Vaccination against seasonal flu in Switzerland: The indecision of pregnant women encouraged by healthcare professionals

Vaccination contre la grippe saisonnière en Suisse : l’indécision des femmes enceintes entretenu par les professionnels de la santé

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Abstract

Background. – The recommendation for seasonal flu immunization from the second trimester of pregnancy, adopted in summer 2010 in Switzerland, is situated within a social context characterized by reluctance toward some vaccinations, a relatively low vaccination coverage against flu in the general population, and still heated debates fuelled by vaccination campaigns organized around the A(H1N1)pdm09 flu pandemic in winter 2009 to 2010. This study examines Swiss pregnant women’s representations of the risks associated with seasonal flu and its vaccination.

Methods. – Semi-structured interviews were conducted with 29 women, while in the maternity unit in March 2011, 3 to 5 days after giving birth. The interviews addressed the risks associated with flu, modes of protection, motivations for, and obstacles to vaccination.

Results. – The interviewees did not show major preoccupations regarding seasonal flu and they tended to distance themselves from the at-risk status. They did not directly challenge seasonal flu immunization; however, they were reluctant to do it. Their attitudes were supported by their personal experience and the experience of their social networks. Healthcare professionals, particularly medical doctors, gave very little direction, or even did not raise the issue with them.

Conclusions. – Between the rather moderate positions of those who are against vaccination and those who support it, an intermediate grey zone, characterized by hesitation, was observed. Furthermore, the indecision of pregnant women is reinforced by doubts among the persons they are close to and also among the professionals they met during their pregnancy.

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Keywords: Vaccination; Influenza; Pregnancy

Résumé

Position du problème. – La recommandation de vaccination contre la grippe saisonnière à partir du deuxième trimestre de la grossesse, adoptée en été 2010 en Suisse, s’inscrit dans un contexte social marqué par des réticences face à certaines vaccinations, une relativement faible couverture vaccinale contre la grippe en population générale et les débats encore chauds suscités par les campagnes de vaccination mises en place autour de la pandémie A(H1N1)pdm09 en hiver 2009 à 2010. Cette étude porte sur les représentations que se font les femmes enceintes suisses des risques liés à la grippe saisonnière et à sa prévention vaccinale.

Méthodes. – Des entretiens semi-directifs ont été menés avec 29 femmes lors de leur séjour à la maternité en mars 2011, trois à cinq jours après leur accouchement. Ces entretiens ont abordé les risques associés à la maladie, les moyens de protection, les motivations ou obstacles à la vaccination.

Résultats. – Les interviewées ne traitaient pas d’inquiétudes majeures par rapport à la grippe saisonnière et tendent à se distancer du statut de personne à risque. Elles ne mettent pas directement en cause la vaccination contre la grippe saisonnière, mais elles restent peu disposées à la faire.

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1. Introduction

Flu vaccination during pregnancy or in the immediate postpartum period takes place within a social context marked by reluctance to receive certain vaccinations as well as a relatively low vaccine coverage against the flu in the general population. In addition, the debates raised by the vaccination campaigns set up against the A(H1N1)pdm09 flu pandemic during winter 2009 to 2010 left their mark. These different issues may affect the attitudes women have toward seasonal flu vaccination recommendation from the second trimester of pregnancy adopted, in 2010 in Switzerland.

According to the international literature, the ambivalence of some parents toward vaccinations against childhood diseases, in particular the measles, mumps, rubella (MMR) vaccination, is based on different arguments: fears concerning the side effects of the vaccine, the benign character of childhood diseases, individual responsibility in healthcare matters, associated with a healthy lifestyle that is deemed protective, holistic conceptions of health and the body that are incompatible with undertaking vaccination, religious arguments, and criticisms concerning the economic stakes involved in vaccination campaigns serving the interests of pharmaceutical firms [1–6]. It is probable that pregnant women have been exposed to these different points of view, notably if they already have children.

