

Rapid assessment of beliefs and understanding related to H1N1 influenza immunization¹

Introduction

The United States and several other industrialized countries are working with WHO to financially and technically support novel H1N1 influenza vaccination of health workers and pregnant women in some developing countries. This endeavor involves the use of a new product (novel H1N1 vaccine) against a relatively new public health hazard that may be somewhat unfamiliar to the target groups. Given the urgency of the epidemiologic situation, a non-routine style of service delivery will be employed to reach large numbers of people in a short period of time. There is only limited experience with immunizing health workers in developing countries. Regarding pregnant women, there is a long history of immunizing them with tetanus toxoid. Periodically and in multiple countries, however, allegations have arisen that vaccination of pregnant women is a veiled attempt to sterilize them. These rumors have proven very damaging to immunization efforts and, in some places, have persisted for several months before being resolved.

Taken together, these issues constitute a cluster of concerns that should be explored in order to develop effective communication strategies to support novel H1N1 influenza immunization. For this reason, it is proposed that a rapid assessment of knowledge and attitudes toward novel H1N1 influenza and vaccination against it be conducted in a few select places.

Target groups for assessment

In broad terms, the assessment will explore understanding and attitudes toward novel H1N1 influenza and H1N1 influenza vaccination among those who are to receive the vaccine, namely pregnant women and health workers. The views of health workers are particularly important because they will be as both recipients and providers of the vaccine. A third target group is higher level stakeholders who can play an important role in promoting and supporting – or blocking – these vaccination efforts. Stakeholders may include: top government and political officials who affect decision-making on health; heads of professional associations for nurses and obstetricians; labor organizations for health workers; influential academics; technical partners (e.g., local WHO staff); immunization program managers; district officials; community and religious leaders.

More information than is currently available will be needed to define these target groups in enough detail to carry out the assessment. Given limited vaccine supplies, decisions will be made about geographic distribution of H1N1 vaccination; it will likely be limited to high-risk areas, e.g., densely-populated urban areas, refugee camps, cross-border areas. This information will be used to further define the individuals to be included in the assessment.

Objectives of assessment (by participant group)

Pregnant women:

- Describe their understanding and perceptions of H1N1 influenza and vaccination against it

¹ Adapted from rapid formative research on new vaccine introduction in Rwanda, 2009. (Y. Drabo, AED for the IMMUNIZATIONbasics Project in conjunction with MOH/Rwanda)

- Identify the advantages, for themselves, their child, and their families, of H1N1 vaccination
- Describe their concerns about H1N1 vaccine and vaccination
- Identify the types of information about H1N1 vaccination that they would like to receive, and from whom they would like to receive it
- Identify any obstacles to getting vaccinated against H1N1 influenza

Health workers:

- Describe their understanding of H1N1 influenza and perceptions of their personal risks from the disease as health care providers
- Give their opinions on receiving vaccination against H1N1 influenza
- Give their opinions on vaccinating pregnant women with H1N1 influenza vaccine
- Describe their perceptions and possible reasons why pregnant women and their families might accept or not accept the vaccine
- Describe their own reactions to the concerns that pregnant women and their families might express about the vaccine
- Identify the types of information that they'd like to receive to help them to respond to the concerns of pregnant women and their families

Stakeholders:

- Describe their understanding of H1N1 influenza and vaccination against it
- Give their opinions about H1N1 vaccination, including their perceptions of benefits and concerns about it
- Describe possible reasons why pregnant women and health workers might accept or not accept the vaccine
- Identify the types of information they would like to receive to address these concerns
- Suggest effective ways of communicating to health workers, pregnant women and their families, and the community at large about H1N1 influenza vaccination.

Methodology

To gain an understanding of attitudes (and to a lesser extent, knowledge), this will be a rapid qualitative assessment using mostly open-ended questions. This type of inquiry is needed to uncover underlying concerns to address in planning both the supply and demand aspects of the H1N1 vaccination campaign.

Individual interviews will be used to collect information from the three groups: Pregnant women, health workers, and stakeholders. .

The number of questions in the discussion guides is deliberately limited in order to both accommodate time constraints and permit the exploration of participants' views and reasons behind them.

Sites for assessment

Interviews with health workers and pregnant women will be conducted in the locations in a country where H1N1 influenza immunization is to be provided. Interviews should be carried out in at least two

geographically distinct areas (e.g., regionally in Asia, Africa and LAC, and nationally in at least two cities; or a city plus a refugee camp, etc.)

Interviews with stakeholders will be carried out both at national level and at local level (for local community and religious leaders or district officials).

