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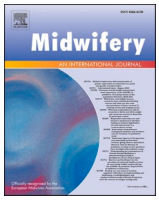

Single mothers by choice - experiences of single women seeking treatment at a public fertility clinic in Denmark: A pilot study

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ABSTRACT

Problem: There has been an increase in the number of single women deciding to have children through the use of medically assisted reproduction (MAR). These women are referred to as 'single mothers by choice' (SMC). Background: Previous studies have shown how SMC can feel stigmatised. Aim: Explore if single women seeking fertility treatment in Denmark feel stigmatised.
Methods: Six single women undergoing MAR at a public fertility clinic in Denmark were interviewed. The interviews were audiotaped, anonymised, and transcribed in full, after provided written consent by the participants to take part in the study. Data were analysed using qualitative content analysis.
Findings: The women would have preferred to have a child in a relationship with a partner. Despite their dream of the nuclear family meaning a family group consisting of two parents and their children (one or more), the women choose to become SMC because motherhood was of such importance, and they feared they would otherwise become too old to have children. The participants did not experience stigma or negative responses to their decision, but they all had an awareness of the prejudices other people might have towards SMC.
Conclusion: This study contributes to the understanding of the experiences of single women seeking fertility treatment in a welfare state where there are no differences in the possibilities for different social classes to seek MAR.

Introduction

The majority of women and men in the Nordic countries want to have children and build a family (Lampic et al., 2006; Statistics Sweden, 2009; Sørensen et al., 2016; Virtala et al., 2011). A qualitative interview study has shown that becoming a mother is an integral part of life for most women, and many women see it as the meaning of life (Frederiksen et al., 2011).

However, many women are faced with the reality of their ticking biological clock and no partner with whom to have a child. The view on families have changed during the recent decades in the Nordic countries, allowing families to have different structures and children to grow up in other constellations than the traditional nuclear family. However, women choosing single motherhood continue to challenge the norms of society (Jacobsen et al., 2020; Jain and Mahmoodi, 2022).

Since 2007, medical doctors in Denmark have been permitted to offer medically assisted reproduction (MAR) to single women and women in lesbian couples, in addition to its traditional use for infertile heterosexual couples (Ministry of Health and the Elderly, 2006). Since the new legislation there has been an increase in the number of women actively deciding to have a child through the use of MAR, without the involvement of a partner. In 2019, 10 % of the national birth cohort in Denmark was children conceived after MAR and 12 % of these children were born of a single mother (The Danish Fertility Society, 2019). These women are often referred to as 'single mothers by choice' (SMC) and differs from the single mothers who find themselves parenting alone following a divorce or a separation (Golombok, 2015).

Most women want to find a partner in the future with whom to start a family (Murray and Golombok, 2005; Petersen et al., 2016; Salomon et al., 2015), and most women who seek single motherhood with the use of MAR are not choosing it as their Plan A (Petersen et al., 2016; Ravn 2017, 2021; Salomon et al., 2015). For these women, it is more

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important to have a child than to wait to have a partner first. Ravn (2017, 2021) describes this as the active and positive choice to have a child rather than the active choice not to have a partner. Furthermore, the biological clock is both a mental and physical feeling that is impossible to repress for these women (Volgsten and Schmidt, 2021).

Women who seek single motherhood are described as being resourceful and well educated (Golombok, 2015; Jacobsen et al., 2020), and they have also thought long about becoming a SMC and discussed it with friends and family (Golombok, 2015). A Norwegian study found that SMC felt that they should prove to others that they were worthy of being a mother, and they should even be an extra good mother and appear successful (Jacobsen et al., 2020). Although the number of women seeking single motherhood is increasing, it is not the social norm to be SMC and therefore it can increase the risk of feeling stigmatised.

Stigmatization was first defined by Goffman in 1963, but the definition has evolved over the years. In 2001 it was defined by Link and Phelan (2001) as "*In our conceptualization, stigma exists when the following interrelated components converge. 1: people distinguish and label human differences. 2: dominant cultural beliefs link labelled persons to undesirable characteristics—to negative stereotypes. 3: labelled persons are placed in distinct categories so as to accomplish some degree of separation of "us" from "them." 4: labelled persons experience status loss and discrimination that lead to unequal outcomes*".

