Author's response to reviews

Title: How French physicians manage with a future change in the primary vaccination of infants against diphtheria, tetanus, pertussis and poliomyelitis? A qualitative study with focus groups.

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

We thank you very much for your review of our article. Referees have given useful remarks to improve it. So please find enclosed a new version of our manuscript entitled “How French physicians manage with a future change in the primary vaccination of infants against diphtheria, tetanus, pertussis and poliomyelitis? A qualitative study with focus groups.”, which we submit as an original article to BMC Family practice.

As we may understand referees were not all of them fully familiar with qualitative method in the field of medicine research. We added references to justify use of our method in the article and in responses to referees.

Responses are in blue color.
Thank you very much for considering our work.

Yours sincerely
Louise Rossignol

Reviewer's report

**Title:**
How French physicians manage with a future change in the primary vaccination of infants against diphtheria, tetanus, pertussis and poliomyelitis? A qualitative study with focus groups.

**Reviewer:**
Annunziata Faustini

**Date:**
25 March 2013

Reviewer's report: COMMENTS TO THE AUTHORS

Major Compulsory Revisions

The research question of the study is not clearly defined. The title suggests that the aim of the paper is to assess the strategies physicians would take to increase acceptability of the changes to be introduced in primary vaccination. However, though the focus group involved physicians, the discussion is mostly oriented to parents' acceptability and many suggestions are addressed to a direct intervention by health authorities.

Our aim was to assess the strategies physicians would take to increase acceptability of the changes to be introduced in primary vaccination, so we involved only physicians for reasons explain the next point. Sometimes physicians have anticipated parents’ perception. This theme was notified in the results and then discussed especially as indirect results. Other studies should
be done to examine the perception of patients about this change. In order to response to your remark we changed the introduction and the discussion as follow.

In the introduction, second paragraph:

“The first aim of this study was to examine the perceptions of primary care physicians about a change in DT-IPV vaccination. Secondary objectives were to understand their wishes for the implementation of the new vaccination schedule and to investigate the perceptions of primary care physicians in relation to the annual changes of vaccination schedule”.

In the discussion, last paragraph:

“Second, physician has indirectly described parents’ preferences in addition of their own perception.”

Whether the authors want to study parent’s role in improving vaccination coverage or if they want to understand the role of physicians in increasing adherence should be more clearly stated, and consistently supported by the methodological choices, as discussed below.

As stated above we indicated this limit in the discussion. We agree that parents and physicians have a role in improving vaccination coverage. But the aim of our study was to examine physician’s experiences, attitudes, and beliefs towards a change in this vaccination. This was pertinent because physicians’ agreement is necessary to get high vaccination coverage (Henrich N, et al., Health Promot Pract, 2011).

A brief introduction explaining who sets the vaccination schedules (especially for the primary vaccination, which coverage threshold is essential), who gives the primary vaccines and who is charged for vaccination in France could help in better understanding the study design and execution.

Explanation on the vaccination schedule’s setting in France is now specified in the introduction:

“The Public Health High Council and particularly Technical Vaccination Committee (CTV) are in charge of vaccination strategies development in France. The Ministry of Health validates and implements their notices. Each year a new calendar is edited with past and new recommendations. Even if DT-IPV vaccination’s coverage was 91.5% in 2007, this deep change in DT-IPV vaccination is like a small revolution in France. Because of this, it appears necessary for the CTV to assess primary care physicians’ agreement prior to this modification.”

Explanation on providers of vaccination in France is now specified in the method, first paragraph:
“Two medical specialties take care of children in French primary care: general practitioners (GPs) and paediatricians. In 2011, they respectively represented 96% and 4% of those physicians.”

Even the definition of the changes to be introduced to the primary vaccination schedule is unclearly stated. For both possible contexts of the study (parents acceptability or doctors’ rule in managing changes), the nature of these changes is very important: reducing the doses of one vaccination gives rise to doubts on its efficacy; introducing a new vaccination gives rise to doubts on safety, efficacy and costs (both in terms of physicians’ performances and in terms of parents’ expense. Finally, even which vaccine has to be introduced could influence parents’ acceptability as well as physician performances, according to how harmful the disease is perceived to be and to the possible side effects. In the background, the authors maintained that vaccinations, such as pertussis or measles, were yet to be introduced, but pertussis should already be given with DT-IPV as indicated in the title; in addition a few topics discussed in the focus groups deal with vaccines against meningitis.

