Interest in web-based Treatments for postpartum Anxiety: An exploratory Survey

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Abstract

Objective: This study aimed to explore women's interest in web-based treatments for postpartum anxiety and determine the feasibility of reaching women with postpartum anxiety online. **Background:** Anxiety in the postpartum period is common and often untreated. One innovative approach of offering treatment during this period is through web-based self-help. Assessing women's interest in new treatments, such as a web-based self-help, is an important step prior to development efforts. **Methods:** A cross-sectional online survey was created and promoted for four months via unpaid social media posts (Facebook & Twitter). To be eligible, women had to be over the age of 18, live in England, fluent in English, be within 12 months postpartum and self-report at least mild levels of anxiety. **Results:** A sample of 114 eligible women were recruited. The majority were Caucasian well-educated middle class women. Seventy percent reported moderate or severe anxiety. Sixty-one percent of women expressed interest in web-based postpartum anxiety treatments. Women preferred treatment in a smartphone/tablet application format, presented in brief modules and supported by a therapist via email or chat/instant messaging. **Conclusions:** Based on the stated preferences of participating women it is recommended that postpartum anxiety web-based treatments include different forms of therapist support and use a flexibly accessible smartphone/tablet application format with content split into short sections. The findings also suggest that unpaid social media can be feasible in reaching women with postpartum anxiety, but additional efforts are needed to reach a more diverse population.

Keywords: Internet, recruitment, postpartum anxiety, self-help, survey

Introduction

Anxiety disorders are common among postpartum women with prevalence rates ranging between 10% and 20% (Howard et al., 2014; Leach, Poyser, & Fairweather-Schmidt, 2015). If left untreated, they can have adverse effects on mother's and child's somatic and psychological health (Stein et al., 2014). Accessible and effective treatment is therefore important. One innovative treatment approach is through web-based self-help, which can be done alone or with support from a healthcare professional. During the postpartum period, potential advantages of this approach are that women can access treatment at any time and it does not require potentially time-consuming or inconvenient face-to-face sessions. Moreover, this approach offers anonymity that might help with overcoming the stigma of accessing help (Woolhouse, Brown, Krastev, Perlen, & Gunn, 2009) and is often free or relatively low cost. It has been shown that the majority of today's parents search for information and social support on the internet (Plantin & Daneback, 2009) and that the majority of postpartum women find online resources useful when feeling isolated and restricted by their baby's schedule (McDaniel, Coyne, & Holmes, 2012). This suggests that web-based self-help treatments may be an appropriate alternative or supplement to regular face-to-face therapy for postpartum women.

Web-based treatments have been shown to be effective. Meta-analyses of web-based treatments for anxiety disorders show this treatment is more effective than waitlist and placebo controls and that effects were equal to face-to-face treatment across different anxiety disorders (Andrews, Cuijpers, Craske, McEvoy, & Titov, 2010; Cuijpers et al., 2009; Mewton, Smith, Rossouw, & Andrews, 2014). There are web-based treatments specifically developed for postpartum depression (e.g. Danaher et al., 2013; Haga, Drozd, Brendryen, & Slinning, 2013; O'Mahen et al., 2014), however, there are none developed specifically for postpartum anxiety (Ashford et al. 2016).

Before developing a web-based treatment for postpartum anxiety, interest/demand by women with postpartum anxiety needs to be assessed. Assessing potential reach and interest of new treatments is crucial, as public health impact of treatments is only high if they reach a substantial proportion of the target population (Glasgow, McKay, Piette, & Reynolds, 2001; Glasgow, Vogt, & Boles, 1999). Social media channels such as Facebook and Twitter have been found to be an effective and low-cost way of reaching women for health-related issues and research (Fenner et al., 2012; Kapp, Peters, & Oliver, 2013; Khatri et al., 2015), however, it remains to be investigated whether those are viable channels for reaching women with postpartum anxiety.

Identifying desired treatment formats of web-based treatments which fit the specific needs of postpartum women with anxiety may improve treatment outcomes and adherence (O'Mahen et al., 2015). So far, one study has looked at preferences for internet treatments specific to women with postpartum depression after pregnancy complications (Maloni, Przeworski, & Damato, 2013). However, it is currently unknown whether women with postpartum anxiety have any specific preferences for the format of web-based self-help.