This qualitative pilot study aims to explore the experiences of single women in Denmark seeking fertility treatment, with focus on stigmatisation and the reactions they have received.

Statement of significance

Problem or Issue	Many women are faced with the reality of their ticking biological clock and no partner with whom to have a child. Women choosing single motherhood challenge the norms of society.
What is Already Known	Studies from UK, Norway, and Israel have shown that single mothers have been criticised and felt stigmatised due to their decision about becoming single mothers by choice.
What this Paper Adds	This study contributes to understanding the experiences of single women seeking fertility treatment in a welfare state where there are no differences in the possibilities for different social classes to seek MAR in the public health care sector.

Participants, ethics and methods

Setting

Denmark is a welfare state with a public health care sector providing MAR free of charge, 240 days of paid parental leave, and access to affordable full-time public day-care. The country's public fertility clinics are publicly funded, except for the medical costs associated with the treatment. Public fertility clinics offer treatment to childless single women and to couples having no common child up to female age 41 years old. Private fertility clinics where patients pay out-of-pocket is offered to couples and single women up to 46 years old. About 50 % of the fertility treatments are performed at public clinics (The Danish Health Authority, 2021), and the waiting time from the patients being referred until they receive treatment is about six months.

Study design

This study was a qualitative pilot study based on semi-structured interviews of single women ($N = 6$) undergoing MAR at the Fertility Department, Rigshospitalet in Copenhagen, Denmark.

Data collection

A letter of information was given to single women undergoing MAR by a senior medical doctor. If the women told the senior doctor they wanted to participate, they were contacted by the interviewer directly to schedule an interview. Seven women were invited, and six women agreed to participate.

Interviews were held in person at the Department of Public Health, University of Copenhagen, Denmark. A semi-structured interview guide was used in all six interviews and aimed to examine the women's experience of being single woman seeking fertility treatment in Denmark. The semi-structured interview guide included questions informed by a review of the literature (Frederiksen et al., 2011; Golombok, 2015; Salomon et al., 2015; Volgsten and Schmidt, 2021) and discussion with the multi-disciplinary team of authors (i.e., experts in the medical, psychological, public health fields).

The interview guide consisted of five topics: personal information and the choice of becoming a single mother by choice; impact, influence, and reactions of their social relations; how the women perceived they were treated by the healthcare professionals at the fertility clinic; stigmatisation and self-stigmatisation.

Each woman was interviewed once over a 2-month period in 2020. Interviews ranged between 41 and 103 min (average 81 min) and were conducted by the first author. The interviews were audiotaped and transcribed in full. Participants were anonymized using pseudonyms for their names, starting with the Letter A from interview 1, Letter B from interview 2 etc.

Participants

The participants were single and childless women undergoing MAR at the Fertility Department, Rigshospitalet in Copenhagen, Denmark. Five women received in vitro fertilization (IVF), and one received intrauterine insemination (IUI). The women were between 30 and 40 years old (average 36.6 years) and were all residents in the Capital Region of Denmark.

The women's educational level ranged from medium-long education to long further education. Five had previously been in long-term relationships, and one had never been in a relationship. They had been in fertility treatment between 1 and 3.5 years with an average duration of 2 years. Two of the participants had endometriosis. Three participants had become pregnant during their treatment, but all pregnancies ended in pregnancy loss and they continued their treatment.

Data analysis

Data were analysed using qualitative content analysis, where interview transcripts were divided into codes, subthemes, and overall themes (Graneheim and Lundman, 2004).

First, quotations, also called 'meaning units' from the six interviews, were selected. The quotes were condensed, which refers to a process in which they are shortened while still preserving their meaning and message. The selected quotations were marked with a code associated with their primary meaning (Graneheim and Lundman, 2004). The codes were organized into subthemes, and finally, the subthemes were organized into overall themes. Thirty codes, ten subthemes, and four overall themes were identified.

During the analysis, observer triangulation was performed (Holstein, 1995), which means that all codes, subthemes, and overall themes were discussed and reviewed by the authors of the article.

