correspondence with other colleagues familiar with the field, to try to ensure all key work had been identified. Despite, these

efforts I am conscious that there may be work which is missing, and such ommissions are entirely my responsibility.

Oral health: function and social inequalities

Oral health is important to both physical and social function. Simply, the mouth is "the boundary between: the internal body and the external sources of pollution" (Nettleton, 1988 p163), through which food and drink enters the body, and is one means through which we express ourselves (Thorogood, 2000; Gibson, 2008). Good oral health and functioning teeth are integral to good physical health, ensuring a varied and nutritionally balanced diet necessary (Bedi et al., 2003, DoH, 2005, Petersen & Yamamoto, 2005). Further, oral health and the appearance of the mouth and teeth are important to both an individual's perception of self and their social interactions (Strauss & Hunt, 1993, McGrath & Bedi, 1998, Fiske et al., 1998, Steele et al., 2004). The position of the mouth in the centre of the face makes it – in many cultures- highly visible, and as such is important to the outward appearance, upon which others respond and react to us (Goffman, 1990, Featherstone et al., 1991, Giddens, 1991, Shilling, 1993). In particular, the appearance of teeth is important, and may be used to make judgements about an individual (Alkhatib et al., 2005; Gregory et al., 2005), although such judgements are likely to be shaped by social, cultural and historical factors. For example, in the 16th and 17th centuries blackened teeth were a sign of affluence – reflecting the ability to afford to consume sugary foods – today, the opposite is the case, with decaying or rotted teeth being generally associated with poverty (Gibson, 2008). Having rotten or visibly missing teeth within western cultures conveys a myriad of possible – invariably negative – assumptions about a person: notions of 'dirty' or 'unhygienic', lacking a pride in oneself. It would seem that the appearance of teeth is becoming increasingly important with image of the "American smile' – perfect white, even shaped and straight - is becoming extremely prevalent (Barford, 2008). Although some may view those with perfect teeth with suspicion (Gregory et al., 2005), others are seemingly becoming more willing to engage with an array of cosmetic procedures to 'improve' themselves (Gimlin, 2007).

Given that oral health is integral to physical and social function, it is important to recognise that considerable inequalities in oral health exist. Across the world, poorer oral health and less access to and uptake of preventative oral health care are more prevalent amongst deprived groups (Kelly et al., 2000, Petersen & Yamamoto, 2005). Within the UK, those interested in public health dentistry have demonstrated that whilst

there have been significant overall improvements in experiences of oral health, inequity between different groups persists and indeed continues to grow (Watt & Sheiham, 1999). Evidence suggests that inequalities are apparent throughout the lifecourse, but are particularly marked amongst pre-school children, with children from less affluent socioeconomic groups having more decayed primary teeth (Hinds & Gregory, 1995 cited in Watt & Sheiham, 1999). In adulthood, although the edendate population is decreasing, more deprived socioeconomic groups have the highest proportion of edendate people (Kelly et al, 2000). Further, across the lifecourse, as with other health experiences there are regional inequalities in oral health exist. For example Locker et al (1991) demonstrated that there was poorer oral health experiences in non-metropolitan or rural areas in Ontario compared to other communities, and in England there is generally poorer oral health in the northern regions compared to the south (Watt & Sheiham, 1999). Until recently (DoH, 2002), there was no obligation for a local health authority to provide a person living in its locality with a primary care dentist, resulting in a greater geographical variation in access – which still persists - to dental services compared to medicine (Batchelor, 2005).

There are also marked generational differences in oral health in many countries (Ettinger, 1992). For example, within the UK, until the inception of the NHS in 1948, few people could afford restorative care, and those who could not had their teeth extracted and replaced with a full set of dentures. This trend continued in the early years of the NHS, when the demand for restorative care was more common in the middle classes, with those from more deprived backgrounds viewing dental treatment as a 'luxury service' (Dickson, 1968)). In addition, regional differences developed as preventative oral health services were more quickly assimilated into practice in the South of England compared to the North (Craft & Sheiham, 1976). Today, the UK population can be divided fairly neatly into three "dental" cohorts: those over 70 years , many without any natural teeth; those aged 40 to 70 years, affected by early NHS treatments with high disease and high restoration; and those under 40, with low disease and low restoration experience (Nunn et al., 2000, Steele et al., 2000). Whilst the availability and provision of oral health care will have had an impact on different generations, other explanations for age cohort variation include: negative attitudes towards dentists in older people who experienced at first hand, or heard of , some of the brutal techniques used in the past; cost; fear and anxiety; changing patterns in diet, particularly the increase in the availability of sugary snacks from the 1950s onwards; the introduction of water fluoridation, and perhaps most significantly the widespread use of fluoride