Interview teams

Background of interviewers

Each interview teams could be comprised of at least one person with experience in conducting interviews and one other person who is familiar with the health system in general and immunization in particular. In addition, a technical specialist knowledgeable about H1N1 influenza should be on the team as a resource, if possible.

Each team will consist of:

- An interviewer
- A technical specialist in immunization and H1N1.

It is desirable that the second person (technical specialist on H1N1 and immunization) be available to respond to any questions that health workers or pregnant women may raise in the course of the inquiry. Each team of researchers should also be provided with a Question & Answer sheet that presents common questions about the vaccine and the appropriate responses.

Supervision

It will be important for this assessment to be organized and managed by in-country colleagues who are: (a) fluent in the local language(s) commonly used by pregnant women and health personnel in the sites where H1N1 influenza vaccination will be conducted; and (b) proficient in research techniques. The management team for the assessment should travel with the teams to the areas where the inquiry is to take place to assure the quality of data collection. They should be prepared to assist with on-the-spot decisions such as reconsidering the sites (health facilities) for interviews, ensuring that participants meet the inclusion criteria, or redirecting discussions to ensure that they are productive.

Analysis of findings and preparation of report

At the end of each day, interview teams will meet with the assessment management team to review and compare their findings, identify key issues, and revise approaches for the next day as needed.

At the conclusion of the assessment, the management team will conduct an analysis of all findings, triangulating among observations from each target group and identifying key themes that must be addressed in planning the vaccination campaign. They will prepare a final report that highlights key findings and recommends critical elements for the communication strategy, including objectives, target groups, messages, materials, dissemination, and monitoring.

Instruments

- For pregnant women
- For health workers
- For stakeholders

Discussion guide for pregnant women

The moderator introduces the discussion with a short script [to be fully developed along the lines of what follows] that briefly described H1N1 influenza and the MOH's plans for H1N1 vaccination.

"Thank you for giving us some of your time today.

My name is ____ and my colleague here (note taker) is _____. We are working with the Ministry of Health to improve the health in the country.

Today, we would like to start by informing you that the Ministry of Health would like to start giving a new vaccine, H1N1 flu [*use local language and whatever terminology has become popular for H1N1 flu*] For that reason, we'd like to ask some questions to get an idea of what you think of this proposal by the Ministry of Health.

Your opinions are very important. They can greatly help the Ministry of Health. We greatly appreciate your participation in this discussion. The questions and discussions shouldn't take more than an hour. At the end, we'll give you something to drink and invite you to ask any questions that you may have about this subject.

[*N.B., the following is to be developed. Need to find the right balance between providing key information without undermining the following inquiry about their understanding and attitudes about H1N1 and H1N1 vaccination.*] During the past six months or so, a disease called _____ has made people ill all around the world and has killed some of them. The disease, _____, has been especially dangerous for pregnant women and has killed more of them than other people. Now there is a vaccine for _____ that can prevent people from getting the disease.

The MOH is planning to give _____ vaccine to pregnant women in XYZ parts of the country because those are the places where _____ might make the most people sick. The MOH will also give the vaccine to health workers in these areas so that they can stay healthy and protected from _____ and keep providing care to patients.

You will receive this vaccine just one time while you are pregnant [VERIFY THIS.] You will be able to receive it [*say where and when they can obtain it.*] This vaccine is safe for both you and the baby you are carrying. You may feel pain with some swelling and redness at the site of the injection on your arm for a day or two. But the vaccine is effective and safe and is already used to protect pregnant women in other countries.

Now, I would like to ask you some questions.

1. Have you received other vaccinations before when you have been pregnant? What did you like about the experience? What didn't you like? (*Probe: amount of time for waiting, or the information that the health worker gave during the vaccination session*)
2. *Based on everything you know now, or just your opinion, do you think you will most likely get vaccinated or will probably not get vaccinated? (If not sure, get them to choose "yes" or "no", even if they are not sure by asking which way they are leaning – yes or no.)*

