Supportive care for women with recurrent miscarriage: a survey to quantify women’s preferences

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BACKGROUND: Supportive care is regularly offered to women with recurrent miscarriages (RMs). Their preferences for supportive care in their next pregnancy have been identified by qualitative research. The aim of this study was to quantify these supportive care preferences and identify women’s characteristics that are associated with a higher or lower need for supportive care in women with RM.

METHODS: A questionnaire study was conducted in women with RMs (≥2 miscarriages) in three hospitals in the Netherlands. All women who received diagnostic work-up for RMs from January 2010 to December 2010 were sent a questionnaire. The questionnaire quantified supportive care options identified by a previous qualitative study. We next analysed associations between women’s characteristics (age, ethnicity, education level, parity, pregnancy during questionnaire and time passed since last miscarriage) and their feelings about supportive care options to elucidate any differences between groups.

RESULTS: Two hundred and sixty-six women were asked to participate in the study. In total, 174 women responded (response rate 65%) and 171 questionnaires were analysed. Women with RM preferred the following supportive care options for their next pregnancy: a plan with one doctor who shows understanding, takes them seriously, has knowledge of their obstetric history, listens to them, gives information about RM, shows empathy, informs on progress and enquires about emotional needs. Also, an ultrasound examination during symptoms, directly after a positive pregnancy test and every 2 weeks. Finally, if a miscarriage occurred, most women would prefer to talk to a medical or psychological professional afterwards. The majority of women expressed a low preference for admission to a hospital ward at the same gestational age as previous miscarriages and for bereavement therapy. The median preference, on a scale from 1 to 10, for supportive care was 8.0. Ethnicity, parity and pregnancy at the time of the survey were associated with different preferences, but female age, education level and time passed since the last miscarriage were not.

CONCLUSIONS: Women with RM preferred a plan for the first trimester that involved one doctor, ultrasounds and the exercise of soft skills, like showing understanding, listening skills, awareness of obstetrical history and respect towards the patient and their miscarriage, by the health care professionals. In the event of a miscarriage, women prefer aftercare. Women from ethnic minorities and women who were not pregnant during the questionnaire investigation were the two patient groups who preferred the most supportive care options. Tailor-made supportive care can now be offered to women with RM.

Key words: recurrent miscarriage / psychology / counselling

Introduction

Recurrent miscarriage (RM) is defined as two or more miscarriages before 20 weeks of pregnancy and affects ~1–5% of all couples (Rai and Regan, 2006). Current diagnostic procedures aim to identify aetiological factors as structural chromosome abnormalities, thrombophilic disorders, elevated homocysteine fasting level and uterine abnormalities in these couples. However, the majority of RMs remain unexplained (Jauniaux et al., 2006). Even though a cause of the RM can be found in up to 50% of the women, only for women with
Supportive care for recurrent miscarriage

RM results from antiphospholipid syndrome, a potentially effective treatment namely the use of anticoagulants is available (Rai et al., 1997; Empson et al., 2005). For all other women with RM this is not the case, which is one of the reasons why RM is a distressing condition for the affected couple and a frustrating problem for the clinician.

Current guidelines from the European Society of Human Reproduction and Embryology (ESHRE) and the Royal College of Obstetricians and Gynaecologists (RCOG) recommend supportive care during the next pregnancy for women with unexplained RM (Jauriaux et al., 2006; RCOG, 2011), suggesting that it has a beneficial effect. The guidelines of the association of early pregnancy units suggest that all staff members should be trained in emotional aspects of early pregnancy loss and offer bereavement counseling (www.earlypregnancy.org.uk).