toothpaste (Finch et al 1989, Ettinger, 1992, Watt & Sheiham, 1999). These generational differences clearly have an impact on the demand and use of oral health services (Gibson 2003), and concern has been raised about how to improve the oral health of older people, as improvements in oral health are likely to have a concomitant affect on physical health. Edentate older people may be in particular need of help. Research shows that those without natural teeth, who are likely to have full dentures, are less likely to perceive a need for or to access oral health services compared to dentate people in the same age cohort (Locker et al, 1991, Kelly et al, 2000).

When considering inequity in oral health experiences, it is necessary to consider how paying for treatments may affect people's use of health care services. Certainly, in their much cited qualitative research, Finch et al (1988) identified cost and anxiety as the two main barriers to accessing dental services. Within the UK primary care dentistry is unusual, in that, unlike other NHS services, dental care was only ever briefly available free, to all - although some groups including: those under 18, pregnant women (and a year after the birth); those on low incomes or income support are still able to access free NHS oral health care. By 1951, to control the unprecedented demand for dental services, a co-payment system was introduced for the majority of people, the basis of the subsidised system which continues today (Milsom et al., 2008). Although people may be familiar with making a personal financial contribution towards dental treatment costs, those on a lower incomes will experience the impact of such costs disproportionately compared to those with more disposable income, and therefore the different direct and indirect costs associated with treatment must be considered (Gibson, 2003 p180). Further, recent changes in oral health policy appear to have resulted in more dentists providing some or all of the treatments privately (OFT, 2003; IC, 2006, Patients Association, 2008) and people finding it difficult to access primary care dentistry (Bajaj, 2008). Within the UK, concern has been raised about the increased number of people with dental abscesses requiring hospital admission (Thomas et al., 2008), and the fact there are more of these admissions come from the least affluent social groups (Mole, 2008). Such admissions may be attributable to people not seeking dental care, but they also see, to suggest that some people are unable to access routine or emergency dental care (Thomas et al., 2008).

Sociology and oral health

To move now to discuss the work of sociologists in the field of oral health and health care. This field can broadly be divided into two: sociology *of* oral health care and sociology *in* oral health care (cf Straus, 1957 cited in Seale, 2008). The first can broadly be defined as research conducted and led by sociologists whose research papers and books have been written for a social science audience. The second characterised by research concerned with improving oral health or health care delivery, involving multi-disciplinary teams frequently led by dental clinicians, where the sociologist's key role is often to provide (usually) qualitative, methodological expertise and guidance. Below I outline each in turn, however, as with all attempts to categorise an area of study, sometimes the divisions are not quite as 'neat' as they might at first appear.

Sociology of oral health and health care

The first sustained sociological interest in dentistry occurred the 1960s in the US, with a focus on the profession of dentistry - likely a reflection of more general the emerging sociological interest in professions, and medicine in particular, around this time (e.g. Becker et al., 1961, Freidson, 1970). More and Kohn (1960) suggest that of the five possible students' motivations they identified for entering dentistry: prestige, financial reward, 'human service', autonomy and manual skill, the most important driver for students was the quest for autonomy. Other work pertaining to the organisation of professions more elliptically engaged with dentistry rather than making it the main object of interest (e.g. Kriesberg 1962). Similarly, Akers and Quinny (1968) used dentistry, as one of a group of five health professions, to explore their conceptual framework of how different professional groups organise themselves. By contrast, in Britain, the first sociological work which emerged from sociology was concerned with the population's oral health. Based on a survey in Manchester, Dickson's (1968) highlights for the first time, what were to become familiar patterns of class variation in uptake and attitudes towards dental treatments.