Therefore, this study had two main aims. The first aim was to identify women's interest in and preferences for web-based treatments which include: a) interest and likelihood to use web-based treatments with or without therapist support; b) preferences for therapist support c) and preferences for different treatment formats; and d) to explore whether sample characteristics are associated with interest and likelihood of women using web-based treatments. The second aim was to determine the feasibility of reaching women with postpartum anxiety through free social media channels and to identify which women may be reached in terms of sociodemographic variables and anxiety level.

Method

A cross-sectional online survey was employed to examine interest and likelihood of using web-based treatment, preferences for treatment format and support, sample characteristics associated with interest and likelihood of women using web-based treatments, the feasibility of reaching women with postpartum anxiety online through social media and sociodemographic characteristics of women reached.

Sample

Eligible women had to be aged over 18, live in England, be fluent in English, be within 12 months postpartum and self-report at least mild anxiety (score ≥5 on the Generalized Anxiety Disorder-7 scale (GAD-7)). Women with mild anxiety were included because comparatively low anxiety symptoms have been observed among women in the first 2–8 weeks postpartum and symptoms may not occur until later in the postpartum period (Breitkopf et al., 2006).

Measures

This open access online survey consisted of four parts: 1) consent and eligibility screening, 2) questions about access and use of technology, social support and previous use and helpfulness of different mental health resources, 3) questions about interest and preferences in web-based treatment, and 4) demographic questions (optional). At the start of part three a short paragraph explained web-based self-help. Questions were developed by reviewing the literature regarding treatment preferences and experiences during the postpartum period (Goodman, 2009; Maloni et al., 2013; O'Mahen & Flynn, 2008) and were discussed with the research team to establish content validity.

Anxiety

The seven item GAD-7 (Spitzer, Kroenke, Williams, & Löwe, 2006) with a 4-point Likert-scale (1=not at all to 4=nearly every day) assessed study eligibility and level of anxiety. Total

scores: 0-4="no anxiety"; 5-9="mild anxiety"; 10-14="moderate anxiety";>14="severe anxiety". The GAD-7 is recommended as a screening tool for perinatal anxiety in the current clinical guidance on antenatal and postnatal mental health issued by the National Institute for Health and Care Excellence (NICE) (NICE, 2014).

Access to Technology and social Support

Thirty-one questions assessed access (yes =1, no=2) and use of communication technology (never, less than once a week, once a week, 2-3 times a week, 3-5 times a week, daily) and use (yes/ no) and perceived helpfulness (1=not helpful to 3=very helpful) of previously accessed mental health resources. Social support with the dimensions 'family', 'friends' and 'significant others'was measured by the 12-item Multidimensional Scale of Perceived Social Support (MSPSS; Zimet, Dahlem, Zimet, & Farley, 1988; Zimet, Powell, Farley, Werkman, & Berkoff, 2011), which uses a 7-point Likert-scale (1=very strongly disagree to 7=very strongly agree) with a total range of 7-84 and has previously been used in postpartum women (Husain et al., 2006; Yağmur & Ulukoca, 2010).

Interest and Preference

Twenty-three questions asked about women's interest (1=definitely not to 5=definitely yes) and likelihood (1=extremely unlikely to 5=extremely likely) to use a hypothetical web-based treatment with or without therapist support and about preferences concerning the format of therapist support and a variety of potential treatment formats.

Concerns

Concerns about security and confidentiality of personal information and evidence for the efficacy of web-based treatments were inquired on a 5-point Likert-scale (1=not at all concerned to 5=extremely concerned).

Sociodemographic Data

Information about age, ethnicity, weeks postpartum, number of children, relationship status, level of education, occupation, annual household income and current living arrangements was collected.

Reach

It was recorded how many women accessed the survey, how many were eligible and how many completed the survey. Respondents were also asked to state where they had seen information about the survey.

