

Eastern Illinois University

The Keep

2022 Awards for Excellence in Student
Research and Creative Activity - Documents

2022 Awards for Excellence in Student
Research and Creative Activity

Spring 2022

Growing Up Healthy: A Study on Young Adults and their Readiness to Transition to Independent Healthcare

Annabelle Heddell

Follow this and additional works at: https://thekeep.eiu.edu/lib_awards_2022_docs



Part of the [Higher Education Commons](#), [Nutrition Commons](#), and the [Public Health Education and Promotion Commons](#)

**Growing Up Healthy: A Study on Young Adults and their Readiness to Transition to
Independent Healthcare**

Annabelle Heddell and Dr. DeRuiter-Willems

Summer 2021

8/13/2021

Growing Up Healthy: A Study on Young Adults and their Readiness to Transition to Independent Healthcare

Healthcare is a lifelong journey that involves changes, decision making, and awareness of health needs and concerns. As children grow up and age out of the pediatric system, transitioning occurs. Healthcare transitioning (HCT) is a process that assists individuals with the different stages of their health journey. Transition readiness is derived from the concept of health care transitioning, which is generally defined as “the process of shifting from pediatric to adult-focused care” (Kelemen et al., 2014, p. 1062). A more in-depth definition describes health care transitioning as the “process of purposeful, planned movement of adolescents with chronic medical conditions from child to adult-centered healthcare systems” (Ho et al., 2014 as cited in Blum et al., 1993). For young adults, healthcare transitioning becomes an increasingly important concept as individuals are emerging into their adult lives with different skill sets, understandings, and capabilities. Physicians describe a successful transition from childhood healthcare to independent healthcare as a well-timed transition that prepares an adult to optimize their ability to manage their health, adult roles, and general functioning (American Academy of Pediatrics, American Academy of Family Physicians and American College of Physicians-American Society of Internal Medicine, 2002). The skills and abilities that are considered valuable can change as health education differs based on the age of the individual, such as abilities to voice needs, follow direction, and communicate with parents and providers.

The education system has changed guidelines regarding health education numerous times, creating incessant concerns for individuals who are beginning to manage their own healthcare. Medical providers are recommending that patients take proactive measures with managing their health responsibly, yet most youth lack the ability to transition successfully

(Cooley et al., 2013). The patients are encouraged to take responsibility but do not hold conversations or initiate the transfer process to independent healthcare (Cooley et al., 2013). Numerous research studies have been conducted with children with chronic diseases, suggesting that children with chronic diseases are more equipped to handle healthcare needs as they transition out of pediatric care (Demars et al., 2011). The study most noted for this research examined the readiness of children to transition to independent healthcare, primarily children with chronic disease (Demars et al., 2011). Children and young adults are two populations that require detailed attention when it comes to healthcare transitioning as many providers and parents do not provide the proper resources to adequately prepare them for independent healthcare (Keleman et al., 2014). Furthermore, the changing education system and lack of awareness perpetuates this problem as many families and providers are not holding conversations about health and how young adults should prepare themselves for managing their health (Keleman et al., 2014). The discrepancies and controversy over health education have impacted the way that patients, providers, and their families discuss independent healthcare and how they interact with health systems.

While the health education and communication gaps affect children, college students are another large population that is left out of the conversation. College students are in a vulnerable position, leading to health disparities and disproportionately placed health resources. Social determinants of health such as students coming from different backgrounds, socioeconomic statuses, religious beliefs, and access to healthcare can impact health education and the students' readiness to transition to independent healthcare. These factors play a role with how college students treat healthcare transitioning, perceive health concerns, and take proactive measures for health. College campuses and universities need to be aware of how these factors can lead to

different challenges and needs for students as they learn to manage their healthcare. Some of the ways that these obstacles can be addressed is through increased awareness, educational efforts and programs, extended time with medical providers for appointments.

Purpose

The purpose of this study is to examine college students and their readiness to transition to independent healthcare.

Research Question

Are young adults ready to independently: manage their own medications, keep appointments, track health issues, talk to medical providers, and manage daily activities? The hypothesis for this study was that students are not prepared to transition into independent healthcare. The null hypothesis was that there is no conclusive evidence that suggests college students are not prepared to transition into independent healthcare.

Methods

The purpose of this research study is to determine the readiness of college students to transition to independent healthcare on a college campus. This descriptive study analyzes the relationship between college students and their transition readiness to independent healthcare. Examining the relationships between college students and their transition readiness to independent healthcare at a university required consent and approval from the Institutional Review Board (IRB) at Eastern Illinois University (EIU), a university in central Illinois. The survey was distributed over a two-week period, allowing students to take the survey on their own timing. Data was analyzed electronically through Excel to determine if there were any relationships between variables such as gender, year in school, and history of chronic conditions.

