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A kind reminder—A qualitative process evaluation of women's perspectives on receiving a reminder of type 2 diabetes follow-up screening after gestational diabetes

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Abstract

Rationale, Aims and Objectives: Women with previous gestational diabetes mellitus (GDM) are more than eight times more likely to develop type 2 diabetes (T2DM) compared to women without GDM. Annual follow-up T2DM-screening is recommended, but participation rates decrease rapidly after the first year. In the North Denmark Region, an electronic reminder has been tested with the aim of improving follow-up care for women with prior GDM. The aim of this study was to explore women's perspectives on receiving an electronic reminder, and the role of reminders in both women's decision-making and informed choice regarding participation in follow-up screening.

Methods: A qualitative process evaluation informed by a critical realistic perspective. Data consisted of 20 semi-structured interviews with women previously diagnosed with GDM who had received the reminder. Interviews were analyzed using reflexive thematic analysis.

Results: The reminder affected women's decision-making and informed choices through a range of mechanisms. Its personalized design prompted feelings of co-responsibility and care from the healthcare system, supported continuity in women's care pathways, and helped women bridge the gap between healthcare sectors. Women's perception of diabetes risk and the importance of follow-up influenced their decision-making. Participation in follow-up screening was influenced by several contextual factors, as women's everyday life impeded their prioritizing follow-up screening. Women who experienced being met by their general practitioner (GP) with acknowledgement rather than stigmatization and received supportive information tailored to their life situation were more motivated to participate in future follow-up screenings.

Conclusion: The reminder indicated both concern and co-responsibility for women's follow-up care after GDM and was well received by the women. It supported

participation in follow-up screening through an emphasis on shared decision-making and informed choice. Women's interaction with their GP played a significant role.

KEYWORDS
diabetes; gestational, diabetes mellitus, type 2; evaluation study; health care evaluation; program evaluation; qualitative research

1 | INTRODUCTION

Gestational diabetes mellitus (GDM) is on the rise[1–3] and poses an increasing global health concern as women with previous GDM are 8.3 times more likely to develop type 2 diabetes (T2DM) compared to women with no history of the condition.[4] Women with prior GDM had a 17.92 (95% confidence interval [CI] 16.96–18.94) greater odds ratio of developing T2DM compared to women with normal glycemic pregnancies when factors such as age, BMI, and parity were considered.[5] One third of women with prior GDM have been diagnosed with T2DM within 15 years after delivery.[4] Undetected diabetes and delayed diagnosis may result in the early presence of late diabetic complications, including cardiovascular disease, diabetic eye disease, kidney disease, nerve and/or vascular damage, diabetic foot complications, and decreased quality of life.[2] These health complications make early T2DM detection vital.

A Danish study found follow-up screening to be an important tool to ensure early detection of T2DM.[6] Annual or triannual screening for T2DM in women with previous GDM is recommended by Danish and international guidelines.[7–10] Nonetheless, only 17.7% of Danish women with previous GDM participate in follow-up screening 4–6 years postpartum.[6] This is concerning as the risk of developing T2DM peaks 3–6 years after GDM,[5] and the increased risk of T2DM persists for up to 15 years after birth.[5]

Though women with previous GDM generally find follow-up screening important,[11] qualitative studies have identified a range of barriers that affect participation in postpartum follow-up screening: perception of diabetes risk as being low, being left with the sole responsibility of accessing follow-up care, logistic challenges,[12] uncertainties among the general practitioner (GP) concerning screening procedures,[11,13] and postpartum focus on the baby rather than the mother.[12] Additionally, a general lack of continuity of care and gaps between healthcare sectors constitute important barriers to women's participation in follow-up screening.[12–14]

Increased awareness and written risk reduction advice have been shown to increase participation in follow-up screening.[15] Some women appreciate their GP reminding them about follow-up screening recommendations.[16] General reminder interventions have been found to increase participation in international studies,[13,17–19] and a systematic review has indicated that reminder interventions were perceived as helpful by women.[15] However, only a single survey examined women's views on receiving a reminder.[20] More in-depth knowledge is thus needed about women's perceptions and how a reminder may contribute to decision-making and informed choice concerning their participation in follow-up screening.

