Original Article

Young women's views of receiving information about the consequences of delayed childbearing: A qualitative study

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Abstract

Objective: The objective of this study was to explore young women's views about receiving information on the consequences of delaying childbearing.

Design: The study design was qualitative, focus group (FG) discussions.

Setting: This study was conducted at the Sexual and Reproductive Health Clinic in Aberdeen.

Participants: The study participants were young women (18–25 years of age) attending the Sexual and Reproductive Health Clinic.

Methods: Two focus groups with a total of 14 women, semi-structured interviews conducted.

Main Outcome Measures: The main outcome measures were young women's perceptions of receiving information about delayed childbearing.

Results: A range of factors impacting on childbearing decisions were identified ranging from personal circumstances such as financial and relationship stability to broader societal and cultural expectations. Social stigma associated with having children in the early twenties was found to be an important factor preventing women from having children earlier, even if they wanted to. All participants indicated a need for greater provision of information on the reproductive consequences of delayed pregnancy enabling them to make informed decisions about motherhood. There was consensus among participants that information should be provided in secondary schools as a part of the national curriculum, to both genders, in a nonthreatening and objective way.

Conclusions: There is a need to provide young women with fertility information. Further research is required to determine how this information could be incorporated as part of the national curriculum, without diluting the message of teenage pregnancy.

Key Words: Advanced age, education, fertility, information, pregnancy, qualitative study, stigma

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INTRODUCTION

Statistics from around the globe have shown substantial shifts in the demographic patterns of motherhood in recent decades; modern women are choosing to delay childbearing, often until an advanced reproductive age.[1,2] The average age of motherhood in the UK has increased with similar trends true of both local and worldwide populations.[1-3] Furthermore, increasing proportions of women are bearing their first child aged > 35.[4,5] Reproductive capacity has not kept pace with

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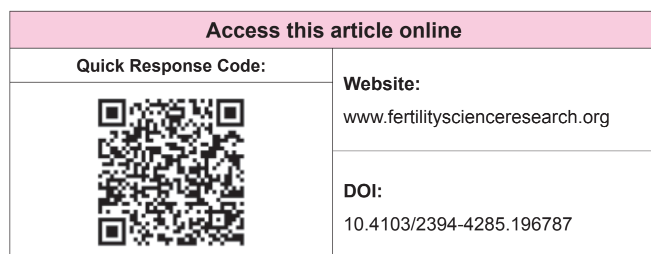

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biological longevity; a woman's fertility begins declining in the third decade and decreases sharply after 35 years, due to the process of "ovarian aging."[6] This has major consequences for both spontaneous and assisted reproduction.[6,7]

Research has consistently shown that pregnancy at an advanced reproductive age (generally accepted as age >35) carries higher complication rates for both mother and child, such as miscarriage, chromosomal abnormalities, and preterm birth, with higher costs, particularly in women over the age of 40.[8,9]

In addition to the immediate health and health-care costs, delaying pregnancy has long-term societal consequences. Women who postpone motherhood often have smaller families overall, and are more likely to be involuntarily childless.[10] The increasing numbers pursuing this route have become apparent in several European countries which now have a fertility rate below the optimum replacement level.[10,11] This has resulted in an unfavorable dependency ratio with more pensioners than young tax payers, an economically unsustainable situation. The effects of this shift in reproductive behavior may not be immediately noticeable, but will have far-reaching consequences including smaller pensions and longer working lives.

Multiple studies have investigated women's knowledge and attitudes surrounding their own fertility.[12-18] These studies have shown that although the majority of women are aware of the reproductive consequences of delaying pregnancy, as well as the increased risks of pregnancy later in life, many have an overly optimistic view of the success rates associated with assisted conception for women of an advanced reproductive age, and the majority of women are unaware that female age is the main determinant in the chances of a successful conception, even when using fertility services.[12,16] These studies have also highlighted the need for preemptive action, suggesting that women should be provided with information in their early twenties about the consequences of delaying childbearing so that they can make informed choices.[19-21] However, this information is not routinely provided, as there is much uncertainty about what information should be provided about the consequences of delayed childbearing and its effects, who should deliver this information, as well as when and where this information should be provided.