Supportive care is regularly offered to these women, after which live birth rates up to 85% are reported (Javert, 1954; Stray-Pedersen and Stray-Pedersen, 1984; Liddell et al., 1991; Clifford et al., 1997; Brigham et al., 1999). What women with RM perceive as supportive care during their next pregnancy was not known until a recent qualitative study (Musters et al., 2011). In this study, women identified 20 different supportive care options; 16 of these options were preferred for their next pregnancy. Among the preferred supportive care options were early and frequently repeated ultrasounds, HCG monitoring, practical advice concerning life style and diet, emotional support in the form of counselling, a clear policy for the upcoming 12 weeks and medication. The four supportive care options that were not preferred by the women were admission to a hospital ward at the same gestational age as previous miscarriages, complementary alternative medicine (CAM), an ultrasound every other day and supportive care from their general practitioner.

In this study, we investigated which supportive care options are most commonly preferred by women with RM in their next pregnancy and identified women’s characteristics that are associated with a higher or lower need for supportive care in women with RM.

Materials and Methods

Setting

This patient preference study was conducted in women with RM in three hospitals in the Netherlands; the Academic Medical Centre in Amsterdam, the Onze Lieve Vrouwe Gasthuis in Amsterdam and the University Medical Centre Utrecht in Utrecht. Institutional Review Board (IRB) approval was not required because a questionnaire study is not subject to the Dutch ‘Medical Research Involving Human Subjects Act’.

Participants

All women who received diagnostic work-up for RM from January 2010 to December 2010 in the three hospitals were sent a questionnaire (n = 266). The questionnaire was sent after the diagnostic work-up for RM had been performed. Women were eligible if they had two or more miscarriages (≥20 weeks pregnancy) and if they were fluent in Dutch.

Survey design

The questionnaire included a letter explaining the purpose of the study and information on supportive care and RM (the Supplementary data contain a translated version of the information provided and the questionnaire).

The questionnaire consisted of three parts. In the first part, women’s characteristics were collected. This included age, education, ethnicity, diagnosis of their RM (translocations, thrombophilic disorders, endocrine disorders, uterine abnormalities and unexplained), their obstetric history and if they still had a wish to conceive.

The second part of the questionnaire contained 41 Likert scale items based on the 20 supportive care options that were identified in our previous qualitative study (Musters et al., 2011). These 41 Likert scale items were divided into three domains (medical supportive care, ‘soft-skills’ and other types of supportive care). The five-point Likert scale items ranged from total disagreement to total agreement for a particular option that could be offered in their next pregnancy. After each topic, where applicable, we asked the women to choose a caregiver they preferred to receive supportive care from (for instance: gynaecologist, doctor specialized in RM or a psychologist).

In the third part of the questionnaire, we asked the participants to state their need for supportive care on a 1–10 scale. Ten reflected the highest and 1 reflected the lowest need for supportive care.

All the questionnaires were sent by post in January 2011. To ensure the highest possible response rate, we used a short questionnaire (maximum 15 min fill in time), prepaid return envelopes, preliminary notification where possible and two reminder questionnaires (Edwards et al., 2002).

The reminders were sent to non-respondents in a period of 10 weeks.

Pilot study

The questionnaire was pilot tested for interpretation among five women with RM, two gynaecologists (one specialized in RM), two fertility doctors, two PhD students (one specialized in RM) and one medical psychologist at the Academic Medical Centre in Amsterdam, the Netherlands. The three parts of the questionnaire were well understood by all the participants of the pilot study, and therefore, only minor modifications were made to the final version of the survey.

Sample size calculation

On the basis of the null hypothesis that an equal percentage of women would or would not prefer a supportive care option, a sample size of 160 women would be required for an 80% power at a two-sided alpha of 0.05 to detect a preference rate of 61% with a confidence interval (CI) of ± 7.5%.

Statistical analysis

Descriptive data are given in numbers and percentages. To clearly distinguish which supportive care options women with RM prefer or do not prefer during their next pregnancy, the 5-point Likert scale responses were recoded into a three point classification. Numbers 1 and 2 were recoded into number 1, which represented no need, number 3 was recoded into number 2, which represented a neutral answer and numbers 4 and 5 were recoded into number 3 and represented a preference for a certain supportive care option. The percentages per supportive care option were calculated. Supportive care options that were preferred by 60% or more of the women with RM were considered preferred by the ‘majority’ of the women. We performed a chi-squared test in which we compared the ‘prefer’ group with the ‘no need’ group.

