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How do women perceive abortion care: A study focusing on healthy women and those with mental and posttraumatic stress

Inger Wallin Lundell^{1,2}, Susanne Georsson Ohman^{2,3}, Inger Sundstrom Poromaa¹, Ulf Hogberg¹, Gunilla Sydsjo⁴ and Agneta Skoog Svanberg¹

¹Department of Women's and Children's Health, Uppsala University, Uppsala, Sweden

²Sophiahemmet University, Stockholm, Sweden

³Department of Women's and Children's Health, Karolinska Institutet, Stockholm, Sweden

⁴Division of Obstetrics and Gynecology, Department of Clinical and Experimental Medicine
Faculty of Health Sciences, Linköping University, SE581 85 Linköping, Sweden

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Correspondence: Dr. Inger Wallin Lundell, Department of Women's and Children's Health, Uppsala University, SE 751 85 Uppsala, Sweden. Tel: +46 (0)70 162 1029, Fax: +46 (0)18 559775. Email: inger.wallinlundell@shh.se

Abstract

Objectives To identify perceived deficiencies in the quality of abortion care among healthy women and those with mental stress.

Methods This multi-centre cohort study included six obstetrics and gynaecology departments in Sweden. Posttraumatic stress (PTSD/PTSS) was assessed using the Screen Questionnaire-Posttraumatic Stress Disorder; anxiety and depressive symptoms, using the Hospital Anxiety Depression Scale; and abortion quality perceptions, using a modified version of the Quality from the Patient's Perspective questionnaire. Pain during medical abortion was assessed in a subsample using a visual analogue scale.

Results Overall, 16% of the participants assessed the abortion care as being deficient, and 22% experienced intense pain during medical abortion. Women with PTSD/PTSS more often perceived the abortion care as deficient overall and differed from healthy women in reports of deficiencies in support, respectful treatment, opportunities for privacy and rest, and availability of support from a significant person during the procedure. There was a marginally significant difference between PTSD/PTSS and the comparison group for insufficient pain alleviation.

Conclusions Women with PTSD/PTSS perceived abortion care to be deficient more often than did healthy women. These women do require extra support, relatively simple efforts to provide adequate pain alleviation, support and privacy during abortion may improve abortion care.

Introduction

In the few studies that have evaluated women's perspectives of abortion care demonstrate that women in different countries rate their overall satisfaction with abortion care as high¹⁻⁶. When women are dissatisfied or report negative experiences of abortion care, it was reported to be because of multiple factors including patient-related factors such as pain experiences, expectations of care and sociodemographics in previous studies². Younger women^{1,2,6}, women with higher levels of education² and women without children^{1,6} were more likely to report negative experiences of abortion care. Experiences of long waiting time^{2,5,7}, inadequacies in treatment by clinicians and health care staff^{2,3,5,7} and medical complications in relation to the abortion¹ are examples of health care-related factors. One researcher suggested that to increase satisfaction with abortion services for women undergoing surgical abortion the waiting time at the clinic should be shortened⁷. For women having medical abortion, the provision of adequate and realistic information about bleeding, pain, expulsions and related factors is important and has been stressed in several studies³⁻⁶.

Medical abortions can be performed at home, and the number of such practices appears to be increasing in Sweden⁸, although exact data are unavailable⁹. Midwives are now performing the duties of drug administration, care during the procedure and follow-up¹⁰. Barbarosa suggests that routine assessments of patient satisfaction could help health care staff to identify those in need of more support¹¹.

Previously, in a longitudinal study, we investigated the prevalence of posttraumatic stress disorder (PTSD) and posttraumatic stress symptoms (PTSS) in abortion-seeking women. The prevalence of PTSD before the abortion was 7%, which is consistent with the general Swedish female population¹², and the prevalence of PTSS was 23%¹³. However, no population based figures for PTSS were available in the study of Frans and colleagues¹².

It is important to identify women with mental stress, including not only those with PTSD/PTSS, but also those who present at the abortion clinic with anxiety and/or depressive symptoms, because some of these women may be in need of counselling to prevent negative experiences and dissatisfaction. However, it is unknown specifically which aspects of the abortion care, in addition to counselling, may be improved for women with adverse mental health. Thus, the aim of the present study was to identify perceived deficiencies in the quality of abortion care, focusing on the perceptions of women who present with mental stress at the abortion clinic as compared with women who did not show the specific symptoms of mental distress for which we measured.