Against this background, the focus of our study was to investigate what young women's views are toward delaying motherhood, the optimal way by which information related to this should be provided and how young women will respond to the information provided. We explored young women's perceptions of receiving information on the consequences of delayed pregnancy using focus group (FG) discussions. This is the most appropriate method for exploring people's views and experiences, particularly where little is known about a subject or topic area.[22,23]

METHODS

Recruitment

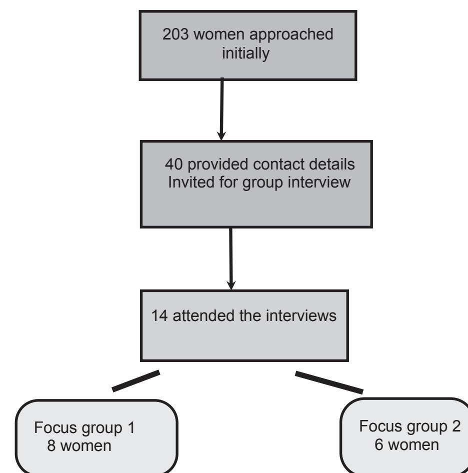
A purposive homogeneous sampling was used to recruit women aged between 18 and 25 years from sexual health drop-in clinics in Aberdeen. Women attending for matters related to the termination of pregnancy were not approached. Women who supplied their name and contact details were then contacted to arrange a date and time for the FG [Figure 1]. The option of an individual interview was also offered to those who did not wish to take part in a group discussion, but no one opted for this.

Data collection

Two FGs were conducted between February and March 2013, with a total of 14 women. Eight women contributed to "FG1" and six to "FG2."

Facilitators conducted semi-structured interviews using a topic guide to facilitate the discussions and ensure consistency of questions across the two FGs, while allowing flexibility for participants to raise issues themselves. Questions were aimed at exploring the women's awareness and knowledge of delayed childbearing and its effects, as well as exploring their views on whether information should be provided about the consequences of delaying pregnancy, how and when this could be provided, and whether they felt this information provision would have an effect on their future childbearing decision-making.

After the initial discussion, participants were provided with written facts on pregnancy success rates at various ages (taken from national data) and were asked to comment on the content.



Gjhvsf!2; Recruitment of study participants

Data analysis

Discussions were audio-recorded and transcribed verbatim, checked for accuracy, and identifying information removed for anonymization. The transcripts were analyzed thematically using a constant comparative approach. This involved comparing emerging themes and codes across the dataset. The analysis was inductive (moving from observation to hypotheses) and was facilitated by a computerized qualitative data analysis package (Nvivo 9).[24] Descriptive accounts were produced by EF and discussed with AM.

RESULTS

Participants ranged in age from 18 to 25 years, 13 participants were current university students and one was in full-time work. Findings are presented according to four main thematic categories: (1) Awareness and knowledge; (2) factors shaping childbearing decisions; (3) information provision; (4) perceptions after receiving fertility information.

Awareness and knowledge

About the topic

All participants were aware that increasing number of women are delaying motherhood; however, a large range existed between what participants perceived as "late childbearing;" some felt that age 35 was "getting late" whereas for others 45 constituted as late. Although there was a basic awareness of their fertility declining with age, there was an uncertainty about when this decline began, though some had an idea of when but lacked certainty about the facts. There was a consensus that pregnancy at an older age had higher risks of complications. Some perceived that good health and good fertility were closely linked, and fertility is largely controlled by their lifestyle, with factors such as obesity and alcohol being of potential detriments to it. It seemed that the media was both effective and counterproductive for this issue. There was a consensus that documentaries on television (TV) had raised fertility awareness, and both groups agreed that this could be a source of providing fertility education to young people.

About the fertility treatments

In vitro fertilization (IVF) seemed to be the fertility treatment that women in both groups were most familiar with. However, little seemed to be known about IVF, and even less about other forms of fertility assistance.

There was much uncertainty about the costs of IVF and whether or not the NHS subsidized treatment. However, a number of participants were aware that a cycle costs approximately £3000.

Factors shaping childbearing decisions

There were a number of factors that both groups considered to be important in influencing their childbearing decisions [Table 1].

Changing priorities

Higher education and establishing careers were described as the important factors shaping decisions to delay pregnancy. Participants expressed strong feelings about having plans and priorities while they were "young," such as "living life with little responsibility," and that motherhood was something that would be a priority "later." Many participants agreed that balancing a career with a child was perceived to be very problematic, and most felt that balancing a child with career was not possible, with several participants perceiving "motherhood as the end of their career."