1.1 | The reminder

This study was based on an electronic reminder of annual follow-up screening that was tested in the North Denmark Region.[21,22] Women diagnosed with GDM at Aalborg University Hospital between 2012 and 2018 received the reminder in August 2020. The reminder was sent as Digital Post[23] from the Regional Health Service via a national, electronic system that supports personal and secure email.[23] The email included information concerning the women's increased risk of T2DM, recommendations for yearly follow-up screenings, information regarding the benefits of early detection of T2DM, instructions regarding how to book a test and whom to contact for further information.[24] The wording of the reminder was based on principles of *informed choice* and *patient-centred care* (Supporting Information: additional file 1).[24] It was designed as a brief decision aid that supported individual autonomy through the facilitation of knowledge and choice between different options.[25] This focus encouraged shared decision-making based on the provision of information and deliberation support.[26]

The effect of the electronic reminder was evaluated in a randomized controlled trial (RCT) including 1463 women diagnosed with GDM at Aalborg University Hospital, Denmark.[24] An RCT contributes knowledge regarding the effectiveness of the reminder's ability to increase women's participation in follow-up screening but not how the reminder supports women's decision-making or replicability in different contexts.[27] This kind of knowledge requires a theory-based research perspective focusing on how changes occur through the interplay of mechanisms and context.[28] This knowledge can help explain how the reminder entails an effect as well as what affects women's participation. Insights on women's perceptions of receiving the reminder are important to understand how their autonomy and the decision-making process concerning participation in follow-up screening are affected. It also provides insight regarding potentially untended negative consequences that should be avoided.[29]

1.2 | Aim

To explore women's perspectives on receiving an electronic reminder and the role of the reminder in women's decision-making and informed choice on participation in follow-up screening.

2 | METHODS

2.1 | Design

The study used a qualitative process evaluation design inspired by the British Medical Council's (MRC) guidance on process evaluation and recommendations for examining intervention delivery by assessing mechanisms, contexts and how these facilitate or inhibit the intervention effect.[27] Focusing on the processes underlying an intervention may offer insight into how the intervention leads to both intended and unintended effects and how an intervention can be improved.[28,30]

The process evaluation adopted a critical realist perspective which asserts that to provide an adequate rationale of causal laws to explain a phenomenon, a look at mechanisms and contexts is needed. Often a combination of several mechanisms merges to trigger, modify or block an effect depending on the context.[31–33] Mechanisms are the link between components of the intervention and potential outcomes affected by contextual circumstances.[28] In this study, the mechanisms explored were related to the women's response to receiving the reminder, which, depending on the context, affected their participation in follow-up screening. The contexts were circumstances influencing women's participation in this screening. An illustration of the intervention mechanisms and context in a program theory or logic model is a key element of intervention development and process evaluation.[28]

2.2 | Data collection

Data were collected using qualitative semi-structured interviews inspired by realist interview methodology.[34] Realist interviews explore the perceptions of informants as well as test and refine both presumed mechanisms and contextual aspects, with the voice of the informants becoming the evidence of the phenomenon under investigation.[34] Women's perceptions of receiving the reminder were therefore explored with an emphasis on gathering information on the mechanisms and contexts that had either facilitated or inhibited their decision-making and subsequent participation in follow-up screening. A semi-structured interview guide was pilot-tested and used to guide the interviews.[35]

Women diagnosed with GDM between 2012 and 2018 who had received the reminder and had not otherwise been diagnosed with T2DM were eligible for inclusion. The recruitment of participants was inspired by realist sampling, where sampling intends to sample individuals sufficiently able to provide insight into the mechanisms and contexts of the phenomenon under study.[36] All women who had received the reminder were presumed able to provide insight into both their process of decision-making and informed choice concerning participation in follow-up screening.

Sampling was conducted in collaboration with the Department of Obstetrics and Gynecology at Aalborg University Hospital, which had the contact information of women who had received the reminder. To examine the importance of contextual factors, the recruitment attempted to include women with different characteristics, that is, age, educational levels, occupational status, civil status, years since GDM diagnosis and ethnicity. Women were contacted by telephone and invited to participate. Sampling did not differ based on ethnicity, and all women were Danish speakers. Both women who had participated in follow-up screening as well as those who had chosen not to participate were included.

Data collection took place from December 2020 to January 2021—approximately 4 months after the reminder was sent. Three interviews were held face-to-face. Covid-19 restrictions resulted in the remaining interviews being held via Zoom or on the telephone, depending on the women's preference. Each interview lasted approximately 30–40 min and was audio recorded and transcribed verbatim.

