



Experiences of harassment and empowerment after sharing personal abortion stories publicly[☆]

Katie Woodruff^{*}, Rosalyn Schroeder, Stephanie Herold, Sarah C.M. Roberts, Nancy F. Berglas

Advancing New Standards in Reproductive Health (ANSIRH), Dept. of Obstetrics, Gynecology & Reproductive Sciences, University of California, San Francisco, 1330 Broadway, Suite 1100, Oakland, CA 94612

ARTICLE INFO

Article history:

Received 10 December 2019
Received in revised form 4 February 2020
Accepted 5 February 2020
Available online xxxx

Keywords:

Abortion disclosure
Stigma
Harassment
Abortion storytelling

ABSTRACT

Objective: In recent years, in an attempt to counter stigma and increase empathy, public education campaigns have encouraged people to share their personal abortion stories. This exploratory study sought to document negative and positive experiences of those who have shared their abortion stories publicly.

Study design: We conducted an anonymous online survey of people who have shared their abortion story publicly ($N = 88$), recruited via partners affiliated with two abortion story-sharing campaigns. The survey asked about the context in which respondents shared their abortion story, any negative and positive experiences online and in “real life” as a result of story sharing, and any problems or benefits resulting from these experiences. We analyzed survey data using descriptive statistics, bivariate analyses and categorizing responses to open-ended questions.

Results: Sixty percent of respondents reported experiencing harassment and other negative incidents after sharing their story publicly. These experiences contributed to emotional stress, problems with loved ones and difficulties at work and/or school. These harms were reported even by many respondents who used only a first name or alias when sharing their story. Despite this, positive experiences as a result of story sharing were reported by four out of five respondents and motivated many to continue sharing their story.

Conclusions: This exploratory study indicates that many people who share their abortion story publicly find it to be an empowering, rewarding experience. Yet they also experience harassment and threats at high rates. Future research should explore both positive and negative experiences in more depth.

Implications: Sharing one’s personal abortion story as part of a public education campaign can be a positive, empowering experience. Nevertheless, policymakers, journalists and reproductive health advocates should recognize the potential harms experienced by people who share their abortion story publicly and consider measures to support these individuals.

© 2020 Published by Elsevier Inc. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

1. Introduction

Abortion is both a common and stigmatized experience in the United States [1,2]. Scholars define abortion stigma as the shared understanding that abortion is socially wrong or morally unacceptable and theorize that this stigma manifests in politics, media, institutions, communities and among people who have had abortions [3,4]. Stigma related to other identities and medical experiences has well-documented adverse effects on population-level and individual-level health outcomes [5–7]; likewise, abortion stigma may be associated with psychological distress and poor mental and physical health outcomes [8,9].

In recent years, in an attempt to counter abortion stigma and increase empathy, some public education campaigns have highlighted the personal stories of people who have abortions [10–16]. In such campaigns, people who have had abortions may choose to share their experience publicly through activities such as publishing a first-person article in the mainstream media, speaking with a journalist about their personal experience with abortion, sharing their abortion story through social media, speaking at a public rally, giving testimony at a legislative hearing and many others. Public education campaigns report shifts in attitudes among their target audiences as a result of their campaigns [17], and some evidence indicates that, under specific circumstances, interpersonal storytelling may be an effective way to address stigmatizing attitudes [18,19]. Yet little research documents the experiences of the people who share their abortion stories in such settings.

Anecdotally, people who share their abortion stories publicly report harassment and threats as a result, as well as increased support [20,21]. As a result of this harassment, some people discontinue participating in

[☆] Declarations of interest: none.

^{*} Corresponding author.

E-mail address: katie.woodruff@ucsf.edu (K. Woodruff).

abortion storytelling efforts [22,23]. While no published research has specifically documented the harassment of people who share their abortion stories, other research finds that roughly 40% of Americans have experienced “harassing or abusive behaviors” online [24]. A growing body of research documents the gendered and racialized nature of online harassment [25–27] and the toll it takes on emotional and psychological health, particularly for young people [28–30]. As such, online harassment is a growing public health concern [31].

Given that abortion is a particularly stigmatized experience, people who share their abortion stories publicly may have unique experiences of harassment and support. In this study, we sought to explore individuals' positive and negative experiences as a result of telling their abortion stories and to examine what they saw as the impact of these experiences.