3. Can you tell us what you have heard about _____[H1N1]. What have you heard about vaccination against _____ [H1N1]?
4. What do you think about the MOH's plan to vaccinate pregnant women with this vaccine?
5. Could you please explain your opinion?
6. What would be the benefits of using this new vaccine? The benefits for you? The benefits for your baby and for your family? (Probe: protection of mother against _____, means she won't be sick with H1N1 when she is pregnant or when her baby is born...)
7. Now I would like to ask you if you have any concerns about this new vaccine. Are there any reasons why you would not be vaccinated with this _____ vaccine? What do you see as the disadvantages, if any, of being vaccinated?
8. If that is the case, what are the reasons? (*Probe: acceptability by the woman, her husband, mother-in-law or others; difficulty in getting to the health facility when pregnant*)
9. Are there people who think that you should be vaccinated? Who are they?
10. Are there other people you know - in your family, or others - who might have concerns about you getting vaccinated? Who are they? What concerns do you think they would have? What about concerns in other people's families?
11. What would make it EASIER for you to be vaccinated?
12. What would make it more difficult for you to be vaccinated?
13. When you come for vaccination with _____ vaccine, what information would you like the health care provider [*use locally-appropriate term*] to give you about this vaccine during the vaccination?
14. If you have concerns, what would you like to hear from the health care provider that could reassure you? (*Probe: what you need to do in case of side effects; reassurance that the vaccine is safe; which illnesses the vaccine can prevent; how many times to get the vaccine.*)

15. Are there other people besides the health care provider from whom you would like to hear about this vaccine?

16. Do you know when and where vaccinations will be given in this area?

- ✓ Invite the participants to pose any questions they choose on the subject of this new vaccine or other vaccines.
- ✓ Thank them and offer them refreshments.

Discussion guide for health workers (vaccinators)

Interviewer says the following.

“My name is ____ and my colleague here (note taker) is _____. We are working with the Ministry of Health to improve the health in the country. Soon, the Ministry of Health is going to start giving a new vaccine, H1N1 flu [*use local language and whatever terminology has become popular for H1N1 flu.*] For that reason, we’d like to ask some questions to get an idea of what you think of this proposal by the Ministry of Health.

Your opinions are very important and can greatly help the Ministry of Health with _____ vaccination. We greatly appreciate your participation in this discussion. The questions and discussions shouldn’t take more than an hour. At the end, we’ll give you something to drink and invite you to ask any questions that you may have about this subject.

[N.B., the following may be refined. Need to find the right balance between providing key information without undermining the following inquiry about their understanding and attitudes about H1N1 and H1N1 vaccination.]

During the past six months or so, a disease called _____ has made people in countries all around the world ill with flu symptoms and has killed some of them. The disease, _____, has been especially dangerous for pregnant women and has killed more of them than other people. Now there is a vaccine for _____ that can prevent people from getting the disease.

The MOH is planning to give _____ vaccine to pregnant women in [*XYZ parts of the country*] because these are the high-risk areas for _____. The MOH will also give the vaccine to health workers in these same areas [*VERIFY*] so that you are also protected from _____ and can continue to provide health care.

You will receive this vaccine a single dose of this vaccine during the month of _____. You will be able to receive it at [*name the location*]. This vaccine is safe and just a single dose is effective in adults. The vaccine will be given by intramuscular injection in the upper arm, so you may feel pain with some swelling and redness at the injection site for a day or two. But the vaccine is effective and safe and is already being used in other countries.

In addition to receiving the vaccine yourself, you will also vaccinate pregnant women by giving them a single dose regardless of their stage of pregnancy. Studies have shown that the vaccine is safe and effective in pregnant women during all stages of pregnancy. Pregnant women in many other countries are already being vaccinated with this vaccine.

There will be a special, one-time only vaccination campaign to vaccinate pregnant women with this vaccine. It will take place during [*give approximate dates.*] Before then, the MOH will train vaccinators on how to handle and administer this vaccine.

At this time, the Ministry of Health would like to know if vaccinators think that there could be any particular problems with this new vaccine— either in receiving it yourselves or in giving it to pregnant women—that can be addressed in planning. It is for this reason that we would like to ask you some questions. Let’s begin. ”

1. *Based on everything you know now, or just your opinion, do you think you will most likely get vaccinated or will probably not get vaccinated? (If not sure, get them to choose “yes” or “no”, even if they are not sure by asking which way they are leaning – yes or no.)*
2. Can you tell us what you have heard about _____[H1N1] disease.
3. As a health care provider who is in contact with sick people, what do you think about your own risks of becoming sick with _____? *(Probe: in what ways would _____ affect you? If you got sick with it, how would it affect your family?)*
4. What have you heard about vaccination against _____ [H1N1]?What advantages do you see to your getting vaccinated against _____?
5. What disadvantages or concerns do you see with getting vaccinated against it?
6. Are there people you know that would approve of your being vaccinated? Who would want you to get vaccinated? Who are they?
7. Are there other people you know - in your family, or others - who might have concerns or disapprove of your getting vaccinated? Who are they? If this is the case, what concerns do you think they would have?
8. What would make it EASIER for you to be vaccinated?
9. What would make it more difficult for you to be vaccinated?
10. Do you think that there could be any problem in administering this vaccine to pregnant women in the manner that I just described? If yes, what are they? Assume that it will be given through a special campaign, not routine ANC or immunization services. *(Probe: women may be reluctant to get vaccinated; added workload; giving information to woman, other...)*
11. What information do you think pregnant women and their families would need about _____ vaccination so that they would be willing to participate in the _____ campaign? What would be
12. Do you think pregnant women or their families might have any reasons for not accepting this new vaccine? If so, in your opinion, what would these concerns be?