In the US, O'Shea and Cohen's (1971) *Toward a Sociology of Dentistry* was the first – and to date, possibly still the only - edited collection of essays on sociology of dentistry. The aim of this book is two fold:

> "to make dentistry, and more importantly dental health, a salient object for social scientific study. We hope also that the dental community will better understand what sociologists do in the dental domain, how they think and what they might contribute toward improving the level of oral health of a population" (O'Shea and Cohen, 1971) p9)

As well as containing six original papers – four of which pertain to the US, one to Israel and one Britain – this edited collection provides a comprehensive bibliography of sociologically relevant international literature at the time. The essays in the book cover different topics, including: the social organisation of dentistry (O'Shea, 1971) the delivery of dental services in small towns (Wolock & Wellin, 1971), and the impact of social and psychological factors on dental health in Israel (Shuval, 1971). In particular, I recommend Linn's (1971) paper to anyone interested in the gendered history of professions. Linn examines the the experiences of 16 female dental students who at the time – in stark contrast today – were very much in the minority. They were treated with by those outside dentistry with suspicion for wanting to enter the profession: "they look at you as if you're cracked" (p66); and frequently treated with derision or disrespect by male colleagues "my experience here is as in any profession; men are rather condescending to women students" (p67). In a later chapter, Richards (1971) examines the evolution of dentistry within Britain, comparing how, in contrast to the US, the British public did not hold dentistry in the same regard as other professions.

In the 1970s and onwards, whilst sociological attention continued to focus on the development of professions, relatively little attention was given to the evolution of the profession of dentistry (exceptions are Reid, 1979, Larking, 1980). Larkin (1980) analysed how the profession of dentistry developed its sphere of authority; over time, as with other professional groups, it sought to subordinate, control or eradicate other groups working in oral health. The next substantive body of work identified is Davis' (1980) book *The Social Context of Dentistry,* which anyone interested in this field is encouraged to read. This book provides an international historical overview of the emergence of dentistry as an organised profession and critically examines its position and function within society. It documents some of the inequalities in oral health and health care, highlighting how, as with medicine, those with the greatest need for preventative dental services were – and continue to be - less likely to access services. Davis suggests that adopting a cultural approach to dentistry "highlights the relativistic and changeful nature of systems of beliefs and practices"(p118). He calls for recognition of the social and cultural shaping of dental practices and beliefs, and for more engagement with social sciences, suggesting this may result in a shift from interventional oral health services to prevention.

From the 1980s there is a more sustained – albeit still small – interest in sociology and oral health and health care. The scope of the research of sociologists who have been – or are – working in this field remains eclectic,

and has been directed towards both social science and clinical audiences, and often involves multi-disciplinary teams. Research topics of interest reflect some familiar topics of enquiry within the broader field of sociology of health and illness: the development of the dental profession and its sphere of authority (Nettleton, 1992, Adams, 1999, Kuhlmann, 2001, 2003), individual oral health and health care experiences (Finch et al, 1988, Hill et al 2003, Gibson et al., 2004, Gregory et al., 2005; Marsham et al, 2009), differences in lay and professional understandings of oral health interventions (Nations & Nuto, 2002, Graham et al., 2006), and dental health policy (Manley et al., 1994, Hancock et al, 1999; Calnan et al., 2000). In addition, detailed conversational analyses of the clinician-patient encounter in dentistry have also been undertaken (e.g Burton & Coleman, 1985, Anderson, 1989). The range and scope of the work in this field demonstrates the great potential which exists for future research. For example, Hancock *et al* (1999) argued that the perceived public dissatisfaction with NHS oral health provision was less about perceived differences in technical qualities – their respondents reported not being able to make much distinction – but rather it is more likely to be attributable to difficulties in accessing services By contrast, Calnan *et al's* (2000) work examining individual UK dentists motivations for deciding whether to practise within the NHS or privately, suggested that dentists felt by offering – at least some if not all – private provision gave them more flexibility, and in particular meant that they were ale to offer the highest standards of care to their patients. In light of recent policy changes and developments it would be timely to revisit this topic from both users', and professionals' perspectives.

