Journal of Pediatric Nursing (2016) xx, xxx–xxx

Understanding How Overweight and Obese Emerging Adults Make Lifestyle Choices

EunSeok Cha PhD, MPH, MSN, CDE, RN [a,*], James M. Crowe BA [b], Betty J. Braxter PhD, CNM, RN [c], Bonnie Mowinski Jennings PhD, RN, FAAN [a]

[a] *College of Nursing, Chungnam National University, Daejeon, South Korea*
[b] *School of Social Service Administration, The University of Chicago, Chicago, IL*
[c] *School of Nursing, University of Pittsburgh, Pittsburgh, PA*

Received 19 February 2016; revised 1 July 2016; accepted 6 July 2016

Key words:
Emerging adults;
Healthy behavioral choices;
Rational choice theory;
Health promotion

Purpose: To better understand health-related decision making among overweight and obese emerging adults.
Design and Methods: A cross-sectional design was used in the parent study involving overweight and obese emerging adults, ages 18–29 years. The goal of the parent study was to screen participants' diabetes risk and identify characteristics of emerging adults with prediabetes (N = 107). A sub-sample of respondents (n = 34) from the parent study were invited to participate in focus group interviews depending on whether they had prediabetes (three groups) or they did not have prediabetes (four groups). Each focus group interview lasted 90–120 minutes following a semi-structured interview guide. Conventional content analysis was used in the data analysis. Because of the similarities between participants with and without prediabetes, the findings were synthesized and reported in the aggregate. Moreover, during the analysis, the authors decided that rational choice theory provided a useful organizing structure for presenting the data.
Results: Emerging adults' behavioral decisions were rational reactions to their personal competence, perception of health, environment, and availability of resources to handle problems. Calculation of trade-offs and estimations of resource availability were often used when making decisions.
Conclusions: Emerging adults choose unhealthy behaviors due to inaccurate information and insufficient competence to practice healthy lifestyles rather than because of laziness or being irrational.
Practice Implications: Behavioral interventions for emerging adults need to help them develop skills to enhance health literacy and problem solving, thereby enhancing their awareness of available resources and decreasing the perceived cost of making healthy choices.

Emerging adulthood, a period between ages 18–29, is a new life stage introduced by developmental psychologists in the 1960s (Arnett, 2000; Arnett, Zukauskiene, & Sugimura, 2014). This new developmental stage was created in response to the societal changes related to the increasing marital age, timing of parenthood, and expected higher education and training as preparation for being in the workforce until retirement (Arnett, 2000). Physical and emotional maturity, financial independence, and successful role transitions distinguish mature adults from emerging adults (Arnett, 2003).

During the past four decades, obesity prevalence has grown faster among emerging adults than in the general population (Flegal, Carroll, Ogden, & Curtin, 2010; Ogden, Carroll, Kit, & Flegal, 2012). A potential reason for this obesity epidemic among emerging adults is that their lifestyle behaviors differ from those of more mature adults. Emerging adults often consume calorie-dense foods and beverages, eat a "fourth meal" (a meal between supper and breakfast; Nelson, Story, Larson, Neumark-Sztainer, & Lytle, 2008), and have lower basal activity (Cha et al., 2015; Nelson et al., 2008). Emerging adults

* Corresponding author: EunSeok Cha PhD, MPH, MSN, CDE, RN.
E-mail address: chase01@gmail.com.

http://dx.doi.org/10.1016/j.pedn.2016.07.001
0882-5963/

also tend to stay up late. Evidence shows that individuals who go to bed after 11:00 pm and sleep less than 6 hours/night are more likely to engage in unhealthy behaviors (e.g., late night snacking, physical inactivity, smoking, alcohol consumption; (Bayon, Leger, Gomez-Merino, Vecchierini, & Chennaoui, 2014; Rosenberg, Maximov, Reske, Grinberg, & Shah, 2014; Schoenborn & Adams, 2008). These unhealthy behaviors have been linked to increased risk of imbalanced glucose metabolism leading to prediabetes or diabetes (MacLeod, Terada, Chahal, & Boule, 2013; Morselli, Leproult, Balbo, & Spiegel, 2010).

