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Pregnancy, Contraception and Emergency Contraception: The Language of Urban Adolescent Young Women

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Abstract

Study Objective—We sought to characterize how a group of urban adolescent females understands the domains of pregnancy, contraception and emergency contraception (EC).

Design—We utilized the research strategy of freelisting as part of an in-depth interview study.

Setting and Participants—Urban adolescent females presenting to a Pediatric Emergency Department. Participants were enrolled using a purposive sampling strategy if they were Black, English-speaking females ages 15 through 19 years old who resided in one of 11 zip codes surrounding the hospital.

Main Outcome Measure—Smith's saliency score. Freelists were analyzed for the entire sample as well as for subgroups.

Results—Thirty adolescents completed the interview. We found that this group of adolescents uses different words to characterize the domains of pregnancy, contraception and EC. The only overlapping salient term was "abortion," which appeared in the overall lists for pregnancy and EC and in the younger group's list for contraception. In addition, lack of knowledge was cited as an important factor related to contraception.

Conclusions—Adolescent patients may not understand the concepts of contraception and EC fully. Providers should consider the potential need to provide an explanation for terms used, and should consider explicitly differentiating between routine forms of contraception and EC, as well as between EC and abortion.

Keywords

emergency contraception; freelists; adolescent; communication

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Introduction

Unintended pregnancy is a major public health issue. Although the United States teen birth rate declined nearly 2% in 2008 [1] and 3% in 2009,[2] the U.S. has by far the highest teenage pregnancy rate of any industrialized nation.[3] Furthermore, an estimated 80% of teenage pregnancies are unintended; [4] despite this, a significant proportion of teenagers report using no contraception during their first sexual intercourse.[5] While emergency contraception (EC) is a safe and effective method to prevent pregnancy,[6,7] it remains underutilized in the adolescent population.[8,9] One potential limitation to adolescent-directed interventions designed to increase EC use is the risk that providers and adolescents may understand pregnancy prevention in different ways. Although clinicians may feel that they are being clear when describing contraception and pregnancy prevention to teenagers, their expert understandings and descriptions may not match adolescents' lived experiences and perceptions. The objective of this study was to use a research strategy borrowed from anthropology, but rarely used in adolescent reproductive health,[10] to identify how a group of urban adolescent females define pregnancy, contraception, and EC.

Materials and Methods

We analyzed freelist data obtained as the first stage of an in-depth interview study of adolescent females which aimed to determine their knowledge, attitudes and beliefs about pregnancy prevention and EC. The full study methods have been published previously.[11] A purposive sample of female participants, ages 15–19 years, with or without a history of sexual activity, were enrolled if they presented to an urban Children's Hospital Emergency Department for any chief complaint; if they resided in one of 11 zip codes surrounding the hospital; and if they were black and English speaking. These criteria were selected to reflect a somewhat culturally homogenous population and to mirror the demographics of the population that lives around the hospital. Institutional review board approval was obtained for this study. Interviews began with a freelisting exercise, a technique commonly used by anthropologists to understand how individuals and groups define a particular domain.[12] Freelisting also gives insight into the relative salience or importance of words defining the domain.[13,14] We asked each respondent to provide lists of words that described each of the following: "pregnancy," "contraception," and "emergency contraception." The research team met to review the freelists and to standardize lists by combining synonyms. The cleaned lists were entered into Anthropac (version 4.0 1996, Analytic Technologies, Natick, MA), a software program designed specifically to analyze freelists. Anthropac calculates a Smith's saliency score,[15] which is a function of the frequency with which a word is mentioned, the average position on the list where the word falls and the length of each list. Words that are mentioned most frequently and early in most lists obtain the highest saliency scores. Saliency scores were generated for words identified by all participants, for girls <17 years and ≥17 years, and by history of sexual activity (no or yes).

Results

Ninety-two patients in the Emergency Department were approached for the study; 56 (61%) consented, and 30 of those (54%) returned for the interview. Participants' mean age was 16.4 years. Sixteen (53%) reported a history of sexual activity, and 5 (17%) reported a history of pregnancy.

Tables 1 through 3 illustrate the salient word lists for the terms "pregnancy," "contraception," and "emergency contraception" for the overall study participants as well as subgroups. The lists are ordered with the most salient words first. The salient word lists for the term "pregnancy" were the longest and most varied by subgroup. The word "baby" was

salient across all groups; the terms “school,” “parents,” and “responsibility” were salient only for the non-sexually active group, and the term “scared” was salient for the sexually active group and the older group. Interestingly, for the term “contraception,” the phrase “don’t know” was mentioned most frequently and early across all groups; other salient words included specific types of contraception. Two words were noted only by the sexually active group – “patch” and “protection.” Finally, for the term “emergency contraception” the phrase “don’t know” was again very salient across groups; other salient words included “fast,” “emergency,” and “abortion.” Of note, the non-sexually active group’s salient terms included only “don’t know” and “abortion,” and the term “emergency” was most salient for the younger group.