Sarah Nettleton's doctoral research work , (Nettleton, 1986, 1989, 1991), later published as her book "Power, Pain and Dentistry" in 1992, is one of the most sustained contributions to the field. At a practical level, the context and funding of her research as a sociologist was – and remains – unusual. Her work was supported and wanted by dental clinicians – something she herself initially found perplexing: "Why should dentists want to employ a sociologist to look at teeth and dentistry" (Nettleton, 1992 p7). During the course of her fieldwork Nettleton reviewed archive materials and interviewed and observed both dentists and patients as they experienced and enacted their oral health and health care. Her work examines how the profession of dentistry constructed a clearly delineated body of knowledge of its own, thus essentially separating the mouth from the body (Nettleton, 1988) and how the experience of pain led to the creation of specific dental patient and clinical encounter (Nettleton, 1989). Further, she demonstrates how public health discourses about oral health and health care within dentistry permeated into the home, shaping the moral responsibility of mothers'

oral health work in the domestic sphere (Nettleton, 1991). It remains the only exploration of oral health care within Britain based on a single piece of ethnographic fieldwork.

Recent sociological work has focused on the micro level of individual experiences of oral health and health care. In the UK, Gibson et al. (2000) explored individuals' accounts of regular dental attendance, and suggest that this can be understood by referring to the broader body of research about how people adapt to chronic illness. They suggest that regular dental attendance – like regular medical attendance for some chronically ill individuals – may serve as a means of 'checking' their current oral status and monitoring its stability or decline. Further, as with chronic illness, some people are more reliant on (and expecting of) professionals for their care, with others being more self-reliant, adapting to their symptoms in order to limit the impact they may cause. Oral health related quality of life, comes under scrutiny in Gregory et al's (2005) work. They challenge the notion that it is a stable and measurable construct, and show how it varies and changes between individuals and over time in the same individual. They assert how individual's oral health related quality of life is defined by the interaction between the relevance – 'super relevance' to 'not relevant' - and impact of oral health in everyday life which by its nature often changes over time. Similarly, Marsham *et al* (2009) - taking some early symbolic interactionist work as their theoretical framework - examine the impact of development defects of enamel (DDE) on how young people perceived themselves and how they felt others reacted to them. They conclude that those you people whose sense of self was defined by their appearance, and who needed others to approve of their appearance, were more affected by their DDE than those who did not regard their teeth or their appearance as central to their sense of self. Graham et al's (2006) work differs to the previous work cited in that she and her colleagues examine both patients' and clinicians' views and experiences of removable partial dentures – a common technique for dealing with the problem of missing teeth. Their analysis highlights the need for dentists to consider the social meaning to the patient of any given treatment option. They argue this because, many of the practical difficulties and realities of living with a partial dentures cited by patient respondents: food getting stuck between mouth and palate; palate moving, or falling out; and unpleasant physical sensations; using fixative gels and having their sense of taste affected by their palate; issues which were not considered at all by dentists. Finally, the work of Nations and Nuto (2002) who studied lay and professional understandings of tooth loss in Northeast Brazil, demonstrates the lack of engagement – and indeed at times overt dismissal – of any traditional understandings of tooth loss. They

argue that a failure to engage with or understand lay perspectives of oral health and health care can negatively impact on oral health care policy. They argue that a complete "Kuhnian paradigmatic revolution" (p243) must take place if the Brazilian dental professionals is to engage more fully with the understandings and experiences of poorer patients and begin to tackle inequalities in oral health.

In Canada, Adams (1999, 2004) examines the historical and political development of the dental profession, offering interesting insights into the continuing struggle for professional dominance of dentistry in Ontario. She focuses on how the professions of dentistry and medicine evolved alongside each other with little dispute (Adams, 1999). She suggests this was due to four factors: firstly, unlike other professions, medicine and dentistry were seeking to establish their professional credentials around the same time; secondly; dentistry's sphere of interest – the mouth – did not impinge on the territorial interests of medicine; thirdly, drawing on the same body of knowledge, dentistry never challenged the fundamental knowledge base of medicine; and finally, she asserts that the shared gender and class position of both professional groups fostered good relationships between the two. By contrast, the professional struggle over who should provide primary care dentistry - dentists or dental hygienists – has been far less unproblematic (Adams, 2004). She argues that this is because a rise in the status of hygienists – who have traditionally been subordinate to dentists - can only be made at the concomitant expense of dental knowledge. Kuhlmann's (2001, 2003) analysis of evolution of the German dental profession, examines the gendered history of the establishment of expertise. She argues that the acceptance of women as being 'natural' carers of children was integral to their access to the dental profession in the first instance, and later to the highly regarded specialism of orthodontics.

