Author's response to reviews

Title: The impact of frailty on oral care behavior of older people. A qualitative study

Authors:

Dominique Niesten (d.niesten@dent.umcn.nl)
Krista van Mourik (k.van_mourik@lumc.nl)
Wil van der Sanden (w.vandersanden@dent.umcn.nl)

Version: 2 Date: 17 October 2013

Author's response to reviews: see over
Dear editor,

In answer to your email request dd 18 September 2013 to react to the reviewers’ assessments, we have addressed all of the comments of the reviewers, and have made the changes that were required.

We wish to express our gratitude to the reviewers who spent valuable time and effort to improve our manuscript.

We have now uploaded a new version of the manuscript (‘BMC OH manuscript 4880474061037212_171013’) and will await your reaction.

Sincerely, on behalf of all authors,

Dominique Niesten

**Reviewer1**

1. Introduction:
   - ‘distressed’ was replaced by ‘affected ’

2. Methods
   - The phrase: “Most recruits consented to participate, according to the care-managers, who did not ask for reasons for non-participation.” was changed into: “According to the care-managers, most recruits consented to participate. Reasons for non-participation were not collected.”
   - The active voice with personal pronouns (“we used”, “we carried out” etc.) into passive voice 3rd person was changed in a small number of cases. However, we (the authors) prefer the active voice with personal pronouns if appropriate, and since BMC journals do accept this choice (see also our previous article in BMC
public health [http://www.biomedcentral.com/1471-2458/12/839](http://www.biomedcentral.com/1471-2458/12/839), we did not systematically convert all ‘we’-phrases to passive voice. I (DN) once learnt that “in order to demonstrate this reflexivity [of the researchers on their subjective input in the analysis], qualitative researchers often use the first person active voice (either in the singular all the plural) - or indeed any person, rather than use the passive voice - which is the norm for quantitative researchers.” See also: Gilgun, Jane F. (2005). “Grab” and good science: Writing up the results of qualitative research. Qualitative Health Research, 15(2), 256-262.

However, if the reviewer considers this to be an essential revision, we are prepared to change this in the final version.

- Some sentences were rephrased as suggested.

3. No revisions required

4. Results section:
   - Theme A: in order to prevent confusion about the statement about ‘younger women’ illustrated with a quote from a 70 year old lady, the text was changed into “‘younger’ (65 – 80 y.o.) women”
   - Theme A: ‘as soon as he got out of bed: We meant “as soon as he was well enough to get out of bed” and the text was changed accordingly.
   - Theme B: “dental control visits”: We left out ‘control’ in this case because it was not important to distinguish regular dental check-up visits from dental visits for the purpose of pain relief. In cases where this distinction is important, ‘dental control visits’ was replaced by ‘dental check-up visits’ or ‘(regular) dental check-up visits’.
   - Theme B: Quote B16: indeed, the wrong quote, it should have been qB15, and was replaced accordingly. qB16 illustrates the last statement in this section.
   - Theme C/ Disorientation: ‘so we were told’ was deleted.
   - Theme C/ Disorientation: a quote (qC5) was added at the end of this section; following quotes were re-numbered.

5. Discussion section:
   - ‘dental control visits’ was replaced by ‘dental check-up visits’ throughout the section.
   - Paragraph starting with ‘character traits’: was reworded and moved to page 12 into the generic discussion. The last sentence was deleted.
   - Paragraph starting with ‘it can be argued that’: no reference was added to evidence the statement ‘frail elderly people who are generally more concerned
about short term than long term health benefits’; instead, the sentence was changed into: ‘frail elderly people who most likely will be more concerned in general about short term than long term health benefits’

- Page 16 first paragraph: the last sentence was reworded: “Such benefits could not be established in a longitudinal study by Locker [66].”

- Page 16 second paragraph: ‘Northern countries’ was replaced by “Northern European countries, the USA, Canada and Australia”

- Page 16, second paragraph, second and third sentence were rephrased as follows: ‘It can indeed solve problems for those with oral pain or discomfort who are unable to attend regular dental practices due to lack of transport or mobility problems. However, providing mobile dental care to frail older people regardless of their treatment demands and regardless of their abilities to arrange and make dental visits by themselves, is likely to be cost-ineffective and is also at variance with people’s autonomy rights.’


- Page 16 second paragraph: the last sentence was rewritten: “For most residents who were interviewed in this and a previous study by the same authors [37], this could be achieved by nurses or carers providing necessary support in daily hygiene routines, and through arranging dental visits and transport in cases requiring treatment.”

- Page 16 third paragraph: was completely rewritten and additional insights were added following the reviewer’s suggestions: “Measures that target the interaction between residents and nursing staff and that increase the quality and level of care without any substantial cost, could relieve most of the barriers to favorable oral care behavior that we observed in this study. Compassionate care and patient centered communication, for instance, are two related approaches that have been proven to enhance the quality of care in care dependent older people [70-74]. They include close observation of patients and effective and empathic communication, and lead to reduction of medical errors and improved health outcomes and patient satisfaction [71]. These approaches are expected to reduce barriers to oral health care encountered in this and other studies [69, 75, 76], including the invisibility and underreporting of the resident’s oral health concerns. Close observation of residents and empathic communication could be used to learn about and understand the resident’s concerns and wishes, his or her health priorities, oral
health attitude and experienced barriers to good oral hygiene practices. Dental and nursing staff should also be alert to indicators for poor (oral) hygiene-related behavior, like forgetfulness, depression, or poor dexterity. More specifically, nurses and dentists should regularly ask residents if they experience difficulties in tooth brushing or organizing a dental visit. Compassionate care will help improve the relationship between dentist and patient and between nurse and resident, and may increase the nurse’s willingness to support residents with their oral care. As a result, two of the most frequently reported barriers to oral health care support by nursing staff, lack of prioritization and unfavorable oral healthcare attitude [69, 75, 77-79], may be mitigated.”