The immediacy of this study was prompted by the U.S. Supreme Court's decision to hear the case of *June Medical Services, LLC v. Gee* during its 2019–2020 term. As part of the case, the Court will consider whether providers have “third-party standing” to challenge laws on behalf of their patients. The State of Louisiana maintains that abortion patients do not face a hindrance in pursuing their own rights and should be able to file a lawsuit to challenge a restrictive abortion policy [32]. This raises the question of whether fear of harassment resulting from sharing their abortion experience would hinder abortion patients from bringing such a lawsuit. Thus, understanding the experiences of people who have chosen to share their abortion stories publicly is particularly timely.

2. Methods

We surveyed people who have shared their personal abortion story in a public setting, which we defined as in an outlet or event that is accessible to the general public for attendance and comment, whether individuals used their name or chose to remain anonymous. Individuals who met this criterion, were aged 18 or older and could complete the survey in English were eligible to participate.

2.1. Sample and recruitment

After the UCSF Human Research Protection Program approved the research protocol, we asked two professionals who held leadership roles with two public abortion storytelling campaigns to act as recruitment partners. These recruitment partners sent emails inviting their network of “abortion storytellers” (people who have participated in their public education campaigns by sharing their abortion stories publicly) to complete the survey. The number of potential respondents invited directly by these recruitment partners totaled 211 people. Partners sent one follow-up reminder email to each potential respondent approximately 1 week after the original email.

2.2. Data collection

We designed a brief, anonymous online survey to understand respondents' experiences as a result of sharing their abortion stories. We asked questions about the context in which respondents shared their abortion story, e.g., in what format(s) they shared their abortion story (e.g., blog post, public testimony), the year they first shared their story, how long after their abortion or first abortion they began sharing, the approximate number of times they have shared their abortion story and under what name they have shared their story (e.g., real full name, real first name only, an alias, or using a mix of real name and alias in different situations). We also asked basic demographic characteristics (e.g., age, race/ethnicity, gender, geographic region).

To assess negative experiences as a result of publicly sharing an abortion story, we used categories and items from Pew Research's 2017 study of online harassment [24], adapting them to apply explicitly to the experience of harassment after sharing an abortion story publicly.

We asked respondents if they had personally experienced any of a list of negative experiences online and/or in real life as a result of sharing their abortion stories (e.g., been called offensive names, received death threats). We asked if these negative experiences resulted in any personal problems (e.g., problems with friends or family, mental or emotional stress, problems at work or school). If respondents indicated any negative experience as a result of sharing their story, we used open-ended questions to ask them to describe one negative experience, list offensive names they had been called (if applicable) and describe how these negative experiences affect how they feel about sharing their abortion story publicly.

To assess positive experiences as a result of sharing their abortion story, we used items drawn from news coverage of public abortion storytelling campaigns [20,21] (e.g., supportive responses from friends or family, making new connections). As with the negative experiences, we used open-ended questions to ask respondents to describe a positive experience they had as a result of sharing their story, if applicable, and to describe how these positive experiences affect how they feel about sharing their abortion story publicly. We also included general open-ended questions such as “Overall, after all your experiences as a result of sharing your abortion story publicly, what would you tell another person who is considering sharing their own abortion story publicly?” We measured all experience items dichotomously (have vs. have not experienced), and for all questions, we specified that respondents should report on experiences that resulted from sharing their abortion story publicly as opposed to from the abortion experience itself.

We used Qualtrics survey software to administer the survey and store the data. Data collection occurred from October 30 to November 11, 2019. The anonymous survey took less than 30 min to complete. Respondents received a \$25 gift card for their time.

2.3. Analysis

For each item, we calculated frequencies with proportions and exact binomial confidence intervals to give a range of values likely to include the true proportion of people's experiences. We created dichotomous variables of having any negative experience (vs. none) and any positive experience (vs. none). We assessed differences in these experiences by respondent characteristics (region, age, race/ethnicity, use of full name vs. an alias, frequency of sharing, and time between abortion and first storytelling) using χ^2 tests. In addition, we assessed the overlap between having had negative and positive experiences. Because of the exploratory nature of this study and small sample size, we used $p < .10$ as our cutoff for statistical significance. Quantitative analyses were conducted using Stata version 15.

For responses to open-ended questions, we categorized the responses into themes based on the survey items (e.g., being called offensive names, supportive response from strangers) as well as on strategies and experiences that emerged from the data (e.g., limiting story sharing to safe circumstances, defying stigma). The first and senior authors met to discuss and make decisions about preliminary categories, discrepancies and outlier themes and independently applied the themes to a subset of data, discussing and refining categories until all discrepancies were resolved. The senior author then applied the final categorization scheme to the remaining open-ended response data. We selected quotes to illustrate the most common themes expressed by respondents. To help contextualize each quote, here we provide the respondent's age, region and the year in which they first shared their abortion story publicly.