13. As a health care provider, how could you respond to these concerns? (*Probe: Would you give them the vaccine anyway? Reassure them that the vaccine is safe? Let them leave without getting vaccinated?*)

14. What type of information would you like to receive during training that would help you to respond to the concerns that parents could have?

[End of interview. Thank the health worker, invite questions, and offer refreshments.]

Interview guide for stakeholders

Note: much of the language and terminology in the following will need to be adapted depending upon the technical background and role of each stakeholder being interviewed. The following is a model for a technical national level stakeholder such as head of a medical or nursing association.

“Our names are ____ and _____. We are working with the Ministry of Health to help prepare for a vaccination campaign against novel H1N1 influenza, sometimes called pandemic flu or swine flu. The campaign is tentatively scheduled to take place in *[name the month]*. To help with the planning and to ensure that the views and concerns of key people are heard, we would like to ask some questions to get an idea of what you think of this proposal by the Ministry of Health.

Your viewpoints are very important and we greatly appreciate your willingness to spend some time talking with us. The discussion shouldn't take more than about half an hour.

As you are probably well aware *[for a medical/health stakeholder at national level]*, during the past six months or so, novel H1N1 influenza has sickened people in more than 100 countries around the world and there is concern that it could become more dangerous over time. Evidence shows that pregnant women are one of the highest risk groups for H1N1 influenza. Health care providers are also at elevated risk because of their potential exposure while caring for the sick people.

There is now a safe and effective vaccine against H1N1 influenza but it is in limited supply globally. The MOH has received a quantity of this vaccine and is planning a one-time only H1N1 influenza vaccination campaign of pregnant women in *[XYZ parts of the country]* because these are the highest-risk areas for the disease. Prior to this, the MOH will also vaccinate health workers in these same areas *[VERIFY]* so that they are protected and so they can continue to care for patients. This campaign is schedule to take place *[give approximate dates]*.

This vaccine is safe and only a single dose is effective in adults. It will be given by intramuscular injection in the upper arm. The side effects of the vaccine are some pain with some swelling and redness at the injection site for a day or two. But studies have demonstrated the vaccine is effective and safe, including during all stages of pregnancy. It is already being used in other countries to vaccinate pregnant women and health care providers.

At this time, the Ministry of Health would like to if key stakeholders have any particular concerns with H1N1 influenza vaccination. If so, then they'd like to address them in planning. This is why we'd like to ask you some questions. Shall we begin?”

1. Could you please tell us what you have heard about H1N1 influenza (“pandemic flu”), both around the world and in this region? What risks do you think it poses to people in this country?
2. What have you heard about the H1N1 influenza vaccine? *(Probe on efficacy and safety, availability.)*

3. What do you think will be the benefits of this vaccine, given how the MOH plans to use it in conducting a campaign to immunize health workers and pregnant women in XYZ parts of the country?
4. Do you have any concerns about this vaccination campaign for health workers and pregnant women in XYZ parts of the country? If so, what are they?
5. For health care providers – doctors, nurses, and others [*to be defined specifically in each country*]*—do you think they will accept to receive this vaccine? What reasons, if any, do you think they would have for not getting vaccinated with it?*
6. For pregnant women, do you think they will accept to receive H1N1 influenza vaccine? What reasons, if any, do you think they or their families would have for not getting vaccinated with it?
7. What types of information do you think pregnant women and their families would need about H1N1 influenza vaccination so that they would be willing to participate in the campaign? From whom should they hear this information--who or what are the most trusted and convincing sources of information for them about vaccination?
8. How could health care providers, such as doctors and nurses, respond to the concerns that pregnant women and their families might raise?
9. What are the best ways to prepare health care providers to be able to respond to the concerns of pregnant women and their families? (Probe: Training? Supervision? Brief technical materials? Seminars or newsletters from professional associations?) [*Note: for interviews with community or religious leaders, the probes may be different.*]
10. Do you have any other comments or points that you would like to make? If not, thank you for your time and attention.