

## **45th Biennial Convention (16-20 November 2019)**

### **An Examination of Family Cancer and Health Communication Among College Students and Their Families**

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#### 1. Introduction

Cancer occurs among 1 in 3 individuals in the United States. <sup>1</sup>The disease extends among various races, socioeconomic classes, and families to produce feelings of hopelessness, loss of control, and psychological distress.<sup>2-5</sup> Despite the prevalence of cancer among many populations, there still exists a negative stigma about the illness. It is this stigma, which creates barriers among families to discuss the diagnosis, treatment, and or quality of life for individuals living with cancer.<sup>4,6,7</sup>

#### 1. Body

Family cancer communication

Family cancer communication is essential given the presence of an increased risk of cancer in some families due to genetic mutations, behaviors, and environmental issues.<sup>1</sup> The role of genetics and the ability to screen for various genes that are linked to cancer has become an increasingly pertinent topic in the field of medicine. Therefore, family members must be aware of the potential risk for developing cancer that has a history of occurring in their family. College students, which are young adults must also grapple with various health risks within their families while pursuing a degree. When faced with academic success or being knowledgeable of their risk for various cancers and other diseases it is not difficult to surmise college students will be inclined to choose academic success. Although undergraduate college students are gaining knowledge and life skills in an academic setting, one must not forget that the family is a significant influence regarding their behaviors and values.

Undergraduate College students

According to the National Center for Education Statistics within the U.S. Department of Education and the Institute of Education Sciences, the latest statistics for undergraduate students enrolled in postsecondary degree granting institutions was appropriately 16.9 million as of fall 2016.<sup>8</sup> Inadequate knowledge of health topics can place college students at risk for various diseases that may be prevalent within their families.

However, the families of college students may feel the need to shield them from a cancer diagnosis or other health issues due to their academic endeavors. When faced with academic success or being knowledgeable of their risk for various cancers and other diseases it is not difficult to surmise college students will be inclined to choose academic success. Although undergraduate college students are gaining knowledge and life skills in an academic setting, one must not forget that the family is a significant influence regarding their behaviors and values.

The objective of this study was to examine the results of the Family Cancer and Health Communication Questionnaire (FCHCQ), an electronically administered survey designed by the primary investigator, to measure cancer perception, comfort in communicating about cancer and health issues and topic avoidance within the families of college students.

## **METHODS**

### **Design and Sample**

The pilot study utilized a cross-sectional design and was implemented from November 2016 to April 2017. Participants in the study were undergraduate college students at a public university in the Southeast region of the U.S. Inclusion criteria for the study consisted of currently enrolled full or part-time undergraduate students, 18 years of age and older, able to speak and read English, and access to an electronic device with internet service. College students who were not undergraduate students, under the age of 18 years old, not enrolled as full or part-time students, or could not read or speak English were excluded from the study.

The impetus for the development of the FCHCQ was the lack of questionnaires that measured an individual's comfort with discussing cancer and family health communication which impact an individual's health. The concept of cancer communication avoidance within the family provides valuable information regarding barriers to communication. Previous questionnaires were based on avoidance of cancer communication, which served as a foundation for including this concept in items on the FCHCQ. Thus, the FCHCQ built upon topic avoidance of cancer communication within the families of college students. The concept of comfort in discussing cancer with family members was lacking from the previous questionnaires although it seemed to be a pertinent aspect for general communication as well as cancer and health communication. The FCHCQ fills a lack in the literature by combining aspects of the previously indicated questionnaires that were developed and validated to assess avoidance of cancer communication, family communication, and comfort with communicating about cancer. Furthermore, there are no questionnaires that measure the combination of previously mentioned concepts among college students. In addition, the questionnaire, is intended for use among individuals with or without a diagnosis of cancer.

After approval for the study was received from the University's Human Subject Committee, an email for participation in the study was dispersed among the college students. Emails were sent randomly to undergraduate students who were 18 years of age and older via the University's Survey Committee. The email contained a link for the online software program Qualtrics, which contained the consent for participation in the study and the FCHCQ.

### **III. Objectives**

The objectives are: 1) Discuss topics of avoidance within family cancer and health communication; 2) Differentiate which family members college students are comfortable with sharing health and illnesses information; 3) Identify if college students are more comfortable sharing information regarding health and illness within or outside of the family.

