

## Original research article

Abortion misinformation from crisis pregnancy centers in  
North Carolina<sup>☆</sup>

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## Abstract

**Background:** This study assessed the accuracy of medical information provided by crisis pregnancy centers in North Carolina.**Study Design:** We performed a secondary data analysis of a “secret shopper survey” performed by a nonprofit organization. Reports from phone calls and visits to crisis pregnancy centers were analyzed for quality and content of medical information provided. Web sites of crisis pregnancy centers in the state were also reviewed.**Results:** Thirty-two crisis pregnancy centers were contacted. Nineteen of these were visited. Fourteen centers (44%) offered that they “provide counseling on abortion and its risks.” Inaccurate information provided included a link between abortion and breast cancer (16%), infertility (26%) and mental health problems (26%). Of the 36 Web sites identified, 31 (86%) provided false or misleading information, including 26 sites (72%) linking abortion to “post-abortion stress.”**Conclusions:** Many crisis pregnancy centers give inaccurate medical information regarding the risks of abortion. Overstating risks stigmatizes abortion, seeks to intimidate women and is unethical.

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**Keywords:** Abortion; Mystery shopper study; Crisis pregnancy centers

## 1. Introduction

Crisis pregnancy centers (CPCs), sometimes called “pregnancy resource centers” or “pregnancy support centers,” are facilities that offer free services to women facing unintended pregnancies. The most common services include free pregnancy testing, onsite ultrasound or ultrasound referrals, counseling and short-term assistance. Some promote themselves as women’s health clinics, and a few even give the impression that they offer abortion services by appearing in Internet searches for abortion clinics [1]. Comprehensive women’s health clinics are subject to inspection by the state Department of Health and Human Services and must meet health and safety standards for hygiene, employee qualifications and supervision, quality of care and patient confidentiality. In contrast, CPCs have no

such requirements. The majority of CPCs are volunteer-run, though some have medically licensed staff who volunteer on a part-time basis. In North Carolina, CPCs outnumber comprehensive reproductive health care providers that perform abortions (medical or surgical) four to one, with approximately 122 CPCs and fewer than 30 abortion providers. In July 2011, North Carolina passed legislation requiring women seeking abortion to be given access to a directory on the state Web site of reproductive health and social service agencies in the state, including CPCs.

This study evaluates the findings of a “secret shopper” survey of CPCs in North Carolina. It also reviews the information available on the Internet for CPCs in North Carolina. The objective was to evaluate the accuracy of the information available from the CPCs.

## 2. Materials and methods

Deidentified data from a “secret shopper” evaluation conducted by a nonprofit reproductive rights organization in North Carolina were used for this secondary analysis. The

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Institutional Review Board at the University of North Carolina determined that a secondary analysis of anonymous data did not require Institutional Review Board approval.

The original data were collected over a 4-month period by research staff who presented anonymously as women in need of a pregnancy test, either over the phone or in-person. Seven individual researchers presented to the CPCs, either over the phone or in-person. Six were women, and one was a man who posed as the boyfriend of a pregnant woman. Six were in their late teens to mid-20s, and one woman was in her early 40s. Five of the volunteers were white, and two were African-American.

A list of all the CPCs in North Carolina was generated through a comprehensive Internet search by staff and volunteers of a nonprofit reproductive rights organization. The databases of national organizations such as Care Net, Ramah International, and the National Institute of Family and Life Advocates were also reviewed. Through this search, 122 CPCs were identified in North Carolina.

Researchers attempted to conduct a telephone call and an in-person visit at each center. On contact with each center, they posed either as potentially pregnant women or as the male partner of a potentially pregnant woman seeking help and information about pregnancy options. Researchers wrote detailed narratives of their encounters during phone calls or immediately after in-person visits. Attempts were made to contact all of the centers, but many of the phone numbers either were disconnected, lacked a voicemail option or were connected to an individual's voicemail without a reference to the center. Other calls were unanswered or unreturned. A total of 32 centers were reached by telephone.

Of the 32 centers reached by phone, 19 were visited in-person by research staff. The centers visited were chosen based on the travel ability of the researchers. Whenever possible, researchers went in pairs, with one person posing as a potentially pregnant woman and the second one posing as a supportive friend. When it was not possible for researchers to go in pairs, a researcher who went alone posed as a potentially pregnant woman who did not have a support system. At each center, the researcher told the CPC volunteers that her menstrual period was very late and she suspected she was pregnant. She stated that the pregnancy was not intended and therefore she wanted to learn about all of her options, including abortion. Immediately after each visit, researchers completed a detailed report regarding the visit. Researchers documented the information provided by staff at the centers regarding abortion, contraception, adoption, breast cancer, sexually transmitted infections and HIV. They also recorded the services and referrals provided by the center. Researchers also accepted all of the written materials provided by the center personnel during in-person visits.