Sociology in oral health care

Turning to what might be termed sociology in oral health care, requires us to consider the impact that sociologists have on oral health services research. In the US, Lois Cohen, has had a significant impact on understanding of oral health experiences. Cohen's work spans over 30 years and she continues to be an influential figure, whose contribution to dental health research is highly regarded by her clinical colleagues (see Dworkin, 1999). It was Cohen and Jago (1976) who first called for the development of 'sociodental indicators' in oral health; that is thinking beyond clinical factors and considering individual, socioeconomic, cultural or life-style influences on oral health. Later dental public health clinicians also argued for the concept of need to

be expanded beyond the clinical and to include both functional and social need (Sheiham et al., 1982). The culmination of some of these interests can be seen in the influential work of Locker (1988) who proposed a broad biopsychosocial conceptual model of oral health, which has informed many oral health related quality of life measurements.(3) Today, within oral health services research there is a general acceptance of the need to consider the impact of 'non-clinical' factors - including social and psychological - on oral health.

As well as acknowledging the influence of individuals, it is important to acknowledge the impact on, what might be termed, 'social science methods' - particularly, qualitative techniques – oral health and health care research(4). This suggests neither that sociologists *only* do qualitative studies - although it a methodology frequently used within British medical sociology (Seale, 2008) - nor that every qualitative study in oral health services research involves a social scientist. Nonetheless qualitative methods have been used to explore a myriad of different clinically relevant topics, which might broadly be categorised thus: lay experiences of oral health and health care, and its implications for dental service provision (e.g. Lowry and Craven, 1999, Preston et al., 2001, Anderson and Thomas, 2003, Fitzgerald et al., 2004, Kaye et al., 2005); dental practitioners' attitudes and understandings of particular practices or procedures (e.g. Crossley, 2004, Durham et al., 2007) and problems of enacting dental health policy (e.g.Dyer and Robinson, 2006, Gussy et al., 2006, Holmes et al., 2008).

In Canada, the work of MacEntee and colleagues represents a sustained body of work of dental clinicians and social scientists researching together (MacEntee, 1996, MacEntee et al., 1997, Dharamsi and MacEntee, 2002). Using individual interviews, their work focuses on how ageing and gender impact on experiences of oral health and health care Their work demonstrates how adapting to oral health experiences and managing one's mouth are integral to 'successful ageing'. They illustrate both the negative and positive effect that oral health can have on the social interactions of older people: with discomfort leading to social withdrawal, but a functioning unproblematic oral experience enhancing social relationships (MacEntee et al., 1997). More recently Dharamsi & MacEntee, (2002) have examined how theories of distributive justice can help inform debate – and ultimately address – inequities in oral health care in contexts where there is little agreement on how best to allocate resources.

Reflections and some future directions

Oral health and health care are integral to human health and interactions, and yet the number of sociologists who have, and continue, to research in this field is small. Many of the authors already cited have, in different ways, called for sociologists to engage more with oral health and health care (Ross, 1965, O'Shea and Cohen, 1971, Davis, 1980, Graham, 2006), and whilst this review echoes these calls, I want to move on from merely reiterating the need for more work, and to suggest some – albeit no means an exhaustive agenda for – future research directions. In a recent article (Seale, 2008) - drawing on the work of Burawoy (2005) - calls for a medical sociology which is both 'policy-relevant' and 'public-relevant'. I suggest that this is oral health and heath care is an area of research that represents a real opportunity for an 'outward looking' sociology to develop.