Women’s characteristics

We analysed associations between women’s characteristics (age, ethnicity, education level, parity, pregnancy during questionnaire and time passed since last miscarriage) and supportive care options to elucidate any differences between groups. Ethnicity was based on the woman’s country of birth and the country of birth of her parents (Alders 2001; CBS, 2001;
Stronks et al., 2009). The patient characteristics were all dichotomous; age (≤35 and >36 years), ethnicity (Caucasian and ethnic minorities), education level (low/moderate education and high education), parity (no children and 1 ≥ children), pregnancy during survey (pregnant and not pregnant) and miscarriage (miscarriage ≥6 months ago and miscarriage < 6 months ago).

First, we tested the different patient characteristics for a univariate relationship with the different supportive care options in order to select the items for the multivariate probit analysis. Chi-squared test was used to determine a relationship for the univariate analysis.

We subsequently assessed the association between selected variables and the following outcomes (ethnic minority, education, parity, not pregnant and miscarriage ≥6 months) using multivariate probit in STATA 11.2. The mvprobit program fits multivariate probit models using the method of simulated maximum likelihood (Jenkins and Van Kerm, 2003). Women’s characteristics that were significantly (P ≤ 0.05) associated with preference for a particular supportive care option in the univariate analysis were subsequently entered in a multivariate probit analysis.

Because the multivariate probit analysis gives coefficients that are difficult to quantify, a multivariate logistic regression analysis was performed for the statistically significant associations to calculate the odds ratio’s (ORs). A backward selection method for the multivariate logistic regression analysis was used and the strength of the association between a woman’s characteristic and preference for a particular supportive care option was expressed in ORs with 95% CIs. Two-sided P-values < 0.05 were considered statistically significant.

Results

Two hundred and sixty-six women were asked to participate in the study. Of these women, 174 returned the questionnaire. The response rate was 65%. Three questionnaires were excluded as the women did not fill in any of the preferences questions. In total, 171 questionnaires were analysed. Baseline characteristics of the women are shown in Table I.

Preferences for supportive care

The mean preference on a scale from 1 to 10 for supportive care was 8.0 for all women with RM (Table II). The frequencies and percentages of women who did not prefer, were neutral, or did prefer a supportive care option are listed in Table II. The majority (≥60%) of the women with RM preferred 15 of the 41 supportive care options and rejected 2 of the 41 supportive care options. These 17 supportive care options are summarized below per domain.

Domain 1: medical supportive care

The majority of the women requested a plan for the first trimester with one doctor (preferably a gynaecologist or doctor specialized in RM) with knowledge of their obstetric history. An ultrasound examination directly after a positive pregnancy test, when symptoms occurred and every 2 weeks a repeat ultrasound was preferred by the majority of women with RM. The majority of the women wished to receive medical information from their doctor relating to all aspects (diagnosis, treatment and prognosis) of RM.

In general, admission to a hospital ward at the same gestational age as previous miscarriages was not considered necessary by the majority of participating women.

Domain 2: ‘soft-skills’

Women preferred soft-skills from their doctor in the form of taking them seriously, listening to them, showing understanding and empathy, informing on progress and enquiring about emotional needs.

Domain 3: other types of supportive care

Next to ‘soft-skills’ from their doctor, they also valued support from their friends. Finally, the majority of the women expressed a need to talk to a professional (i.e. medical or psychological) after their next miscarriage but bereavement therapy was not considered necessary by the majority of participating women.