Through analyzing the data from this research, possible relationships and inferences can be made from the results.

Research Design

Participants

The participants for this research study are college students at EIU. The university population draws students from across the country, but primarily students from the Midwest. Among the participants, the year in school was a factor, varying from freshman to graduate students. Participants selected their gender, year in school, and whether they had a chronic condition at the time of the study. The participants took the survey at free will, no reimbursements or promotional items were offered at the time of study.

Research Questions

This study is meant to examine the relationship between college students and their readiness to transition to independent healthcare. To examine this relationship, research questions have been formed. The research questions are related to healthcare readiness and are as follows: Are young adults ready to independently: manage their own medications, keep appointments, track health issues, talk to medical providers, and manage daily activities?

Research Instrumentation

The survey is split into five different sections, each targeting a certain portion of the research question: managing medications, appointment keeping, tracking health issues, talking with medical providers, and managing daily activities. In total, there are 20 questions, divided into groups of 4 questions on managing medications, 7 questions on appointment-keeping, 4 questions on tracking health issues, 2 questions on talking with providers, and 3 questions on managing daily activities. The research questions for this survey were taken from the TRAQ

with permission from the Quillen College of Medicine at East Tennessee State University (ETSU), see Appendix D. A condensed proposal was written to identify basic goals and to outline the course of the study. Once the research questions were chosen, paperwork was submitted to the IRB for approval to move forward with research.

Data Collection

Data was collected through an email survey sent to students at EIU and posted on social media for students to take at their own will. The survey's sample was the convenience sampling method as there were time restrictions on the research. Students who were 18 or older at the time of study were encouraged to participate. The Qualtrics software program was used to create and disperse the survey to students. Consent was obtained through a consent form posted on the first page of the survey, which was to be documented before any survey was taken. If questions arose, participants had the option to reach out to the advisor over the study and voice their concerns. Students then completed the survey through the link for Qualtrics.

Data Analysis

After data collection, the data was collected and organized in an Excel sheet to process the information. After the initial collection, the data was recoded into numerical values to be able to run statistical analyses. For gender, data was recoded from male to one, female to two, and non-binary/third gender to three. For year in school, freshman status was recoded as one, sophomore as two, junior as three, senior as four, and graduate as five. Responses for each question were recoded as the answers were given on a variation of a Likert scale. The first response "No" was recoded as one, "No, I do not know how" as two, "No, but I want to learn" as three, "Yes, but I am learning to do this" as four, "Yes, I have started to do this" as five, and "I always do this when I need to" as six. Additionally, the responses for whether the participant had

a chronic condition were recoded as one for yes and two for no. Data was run through Excel, another statistics program to gather information for the composite scores of the participants and determine if there are any possible relationships between the data. A one-way ANOVA test was run on data to examine the relationship between college students and their knowledge regarding bad reactions to medications. This test provided information that would be used to either accept or reject the null hypothesis. The data from the ANOVA test was compared to the null hypothesis, stating that there is no conclusive evidence that shows college students are not ready for transitioning into independent healthcare.

Results

Introduction

The survey generated results that were unique to the population. The participants for the study attended EIU, were mostly female, and most of the population had no history of chronic conditions at the time of the survey. All class ranks were included in the survey, starting from freshman to graduate student. Out of the undergraduate students, the largest population identified their class rank as senior.

Upon review of the results, students had a general grasp on how to manage their own medications, make doctor's appointments, and take care of their living space. However, skills were lacking with health literacy and self-efficacy regarding insurance, what to do with bad reactions to medication, and how to explain symptoms to doctors.

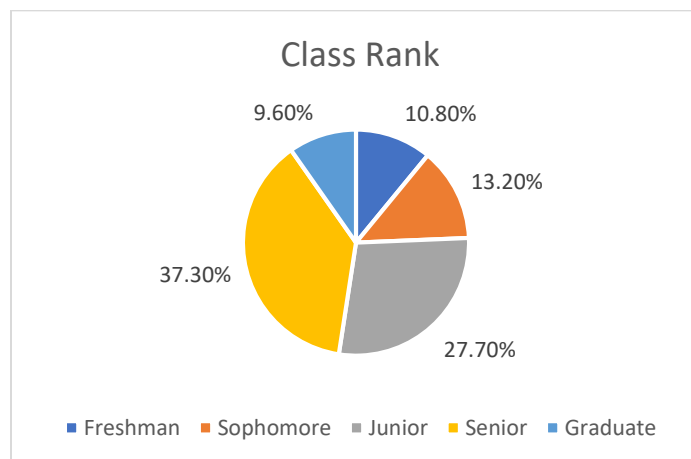
Sample Demographics

The surveyed population had to be students at EIU and enrolled in classes. The participants had to be 18 or older to participate in the survey. For the research study, there were 83 participants who completed the survey. Out of the population, 78.3% of the participants were