Ethical approval

According to Danish law, interview studies with no inclusion of biomedical data do not require permission from a scientific ethics committee. The project followed the Helsinki II Declaration. The university's rules regarding data protection were followed and data was stored as requested by the Danish Data Protection Agency, University of Copenhagen. All participants provided written consent to take part in

the study. Participants could withdraw from the study at any time.

Results

Four overall themes were identified; (1) The decision of becoming a single mother by choice, (2) Emotions associated with becoming a single mother by choice, (3) Lack of stigma, (4) Family building – a social interaction.

Quotes have been extracted from the transcripts to illustrate the content of the themes.

The decision of becoming a single mother by choice

The decision of becoming SMC was a decision that the participants have considered carefully and thought about for a long time.

> *"I'm not just doing this for fun if you can call it that. It's not a decision I made 'overnight'. It is something that I have thought about for a very long time"* (Anna).

A choice motivated by their deep-seated desire to become a mother.

> *"And I want children. I have to. That's the meaning of life"* (Ditte).

Most would have preferred to have a child with a partner and create a nuclear family, and becoming SMC was often described by the women as a plan B.

> *"Plan A was, to begin with, having children with a boyfriend […] because, in my head, that was the normal thing to do. I wanted to have children with a husband. And now I have accepted, or come to terms with, that my situation is different"* (Ditte).

However, their decision to become SMC was not seen as an active choice based on preference, but because they did not have a current partner and because of their increasing age and associated fertility decline. They felt that time was running out for them to have a child and their biological clock was ticking.

> "It is the ticking clock that I find extremely difficult. You can feel the days, the weeks, the months passing by. And I just get older and older, and it does not get any easier to achieve a pregnancy" (Ellen).

Another participant said:

> "So now I did not want to wait any longer. Now I did not dare to gamble with time anymore because, I knew, time does not help that it gets better either. So that was probably where I decided that now I go it alone" (Anna).

Emotions associated with becoming a single mother by choice

Becoming SMC was a continuous process associated with many emotions. It was a hard and intrusive process, and the participants described it as an emotional roller coaster.

> *"Those who do an Ironman or something like that and think that is tough they should try this. Because this is tough. It's a giant emotional roller coaster"* (Bea).

The women in this study felt self-blame and guilt about becoming SMC. They had many negative thoughts about themselves, and many reported that they did not feel *'good enough'.*

> *"I blame myself for a lot of things, too many things, but I do. I have many negative thoughts about myself in connection with becoming a single mother by choice. I don't feel that I'm good enough, neither as a woman nor in anyone else's eyes […]"* (Anna).

Some of the women reported that they blamed themselves for not finding a partner with whom to create a nuclear family.

> *"*I think there must be something wrong with me since all my friends can find partners with whom to get married and have children, but I can't*"* (Filippa).

Others blamed themselves for not getting pregnant due to something they did or did not do during treatment.

> *"During the fertility treatment, I have often been thinking that if I hadn't been exercising that particular day, it would probably have succeeded, and I would have become pregnant"* (Caroline).

The study participants found the process of becoming SMC mentally and physically challenging, but on the other hand, they felt empowered by their decision.

> *"When I can manage this, then I can manage quite a lot myself. So, it has confirmed to me that I can do a lot myself and fight a lot myself and be in it alone"* (Bea).

Lack of stigma

The women in this study did not experience stigma or negative responses to their decision about becoming SMC, and they felt accepted by society.

> "I think the majority of society is really positive about it […]" (Ditte).

The process of becoming SMC was influenced by their social relations with family and friends. They reported they have primarily experienced positive reactions and support.

> "There have only been positive reactions from everyone. Both men and women" (Caroline).

But most of the participants believe that it was easier to be SMC when living in the capital urban area. They imagined that they would feel stigmatised if they had not lived in a large city, but instead in a small town where it was not as common to be SMC.

> *"It is probably a lot easier for me to become a single mother by choice because I live here in Copenhagen. I don't think it would have been easy if I lived in a smaller community, such as the town where I grew up. Here, I do not feel special"* (Anna).

They were aware of the prejudices other people might have towards SMC. Hence, they were ready to defend their choice if necessary.