2.3 | Data analysis

Interview data were analyzed using Braun and Clarke's *reflexive thematic analysis*.[37–39] This strategy examines the underlying assumptions that affect and shape semantic conditions in the data.[37] The approach combines well with an overall realist focus on underlying mechanisms and how these operate in various contexts resulting in different outcomes.[31] Data were coded, sorted, ranged, assessed, validated, defined and reported in six stages.[37–39] The analysis was supported by the qualitative analysis software program NVivo 12. The identified themes represented specific patterns of both semantic and latent meanings across data[39] and were arranged in a logic model illustrating the mechanisms and contextual factors of the reminder (Figure 2).

2.4 | Participants

In total, 20 women were interviewed. Figure 1 illustrates the study sample based on women's participation in follow-up screening.

The participants varied in age, educational levels, occupational status, civil status, and year of GDM diagnosis, as shown in Table 1.

2.5 | Ethical considerations

According to Danish legislation, qualitative studies are based solely on informed and written consent.[40,41] The Study was registered at Aalborg University in Aalborg, Denmark. Following the principles of the Helsinki Declaration,[42] all participants received both verbal and written information about the study, as well as information regarding the possibility of withdrawal, confidentiality, and anonymity. All participants signed an informed consent form before being interviewed. The written consent form was approved by Aalborg University and followed the General Data Protection Regulation (GDPR) that has been implemented in the European Union.[43,44]

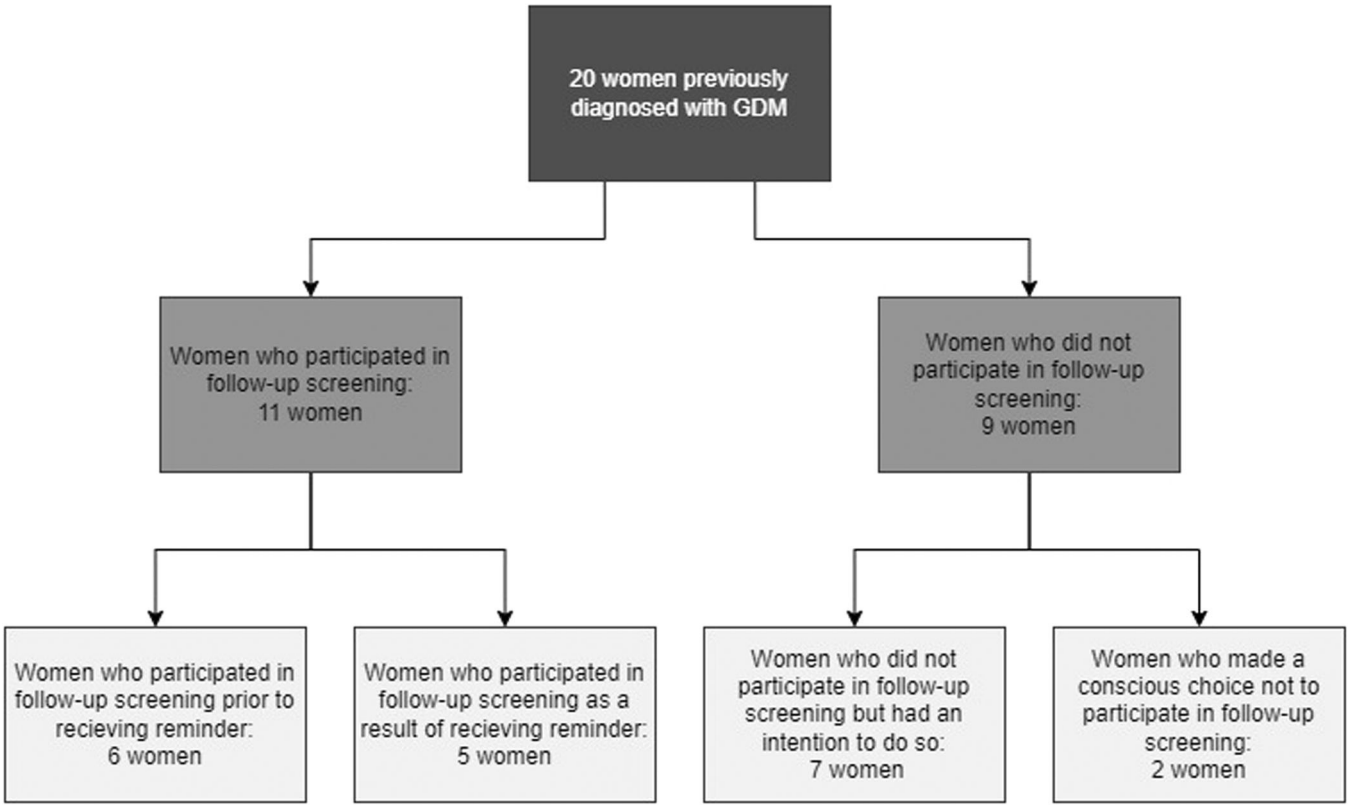

FIGURE 1 Overview of women's participation or nonparticipation in follow-up screening