Some participants suggested that the increased opportunities now perceived to be available to women were due to the ability to delay motherhood resulting from the availability of contraception. This also brought in the idea of women having increased control over their own lives.

Some women perceived childbearing as "somewhat out with their control;" they felt that despite their plans, other factors in life may intervene and childbearing could be "something put off until a more convenient time."

Cultural and societal expectations

Expectations of society and parents for their children to go to a university and establish a career were viewed as important; for a young woman to become pregnant relatively soon after attending university was perceived potentially as a "waste" of education and money from the perspective of parents and society.

The changing gender roles, particularly of women over the last few decades, and the opportunities and choices now available compared to their perceived historic role were also important issues to a number of participants. In the past, women were perceived as domestic homemakers and mothers, whereas now women perceive themselves to achieve many things on top of these roles. Both groups commented on how society had changed the age of perceived independence; they expressed that "university seemed to extend the teenage years," and slow down the rate of independence and maturity. This increased age of independence leads to women feeling "too young" and not mature enough to begin a family.

Personal circumstance in childbearing years

Participants felt that a number of personal factors significantly shaped their decisions about motherhood.

Table 1: Factors shaping childbearing decisions

Theme 1 - changing priorities	Theme 2 - cultural and societal expectations	Theme 3 - personal circumstances	Theme 4 - information from school	Theme 5 - stigma of being younger or older mum
Higher education More opportunities for career development Difficulty in balancing career and child Increased control over their own lives Easy availability of contraception to delay motherhood	Higher expectations from parents and society to establish careers Changing image and role of women Shift in the perceived number of years of independence Changed perception of maturity	Readiness for motherhood Relationship and financial security prior to conception Preservation of physical appearance	Predominant message of contraception use and avoiding pregnancy in teenage years Lack of information regarding the optimum time for conception Variation in the level of sex education provided in different schools	Widely prevalent at all levels (society, school, peers) Younger mothers perceived as having low intelligence Older mothers perceived as self-centered

Personal "readiness," the time at which a woman feels she is "ready" for motherhood, was a factor implicated by both groups. Women felt that motherhood is a very personal decision, and no one should be told to have a child before they feel physically, psychologically, and financially ready.

All participants agreed that "financial and relationship security" was the vital factor in shaping childbearing decisions. Participants also perceived children to be extremely expensive, and felt it would not be until they were older with a secure career in place that they would be in a position to support a child.

"Preservation of physical appearance" was a topic briefly mentioned by some participants in FG1. They felt that losing control on how their body looks could be a factor in young women delaying pregnancy until their later years.

Information received from schools

There were strong opinions from both groups on the influence of the school message on childbearing intentions; they felt that school had provided them with a very strong message, promoting contraception and condemning teenage pregnancy. Neither group felt that school had provided them with information on when was the optimum time to consider pregnancy. Participants also discovered large discrepancies between schools' provision of sex education; some seemed to have received a thorough education, whereas others did not have enough information on it.

Stigma associated with younger and older mothers

Participants unanimously agreed that stigma was a problem for both young and older mothers. Stigma seemed to be perceived as coming from society, school, and even their peers, and the stigma of being perceived as a "teen mum" had now been extended to those having children in their early twenties:

"You read the papers and magazines… if you're below the age of 25, you're kind of stigmatized as a 'teen mum', even though you're not" - L2; FG2

"(Stigma) comes from other people the same age, like people that are at uni … see someone their age having a child; they're judgmental about it …" - C; FG2?

They felt that mums in their early twenties are stigmatized as having little education and low intelligence:

"You do assume that when you see someone like an 18 year old… with a kid that 'Oh, they don't have education, they are probably not that smart"' - L; FG1

"When I see women… that have children like really young, it's just like a stereotype that's tagged onto them… I don't think like people want that stereotype, they don't want to be seen as… a teenage mum who looks like she's got no education, nothing going for her" - KA; FG1

There was also stigma surrounding older mothers, as they could be perceived as "selfish" or unable to meet the physical or emotional needs of childbearing.

One woman felt that with increasing frequency, motherhood at an older age would become less stigmatized and that with advancing health care leading to longer average life spans, women having children at an older age was acceptable.

Information provision

Participants were asked to discuss their views about how information provision on delayed childbearing could be optimized in terms of what should be provided (if anything), where, when, how, and by whom [Table 2].