Methods

This study is a part of a multi-centre cohort study targeting women who requested an induced abortion from September 2009 to June 2010 at the outpatient clinics of the gynaecology and obstetrics departments of six public hospitals in Sweden. All women who requested an induced abortion before the end of the 12th gestational week were approached for participation. The only exclusion criterion was the inability to read and understand Swedish¹³. Women were informed about the study, including the follow-ups, at the first abortion visit. Participating women signed an informed consent form and completed the first questionnaire in the waiting room at the abortion clinic before they underwent abortion. Two follow-up questionnaires were sent by post to the participating women at 3 and 6 months after the abortion¹⁴. The study was approved by the Regional Ethics Committee of Uppsala University, Uppsala, Sweden (approval date February 25, 2009).

Measurements

The following instruments were used: the Screen Questionnaire-Posttraumatic Stress Disorder (SQ-PTSD)¹², the Hospital Anxiety and Depression Scale (HADS)¹⁵ and the Quality from the

Patient's Perspective (QPP) questionnaire^{16,17}. The baseline questionnaire also collected data on sociodemographic variables. Supplementary information, including previous pregnancy, abortion method, place of abortion (home or outpatient clinic) and psychosocial support during the abortion process, was retrieved from the patients' medical records. Intensity of pain was measured using the visual analogue scale (VAS, ranging from 0 = no pain to 10= worst possible pain) in a subsample (n = 128) who had medical abortions at the Umeå University hospital outpatient clinic.

SQ-PTSD

The SQ-PTSD¹² was used to obtain a diagnosis of PTSD and of PTSS based on self-reported data. Data from the baseline assessment were analysed to assign a research diagnosis of PTSD/PTSS to women at the time of their abortion. The instrument is based on the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV) diagnostic criteria for PTSD¹⁸ and assesses trauma experiences as well as trauma symptoms¹². Only women who met all the DSM-IV criteria from A to F were classified as having a research diagnosis of lifetime PTSD. In previous studies, different terms have been used to denote individuals who only partly met the diagnostic criteria: sub-threshold PTSD, partial PTSD or PTSS¹⁹. In the present study, we used the term PTSS.

HADS

The HADS measures anxiety and depressive symptoms and contains 14 items divided into two scales: seven items evaluating anxiety and seven evaluating depressive symptoms¹⁵. The instrument has been validated in several clinical populations with satisfactory results²⁰, including in Swedish circumstances²¹. Data from the baseline assessment were analysed to evaluate whether anxiety and/or depressive symptoms were present at the time of abortion.

QPP

Perceived quality of care at the abortion clinic was evaluated at 3-month follow-up by use of selected questions from the QPP questionnaire. The instrument was included in the questionnaire for the 3-month assessment, because we decided to evaluate the abortion care as close as possible after the abortion, trying to minimize recall bias. According to the QPP, quality of care can be understood in the light of two conditions: the resource structure of the care organisation and the patient's preferences. The first condition consists of person-related, physical and administrative qualities, and the latter has both rational and human aspects. The QPP for outpatient clinics contains 21 items¹⁶.

The present study used a modified version of the QPP questionnaire, containing 18 items, inspired by a previous abortion study⁵. Additionally, the phrasing of the items was altered to capture women's experiences of abortion services. Nine items measured different experiences of abortion care, and nine measured the subjective importance of these aspects. For example, 'I was treated with respect by the health care staff' (experience). 'It is important for me to be treated with respect by the health care staff' (subjective importance). A five- point Likert scale was used, where 1 denoted 'do not agree at all' and 5, denoted 'fully agree'. In the present study, Cronbach's alpha was 0.77 for the index of experience and 0.76 for the index of subjective importance.