3 | RESULTS

The reminder offers a range of resources available to the women through different contextual factors influence how they respond to and interact with this resource. Overall, the analysis showed that the electronic reminder supported women's decision-making concerning follow-up screening, and for women who wished to participate, it provided a helpful tool to assess the recommended follow-up screening.

The analysis identified four main themes: *a kind reminder to take care of oneself*, *perception of diabetes risk*, *a mother's everyday life*, and *the GP's need to know what it is all about* and two sub-themes: *protection of oneself* and *the GP's view on diabetes prevention*. These themes are illustrated in a logic model (Figure 2).

3.1 | A kind reminder to take care of oneself

All the participating women expressed acceptance and positive perceptions about receiving the reminder. This positive response was generally linked to the perception that the tone and manner of the reminder was '*kind*' and respectful of the women's autonomy, including their right to make their own decision regarding participation in follow-up screening.

> '*I think it is important, that, you know, whether it [follow-up screening] is a must or it is voluntarily (…) It is your own body, and you have the right to do what you want, but yes. I reckon, if written, that you* ***should****, that you* ***must****, then I would think, that you were talking down to me because it is my own, it is my own right*'. (Vilja)

Overall, the women felt that the reminder offered an opportunity for them to make their own decisions and take care of themselves. While the women were aware that booking a follow-up screening appointment was their own responsibility, the reminder evoked the feeling that the healthcare system reached out to them and took co-responsibility for their care across healthcare sectors.

Receiving the reminder generally promoted a perception of not being left alone after giving birth among women. Exemplifying this, one woman expressed how the reminder had felt like a pleasant surprise that made her feel that she had not been forgotten by the healthcare system even though her pregnancy with GDM was years ago.

> '*I think I felt that I was being taken care of. Yes. "My God, there are someone, who remembers that, how kind, now I have to get it sorted out [follow-up screening]*'. (Dagny)

The fact that the reminder was designed as a personal letter made the women feel that it was not an automated, routine output inquiry. Rather, it made them feel like the healthcare system cared. As one woman explained:

TABLE 1 Participant characteristics

Educational level (ISCED)	Number of women (*n*)
Primary education (1)	1
Lower secondary education (2)	–
Upper secondary education (3)	2
Postsecondary non-tertiary education (4)	4
Short-cycle tertiary education (5)	9
Bachelor's or equivalent (6)	2
Master's or equivalent (7)	2
Doctoral or equivalent (8)	–
Civil status	**Number (*n*)**
Single	4
Partner	16
Occupation	**Number (*n*)**
Employment	10
Unemployment	1
Sick leave	2
Sheltered employment	1
Maternity leave	3
Part-time employment	1
Undergoing education	2
Year since diagnosed with GDM[a]	**Number (*n*)**
0–2 years	7
3–5 years	13
6–8 years	8

[a]Some women had several pregnancies affected by GDM.

> *'It is more personal in that way, and I really like that, it is actually like "we care about you" (…) I really think that it is a good way of doing it, without doubt then it is not arranged in a way. It is more like, yes personal and subdued'*. (Ronja)

The layout and content of the reminder furthermore triggered positive emotions that not only facilitated decision-making among the women but also motivated them to participate in follow-up screening. By offering information about the increased risk of T2DM after GDM, the potential benefits of follow-up screening, and information regarding where and how to participate, the reminder also worked as a helpful guideline on how to access follow-up care. As this woman explained:

> *'Well, it reminds me that I must get it [follow-up screening] done and I am guided regarding what the next step is, as you say, you can print out the reminder and bring it to my doctor if that is what I need, which also helps the doctor'*. (Iben)

Some women shared that their GP or other clinical staff had responded in a critical or non-encouraging way to their request for follow-up screening. These women perceived the reminder as a particularly helpful document highlighting the relevance of follow-up screening and legitimizing their desire to participate. The fact that the reminder was distributed through an official digital email system contributed to the women's perception of it being valid and reliable. This woman explained:

> *'It seems so obvious, that you need to take it seriously. If it was sent as an [ordinary] e-mail (…) I think it would seem like, like it did not come from the hospital, maybe. Like it was a scam or something (…) I reckon it appears professional when sent as Digital Post'*. (Astrid)

Receiving the reminder in a national, electronic, secure mailbox led to curiosity which led the women to read it immediately; however, the context in terms of where the women were when reading the reminder affected participation. Women who had been busy while reading the reminder tended to forget to book a follow-up screening appointment in particular.