Should information be provided?

The majority of women felt that fertility education should be provided to them. There were a number of different reasons behind the need for information, but the ability to make "informed" choices was particularly important.

However, a small number of women felt that fertility education did not need to be provided, since everyone has the opportunity

Table 2: Information provision, excerpts from the data representing some responses

Questions	Responses
Should information be provided	*"I think you have a right to know… if you get to a point where they say "Oh you can't have children"… and they tell you that you might have had a chance back then, then they'd be like 'Well why didn't someone tell me?' so they have to know"* – Li; FG2
Nature of information to be provided	*"Contraception is shoved in your face and getting pregnant is seen as a terrible thing, so they could make it a bit more of a positive or even just neutral… It should be just put straightforward like that; it shouldn't be influenced either way. They should just be telling you about it and then leaving you to make your own mind up about it"* – R; FG1 *"You have to find a way of telling people without telling them"* – Ln; FG2
How should it be provided?	Websites *"It would be nice to get one concise website where you could get information about age-related problems when it comes to pregnancy"* – L; FG1 Leaflets, public spaces *"It's too personal a subject to be advertised just anywhere"* – KA; FG1 *"I was also thinking, public toilets… Which is obviously a personal place where no one is going to see you picking up the leaflet"* – H; FG1 Leaflets, health-care setting "*Women have to go for a smear every 3 years and you get a postal leaflet, there could be just another extra slip that gives which gives a link to the website, where you can get your information"* – M; FG1 Mobile apps and social networking websites *"You have to be sensitive, it's not really sensitive to anyone if it's just on Facebook"* – Ln; FG2 Pill packet warnings *"That's quite a good idea, because the first time I got the pill I did read the entire instructions… I think that's a really good idea"* – F; FG2 Communicating with health-care professionals *"Maybe if you're asking for the pill…if you go for any contraception, anything to do with having a child, maybe the doctor could say"* – Li; FG2
When should it be provided?	Age "I think the smear test is a good time to start introducing it to people again because you get called in at 20 to do it anyway, so that's sort of the age if you want 15 years to think about it, so maybe that's the best time" – H; FG1 School *"It would be quite good to have some sort of thing in place at school where they do sorts of presentations. Because then… you're getting told… some information on fertility, because they do get told how not to get pregnant, don't actually get told how difficult it actually is to get pregnant and how long you've got left"* – R2; FG2 *"People should be told in biology or something." Your fertility rates will go down past this age"* – Li; FG1

FG1: Focus Group 1, FG2: Focus Group 2

to do research themselves, and therefore, there is no need to provide it:

"I don't think it's as big of a deal letting people know because people can find out themselves" - Li; FG1

Participants who were unsure about whether fertility information should be provided were primarily concerned about what information would be provided and the method used. Many were worried about a potentially aggressive approach to information provision, creating added pressure for young women:

"If there was some sort of guidance that came out that said 'You should have a child between 25 and 28'… then people would be like 'Well the Government are telling me when I can have children and that can't be allowed'" - F; FG2

Participants in FG1 also discussed the benefit of providing information to women in the context of dispelling fertility myths that often resulted from receiving information from a variety of unreliable sources:

"One of the things that really scared me was I heard at university… it can take up to 5 years for a woman to conceive after she got (the rod) taken out. But I went to the clinic and they said that was a load of nonsense, so it's a mix of information I'm getting" - KA; FG1.

What information has to be provided?

There was a great deal of discussion about the type of information to be provided. All participants felt that a "neutral" approach was important so that women feel informed and empowered by the information they are receiving, not dictated by it. Participants felt that providing the information as facts, without influence, would allow women to make their own decisions about motherhood:

"If you just put in a fact like that then people aren't going to be like 'Oh, you're telling me to have a baby'. They'll be like 'Oh, you're telling me the fact and now I'm going to decide for myself'"-Ln; FG2

Some women in FG1 specifically asked for evidence-based statistics, as they felt that this was the information that women needed to be accurately provided with:

"What is the number behind steep decline? I would also like to see behind those numbers, the IVF success rate, how much is age-related?" - L; FG1

Finally, the women wished to receive the information in a nonthreatening manner. They felt that it was a sensitive subject, and this should be considered when drafting up the information content:

"They've got to be really sensitive, because actually it's a sensitive issue" - Li; FG2

How to provide information?