Procedure & Recruitment

Ethical approval was gained from the university research ethics committee. The survey hosted by Qualtrics was online from May until August 2015. Using convenience sampling, participants were recruited through free social media posts on Facebook and Twitter. The lead author joined 137 parenthood- or motherhood-related Facebook groups based in England and posted promotional text twice a month. All groups were asked for permission with three groups declining to take part. Tweets using relevant hashtags (i.e. #postnatalanxiety) were directed at relevant organizations or users (i.e. @PANDAS_UK). Information about the study was also posted on motherhood-related forum website (www.Netmums.com). Participation was voluntary with no incentives. The survey took approximately 10-15 minutes to complete and IP address and cookies were used to prevent repeat entries and to allow saving and continuing the survey at a later point. Participants could disclose their email address to receive the study results or indicate interest in future studies. Before the launch, the authors

tested the survey's technical functionality. The survey was only accessible after respondents indicated they had read the study information and consented to take part by checking the appropriate box and confirmed they were eligible. Non-eligible respondents were thanked, provided with links to organization websites providing help with postpartum or general mental health (i.e. Association for Postnatal Illness) and advised to contact healthcare professionals (i.e. general practitioner) if worried. Eligible respondents were also provided with the same information after completing the survey.

Data Analysis

Completed and partial responses were analysed. Descriptive statistics including percentages, *n* values, means and standard deviations were calculated where appropriate to explore response rate, sample characteristics and interest and preferences in web-based treatments. Correlations between sample characteristic variables (level of anxiety, sociodemographic variables (age, weeks postpartum, number of children, education, income), social support, previous access to help for mental health, use of technology and internet and concerns about web-based treatment) and interest and likelihood to use web-based self-help with or without support were calculated. Spearman's rho was applied due the issues with normality identified during data screening and 2-tailed was used as no previous hypothesis about the direction of the relationships existed. A one-way ANOVA was performed to test whether interest and likelihood to use web-based treatments differ by level of anxiety.

Results

Social Media Reach

Recruitment Response

A total of 220 women started the survey. Figure 1 presents participant loss and attrition due to ineligibility or partial completion of the survey. Twenty-seven responses were excluded

due to ineligibility (Answer "no" to eligibility question: *n*=3, GAD-7 score <5: *n*=10, postpartum weeks >52: *n*=14). One hundred and fourteen participants were eligible and completed the survey, resulting in a 59.1% completion rate. Most respondents heard about the survey through Facebook groups (*n*=140) rather than Twitter (*n*=9).

[Figure 1 near here]

Sample Characteristics

Detailed information about sample characteristics are given in Table 1. It can be seen that participants were between 2-48 weeks postpartum (*M*=23.59, *SD*=12.81), 37% (*n*=57), were first time mothers and women had between 1 and 5 children (*M*=1.57, *SD*=0.80). Participants were predominantly "White/Caucasian", married, living with their partner and the mean age was 32.92 years (*SD*=4.50). Half of the women stated to have a Bachelor's degree or higher and were on maternity leave. A fourth of the women had a yearly household income equal or above £80.0000. Forty (24.54%) women scored in the mild anxiety range, 46 (28.22%) in the moderate anxiety range and 67 (41.10%) in the severe anxiety range. The overall sample mean was 13.57 (*SD*=5.12), which is within the moderate anxiety range. For perceived social support, the overall mean of the MSPSS measure was *M*=59.06 (*SD*=14.45), which is classified as high.

[Table 1 near here]

Interest in web-based Treatments & Preferences regarding Format

Women's interest in web-based treatment for postpartum anxiety is shown in Table 2. Table 3 shows correlations between the sample characteristic variables and the interest and likelihood of using web-based therapy variables and Table 4 presents their preferences regarding treatment formats and features.

Interest

Sixty-one percent (*n*=76) of women answered "definitely yes" to being interested in web-based treatment. Sixty-four percent (*n*=80) of women stated that they were "extremely likely" to use web-based treatment if it were available.

[Table 2 near here]

Women varied in their views of whether web-based treatments should be supported by a therapist. Women were more interested in web-based treatment without therapist support when they had previously used self-help books ($r(123)=.23$, $p<.05$), mental health websites ($r(123)=.24$, $p<.05$) or had a lower educational level ($r(99)=-.26$, $p<.01$). In addition, women who rated help from their friends for mental health issues as more helpful were more interested in web-based treatment without support ($r(83)=.25$, $p<.05$). Women were more interested in web-based treatment with support if they had less concerns about treatment efficacy ($r(110)=-.20$, $p<.05$).

Similarly, women indicated to be more likely to use web-based treatment without support when they had previously used mental health websites ($r(121)=.24$, $p<.01$), self-help books ($r(121)=.32$, $p<.01$), online mental health forums ($r(121)=.20$, $p<.05$) and had a lower education level ($r(97)=-.24$, $p<.05$). Women who rated help from their friends for mental health issues as more helpful, indicated to be more likely to use web-based treatment without support ($r(83)=.23$, $p<.05$). Women indicated they would be more likely to use web-based treatment with therapist support when they had previously used self-help books ($r(119)=.22$, $p<.05$), mental health websites ($r(119)=-19$, $p<.05$), or were less concerned about treatment efficacy ($r(108)=-.20$, $p<.05$).