3.2 | Perception of diabetes risk

While the reminder typically increased the women's motivation and intentions of participation in follow-up screening, the reminder not necessarily led to all women being screened. The main reason for this was the perception of diabetes risk severity, as this woman explained:

> *'I think if I understood the importance of it [follow-up screening], like cervical cancer screening. If I understood the importance, then it [screening] would not be an interruption in a busy everyday life, but would be something I felt was important'*. (Liv)

In general, the women who found follow-up screening important found the time to book a test even with a busy everyday life, while other women forgot to contact their GP because of their busy lives. Women who forgot or chose not to participate in follow-up screening still expressed appreciation for receiving the reminder since it required them to reconsider their own reasoning for opting out and facilitated continuous decision-making:

> *'It is a good thing for me, who is the type who forgets about it and maybe takes [these things] a bit relaxed and say "well, there is still someone who believes it [follow-up screening] is important", then I have to reconsider. Is it something that I actually want to respond to? Now*

someone has encouraged me, so I now have to reconsider (…) Generally, I suppose it is excellent'. (Thora)

This statement elucidates the importance of having a choice by highlighting women's reflections regarding their risk of T2DM and decisions concerning participation in follow-up screening. In some cases, women's knowledge regarding minimizing risk through diet and exercise resulted in the rejection of follow-up screening. These women believed their lifestyle was appropriate and protective. Not experiencing any T2DM symptoms and a perception of a healthy body was a barrier to follow-up screening as the follow-up screening was perceived as irrelevant in these cases. Women who had once received a normal blood glucose test and experienced no T2DM symptoms also tended to find follow-up screening unnecessary but highlighted the reminder as informational.

3.3 | A mother's everyday life

For some women, struggling to balance a busy everyday life with obligations related to family, household, and work was a barrier to participating in follow-up screening. As this woman explained:

> *'I believe in everyday life my job is important, and my children are important (…) there are just a lot of things we need to do, and it is not that easy to get time off from work, and then it [children and work] is the first priority. I do not know if I could change that. Maybe, if I start thinking about myself and my own health*'. (Nanna)

Most of the women reported that they found follow-up screening important, but they also found it difficult to prioritize screening for a disease they paid little or no attention to in an otherwise busy everyday life. Everyday life with children was a contextual condition that highly affected their priorities and ability to act on the reminder.

Participants who had been diagnosed with GDM up to 8 years before gave little thought to the risk of T2DM in their everyday life; however, this did not seem to affect their motivation to participate in follow-up screening. In general, women experienced GDM as a temporary condition without long-term consequences, although most were aware of their increased risk of developing T2DM.

3.3.1 | Protection of oneself

For some of the women, a sense of fear and anxiety about getting diagnosed with T2DM in follow-up screening negatively affected their decision-making and participation. A woman related the following:

> '[for me] *it's because somehow you think, I do not want to be diagnosed with T2DM right now, so if I pretend not to… I'm not sure, it was how it was. A kind of defense mechanism. I would rather live in uncertainty than having it [T2DM]'*. (Ingrid)

An unintended consequence of the reminder was that receiving it could enhance feelings of guilt because it reminded the women of having postponed follow-up screening. Not participating in follow-up screening did not, however, relieve the women's fear of a T2DM diagnosis but was further enforced uncertainly.

Some women were discouraged from participation due to the embarrassment or shame that came with being diagnosed with GDM, as they felt that they had brought the disease on themselves. Here nonparticipation acted as protection from these negative feelings. Even so, the women still preferred receiving the reminder over not receiving it.

3.4 | The GP needs to know, what it is all about

Several women had previously experienced that their GP lacked knowledge concerning the risk of T2DM after GDM. Specifically, some had been told by health professionals that follow-up screening was unnecessary. GP's knowledge, initiative, and view on follow-up screening affected women's participation as it entailed the women taking follow-up screening seriously.