3. Results

Eighty-eight respondents completed the survey, for a 42% response rate. See Table 1 for respondent characteristics.

Table 1
Characteristics of respondents who shared their abortion story publicly ($N = 88$)

Respondent characteristic	n (%)
Age range	
18–19	1 (1%)
20–29	23 (26%)
30–39	24 (27%)
40–49	12 (14%)
50 or over	28 (32%)
Sex	
Female	74 (84%)
Gender nonconforming	4 (5%)
Missing	10 (11%)
Race/ethnicity	
White	56 (64%)
Latinx	7 (8%)
Black	6 (7%)
Asian/Pacific Islander	5 (6%)
Mixed race	2 (2%)
Other	2 (2%)
Missing	10 (11%)
Geographic region	
West	22 (25%)
Southeast	18 (20%)
Northeast	17 (19%)
Midwest	13 (15%)
Outside the United States	7 (8%)
Missing	11 (13%)
Where abortion story was shared (more than one response possible)	
Social media post	53 (60%)
Public educational campaign	45 (51%)
Quoted in a news story	25 (28%)
Op-ed in newspaper or news site	21 (24%)
Visit to policymaker's office	20 (23%)
Testimony at policy hearing	15 (17%)
Speech at rally	14 (16%)
Other (5 or fewer occurrences each)	31 (35%)
Years between abortion and first storytelling	
5 or fewer years	51 (58%)
More than 5 years	37 (42%)

3.1. Settings and approaches

Respondents shared their abortion stories in a number of different settings, including social media posts (60%), educational campaigns (51%), being quoted in a news story (28%), first-person articles in newspapers and websites (24%), visits to policymakers (23%) and public testimony (17%). Most (58%) shared their story within 5 years of their abortion, and 42% had shared their story six or more times.

The majority of respondents (56%) reported using strategies to minimize their exposure to or harms from harassment, including using their first name only or an alias rather than their full real name, as well as carefully choosing when and where to share their stories. As one respondent noted,

“I do not use my name as I am in a small profession. I need it to not impact my financial life as I am the sole income to the home.” (age 46, Midwest, story first shared in 2013)

Other respondents noted that they waited to share their stories publicly until they were in circumstances where they felt less vulnerable to harassment, such as a geographic location with more accepting attitudes or a time of life when they felt more able to be public about their stories.

“At this point in my life though, I am retired and don't need a job, I am married to a wonderful man and have all the emotional support I need so I really don't care anymore who knows or what they think about it.” (age 60, West, story first shared in 2001)

Yet even among respondents who used only their first name or an alias when sharing their stories, harassment and other negative

experiences as a result of sharing their stories were common (reported by 55% of those respondents).

3.2. Experiences following abortion storytelling

There was considerable overlap of reports of positive and negative experiences. More than half of respondents (53%) reported both positive and negative experiences following storytelling. Twenty-nine percent reported only positive experiences, and 7% reported only negative experiences.

3.2.1. Negative experiences

The majority of respondents (60%) reported experiencing harassment or other negative incidents as a result of sharing their stories (Table 2). Respondents reported negative experiences both online (53%) and in “real life” (36%). These experiences included being called offensive names (48%) (see Figure 1), having someone try purposefully to embarrass them (25%), receiving distressing images online (15%), receiving death threats (14%) or physical threats (11%) and being sexually harassed (7%). Fourteen percent of respondents reported feeling that they or their loved ones were in physical danger as a result of sharing their abortion stories.

In bivariate analyses (Table 4), reports of negative experiences differed significantly by how frequently respondents shared their story. Negative experiences were more common for those who had shared their story more than five times compared to those who shared it less often (81% vs. 45%, $p = .001$). There were no statistically significant differences in reports of negative experiences by region, age, race/ethnicity, use of full name vs. an alias or the amount time between their abortion and first storytelling.

Responses to open-ended questions illuminated the emotional impact of these experiences.

“I have been told several times online that abortion is wrong, no matter what, even if your life is at risk, and that I deserved to die for what I had done, and if I had died because I chose to continue my pregnancies, then that would have been God's will, and I still would have deserved to die. It makes me feel like my life is worthless, and it brings to light how little I matter to some people. There are some people out there who would rather see me dead than able to make decisions about my own body.” (age 31, Northeast, story first shared in 2012)

Almost half (47%) of respondents reported that these negative experiences caused problems in their life, including mental or emotional stress (36%), difficulties with friends/family (27%), missed activities

Table 2
Negative experiences as a result of sharing abortion story publicly ($N = 88$)