There was no significant effect of level of anxiety (mild, moderate or severe) on interest in web-based treatment without support ($F(2, 122)=.16$, $p=.85$) or with support ($F(2,$

120)=.60, p=.60), as well as likelihood to use web-based treatment without (F(2, 120)=1.17, p=.31) and with therapist support (F(2, 120)=1.78, p=.17).

[Table 3 near here]

Preferences

Most women stated interest in therapist support via email (n=98, 78.4%) and via instant messaging/chat (n=91, 72.8%). Fewer women were interested in telephone support (n=52, 41.6%) or Skype support (n=25, 20.0%). Concerning the support frequency, most women answered "as often as needed" (n=36, 28.8%), "once a week" (n=31, 24.8%) and "every other week" (n=26, 20.8%).

Most women preferred to access web-based treatments as a smartphone/tablet application (n=60, 52.2%) or as both a website and smartphone/tablet application (n=43, 37.4%), were willing to spend between 5-15 minutes on a web-based treatment at a time and preferred spending as much time as needed on the treatment per week.

Treatment features that women were interested in included experience stories from other women (n=97, 83.6%), online forum (n=85, 73.3%), audio relaxation exercises (n=84, 72.4%), regular mood checks (n=79, 68.1%) and online home-work (n=72, 61.2%). A little more than half were interested in treatment email reminders (n=68, 58.6%), live-chat rooms with other women (n=64, 55.2%) and treatment videos (n=62, 53.4%). When asked whether they would like to be contacted when the web-based treatment becomes available, 52 respondents (45.6%) provided their email.

[Table 4 near here]

Discussion

This study aimed to explore women with postpartum anxiety's interest and preferences in web-based treatment and to evaluate the feasibility of reaching those women online through social media. Results showed that 61% of women with postpartum anxiety were interested in using web-based treatments and that free social media promotion is a viable and feasible way to reach women with postpartum anxiety in England. Women's interest and preferences in web-based treatments and recommendations for future treatment development and research will be discussed together with characteristics of study participants reached in this study, as well as ways to potentially improve reach.

Interest and Preferences in web-based Treatment

Sixty-one percent of women indicated they were interested in web-based treatment with and without therapist support and 63.6% stated to be likely to use web-based treatment with and without support. This supports previous research which found that web-based treatments are acceptable to women with postpartum depression (O'Mahen et al., 2015; Pugh, Hadjistavropoulos, Hampton, Bowen, & Williams, 2015). More than half of the women stated they were more interested and likely to use web-based treatment with therapist support than without. This is consistent with a studiy of postpartum mental health web-based interventions reporting that many women felt unable to complete treatment without professional help (O'Mahen et al., 2015). Women in this sample preferred therapist support via email or instant messaging/chat to contact via Skype/phone, hence preferring more anonymous and less personal support. This contradicts a previous study where women expressed interest in telephone support (O'Mahen et al., 2015). However, that study explored views of women with postpartum depression and it may be that women with postpartum anxiety prefer less personal support. There was a considerable percentage of women interested in phone/Skype support, hence the needs and preferences seem diverse, so web-based treatments would benefit from incorporating different forms of support.

Women were more likely to use web-based treatments with and without support when they had previous experience with using mental health websites and self-help books. This is consistent with previous studies which have found that individuals who had experience with web-based treatment rated those as more helpful and acceptable than those who did not (Gun, Titov, & Andrews, 2011; Sweeney, Donovan, March, & Laurenson, 2015). This suggests that interest and likelihood in using web-based treatment could potentially be promoted by increasing exposure of postpartum women to self-help services or web-based treatments. Irrespective of their anxiety level, women were interested and likely to use web-based treatments. It might therefore be useful for web-based treatments to identify/screen for different anxiety levels and offer content appropriate for the identified severity. That perceived social support did not have effect on interest and likelihood to use web-based treatments might be explained by the fact that overall women rated to have high levels of support available. It would be interesting to explore in more depth interest and likelihood to use this type of treatment of women with no or less support.