female (n=65), 19.3% of participants were male (n=16), and 2.4% of participants were classified as non-binary/third gender (n=2). Within the sample, 21.7% of the participants did have a chronic disease or condition that lasted for longer than 6 months at the time of the survey (n=18), and 78.3% of participants did not have a chronic disease or condition (n=65). Class rank was also considered within the study with 10.8% of participants being classified as freshman (n=9), 13.2% classified as sophomore status (n=11), 27.7% classified as junior status (n=23), 37.3% classified as senior status (n=31), and 9.6% identified as graduate status (n=8), see Figure 1.

Figure 1

Class rank



Research Question

Are young adults ready to independently: manage their own medications, keep appointments, track health issues, talk to medical providers, and manage daily activities?

Findings

Managing Medications

When asked if they (participants) fill a prescription when they need to, 54.2% said I always do this when I need to (n=45), 14.4% said yes, I have started doing this (n=12), 9.6% said yes, but I am learning to do this (n=8), 6% said no, but I want to learn (n=5), 4.8% said no, I do

not know how (n=4), and 10.8% said no (n=9). Participants were asked if they know what to do if they are having a bad reaction to their medications; 31.3% responded with I always do this when I need to (n=26), 9.6% responded with yes, I have started doing this (n=8), 22.9% responded with yes, but I am learning to do this (n=19), 20.5% responded with no, but I want to learn (n=17), 4.8% responded with no, I do not know how (n=4), and 10.8% responded with no (n=9), see Figure 2. The ANOVA test results are shown below with the between groups mean square being 1.232 and the within groups mean square being 2.785; the F value was .442, shown in Table 1 below.

Figure 2

Bad reaction to medication and responses

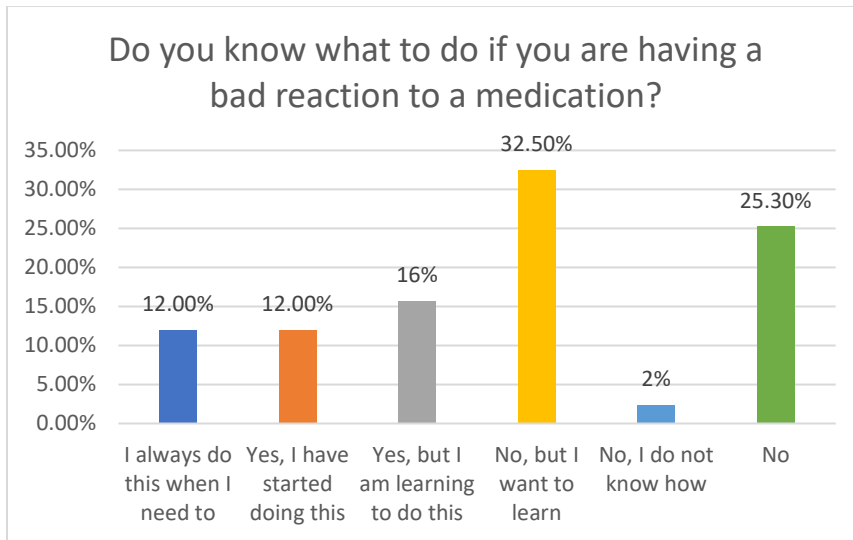


Table 1

SUMMARY				
Groups	Count	Sum	Average	Variance
Male	16	62	3.875	2.516666667
Female	65	268	4.123076923	2.859615385
	2	10	5	2

Non-
binary/Third
Gender

ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	2.463531047	2	1.231765524	0.442354372	0.644083895	3.110766166
Within Groups	222.7653846	80	2.784567308			

ANOVA test results on bad reactions to medication

When asked if they take their medications correctly and on their own, 71.1% responded with I always do this when I need to (n=59), 14.4% responded with yes, I have started doing this (n=12), 4.8% responded with yes, but I am learning to do this (n=4), 2.4% responded with no, but I want to learn (n=2), and 7.2% responded with no (n=6). When asked if they order medications before they run out, 44.6% responded with I always do this when I need to (n=37), 21.7% responded with yes, I have started doing this (n=18), 18.1% responded with yes, but I am learning to do this (n=15), 1.2% responded with no, but I want to learn (n=1), 1.2% responded with no, I do not know how (n=1), and 13.2% responded with no (n=11).