Negative experience	n (%)	95% CI
Was called offensive names	42 (48%)	37%–59%
Had someone try to purposefully embarrass me	22 (25%)	16%–35%
Received distressing images online	13 (15%)	8%–24%
Received death threats	12 (14%)	7%–23%
Was physically threatened	10 (11%)	6%–20%
Was sexually harassed	6 (7%)	3%–14%
Was doxxed (someone posted my personal information online without my consent)	4 (5%)	1%–11%
Received threats of rape	3 (3%)	1%–10%
Other negative experience	18 (20%)	13%–30%
Any negative experience	53 (60%)	49%–71%



Figure 1. Offensive names reported by respondents (most common names appear largest).

with friends or family (10%), problems at work and/or school (10%), damage to their reputation (10%) and problems in their romantic relationships (9%). For example:

“I had a friend that I thought was a friend. He found out about my story and called me a lot of names. The thing that upset me most was that he said my mother should have aborted me.” (age 58, West, story first shared in 1994)

Some respondents reported that the negative incidents they had experienced stopped them from sharing their abortion stories further.

“After I was fired from my job over having an abortion 7 years prior to my employment, I stopped talking about it publicly. And now that I live in Small Town U.S.A., I am silent about it both publicly and online.” (age 44, Midwest, story first shared in 2014)

3.2.2. Positive experiences

Positive experiences as a result of abortion story sharing were common, reported by 82% of respondents (Table 3). Nearly two thirds of respondents reported that they received supportive responses from friends and/or family (65%) or thanks or praise (64%) as a result of sharing their abortion stories. Half reported that they made valuable friends or connections with other abortion storytellers (50%), that their story had helped someone (49%) and that their story made others think differently about abortion (48%).

In bivariate analyses (Table 4), reports of positive experiences differed significantly by frequency of sharing and time between abortion

Table 3
Positive experiences as a result of sharing abortion story publicly (N = 88)

Positive experience	n (%)	95% CI
Received supportive response from friends and/or family	57 (65%)	54%–75%
Someone thanked or praised me for my story	56 (64%)	53%–74%
Received supportive comments from strangers online	53 (60%)	49%–71%
Made new friends/connections with other storytellers	44 (50%)	39%–61%
Someone told me that my story helped them after their own abortion	43 (49%)	38%–60%
Someone told me that my story made them think differently about abortion	42 (48%)	37%–59%
Received supportive comments from strangers in person	36 (41%)	31%–52%
Led to new work/professional opportunities	21 (24%)	15%–34%
Other positive experience	10 (11%)	6%–20%
Any positive experience	72 (82%)	72%–89%

and storytelling. Positive experiences were more common for respondents who had shared their story publicly more than five times vs. less often (95% vs. 73%, p = .008) and those who shared their story within 5 years of their abortion (88% vs. 73%, p = .067). There were no statistically significant differences in reports of positive experiences by region, age, race/ethnicity or use of full name vs. an alias.

In open-ended responses, respondents described the benefits of these positive experiences, such as the gratification of helping others who had had abortions:

“The first time I shared my abortion story on stage, I had women come up to me crying and hugging me. Several of them had never told anyone before that they had an abortion previously because they were too ashamed or felt guilty. They said my story helped them realize that they didn’t need to feel shame or guilt.” (age 27, Northeast, story first shared in 2017)

Some respondents also reported the satisfaction of having an impact on policymakers.

“I was asked to testify in [state] about a 20 week ban. I shared my story, and one lawmaker... later told the representative from the ACLU who was with me that my story made him change his vote.” (age 41, Northeast, story first shared in 2010)

Others reported that sharing their stories publicly lessened their own feelings of shame or guilt.

“It has helped me to personally continue to unlearn the internalized shame and stigma associated with my abortion story. The more I have opened up about my story and the more I have gotten positive feedback from others – it reminds me that I am doing the greater good. I no longer feel my internalized shame.” (age 34, Northeast, story first shared in 2018)

Many respondents reported that these positive experiences motivated them to continue sharing their abortion stories, despite the harassment they experienced (Table 5). For some, in fact, the harassment actually encouraged them to continue sharing, as it demonstrated that harmful antiabortion attitudes are still prevalent, and proved the need to try to counter these attitudes.

“When I receive harassment, it makes me want to be even more bold to normalize the experience.” (age 28, Southeast, story first shared in 2016)

Several respondents saw their own story sharing as a way of protecting others from harassment.