Most women preferred a smartphone/table application format, which is consistent with results from a project investigating perinatal online healthy lifestyle support (Hearn, Miller, & Fletcher, 2013). Inaccessibility of web-based treatments as tablet/smartphone applications has been identified as a common treatment barrier (Haga et al., 2013). Web-based treatments should therefore either be developed as an application or render to this platform. Most women were willing to spend 5-15 minutes at a time in the program, which is similar to Maloni et al. (2013) reporting that the majority women with postpartum depression would use treatment for 15-30 minutes. It seems therefore important that web-based treatments are split into brief modules that can be completed in approximately 15 minutes or that modules can be saved and re-accessed.

Reaching Women with postpartum Anxiety through Social Media

This study had a reasonable response considering the strict eligibility criteria and that study recruitment was done without any incentives through unpaid social media posts. In comparison, a study evaluating the feasibility of five months' online recruitment of women with postpartum depression after pregnancy complications recruited a smaller sample with 53 eligible respondents (Maloni et al., 2013). However, that study was conducted in North America and used website banner advertisement. Two studies which recruited UK women with postpartum depression online for a web-based treatment had similar (249 respondents over 5 months; O'Mahen et al., 2014) and higher response rates (1,403 respondents over two waves of two-week recruitment periods; O'Mahen et al., 2013b). However, recruitment was mainly done through website advertisement banners.

The majority of respondents stated to have heard about the study on Facebook. This is not surprising considering that a recent report found that Facebook remains the most popular social media site (Duggan, 2015). Posting study information in parenting-related Facebook groups seems to be a viable, feasible, and free option for reaching women with postpartum anxiety for an online survey. When using this method, existing Facebook groups rules should be followed and posts may need to be approved by a group administrator. Even though Twitter has been effective in reaching antenatal women for health-related research (O'Connor, Jackson, Goldsmith, & Skirton, 2014), it was not as successful in this study. This is likely due to O'Connor et al. (2014) tweeting daily compared to weekly in the current study. It remains to be evaluated whether more tweeting and engagement with the Twitter community might improve reach.

Most recruited women were White British middle-class and well-educated. Studies recruiting postpartum women with mental health issues have reported similar sample demographics (Maloni et al., 2013; O'Mahen et al., 2013, 2014). Even though, Facebook and Twitter have been found to be common among ethnic minorities and individuals of lower

socio-economic statuses (Duggan, 2015), it has been found that individuals from lower socioeconomic groups were 50% less likely to access a study website compared to higher socioeconomic groups (Fenner et al., 2012). It is unclear whether the used channels are inappropriate to reach a more diverse sample or whether women from other ethnicities and different socioeconomic groups are not as interested in postpartum anxiety research and web-based treatment. It is nonetheless important to continue the effort of reaching underserved populations to improve the generalisability of the findings. To improve recruitment, a systematic review identified the importance of social media recruitment being culturally and linguistically appropriate (Bonevski et al., 2014). Furthermore, to make web-based support acceptable and available to women from different social and educational backgrounds, support can be developed in different languages, language levels and tailored to different cultures.

Most women in this study reported levels of mild to severe anxiety. This demonstrates that posts in Facebook groups are a feasible way of reaching women with mild to severe anxiety. Contrary to previous research showing that individuals with severe anxiety have a preference against internet treatments (Gun et al., 2011), it seems that the women with severe postpartum anxiety are interested in web-based self-help. Considering the large interest of these women it may be important for web-based treatments to include mechanisms making women aware of their symptom severity and provide information and resources on where to seek help if needed.

Study Limitations

Convenience sampling and recruiting mainly through parenthood-related Facebook groups may have led to a self-selected sample which limits the study's generalisability. However, the study's aim was to investigate the feasibility of social media reach. Anxiety in this study was measured by a self-report measure and not a diagnostic interview so it is unclear what percent

of women met the criteria of anxiety disorders. However, the aim was to explore interests of women with all levels of anxiety and women may want support irrespective of a clinical diagnosis. Anxiety and depression can be comorbid; however, the focus of this study was anxiety and therefore only anxiety was assessed. The recruited sample was homogenous in terms of sociodemographic factors and results can therefore not be generalised to other ethnicities and individuals with different socioeconomic statuses. A homogenous sample can also be a strength, as results can be generalised for this specific group. No incentives were used allowing for a sample with a genuine and intrinsic interest in the topic and this study is the first to report social media reach of postpartum women without using paid advertisements.

