General dentists' attitudes and perceived barriers in providing domiciliary dental care to older adults in long-term care facilities or their homes in Northern Ireland: a descriptive qualitative study

Kerr E[1]*, Watson S[1], McMullan J[1], Srinivasan M[2], and McKenna G[1]

[1]Centre for Public Health, School of Medicine Dentistry and Biomedical Sciences, Queen's University Belfast, Belfast BT12 6BA

*[2]Centre for Dental Medicine. University of Zurich. 8032 Zurich . *Corresponding author. Email: ekerr10@qub.ac.uk*

Background

- Dental Domiciliary Care (DDC) describes dental care delivered for a patient in an environment outside clinical dental practice, usually in the patient's place of residence.
- Often provided by general dental practitioners (GDPs), DDC visits in Northern Ireland (NI) are remarkably low when compared to the number of older dependent adults in long-term care facilities (LTCF).[1]
- With increasing age, the ability of self-care deteriorates, poly-pharmacy leads to dry mouth, and diets become rich in sugars. These factors are linked to chronic pain, malnutrition, co-morbidities, and reduced quality of life.[2]
- Previous studies reported barriers to DDC for GDPs were remuneration, lack of time and equipment, and difficult patient management.[3]

Research Question

What are general dentists' attitudes and perceived barriers in providing domiciliary oral healthcare to older adults in long-term care facilities or their homes in NI?

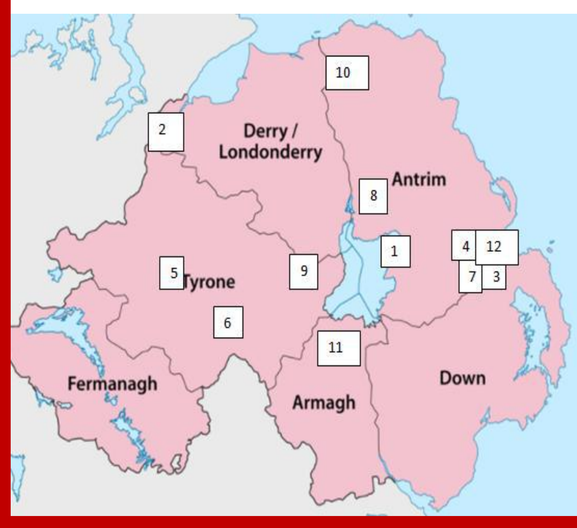
Methods: Semi-structured telephone interviews were conducted with a purposive sample of 12 GDPs in NI in July 2020 who had been contacted by email. Interviews, aided by a topic guide and lasting approximately 30 minutes each, were digitally-recorded and anonymously transcribed verbatim. One interview per participant was conducted by a female dentist (EK), no field notes were taken and transcripts were not returned to participants. An iterative coding process using theme-analytic methods was used.[4] Saturation was reached after eight interviews. Ethical approval was obtained from Queen's University Belfast in September 2019 (Ref:19.37).

Characteristics of study participants

*Data presented as median (IQ)

Characteristic		N(%)
Gender	Male	8 (67)
	Female	4 (33)
Dentist	Associate	8 (67)
	Principal	4 (33)
Practice	Independent	10 (83)
	Corporate	2 (17)
Funding	Private	2 (17)
	NHS	10 (83)
Years qualified as dentist*		13 (10.5-22.8)
~No. of domiciliary visits / year*		5 (0.5-40.5)

Geographical spread of participants' workplace in Northern Ireland



Results: Four major and two minor themes emerged from the interview data and are demonstrated below

The risk of professional litigation was perceived to be too high to allow dentists to comfortably undertake DDC.

- *"It's not that I don't want to do it, it's just that there are so many barriers to it that you have to get in order now to do it properly. I think just our generation is so afraid of litigation that you wouldn't do it unless you went knowing you'd done everything your indemnifier told you to, but the list is getting longer and longer." [Participant 12, private GDP, Belfast]*
- *"I would be more afraid of doing treatment and something happening than not doing it and somebody asking me why I didn't." [Participant 5, NHS GDP, Tyrone]*

Remuneration for dentists undertaking DDC was considered too low to be economically sustainable.