> *'I would probably take it more seriously (…) if a doctor helps me and explains the importance of getting [blood glucose levels] checked and recommends checking it and all that stuff'*. (Helga)

GP's initiative was especially important when women wanted to participate but had not yet contacted their GP because life conditions hampered their prioritization of follow-up screening. While the reminder contributed to decision-making concerning participation in follow-up screening, the GP played a significant role in both women's perception of follow-up screening as important and future participation.

3.4.1 | The GP's view on diabetes prevention

The women expected their GP to be familiar with the recommendation on follow-up care after GDM and highly appreciated when GPs inquired about their personal wishes and needs in diabetes prevention. It was of great importance that women felt they were taken seriously and listened to by their GP. Being met with acknowledgement and support based on the women's individual life situations had a positive influence on their decision-making and participation in follow-up screening. In contrast, a non-engaging, unsupportive behaviour or indifference towards follow-up screening

left the women with the impression that follow-up was unnecessary and thus affected their prioritization of follow-up screening.

For some women, the experience of their GP focusing on risk factors and weight loss was perceived as stigmatizing. One woman expressed a wish (also mentioned by several others) of receiving supportive information tailored to her life situation instead of routinized and general advice:

> *'It was like "well, you're fat and at great risk of developing diabetes" (…) Right there I felt attacked in the way he approached me. Instead of asking "well, have you had any concerns regarding your previous GDM and have you done anything for it not to advance?" I suppose, I would, I wish I was approached in that way, defiantly'*. (Ronja)

Some women had never talked to their GP about their previous GDM or diabetes risk. Several experienced that their GP did not take an interest in them and their risk of developing T2DM and felt they were not taken seriously. In general, the analysis showed that the response and caregiving of the GP is an important contextual condition either facilitating or inhibiting participation in follow-up care.

3.5 | The intervention logic model

The relation between mechanisms and contexts affecting women's decision-making concerning participation in follow-up screening is illustrated in the logic model (Figure 2). The logic model is a visual presentation of the identified themes and how they are interrelated.

The contexts affecting women's participation in follow-up screening are visualized as big arrows as they affected the response that came after receiving the reminder. The small arrows illustrate how the reminder leads to an outcome. The dotted arrows illustrate how the reminder as an intervention circulates if the reminder is sent yearly, which restarts the process. *'A kind reminder to take care of oneself'* triggered a range of responses facilitating women's participation in follow-up screening, including participation being inhibited. The doubled arrow between *'participation in follow-up screening'* and *'perception of diabetes risk'* illustrates how the follow-up screening itself influences women's future participation in follow-up screening.

4 | DISCUSSION

The process evaluation showed that the electronic reminder, its design, and distribution were well received and appreciated by the women. Women's decision-making and informed choice were positively affected by the reminder's personalized design, which triggered feelings of co-responsibility and care from the healthcare system, thus facilitating continuity by bridging the gap between healthcare sectors. In contrast to reminders that solely aim to increase participation rates,[25] the reminder investigated in this study was designed as a decision aid that supported women's autonomy by facilitating knowledge and a choice between different options. The ability of the reminder to facilitate an informed choice is important as this is a central principle in systematic screening programs.[45] An informed choice occurs when individuals with either a positive or negative attitude towards screening have relevant knowledge about the screening, thus allowing them to make a decision on