A number of suggestions were provided by participants as to how the fertility information could be provided including NHS campaigns involving posters in public places such as bus stops, giving out leaflets in smear test appointments, online bookings to speak to a professional, leaflets in health-care waiting rooms, and as part of the national curriculum in Biology and Health classes.

Website and posters

FG1 seemed particularly enthusiastic about running an NHS campaign to advertise a fertility website. They felt that not too many facts should be provided on posters, but just enough to make people consult the website. They felt that this would not pressurise people and leave them enough room to decide for themselves whether they wished to know more. They suggested publicizing the website on bus stops, at university during Sexual Health Week and in public toilets.

Leaflets

Leaflets were another suggestion, however the two groups disagreed over where these leaflets should be available; FG1 felt that they should only be provided in healthcare-related settings, whereas FG2 suggested that they could be left in all public places where leaflets could be provided:

(In response to the question, "If I create a leaflet today, where are the places it should be provided?"…)

"A sexual health clinic? Or maybe the doctor's surgery…. And hospital waiting rooms… I don't think I've ever seen a contraception leaflet in the village hall … I think it's just sort of zoned into areas" - H; FG1

"It would be inappropriate" - E; FG1 (providing fertility leaflets in village hall)

The possibility of advertising or providing leaflets alongside smear test appointments or in public toilets was suggested by some participants.

Mobile apps and social networking websites

Women were questioned about whether they felt mobile phone apps and social networking sites could be used to provide information; however, neither group seemed enthusiastic regarding this; all felt it would be an insensitive method of providing information, and some felt that this would feel pressurizing:

"I think to have it excessively out there does hit a panic button" - C; FG2.

Communicating with health-care professionals

Mixed views were expressed regarding discussing fertility with health-care professionals. Participants felt that you should have the right to talk with a professional about the subject; however, there was a consensus that this would be seldom done by young women. FG2 seemed skeptical as to how seriously they would be taken by a doctor should they approach them with fertility concerns.

Participants felt that it was not the place of a health-care professional to bring up the topic of fertility, although some felt that it would be appropriate in the context of attending for a sexual health-related matter. Most of the FG1 participants felt that professionals approaching the topic of fertility in unrelated appointments would seem "invasive."

"It feels quite invasive in your privacy" - R; FG1

"Maybe when you're going in for a smear… I don't think if you go in for a chest infection they should lecture you about your fertility" - KA; FG1

One woman suggested that there could be an option to talk about fertility provided to women when they attended the sexual health clinic, via an extra form that asked whether they would like to discuss their fertility with a health professional at the clinic.

Pill packet warnings

There were mixed feelings about the idea of labeling contraceptive pill packets with a fertility warning. FG1 felt very negatively toward this, and believed it would feel invasive on their lives or scare women away from using contraception. However, FG2 felt that this was a good idea, as they all read the side effects' leaflets provided in their contraceptive packets and felt that this message could be provided here.

Television shows

TV shows were a suggestion that came from both discussions; participants felt that educational documentaries were a good way of reaching young people, as they had learned from documentaries they had previously seen, as well as from watching fictional dramas that covered fertility issues.

FG2 seemed particularly enthusiastic about this method of information provision; they felt that careful consideration of

channel and timing of the program could help to direct it toward younger audiences.

When to provide information?

Secondary school age seemed to be the consensus among participants. They felt that providing fertility education at school age was the only opportunity available to provide everyone with the information, since not everyone will go on to higher education. With this in mind, they felt that the information had to be provided before the minimum school-leaving age:

"I think when you're hitting mid to late teens, maybe 15, like somewhere in the middle, before you've left school" - C; FG2

"High school… everyone has to go whereas uni only some people will go… school is the only chance you have really to hit everyone" - E; FG1

"The information should come before the kids are allowed to leave school" - M; FG1

Participants unanimously agreed that primary school age was "too young" to receive this fertility education, and that mid secondary school age around 16 years was more appropriate. FG1 participants were asked whether they felt this information provision should be repeated, with mixed responses; only some felt that they should receive it again, perhaps again at school or in university.

