Perceptions of preconception counselling among women planning a pregnancy: a qualitative study

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Received 26 May 2012; Revised 21 October 2012; Accepted 25 October 2012.

Background. Preconception care is a promising new approach to improve the health of future children through primary intervention. Although most women have a positive attitude towards preconception care, women often do not seek preconception care for themselves.

Objective. To explore women’s hesitancy to seek preconception counselling.

Methods. An empirical–analytic approach was used to explore women’s hesitation to seek preconception counselling. In-depth, semi-structured, face-to-face interviews (\(n = 16\)) of women desiring to conceive were conducted, and responses were analysed using the determinants ‘attitude’ and ‘subjective norms’ of the Theory of Planned Behaviour of Ajzen.

Results. The interviewed women expressed a positive attitude towards preconception care in general but were hesitant about seeking preconception care themselves. Women seemed to regard themselves as not being in the target group for preconception care. Additionally, we identified the following four subthemes of subjective norms around the process of becoming pregnant: planning, publicity, information on fertility and artificiality.

Conclusions. Women do not consider themselves to be part of the target group for preconception care. In some aspects, subjective norms around the process of becoming pregnant may conflict with the current practice of preconception care. Recommendations are provided.

Keywords. Medical ethics, preconception counselling, qualitative research, subjective norms, Theory of Planned Behaviour.

Introduction

Preconception care is a promising new approach to improve the health of future children through primary intervention. Antenatal care generally starts after the 12th week of pregnancy; this practice does not account for the importance of the preconception health of prospective parents and it neglects the first gestational weeks, during which key embryonic growth and development occur and which may be associated with adverse effects on the future child.\textsuperscript{1–3} Preconception care is the best way to ensure appropriate action and avoid risks in early pregnancy. General preconception care is directed at all prospective parents and takes place in primary care (general practitioner or midwife level). It entails risk assessment, health promotion, counselling and, if indicated, referral to a specialist (specialized preconception care). Although the primary goal is to promote better reproductive outcomes during this window of opportunity, the changes induced by preconception care are also usually beneficial to the woman’s health. Furthermore, preconception care aims to improve couples’ informed decision-making by providing information on reproductive options.

The Health Council of the Netherlands\textsuperscript{4} advised the integration of general preconception care into the primary health care system, emphasizing the importance of providing preconception care in a single package to guarantee that no component is neglected. In 2007, the city of Rotterdam conducted a pilot study; through public campaigns, future parents were encouraged to complete a pre-pregnancy checklist on the Internet (www.zwangerwijzer.nl) and to send the results to a care provider.\textsuperscript{5,6} These trained professionals perform additional risk assessment to verify certain items and to further explore identified risk factors, if needed, and the
caregiver (usually the midwife or general practitioner) then uses this information to provide preconception advice and other health promotion information. During the public campaign in Rotterdam, use of the Zwangerwijzer website increased by 250%. However, the number of preconception care consultations did not increase. It seems that couples are interested in preconception information but are reluctant to take the follow-up step to consult a professional.

Two other studies found similar hesitance to engage in preconception care consultation. Delissaint and McKyer systematically reviewed literature, focusing on factors related to preconception health behaviours; they found that knowledge, awareness and belief in the benefits of preconception care do not lead to preconception health practice. Frey and Files investigated women’s attitudes regarding preconception care and concluded that the majority of women understood the importance of preconception care but did not discuss these issues with their physician. A study of a low-income Mexican American female population found that although almost all study participants acknowledged the importance of optimizing the health of the mother prior to pregnancy, approximately 60% never consulted a physician before conception.

We identified one qualitative study that investigated why women do not participate in preconception counselling. Three main determinants were distinguished, which explain why women did not accept the invitation for preconception counselling: perceived sufficient knowledge, perceived lack of risk and misunderstanding of the aim of preconception care. However, this study only included women who rejected an invitation from their general practitioner. It remains unclear what women think of preconception care in general and how they envisage preconception care in their personal situation; there seems to be a contradiction between these perspectives. In the present study, we aimed to explain this contradiction by analysing women’s attitudes and norms with respect to the preconception period and preconception consultation. Because preconception care may improve the health of future children as well as the prospective parents’ informed decision-making, it is important that couples wishing to conceive seek consultation. Recommendations for implementation of preconception care consultations in primary health care are provided.