Appointment Keeping

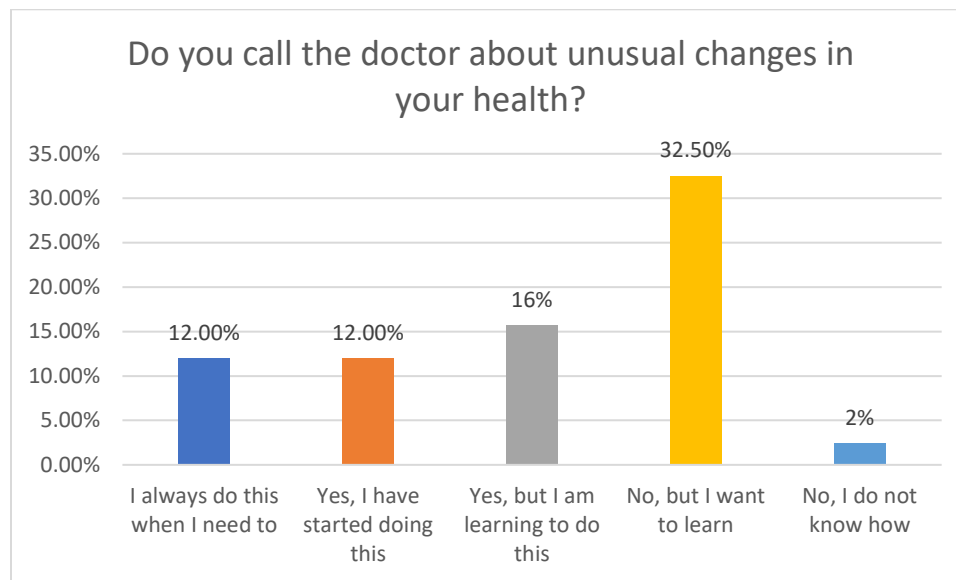
When asked if they call the doctor's office to make an appointment, 57.8% of participants responded I always do this when I need to (n=48), 25.3% of participants responded with yes, I have started doing this (n=21), 9.6% responded yes, but I am learning to do this (n=8), 3.6 % responded no, but I want to learn (n=3), and 3.3% of participants said no (n=3). When asked if they follow-up on any referral for tests, check-ups or labs, 47% responded with I always do this when I need to (n=39), 19.3% responded yes, I have started doing this (n=16), 13.2% responded yes, but I am learning to do this (n=11), 12% responded no, but I want to learn (n=10), 2.4% responded no, I do not know how (n=2), and 6% responded no (n=5). When asked if they

arrange for their ride to medical appointments, 67.5% responded I always do this when I need to (n=56), 8.4% responded yes, I have started doing this (n=7), 7.2% responded yes, but I am learning to do this (n=6), 3.6% responded no, but I want to learn (n=3), and 13.2% responded no (n=11). When asked if they call the doctor about unusual changes in their health, 36.1% responded I always do this when I need to (n=30), 14.4% responded yes, I have started doing this (n=12), 14.4% responded yes, but I am learning to do this (n=12), 8.4% responded no, but I want to learn (n=7), and 26.5% responded no (n=22), see Figure 4.

Participants were asked if they apply for health insurance if they lose their current coverage and 22.8% responded I always do this when I need to (19), 6% responded yes, I have started doing this (n=5), 9.6% responded yes, but I am learning to do this (n=8), 13.2% responded no, but I want to learn (n=11), 30.1% responded no, I do not know how (n=25), and 18.1% responded no (n=15).

