Author's response to reviews

Title: The role of religious leaders in promoting acceptance of vaccination within a minority group: a qualitative study

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Version: 2 Date: 24 April 2013

Author's response to reviews: see over
Dear Sir, Madam,

Hereby we send you the revised version of our manuscript “The role of religious leaders in promoting acceptance of vaccination within a minority with low vaccination coverage: a qualitative study.”

In response to the editor we verified that our manuscript adheres to the RATS guidelines and we added a statement to that effect in the revised manuscript. We also added a statement on informed consent in the Methods section.

We thank the reviewers for their useful comments, our paper has certainly benefited from the adaptations. Below we respond to the comments of the reviewers point-by-point.

Kind regards,

Helma Ruijs,
Corresponding author

Reviewer’s report

Title: The role of religious leaders in acceptance of vaccination within a minority group: a qualitative study

Version: 1 Date: 21 March 2013

Reviewer 1: Khitam Muhsen

Comments to the authors
The study describes the views/attitudes and practices of 12 religious leaders of orthodox Protestant community in The Netherlands. This topic is of public health importance given the low immunization coverage in certain religious sub-groups, often facilitating the occurrence of outbreaks of vaccine preventable diseases in such communities that threaten to spread to the general population. While it is stated that the study examined “the role of religious leaders in acceptance of vaccination”, the direct influence of religious leaders on parental decision of refusal or acceptance of child immunization was not addressed. Furthermore, the role of religious leaders was not addressed in the context of other factors that have impact on parental decision to vaccinate or not vaccinate their child (e.g., perceived risk, perceived susceptibility, other dimensions of the health believe model, etc.). Therefore drawing conclusions concerning the role of religious leaders in acceptance of vaccination should be done with caution.

I suggest rewording of the title and text to accurately reflect the study findings.

In this study we focused on the attitude of religious leaders towards vaccination, and their practice regarding promoting acceptance (or refusal) of vaccination among their congregation members. Therefore we changed the title into: The role of religious leaders in promoting acceptance of vaccination within a minority group: a qualitative study.

The decision-making process of orthodox Protestant parents was studied separately. In line with the results of the present study the parents reported hardly any influence of religious leaders on their decision. (Ruijs et al. How orthodox Protestant parents decide on the
vaccination of their children: a qualitative study. BMC Public Health 2012;12:408) In addition to the rewording of the title the text is reworded where appropriate.

Abstract:

Background – last sentence; I recommend replacing the words “role of…..in acceptance or refusal of vaccination” by “…views/attitudes and practices…of…related to vaccination…”

In line with the change of the title the sentence was changed into ” role in promoting acceptance…”

Since the attitudes of congregation members that appointed the religious leaders included in the study, I suggest deleting the second sentence of the results in the abstract.

The sentence was deleted.

Conclusions in the abstract: I am not fully convinced that the study findings support the authors’ conclusions, especially given that in some orthodox Protestant communities immunization coverage (>85%) is high, with religious leaders being vaccinated themselves.

To explain the influence of the orthodox Protestant church order on the religious leaders’ stance on vaccination we added the following sentence: “Religious leaders’ attitudes towards vaccination vary from full acceptance to clear refusal. According to orthodox Protestant church order, local congregation members appoint their religious leaders themselves. Obviously they chose leaders whose views are compatible with the views of the congregation members.”

Religious leaders that participated in the study support dialogue with the Dutch government during epidemics. Though they won’t directly act to increase immunization coverage, such dialogue is important and has the potential of contributing to containment of epidemics by other means than vaccines.

We added a phrase emphasizing the importance of dialogue in controlling epidemics by other means than vaccination: “Although the dialogue with religious leaders that is pursued by the Dutch government may be helpful in controlling epidemics by other means than vaccination, it is unlikely to increase vaccination coverage.

Introduction
Page 5- second paragraph: please provide descriptions of the epidemics of vaccine preventable diseases that occurred in these communities.

The following description of the epidemics was added: “..a polio epidemic in 1978 (110 cases, one death) and 1992/1993 (71 cases, 3 deaths), a measles epidemic in 1999/2000 (over 3000 notified cases, 3 deaths), a rubella epidemic in
2004/2005 (almost 400 notified cases, 11 cases of congenital rubella syndrome, 2 fetal deaths) and a mumps epidemic in 2007/2008.

Page 6 second paragraph: please consider rewording this statement as suggested in the previous comments.

In line with the change of the title the sentence was changed into “role in promoting acceptance…”

hods
Elaboration on the methodology of Grounded Theory that was used in the study is needed. What are the advantages and limitations of this method compared to other qualitative and quantitative methods?

We chose the methodology of Grounded Theory because it is appropriate for an explorative study. There’s no predefined frame for the analysis, the data are the starting point. The Health Belief Model, for example, assumes that health is a very important issue, which is at least questionable in the case of religious leaders.

In the Methods section we added:
“Because of the explorative character of our study we chose a qualitative research design, applying the methodology of Grounded Theory.”
And we explained the constant comparative method:
“This means that when this concept was identified, previously analyzed interviews were reviewed in order to check if their content fitted into this concept.”