Statistical analyses

Sample size estimation was based on a priori power analyses, previously presented by Wallin Lundell and colleagues²². Age was dichotomised into two categories: ≤ 24 and ≥ 25 years. According to the Official Statistics of Induced abortions in Sweden, most abortions during 2010 were performed in the age group 20 to 24 years, followed by women 25 to 29 years, then by women 30 to 34 years, and then by teenagers⁹. A suitable cut-off was considered to below 25 years and above, because most abortions are performed in the age group 20 to 24

years, followed by the age group of 25 to 29 years. Alcohol users were compared with nonusers, and tobacco smokers and/or snuff users were compared with nonusers. In the analyses, women with a research diagnosis of PTSD or PTSS were categorised as one group. This group consisted of women with PTSD or PTSS only ($n = 61$), PTSD or PTSS and anxiety symptoms ($n = 41$), PTSD or PTSS and depressive symptoms ($n = 6$) and PTSD or PTSS and both anxiety and depressive symptoms ($n = 74$). Anxiety and depressive symptoms scores on the HADS were categorised as absent (score = 0–7) or present (score = 8–21). Women who scored high on the HADS (i.e., those who had anxiety and/or depressive symptoms) were included in one group. The group consisted of women with anxiety symptoms only ($n = 74$), depressive symptoms only ($n = 39$) and both anxiety and depressive symptoms ($n = 83$).

The analysis of the QPP was conducted according to the instructions in the QPP manual¹⁶. An individual's score on a single item on the experience scale was compared with the group mean score for that item. The same procedure was performed with the matching item on subjective importance. Depending on the differences in the scores on the experience and subjective importance items, the quality of care was classified into one of three groups: deficiency, balance or excess (see Table 1).

Mean scores were also calculated for the nine experience items and for the nine subjective importance items. By comparing the mean scores of the two indexes, we obtained an overall assessment of the participants' perceptions of abortion care. The two indexes were calculated and classified as deficiency, balance or excess in the same way as described above (Table 1). For the statistical analyses, the three profile groups of deficiency, balance and excess were classified into two categories: deficiency was retained as one group, and balance and excess were combined to create a satisfactory group.

Table 1 Examples of the classifications of quality of care

Example <i>"Treated with respect by the health care staff"</i>	<u>Deficient</u>		<u>Balance</u>		<u>Excess</u>	
	Experience	Subjective importance	Experience	Subjective importance	Experience	Subjective importance
Score Individual score in relation to group mean score for that item	Less	Greater	Less Greater	Less Greater	Greater	Less
Example <i>"Overall assessment of abortion care"</i>						
Score Individual mean score for the index in relation to the group mean score for that index	Less	Greater	Less Greater	Less Greater	Greater	Less

*The individual score for each experience item was compared with the subjective importance item for the same aspect of care.

**The individual mean score for the index of experience was compared with the mean score of subjective importance. In both cases, participants' perspectives were then classified into three groups: deficient, balance and excess.

Perceptions of deficiency in care by sociodemographic variables, abortion method and mental health status were compared using chi square analysis or Fisher's exact test when needed. Multiple logistic regression analyses were performed to investigate whether mental health status (i.e., baseline PTSD/PTSS, anxiety and depressive symptoms) was independently associated with experiences of deficient abortion care. Adjustments were made for age, civil status, education and tobacco and alcohol use.

For women who underwent a medical abortion at one outpatient clinic, pain intensity was measured using of a VAS ranging from 0 to 10 cm. In the present study, a VAS score of 0 was considered to be no pain, scores of 1–2 mild pain, 3–6 moderate pain and 7–10 severe pain²³. In the statistical analyses, the VAS scores were dichotomised: VAS scores of 1–6 were classified as mild to moderate pain and scores of 7–10 were classified as severe pain.

The alpha level was set at $p \leq 0.05$. SPSS Statistics for Windows, Version 20.0 (IBM Corp, Armonk, NY, USA) and used for all statistical analyses.

Results

Participants

Overall, 2602 women were invited, and 1514 women participated in the study. In the present study, data were analysed from the baseline and the 3-month assessment. The response rate was 54% at the 3-month follow-up. The recruitment process is described in Figure 1. The drop-outs did not choose to participate further in the study, while the group of women who 'never ~~was~~ reported to the study centre' were never given a choice to continue participation. They were excluded from the study because of these circumstances, and they were therefore not considered as drop-outs per se. A drop-out analysis is presented in a previous paper¹⁴ as well as details of the recruitment process^{13,14}.

Figure 1 Flowchart of the respondents at baseline and the respondents and dropouts at the 3-month assessment.

Of the 708 participants in this study, 93% were native Swedes. Ages ranged from 15 to 52 years, with a mean age of 28.7 (SD $\pm$ 7.4), and the most common occupational statuses were full-time worker or student. The majority of the women were married or cohabitant. Sixty-

three percent had 12 years of highest completed education, and a third were tobacco users. PTSD (or PTSS), anxiety symptoms and depressive symptoms were prevalent in 25.7, 38.4 and 28.5% of the women, respectively. The most common abortion method was a medical one performed at home (Table 2).