There was a general agreement that school was seen as authoritative, and information provided to you at this age (i.e., in secondary school - 14–16 years) would be more beneficial than the mixture of information heard on the playground:

"At school is one of the first times you learn about sex and you learn about pregnancy… you need to hear it from an authoritative figure at a young age rather than your friends making it up to sound cool" - E; FG1

Both groups felt that secondary schools specifically should be providing a particular message; one that is not so condemning of teenage pregnancy. They felt that more supportive information should be provided to women who get pregnant, or want to get pregnant young, and that schools could provide women with the message that it was their decision when they want to have children, and a career could be picked up at any time in their lives, whereas they have a fixed fertility window. They felt that they should also be provided with information regarding the optimal age to have children because at the moment they felt there was a gap between 16 and 45 years, which they were uneducated about:

"Schools should say that… if you want to have kids when you're younger; here are the options… It should be more positive" - KA; FG1

Finally, all participants felt that secondary school was an ideal place to provide young people with fertility education. They considered this the only stage where everyone could be provided with information (since not everyone goes to university or reads leaflets) and that children could be provided with the facts as part of the national curriculum in Biology or Health classes. They felt that providing the information in this way would ensure that it was provided in an objective manner, with minimal influence.

Would receiving information affects childbearing intentions?

Finally, the young women in both groups were asked whether they felt this provision of information would make a difference. FG1 participants felt certain that receiving information about the consequences of delayed pregnancy would encourage them to research it further.

FG2 felt that although the change was unlikely to be dramatic, it would cause them and other women to consider the timing of motherhood more carefully and could lead to a change in their childbearing intentions.

Perceptions after receiving fertility information

Participants were given a document entitled, "Information to be provided" to read. This consisted of a draft of the fertility information meant to be provided to young women and the participants views on the document were explored.

A number of women, who initially did not see a need for fertility education to be provided, seemed to have shifted their opinion by the end of the FG discussion.

This shift in opinion often occurred after participants had read the "Information to be provided" document, which contained facts on the chances of pregnancy and IVF success rates at different ages. Participants were very surprised by this information.

"This is crazy" - Ln; FG2

"The numbers are a lot lower than I would have expected, I had no information at all I guess" - L; FG1

The information often led women to conclude that more information certainly had to be provided to young women to inform them of these facts, despite the worry it could potentially cause:

"You just start worrying… it could have a big impact on your life. But it has to be said" - Li; FG2.

DISCUSSION

Main findings

This study showed that participants had some awareness and knowledge regarding delayed childbearing and age-related fertility decline, although there were many misconceptions surrounding this. A range of factors impacting on childbearing decisions were identified, which ranged from personal circumstances such as financial and relationship stability to broader societal and cultural expectations. Social stigma associated with having children in early twenties was found to be an important factor preventing women from childbearing earlier in life, even if they wanted to. All participants wished to be provided with information, helping them to make an informed decision about the reproductive consequences of delayed childbearing. They wished to have the information provided in secondary school as part of the national curriculum in Biology or Health classes, to both sexes, in an objective, nonthreatening way.

Strengths

To the best of our knowledge, this is the first study to specifically explore how, when, and what information should be provided to young people about the reproductive consequences of delayed childbearing. We managed to recruit women to two FGs with themes saturating in the second one.

Limitations

The main limitation of the study was that we only conducted our research in Aberdeen with a relatively small number of women aged 18–25 years. Our study sample was further limited by the fact that we only managed to recruit university students, despite our efforts to enlist a broader representation of women (through recruitment at the sexual health drop-in clinics). Finally, since our sample population was recruited exclusively from the sexual health drop-in clinics, there is a high chance that it has been limited to young women who are sexually active. As this was an initial exploratory study, we only included women. We do not know the views of men. However, previous studies have shown that men are not aware of implications of age on delayed childbearing.

Comparison with other studies

What women know?

Studies from the background literature search revealed that the majority of young women did not have a substantial basic knowledge of many aspects of sexual health.[12-18] This was largely confirmed in our results, where uncertainty surrounded several aspects of contraception, fertility decline, fertility testing, and success rates of fertility treatment.

There was controversy among participants as to what constituted "late" childbearing; a range of approximately 10 years was discussed, with a number of women suggesting that they considered 35 years to be late to have children, but an equal number were firm in their opinions of age 45. As a "reproductively advanced age" is regarded as young as 35, and 10% of women undergo an early reproductive aging process, clearly more information is required here. Due to better health care and longer life spans, many women now regard age 40 as the "new 30." However, when it comes to reproductive health and pregnancy, there is still a fixed optimal fertility window between 20 and 35 years, which has not changed despite changing culture and advancing health care in other sectors. This could be the reason why some young women now regard ages upward of 40 as suitable to begin childbearing.