The coverage rates of seasonal flu vaccination remain for the most part low, including in groups defined as being at risk (the elderly, people with chronic diseases) [7]. Among healthcare professionals, substantial variations between countries are observed [8]. Their reluctance intersects with some of the arguments present in parents confronted with childhood vaccinations, such as the disease’s low level of danger, fears relative to the side effects of the vaccine, the vaccine’s lack of efficacy, and personal resistance as a form of protection. Furthermore, healthcare professionals are not sufficiently aware of the fact that in getting vaccinated they protect their patients. Finally, it has been observed that access to vaccination and its being free of charge influence vaccination coverage [8,9].

Vaccination of pregnant women against the flu has been recommended in the United States since 2004 [10]. The vaccination coverage of this population has remained globally low – between 10 and 15% [11]. However, much higher rates were observed in the context of vaccination against A(H1N1)pdm09 during winter 2009 to 2010, locally reaching nearly half of pregnant women [10,11]. One study reported that during winter 2010 to 2011, 49% of the pregnant women interviewed were vaccinated [12]. Worries about the safety of the vaccine for the foetus may be a determining factor for nonvaccination, but the lack of information and the nonavailability of the vaccine were also mentioned [10,11].

In Switzerland, the inclusion in summer 2010 of pregnant women in the recommendations relative to vaccination against seasonal flu followed the development of the A(H1N1)pdm09 pandemic. After the A(H1N1)pdm09 pandemic was declared by the World Health Organization on 11 June 2009, the media widely echoed the US Centers for Disease Control and Prevention of Diseases (CDC) study published at the end of July in The Lancet [13], which related the death of six pregnant women in the United States associated with complications subsequent to A(H1N1)pdm09 flu. In the fall of 2009, the Swiss national authorities, the Office fédéral de la santé publique (Federal Office of Public Health (OFSP)) and the Commission fédérale pour les vaccinations (the Federal Commission for Vaccinations [CFV]), based their conclusions on this study to justify classifying pregnant women in an at-risk category 1, thus warranting A(H1N1)pdm09 vaccination. From the summer of 2010, reaffirming the excess mortality observed in pregnant women and the scientifically demonstrated reliability of the H1N1/H3N2/B trivalent vaccine, the Swiss health authorities generalized the recommendation for vaccination against seasonal flu for this new at-risk group 2.

These guidelines must be viewed within the controversial context generated by vaccination campaigns against the A(H1N1)pdm09 virus. The controversies were notably spread by social networks that discussed the validity of the precautionary principle, the lack of safety of the adjuvanted vaccines, the haste with which the clinical trials were conducted, and finally the profits the pharmaceutical companies enjoyed and the conflicts of interest that may have undermined the health authorities [14,15].

Conducting a survey on the representations that Swiss pregnant women have of the risks related to seasonal flu and its prevention by vaccination is consequently a relatively novel situation. In view of the conjunction of the social reluctance to undergo vaccination and the precautions usually associated with prenatal care, the recommendation for flu vaccination can be expected to raise mitigated reactions. We examine herein the
opinions of the first wave of women in Switzerland defined as a
group at risk for seasonal flu, through a qualitative study based
on semi-directed interviews.

2. Methods

This study investigated the representations of pregnant
women concerning the risks related to flu during pregnancy and
those related to vaccination, integrating the role played by the
social community and healthcare professionals in these
women’s decisions around flu vaccination. It accompanied a
quantitative survey on seasonal flu vaccination of pregnant
women at the Geneva University Hospital [16]. The protocol of
the two components of the study – quantitative and qualitative –
was approved by the institution’s ethics commission. Adding a
qualitative component aimed at a more in-depth analysis of the
reasonings women had and identification of the different
barriers or motivations associated with the decisions made.

Of the 263 women questioned in a standardized format, 29
underwent a semi-directed interview. After having filled out the
questionnaire, they were selected so as to represent a variety of
ages, national origins, and professional activities, while targeting
the women most likely to detail their arguments around the theme
studied. The data were collected in March 2011, while these
women were in the maternity unit, 3 to 5 days after giving birth.