Conclusion

Most women in this survey were interested in using web-based postpartum anxiety treatments. Based on preferences identified in this surveythose may benefit from including different forms of therapist support and using a smartphone/tablet application format in which the content is presented in brief (maximal 15 minutes) modules. Social media, especially posting on parenthood-related Facebook groups seems to be a free, feasible and viable way of reaching women with mild to severe postpartum anxiety in England. Additional efforts are required to improve the reach of individuals from different ethnicities and socioeconomic groups.

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Tables

Table 1

Demographic Characteristics of the Sample

Characteristic	*n*	%	*M*(*SD*)
Ethnicity (*n* = 101)			
White/Caucasian	91	90.1	
Asian	4	4.0	
Black/African/Caribbean	1	1.0	
Mixed	2	2.0	
Prefer not to say	3	3.0	
Highest level of education (*n* = 102)			
None	1	1.0	
GCSE	6	5.9	
A-level	25	24.5	
Bachelor's Degree	33	34.3	
Master's Degree	23	22.5	
Doctorate	3	2.9	
Other	7	6.9	
Prefer not to say	2	2.0	
Current occupation (*n* = 103)			
Student	2	1.9	
Employee full-time	18	17.5	
Employee part-time	15	14.6	
Freelancer	2	1.9	
Self-employed	5	4.9	
Housekeeper	7	6.8	
Unemployed	3	2.9	
Maternity leave	48	46.6	
Prefer not to say	3	2.9	
Household income (*n* = 101)			
£10,000	1	1.0	
£10,000-£19,999	6	5.9	
£20,000-£29,999	10	9.9	
30,000-£39,999	14	13.9	
£40,000-£49,999	8	7.9	
50,000-£59,999	9	8.9	
£60,000-£69,999	3	3.0	
70,000-£79,999	8	7.9	
≥£80,000	27	26.7	
Prefer not to say	15	14.9	
Relationship status (*n* = 102)			
Single	1	1.0	
In a relationship	31	30.4	
Married	66	64.7	
Separated	1	1.0	
Prefer not to say	3	2.9	
Living arrangement (*n* = 102)			
With partner	92	90.2	
Parents	2	2.0	
Alone	5	4.9	
Prefer not to say	3	2.9	
GAD-7			
Mild anxiety	40	24.54	6.93(1.35)
Moderate anxiety	46	28.22	12.07(1.45)
Severe anxiety	67	41.10	18.57(2.06)

Table 2

Women's Interest in Web-based Treatment for Postpartum Anxiety

	n	%
Interest in web-based therapy without therapist support *(n = 127)*		
Definitely not	5	3.9
Probably not	14	11.0
Maybe	32	25.2
Probably yes	47	37.0
Definitely yes	27	21.3
Don't know	2	1.6
Likelihood to use web-based therapy without therapist support *(n = 127)*		
Extremely unlikely	6	4.7
Somewhat likely	15	11.8
Neither unlikely nor likely	6	4.7
Somewhat likely	67	52.8
Extremely likely	29	22.8
Don't know	4	3.1
Interest in web-based therapy with therapist support *(n = 125)*		
Definitely not	2	1.6
Probably not	6	4.8
Maybe	23	18.4
Probably yes	43	34.4
Definitely yes	49	39.2
Don't know	2	1.6
Likelihood to use web-based therapy with therapist support *(n = 125)*		
Extremely unlikely	1	0.8
Somewhat likely	9	7.2
Neither unlikely nor likely	4	3.2
Somewhat likely	56	44.8
Extremely likely	51	40.8
Don't know	4	3.2
Therapist support via E-mail (*n* = 125)		
Yes	98	78.4
No	17	13.6
Don't know	10	8.0
Therapist support via instant messaging/chat (*n* = 125)		
Yes	91	72.8
No	23	18.4
Don't know	11	8.8
Therapist support via phone (*n* = 125)		
Yes	52	41.6
No	42	33.6
Don't know	31	24.8
Therapist support via Skype (*n* = 125)		
Yes	25	20.0
No	77	61.6
Don't know	23	18.4
Frequency of therapist support (*n* = 125)		
Never	5	4.0
Once a month	11	8.8
Every other week	26	20.8
Once a week	31	24.8
Twice a week	5	4.0
3-4 times a week	1	0.8
As often as needed	36	28.8
Don't know	10	8.0