> "You spend an enormous amount of energy building up this wall. Not in a bad way, but so you are ready with a shield if someone comes and starts shooting at you. And I have built up this wall over a relatively long period of time, so I also know how to defend my choice if it becomes necessary" (Anna).

Family building – a social interaction

The participants dreamt of a nuclear family but had to adapt to their situation and their circumstances with increasing age and lack of a partner.

> *"I have always wanted to have children and a nuclear family, but it has not succeeded. So I am now working on this solo mother project"* (Filippa).

They did not feel that family building could be right or wrong and that it was normal to be a single parent.

> *"And nowadays it is very common to be a single mother by choice. Many children only have one parent or have two parents of the same sex"* (Bea).

When the participants in this study began to think about starting a family as SMC, it was not just a matter of having a child, but something that happened in a larger context and in an interaction with their social

relations. They consulted family and friends to find out who supported them and who would take part in the process and how these people could be placed in a network that created the best conditions for themselves and the child. They made sure they had the social support they needed and made explicit agreements with their social relations.

> *"I have tried to schedule, to map out people I have around me who may be there for me right now, during this period, and who could help when the child is here"* (Ellen).

They have long considered becoming SMC. One of the factors that have influenced the decision had been the support they have experienced from their social relations and the experience of their decision being accepted by society.

> *"I think I'm getting tougher and tougher because I have like an army of family and friends supporting me"* (Anna).

Or as another participant says:

> *"I'm very close with my family, so I don't think it as I'm alone. Of course, it's me who is responsible for the child, but because of the support I get from them, it does not feel like I'm alone"* (Bea).

Discussion

Stigma

Creating a family that differs from the traditional nuclear family is often criticised, as the nuclear family is considered the most natural way to start a family (Graham, 2012). According to social norms in society, single women are not supposed to have children, which increases the risk of stigmatisation (Jacobsen et al., 2020). There are many indications that the experience of stigma depends on the society we live in. A review asserts that most problems faced by single parents are not due to inherent limitations, but rather discrimination and stigma rooted in their respective communities (Jain and Mahmoodi, 2022). Attitudes towards SMC thus vary from country to country and perhaps even from city to city within the same national borders.

Very few studies have examined whether SMC feel stigmatised. Studies from UK, Norway, and Israel have shown that single mothers have been criticised and felt stigmatised due to their decision about becoming SMC (Chasson and Ben-Ari, 2020; Golombok, 2015; Graham, 2012; Graham and Braverman 2012, 2014; Jacobsen and Dahl, 2017; Jacobsen et al., 2020; Segal-Engelchin and Wozner, 2005;). UK studies demonstrated how SMC had been criticised for being selfish career women who bought themselves a new accessory; a baby (Golombok, 2015; Graham, 2012). In the UK, MAR is often self-financed, and a study showed that only one of the 23 single women included received funding for their fertility treatment (Graham, 2014; Graham and Braverman, 2012). This creates inequality in access to treatment, and often are single women seeking MAR in countries where treatment requires self-financing well-educated with good financial resources (Ravn, 2017, 2021). This inequality, and thus the increased incidence of resourceful SMC, can create a stereotypical image of these women and may cause prejudices about SMC.

A Norwegian study showed that SMC in Norway felt that their family form was not seen as being equal with other families (Jacobsen and Dahl, 2017). In Norway, it is not legal for single women to become mothers using MAR. Only women who are married or in a relationship may receive treatment (Jacobsen and Dahl, 2017). Single women who desire to become mothers therefore have to travel to other countries, such as Denmark, to receive treatment. As long as it is illegal to become SMC, there is a risk of stigmatisation (Jacobsen et al., 2020).

A study from Israel found that Israeli SMC felt stigmatised due to their decision (Segal-Engelchin and Wozner, 2005). All women, including single women, have access to MAR in Israel. The treatment is funded by the government until the woman has reached the age of 51 or has given birth to two living children (Landau et al., 2008). However, most Israeli society believes that a 'normal' family consists of a heterosexual couple and their biological children and that this family form is preferable (Chasson and Ben-Ari, 2020). Being SMC in a society that favours the nuclear family and considers this the right way to start a family carries a risk that SMC may feel stigmatised.

