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Contraception 90 (2014) 601 – 605

Contraception

Original research article

Crisis pregnancy center websites: Information, misinformation and disinformation☆,☆☆

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Received 28 January 2014; revised 16 June 2014; accepted 8 July 2014

Abstract

Objective: Most states with 24-h waiting periods prior to abortion provide state resource directories to women seeking abortion. Our objective was to evaluate the information on abortion provided on the websites of crisis pregnancy centers listed in these resource directories.
Study design: We performed a survey of the websites of crisis pregnancy centers referenced in state resource directories for pregnant women. We searched for these state-provided resource directories online. We contacted state Departments of Health and Human Services for a print copy when a directory could not be found online. The crisis pregnancy center websites were evaluated for the information provided on abortion. Standardized data collection tools were used. Descriptive statistics were generated.
Results: Resource directories of 12 states were procured. A total of 254 websites referring to 348 crisis pregnancy centers were identified. Overall, a total of 203/254 [80%, 95% confidence interval (CI) 75%–84%] of websites provided at least one false or misleading piece of information. The most common misleading or false information included on the websites were a declared link between abortion and mental health risks (122/254 sites; 48%, 95% CI 42%–54%), preterm birth (54/254; 21%, 95% CI 17%–27%), breast cancer (51/254; 20%, 95% CI 16%–25%) and future infertility (32/254; 13%, 95% CI 9%–17%).
Conclusion: Most crisis pregnancy centers listed in state resource directories for pregnant women provide misleading or false information regarding the risks of abortion. States should not list agencies that provide inaccurate information as resources in their directories.

Keywords: Crisis pregnancy center; Abortion; Misinformation; Abortion restrictions

1. Introduction

Twenty-six states currently have laws requiring waiting periods between contacting an abortion provider and obtaining an abortion. These laws are similar across states and are often known as "Woman's Right to Know" laws. "Woman's Right to Know" laws prescribe that counseling be performed prior to an abortion, that women either receive a mandatory ultrasound or are offered to see an ultrasound or hear fetal heart tones, and that women wait a specified amount of time before undergoing an abortion [1]. In most states, the mandatory preabortion counseling includes telling women that agencies offer "alternatives to abortion." In some states, such as North Carolina, women are told that they can receive a free ultrasound or hear fetal heart tones at an agency that provides this service. These agencies are privately owned, not affiliated with hospitals and commonly known as crisis pregnancy centers.

In states with a "Woman's Right to Know" law, women are offered written materials, including information about abortion and often a "Resource Directory" that lists services and agencies available to pregnant women seeking abortion in the state. These directories include crisis pregnancy centers in their listings. Crisis pregnancy centers are nonprofit organizations that offer free services to women facing unintended pregnancies, such as pregnancy testing, ultrasound, counseling, and baby and maternity items. Some

☆ Presented at the Society of Family Planning Annual Meeting, Denver, Colorado, October 27–28, 2012.

☆☆ Implications: Eighty percent of crisis pregnancy centers listed in state resource directories for pregnant women provide misleading or false information regarding abortion.

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http://dx.doi.org/10.1016/j.contraception.2014.07.003
0010-7824/

promote themselves as women's health clinics, and a few imply that they offer abortion services. The tactics used by crisis pregnancy centers to dissuade women from having abortions often include providing misleading or false information about abortion [2,3]. Because crisis pregnancy centers do not provide medical care, they are not governed by the same rules and regulations that govern health clinics.

The information provided on the websites of the crisis pregnancy centers may be difficult for women to evaluate, given the extremely varied quality of information available on the Internet [4,5]. Most states provide a disclaimer that they do not specifically endorse the views of any particular agency. However, because crisis pregnancy centers are listed by a state resource directory as simply centers for "alternatives to abortion," they may be viewed by patients as sources of accurate information or as health centers.

The objective of this survey was to evaluate the medical information on abortion provided by websites of crisis pregnancy centers listed in states' resource directories for pregnant women.