- Page 17, the paragraph: “We propose closer links between dentists and health professionals in order to increase the use of dental care. Dentists could, for instance, be alerted by their database system when a patient has stopped making routine dental visits and then contact the patient and their general practitioner or care home.” was deleted.

6. Suggested revisions were implemented
7. Suggested revisions were implemented
8. The following sentence was added to the abstract: “The aim of this study was to explore how the type and level of frailty affect the dental service-use and oral self-care behavior of frail older people”.
9. Suggested revisions were implemented

Title: Since we use the U.S. spelling consistently throughout the paper, I did not change the word ‘behavior’ into ‘behaviour’

Reviewer 2
1. Introduction:
   - No revisions required
2. Methods
   - Reflexivity: A paragraph on reflexivity was added: “Reflexivity of the researchers
   Insights from various academic and professional backgrounds influenced the data analysis. The researchers added expertise in and knowledge of public oral health
care and philosophy (DN), health sociology and medical anthropology (KM),
dentistry and dental care (WS), and qualitative methodology (DN and KM) to the
analysis. The only dental professional of the team did not conduct the interviews
in order to reduce the chance of participants feeling restricted in their responses.
During the study design and in the analysis phase, we repeatedly consulted
geriatric dentists and geriatric nurses to help us to bring up relevant issues during
the interviews, and to create more contextual background to understand the
participant’s information.”

- The paragraph on qualitative rigor was rewritten and a heading was added:
“Qualitative Rigor
Several used techniques helped to ensure the trustworthiness and credibility of our
analysis [32]. Firstly, we combined or triangulated information from three
sources: interviews; observational notes; and the opinions of care-managers.
Secondly, the research team brought three separate professional backgrounds to
the analysis. Thirdly, the interviewers carried out member checks during the
interviews, which involved restating or summarizing information and then asking
the participants to determine the accuracy. Lastly, we offer direct quotes from the
transcripts to support our thematic interpretations. We stopped interviewing when
no new themes or subthemes emerged. (theme saturation) [33].”

- More details on the context of the study in terms of the types of institutions
selected were provided: the word ‘regular’ was added to the description of the
types of institutions selected, and the following phrase was added: “Regular
daycare centers and assisted-living homes in East-Netherlands were randomly
chosen from a national website that lists all Dutch care institutes
(www.zorgkaartnederland.nl/).”

- The status of the individuals is best described by their ZZP status (table 1) and is
summarized in table 2. I did not see enough reason to add further details in the
method section.

- An additional description of the method, and reason for, collecting the ‘opinions
of care managers’ is provided: “In most cases, and in every case where we
received any unclear or contradictory information from the respondent, we
contacted care managers after the interview, either in person or by telephone, in
order to briefly discuss our interpretation of this information.”
The description of the analysis was rewritten in order to make it read more logically and to add some details: “In order to identify the specific themes relating to the care behavior of the participant [24] (p.67), DN and KM first applied line-by-line coding of each transcript. We then discussed and reviewed the attributes and meanings of the codes until consensus was reached. This way, a coding frame developed. The coding process and analysis was supported by a computer program (MaxQDA 2010; www.MaxQDA.com) which also facilitated (semi-)quantification of codes and emerging themes during the analysis. A third investigator (WS) checked the reliability of the attribution of codes in five randomly selected interviews. DN and KM grouped coded segments with related content into code groups. We then formulated an initial set of themes based on the underlying meaning of grouped coded segments. Themes were repeatedly compared with the data following a method of ‘constant comparison’ [24] p.71. We applied this method after every two or three interviews in order for emergent themes to be verified and explored in interviews that followed. The discussion and subsequent refining of themes among all authors went on until we reached consensus on a definite set of themes.”

3. No essential revisions required. We chose not to include the quotes in the ‘results’ section; mainly because of the way we reference groups of quotes (not always sequential), and because of the high number of quotes we chose to use. However, we agree that interspersing of quotes throughout the text makes reading easier.

4. No revisions required.

5. a) The reviewer states that the conclusion section is long. However, there is no separate conclusion section in the discussion or elsewhere in the article other than in the abstract.

6. a) The ‘strengths and limitation’ section was rewritten in order to add depth and issues related to selection bias, information bias, and reflexivity.
   b) The last paragraph of the discussion section (starting with ‘character traits’) was rewritten and moved to page 12 (first part of the discussion).

7. No revisions required

8. No revisions required

9. a) the suggested correction was made
   b) ZZP described/ defined
   c) the suggested correction was made
d) an explanation of what ‘member checks’ involved, was added

e) ‘handicapping’ was replaced by ‘disabling’

f) ‘left in the dark’ was replaced by ‘not told about’

g) the suggested correction was made

h) ‘handicaps’ was replaced by ‘disorders’