The interview guide was developed by the physicians and
sociologists involved in the study. The main topics of this guide
were defined so as to provide greater detail on the following
subjects: disease risks, means of protection, motivations and
obstacles to vaccination (personal responsibility, the role played
by healthcare professionals, the role of the media as well as
family and friends), and attitudes toward vaccination in general.
These interviews were conducted by two physicians who were
residents in pediatrics within the hospital. The interviews were
fully transcribed and then coded by a sociologist using ATLAS.ti
qualitative analysis software. The results report the main
arguments brought up by the interviewees, with an extract of
a specific interview illustrating a point of view common to
several subjects. Moreover, the analysis favored the description
of the reasoning of the nonvaccinated women, more numerous in
the qualitative study and asked to explain their reluctance. The
motivations of the vaccinated women were more specifically
analyzed in the quantitative component of the study.

3. Results

The respondents were between 19 and 40 years old (mean
34 years). This population included a variety of nationalities and
worked in diverse professions (mail carrier, journalist, shop
assistant, nurse’s aide, etc.). Of the 29 interviewees, five had been
vaccinated against flu. This proportion is close to that observed in
all the women who participated in the study (18%) [16].

3.1. Representations of flu: evaluation of risks and
prevention

Among the 29 women interviewed, different ways of
representing seasonal flu were found. On the one hand, they
considered this illness as dangerous for different types of
population that were a priori weak or vulnerable: they
mentioned, for example, the elderly, children, and people
suffering from chronic diseases and immunity problems.

In some cases, depending on the patient’s age, say his
medical history, if he’s ill, if he has potentially serious
diseases, immunodeficiency, cancer, things like that. It
depends on the patient, but it can be very serious.
Sarah³, 29 years old, not vaccinated.

According to these women, a case of flu treated sufficiently
early had no serious consequences. However, if it was not taken
care of rapidly, the risk of complications and death were
brought up. On the other hand, the women believed that flu was
not a threat for people in good health. They evaluated the risk
according to the person’s health and the risk of complications
that could lead to death. Apparently, the women followed the
health authorities (the WHO and for Switzerland the OFSP/
CFV recommendations) in their classification of persons at risk.

I know that it (the flu) does not seem to be a dangerous
disease if we take things as we should and we follow the
recommendations, but I also know that it seems that for
pregnant women it’s even more risky compared to others.
Lorie, 27 years old, not vaccinated.

Nevertheless, even though they were classified in the same
way as other persons potentially at risk since the
A(H1N1)pdm09 pandemic, they nuanced this inclusion.

We hear that pregnant women are at risk, but I think that
pregnant women who have no health problems won’t have
anything serious because of the flu.
Viviane, 32 years old, not vaccinated.

Considering themselves in good health, the interviewed
women said they did not take specific measures against the flu.
However, they thought that certain lifestyle habits and some
knowledge of hygiene indications guaranteed good health for
them and their family.

It’s true that we have the resources necessary, so we ought to
protect ourselves because there are epidemics. And why do
some people slip through and not others? I think that there
are also ways to take care of oneself, have a healthy lifestyle,
eat well, which make us stronger and more resistant. As for
me, I advocate taking care of oneself and not taking any
chances.
Sarah, 29 years old, not vaccinated.

At the same time, some of the interviewees noted that such
individual measures did not necessarily protect against flu.
Consequently, it was judged acceptable that the flu occur
nonetheless.

Well, if it happens, it happens... after all, we are partly
responsible because if we take the necessary precautions we

³ All names are fictional.
won’t get it. As for me, I think that there are things that are inevitable. That’s life.

Miriame, 26 years old, not vaccinated.

This example illustrates the limits of prevention attributed to lifestyle. On the one hand, the interviewed women felt responsible for their health, i.e., they were careful to take an active part in their own protection against a disease that could potentially affect them. On the other hand, they relativized their ability to act on this front, citing the fatality inherent to life.

Altogether, the interviewees did not demonstrate major worries concerning seasonal flu, but two groups stood out: women who were in good health who did not fear an episode of flu (with a healthy lifestyle) and women who were more worried about possible complications following this illness.

3.2. Representations of risks associated with the flu vaccine

Although the interviewees displayed few attitudes that were frankly resistant to vaccinations, they nonetheless expressed certain fears concerning the effects of the flu vaccination during pregnancy.