The concern and criticism of SMC is mostly about the well-being of their children. A Swedish study showed that a third of the health care professionals in various paediatric departments believed that children of SMC were at greater risk of poorer mental health and social stigma (Armuand et al., 2020). Thus, a comparison of single mothers and families with two parents, all with children from a sperm donor, showed that children of single mothers were as close to their mothers and well-functioning both emotionally and behaviourally as children with two parents (Golombok, 2020).

In this pilot study, none of the participants felt stigmatised. They received positive reactions from their social relations and felt accepted by society. Denmark has publicly funded fertility clinics and thus equal access to treatment, and therefore there is no difference in social class among women seeking MAR (Salomon et al., 2015). The opportunity of paid parental leave and access to affordable full-time public day-care makes it possible to raise a child alone. Furthermore, Denmark is not a religious country, and society generally accepts several forms of different family building.

Although the women in this study did not feel stigmatised by society or their social relations, their negative thoughts and their awareness and imagination of the prejudices other people might have towards SMC in some way ended up being expressed as self-stigmatisation.

A UK interview study of single women in fertility treatment showed that despite the women feared others' prejudices about their decision to become SMC, many were aware that the prejudices came primarily from themselves (Graham, 2018). This phenomenon that SMC has negative thoughts about themselves exists regardless of the experience of stigmatisation.

Importance of motherhood

For most people, becoming a parent is a common expectation of life (Schmidt and Sejbæk, 2012), and becoming a mother is an integral part of the life that many women imagine. For many women becoming a mother is instinctive and strongly associated with the female identity (Frederiksen et al., 2011).

A Danish study examining attitudes towards family building and knowledge about fertility in 20–40-year-old healthcare professionals showed that almost all participants found being a mother important, and most had difficulties imagining a life without children (Mortensen et al., 2012).

The participants in this study have a strong desire to become a mother. Many of them describe how they always have dreamed of having children and becoming someone's mother. They also describe how they dreamt of a nuclear family but chose to become SMC because motherhood was of such importance, and they feared they would otherwise become too old to have children if they waited to find a partner. Studies on SMC have found that becoming a single mother was not their preferred way of starting a family, but a decision and a solution they have had to accept. The women often described being SMC as a plan B (Salomon et al., 2015), and many expressed griefs by giving up the dream of a nuclear family (Graham, 2012).

A sociological Danish study showed that the biggest motivation to become SMC was the desire for a child. A desire that is described as an overwhelming driving force (Ravn, 2017, 2021). Becoming a mother was a strong driving force among the participants in this study, and they are willing to compromise on many things in their lives to achieve the dream of motherhood. Some participants also described how they had to leave their partner to fulfil their dream of becoming a mother because their current partner did not want to have children. Women leaving their

partners to pursue motherhood is described in other Danish studies of SMC (Frederiksen et al., 2011; Salomon et al., 2015). A large study, consisting of 181 SMC, showed that the majority had previously been in a long-term relationship but did not have any children with that partner because the partner did not desire children (yet) or already had children and did not desire to have more (Salomon et al., 2015). A qualitative interview study of SMC also found that several of the women had previously been in relationships but that their partner, for various reasons, did not want to have children, and the women in the study described that it was more important to have a child than staying with their partner (Frederiksen et al., 2011).

Becoming SMC is thus so not from a preferred choice but because of a deep-seated desire to become a mother and because these women see no other way but becoming single mothers if they want their dream of a child fulfilled before it is too late (Van Gasse and Mortelmans, 2020).

Family building as a social interaction

Building a family using MAR has a social dimension, and most people in fertility treatment talk to others about their situation (Schmidt, 2009). A larger questionnaire-based cohort study among couples in fertility treatment showed that 94 % of women and 83 % of men have told others about their condition (Schmidt et al., 2005). Many of the women in this study describe needing to share their decision with friends and family as they do not have a partner with whom to share it. The decision to become SMC is not a decision the women have made 'overnight'. They have consulted friends and family and have tried to optimise their situation by mobilising their social relationships. The women have researched whom among their social relations they can place in a network that supports them throughout the process and thus creates the best conditions for themselves and the child.