Uncertainty and lack of information was a key theme in the results, showing that overall, our participants felt uninformed about many fertility and pregnancy issues. With regard to childbearing, uninformed decision-making can significantly impact the lives of prospective mothers and for some, lead to involuntary childlessness.

Why do women delay pregnancy?

Several factors were discussed during the group sessions, consolidating the previous evidence that higher education, establishing a career and financial security, finding a suitable partner, and a personal "readiness" are all key factors in shaping a woman's childbearing decisions. Feeling that motherhood was something that is, to an extent, out with a woman's control was a factor discussed during our study, which had been found in one another study.[1]

Our participants seemed to view higher education and establishing a career as particularly important factors in delaying pregnancy. This could certainly be due to the sample population which was recruited; all were currently undertaking undergraduate or postgraduate degrees. If a broader representation of women had been obtained from recruitment, other factors implicated in the delaying of pregnancy may have come to light. Despite this imbalance of study participants, the study unearthed an important issue; in spite of government efforts to support new parents through measures such as increased maternity and paternity leave, young women do not perceive early motherhood as something that can co-exist with a career, and delaying pregnancy to first establish their career is

seen as a necessity for many. This suggests that more support is necessary for mothers and young mothers, in particular, to allow them to focus on their career too. If more supports were in place, perhaps, more women would be encouraged to start their families at a younger age.

The "school message" condemning teenage pregnancy had a profound influence on the participants; all felt this message had been promoted aggressively in school, and agreed that this had influenced their decision to delay pregnancy. However, despite sex education being part of the national curriculum, there were large discrepancies between schools as to the standard of sex education provided, and many of the young women in our study did not feel that they were being provided with a basic knowledge about this.

Our results also revealed that the stigma associated with being labeled a "teen mum" by society has been extended to include mothers in their early twenties; this was found to be a further factor behind the rationale of delaying pregnancy, and one that had not been found in the existing literature on this topic. This is a very important fact that has come to light through this study, as it explains why those who can and wish to become mothers at an earlier age are put off. This is an area where public health message is lacking.

What information do they wish to receive?

As previously mentioned, no existing literature was found detailing how, when, and what information should be provided to young women on the consequences of delayed pregnancy, or what their perceptions of receiving this would be; therefore, no comparisons can be made regarding these results. However, as per the existing literature results, women in the current study also felt that they, and other young women, ought to be more informed about delaying pregnancy; they felt that being informed on these matters would influence their reproductive decision-making.[15,21]

Where to provide information?

Information provision through schools as part of the national curriculum was suggested by all participants. School education was discussed in detail by both groups, and despite their issues with much of the sex education they had received there, it was clear that it had a profound effect on them.

Both groups were in unanimous agreement that this information should be provided to both genders. This was interesting since much of the existing literature on this topic had only investigated perceptions and knowledge of women, and only two background literature studies had included men in their sample population. This shows that despite changing culture and gender roles, our modern day society still does not regard the issue of childbearing as an equal responsibility between a man and a woman.

When to provide information?

A previous study found that women in their thirties felt that fertility information should be provided in their early twenties.[21] Although our groups agreed that early twenties seemed the most appropriate and relevant time to receive this information, they did not feel that this was feasible as there is nowhere at this life stage that information could be unanimously distributed, since young people go in several different directions at this age; university, college, jobs, or already employed. This was a significant factor in our participants, suggesting secondary school as the most ideal place to provide fertility education to young people.

Although secondary-school age would allow for unanimous distribution of fertility information to young people, problems in implementing this approach have to be considered; educators would need to carefully consider how to provide delayed childbearing information in a way that did not promote having children during teenage years.

Future research

Future research needs to concentrate on how to incorporate fertility information into the national curriculum for secondary school, without diluting the message about the prevention of teenage pregnancy in a nonthreatening and objective manner.

CONCLUSIONS

This preliminary research study showed that young women wish to receive information about delaying pregnancy, ideally in secondary school through the national curriculum. They do not wish to receive this information recurrently, and feel it should be provided to both boys and girls. Finally, young women wish to receive this information in an objective and sensitive manner, allowing them to be empowered by the information they have received, not have their lives dictated by it.

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Conflicts of interest

There are no conflicts of interest.

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