In the Discussion we added:
“We distinguished three subgroups of religious leaders with various attitudes and practices regarding vaccination. Because of our qualitative study design we could not assess the size of these subgroups. However, for all subgroups the role in promoting acceptance of vaccination was limited.”
“Finally, our data, collected by interviewing religious leaders, are per definition subjective. However, they are in line with the results of a previous study on vaccination among orthodox Protestant parents. These parents reported not consulting their religious leaders during the decision-making process.[31]” with a reference to a previous study.

Was the concept of “theoretical sampling” implemented in the study? Did the analysis of data have any effect on the sampling procedure? (Reference Corbin and Strauss 1990).

We added the following:
“The selection of new participants was driven by the analysis of the interviews, we actively sought religious leaders with different stances and practices. Moreover, interview questions were added or adapted based on the analysis of previous interviews in order to understand and test emerging concepts.[24]”

Results
While the religious leaders, their views and activities concerning vaccines are
described in details, actually concepts emerging from such descriptions are the basic unit of analysis in the Grounded Theory (Corbin and Strauss 1990, page 420). “Theories can’t be built with actual incidents or activities as observed or reported from raw data. These incidents, events and happenings are taken as, analyzed as, potential indicators of phenomena, which are given conceptual labels” (Corbin and Strauss 1990). If the Grounded Theory was used as a basis of the study, please revise the way the results are presented, since the current presentation does [not] fully emphasize the Grounded Theory elements (Corbin and Strauss 1990).

The central concept in our manuscript is that the role of the religious leaders in promoting acceptance of vaccination is dependent on their authority that is influenced by church order. This concept is based on the findings that the approach of the subject vaccination is not only dependent on the point of view of the religious leader but also the acceptance of vaccination in the congregation that appointed him.

At the beginning of the Results section this central concept is now stated more explicitly:

“Influence of church order
With regard to their addressing of the subject vaccination in contacts with congregation members, three subgroups of religious leaders stood out: those who fully accept vaccination and do not address the topic, those who have religious objections to vaccination but focus on deliberate choice, and those who have religious objections to vaccinations and preach against vaccination (see Table 2). The approach that the religious leaders apply seemed to be determined by the acceptance of vaccination in their congregation as well as by their personal point of view. This can be explained by the orthodox Protestant church order: the local congregations choose their own religious leaders, appointing pastors and elders who have views compatible with those of the members of the congregation.”

Moreover, the text of the Results section was reorganized, for each subgroup of religious leaders we first focus on promotion of acceptance of vaccination in their congregations and then focus on their own point of view on vaccination.

Discussion

I disagree with the authors on few sentences Page 15, second paragraph: “...The religious leaders who do not address vaccination all came from congregations where vaccination is no longer an issue; everyone- including ......There is no need to increase vaccination coverage....” Is there evidence to support the notion that “everyone” in such congregations accepts vaccination?

There are large differences in vaccination coverage between and also within the various orthodox Protestants denominations (see Ruijs et al. Religious subgroups influencing vaccination coverage in the Dutch Bible belt. BMC Public Health 2011; 11:102 and Ruijs et al. Measuring vaccination coverage in a hard to reach minority. Eur J Public Health 2012;22:359-364) However we cannot prove that “everyone” was vaccinated. Therefore we changed “everyone” into “almost everyone”.

Indeed, "Increasing vaccination coverage may not be needed in communities
with high vaccination coverage”. However monitoring and maintaining high immunization coverage is also important. Dialogue with religious leaders of such communities can maintain trust in the government.

According to our study on the decision making of orthodox protestants (Ruijs et al. How orthodox Protestant parents decide on the vaccination of their children: a qualitative study. BMC Public Health 2012;12:408) orthodox Protestant parents who fully accept vaccination do no longer relate vaccination to religion. Like in the general population their concerns on vaccination –if they have any- relate to vaccine safety. We’re not sure if a dialogue between government and religious leaders will influence such concerns. Moreover, as we describe in the results section in the paragraph on dialogue with the government orthodox Protestants generally have trust in the government, that they consider to be an instrument of God.

Pages 16-17: the study showed that some orthodox Protestant communities and their leaders actually accept vaccination; this however was not reflected in this part of the discussion.

In the Background section we mentioned already that some orthodox Protestant communities accept vaccination:

“Others accept vaccination as a gift of God. In a recent study, three clusters of orthodox Protestant denominations were identified with differing levels of vaccination coverage: high (>85%: Reformed Bond, Christian Reformed Churches), intermediate (50-75%: Restored Reformed Church and Reformed Congregations), and low (<25%: Old Reformed Congregations and Reformed Congregations in the Netherlands).[15]”

We added the followingsentences:
The vaccination coverage per denomination was assessed at national level. At local level, however, vaccination coverage may be higher or lower than the national average for that denomination.[16]

Page 17 paragraphs 1: Though the religious leaders claimed that they won’t promote vaccination following dialogue with Dutch government; such dialogue should be encouraged, since other control measure can be helpful in containment of epidemics, including outbreaks of non-vaccine preventable diseases.