Perceived deficiencies in quality of abortion care in healthy women

Of all the participating women, 16% reported the overall abortion care as being deficient. Perceived deficiencies differed between the QPP items, ranging from 11.7% for the possibility to have support from a partner when needed to 22.3% for respectful treatment by the health care staff (Table 2).

Table 2 Baseline respondent characteristics and perceived deficiencies in abortion care at 3-month follow-up (n = 708).

Variable	Respondents	
	n	%
Baseline		
<i>Age</i>		
≤ 24 years	250	35.3
≥ 25 years	458	64.7
Unmarried/not cohabitant	174	24.6
Completed education ≤ 12 years	444	62.7
Tobacco user	235	33.2
Alcohol user	580	81.9
No previous pregnancy	276	39.0
No children	340	52.3
PTSD or PTSS	182	25.7
Anxiety symptoms	272	38.4
Depressive symptoms	202	28.5
Counselling before abortion	297	41.9
<i>Abortion method</i>		
Medical	568	80.2
Surgical	118	16.7
<i>Place of abortion</i>		
Home	380	53.7
Clinic	304	42.9
<i>Pain during the medical abortion procedure*</i>		
None (VAS** = 0)	11	8.6
Mild or moderate (VAS = 1–6)	89	69.5
Severe (VAS = 7–10)	28	21.9
3-month follow-up		
<i>Perceived deficiency in quality of abortion care in:</i>		
Acceptable waiting time for appointment	151	21.3
Information about the procedure	138	19.5
Participation in decision-making procedure	103	14.5
Acceptable waiting time for the procedure	105	14.8
Treatment with respect by the health care staff	158	22.3
Receiving good care and support	148	20.9
Possibility to have privacy and rest during the procedure	105	14.8
Possibility to have support from partner, relative or friend when needed	83	11.7
Effective analgesic	112	15.8
Overall assessment of abortion care	116	16.4

Young, childless and primigravid women, and non-users of tobacco were more likely to assess the overall experience of abortion care as deficient (Table 3). Moreover, women who terminated their pregnancy at the abortion clinic were less satisfied with the abortion care they received than women who terminated their pregnancy at home. The reported perceptions of quality of care did not differ between women who had medical and those who had surgical abortions. Young women were the most critical, reporting deficiencies in all items (Table 3).

Most women were satisfied with the analgesia, but young women were more likely to report inadequacies with this item (Table 3). In the subgroup who rated pain intensity ($n = 128$), 22% experienced severe pain during the medical abortion procedure, and their pain alleviation was more often perceived as insufficient. Despite the lack of a significant difference, it is notable that women reporting severe pain were the most dissatisfied group on all items (Table 3). There were no differences regarding experiences of pain relief by the location of abortion (at home or at the clinic) or by the method of abortion. However, women who reported lack of pain relief were more likely to report discontentment in the overall assessment of abortion care, both in the subsample (37%, $p = 0.01$) and in the total sample (39%, $p < 0.001$).

Table 3 Deficiencies in abortion care by sociodemographic variables and data from medical records ($n = 708$). A higher number (%) indicates worse perceived care.