“These [negative] experiences have strengthened my resolve to share as often as I am able to do so. As an older person, I feel I have nothing to lose, whereas young people risk so much more because of the stigma. I see the harassment as emotional and psychological violence, and I want to do all I can to stop the brutality.” (age 59, Southeast, story first shared in 2014)

4. Discussion

Prior research has documented the power of personal storytelling to shift public attitudes and reduce stigma related to other stigmatized health topics [33,34]. Similarly, there have been calls for more abortion storytelling to help normalize abortion [18,35], but no research has examined the impacts of abortion storytelling efforts on those who share their stories. This study begins to document the significant feelings of empowerment experienced by many of those who share their stories via public abortion storytelling campaigns. We find that for people who share their abortion stories publicly, positive experiences, such as

Table 4
Negative and positive experiences after abortion storytelling, by respondent characteristics (N = 88)

	N	Any negative experience		Any positive experience	
		n (%)	p value	n (%)	p value
Region					
West	22	14 (64%)	.92	22 (100%)	.29
South	18	11 (61%)		16 (89%)	
Northeast	17	9 (53%)		14 (82%)	
Midwest	13	9 (69%)		12 (92%)	
Outside the United States	7	4 (57%)		7 (100%)	
Age range					
18–29	26	19 (73%)	.11	21 (81%)	.87
30 or over	62	34 (55%)		51 (82%)	
Race/ethnicity					
White	56	33 (59%)	.45	51 (91%)	.51
Nonwhite	22	15 (68%)		21 (95%)	
Used name in storytelling					
Alias, first name, or mix	49	27 (55%)	.21	39 (80%)	.38
Always used full name	38	26 (68%)		33 (87%)	
Number of times shared story					
1–5 times	51	23 (45%)	<.01	37 (73%)	.01
6+ times	37	30 (81%)		35 (95%)	
Years between abortion and first storytelling					
5 or fewer years	51	34 (67%)	.15	45 (88%)	.07
More than 5 years	37	19 (51%)		27 (73%)	

Table 5
Categories of main themes about experiences resulting from abortion storytelling, from open-ended responses.

Theme	Exemplar quote (with respondent's age, region and year they first shared their story)
Category 1: Respondents carefully manage how they share their story to limit negative exposure	
Use only first name or pseudonym	<i>It has made me hesitate to share my real name. I fear some of these people might come after me and attempt to harm me or my family if they know who I am. (age 31, Northeast, 2012)</i>
Limit sharing to online spaces, not in-person	<i>It makes me consider who I share my story with. It is one thing to share on social media, but another to talk about it in person. (age 36, Midwest, 2015)</i>
Wait to share until circumstances are safer	<i>Part of the reason that it took me many years to feel able to share it at all is that I now live in an area that is very supportive in general of women's rights. It would not have been as safe to share in the past. (age 33, West, 2019)</i>
Ignore responses to story	<i>When my story gets posted from a news outlet, I have learned not to read the comments online as people won't hesitate to say horrible things about you. I have been called all sorts of names. At this point in time, I just ignore the comments. (age 41, Northeast, 2010)</i>
Stop sharing story	<i>I've certainly held back recently. I am in a fairly public job, and I now have a family of my own. I don't feel safe given my current role to share this type of information publicly. I risk harm to my husband and daughter. I am terrified of something bad happening to my family due to my story. (age 29, Midwest, 2011)</i>
Category 2: Respondents describe many types of negative experiences as a result of sharing their story	
Judgment and name-calling	<i>I've definitely been called a baby killer online, "an absolute piece of shit and disgrace to the... family," disgusting, and there's been a few instances of "irresponsible" rhetoric that I don't remember specifically. (age 28, Southeast, 2016)</i>
Online harassment	<i>I've had a person create a fake account and follow me and most of my friends online and share my posts to "prove" that I am a murderer. They tagged my friends in posts where they called me all different kinds of insults and posted graphic photos. (age 23, West, 2017)</i>
Problems at work	<i>Someone emailed my boss and told him I was a pedophile and murderer and should be fired. Thankfully the police were called and the person recanted. (age 38, Northeast, 2013)</i>
Loss of relationships with friends/family	<i>I had a dear friend... tell her family, who told others. I was no longer welcome in their home. After telling one or two friends they stopped speaking to me. Some called me baby killer. (age 26, Southeast, 2015)</i>
Loss of community	<i>I was a part of a writing group [locally]. When my story... went live, they barred me from the group due to being a "wanton cunt devil worshiper that sacrificed her own babies to Satan." The group gave me no warning that they were going to do this and leveled the hammer of insults on me at a public restaurant where we met usually. I went home in tears. (age 37, Midwest, 2015)</i>
Public harassment	<i>I served as a clinic escort. One of the protesters found my abortion stories on-line. He began taunting me by name, shouting my name from the street, addressing me by my name as he harassed me, shouting about me being a baby killer who should turn to Jesus for forgiveness or else burn in hell. He filmed me and took pictures. (age 59, Southeast, 2014)</i>
Category 3: Despite harassment, respondents express many positive impacts of sharing their story	
Defying stigma	<i>It is a great feeling to tell "my secret" every time. Not keeping my choice bottled up is an overall satisfying, self-respecting feeling. (age 55, West, 2014)</i>
Combatting isolation	<i>Learning how many of my friends/peers also had abortions made me feel not so alone. (age 44, West, 2016)</i>
Pride of helping others	<i>I would share my story 1000 more times if it helped one person. (age 34, Midwest, 2017)</i>
Leadership opportunities	<i>My community created space for me to grow into a leader who advocates for reproductive health, right, and justice. (age 28, region unknown, 2017)</i>
Transformed a negative experience into something positive	<i>Sharing publicly decreased the bit of stigma I had left around my abortions. (age 32, Southeast, 2018)</i>
Shifting others' views on abortion	<i>I've had people who previously identified as anti-abortion and participated in anti-abortion rallies tell me my story helped them understand that it is not their place to oppose abortion and now view it a healthcare decision. (age 34, West, 2017)</i>
Forming friendships and community	<i>I've made friends from this movement. They have been incredibly supportive for me. (age 29, Midwest, 2011)</i>
Impacting the political process	<i>I testified in the [state] legislature and got them to set 2 anti-choice bills aside for the remainder of the session. Preserving the rights of poor women to access abortion, even if it was just for a few months. (age 50, West, 2010)</i>
Feeling protective of others who are more vulnerable	<i>I feel ever more strongly that I have an obligation to use my privilege (white, middle class, not very vulnerable) to tell this story as loudly as possible to support the people who aren't in the same position. (age 44, West, 2015)</i>