Considering oral health and health care at a structural and policy level may provide sociologists with a real opportunity to address social inequitie,s and to engage with wider society and policy makers in debate about how best to reduce oral health inequalities. I have already highlighted some of the inequities experienced by different socioeconomic groups and the geographical variation in access to and provision of services. Further, recent changes in the UK, have meant that more dentists are choosing to provide at least some of their treatment privately (OFT, 2003, IC, 2006, Patients' Association, 2008). This has resulted in people paying for more, and potentially having more choice of treatments, but also there is a suggestion that a significant proportion of the population now has difficulties accessing primary care dentistry (Bajaj, 2008). Such changes in the access, organisation and delivery of primary care dentistry are 'ripe' for critical exploration. If Thomas et al's (2008) evidence is accurate, and people are turning to emergency medical services when they are unable to access oral health care, perhaps we are seeing an(other) emergence of the Inverse Care Law in oral health services (cf Locker et al 1991), or of a situation where those who are able to afford it will engage with regular preventative oral health care and those who cannot will come to rely up emergency treatment (cf Dickson, 1968).

Addressing the inequities in oral health and health care experiences between different generational cohorts and providing sustainable and appropriate oral health services for an ageing population is of concern to many countries when planning their oral health services (Morley, 1999, Conan Davis, 2005). Understanding the

views and experiences of older people themselves is integral to developing appropriate services. Taking the UK as an example, it is likely that the individuals in the three different dental cohorts evident in society will vary significantly in their experiences of, attitudes to and expectations of oral health and health care. Additionally, within each generation attitudes and practices will be shaped by individuals own oral health care experiences and those of the previous generation. At present we have little insight into such variations. Understanding how people perceive oral health and health care, and how their views may change over time, can provide a 'grounded' contextual framework to enable the design and delivery of more appropriate oral health services. Further, examining individuals' oral health care experiences is also of value to clinicians and clinically orientated research, as existing measures of oral related quality of life are challenged, and we see a move towards developing tools firmly rooted in individual patient experiences and meanings (see Locker and Allen, 2007).

As we witness an increase in the provision of private oral health care, sociologists, perhaps working with health economists, can provide new perspectives on the oral health service 'market'. Examining the enactment and consequences of oral health care provision and policy is relevant beyond national boundaries; providing health care within a context of finite resources is a perennial challenge. Within the UK, the relationship between an individual and their dentist is fundamentally different to that with their family doctor, as the former has a financial element; even within NHS care the majority of people to make some personal financial contribution towards the cost of care. Thus, oral health care represents a medium in which to critically examine what, to date, has been relatively ignored by sociological research, namely the private health care environment. Examining this could achieve two things. Firstly, it provides a clinical setting in which to explore the negotiation of treatments which have a personal financial cost to the patient, and to critically examine how decisions are influenced by personal, social and economic factors. Secondly, this shift to more private provision can provide a vehicle through which to explore the accuracy of current notions of consumerism in health care, and the extent to which consumers influence individual service providers and service organisation and provision.

At a micro level – whilst work has been conducted, generally adopting a symbolic interactionist perspective, related to individual user and practitioner views and experiences of particular conditions of technologies – it

remains that relatively little is known about: how lay people experience and conceive of their oral health and health care; how those experiences are mediated by the individual's own health biography and the health experiences of significant others; how oral health experiences change over time within individuals' own lifecourse and vary between different individuals, and cultural groups; and finally, how oral health compares in importance to the other aspects of health. Away from the individual, the clinical encounter within primary care dentistry is a peculiar one, and is itself worthy of further detailed attention. By virtue of physical and technical constraints the patient is rendered relatively passive during the oral examination and the dentist is permitted to transgress bodily boundaries (Graham, 2006). How these encounters – and intrusions into the body - are enacted and negotiated could provide fruitful space for examining how such intimate examination is accomplished. In particular, it would be interesting to explore how technologies mediate the encounter between the dentist and patient, and how they are used to legitimise bodily transgressions.