Prediabetes is defined by one of three measures: (a) fasting glucose (100–125 mg/dL); (b) 2-hour 75 g oral glucose tolerance test (140–199 mg/dL), or (c) HbA1C (5.7–6.4%). Community-based lifestyle coaching programs are available to assist persons with prediabetes and/or metabolic abnormalities (Centers for Disease Control and Prevention, 2013; Katula, Blackwell, Rosenberger, & Goff, 2011; Knowler et al., 2002). Such programs, however, are not designed to consider age-specific lifestyle modifications. Emerging adults often have different perceptions of health risks and also may perceive psychosocial and structural barriers to participating in these programs (Adriaanse, Snoek, Dekker, van der Ploeg, & Heine, 2002; Andersson, Ekman, Lindblad, & Friberg, 2008).

Emerging adults confront many transitional demands, expectations, and role changes as they move from being more dependent adolescents to more independent adults (Garvey et al., 2014). When emerging adults are faced with managing health conditions such as obesity or prediabetes, issues unique to their developmental stage must be considered. Thus, the purpose of this study was to better understand overweight and obese emerging adults' decision making related to obesity-linked health risks with the goal of using the findings in the future to design an age-specific health promotion program.

Methods

Study Design

Qualitative description was the method that guided this work (Sandelowski, 2000, 2010). The goal in qualitative description is to gain firsthand knowledge from informants about the topic of inquiry. Unlike other qualitative methodologies, there are few pre-existing philosophical determinants in qualitative description and a high degree of interpretation and abstraction are not required.

Setting and Participants

The parent study, aimed at screening diabetes risk and identifying the characteristics of emerging adults with prediabetes to develop an age-specific diabetes prevention program, was approved by Institutional Review Boards at Emory University and other appropriate institutions (Cha et al., 2015). Telephone screening was completed of 224 contacts. Of these, 126 overweight and obese, physically inactive emerging adults, ages 18–29, were invited for diabetes risk screening to assess their body mass index (BMI; measured using weight and height), fasting blood glucose, HbA1C, and psycho-behavioral variables (e.g., physical activity, dietary behavior over the past year measured by the Dietary Quality Index-Revised for Young adults, body image perception). Of the 126 potential participants, 107 emerging adults came to a clinical research unit and completed the informed consent process, providing written consent to participate in the parent study. These same participants were asked about their desire to attend a focus group.

Participants for the analysis reported here were a sub-sample of the parent study who agreed also to be involved in a focus group interview (n = 34). Using the diabetes screening test results (fasting glucose and HbA1C tests), participants were placed in either a normoglycemic group (3 groups, 18 individuals total) or a prediabetes group (4 groups, 16 individuals total). The goal was to have at least 3–6 participants in each focus group. These participants were provided information about the date, time, and place of the group. In addition, to maximize attendance, participants received three reminder telephone calls—one a week before the group, one 1–3 days prior to the group, and one on the morning of the interview.

The majority of the focus group participants were in their early twenties (mean age = 23.6 ± 3.1 years old); female (n = 31); African American (n = 25); college students (n = 18 undergraduates, n = 10 graduate students); and severely or morbidly obese (n = 20; BMI of 35 or higher). The median dietary quality score assessed by Dietary Quality Index-Revised for Young adults (DQIR-Y) was 59.8 (mean ± SD = 61.3 ± 10.2; range 43.3–78.8 of 95). Table 1 shows the socio-demographics of the participants.

Data Collection Procedure

A semi-structured interview guide was developed based on a literature review; it was refined by a nurse researcher with qualitative expertise (Table 2). Prior to the focus group interviews, primary and assistant moderators were trained in their roles. A moderator pair was at each focus group. The first author (PI) was present in each group and conducted a debriefing with the participants at the end of each interview to correct myths regarding early onset type 2 diabetes, prediabetes, and healthy lifestyles. Upon completing the interviews, all participants received a $25 gift card. The PI also debriefed with the research team to refine the interview guide.

Each focus group lasted 90–120 minutes. All interviews were digitally recorded. The de-identified interviews were transcribed by a research assistant and independently verified for accuracy by research staff.

Data Analysis

In collaboration with the first and last authors, two research assistants independently reviewed the transcripts and began open coding following the principles of conventional content analysis (Hsieh & Shannon, 2005). MAXQDA 11.0 software (VERBI software, Germany) was used for data management. The coding process was iterative with the research assistants comparing independently derived codes, reconciling differences, and achieving consensus on a coding structure. The coding