A Norwegian study showed that single mothers found it essential to have a good social network with people who could impact the child's life. They were aware that their child would have fewer relatives and therefore made an extra effort to establish an excellent social network before the child was born (Jacobsen et al., 2020). Other studies support this finding (Hertz, 2008; Jadva et al., 2009; Van Gasse and Mortelmans, 2020). Many of the women in this study are concerned about whether a missing father will have consequences for the child. Therefore, many of them have chosen people in their network who can be a father figure for their child. A UK study also showed that single mothers found it important to ensure a male role model in the child's life (Jadva et al., 2009). It can be significant to have connections with close male figures in relation to a child's existence in the world and the development of social roles.

The participants in this study tell that one of the factors that have influenced their decision of becoming SMC has been the support they have experienced from their social relations and the experience of their decision being accepted by wider society.

A Belgian study examining how single women reorganize their lives to make life as a single mother easier described social relationships as 'social gatekeepers'. These gatekeepers can significantly influence and play a major role in single women's decision-making and preparation process when becoming SMC. They described how support from social relations can make the decision to become a single mother easier and how conversely, it can become more complicated if some in the social network are sceptical. They also described that the first step after becoming SMC is to mobilise and strengthen the social network by, for example, moving closer to the family or explicitly asking people if they want to be there for them and the child. They found that the decision to become SMC depended on the attitude of the social relations (Van Gasse and Mortelmans, 2020).

Thus, becoming SMC is not an individual process only in relation to the particular woman, but something that happens in an interaction with their social relations (Schmidt and Sejbæk, 2012).

Strengths and limitations

To our knowledge, this is the first qualitative study to explore the experiences of Danish single women seeking MAR with a focus on stigmatisation.

The method used in this study was a qualitative approach using semi-structured individual interviews, and through qualitative methods, detailed information about the participant's experiences has been obtained (Christensen et al., 2013). During the preparation of the interview guide and the analysis, observer triangulation was performed (Holstein, 1995), which means that all questions in the interview guide and codes, subthemes, and overall themes in the analysis, were discussed and reviewed by all the authors of the article. This process increases the intersubjectivity and, thus, the study's validity (Jørgensen, 1995).

Qualitative studies are rarely based on data consisting of a large study population because too many participants can make the material unmanageable and the analysis superficial (Malterud, 2013).

The small sample size and thus the difficulty to generalise the results in qualitative interview studies is still often considered a limitation. However, the interviews allow for an in-depth exploration of a particular experience from the individual's perspective, which is not possible through statistical methods and is relevant for clinical practice.

The participants were recruited from a public fertility clinic in the Capital Region of Denmark and may not be representative of all single women seeking MAR. Results might not be transferable to other countries with a different cultural context regarding the societal acceptance of different ways to establish a family.

Conclusion

This growing group of women are faced with the decision of forgoing motherhood to wait for a partner or pursuing parenthood as a single mother and hoping to find a parent later. More are choosing to become SMC and hoping to find a partner later on because of their fear of becoming too old to have a biological child. SMC do not differ from cohabiting women seeking MAR in relation to their experiences and attitudes towards motherhood except their experience of self-blame and negative thoughts about themselves, which in some ways led to self-stigma. Fertility specialists and other health care professionals at fertility clinics must be aware of this when treating SMC.

This study contributes to understanding the experiences of single women seeking fertility treatment in a welfare state where there are no differences in the possibilities for different social classes to seek MAR in the public health care sector, but other studies are needed to investigate this further.

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CRediT authorship contribution statement

Michala Steenberg: Conceptualization, Data curation, Formal analysis, Methodology, Writing – original draft. **Emily Koert:** Conceptualization, Formal analysis, Methodology, Supervision, Writing – review & editing. **Lone Schmidt:** Conceptualization, Formal analysis, Methodology, Project administration, Supervision, Validation, Writing – review & editing. **Jeanette Bogstad:** Data curation, Investigation, Resources, Writing – review & editing. **Randi Sylvest:** Conceptualization, Formal analysis, Investigation, Methodology, Project administration, Resources, Supervision, Writing – original draft, Writing – review & editing.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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