All these vaccines, that’s good… I’m not against vaccines. (…) There’s no problem, but… I mean, we know that there’s always a risk. Even if it’s minimal, there’s always a risk.

Marie, 41 years old, not vaccinated.

Some of the women weighed the risk of the illness and the risk related to vaccines:

I think there’s always a risk in taking a medication and when getting vaccinated. But I think that it’s better to be vaccinated than to fall ill.

Claire, 36 years old, not vaccinated.

Others, however, judged that vaccination was not adequate:

For me personally, I don’t know, a flu vaccine is still a vaccine. So I believe that during my pregnancy I don’t really want to run a risk that I judge to be not really… not reasonable in fact.

Marie, 41 years old, not vaccinated.

In the case of certain women, vaccination was not deemed useful. For example, one woman, considering herself healthy and not having caught the flu, claimed:

Why do it if until now I haven’t caught the flu? Why inject things into the body? We don’t really need to.

Violette, 32 years old, not vaccinated.

For others, the market authorization of a vaccine was reassuring. This was insufficient, however, to allay all doubts:

My reasoning is that a vaccine, if it’s put on the market… well, there could be problems later, definitely. I’m not going to get every vaccine that exists, that’s for sure. But on the other hand, it’s like everything else, you can’t really know for sure. Therefore, if they have this now and it’s on the market, maybe it’s better to have it. There are nonetheless vaccines that work, so for my little girl, the mandatory vaccines, of course, and the others I don’t know.

Iris, 19 years old, not vaccinated.

The interviews shed light on the ambivalence of pregnant women confronted with seasonal flu vaccination: they were not ready to clearly oppose this vaccination, but they were unwilling to get vaccinated.

3.3. Role played by family, friends and experience

Pregnant women explained that their opinions were formed collectively, through sharing experiences with the members of their family and friends. Thus, those who had a positive experience of vaccination for themselves and with their family and friends expressed a more favorable opinion on this act. On the contrary, those with a negative experience (getting the flu when vaccinated) had a warier opinion toward this prevention technique. In this perspective, if family and friends had not clearly manifested as being in favor of vaccination, the person may have hesitated before getting vaccinated.

Nobody I know is vaccinated because getting vaccinated may not be what we’re used to doing. Generally speaking, we’re not much in favor of taking medications.

Miriame, 26 years old, not vaccinated.

Personal and family experience around childbirth was also brought up as an argument in making the decision. Knowing that there was a risk of complications during birth had led some to prefer prevention and vaccination to reduce this risk.

I didn’t really plan to get vaccinated at the beginning. But since we got the flu, probably H1N1, at Christmas, which really ran us into the ground, and I knew I was going to have a cesarian (I’d already had two and the last one didn’t go well), I preferred getting vaccinated. I knew that I couldn’t face the operation and that the baby couldn’t wait until I got better, in case I had a fever.

Émilie, 37 years old, vaccinated.

Women who had had a bad experience during their last delivery were more inclined to take preventive measures than those who had never had children or those for whom the flu was not serious.

The workplace is a great echo-chamber where both everyday events and world news are reflected. This is a place where experiences are exchanged and shared among colleagues and where opinions are formed based on the experience of others. Given that the seasonal and pandemic flu vaccination is proposed in a large number of companies, discussions on flu are often raised.

The normal flu? Yes, yes (we talk about it), you could say that there are provaccine people who get vaccinated every year and then try to get everyone worked up about it, and then there are those who say, oh, it’s the flu, you’re not going to go get vaccinated, are you?

Barbara, 31 years old, not vaccinated.
In addition to comparing points of view, the workplace provided concrete observations that fed the reluctance to get vaccinated.

Well, let’s say that there are several colleagues who got the flu vaccination and then got the flu. And that’s really what I mean: what good is getting vaccinated if you get the flu anyway?

Valentine, 34 years old, not vaccinated.

3.4. Role played by healthcare professionals and information on vaccination

Of the 29 people interviewed, few of them were alerted to the dangerousness of seasonal flu and vaccination as a means to protect themselves against this illness by healthcare professionals caring for them during their pregnancy. Often, they were simply not informed by their physician.