Table 3
Correlations Between Sample Characteristic Variables and Interest in Web-based Therapy Variables

	Interest web-based without therapist support	Likelihood to use web-based without therapist support	Interest web-based with therapist support	Likelihood to use web-based with therapist support
GAD7 – anxiety	.03	.13	.07	.09
MSPSS - social support	.04	.07	.06	.00
Frequency internet use	-.03	.00	-.10	-.10
Frequency desktop computer use	.09	-.01	-.01	-.10
Frequency laptop use	-.07	.05	-.05	-.04
Frequency tablet use	.07	.03	.12	.08
Frequency smartphone use	-.11	-.09	-.14	-.14
Previous help family	-.01	.01	.09	.06
Previous help friends	.06	.08	.06	.03
Previous help General Practitioner	-.11	-.05	.02	.04
Previous help psychologist/psychiatrists	-.11	-.03	.01	.01
Previous help counsellor	.03	.09	.03	.04
Previous help telephone counselling	-.01	.02	.11	.07
Previous help self-help books	.23**	.32**	.12	.22*
Previous help online counselling	.05	.14	.06	.15
Previous help mental health websites	.24**	.24**	.12	.19*
Previous help online forum	.11	.20*	.12	.13
Previous help web-based therapy without support	.08	.12	-.01	.16
Previous help web-based therapy with support	.04	.09	-.04	.03
Helpfulness family	.04	.10	.14	.06
Helpfulness friends	.25*	.23*	.03	-.06
Helpfulness General Practitioner	.01	.01	.06	.05
Helpfulness psychologist/psychiatrists	-.18	-.24	-.21	-.21
Helpfulness counsellor	-.13	-.04	.04	.03
Helpfulness telephone counselling	-.019	.03	-.20	-.05
Helpfulness self-help books	.07	.13	.19	.14
Helpfulness online counselling	-.51	-.47	-.38	-.37
Helpfulness mental health websites	.19	.17	.14	.10
Helpfulness online forum	.14	.08	.17	.10
Helpfulness web-based therapy without support	-.53	-.54	-.38	-.38
Helpfulness web-based therapy with support	-.61	-.61	-.53	-.61
Age	.06	.05	-.00	-.00
Weeks postpartum	-.00	.13	.01	-.04
Number children	-.06	-.03	-.15	-.017
Level of education	-.26**	-.24*	-.13	-.17
Household income	-.00	-.15	.016	-.13
Security of personal information	-.02	.09	-.08	-.08
Confidentiality of personal information	-.03	.11	-.09	-.08
Evidence for efficacy of treatment	-.16	-.08	-.20*	-.20*

* p<.05; ** p<.01

Table 4

Women's Format Preferences for Web-based Treatment for Postpartum Anxiety

	n	%
Preferred ways of accessing web-based treatment *(n = 115)*		
Website	12	10.4
Smartphone/tablet application	60	52.2
Both website and application	43	37.4
Time willing to spend on web-based treatment *(n = 114)*		
0-5 minutes at a time	5	4.4
5-15 minutes at a time	42	36.8
15-30 minutes at a time	32	28.1
30-45 minutes at time	3	2.6
45-60 minutes at time	4	3.5
As often as needed	24	21.1
Don't know	4	3.5
Frequency per week willing to spend on web-based treatment *(n = 114)*		
Never	3	2.6
Once a week	22	19.3
Twice a week	19	16.7
3-4 times a week	16	14.0
5-6 times a week	3	2.6
As often as needed	47	41.0
Don't know	4	3.5
Web-based treatment features include (*n* = 116)		
Videos		
Yes	62	53.4
No	36	31.0
Don't know	18	15.5
Audio relaxation exercises		
Yes	84	72.4
No	25	21.6
Don't know	7	6.0
Experience stories		
Yes	97	83.6
No	15	12.9
Don't know	4	3.4
Home-work online		
Yes	72	62.1
No	27	23.3
Don't know	17	14.7
Home-work to download & print		
Yes	29	25.0
No	66	56.9
Don't know	21	18.1
Live-chat room with other women		
Yes	64	55.2
No	39	33.6
Don't know	13	11.2
Online forum		
Yes	85	73.3
No	22	19.0
Don't know	9	7.8
Online diary		
Yes	51	44.0
No	41	35.3
Don't know	24	20.7
Email reminders		
Yes	68	58.6
No	30	25.9
Don't know	18	15.5