- *"You are more doing it because that's your job…, it's time consuming…, if you did it all the time it would be economically suicidal…, It's a bit like doing legal aid if you're a lawyer you're working for free, pro bono work, that's really what it is." [Participant 7, NHS GDP, Belfast]*
- *"It's effectively charity work. You're at a loss even with what they pay you…,From a purely business point of view it doesn't pay you because the amount of surgery time that you lose you don't get the remuneration back for it so therefore you physically can't do it during business hours." [Participant 10, NHS GDP, Antrim]*

Treatment of dependent older patients in DDC was viewed as complex.

- *I am starting to think that it's almost becoming a speciality. It's not as easy to treat the elderly as it used to be…, people with bridges, crowns, implants…, once that goes wrong it's almost impossible to treat…, you just fiddle about putting in dressings, giving them antibiotics and doing bits and pieces." [Participant 6, NHS GDP, Tyrone]*
- *"It tends to be fixing a denture or they've lost a denture.., it is just quite awkward to do anything. You can't do a filling. In theory you might be able to take a tooth out but you wouldn't really want to do that because they're mostly elderly patients and they might have a lot of medical problems and it is not ideal doing them out of the surgery" [Participant 3, Private GDP, Belfast]*

The organisation of dental services in Northern Ireland was confusing and actually impeding DDC delivery for dependent older adults.

- *"The reality is you are running a business that has to be cost effective but that is a general problem with dentistry especially as an NHS dentist so you have to cut your costs depending on how the system lets you do it but the system to me doesn't really support in any shape or form or manner domiciliary care" [Participant 7, NHS GDP, Belfast]*
- *"At university and even through foundation training there was very little, in fact none probably, no training at all in how to do a domiciliary visit…, What is the pathway for us? Do you do a domiciliary? Do you not do a domiciliary? Is it the community dental service's responsibility or yours?" [Participant 1, NHS GDP, Antrim]*

The culture within each dental practice dictates provision of DDC

- *"We only do them when we're asked to do them. We're not promoting them, it's out of a duty of care to the patient. We're not really doing it to make money but the fee to me is what it is." [Participant 11, NHS GDP, Armagh]*

The positive attitudes dentists have towards DDC

- *"I think it's very important, a lot of the people we would do domiciliary visits for are people who have been coming in and out of the surgery for years and have been very loyal and I think it's only right that we try to see them" [Participant 2, NHS GDP, Derry/Londonderry]*

Discussion: GDP's perceived lack of remuneration for DDC is not because the fee is low per se, but because it is low in relation to the amount of time DDC takes within such a complex environment and the money that could be earned instead by treating patients within the dental surgery. Regarding litigation, perhaps it's not that dentists don't *want* to do DDC but that they are *afraid* to. Clarification of GDPs' responsibilities around DDC with clear guidelines surrounding provision is recommended given the increase in demand for this service. Data collected inadvertently focused on LTCF residents and captured fewer issues specific to dependent older adults in their own homes, a niche that would benefit from further investigation.

Conclusion: Avoidance was the predominant attitude, built on the perception of multiple barriers which centre round finance, high risk of litigation, complexity of treatment, and the system within which DDC lies. Anxiety associated with litigation and professional indemnity for DDC provision has emerged as a new theme in this area.

References: (1) Department of Health. SDR Items of service claims by item number and children/adults 2020 http://www.hscbusiness.hscni.net/services/3173.htm. Accessed September 9, 2020. (2) McKenna G, Burke FM. Age-related oral changes. *Dent Update*. 2010;37(8):519-523. doi:10.12968/denu.2010.37.8.519 (3) Stevens A, Crealey GE, Murray AM. Provision of domiciliary dental care in North and West Belfast. *Prim Dent Care*. 2008;15(3):105-111. doi:10.1308/135576108784795400

(4) Braun V, Clarke V. Using thematic analysis in psychology, Qualitative Research in Psychology, 2006;3(2): 77-101. DOI: 10.1191/1478088706qp063oa

Acknowledgements: The authors would like to thank all the participants for taking part in this study by taking the time to conduct interviews. **Conflict of Interest:** All authors declare that they have no conflict of interest.

Author contributions: All authors listed (EK, SW, JMM, MS & GMK) were involved in formulating the research question. EK conducted all interviews and analysed the data. EK wrote the manuscript and all authors were involved in reading, revising it critically, editing, and approving the final manuscript. **Funding:** No funding