Figure 4

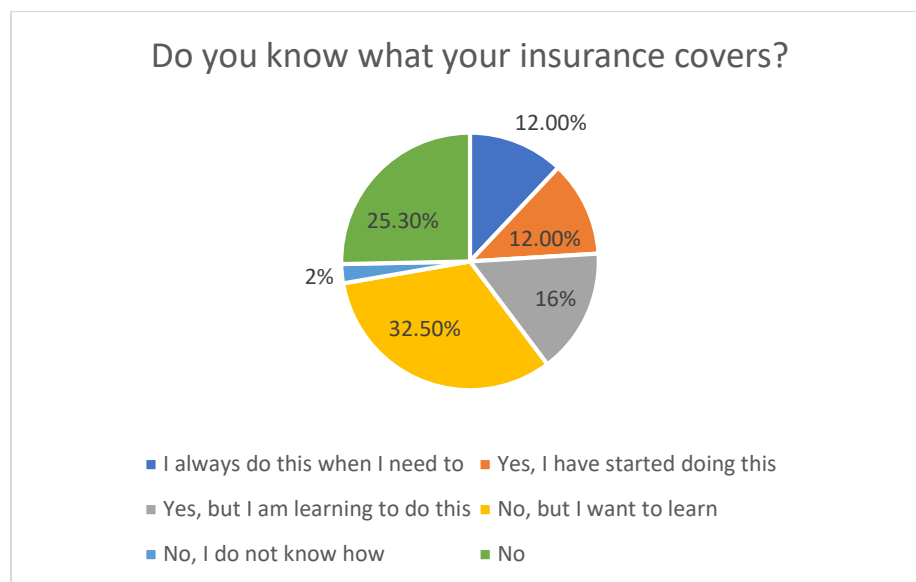
Unusual changes in health



When participants were asked if they knew what their health insurance covers, 12% responded I always do this when I need to (n=10), 12% responded yes, I have started doing this (n=10), 15.7% responded yes, but I am learning to do this (n=13), 32.5% responded no, but I want to learn (n=27), 2.4% responded no, I do not know how (n=2), and 25.3% responded no (n=21), see Figure 3 for a visual depiction of results.

Figure 3

Knowledge about health insurance



When asked if they manage their money and budget household expenses, 38.5% responded with I always do this when I need to (n=32), 25.3% responded yes, I have started doing this (n=21), 23% responded yes, but I am learning to do this (n=19), 4.8% responded no, but I want to learn (n=4), 1.2% responded no, I do not know how (n=1), and 7.2% responded no (n=6).

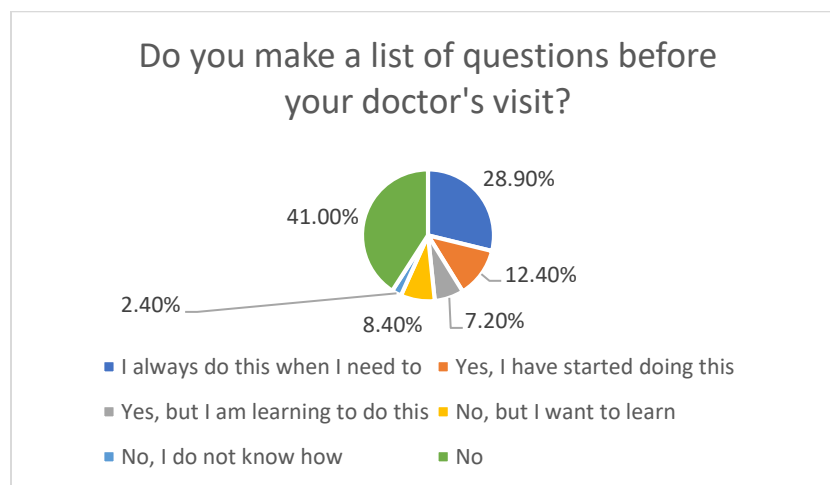
Tracking Health Issues

When asked if they fill out the medical history form (including a list of allergies), 73.4% of participants responded with I always do this (n=61), 9.6% responded yes, I have started doing

this (n=8), 8.4% responded yes, but I am learning to do this (n=7), 2.4% of participants said no, but I want to learn (n=2), 2.4% responded no, I don't know how (n=2), and 3.3% responded with no (n=3). When asked if they keep a calendar or list of medical and other appointments, 55.4% responded I always do this when I need to (n=46), 16.9% responded yes, I have started doing this (n=14), 10.8% responded yes, but I am learning to do this (n=9), 2.4% responded no, but I want to learn (n=2), 1.2% responded no, I do not know how (n=1), and 13.2% responded no (n=11). When the participants were asked if they make a list of questions before the doctor's visit, 28.9% responded I always do this when I need to (n=24), 12.4% responded yes, I have started doing this (n=10), 7.2% responded yes, but I am learning to do this (n=6), 8.4% responded no, but I want to learn (n=7), 2.4% responded no, I do not know how (n=2), and 41% responded no (n=34), see Figure 4. Lastly, if asked if they get financial help with school or work, 49.4% responded I always do this when I need to (n=41), 20.5% responded yes, I have started doing this (n=17), 7.2% responded yes, but I am learning to do this (n=6), 4.8% responded no, but I want to learn (n=4), and 18.1% responded no (n=15).