Up to now the new calendar proposed to the physicians during our study was not officially available. So it was not able to show it. But it has been published last week. A link has been added in the manuscript to clarify the modifications. Concerning pertussis and measles, the nature of these changes is now indicated in the introduction:

“In 2012, the French Technical Vaccination Committee (CTV) had studied the possibility of reducing one dose of DT-IPV vaccine in childhood vaccination before the age of 2 years and vaccination at age fixed for adults. This discussion was part of a broader debate including the DT-IPV vaccination after the age of 2 years, but also others vaccinations such as vaccinations against whooping cough or measles. This new calendar has been edited in April 2013 and available on the French Institute for Public Health Surveillance website [www.invs.sante.fr] [reference 6 in the article]. “

However acceptable a qualitative assessment of vaccination changes could be, a qualitative definition of the research question would be unacceptable. About the methods the authors adopted, I think that removing the obstacles to getting the most efficacious results in immunization campaigns is important, but once the rationale of the vaccination changes have been clearly defined (in terms of health), and the highest coverage have been warranted by an intervention program and an enhanced surveillance of the disease. This aspect could not have been neglected in Pasteur’s country, but nothing has been reported in the background about the problems that emerged in previous experiences in that country. This aspect is important here because it conditions the added value that qualitative analyses could contribute. I am wondering which improvement could get this qualitative approach in a national context where primary vaccination coverage is as high or higher as 98% (WHO data). Then, a detailed goal in terms of health should be reported in the introduction to complete the background, to specify the aim of this study, but also to allow a better assessment of the method’s adequacy.
We thank referee for this very important remark, but nowadays high coverage does not protect the future. The French Ministry of Health suggests that change of DT-IPV vaccination could be a little revolution in France. We should carefully monitor DT-IPV vaccination coverage after the implementation of the new recommendation. To justify this point, we added to the example of influenza vaccine, the example of measles in the background in the introduction:

“In the field of childhood primary vaccination, implementation of measles vaccination confirmed that the new recommendation is a long learning. Since first dose of measles vaccine recommendation in 1983, the vaccine coverage rate of 95% has not been reached, and took nearly 10 years to reach 80% (32 % in 1985, 80% in 1994).”

I have further comments on the methodological aspects.

- If the topic is the parents’ acceptability, why do the focus groups involve physicians? In contrast, if topic is the physician’s performance, I am afraid that good scientific information and a discussion with the involved categories could be more efficacious.

As stated above, we only have data from physicians. This limit has been added to the discussion. The aim of the study was not to explore GP’s performance. Focus groups would not have been a good choice to explore this objective, but to explore GP’s obstacles and attitudes. Focus groups are a good way to collect those data (Krueger R, Casey M. Focus groups, a practical guide for applied research. Sage Publications, 2009, this reference has been added to the method).

- The method comes from the marketing field, whose aim is to state if a well-characterized group of people is the best target for a given product. In social-health research, the method has been used in fields such as psychiatry or physiotherapy, where the cooperation of patients involved with a specific intervention is very important, or in population screening with low coverage, to remove access problems. Similarly, in the vaccination field, the method could be useful for vaccines aimed at patients or population groups particularly at risk for specific complications. In contrast, the primary vaccination is quite a different field, since it deals with the whole population, and results depend often on the most difficult and unwilling fringe groups, to which vaccination programs should pay more attention. The authors should better justify why they used this method in the context of a primary vaccination campaign, in a country where coverage is as high as 98%.

The aim of the study was not to estimate the coverage of DT-IPV vaccination, but to examine physician’s experiences, attitudes, and beliefs towards a change in this vaccination. It is true that this method comes from the marketing field and also social science. But since 90’s it is used in medical research. Its goal is to develop hypotheses. Those could then be tested with quantitative research. The group dynamic was looked for because it allowed GPs to express different points of view. Choice of qualitative method is better argue in the method, first paragraph:
“Focus group method has already been used to examine physicians' immunization behavior (references 17-19 in the article)”

The characteristics of the selected people involved in the groups, particularly the accuracy in assuring a balanced representation of such different traits, such as gender, age, work setting (rural, city) are not clear, since they contrast, in my opinion, with the philosophy of this method oriented to identify homogeneous groups; on the other hand this balance cannot assure better representativeness, due to the very low numbers and the voluntary adhesion to the groups. Groups stratified by different characteristics would have been more satisfactory.