2. Materials and methods

We developed a protocol to systematically evaluate the websites of crisis pregnancy centers listed in state-provided resource directories for women with unintended pregnancies. No institutional review board permission was required. Twenty-six states with abortion counseling and waiting period laws were identified through the Guttmacher Institute's Brief on "Abortion Counseling and Waiting Periods" (initially accessed March 12, 2012) [6]. We performed a Google search using the terms "women's resource directory," "women's right to know resource directory" and "women's right to know department of health and human services." If a directory was not available online but a phone number was available, we called and ordered the resource directory. Additionally, individual searches of state health department sites were performed using the terms "woman's right to know," "resource directory," "abortion" and "pregnancy counseling." These terms were generated by reviewing the literature to find commonly used terms for our search criteria. The a priori list was modified with new keywords found on the websites we searched.

We identified all agencies listed in each state directory that were listed as, or appeared to be a crisis pregnancy center, a nonprofit organization with the stated purpose of counseling women not to have an abortion. For agencies with no website listed, the web address was searched on Google using the name, city and state. We included websites of crisis pregnancy centers as well as pregnancy resource centers, pregnancy care centers or centers offering alternatives to abortion, which are other names for this type of organization. We excluded websites if they referred to a maternity home (a live-in facility for pregnant women waiting to give birth), Catholic or other religious relief services, adoption agencies or other organization not identified as a crisis pregnancy center. Each website was reviewed independently by two authors, and data were doubly entered into a database. If a discrepancy between the two authors' entries was found, the other two authors also reviewed the website, and a consensus among the four authors was achieved.

A standardized data collection tool was used to record information from each website. Information recorded included services and information offered and the information regarding abortion on each website. We recorded whether the website had specific information on abortion or abortion methods. We also recorded whether the website described an association between abortion and specific outcomes, particularly mental health disorders, breast cancer and poor pregnancy outcomes such as infertility and preterm birth. The outcomes were chosen based on prior findings that these outcomes are often used by organizations or groups attempting to dissuade women from abortion, but are not risks supported by scientific evidence or professional organizations [1–3]. Descriptive statistics are reported, with proportions and 95% confidence intervals (CIs) where appropriate [7]. All data were analyzed using Stata 11.0 (StataCorp LP, College Station, TX, USA).

3. Results

Resource directories for 12 states were obtained. Online resource directories were found for Alaska, Georgia, Idaho, Louisiana, Minnesota, North Carolina, South Carolina, Oklahoma, Texas, West Virginia and Kansas. The state directory for Alabama was obtained by calling the state health department. Directories for the 14 remaining states with mandatory counseling or waiting period laws were not located after searching the Internet and calling the state departments of health and human services. Three states, Pennsylvania, South Dakota and Ohio, had websites that stated the page could not be found. The health department in Indiana was contacted and found to have only a directory of licensed abortion providers. The health department in Kentucky was contacted by phone but had a nonworking number. Missouri, Utah and North Dakota did not have resource directories. State health departments were contacted in Arkansas, Massachusetts, Montana, Michigan, Nebraska and Mississippi. We made three phone calls to each of these state health departments but did not receive any return calls. The majority of resource directories did not include any agencies that provide abortion. The resource directories for a few states (North Carolina, South Carolina and Kansas) also included comprehensive women's health centers in their resource directory listings.

From the 12 state resource directories we found, we identified a total of 601agencies that at first appeared to be crisis pregnancy centers. We found 456 websites for these agencies. Screening of the websites revealed that 348

websites referred to crisis pregnancy centers and 108 websites referred to agencies that were not crisis pregnancy centers. Ninety-four websites referred to more than one crisis pregnancy center. We collected data for each crisis pregnancy center website only once, even if the website referred to more than one crisis pregnancy center. This left a total of 254 websites that were reviewed and included in this analysis (Fig. 1).

The websites contained varying amounts of information. Some were a simple one-page website containing no information on women's health (40/254 websites; 16%). Almost all websites stated that free pregnancy testing was available at the clinic (245/254; 97%). Just over half offered free ultrasounds (136/254; 54%). Many were religious (146/254; 58%), stating directly that they were a Christian organization or offering Bible study. Many websites (144/254; 57%) contained information on abortion. Most websites did not provide a disclaimer that the crisis pregnancy center was not a medical facility (221/254; 87%). A small proportion (43/254; 17%) mentioned that someone on the staff or advisory board of the center was a doctor or nurse (Table 1). Overall, a total of 203/254 (80%, 95% CI 75%–84%) of websites provided at least one false or misleading statement (Table 2).