the satisfaction of influencing policy outcomes or helping another person after their own abortion, outnumber negative ones and motivate many to continue sharing their own stories. Our work echoes prior research documenting how many healthcare professionals who provide abortion care reject stigma and strive to reframe stereotypes about abortion as they disclose their work to others [36]. It also accords with studies of people with other stigmatized experiences who share their stories, who report increased social support [37,38] and sense of purpose [39] as a result. Future research should explore abortion storytelling as not just a potential intervention for those who hear the stories, but a form of personal empowerment for those who share.

Nevertheless, our study also documents that harassment and other negative experiences are common after people share their abortion stories publicly, even if they use an alias. Despite careful efforts to control when and how they share their story in order to avoid harassment and other negative experiences, more than half of our respondents reported experiencing one or more negative incidents online – including physical threats and death threats – and more than a third experienced a negative in-person incident. A majority of respondents who chose to use only a first name or alias when sharing their stories still reported these harms; in fact, use of an alias made no statistically significant difference in reports of negative incidents compared to using their full real name. The level of harassment and threat reported by our respondents is significantly higher than that reported in general population studies of online harassment [24,40], supporting our hypothesis that people who share their abortion stories publicly experience particularly frequent and virulent harassment. Our study also finds that this harassment results in significant fear, stress and other difficulties, leading some people to stop sharing their abortion stories altogether.

A number of limitations constrain this study. First, we created the measures for assessing positive experiences after finding no exemplar measures in the scientific literature. Thus, our items assessing positive experiences were fewer and less detailed than those assessing negative experiences, which we were able to modify from existing measures. Second, the data collection period was brief, and the pool of invited respondents was relatively small, limiting the number of respondents. The small sample means that our point estimates of percentages are imprecise, and we may not have been able to detect differences in experiences by respondent characteristics. Third, our sample was not demographically representative of people who get abortions in the United States. More than 50% of our respondents were white, and almost three fourths were over age 30, while the majority of people who get abortions in the United States are people of color (61%) and in their 20s (60%) [41]. Given some evidence that people of color and younger people are more likely than white people and older people to experience online harassment [24,40], this may indicate that our study underrepresents the negative experiences we could expect if our sample more accurately reflected the racial/ethnic makeup and age distribution of those who have abortions in the United States. Finally, the study may have been influenced by selection bias if people who had negative experiences were more motivated to participate. However, given the response rate, even if we assume that people who chose not to participate had only positive experiences as a result of sharing their abortion stories publicly, it would still mean that more than 25% of the overall invited pool of potential respondents had a negative experience.