SMS reminders		
Yes	46	39.7
No	49	42.2
Don’t know	21	18.1
Mood checks		
Yes	79	68.1
No	15	12.9
Don’t know	22	19.0

Figures

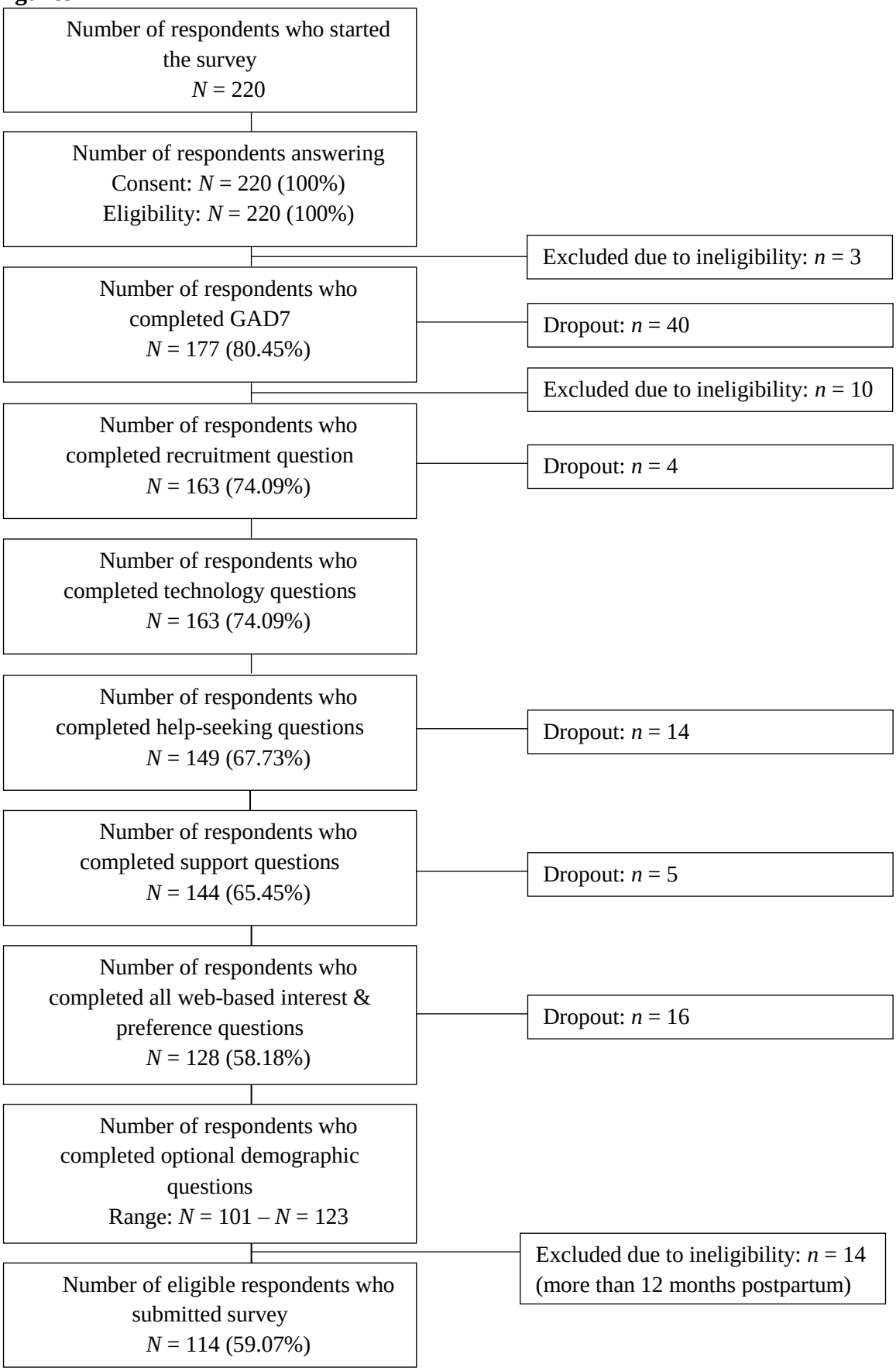

Figure 1. Gradual attrition of respondents over the course of the survey