We didn’t talk about vaccination with the gynecologist at all. I was so preoccupied by the baby’s growth, a good diet, etc., during the pregnancy. I was filled with all these ideas! So if the doctor doesn’t bring it up, I couldn’t have thought about it.

Claire, 36 years old, not vaccinated.

According to the interviewees, it was the physician, i.e., the person who holds the scientific knowledge, who had the role of informing patients. They could of course make enquiries themselves, but finally it was the physician who should explain the choice of whether or not to get vaccinated.

It’s the responsibility of the doctor or the midwife to say that: if there are dangers, do you want to protect yourself against them?

Pauline, 38 years old, vaccinated.

In addition, the women declared they were very attentive to how a message was transmitted. If the message was clear and delivered with conviction, they said they would follow the recommendations.

If my doctor had told me: if you get it, it could be very dangerous for your baby and for you, I wouldn’t have hesitated a second. That’s what I did throughout my pregnancy, as soon as there was something to do that was good for me or the baby in terms of prevention. And I continue to do it even more.

Sarah, 29 years old, not vaccinated.

In the opposite case, doubt arose in the reception of the message, resulting in the information not being considered important.

She didn’t suggest it (vaccination) while I was doing the exam. Then all of a sudden, when I was walking down the hallway to leave, she tells me: “I don’t know if you would be interested…” and she talks to me a little bit about it in the hallway. I thought, if it had really been serious maybe she should have talked about it right away.

Marielle, 36 years old, not vaccinated.

These reports suggest that during winter 2010 to 2011, doctors’ attitudes showed little commitment with regard to the dangerousness of the flu and the benefits of vaccination, which may have left pregnant women in a state of indecision.

4. Discussion

The issue of seasonal flu and its vaccination raises doubts among pregnant women: they are preoccupied with the dangers of flu and its vaccination during the specific time of pregnancy. They know that they are part of the at-risk population during this time, but at the same time some find it difficult to think of themselves as favored victims of a flu complication, in the same way as other at-risk categories such as the elderly or obese. The tendency to reject this label for oneself was observed for other risks [17,18].

It is therefore understandable that the interviewees reassure themselves after the “pandemic panic” (as one of them expressed it) episode, and as they see it, they return to a “middle course,” even at the cost of a conflict between an overprotective attitude and a careless attitude. Thus, the flu risk is not at the heart of pregnant women’s preoccupations: they are more directly concerned with other risks during prenatal care (chromosomal screening, lifestyle, etc.). Within their discourse, individual responsibility in health matters was emphasized, and flu prevention was integrated into general health and hygiene where common sense was most important, “without exaggeration,” they repeated.

They also had doubts as to the safety of the vaccine, which, even in these women who are a priori favorable to vaccination, cannot be taken for granted. For pregnant women, risk is not assessed exclusively with regard to themselves because their decision could have an impact on the fetus they are carrying.

This population is therefore divided between the worry about making the best decisions for the child, the opinion of the experts following their pregnancy, and the opinions and advice circulating in their social networks. The “tangible evidence” [19], coming from observation within social networks, provides an anchor in a context of uncertainty. Even though the respondents for the most part reaffirmed their confidence in the medical profession, several indices show glimpses of competing information channels. Let us remember the accounts beginning with: “it seems that…,” “you hear that…” rather than reflecting clear professional opinions, which would have removed the doubts as to the risks of flu during pregnancy and the risks of vaccination. Thus, pregnant women surrender to an incessant negotiation between their own experience of the illness, the opinions circulating in their social environment, their rather positive evaluation of the medical authority, and their protective function toward the foetus they are carrying.

Finally, and this is the most striking result of this survey, the variety of medical recommendations that are given to them illustrates a new scene of uncertainty, as if it were up to women to decide on the right choice for themselves, in the sometimes pronounced absence of an unequivocal and sure medical opinion. Yet data collected at the European level have shown
that the public granted healthcare professionals the most trust among all the sources of information relative to the A(H1N1)pdm09 pandemic [20]. In the decisions associated with an evaluation of different risks, having to make a decision autonomously can be a negative experience, as recently observed concerning decisions on the mode of delivery depending on the baby’s presentation [21].