Table I: Baseline characteristics of women with recurrent miscarriages (n = 171).

| Characteristics                        | Frequency | Percentage |
|----------------------------------------|-----------|------------|
| Age, years, mean ± SD (range)          | 34.8 ± 4.7 (22–46) |
| Women pregnant during questionnairea n (%) | 56 (33)    |
| Gestation weeks, mean ± SD (range) (n = 56) | 21.3 ± 10.4 (4–38) |
| Obstetric history mean ± SD (range)    |           |
| No. of pregnancies per woman           | 4.7 ± 2.1 (2–18) |
| No. of miscarriages per woman          | 3.6 ± 2.2 (2–18) |
| No. of children per woman              | 0.6 ± 0.8 (0–5)  |
| Diagnosis of recurrent miscarriages n (%) |           |
| Unexplained                            | 148 (87)   |
| Thrombophilia                          | 10 (6)     |
| Translocation                          | 3 (2)      |
| Endocrine                              | 1 (0.5)    |
| Hyperhomocysteinemia                   | 1 (0.5)    |
| Work-up not completed                  | 2 (1)      |
| Could not remember diagnosis           | 6 (4)      |
| Ethnic background n (%)                |           |
| Caucasian                              | 144 (84)   |
| Minorities                             |           |
| Arab                                   | 13 (8)     |
| African                                | 9 (5)      |
| Hispanic                               | 2 (1)      |
| Not mentioned                          | 3 (2)      |
| Education level n (%)                  |           |
| Lowa                                   | 12 (7)     |
| Moderateb                              | 51 (30)    |
| Highb                                  | 106 (62)   |
| Not reported                           | 2 (1)      |

aForty-four (79%) pregnant women had a pregnancy duration that was 12 weeks or longer.

bHigher vocational education.

cHigher general secondary education/pre-university secondary education.

dHigher vocational education/university.

Patient characteristics associated with preference for supportive care options

Women’s characteristics that were significantly associated with preference for a particular supportive care option in the multivariate probit analysis are summarized in Table II.
### Table II  Attitudes of women with RMs to supportive care options in their next pregnancy (n = 171)\(^a\).

| Preference (scale 1–10) for supportive care in next pregnancy median (quartiles) 8 (7, 10) | No need | Neutral | Prefer | P-value* |
|---|---|---|---|---|
| **Domain 1: Medical supportive care n (%)** | | | | |
| Plan for first trimester | 17 (10) | 11 (6) | 137 (80) | ≤0.000 |
| No. of doctors | | | | |
| 1 | 8 (5) | 23 (14) | 119 (70) | ≤0.000 |
| 2 | 28 (16) | 41 (24) | 76 (44) | ≤0.000 |
| >2 | 86 (50) | 28 (16) | 31 (18) | ≤0.000 |
| Doctor has knowledge of obstetric history | 1 (1) | 3 (2) | 147 (86) | ≤0.000 |
| Ultrasound | | | | |
| Directly after a positive pregnancy test | 33 (19) | 15 (9) | 114 (67) | ≤0.000 |
| During symptoms | 3 (2) | 7 (4) | 150 (88) | ≤0.000 |
| Once a week | 42 (25) | 19 (11) | 100 (59) | ≤0.000 |
| Once every 2 weeks | 16 (9) | 23 (14) | 112 (66) | ≤0.000 |
| Information | | | | |
| From doctor | 14 (8) | 10 (6) | 143 (84) | ≤0.000 |
| From internet | 61 (36) | 37 (22) | 64 (37) | 0.86 |
| From peers | 93 (54) | 23 (14) | 46 (27) | ≤0.000 |
| Advice | | | | |
| Food | 70 (41) | 20 (12) | 75 (44) | 0.74 |
| Lifestyle | 54 (32) | 21 (12) | 89 (52) | 0.004 |
| βHCG | | | | |
| Once before first ultrasound | 58 (34) | 26 (15) | 73 (43) | 0.22 |
| More times before first ultrasound | 60 (35) | 39 (23) | 53 (31) | 0.57 |
| Medication | | | | |
| In general | 72 (42) | 41 (24) | 45 (26) | 0.02 |
| Safe for pregnancy | 44 (26) | 31 (18) | 86 (50) | ≤0.000 |
| Admission to a hospital | 111 (65) | 22 (13) | 29 (17) | ≤0.000 |
| **Domain 2: ‘Soft-skills’ medical supportive care n (%)** | | | | |
| Doctor | | | | |
| Takes you seriously | 1 (1) | 2 (1) | 148 (87) | ≤0.000 |
| Listens to you | 1 (1) | 3 (2) | 147 (86) | ≤0.000 |
| Shows understanding | 4 (2) | 7 (4) | 140 (81) | ≤0.000 |
| Shows empathy | 8 (5) | 13 (8) | 130 (76) | ≤0.000 |
| Informs on progress | 9 (5) | 16 (9) | 126 (74) | ≤0.000 |
| Informs on emotional needs | 17 (10) | 31 (18) | 103 (60) | ≤0.000 |
| Knowledge of home situation | 46 (27) | 41 (24) | 64 (37) | 0.11 |
| Counselling from | | | | |
| A specialized nurse | 63 (37) | 30 (18) | 48 (28) | 0.19 |
| A psychologist | 83 (49) | 25 (15) | 33 (19) | ≤0.000 |
| A social worker | 95 (56) | 20 (12) | 24 (14) | ≤0.000 |
| **Domain 3: Other types of supportive care n (%)** | | | | |
| Support from | | | | |
| Friends | 22 (13) | 16 (9) | 106 (62) | ≤0.000 |
| Family | 22 (13) | 27 (16) | 98 (57) | ≤0.000 |
| Peers | 86 (50) | 17 (10) | 39 (23) | ≤0.000 |
| Relaxation tools | | | | |
| Relaxation exercises | 59 (35) | 30 (18) | 55 (32) | 0.78 |

