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Barriers to and facilitators of vaccination in pregnancy: a qualitative study in Northern Ireland, 2017

Anna Maisa (1,2), S Milligan (2), A Quinn (2), D Boulter (2), J Johnston (2),
C Treanor (3), DT Bradley (2)

1. European Programme for Intervention Epidemiology Training (EPIET), European Centre for Disease Prevention and Control (ECDC), Stockholm, Sweden
2. Public Health Agency, Health Protection Service, Belfast, Northern Ireland
3. Centre for Public Health, Queen's University Belfast, Belfast, Northern Ireland



Background

- Influenza during pregnancy may result in serious complications for the mother and baby
- Increase in pertussis infections in infants in the UK in 2011/2012
- Vaccine uptake in pregnancy in Northern Ireland in 2015:
 - 59% for influenza
 - 63% for pertussis



Aim and objectives

Our aim was to investigate the reasons for receiving or not receiving vaccination during pregnancy using a qualitative approach in order to

- describe the **knowledge** and
- investigate the **attitudes and beliefs** of pregnant women about vaccination in pregnancy
- describe possible practical **barriers** of pregnant women getting vaccinated
- identify ways to overcome barriers identified and to **increase vaccine uptake** in pregnancy

Methods

- Developed discussion guide, consent form and participant information sheet within multidisciplinary group & service users
- Commissioned a market research company to recruit participants and facilitate focus groups and in-depth interviews
- Sampling: Opportunistic on-street recruitment of pregnant women
 - Including adult females, >16 weeks pregnant, vaccinated or not vaccinated and resident in Northern Ireland
 - Migrant background for in-depth interview
 - Excluding acquainted persons, participants of focus groups in the past 12 months

Methods

- Phenomenological thematic analysis by two researchers independently via a six-step process using qualitative analysis software
 - Inductive coding of transcripts and comparison for agreement
 - Discussion to agree on key themes derived from the data and allocating codes
- Applying COnsolidated criteria for REporting Qualitative studies (COREQ):
32-item checklist covering research team and reflexivity, study design, analysis and findings

Results

- Data collected from 16 participants in three focus groups and one in-depth interview
- Mixture of age groups, number of children and social grade

	Participants (n)	Vaccinated against influenza and/or pertussis
Focus group 1	6	5 Yes / 1 No
Focus group 2	7	No
Focus group 3	2	Yes
Interview 1	1	Yes

Results

Identified Themes:

- Information and knowledge
- Influence of others
- Acceptance and trust
- Fear and distrust
- Responsibility for the baby
- Accessing vaccinations

Information and knowledge

- Various sources of information (doctors, midwives, family, internet...)
- Active research and comparison of information
- Face-to-face discussions preferred
- Vaccinated were not necessarily more knowledgeable

Speak to us more instead of just giving you a leaflet, because no matter who you see, be it a doctor or a midwife, it's flooded with leaflets, **they are rushed** to get you in and out that door as quickly as possible. ...

[P2-FG3, vaccinated]

Influence of others

- Strong influence of midwives
- Many would get vaccinated if recommended by healthcare professionals

..., my **midwives** weren't pushy or anything towards it. ...They **were quite laid back** about it all, and I think that's what made me laid back about it all. It's like it's **something not compulsory**, it's up to me to have it. No one was forcing me to make the appointments to have it, So **I didn't think that it was very important**, that it was a big deal to go and do it.

[P1-FG2, unvaccinated]

Acceptance and trust

- Passive acceptance of vaccines
- Trust in healthcare professionals
- Lack of continuity of care
- “ignorance is bliss”

Sure the baby gets vaccinated anyway. So if you are going to have your child vaccinated does it matter if it's during pregnancy or not? **If it is that big of a risk, then they wouldn't offer it you.**

[P7-FG2, unvaccinated]

Fear and distrust

- Fear of pain and early side effects (vaccinated participants)
- Concern about unknown longer-term consequences of the vaccine (unvaccinated participants)
- “Nature is best”
- Anti-vaccination views

I think I am inclined that if I definitely had to have a vaccination, then I wouldn't take it during pregnancy. **The chances of the baby being infected by the things in there**, the levels of mercury and aluminium, if that's ingested and the baby is going through a key development early on, it can affect their kidneys, liver, organs.

[P5-FG2, unvaccinated]

Responsibility for the baby

- Being protective
- More important to vaccinate the baby than themselves
- Unvaccinated participants were concerned about protecting the baby from a vaccine they considered to be potentially harmful

That's why I went for it, because I had listened to so much information, and my gut was telling me so. **Because of the baby inside me**, I couldn't take the risk of anything happening and then me blaming myself, ... And I didn't really want to know anything else about it, because too much information was going to confuse me.

[P3-FG1, vaccinated]

Accessing vaccination

- Most experienced no difficulties accessing vaccination
- Vaccination has not been offered
- Appointment has not been booked
- Inconvenience of attending GP for vaccination
- Lack of time, time off work, difficulty accessing childcare, responsibility of organising appointments

Like with me, I am just really lazy with these kinds of things. Like people say that you need to put an appointment on, but they don't push you, Like, I never really got round to making it the first time, so **what difference does it make this time?**

[P3-FG2, unvaccinated]

Discussion

Barriers

- Own responsibility to book appointment
- Inconvenient to attend GP
- Lack of time
- Time off work
- Access to childcare
- Concerns about side effects of vaccines

Facilitators

- Offer vaccination and appointments
- Checklist and reminders
- Emphasise recommendation
- Explain and discuss vaccination
- Vital influential role of healthcare professionals
- Involve midwives

→ Strategies to develop interventions should address some of these barriers to meet the needs of pregnant women

Limitations

- Small study size due to limited funding and timescales
- Participants from a small geographical area around Belfast
- Inclusion of an unvaccinated participant in one of the vaccinated groups might have influenced other participants
- We cannot be confident that data saturation was reached with respect to the views of immigrant women as only one woman was interviewed

Conclusion

Our study highlights:

- the critical role of healthcare professionals, especially midwives, in recommending vaccination in pregnancy
 - the willingness of many unvaccinated women to be vaccinated
 - the need for a better approach to vaccination reminders, appointments and delivery
- As a result of this study, we are exploring new approaches to vaccines being delivered by midwives in routine antenatal care appointments
- We are conducting a quantitative study of the factors associated with vaccination in pregnancy

Sources of funding

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Ethical approval

Research ethics approval was obtained from the NHS Health Research Authority, West Midlands - Coventry & Warwickshire Research Ethics Committee (REC reference number 17/WM/0076) through its proportionate review process.

Conflicts of Interest

None