We believe that, while modest in scope, this exploratory study provides an important step in documenting the experiences that result from public disclosure of abortion. Future research with larger and more diverse samples of people who share abortion stories should examine results by race/ethnicity, hostility of the local political environment to abortion and years since their abortion(s) since these factors may be significant in shaping people's experiences. Advocates may be heartened by the positive experiences reported by our respondents, which indicate powerful positive impacts of abortion storytelling efforts on those who participate. Yet at the same time, our results point to the

significant harassment and threat faced by many who share their stories. This suggests that more work is needed to explore the tradeoffs between the potential benefits of abortion storytelling efforts and the personal vulnerabilities such efforts may impose on an already marginalized group. In particular, policymakers, journalists and reproductive health advocates should prioritize efforts to support and protect people who share their abortion stories publicly.

Acknowledgments

The authors thank Nicole Bloom for her deft administrative support of this project, our recruitment partners for their enthusiasm and commitment in connecting us to those who have shared their abortion stories publicly, and the anonymous reviewers whose comments greatly improved this manuscript. We are deeply grateful to our study respondents for sharing their experiences with us.

Funding

This project was funded by support from an anonymous foundation.

References

- [1] Jones RK, Jerman J. Abortion incidence and service availability in the United States, 2014. *Perspect Sex Reprod Health* 2017;49:17–27.
- [2] Kumar A, Hessini L, Mitchell EM. Conceptualising abortion stigma. *Cult Health Sex* 2009;11:625–39.
- [3] Norris A, Bessett D, Steinberg JR, Kavanaugh ML, De Zordo S, Becker D. Abortion stigma: a reconceptualization of constituents, causes, and consequences *Womens Health Issues* 2011;21:S49–54.
- [4] Cockrill K, Herold S, Blanchard K, Grossman D, Upadhyay U, Baum S. Addressing abortion stigma through service delivery: a white paper. <https://ibisreproductivehealth.org/sites/default/files/files/publications/Addressing%20abortion%20stigma%20through%20service%20delivery.pdf>; 2013 [accessed December 6, 2019].
- [5] Link BG, Phelan JC. Stigma and its public health implications. *Lancet* 2006;367:528–9.
- [6] Quinn DM, Chaudoir SR. Living with a concealable stigmatized identity: the impact of anticipated stigma, centrality, salience, and cultural stigma on psychological distress and health. *J Pers Soc Psychol* 2009;97:634–51.
- [7] Hatzenbuehler ML, Phelan JC, Link BG. Stigma as a fundamental cause of population health inequalities. *Am J Public Health* 2013;103:813–21.
- [8] O'Donnell AT, O'Carroll T, Toole N. Internalized stigma and stigma-related isolation predict women's psychological distress and physical health symptoms post-abortion. *Psychol Women Q* 2018;42:220–34.
- [9] Major B, Gramzow RH. Abortion as stigma: cognitive and emotional implications of concealment. *J Pers Soc Psychol* 1999;77:735–45.
- [10] Michie L, Balaam M, McCarthy J, Osadchiv T, Morrissey K. From her story, to our story: digital storytelling as public engagement around abortion rights advocacy in Ireland. Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems. Montreal QC, Canada. <https://doi.org/10.1145/3173574.3173931>; 2018 [accessed December 6, 2019].
- [11] Hallgarten L. Abortion narratives: moving from statistics to stories. *Lancet* 2018;391:1988–9.
- [12] Abortion out loud. <https://advocatesforyouth.org/abortion-out-loud/>; 2019, Accessed date: 6 December 2019.
- [13] We testify. <https://wetestify.org>; 2019 [accessed December 6, 2019].
- [14] Shout your abortion. <http://shoutyourabortion.org>; 2019, Accessed date: 6 December 2019.
- [15] Safronova V. Thousands of women have shared abortion stories with #YouKnowMe. She was first. *New York Times*. <https://www.nytimes.com/2019/05/15/style/busy-phillips-abortion-youknowme.html>; 2019, Accessed date: 6 December 2019.
- [16] abortion My, life my. <https://www.myabortionmylife.org>; 2019, Accessed date: 6 December 2019.
- [17] AbiSamra A, Herold S, Cockrill K. "More connected to each other": Results and insights from launching the Untold Stories Project, a new campaign of reproductive storytelling. <https://stepherold.files.wordpress.com/2017/06/untold-stories-report.pdf>; 2015 [accessed December 6, 2019].
- [18] Cockrill K, Biggs A. Can stories reduce abortion stigma? Findings from a longitudinal cohort study. *Cult Health Sex* 2018;20:335–50.
- [19] Belfrage M, Ortiz Ramirez O, Sorhaindo A. Story circles and abortion stigma in Mexico: a mixed-methods evaluation of a new intervention for reducing individual level abortion stigma. *Cult Health Sex* 2019;1–16.
- [20] Bracey Sherman R. What happens when we share our abortion stories: hate, vitriol, but also love. *Rewire News*. [rewire.news/article/2014/05/16/happens-share-abortion-stories-hate-vitriol-also-love](https://www.rewire.news/article/2014/05/16/happens-share-abortion-stories-hate-vitriol-also-love); 2014 [accessed December 6, 2019].
- [21] Martin K. Anti-abortion harassment goes way beyond picketing clinics. *Huffington Post*. https://www.huffpost.com/entry/opinion-martin-abortion-harassment_n_5a5e540fe4b0106b7f55ccc6; 2018 [accessed December 6, 2019].