### **IV Results**

The participants consisted of 346 undergraduate college students who responded to the electronic questionnaire that was randomly emailed to students enrolled at a large public university in the Southeast U.S. Seventeen participants did not provide response to any of the questionnaire items and were therefore excluded from the analysis. The final sample, thus, consisted of 327 participants, 72 males (22%) and 255 females (78%), ranging in age from 18 to 45 with a mean of 20.37 years ( $SD=3.16$ ). Most of the participants were White (81.3%) and non-Latino (78%), and the majority, (97%) were never married. English was the predominate native language for the participants, 90.5%. Lastly, 59.3% of the participants reported an annual family income of \$50,000 or more.

The first item asked participants whom they felt they could talk and have a sense of comfort from a list that was provided. Results indicated that the option of “mother” was the common choice at 59.9%. Lastly, topic avoidance was analyzed wherein the option of “sex” was the most frequently selected, (63%), for avoidance in family discussions. There were also three items that assessed the presence of family cancer and health communications regarding 1) openness for talking; 2) the lack of communicating about health issues with individuals outside of the family; 3) and comfort with talking to family about cancer. Responses for the items were summed to determine the overall score for the scale. Scores on the FCHCQ ranged from 4 to 15, with a mean score of 11.78 ( $SD = 2.35$ ). Scale scores were negatively skewed (Skewness statistics =  $-.92$ ,  $SE = .13$ ), and the distribution of the scores were not normal (Kolmogorov-Smirnov Statistic =  $.16$ ,  $df = 329$ ,  $p < .001$ ). The majority of the scores were above 10, which resulted in the negatively skewed distribution.

The item responses for perception of cancer were summed to determine the overall score for the scale. Scores ranged from 4 to 20, with a mean score of 11.67 ( $SD= 2.96$ ). In addition, scores for the items had a slight positive skew as shown in Figure 4 (Skewness statistic =  $.42$ ,  $SE = .13$ ), and the distribution of the scores was not normal (Kolmogorov-Smirnov Statistic =  $.101$ ,  $df = 329$ ,  $p < .001$ ).

The importance of communicating health issues is indicated in one of the Healthy People 2020 objectives, which aims to increase the proportion of individuals that can identify a family member or friend to discuss their health issues.<sup>9</sup> A decrease and/or elimination of stigma surrounding cancer and discussing health communication must begin with the group that is often trusted the most, the family.

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**Title:**

An Examination of Family Cancer and Health Communication Among College Students and Their Families

**Keywords:**

Cancer and Health communication, College students and Family

**References:**

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### **Abstract Summary:**

A cause for health disparities is lack of health risk and promotion knowledge. Participants will learn the topics of avoidance as well as the comfort college students experience when discussing cancer and health topics within their families. Examining cancer and health communication highlights the need for knowing familial health risks.

### **Content Outline:**

Introduction

1. Cancer is a prevalent in lives of many individuals in the United States. A stigma regarding cancer communication exists which creates barriers among families to discuss the diagnosis, treatment, and or quality of life for individuals living with cancer.

Body  
 Main Point #1 Family cancer communication is recognized as an avenue for examining barriers and facilitators for engaging in the transmission of health information in families.  
 Supporting point #1 In the field of family cancer communication, studies have been conducted among patients, family members, and their healthcare providers to address avoidance of cancer communication, racial, ethnic, and cultural differences in family cancer communication, and the importance of family health history.

a) *Cancer of the breast, colon, prostate, and ovaries are just a few that are known to have an increased risk of occurring among family members.*

Main Point #2 College students are in a unique position in that they are transitioning into young adulthood and assuming increased responsibilities in most cases.

Supporting point #1 Even though college students are considered young adults they often encounter an environment which places their health at risk.

*a) College students tend to engage in risky health behaviors and research indicated they do not possess adequate health information on pertinent health topics regarding their overall health.*

Main Point #3 There is a lack of research that examines family cancer and health communication among college students.

Supporting point #1 The current study builds upon the foundation for examining family cancer and health communication among college students.

*a) Studies regarding communication have largely centered on the transmission of information regarding the family health history as well as cancer information transmission between patients and providers.*

Conclusion

1. Through the examination of family cancer and health communication among college students, generations will gain an awareness regarding the importance of family health histories.
2. Through the sharing of family cancer and health information college students can initiate or continue to build upon healthy behaviors or health screenings.

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**Author Summary:** Dr. Sabrina Dickey is an Assistant Professor in the College of Nursing at Florida State University. Her research examines the health disparity of prostate cancer among Black men through education and service within a community setting. She conducts interventional research to increase awareness of prostate cancer among Black men along with research on family cancer communication. Dr. Dickey's long term goal is to increase awareness of prostate cancer and family cancer communication among Black families.

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