This study includes a certain number of limits. The interviews were conducted in a hospital setting and by physicians. This probably heightened the absence of a strong antivaccination position, since it is likely that the women who opposed vaccination did not accept to be interviewed or relativized their reserves in the situation of an interview with a representative of the medical institution. The postpartum situation was also unfavorable to more in-depth interviews that would have allowed the ambivalence and questions of the respondents to progressively emerge. The qualitative approach adopted aimed to document the diversity of viewpoints and the reasonings within the population studied, an approach explaining the low number of respondents.

In addition, these parturients were interviewed in March 2011, 1 year after the A(H1N1)pdm09 pandemic: in view of the many allusions to “H1N1” coming from the interviews, it is clear that their discourse and their attitudes intermingled seasonal flu and A(H1N1)pdm09 flu. It is therefore difficult to establish with certainty that these pregnant women had clearly grasped the broadening of the recommendation for vaccination to seasonal flu. This difficulty was increased by the fact that the seasonal flu trivalent vaccine used in 2010 to 2011 contained the 2009 pandemic strain. Finally, the questioning remained centered on the protection provided by the vaccination to the mother, while the protection provided to the child was not raised in the study.

5. Conclusion

The interviews allowed us to describe mothers who had confidence in themselves and their baby, showing reluctance to any recourse to medicine that was not indispensable and somewhat suspicious of pharmaceutical firms’ profit-making and testing of vaccines. On the other hand, mothers who were apparently less informed emphasized that they were ready to “do everything that was good” for themselves and their baby, therefore to allow themselves to be persuaded if the vaccine was advised to them. However, one should be wary of concluding prematurely in a battlefront that opposes anti- and provaccine opinions. Thus, the antivaccine individuals are not unaware of the worries associated with the appearance of more contagious and at times more dangerous viral strains (A(H1N1)pdm09), no more than they neglect the duty to the community and to protect themselves against a pandemic. In addition, the provaccine advocates consider that the seasonal flu has widely become standard, but consider that the vaccine does not systematically protect against flu. Between these two nuanced positions can be found a grey zone, a zone of indecision that manifests as hesitating behavior. Consequently, the mothers interviewed bring into play a certain number of actors who can reinforce their representation of the flu risk or better inform them so as to tip the scales in favor of the dangers or the benefits of vaccination. The discussion with close relations, within the family or at the workplace, and the examples gathered among friends all form a first circle of reference. The wide media coverage given to medical news and disseminated through the innumerable social networks make up a second circle. Finally, directly meeting with the authority on the subject (gynecologist, physician, paramedical personnel, the third referential circle, by far the most determinant in the eyes of the pregnant women in this study), reserved a few surprises. What strikes one when reading these women’s accounts is the wide spectrum of medical advice dispensed, which, if not entirely absent, oscillates from positive to negative, passing through expectant attitudes – vaccinate, don’t vaccinate, wait – but, when all is said and done, you must make the decision yourself. In this context, ambivalence seems prevalent both with healthcare professionals and pregnant women.

The healthcare professionals’ knowledge and attitudes, in particular gynecologists who provide the vast majority of prenatal care during pregnancy in Switzerland, toward seasonal flu vaccination would deserve to be studied. Documenting the different reasons that may explain their lack of commitment toward vaccinating pregnant women would make a large contribution to the vaccination promotion campaigns. The results presented herein involve the first season following the recommendation in Switzerland for vaccinating pregnant women against seasonal flu. It is probable that their vaccine coverage will increase over the years, as was the case in the United States, which adopted this measure several years ago [12]. Our study underscores that this would require vaccination promotion campaigns for both healthcare professionals and pregnant women themselves.

Disclosure of interest

The authors declare that they have no conflicts of interest concerning this article.

Appendix A. Supplementary data

Supplementary data associated with this article can be found, in the online version, at: http://dx.doi.org/10.1016/j.resspe.2012.03.008.

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