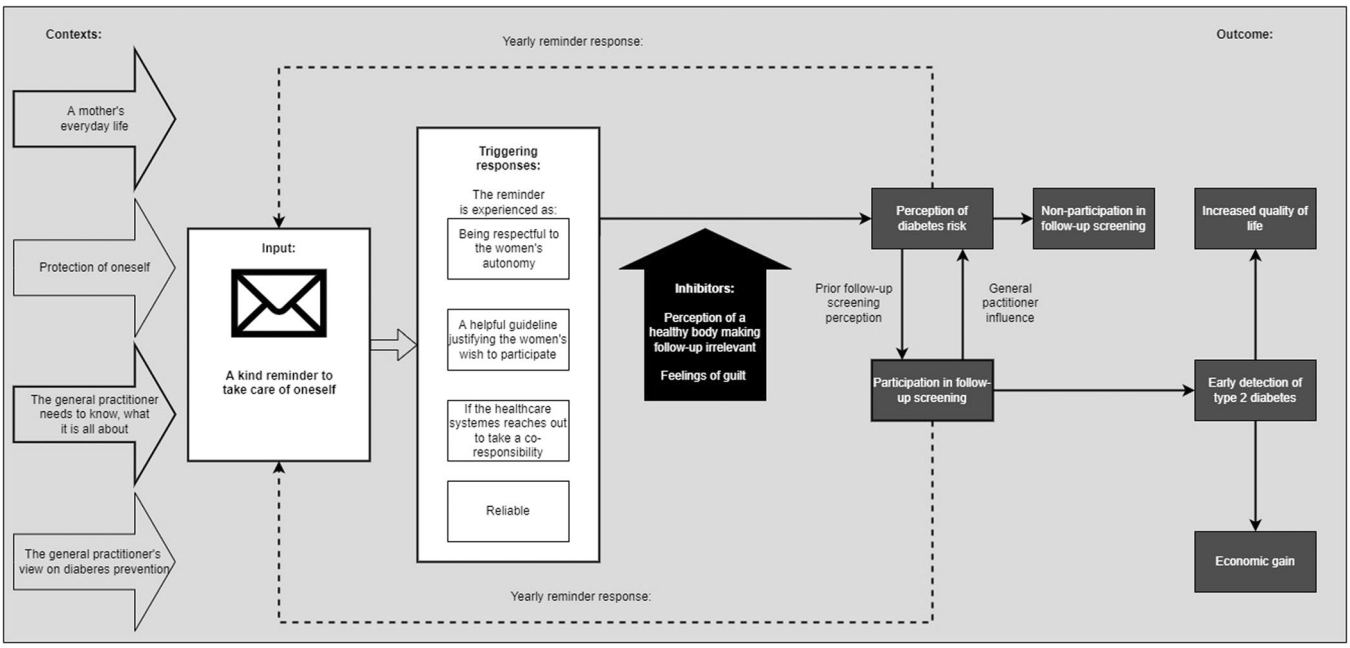

FIGURE 2 A logic model illustrating the electronic reminder as an intervention within a complex system

participation.[25] The personalized design of the reminder and its ability to express care from the health care system seemed to support the principles of informed choice in the intervention design. This presents a possible explanation for the effect of the reminder found in an adjunct RCT-study[24] as reminders with a personal approach, for example, personal letters, can increase participation in follow-up screening.[15]

Reminders have been found to be successful in supporting patients in shared decision-making[46] as well as to significantly improve outcomes for disadvantaged patients.[47] The foundation of shared decision-making is the provision of information and deliberation support.[26] This is in line with previously published literature which shows that for many people, knowledge provision and encouragement will not be enough in and of itself to enable shared decision-making.[46] A key finding of this study was that the perception by the women was that the reminder was a kind way to remind them to take care of themselves while emphasizing the fact that participation in follow-up screening was their own choice and they had the right to make their own decision independent of follow-up recommendations. This entailed a process of decision-making by the women. The reminder thereby provided information concerning follow-up screening as well as gave support for the decision-making processes through knowledge of how to receive additional information, whom to contact for further discussion, and increasing the women's confidence in contacting their GP by justifying their wish to follow up and thereby engage in shared decision-making.

Reminders targeting high-risk individuals is a high-risk strategy in disease prevention, and according to Rose, an advantage to this is GP motivation.[48] This highlights the importance of GP engagement and the consequences of indifference and nonengagement. A key finding of this study was the importance of GP engagement in follow-up screening affecting the women's decision-making and motivation to participate in future screenings. GP engagement being important in follow-up screening has also been found in other studies investigating how to support women's attendance in follow-up care.[16] The importance of GPs underpins how social interactions influence individual behaviour being a disadvantage in high-risk preventive strategies.[48]

Earlier studies from the same Danish region have reported some GPs having insufficient knowledge of women's risk and recommendations regarding follow-up screenings. Specifically, GPs felt a hesitation to communicate and participate in decision-making processes.[49,50] GPs have the opportunity to facilitate a relationship between women previously diagnosed with GDM and the healthcare system, creating relational continuity.[19] In this way, the GP affects women's participation in follow-up screening. Research illustrates difficulties in GP involvement in follow-up screening, for example, time pressure, which causes GPs to prioritize urgent matters concerning the birth and the baby over follow-up care. GPs experience handover difficulties from secondary care[51] consisting of insufficient information sharing between GDM diagnosis and follow-up care.[49,50] This is of importance, as this study highlights the significance of GP knowledge and engagement in women's participation in follow-up screening.