Methods

Population
In total, 16 women considering a pregnancy were interviewed. As it is difficult to reach women who are planning a pregnancy, we used a variety of methods to recruit women for this explorative study: we recruited through the Internet [www.zwangerwijzer.nl; (Z1–Z11)], via a network of ethnic minority women (D1–D3) and by use of snowball recruitment (T1, T2). Women were not approached individually—they responded to a general invitation. We strived to include an ethnically and socio-economically diverse group of women of various ages, for purposes of exploration, not comparison. The 16 interviewees were between 22 and 39 years of age (mean = 32.8 years). Education was classified as follows: low (3 women), elementary school or lower vocational education; medium (3 women), secondary and medium vocational education; and high (10 women), higher secondary or vocational education. Women’s ethnicities were determined by the country of birth of their parents: Dutch (12 women), Moroccan (2 women) and Surinamese (2 women). All personal identifiers were removed or disguised, such that the persons described are not identifiable and cannot be identified through the details of this report.

Interviews
Information about the research project and interview procedure was provided over the telephone and again face-to-face before the interview. All women agreed to participate.

One interviewer (BZ, medical ethicist and experienced interviewer) conducted in-depth, semi-structured, face-to-face interviews with women planning a pregnancy, to explore their perceptions towards preconception care consultation. The interviews were structured around two key questions:

• Could you please elaborate on your wish for pregnancy?
• What are your thoughts about pre-pregnancy consultation?

The interview duration varied from 45 to 90 minutes. All interviews were recorded and transcribed verbatim.

Data analysis
A thematic approach was used to analyse the data. After becoming familiar with the data by reading and rereading them, researchers BZ and SD (experienced researcher) coded the data separately, by applying and continuously adjusting brief verbal descriptions to small chunks of data. Coding was open and thus not driven by a pre-existing framework. Codings were compared, and together, BZ and SD identified themes that integrated sets of these codings; ultimately, data were divided into categories of ‘attitude’ and ‘subjective norms’. The identification of themes was driven by the Theory of Planned Behaviour, a model that predicts the intention for behavioural change—defined in this study as ‘seeking preconception care consultation’. Behaviour is determined by actual behaviour control and intention. The intention is determined by the attitude towards the behaviour, subjective norms and perceived behaviour.
control (Figure 1). Because preconception consultation in the Netherlands is still in an experimental phase, we focused on attitude and subjective norms to explain women’s hesitation to make a preconception care visit. Data were coded as ‘attitudes’ when they related to women’s perceptions of whether and why they thought preconception care to be useful, in general or for themselves.

The original model specifies the determinant ‘subjective norms’ as ‘norms of important others’ and the motivation to comply with those norms. It is suggested that ‘in certain contexts, we need to consider not only social pressures but also personal feelings of moral obligation or responsibility to perform, or refuse to perform, a certain behaviour’.13 The process of conception undoubtedly represents such a context; women have strong personal norms about how the process of getting pregnant should be. Therefore, we categorized the data as ‘subjective norms’ when they were related to women’s personal norms. We did not investigate subjective norms of important others.

After categorization of the data into ‘attitude’ and ‘subjective norms’, four subthemes were identified relating to women’s perceptions of becoming pregnant in relation to preconception care: planning, publicity, information on fertility and artificiality.

Representative quotations were chosen to demonstrate the (sub)themes identified; these are presented in the results section, each followed by a participant number.

Results

Attitude

Attitudes towards preconception care consultation were overall positive. However, the attitude changed when women envisaged preconception care in their personal situation, with a majority responding negatively regarding whether they would consider seeking preconception care consultation.

Respondent: It seems to me that such a counselling is a very good initiative.

Interviewer: And would you yourself consider a visit?

Respondent: Well… no. (D1)

For several reasons, the women in this study seem to regard themselves as not belonging to the target group for preconception care. They mentioned that they had already found the relevant information in books or on the Internet and that they had conducted their own risk analysis and concluded that they were ‘safe’ or that they could handle the risks. For some, it was not their first child and they perceived themselves as experienced mothers, not needing any further advice.

On the one hand, I think that I know enough about potential risks. On the other hand, I think that we don’t run a risk; there are, for example, no strange diseases in our family. […] It is kind of being arrogant: I just think that there are no things that I need to ask about, that I know what I need to know. (Z5)

Another belief that determined this attitude was the frequently mentioned misunderstanding that preconception care consultation is directed at couples with fertility problems instead of all couples with a pregnancy wish.