Negative perceptions in quality of abortion care, by item													
Variable		Treatment with respect by the health care staff			Receiving good care and support			Effective analgesic			Overall assessment of the abortion care		
		n	%	P-value	%	%	P-value	n	%	P-value	n	%	P-value
Baseline													
Age	≤ 24	78	31.3	<0.001	63	25.5	0.033	52	21.0	0.007	53	21.2	0.011
	≥ 25	80	17.5		85	18.6		60	13.2		63	13.8	
Civil state	Co-habitant/married	117	22.5	0.752	102	19.7	0.178	81	15.7	0.597	82	15.8	0.533
	Not co-habitant	37	21.4		42	24.6		30	17.4		31	17.8	
Completed education	≤12 years	89	20.0	0.049	83	18.8	0.053	69	15.7	0.775	67	15.1	0.203
	>12 years	69	26.4		65	25.0		43	16.5		49	18.8	
Tobacco	Tobacco user	47	20.0	0.284	42	18.0	0.162	37	15.9	0.960	28	11.9	0.023
	Tobacco nonuser	111	23.6		106	22.6		75	16.0		88	18.6	
Alcohol	Alcohol user	134	23.1	0.280	121	21.0	0.950	96	16.7	0.271	92	15.9	0.424
	Alcohol nonuser	24	18.8		27	21.3		16	12.7		24	18.8	
Pregnancy	No previous pregnancy	85	30.9	<0.001	74	27.1	0.002	51	18.5	0.074	62	22.5	<0.001
	Previous pregnancy	65	16.6		66	17.0		52	13.4		49	12.5	
	Without children	104	28.2	<0.001	89	24.3	0.013	64	17.4	0.172	72	19.5	0.015
	With children	46	15.1		50	16.5		41	13.6		38	12.5	
Abortion													
	Counseling before abortion												
	Yes	69	23.3	0.802	69	23.4	0.137	43	14.6	0.430	56	18.9	0.190
	No	78	22.5		64	18.6		58	16.9		52	15.0	
	Medical abortion	120	21.2	0.157	114	20.2	0.294	92	16.3	0.602	89	15.7	0.425
	Surgical abortion	32	27.1		29	24.6		17	14.4		22	18.6	
	Abortion at home	81	21.4	0.605	75	19.9	0.466	58	15.4	0.703	50	13.2	0.020
	Abortion at clinic	70	23.0		67	22.2		50	16.5		60	19.7	
	VAS* 0-6	14	15.7	0.057	13	14.6	0.378	7	7.9	<0.001	12	13.5	0.155
	VAS* 7-10	9	32.1		6	22.2		10	37.5		7	25.0	

P-values represent significance of Chi square test or Fisher's exact test.

* Among all women who had a medical abortion at the outpatient clinic of Umeå University hospital ($n = 128$), intensity of pain during the abortion was measured using the Visual Analogue Scale (VAS; ranging from 0 = no pain to 10 = worst possible pain). In this table, VAS scores of 0 are excluded, VAS scores of 1-6 are categorised as mild or moderate pain, and VAS scores of 7-10 are categorised as severe pain.

Perceived deficiencies in quality of abortion care in women with mental or posttraumatic stress

Women with posttraumatic stress were more likely to experience in the overall satisfaction with abortion care. They were also dissatisfied concerning being treated with respect by the health care staff, receiving good care and support, having possibilities for privacy and rest during the procedure and having the possibility to have support from a partner or another significant person. Additionally, they reported insufficient pain relief more often than did women without posttraumatic stress (not significant). The analyses revealed no differences in the content of abortion care between the healthy comparison group and women with anxiety and/or depressive symptoms (Table 4).

Table 4 Perceived deficiencies in abortion care in relation to mental health status (n = 708). A higher number (%) indicates worse perceived care.

Negative perceptions in quality of abortion care by item	Comparison group (n = 330)		PTSD/PTSS (n = 182)		P-value	Anxiety and/or depressive symptoms (n = 196)		P-value
	n	%	n	%		n	%	
Acceptable waiting time for appointment	73	21.1	40	22.1	0.995	38	19.5	0.475
Information about the procedure	61	18.5	34	18.8	0.934	43	21.9	0.336
Participating in decision-making procedure	42	12.7	31	17.2	0.166	30	15.3	0.405
Acceptable waiting time for the procedure	46	14.0	27	14.9	0.773	32	16.3	0.465
Treatment with respect by the health care staff deficiency	60	18.2	50	27.6	0.013	48	24.5	0.083
Receiving good care and support	55	16.8	51	28.5	0.002	42	21.4	0.184
Possibility to have privacy and rest during the procedure	35	10.7	39	21.9	0.001	31	16.0	0.082
Possibility to have support from partner, relative or friend when needed	31	9.5	32	18.1	0.006	20	10.2	0.796
Effective analgesic	48	14.8	39	21.5	0.053	25	12.8	0.521
Overall assessment of abortion care	44	13.3	38	20.9	0.026	34	17.3	0.210

The P-values indicate significance of PTSD/PTSS vs the comparison group and anxiety and/or depressive symptoms vs the comparison group. Missing data for the healthy comparison group occurred in 0.3% (acceptable waiting time) to 1.5% (effective analgesic) of cases; for women with PTSD/PTSS in 0.5% (acceptable waiting time for appointment, information about the procedure, acceptable waiting time for the procedure, treatment with respect by the health care staff) to 2.7% (possibility to have support from partner, relative or friend when needed) of cases; and for women with anxiety and/or depression in 0.5% (acceptable waiting time for appointment) to 1% (opportunities for privacy and rest during the procedure) of cases.