The most common medical inaccuracies included on the websites were a declared link between abortion and mental health risks, preterm birth, breast cancer, future infertility, miscarriage and ectopic pregnancy. Additionally, a significant proportion of websites linked abortion and suicidal thoughts and/or suicide. Almost three quarters of sites mentioned that abortion leads to a condition described as "postabortion stress" (Table 2). Of the 120 websites providing information on abortion, 110 had at least one false or misleading assertion (92%; 95% CI 85%–95%).

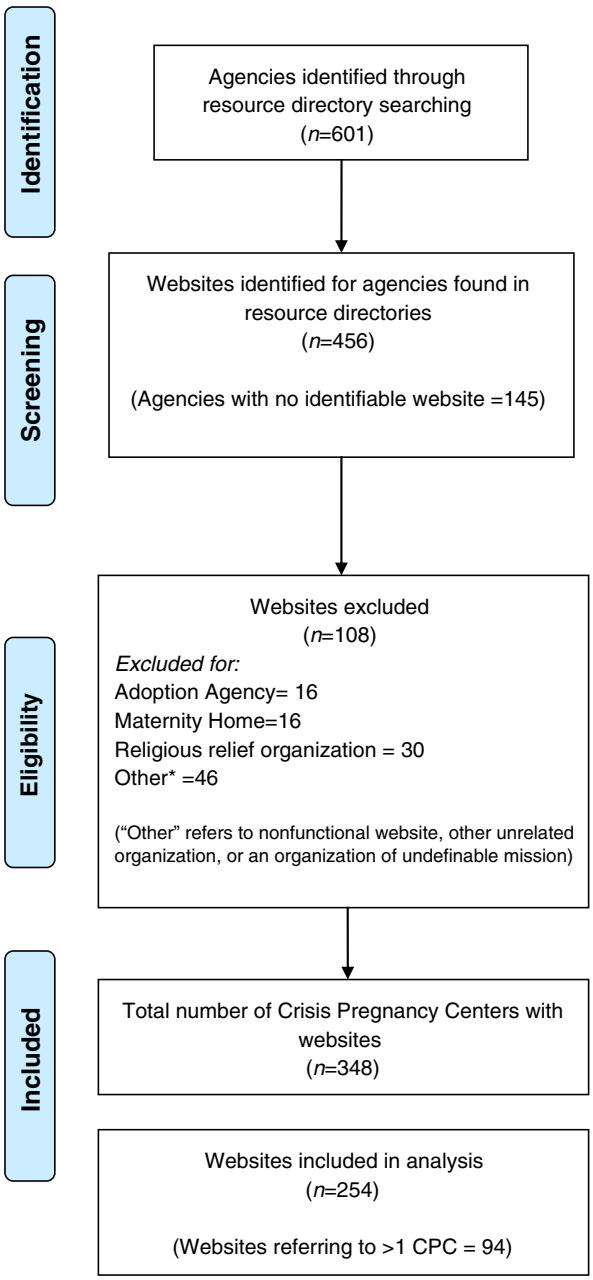

Fig. 1. Flow of websites included in the study.

4. Discussion

The websites for 80% of crisis pregnancy centers contain misleading or inaccurate information regarding the risks associated with abortion. This is alarming because many states currently list these organizations as places to seek information on alternatives to abortion. Some states even provide funding to crisis pregnancy centers through license plates and other programs [8].

Abortion is a safe medical procedure and is less risky than carrying a pregnancy to term [9]. Overstating the risks of abortion may lead to unwarranted fears among women seeking abortion [10,11]. Deterring women from seeking abortion by providing them with inaccurate information about risks of abortion such as preterm birth, infertility, breast cancer and suicide is unethical. The evidence for the poor outcomes often asserted on these websites is lacking.

Table 1
Baseline characteristics of crisis pregnancy center websites.