Figure 4

Questions for providers

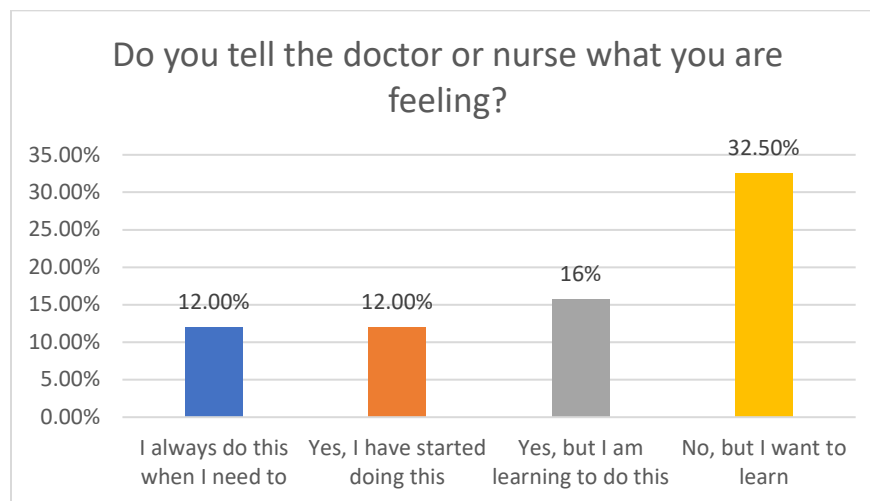


Talking with Providers

When participants were asked if they tell the doctor or nurse what they are feeling, 71.1% responded I always do this when I need to (n=59), 19.3% responded yes, I have started doing this (n=16), 6% responded yes, but I am learning to do this (n=5), and 3.6% responded no (n=3), see Figure 5. Participants were asked if they answer questions that are asked by the doctor, nurse, or clinic staff, and 84.3% responded I always do this when I need to (n=70), 14.4% responded yes, I have started doing this (n=12), and 1.2% responded yes, but I am learning to do this (n=1).

Figure 5

Discussing health with provider



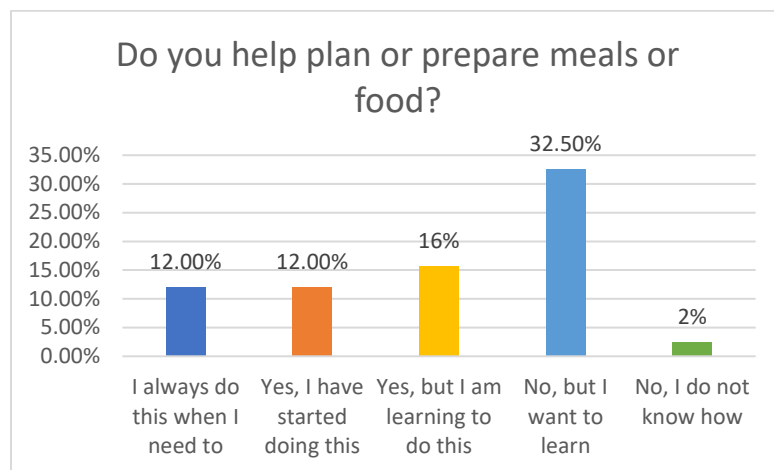
Managing Daily Activities

Participants were asked if they help plan or prepare meals or food and 54.2% responded I always do this when I need to (n=45), 15.7% responded yes, I have started doing this (n=13), 9.6% responded yes, but I am learning to do this (n=8), 6% responded no, but I want to learn (n=5), 2.4% responded no, I do not know how (n=2), and 12% responded no (n=10), see Figure 7. When asked if they keep their home/room clean or clean-up after meals, 62.6% responded I always do this when I need to (n=45), 15.7% responded yes, I have started doing this (n=18),

10.8% responded yes, but I am learning to do this (n=9), 2.4% responded no, but I want to learn, and 2.4% responded no (n=2). Participants were also asked if they use neighborhood stores and services (grocery stores and pharmacy stores) and 85.5% responded I always do this when I need to (n=71), 4.8% responded yes, I have started doing this (n=4), 6% responded yes, but I am learning to do this (n=5), 1.2% responded no, I do not know how (n=1), and 2.4% responded no (n=2).