The authors reviewed the narrative reports from these encounters for the content and medical accuracy of the information provided by the CPCs. Inaccurate medical information regarding abortion, pregnancy and contracep-

tion was entered into a data collection form using an Access database. Additionally, the authors reviewed the Web sites of the CPCs for content and medical accuracy. We report proportions and, where appropriate, 95% confidence interval (CI) [2]. Analyses were done using Stata version 11.0 (College Station, TX, USA).

### 3. Results

From March 1 to June 30, 2011, 32 CPCs were contacted by telephone, and of these, researchers visited 19 centers. At the CPCs visited in-person, a range of inaccurate medical information was provided (Table 1). Nineteen CPCs (59%) stated that they do not provide or refer for abortions, but 14 (44%) offered that they “provide counseling on abortion and its risks.” Seventeen of the 32 centers (53%) contacted provided at least one misleading or inaccurate piece of information.

Medical inaccuracies cited by counseling staff at the 19 CPCs visited included a link between abortion and breast cancer (three centers, 16%, 95% CI 5%–37%), a link between abortion and mental health hazards (five centers, 26%, 95% CI 12%–49%), a link between abortion and “Post-Abortion Stress” (five centers, 26%, 95% CI 12%–49%) and a link between abortion and infertility (four centers, 21%, 95% CI 9%–43%). At five of the centers visited (26%, 95% CI 12%–49%), researchers were counseled that “condoms are ineffective.” Researchers were told at three of the centers visited (16%, 95% CI 6%–38%) that other forms of birth control often fail. Abstinence was promoted at 13 of the 32 centers contacted (41%, 95% CI 26%–58%). Three (9%, 95% CI 3%–24%) stated that they do not refer for contraception.

Over the phone, researchers were told by staff at three different centers that pregnancy carries a substantial risk of miscarriage and that “there is plenty of time,” despite not having specific information on the researcher's gestational age (23%, 95% CI 8%–50%). Additionally, they were told of a link between abortion and mental health risks (four centers, 31%, 95% CI 13%–58%) and abortion and “post-abortion stress” (three centers, 38%, 95% CI 8%–50%). Counseling on options was not given over the phone; researchers were encouraged to make an appointment to visit each center that was contacted by phone.

Of the 36 Web sites identified, 31 (86%) provided false or misleading information (Table 1). Seven Web sites simply stated that information about abortion was available, and 29 Web sites (81%) contained specific information about abortion on the Web site. Inaccurate medical information included mention of a link between breast cancer and abortion (4 sites, 11%, 95% CI 4%–25%), link between preterm birth and abortion (15 sites, 42%, 95% CI 27%–58%) and a link between infertility and abortion (7 sites 19%, 95% CI 10%–35%). Twelve sites (31%) contained information about condoms, and 11 of these stated that

Table 1

Medical inaccuracies about abortion and reproductive health portrayed by CPCs in North Carolina in 2011

	Information obtained via in-person visit (n=19)	95% CI	Information obtained via phone call (n=13)	95% CI	Web sites (n=36)	95% CI
At least one piece of misleading or inaccurate information provided	10 (53)	32–73	7 (54)	29–77	31 (86)	71–94
Alleged link between abortion and:						
Mental health risks	5 (26)	12–49	4 (31)	13–58	19 (53)	37–68
“Post-abortion stress”	5 (26)	12–49	3 (23)	8–50	26 (72)	56–84
Infertility	4 (21)	9–43	–	–	7 (19)	10–35
Breast cancer	3 (16)	6–38	–	–	4 (11)	4–25
Preterm birth	–	–	–	–	15 (42)	27–58
Other misinformation provided:						
“Condoms are ineffective”	5 (26)	12–49	–	–	11 (31)	18–47
“Other birth control methods often fail”	3 (16)	6–38	–	–	–	–

A dash (–) indicates that no centers or Web sites provided information on the subject.

Data are n (%).

condoms were ineffective (92%, 95% CI 64%–98%). Additionally, 19 sites (53%, 95% CI 37%–68%) linked abortion to poor mental health, and 26 sites asserted a link between abortion and “post-abortion stress” (72%, 95% CI

56%–84%). Eleven Web sites (31%, 95% CI 18%–47%) contained a list of mental health issues and other problems allegedly associated with abortion (Box 1).