Continued...
analyses are shown in Table III. Results from the univariate preselecting are not shown.

Belonging to an ethnic minority group was significantly associated with preference for nine of the supportive care options, not being pregnant at the time of survey completion with eight options and having no children with four options. Women under 35 years old did not differ from those over 35 in their preferences for supportive care and neither did women from different educational levels nor did the time passed since the last miscarriage had an association with supportive care options.

Women from ethnic minority groups were significantly more likely to prefer admission to a hospital ward at the same gestational age as previous miscarriages (OR 26.4), bereavement therapy (OR 10.2), counselling from a specialized nurse (OR 7.5), advice about lifestyle (OR 6.7), counselling from a psychologist (OR 5.5), βHCG sampling once before their first ultrasound (OR 4.7), doctor’s knowledge of the home situation (OR 4.0) and support from peers (OR 3.7) than women who were not from an ethnic minority group. Ethnic minorities were less likely to prefer support of friends (OR 0.3) than women who were not from an ethnic minority group.

Women without children were significantly more likely to prefer yoga (OR 3.4), CAM medication (OR 3.0) and relaxation exercises (OR 2.9) than women with one or more children, and less likely to prefer one consulting doctor than women with one or more children.

Women that were not pregnant during the survey were more likely to prefer βHCG sampling prior to the first ultrasound (OR 5.0 and 4.8), counselling from a social worker (OR 4.7), ultrasound assessment directly following a positive pregnancy test (OR 3.3), medication (OR 2.6 and 2.5), the doctors’ knowledge of the home situation (OR 2.5) and ultrasound once every week for the first 12 weeks of pregnancy (OR 2.3) than women who were pregnant.

**Discussion**

This questionnaire study investigated which supportive care options for their next pregnancy women with RM most commonly preferred and identified characteristics associated with the need for supportive care.

The majority of women with RM wanted to make a plan with one gynaecologist or doctor specialized in RM, who gives them medical information, is well informed about their obstetric history, takes them seriously and offers ultrasound assessment during symptoms once every 2 weeks during the first trimester and preferably directly following a positive pregnancy test. Finally, if a miscarriage were to occur again, women preferred miscarriage after-care from a medical or psychological professional. The majority of the women did not express a wish to be admitted to a hospital ward at the same gestational age as previous miscarriages nor to receive bereavement therapy. While age did not appear to influence preferences, variations were observed according to ethnicity, parity and pregnancy during questionnaire.