A final area, I would like to suggest sociologist might wish to consider, is the relatively new emergence and increasing interesting in cosmetic dentistry. I suggest this could be examined in two ways: Firstly, cosmetic dentistry – from whitening toothpaste to full veneers and orthodontic treatment – is a lucrative business for both clinicians and the broader industry. Is it possible that oral cosmetic procedures become a 'normal' part of self-care, as common place as toothbrushing? It may be that there are some similiarities:

> "Toothbrushing...is now almost universally practised in the advanced industrial societies, a testimony perhaps to growing health consciousness, but more likely a social trend greatly aided by the efforts of commercial interests. A major stimulus was probably the advent of commercial dentifrices, or toothpastes, since it was only then that oral cleanliness became palatable and pleasant, as well as something that contributed to oral health. The demands of aesthetic appeal have probably also been important in contributing to the wide acceptance of toothbrushing." (Davis, 1980 p100)

The increase in cosmetic dentistry is a controversial issue itself, with some within the profession resenting the encroachment of the 'beauty' industry into health care. Whether this marks a significant shift in the practice and nature of the profession will be seen with time, but it provides a potential new arena to explore professional development as we see some embracing the new skills (and markets) cosmetic dentistry brings, and others preferring to maintain function to optimise oral health care. Examining this emerging 'industry' may enable us to examine critically how the nature of professions may be changing and adapting to new technologies and opportunities, and the extent to which such changes is being 'driven' by external markets.

Secondly, at an individual level cosmetic dentistry may provide a new medium through which to examine broader sociological concerns with the 'body project', and in particular the increasing emphasis on outward appearance and its impact on self-identity. Cosmetic dentistry marks a shift in attitudes from seeing oral health as purely functional, to one central to individual appearance, although this shift has occurred at different rates in different countries (cf US with UK markets). Cosmetic dentistry must also be examined within the broader context of anti-ageing medicine, which continues to increase in influence (Vincent, 2003). As people age, there is a concern (for some) to try to deter or resist – through the use of surgical interventions if necessary - the biological processes of ageing (Featherstone, 1982; Vincent, 2006). Teeth change with age, and while some may choose to age 'naturally', many more are willing to engage with an array of cosmetic procedures to 'improve' themselves (Gimlin, 2007). If we look to the US we see that particular attention has been focussing on the – generally more affluent - 'baby-boomer' generation's expectations of health and appearance (Hancocks, 2006), with some pointing overtly to the lucrative opportunities this affords for clinicians providing cosmetic treatments (Berland et al., 1998, Whitehouse, 2004, Davis, 2006). To what extent this environment will be replicated in the UK is open to debate, but certainly it provides sociologists with a useful medium through which to explore how the shifting emphasis from function to appearance may impact on the expectations people have of their own dental clinicians. Critically examining this expansion of oral cosmetic procedures might enable sociologists to explore how individual bodies are constrained and 'managed', particularly with regard to ageing.

To date, we have already seen some interesting sociological engagement with oral health and health, but there is more to do. What I present here I hope provides those unfamiliar with the field with an insight into the work which has already been achieved, as well as providing some suggestion for future directions. In this final section I have provided only be a partial 'snap-shot' of some of the opportunities for sociologists, in a field where there are new topics to examine and new research collaborations to make. I know (and hope) others will have different agendas and interests. However, what this field offers sociology is the scope to engage critically with very real health issues of maintaining, improving and promoting oral health care for all, but also oral health and health care may be one area of research through which to develop of a more outward looking policy and publicly relevant sociology, which can only be to the good.

Footnotes:

1 Journals searched included: *Sociology of health and illness, Social Science and Medicine, Journal of health and Social Behavior, Health, Social Theory and Health, Sociology, American Journal of Sociology, British Dental Journal, Journal of Dental Research, Community Oral and Dental Epidemiology*.

2 It is not the purpose of this paper to review the extensive and growing literature on oral health related quality of life and its measurement. This field has developed immeasurably in the last two decades though there is still a healthy debate about the tools which have been developed and their capacity to measure (see Locker & Allen, 2007).

[3] It should be noted that it was only in 2007 that a review appeared in Community Dentistry and Oral Epidemiology examining the value of qualitative research for dental public health (Bower & Scambler, 2007) It was not until 2008 that the British Dental Journal published a series of articles about the use and scope of qualitative research in dentistry (Stewart et al, 2008; Gill et al, 2008, Burnard et al, 2008). This contrasts with the much earlier series on the same topic in the British Medical Journal (Pope and Mays, 1999). The late arrival of such commentaries provides some insight into the relatively recent increase – and acceptance – of qualitative work within oral health services research

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