## Box 1

**Emotional impact from abortion**

Women experience strong negative emotions after abortion. Some of these feelings are masked or compounded by changing hormone levels. Sometimes, this occurs within days, and sometimes, it happens after many years. This psychological response is known as postabortion stress (PAS). Several factors that impact the likelihood of PAS include the woman's age, the abortion circumstances, the stage of pregnancy at which the abortion occurs and the woman's religious beliefs. PAS symptoms include:

Anger, anxiety, depression, suicidal thoughts (30%–50%), actual suicide attempts (7%–30%), anniversary grief, flashbacks of abortion, sexual dysfunction, relationship problems, eating disorders, alcohol and drug abuse, psychological reactions

Source: [www.cpccenter.org](http://www.cpccenter.org)

**Women who have experienced abortion may develop the following symptoms:**

- Guilt
- Grief
- Anger
- Anxiety
- Depression
- Suicidal thoughts
- Difficulty bonding with partner or children
- Eating disorder

Source: [www.reachoutcpc.com](http://www.reachoutcpc.com)

**4. Discussion**

Many CPCs gave inaccurate medical information regarding abortion and its risks. Whether in-person, over the phone or through their Web sites, the centers presented here often overstated or gave false information about the physical and psychological risks of abortion. These results are worrisome: many states recommend or require that women receive information about abortion from these centers, and several states fund CPCs through license plates and other programs [3].

The information on the risks associated with abortion presented by the CPCs evaluated here grossly overstated the risk of abortion. Despite evidence clearly disproving a link between abortion and breast cancer [4] and infertility [5–7], these risks are often presented by CPCs as fact. Research is inconclusive regarding a possible link between abortion and preterm birth. It appears that if there is any increased risk of preterm birth after abortion, it is minimal [5,8] and likely confounded by other risk factors [9]. Additionally, women were told that “they have plenty of time” or have a 25%–30% chance of miscarriage at three of the centers contacted. The overall rate of early pregnancy loss and spontaneous abortion is about 32% [10], but viable pregnancies after 8 weeks’ gestation have a risk of spontaneous abortion as low as 2% [11–13]. Without an accurate estimation of the gestational age, delay in seeking care may lead to abortion at a later gestational age [14] or cause women to present too late to care to receive an abortion.

Despite efforts to link abortion to mental health problems [15–17], the notion that an abortion in itself is a traumatizing event is not borne out [18–20]. Neither the American Psychological Association nor the American Psychiatric Association recognizes “Post-abortion Syndrome.”

However, the stigma surrounding abortion may disturb women seeking abortion [21,22].

Strengths of this study include its “secret shopper” design, which simulated the experience of women and men seeking advice. Mystery shopper studies provide a powerful tool to understand the experiences of patients seeking care [23]. They have been used to study difficult-to-ascertain information such as the treatment of the mentally ill by health care professionals [24] and pharmacists’ knowledge of emergency contraception [25]. This study provides insight into the information offered to women seeking care at CPCs that might otherwise be difficult to obtain. More than a quarter of the CPCs in North Carolina were contacted.

This study had several limitations. Fewer than half of the centers had public Web sites that could be analyzed, researchers were unable to reach every center by phone, and investigators were not able to conduct an in-person visit for every CPC. The inability to contact centers may be similar to what pregnant women seeking services from these centers also experience. Unfortunately, while an attempt to contact all centers in the state was made, documentation of what happened after each attempt (voicemail not answered, line disconnected, etc.) was not kept. Centers were visited based on convenience, which may contribute to selection bias and limit the external validity of the results. Visiting a random sampling of centers might have reduced this bias.

Researchers documented their experiences in narrative reports. While they were instructed to comment on the medical information provided, some of the information may have been missed. Lack of uniformity in the data collection may contribute to information bias in this study. We attempted to account for possible information bias by calculating 95% CIs for each proportion. Also, since none of the researchers were actually pregnant, their experiences may have been different if they had truly been facing an unintended pregnancy.

Misleading women regarding abortion violates the ethical principles that govern medicine: beneficence, autonomy and justice [26]. Crisis pregnancy centers are generally not medical facilities, but they purport to explain medical risks to patients. As such, they should be held responsible for providing accurate information. Beneficence requires that women be treated in a way that is likely to benefit them. Using deceptive tactics to scare women is inconsistent with this principle. Autonomy allows women to have full and appropriate counseling regarding all of the options available to them [27]. Advocating an antiabortion viewpoint interferes with this principle. Justice implies rendering to others what is due to them; the freedom to choose safe and legal abortion should not be hindered by organizations with an ideological agenda [28]. Women choosing abortion should be allowed to make a truly informed decision based on the most medically accurate evidence available. Unregulated, ideologically driven CPCs should not be allowed to mislead women with inaccurate medical information.

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