Ethnic minorities preferred 12 supportive care options that were not preferred by the majority of the women with RM, such as admission to a hospital ward at the same gestational age as previous miscarriages and bereavement therapy. This may be because of cultural differences in health care in other countries, for example, more willingness to give non-evidence-based medical treatment. All women from the ethnic minority groups were fluent in Dutch and therefore well capable of conveying their preferences. Because this group consisted of 24 women, we must keep in mind that the conclusions should not be drawn too strongly. This is the first study to reveal different preferences in supportive care options in this group of women. We also showed that pregnancy at the time of completing the questionnaire was associated with different preferences, eight of their supportive care preferences for their next pregnancy differing from those generally expressed. Moreover, the need for supportive care was less evident in pregnant women than in non-pregnant women (7.3 versus 8.3). Considering that 79% of the women that were pregnant had a gestation of 12 weeks or longer, it can be concluded that supportive care is most needed in the first trimester when the risks of pregnancy loss are the largest and the fear for a pregnancy loss is the highest for these women. The differences in preferences found in women with low/moderate education, no children and miscarriage 6 months or longer ago were minor.
The strength of this study lies in the fact that it is based on the results of a qualitative study that identified the preferred options for supportive care (Musters et al., 2011). Secondly, we were able to quantify these results of the qualitative study without losing information. This was achieved by using a broad questionnaire that covered all the domains of supportive care that were previously identified. Also, we analysed each supportive care option as a separate outcome, to find out which specific care was preferred by which particular subgroup. Thirdly, we identified key patient-specific characteristics that are associated with preferences for different kinds of supportive care in a future pregnancy. Finally, this study assessed the views of women actively trying to conceive, and thus, presents a current view of what supportive care women with RM want.

Next to the strengths, certain limitations should be recognized. Caution is required in interpreting and generalizing this data as it was likely that women in greater need for supportive care participated in this study. In contrast, pregnant women who were well past their first trimester and therefore at less risk of a miscarriage also participated, reducing a possible selection bias effect. Secondly, despite employing all feasible recommended strategies to increase the response rate, the response rate was 65%. Why 35% of the women

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**Table III** Statistically significant associations between women’s characteristics and a preference for a particular supportive care option confirmed by multivariate probit analysis expressed in OR* with 95% CIs.

| Supportive care options                      | Associations expressed in OR's (95% CI) |
|---------------------------------------------|----------------------------------------|
| Ethnic minority (n = 24)                     | No children (n = 94)                   | Not pregnant (n = 115) |
| No. of doctors                              |                                        |                        |
| One doctor only                             | 0.4 (0.2–0.9)                          |                        |
| Ultrasound                                  |                                        |                        |
| Directly after a positive pregnancy test    | 3.3 (1.6–6.7)                          |                        |
| Once a week                                 | 2.3 (1.2–4.4)                          |                        |
| Advice                                      |                                        |                        |
| Lifestyle                                   | 6.7 (1.9–23.7)                         |                        |
| βHCG                                        |                                        |                        |
| Once before first ultrasound                | 4.7 (1.4–16.1)                         | 4.8 (2.2–10.6)         |
| More times before first ultrasound          |                                        | 5.0 (2.1–12.3)         |
| Medication                                  |                                        |                        |
| In general                                  | 2.5 (1.0–6.2)                          | 2.6 (1.3–5.2)          |
| If safe in pregnancy                        |                                        |                        |
| Admission to a hospital                     | 26.4 (7.3–94.8)                        | 2.5 (1.2–5.2)          |
| Doctor has                                  |                                        |                        |
| Knowledge of home situation                 | 4.0 (1.3–12.1)                         |                        |
| Counselling from                            |                                        |                        |
| A specialized nurse                         | 7.5 (2.3–24.7)                         |                        |
| A psychologist                              | 5.5 (1.9–16.4)                         |                        |
| A social worker                             |                                        | 4.7 (1.3–16.6)         |
| Support from                                |                                        |                        |
| Friends                                     | 0.3 (0.09–0.7)                         |                        |
| Peers                                       | 3.7 (1.3–10.3)                         |                        |
| Relaxation tools                            |                                        |                        |
| Relaxation exercises                        | 2.9 (1.4–5.3)                          |                        |
| Yoga                                        | 3.4 (1.6–7.0)                          |                        |
| Complimentary alternative medicine          |                                        |                        |
| Medication                                  | 3.0 (1.4–6.1)                          |                        |
| Bereavement therapy                         | 10.2 (3.0–33.8)                        |                        |
| More partner involvement                   |                                        |                        |