- [22] Bracey Sherman R. Sharing abortion aloud: research and recommendations for abortion storytellers and organizations. Sea Change Program. <https://www.reneebraceysherman.com/wp-content/uploads/2015/05/Saying-Abortion-Aloud-Executive-Summary.pdf>; [accessed December 6, 2019].
- [23] Borges A. On choosing to share your abortion story online – or not. Self. <https://www.self.com/story/sharing-your-abortion-story-online>; 2019. [accessed December 6, 2019].
- [24] Pew Research Center. Online harassment 2017. <https://www.pewresearch.org/internet/2017/07/11/online-harassment-2017/>; 2017 [accessed December 6, 2019].
- [25] Megarry J. Online incivility or sexual harassment? Conceptualising women's experiences in the digital age. *Womens Stud Int Forum* 2014;47:46–55.
- [26] Ferrier M, Garud-Patkar N. TrollBusters: fighting online harassment of women journalists. In: Vickery J, Everbach T, editors. *Mediating misogyny*, Palgrave Macmillan, Cham; 2018. p. 311–32.
- [27] Flores-Yeffal NY, Vidales G, Martinez G. #WakeUpAmerica, #IllegalsAreCriminals: the role of the cyber public sphere in the perpetuation of the Latino cyber-moral panic in the US. *Inf Commun Soc* 2019;22:402–19.
- [28] Ford DP. Virtual harassment: media characteristics' role in psychological health. *J Manag Psych* 2013;28:408–28.
- [29] Sinclair KO, Bauman S, Poteat VP, Koenig B, Russell ST. Cyber and bias-based harassment: associations with academic, substance use, and mental health problems. *J Adolesc Health* 2012;50:521–3.
- [30] Tokunaga RS. Following you home from school: a critical review and synthesis of research on cyberbullying victimization. *Comput Human Behav* 2010;26:277–87.
- [31] David-Ferdon C, Hertz MF. Electronic media, violence, and adolescents: an emerging public health problem. *J Adolesc Health* 2007;41:S1–5.
- [32] Cross-petition in *Gee v. June Medical Services, LLC*. Supreme Court, No 18–1323. https://www.supremecourt.gov/DocketPDF/18/18-1460/100385/20190520152745385_June%20%20CCP.pdf; 2019 [accessed December 6, 2019].
- [33] Silvé Hagström A. Suicide stigma' renegotiated: storytelling, social support and resistance in an internet-based community for the young suicide-bereaved. *Qual Soc Work* 2016;16:775–92.
- [34] Pelts MD, Galambos C. Intergroup contact: using storytelling to increase awareness of lesbian and gay older adults in long-term care settings. *J Geront. Soc Work* 2017;60:587–604.
- [35] Thomsen C. From refusing stigmatization toward celebration: new directions for reproductive justice activism. *Fem Stud* 2013;39:149–58.
- [36] O'Donnell J, Weitz TA, Freedman LR. Resistance and vulnerability to stigmatization in abortion work. *Soc Sci Med* 2011;73:1357–64.
- [37] Paterno MT, Fiddian-Green A, Gubrium A. Moms supporting moms: digital storytelling with peer mentors in recovery from substance use. *Health Prom Prac* 2018;19:823–32.
- [38] Bove A, Tryon R. The power of storytelling: the experiences of incarcerated women sharing their stories. *Int J Offender Ther Comp Criminol* 2018;62:4814–33.
- [39] Kimball EW, Moore A, Vaccaro A, Troiano PF, Newman BM. College students with disabilities redefine activism: self-advocacy, storytelling, and collective action *J Divers High Educ* 2016;9:245–60.
- [40] Women who tech, Rad Campaign, and Lincoln Park Strategy. <http://www.onlineharassmentdata.org/>; 2018. [accessed December 6, 2019].
- [41] Jerman J, Jones R, Onda T. Characteristics of U.S. abortion patients in 2014 and changes since 2008. <https://www.guttmacher.org/report/characteristics-us-abortion-patients-2014>; 2016 [accessed December 6, 2019].