I think that it is useful that there exists something like a pre-pregnancy consultation. I used to believe, however, that it is meant for people who tried to,

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**Figure 1** Theory of planned behaviour
but did not succeed in becoming pregnant. When I read about it, I thought about mentioning it to two friends who are trying to get pregnant with IVF. (Z5)

**Subjective norms**

**Planning.** An important requirement for preconception consultation is a planned pregnancy, which is made possible by contraceptive use. Women acknowledged that planning is an important benefit of contraception; however, they also recognized it as a drawback because it is hard to decide when to stop using it and start trying to get pregnant.

Nowadays, we need to plan everything. Actually, the first charm fades away. On the other side, I am so glad that we have the opportunity to plan. You must plan; everyone is using contraceptives. If pregnancy overcomes you, you don't have a choice. But I must decide. I kept postponing that decision: not right now. (T1)

That decision appears to be very difficult. Most women expressed that they had always wished to get pregnant at some point in time but had difficulties in deciding when the right time had come. The majority of respondents referred to their age when explaining the moment they chose to start trying to get pregnant.

When my pregnancy wish started? It started with the idea: I can't wait any longer, then I'll be too old, it's now or never. (Z11)

Preconception counselling was perceived as having two-sided effects on this ambivalence regarding pregnancy planning. On the one hand, preconception care confirms the planned character of the pregnancy. On the other hand, preconception care could be considered a moment of reflection: women (and their partners) could discuss their decisions regarding whether and when to attempt a pregnancy with a health care expert.

I think that many women doubt for years: shall I or shall I not? I think that many of them would need some guidance. (Z2)

**Publicity.** Respondents reported that they wanted to keep it a secret when they decided to try to get pregnant, out of fear that they may not become pregnant and that it then will be painful and annoying if others inquire about it. Some women reported that they do not want to create expectations they will not be able to meet. Another reason women stated for keeping it a secret is that they, as a couple, prefer to have a ‘pact of intimacy’.

I want to protect my husband and myself: we might not become pregnant. I don't want my friends to call me monthly to inquire about my monthlies. In the process of getting pregnant I don't want too much fuss, to prevent disappointments. Please, leave us alone. I don't want to feel any pressure. We want to be together in the cocoon of getting pregnant. (T2)

I think it is nice to keep it a secret, because it is our secret, of the two of us. (Z8)

Preconception care was sometimes assumed to be a barrier, because it could endanger the secret. In this regard, not all locations were considered appropriate for preconception care consultation. For example, one woman felt positively about visiting a health care professional but was afraid of meeting an acquaintance by chance when entering or leaving the midwifes clinic.

When you visit a getting-pregnant clinic, you want to have some privacy. Imagine a woman leaving the midwives clinic and then meeting a neighbour. That neighbour asks: “Oh? Are you pregnant?” And that woman has to reply: “No… I visited a clinic for people who wish to get pregnant.” I would not like that very much. (Z1)

For some women, another threat to the intimate pact is a lifestyle change that could ‘betray’ the wish to become pregnant or an actual pregnancy. Some reported feeling social pressure to consume alcohol because, when they don’t, they immediately are ‘caught’.

Obviously, it is very hard when you want to live according to the ‘rules’ while not being pregnant yet. When you usually drink a glass of wine with your friends and suddenly you stop doing so… that makes you at least suspected. (Z3)

However, most women expected that the secret would be kept, ‘despite’ seeking preconception care consultation, because the medical expert is bound to professional confidentiality. Many women appreciated information and advice from a health care professional because it is perceived as reliable and desirable.

There is so much information on the Internet, what can I trust? Some sites are reliable. But I prefer getting that information from a professional and face-to-face. (Z6)

In some cases, women were disappointed or upset when a general practitioner did not further inquire when they visited him to remove the coil or that a gynaecologist did not mention being overweight as a cause of infertility.

**Information on fertility.** Of course, women strive for healthy pregnancies and healthy children; but for many, their foremost concern was about their fertility.

I would like to be told how incredibly fertile I am. Many of my female friends fear for infertility. They
are afraid that they won’t be able to get any children. (T2)

Some women stated that they would have liked information on their menstrual cycle and fertility.

I remember that I decided to get pregnant and that I was convinced that I would hit the mark immediately. Later on, I learned that there are only a couple of days in which having intercourse could actually lead to a pregnancy. (D3)

One woman even considered information on fertility as the most important component of preconception care.