Following adjustments for relevant confounders, PTSD/PTSS was significantly associated with increased reporting of discontentment of overall quality of care (adjusted odds ratio

[AOR] 1.94, CI 95% 1.17–3.21). Anxiety and/or depressive symptoms, however, were not associated with increased report of overall deficient abortion care (AOR 1.29, CI 95% 0.78–2.15).

Discussion

Findings

Suffering from PTSD or PTSS was associated with increased reporting of deficient abortion care. Besides dissatisfaction with the overall abortion care, women with PTSD/PTSS also reported discontentment in care and support during the abortion process and dissatisfaction in being treated with respect by the health care staff. Other common deficiencies included the possibility of having privacy and rest during the procedure and the possibility to have the support of a partner or another significant person during the abortion. Additionally, women with PTSD/PTSS were more likely to experience insufficiencies in pain alleviation (not significant). Women with anxiety and/or depressive symptoms did not experience abortion care as more defective than did the healthy comparison group.

Strengths and weaknesses of the study

The strengths of the present study include the multi-centre study design, which made it possible to evaluate abortion care at six outpatient clinics in hospitals in large- and mid-sized cities across the country, and the large size of the study sample. The major limitation is the high dropout rate in the study. We have no information on how the dropouts experienced abortion care. Previous dropout analyses in this cohort have suggested that women with PTSD and/or those with more pronounced anxiety and depressive symptoms at baseline were less likely to continue participation in the study¹⁴. Additionally, others have reported that young women more often drop out from abortion studies²⁴. It is therefore possible that deficiencies in the abortion services might be underestimated. Another limitation involves the way in which the QPP was used. In the original QPP, the items and the theoretical framework of the

questionnaire were developed based on patient interviews. The QPP has subsequently been modified to apply to many contexts of care, and all questions have been derived according to the patient's perspective and formulated in words used by patients, strengthening the validity of the questionnaire¹⁶. However, no questionnaire has been developed for abortion services. Therefore, the QPP questions intended for outpatient clinics were used in the present study, but the phrasing of these items was altered to capture the women's experiences of abortion services. Ultimately, this may have affected the psychometric properties of the questionnaire. Furthermore, self-reported inventories have several limitations, such as the potential influence of the question wording, questionnaire format and number of items on the respondent's answers²⁵. Additionally, it is evident that age and health status can affect the participants' ratings, and this should be kept in mind when interpreting the results²⁶. Because there was a period of 3 months between the abortion and the assessment of the quality of the care, recall bias may also be a possibility.

Differences in results in relation to other studies

In accordance with previous studies^{1,2,5,27}, we found that young women were dissatisfied with abortion services. They expressed deficiencies in a number of items, including treatment with respect by the health care staff, receipt of good care and support and effective analgesia as well as the overall assessment of quality of the abortion care. Young age has previously been associated with low patient satisfaction²⁸, but contradictory results have also been reported⁵. Findings from previous Swedish studies suggest that younger women, particularly teenagers, experience negative attitudes about their pregnancies from health care staff. Furthermore, past research has described experiences of paternalistic attitudes from health care staff such as overly coercive contraceptive counselling, concerns about the failure to address difficulties of finding a suitable contraceptive method, worries about the side effects of contraceptives and feelings of having no possibility to discuss the unwanted pregnancy^{29,30}.

The large number of women with only 12 years of highest completed education might be due to the young age in our sample. Many of the women were ungraduated students so their reported educational level will be upper secondary school (≤ 12 years). The results are in line with Statistics Sweden (2012) who report that 30% of the Swedish women in the ages between 22 and 23 years are under higher education (university studies), compared with 22% of the men. Furthermore, 30% of Swedes in the age range of 25 to 64 years have some form of higher education; in year 2011 this figure was 38%³¹.