Figure 7

Meal preparation



Discussion of the Results

Discussion

The information from this study provides a unique perspective on college students and their healthcare needs within a university within Midwest America. This research study allows room for questioning how health services are being run on campuses, what resources are available to students, and do students have a general awareness of these services and how to use them. The statistical analysis did not yield any significant results, suggesting further research would be necessary to investigate the potential relationships. In contrast, the descriptive analysis of data provided more insight into the study based on the sample size and demographics. The

participants within this study seemed to feel prepared to handle general tasks with preventive care and managing daily activities but lacked further information or preparation to handle anything outside of everyday tasks. There are certainly numerous factors that play a role within these responses, which can be evaluated later with further research.

The aspects of the survey which bring unique challenges would be the matter that colleges can provide numerous resources and services to students, but students may not be receptive to those opportunities. The administration of a college or university then needs to focus on the latter of the two and find ways to combat the lack of engagement or support of students after examining the reasons why students are apprehensive to utilize these services. One of the barriers to this kind of adjustment would be finances and budgeting as most colleges and universities face a limited budget already. If the research provided significant data for the school, it may be advised to apply for grant funding. The main issue boils down to whether the school will prioritize the need for advanced healthcare transitioning resources and education.

College students would benefit from additional guidance and resources regarding healthcare transitioning based on the information gathered on the descriptive statistics. The ANOVA test ran on bad reactions with medications did not provide any significance within the data, whether it was between groups, with the f value, or mean squares. This suggests that college students do not have proper skills to transition based on personal surveys, but not based on statistical significance. There has been no statistical significance based on the survey results or analysis of data. The personal responses from students provide a more in-depth view into perceptions, knowledge, and understanding of transitioning to independent healthcare.

For descriptive data, students had a grasp of needing to fill medications and the importance of doing so but lacked the knowledge of what to do if they have an adverse reaction

to a medication or if they run out of a medication. Additionally, the participants struggled with the concept of calling the doctor about any unusual health changes. Health insurance was another obstacle as the 60% of participants (n=50) had no idea what their health insurance covers, and 61.4% of participants would not apply for health insurance if they lost their current coverage (n=51). The lack of coverage and knowledge regarding insurance could significantly impact the individual's access to healthcare, ability to pay utilities and bills, and the general sense of efficacy and independence with healthcare transitioning.

For tracking health issues, about 91.5% of participants had some grasp to a full understanding of the importance and ability to fill out a medical history form (n=76). Additionally, students had a decent understanding of how to keep a calendar or list of medical and other appointments, with 83.1% (n=69) of participants having some grasp to a full capability of keeping a calendar ready. However, 51.8% (n=43) of participants did not make a list of questions before the doctor's visit, suggesting a lack of awareness or self-efficacy. Participants had an optimal understanding of how to get financial help for school or work with 77.1% responding that they had some grasp or full capability of getting financial help (n=64). Most participants do communicate with their providers, with 96.4% (n=80) of participants responding that they do tell their provider what they are feeling.

Similarly, all participants reported some level to full capacity of answering questions asked by the doctor, nurse, or clinic staff (n=83). The participants had a good grasp on how to access medical resources within their community, as 96.4% (n=80) of respondents use neighborhood stores and services. Students also understood how to manage their daily activities through chores such as housekeeping and preparing food.

Conclusions and Recommendations

Overview

The study of college students and their transition readiness to independent healthcare provides unique challenges. As college students age out of pediatric care, questions arise as to what guidelines and protocols are necessary as every student faces personal struggles, barriers, and educational backgrounds. Furthermore, the college atmosphere plays a role within how prepared students are to transition into managing healthcare, primarily through means of insurance, making appointments, talking with providers, and managing daily activities. As a result of the study, the responses of the participants provide different perspectives into how colleges can support their students on the health journey as they navigate their college career.

Upon review of the results, it is apparent that college students have a grasp on what it means to manage healthcare, but they lack the health literacy and awareness to do so. The primary concerns of this study focused on the five areas of the TRAQ tool, which provide a comprehensive analysis of where the individual stands with managing healthcare. Furthermore, the TRAQ tool yields interesting results as the self-reported nature can suggest ambiguity or false results as the participant may rank themselves higher than they perform or can do with the specific task.

Purpose

The purpose of this study is to examine college students and their readiness to transition to independent healthcare.

Summary of the Study

Independence with health means dealing with physical, social, emotional, mental, and spiritual health. When young adults come to college, many depend on their parents for resources

and guidance with health related issues. Also, these students may not be aware of the resources that their school has to offer. Independent healthcare is a topic that is often overlooked within pediatric care as parents and young adults find themselves at a loss of guidance for going into the world. When examining young adult populations, the severity of the problem is apparent when discussing young adults with chronic diseases. Research has been done specifically on college students and their transition readiness as described in the previous section. However, the amount of information is not as detailed as that for young adults with chronic illness or disease. The affected population of college students would depend on a case-by-case basis as students come from vastly different backgrounds and health statuses.