This study's findings highlight the importance of continuity in women's care pathway after GDM. The reminder triggers a response among women in the healthcare system, taking a co-responsibility in postpartum follow-up. In this way, the reminder contributes to follow-up care improvement by succeeding in establishing continuity between GDM monitoring and treatment and postpartum follow-up. Facilitating continuity is important as an experience of discontinuity is a significant barrier to women's participation in follow-up screening[15] while perception of continuity in the transition to follow-up in general practice encourages participation.[52] Lack of continuity challenges the complex system of healthcare is vital.[53] The complexity of the healthcare system reinforces the value of the reminder's ability to facilitate continuity between prepartum GDM monitoring and treatment and follow-up care postpartum. As women's life circumstances inhibited their prioritization of follow-up screening and often made them forget follow-up, the need to improve the continuity of care is significant. The tendency of women to forget follow-up screening is also reflected in a qualitative study examining how to support follow-up attendance after GDM[16] and several studies illustrate women's life circumstances acting as barriers to postpartum follow-up.[12,15]

Earlier studies have shown that women feel abandoned with the sole responsibility of follow-up care after GDM.[12] This study elucidates how the reminder triggered a perception of being cared for and of not being left alone nor forgotten by the healthcare system. This perception contributed to increased continuity of care. The impact of feeling socially supported has also been demonstrated in a previous realist review that showed that social support facilitates women's prioritizing of follow-up screening and an experience of relational continuity, which increases their participation in postpartum follow-up.[19] Healthcare professionals have the ability to represent social support and secure relational continuity. This is important as a lack of continuity functions as a barrier to follow-up participation.[13]

4.1 | Methodological considerations

A strength of this study is its varied sample of participants and, thus, its ability to examine different perspectives regarding receiving the reminder. The use of telephone and digital interviews for the collection of in-depth, qualitative data may be considered a limitation as the golden standard is considered face-to-face interviews based on the supposition that telephone interviews hamper data quality.[54] Nonetheless, recent studies have not been able to identify differences in data quality when comparing face-to-face and telephone/electronic interviews.[55,56] The place for conducting interviews has been reported to have the greatest impact on data quality,[56] and many informants prefer Zoom interviews compared to face-to-face interviews because of the convenience, time effectiveness, and flexibility.[57]

A limitation of the study is the lack of recruitment of women who were not ethnically Danish. This is of importance because there is a significant population of women with Middle Eastern backgrounds in Denmark who are at greater risk of developing T2DM following GDM.[58] The described mechanisms and contexts may affect women with other cultural backgrounds in a different way which is a topic that needs to be explored.

The reminder was sent to women once. Thus, the results of this study do not elucidate how women will experience receiving annual reminders, which is of importance, as the response rate to reminders can decrease over time.[59]

The reminder was sent through a national secure electronic mailbox used in all Danish regions. Adaption of the reminder to other contexts and countries requires access to the use of a similar secure system used routinely for the facilitation of safe communication from health authorities.

5 | CONCLUSION

Receiving the reminder was perceived positively by all participating women. A personal approach in the reminder design facilitated a co-responsibility and impression of care from the healthcare system resulting in continuity, that affected women's choice of participation in follow-up screening. The study has offered important insights into the role of electronic reminders in women's decision-making.

The electronic reminder influences women's decision-making through an informed choice and contributes to shared decision-making. It is important, however, to be aware of the contextual factors of these women, including the significant role of the GP in women's decision-making on participation in follow-up screening. The study findings support the use of an electronic reminder based on principles of shared decision-making and informed choice and are also useful for adapting the reminder intervention to other settings as part of long-term, routine care after a pregnancy complicated by GDM.

AUTHOR CONTRIBUTIONS

Jane H. Nielsen, Charlotte Overgaard and Julie B. Nedergaard developed the conceptual design of this study. Julie B. Nedergaard and Tina A. Dahl recruited the informants. Julie B. Nedergaard conducted and transcribed the interviews. Julie B. Nedergaard analyzed the interviews in close collaboration with, and with assistance from Jane H. Nielsen and Charlotte Overgaard. Julie B. Nedergaard wrote the first draft of the manuscript with significant support from Jane H. Nielsen, Charlotte Overgaard and Lærke M. B. Andersen. All authors have contributed to the revision of the manuscript and approved the final version.

DATA AVAILABILITY STATEMENT

Research data are not shared.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

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SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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