Characteristic (*n*=254)	*n* (%)
Offers free pregnancy test	245 (97)
Offers free ultrasound	136 (54)
Offers free STI testing	48 (19)
States that it is religiously affiliated	143 (56)
Provides a disclaimer that it is not a medical facility	33 (13)
Mentions the medical qualifications of staff	43 (17)
States that it is does not refer for abortion	229 (90)
Offers maternity or baby items	207 (82)
Offers Bible study	77 (30)
Offers counseling on "postabortion stress" at CPC	189 (74)
States that abortion information is available at CPC	213 (84)
Provides general abortion information on website	120 (47)
Provides information on abortion methods on website	92 (36)

Table 2
Information provided on crisis pregnancy center websites.

Characteristic	n(%)	95% CI (%)
Any misleading or false information on website	203 (80)	75–84
Asserts a link between abortion and:		
Preterm birth	54 (21)	17–27
Breast cancer	51 (20)	16–25
"Postabortion stress"	186 (73)	68–78
Placenta previa	4 (2)	1–4
Infertility	32 (13)	9–17
Suicidal thoughts	66 (26)	21–32
Suicide	56 (22)	17–28
Mental health risks	122 (48)	42–54
Other risks	124 (49)	43–55
Fetal pain	15 (6)	4–10
Miscarriage	16 (6)	4–10
Ectopic pregnancy	13 (5)	3–9

Poor mental health outcomes for women undergoing abortion are often asserted on the websites of crisis pregnancy centers. Extensive research into a link between induced abortion and poor mental health outcomes has shown no association between a single, legal, first-trimester abortion and an increased risk of mental health problems. Women experiencing mental health problems after abortion in most cases have other pre-existing and co-occurring risk factors for mental health problems [12,13]. The American Psychological Society and the American Psychiatric Association have both issued statements regarding mental health and abortion based on a comprehensive review of the literature [14,15]. Research on abortion and mental health problems such as suicide and "postabortion stress" does not show that abortion leads to these outcomes. A recent meta-analysis of mental health outcomes and abortion was found to have serious flaws in its methodology [16,17]. The concept of "postabortion stress" is not recognized by the *Diagnostic and Statistical Manual of Mental Disorders* (*DSM*)*, Fourth Edition* or the newer *DSM, Fifth Edition* as a mental health disorder [12,18]. Similarly, claims that abortion leads to suicide or suicidal thoughts have been based on research that was found to have methodological flaws such as failing to control for prepregnancy mental health and using inappropriate control groups [12,13,19].

An association between abortion and future poor pregnancy outcomes is not fully supported by the scientific evidence. Studies that have found a link between abortion and preterm birth have found a minimal increase in the risk of preterm birth following surgical abortion [20–22]. These studies do not meet criteria for establishing causality and are problematic due to lack of controlling for confounding factors [23,24]. The World Health Organization, the Centers for Disease Control, the American College of Obstetricians and Gynecologists, the March of Dimes, or the Royal College of Obstetricians and Gynecologists does not list abortion as a risk factor for preterm birth or other poor obstetrical outcomes, such as infertility or placenta previa [25–29].

The assertion that abortion leads to breast cancer is also not substantiated. Early case–control studies that found a link between breast cancer and abortion were found to have extensive recall bias, and a large collaborative reanalysis of epidemiological studies found no association between breast cancer and abortion [30]. The American Cancer Society and the National Cancer Institute have issued statements refuting a link between breast cancer and abortion [31,32].

Our study has both strengths and weaknesses. We performed a comprehensive search to include all of the websites that could be located by such a search. Rigorous, standardized criteria were used to review each website. Each website was reviewed by two authors, and consensus was reached when discrepancies were found. This study provides a comprehensive view of the types of information and services offered by the crisis pregnancy centers represented by these websites. It is possible that some resource directories were missed in our survey, as we were not able to locate resource directories for every state that might have one. Assessing how many women use these web resources to obtain information about abortion is also difficult. The number of women who obtain resource directories in the first place is unclear, as is the number who would then view the websites of the agencies listed, as we did.

The area of reproductive rights is fraught with strong and deeply held convictions on both sides, but scientific evidence does not support the notion that abortion is harmful to women or has multiple long-term health consequences. Crisis pregnancy centers have the stated goal of preventing abortions and, based on many of their websites, appear to use tactics that scare women in order to dissuade them. Women choosing abortion should be allowed to make a truly informed decision based on medically accurate, evidence-based information. States should not include agencies that provide inaccurate information on abortion in their resource directories for pregnant women.

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