One doesn't need a letter from the lottery on ‘how to spend a million’. One needs to be informed on ‘how to become a millionaire’. (T2)

Artificiality. Many respondents mentioned that their pregnancy and the process of getting pregnant should be ‘romantic’ or ‘natural’. However, when probing somewhat further, most respondents reported using a variety of ovulation tests.

It sounds ridiculous, but I have been using these tests to check whether I ovulate or not. I bought loads of ovulation tests. Well, my cycle is fine. (Z9)

Still, they perceive ‘natural’ and ‘romantic’ as important values that preferably should accompany the process of getting pregnant.

I think that a pre-pregnancy clinic takes away the intimate and magic sphere, by visiting a doctor and saying: “Hi, we want to get pregnant.” I think that it constitutes a huge barrier. (Z3)

Although some women expressed concern that visiting a preconception clinic could endanger the ‘natural’ and ‘romantic’ aspects of getting pregnant, a preconception care clinic was not necessarily perceived as unnatural or unromantic.

The clinic is still natural; they just provide information. One is, so to speak, not having intercourse on the doctor’s desk. (D3)

One woman even considered preconception care as a way to avoid entering into the medical realm.

If I want to know something, I want to get the information right from the expert, without having to go into the medical merry-go-around. I consider that as an important benefit. (Z8)

Discussion

We analysed data relating to women's perceptions of preconception care and of the process of becoming pregnant. Our findings affirm those of previous studies, that women are hesitant to seek preconception care themselves even if they have a positive attitude towards preconception care in general. Although they were considering a pregnancy and hence were members of the target group, the women in the present study did not regard themselves as belonging to the target group for preconception care. Like Hosli et al., we found three reasons for this: perceived sufficient knowledge, perceived lack of risk and misunderstanding of the aim of preconception care. Furthermore, our study analysed women's personal norms relating to the process of becoming pregnant in relation to preconception care, which provided additional insight into women's hesitance to seek preconception care. We identified four themes as being important to women when considering the process of becoming pregnant in relation to preconception care: planning, publicity, information on fertility and artificiality. Our results suggest that women's perceptions of how the process of becoming pregnant should be are sometimes in conflict with the current organization and delivery of preconception care.

Strengths and limitations

The studied population was small but diverse with regard to ethnicity, education and age; thus, we believe that this in-depth investigation provides relevant new insights. All interviews took place in the Netherlands and some perceptions explored (e.g. ‘artificiality’) could be typically Dutch. Furthermore, the situation in the Netherlands is different from that in many other countries, e.g. with respect to the percentage of planned pregnancies (85% in the Netherlands compared to less than 50% in the USA). This should be taken into account when comparing findings among countries. Another limitation of this study is that the subjective norms of important others are not explored, only women’s personal norms; the subjective norms of partners should also be included. In this study and in many others, the men’s role has not been investigated, although preconception care provides the opportunity to include prospective fathers. We are currently performing a study to investigate men’s perceptions on fatherhood and preconception care.

Conclusions

Summary and recommendations

This study provides insight into Dutch women’s hesitance to seek preconception care consultation even if their general attitude towards preconception care is positive. First, women seem to consider themselves to not be part of the target group for preconception care. Furthermore, women’s perceptions on how the process of becoming pregnant should be are sometimes in conflict with the current practice of preconception care.
We provide some recommendations based on our analysis:

- Awareness should be created of the target groups for preconception care consultation: all couples may benefit from it, not just couples who are known to be at increased risk or who are having fertility problems, as women tend to think.
- Preconception care should be offered in neutral locations, e.g. at the general practitioner or health care centre. Organized home visits could be an alternative and additional approach.
- It should be considered that the content of preconception care be extended to include the opportunity to discuss the choice of pregnancy and how to decide when to start trying to get pregnant.
- It should be considered that preconception care be extended to include information on fertility, for example, information about the menstrual cycle and fertile days.
- Practitioners should be aware of the values and ideas of ‘naturalness’ and ‘romance’ that women consider to be important in the process of becoming pregnant.

Personal identifiers
We confirm that all personal identifiers have been removed or disguised so that the persons described are not identifiable and cannot be identified through the details of the story.

Acknowledgements
We wish to thank professor MK Moos for consultation on this project and for her useful and extensive comments on a previous draft of this article. We would like to thank the respondents for sharing their stories.

Declaration
Funding: The Netherlands Organization of Health Research and Development [63300024].

Ethical approval: According to Dutch law, no institutional review board approval is needed for this type of study. All respondents were adequately informed about the study details before participating, and all agreed to participate.

Conflict of interest: none.

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