Women who had a medical abortion at the clinic reported more dissatisfaction with the abortion services than did women who chose a home abortion. According to regulations from the Swedish government, women have the right to choose an abortion method up to the 9th gestational week. Women should be informed on the surgical and medical method and the option to have a medical abortions at home. In collaboration with a physician or a midwife, the women then can make an informed choice of a suitable method and place. This is the ideal way but we cannot guarantee that all women in our study were offered this option before the 9th gestational week. Studies of home abortions are few, and concerns have been raised, from a clinical point of view, that severe pain during medical abortions in home settings may place women at risk for traumatic experiences.

However, the results of the present study revealed no indications of inadequate pain alleviation in women who had a home abortion. Studies of medical abortion in home settings indicate that women appreciate the privacy, control and the social support they are able to get from their partner or another significant person during the abortion process^{8,32-34}. They are more likely to be satisfied, to choose the method again and to recommend the method to a friend than are women who chose medical abortion in the clinic setting^{34,35}. The support and care that women received from their partners, parents or friends may have influenced how they evaluated 'good care and support' in this study.

One-fifth of women in the medical abortion subsample stated that their pain experience was severe. It is clinical practice to prescribe analgesics for women undergoing medical abortions as well as surgical abortions. The most common analgesics prescribed for women undergoing medical abortion was a combination of 1 to 2 tablets containing Paracetamol 500 mg + codeine 30 mg (Citodon) in combination with 2 tablets of Diclofenac 50 mg. Perceived pain, either psychological or physical, is central in the traumatic experience leading to posttraumatic stress reactions. Thus, proper watchfulness and pain alleviation should be prioritised to avoid painful, experiences or re-traumatisation in women with previous traumatic reactions. Women with PTSD/PTSS were more likely to experience insufficiencies in pain alleviation. This might be due to pain adjustment, because study findings have demonstrated that the PTSD hyperarousal symptom cluster is associated with pain outcomes such as pain intensity and disability in patients with chronic pain³⁶. Previous studies have demonstrated that experiencing severe pain during labour is a strong risk factor for negative experiences of childbirth³⁷. Additionally, women who had a negative overall experience of childbirth had high pain scores and did not forget the intensity of the pain years later, in contrast to women with a positive experience, who forgot the labour pain over time³⁸. Consequently, inadequate pain alleviation may also be a risk factor for negative experiences to take into account in abortion care.

Relevance of the findings: Implication for healthcare personnel and policymakers

Although women who presented to the abortion clinic with ongoing PTSD or PTSS were more prone to report perceived problems with the quality of abortion care, it is currently unknown whether these negative experiences might be a risk factor for subsequent mental health problems post-abortion. The findings from the present study suggest that further improvements are possible, especially for women who present at the abortion clinic with ongoing PTSD or PTSS. The woman's history is the foundation of consultation, enabling

individualisation of care according to different needs³⁹. Our results underline the importance of clinical awareness of patients' ongoing mental state for patient-centred care. To provide women with good care and support, it should be mandatory that all women are given the possibility for privacy and rest during the procedure, and women should also be able to bring a partner, friend or relative for support during the abortion. Furthermore, midwives currently perform early medical abortions in Sweden⁴⁰. With this practice, midwives are responsible for the entire abortion process from receiving the first call for an appointment to follow-up. This allows the women to meet the same midwife throughout the whole process¹⁰. This continuity, together with a patient-centred attitude, may increase the possibilities for women to receive good care. Their different abortion care needs, whether due to mental health state, age or other circumstances, will more likely be discovered. In theory, this practice should improve the care and support provided during the abortion process for all women.

Unanswered questions and future research

More studies are needed about how vulnerable women at risk for negative experiences of abortion will be identified, although it is a challenge for healthcare personnel to identify these women. One way might be to ask specific questions as has been suggested in a previous study⁴¹. For example, questions about social support, coping strategies and prior mental health status to narrow down women at risk of mental distress following abortion. Respecting women's integrity, it is a true challenge to ask these questions in such a way so that they are not intrusive to women, and at the same time the women should not be made to feel that they should question their decision to terminate the pregnancy.

Conclusion

Women with posttraumatic stress more often perceived the quality of abortion care as deficient. Although these women should be given extra care and support, our findings also stress that relatively simple efforts may improve abortion care for women, particularly those

with PTSD or PTSS. For instance, a patient-centred attitude may increase the feeling of being treated with respect and receiving good care and support. Furthermore, it should be mandatory that all women are given the possibility for privacy and rest during the procedure, and women should be able to bring a significant person for support during the abortion.

Declaration of interest

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