Methods have been clarified in the article. As Huston explain (Huston, Can Fam Physician, 1998): “The goal of sampling in qualitative research is to select people who will be the most help in answering the research question.” The homogeneity in focus group is important to gather people who are concerned by the same topic, but a purposive sampling is necessary as described in the Qualitative research review guidelines – RATS to obtain diversity of opinions. The RATS guidelines modified for BioMed Central Instructions to Authors are copyright Jocalyn Clark, BMJ. They can be found in Clark JP: How to peer review a qualitative manuscript. In Peer Review in Health Sciences. Second edition. Edited by Godlee F, Jefferson T. London: BMJ Books; 2003:219-235.

In our study, we used maximum variation sampling as now specified in the second paragraph of the method to reach as much as possible diversity of opinions and attitudes:

“Physicians who gave their consent were contacted by telephone to answer questions: number of years since installation, proportion of children seen in consultation, practicing complementary and alternative medicine, member of a network and teaching activity. Considering these answers, groups of participants as heterogeneous as possible were built to obtain maximum variation sampling.”

The authors admitted that the study has certain limitations, but ascribed them to not yet having analysed the observational data (i.e. non-verbal behavior of the participants, I suppose in the focus groups). This is a negligible aspect.

We changed our manuscript as follow:

“The study has several limitations. First, the sampling method might have caused selection bias, including physicians belonging to a network (the French GPs Sentinels network, or the French Association of Ambulatory Paediatrics (AFPA)). Second, physician has indirectly described parents’ preferences, in addition of their own perception. Other study should be done to confirm these results. Third, the qualitative data might have been influenced by interpretation bias, despite efforts to reduce such bias. These included double data analysis and discussion of the data with the research team. Fourth, the
results of the collection of observational data (non-verbal behavior of the participants) have not been fully exploited.”

The conclusions are not supported by the results.
Conclusion was qualified. Taking to account responses to useful remark made before and the modifications done in the article, we think that the conclusions are now supported by the results.

“This qualitative study provides an overview of physicians’ perceptions about a change in the DT-IPV infants’ primary vaccination. They agreed to this change. It helped to raise ideas to work on the improvement of its implementation. This positive experience has enabled collaboration between practitioners and those responsible for developing recommendations. These people have highlighted the importance of this work in the further development of the current recommendations. They will strongly pay attention to the needs of physicians regarding communication and the need to display strong agreement of health authorities.”

Level of interest:
An article whose findings are important to those with closely related research interests

Quality of written English:
Acceptable

Statistical review:
No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
I declare that I have no competing interests

Reviewer:
Pietro Ragni

Date:
27 February 2013

Reviewer’s report:
Major Compulsory Revision: none.

1. Minor Essential Revision. The results are very interesting and could be applied in health care systems other than French. So, it would be useful to know if the ratio GP / paediatrician making up the focus groups is representative of the ratio GP / paediatricians who treat the paediatric population.

In 2011, general practitioners and paediatricians respectively represented 96% and 4% of those physicians. By using focus groups we needed to obtain diversity of opinions. It was not necessary to be fully representative of the
population. But it was important to gather all specialties, which take care of children. So focus groups were done with general practitioners and paediatricians. To clarify this point for the reader, we have modified our manuscript (first paragraph of the introduction):

“The two medical specialties take care of children in French primary care: general practitioners (GPs) and paediatricians. In 2011, they respectively represented 96% and 4% of those physicians. It was decided to set up focus groups for these two different specialties.”

2. Discretionary Revision: I think it would be useful to suggest (in "Discussion") specific tools to public health vaccination services for editing of vaccination schedules, not only comments severely based on scientific literature.

We had now added suggestions in the discussion:

“With the development of innovative tool like mesvaccins.net, vaccination coverage may be better. This application can be used in France both by physicians and patients to know when and which vaccine are recommended. It is update regularly. For nowadays it is not available for medicine software. This could be something to work.”

Level of interest:
An article of importance in its field

Quality of written English:
Acceptable

Statistical review:
No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
I declare that I have no competing interests