(*Odds ratio’s given from multivariate logistic regression analysis were shown if coefficients from the multivariate probit analysis showed a significant association. \( > \) is a significantly higher preference for a supportive care option (\( \leq 0.05 \)) and \( < \) is a significantly lower preference for a supportive care option (\( \leq 0.05 \)).

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(P-values < 0.05) (total, \( n = 171 \)).
did not respond could be due to the sensitive nature of the topic as questions about RMs may be confrontational for these women (Edwards et al., 2002). Thirdly, as all data collection was carried out in the Netherlands, the reported findings may not be generalizable to other countries. However, the supportive care options we quantified are not specifically related to the Dutch setting. Finally, the scope of this research was limited to the preferences of women with RM.

Another point that should be noted is that 87% of the women participating in this study had unexplained RMs, which is higher than in other studies that report about half (54%) of the women having unexplained RMs (Habayeb and Konje, 2004; Jaslow et al., 2010). There are several explanations for this. Firstly, the average age of the women in our study is 35 years compared with 32 years in the other studies. As women get older, the chance of ‘unexplained’ miscarriage increases. Secondly, it could be that women with unexplained RM feel more compelled to return the survey than women with a known cause of their RM. Finally, this remains a self-report questionnaire in which women themselves report on the cause of their miscarriage and women with a known, but untreatable cause may have interpreted their RMs as unexplained.

Provision of the supportive care options preferred by women with RM is not always feasible in our current health care system; for example, ethnic minorities prefer admission to a hospital ward at the same gestational age of a previous miscarriage. To be able to implement these supportive care options in daily practice, further research should involve the perceptions of the caregivers to help categorize and prioritize the preferred supportive care options regarding feasibility and superfluity.

It is recommended that the preferences of women with RM be considered and training on counselling and psychological support be offered to health care professionals. RM is a frustrating condition for both women and clinicians alike. The results of this study can help lessen this frustration for both groups, because we now know which supportive care options women with RM find the most important. This will bring clinicians a step closer to effectively helping and understanding women with RM.

**Supplementary data**

Supplementary data are available at http://humrep.oxfordjournals.org/.

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**Authors’ roles**

A.M.M. contributed to the design of the study, the acquisition of the data and the analysis of the data. She also drafted the manuscript. Y.E.M.K. contributed the acquisition of the data and revised the manuscript critically. N.M.v.B. contributed to the design of the study, analysis and interpretation of the data and to the revisions of the manuscript. E.K. contributed the acquisition of the data and revised the manuscript critically. N.S.M. contributed in the interpretation of the data and to the revisions of the manuscript. F.v.V. contributed to the design of the study, interpretation of the data and to the revisions of the manuscript. P.T.N. contributed to the design of the study and analysis of the data. She also participated in interpretation of the data and revised the manuscript critically. M.G. contributed to the design of the study, participated in interpretation of the data and revised the manuscript critically.

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**Statement of independence of researchers from funders**

All researchers are independent from funders.

**Ethical approval**

The subjects did not undergo additional investigations nor treatment. As assessed by the Institutional Review Board (IRB), Academic Medical Center Amsterdam, the study was not subject to the Dutch ‘Medical Research Involving Human Subjects Act’ (meaning that no formal IRB approval was required).

**Conflict of interest**

None declared.

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