Discussion

Although EC is a safe and effective method for pregnancy prevention, the adolescent population underutilizes this contraceptive method. By utilizing freelistings, we sought to identify how a group of urban adolescent females define and understand the domains of pregnancy, contraception and EC to gain insight into ways that communication about contraception and EC is actually heard by this group of young women.

As a research tool, freelistings is particularly useful for identifying shared notions about a construct. It generates salient words that are group generated examples of the most frequently mentioned spontaneous descriptors of the domain. Thus, the method enables us to identify the most prototypical ways that members of a group (or contrasting subgroups) think about a specific term or idea. In our study, the word pregnancy was associated with emotional words and with words that hold both positive and negative connotations. Interestingly, the domain of pregnancy seems to be very different from the domain of contraception, with the only overlapping salient term being “abortion.” Furthermore, teenagers who are sexually active may understand that EC is not equivalent to abortion better than teenagers who are not sexually active.

The findings from this study also inform clinical practice, and could translate to other educational settings as well. We know from our work and the work of others that there are significant knowledge gaps about EC among adolescents.[8,9, 11, 16,17] There is also a small, but growing body of literature on adolescent health literacy with regards to reproductive health.[18] Adolescents may receive education about reproductive health in a variety of settings beyond the medical setting, including schools, but those experiences may be inconsistent and may or may not be based on the most up-to-date medical knowledge, given that there is no clear national policy around reproductive health education in the U.S. Our results indicate that sexually active adolescents may have different (but not necessarily better) understandings about EC from adolescents who are not sexually active. This implies that a “one size fits all” approach to health education about EC may be heard differently by adolescents depending upon whether or not they are sexually active, and that speaking in broad terms to all patients may not be as effective as tailoring the message to particular subgroups. Further, it is clear that misperceptions about EC persist and these should be acknowledged and confronted directly. Our results also suggest that clinicians should take into account the possibility that concepts such as pregnancy and contraception may have positive or negative valence for their adolescent patients.

There are several limitations to our study. First, we enrolled a narrow demographic of participants to fit our research question, so the results may not be generalizable to all adolescents. This project was hypothesis generating, and the results warrant further study, including expanding to different populations of adolescents. In addition, it is possible that the adolescents provided socially desirable responses; however, given the breadth of

responses this is unlikely. Finally, we chose three terms for the exercise; participants may have generated different lists is asked to describe other terms such as “family planning” or “birth control.” However, we selected our terms to specifically assess adolescents’ understanding of those words, given that we anticipated adolescents may have variable understanding of terms that are often used in medicine, particularly with respect to “contraception.”

Despite these limitations, this study provides a novel method for insight into adolescents’ understanding of pregnancy prevention and EC. When talking to adolescents about pregnancy prevention, concepts which providers may believe are self-evident have different meanings for teenagers; providers should consider the possibility that patients may not understand these concepts fully, particularly the word, “contraception.” Other terms may have more meaning for a particular adolescent; alternatively, providers may need to provide an explanation for whatever terms are used. In addition, providers should consider differentiating between routine forms of contraception and EC, as well as between EC and abortion, when providing pregnancy prevention counseling to adolescents.

In conclusion, providers should consider the possibility that patients may not understand the concepts of contraception and EC fully, and should consider these limitations when providing pregnancy prevention counseling to adolescents. A direct approach, including an acknowledgement that some terms may not be well understood, an explanation of terms used, and an explicit distinction between EC and abortion may provide adolescents with the tools needed to prevent unintended pregnancy.

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Table 1

Salient terms for the freelists around pregnancy

Overall	15–16 year olds	17–19 year olds	Non-SA	SA
Baby	Baby	Baby	Baby	Baby
Abortion	Sex	Abortion	Abortion	Sex
Sex	Pain	Sex	Pain	Abortion
Pain		Happy	Happy	Money
Money		Money	Money	Scared
Happy		Pain	School	
Scared		Scared	Parents	
			Teenager	
			Responsibility	

Non-SA: no history of sexual activity

SA: report of current or past sexual activity

Table 2

Salient terms for the freelist around contraception

Overall	15–16 year olds	17–19 year olds	Non-SA	SA
Don't know	Don't know	Don't know	Don't know	Condoms
Condoms	Birth control pills	Condoms	Condoms	Don't know
Birth control pills	Condoms	Birth control pills	Birth control pills	Birth control pills
Depo	Depo	Depo	Abstinence	Depo
Abstinence	Emergency contraception	Abstinence	Don't do it	Emergency contraception
Emergency contraception	Abstinence			Abstinence
	Abortion			Patch
				Protection

Non-SA: no history of sexual activity

SA: report of current or past sexual activity

Table 3

Salient terms for the freelists around emergency contraception

Overall	15–16 year olds	17–19 year olds	Non-SA	SA
Don't know	Don't know	Emergency contraception	Don't know	Don't know
Abortion	Abortion	Don't know	Abortion	Fast
Emergency contraception	Emergency	Abortion		Emergency contraception
Fast	Fast	Fast		
Emergency				

Non-SA: no history of sexual activity

SA: report of current or past sexual activity