The last sentence of the paragraph was changed into:
Although the dialogue with religious leaders pursued by the Dutch government may be helpful in controlling epidemics by other means than vaccination, it is unlikely to increase vaccination coverage.

Table 1: please provide the rates of vaccination coverage that are considered high, intermediate and low.
The rates are added in the table. According to our previous research vaccination coverage > 85% is considered high, 50-75% is considered intermediate and < 25% is considered low.
Reviewer's report

Title: The role of religious leaders in acceptance of vaccination within a minority group: a qualitative study

Version: 1 Date: 24 March 2013

Reviewer 2: Thelma Toni-Uebari

The authors have studied a very relevant topic of public health importance, looking at the role of religious leaders in accepting vaccination within a minority group in the Netherlands. They have chosen a qualitative study which is the appropriate research method. The findings of this study could have important policy implications for the government of the Netherlands.

Major compulsory revisions:
None identified

Minor Essential revisions:

1. Background: Paragraph 2, Line 4
   ‘…an orthodox Protestant minority of 250,000…’ ?? It would be useful to clarify what the figure refers to.

   The word “people” was added.

2. Results Paragraph 2, Line 1
   ‘… addressing of the subject vaccination…’. Is this a typo omission?
   ‘…addressing of the subject of vaccination…’ suggested.

   The word “of” was added.

3. Results: Religious leaders who focus ….choice. Page 10, paragraph 2, last line before Respondent 3
   ‘Various bible passages but also…’ Is sentence grammatically correct?

   The sentence was changed into:
   “Next to some relevant bible passages, the difficulties in the decision-making process and the psychological consequences of the decision were discussed.”

4. Results: Dialogue with authorities
   Paragraph 3, Line 4 (page 12)
   ‘…they will not obey to government rules.’ Is this an error/typo?

   The text was changed into:
   “and that in that case they will not obey to the government.”

5. Results: Dialogue with authorities: Paragraph 4 (pages 12/13) Lines 2-4, Line
5 Sentence beginning ‘In their opinion....’
Could these sentences be rephrased to improve clarity of understanding?

The sentences were changed into:
“They expected that a dialogue with the authorities would provide an opportunity to explain the orthodox Protestant objections to vaccination and thus add to mutual understanding. Such a dialogue should focus on measures to control the epidemic in general.”

6. Church order and religious leaders......vaccination: Paragraph 2
“...everyone ... accepts vaccination”
Is this conclusion correct? Is this a fact identified from the study or other previous studies?

Based on previous studies there are large differences in vaccination coverage between and also within the various orthodox Protestants denominations (see Ruijs et al. Religious subgroups influencing vaccination coverage in the Dutch Bible belt. BMC Public Health 2011; 11:102 and Ruijs et al. Measuring vaccination coverage in a hard to reach minority. Eur J Public Health 2012;22:359-364) and there are indeed also congregations with high vaccination coverage. However we cannot prove that “everyone” accepts vaccination. Therefore we changed “everyone” into “almost everyone”.

Secondly, the respondents from this group come from RCC and RC. This paragraph contradicts the earlier documentation under Background, paragraph 2, Lines 10 and 11 which states that RCC and RC have intermediate (50-75%) vaccination coverage.

We adapted the documentation under Background and added the following explanation, with a reference to our previous research on this subject:
“The vaccination coverage per denomination was assessed at national level. At local level, however, vaccination coverage may be higher or lower than the national average for that denomination.[16]”

Discretionary revisions:
7. Abstract. Background
Is it necessary to include the phrase ‘-among other interventions-’ in Line 3

This phrase was not really necessary and therefore left out.

8. Use of hyphen (-)
I observed that hyphens were used many times throughout the manuscript, sometimes inappropriately. In some of these instances a comma (,) would suffice.

We changed hyphens into comma’s where we considered this appropriate.

9. Abstract: Results paragraph
Line 4 ‘...and those who preach not to vaccinate.’ Could it be written as ‘those
who preach against vaccination’?

This has been changed.

10. **Results**: Religious leaders who do not address…..vaccination. Page 9, Lines 7-10 Sentence beginning ‘To provide some insight... to vaccination.’ Could this sentence be rephrased to improve clarity of understanding?

The sentence was rephrased into:
“Nevertheless one of these leaders sometimes raised the topic of vaccination in confirmation classes, he reported the youth to not see any religious objections with regard to vaccination anymore.”

11. **Results**: Religious leaders who preach against vaccination:
Of the 12 respondents that took part in the study, 5 (the majority) came from this group. However, only one quotation (one respondent) was reported in the manuscript. Adding one or more quotations from this group, I think, would reflect better balance in reporting the findings.

The following quotation were added:

**Respondent 7:**
During house calls we hardly ever get questions on vaccination. I think most people in our congregation think in the same way. The parents teach their children.

**Respondent 4:**
We talk about it during premarital consultations. Then people are in a stage that they have to decide on these subjects.

‘…owe their authority among congregation members…’
Should this read as ‘…authority over congregation members…’?

As according to orthodox Protestant church order congregation members appoint their religious leaders themselves, orthodox Protestant pastors do not automatically have authority over congregation members, they gain authority by convincing them.