Conclusions

There were not any significant statistical relationships or findings within this research study as the sample size was too small to yield any major results. However, the study can be replicated to dive into further analysis. For this study, the descriptive statistics provide the most applicable information based on the responses of the participants. The statistical tests showed no significant findings with analyzing relationships between variables and data. Throughout the course of the research study, a few points were made clear based on the responses given by the participants. The results from this study are like those from a study completed in 2015, in which patient-reported strengths and areas for improvement were aligned. In general, greater mastery of skills were associated with in-person communication with providers, taking medication, managing activities; the least skilled areas were involving health care advocacy such as managing insurance or knowing what it covers (Denson et al., 2015). Additionally, the youth within the previous study reported their level of readiness at a learning stage, which is between a 3 and 4 on a TRAQ scale (Denson et al., 2015). These results are comparable to the levels of

readiness with college students as many felt comfortable to a certain degree with managing independent healthcare. However, there were various responses, and the data was not consistent with each question.

College students within the study appeared to have a general understanding on the aspects of healthcare transitioning yet lacked the ability or education to do so. Additionally, college students felt comfortable answering questions asked by medical providers, but they were unprepared for appointments as they did not generate lists of questions to ask. Furthermore, college students struggled with handling adverse reactions or unusual changes in their health status, as most responded that they did not know what to do or were just starting to complete this task. Another example of the lack of preparation is that participants struggled with the matter of insurance, with a significant amount of the participants responding that they would not know what to do if they lost their health coverage. It is concerning to consider these statistics as most of the population does not have a firm understanding of insurance, what it provides, or what to do if coverage is lost. This problem can be exacerbated by access to resources, socioeconomic status, education level, geographical location, and other social determinants of health.

Contrastingly, students demonstrate an ability to manage other tasks presented within the study. Tasks such as making and keeping appointments, answering questions asked by the medical staff, utilizing local resources such as grocery stores and pharmacies, and knowing how to fill out a medical history form were all higher ranked than other tasks on the survey. These concepts provide a positive hope for colleges and universities as this data serves as a starting point for education, health services and programming, and how to manage the different challenges of a student population that comes from across the globe.

Health transitioning has increased significance within a college campus as many students are leaving home for the first time, leading to increased anxiety and uncertainty when it comes to managing health, finances, and living situations. These feelings may lead to adverse experiences or situations if the student partakes in unhealthy coping strategies such as excessive drinking, use of illicit drugs, unhealthy spending habits, or isolation from others. When examining healthcare transitioning, it becomes necessary that universities provide students with resources to learn about the services that they need based on age, gender, and health history. Furthermore, it is crucial that students understand how to use these services and take initiative with managing health as they age.

Limitations of the Study

While the study produced results at face value, the study had limitations with the validity of the students' responses. Since the survey was sent to students asking about personal beliefs and interpretations of behavior regarding healthcare and transitioning, some students may have answered incorrectly. For example, students may give themselves a higher score than what is true as the individual seeks to feel important, validated, or respected with decision making. Additionally, the sample size is a limitation as many surveys had to be discarded due to incompleteness, which significantly reduced the sample size. A larger sample size could show a stronger relationship between preferences, abilities, and beliefs with the students who partake in this survey. Also, the study was limited to students attending Eastern Illinois University, which would describe a small percentage of students attending a college or university within Illinois. Another limitation of the study is awareness and marketing of the research as many students do not check their email regularly. Outside of sample size and validity, an area of concern is the length of the survey as many of the questions are repetitive. When analyzing the data, a large

portion of the responses had to be discarded due to incompleteness. Additionally, the survey was distributed close to mid-term examinations in mid-February, which may have been a limitation as the stress of exams could have impacted students and their willingness to participate in research studies. Lastly, the effects of COVID could have impacted online interactions due to the vast number of online obligations, thus impacting the results and outcomes of the research study.

Overall, the limitations of the study are a result of sample size, duration of the study, time of which the study was distributed, accuracy of self-reporting, and health literacy. These limitations are not a complete list, rather they are comprehensive in nature and seek to provide ways for future research endeavors to improve this research study.

Recommendations

Recommendations for Future Research

- Larger sample population
- Gather information from across the state
- Distribute surveys in person
- Longer time period for distribution
- Needs assessment for students
- Gather data on high school health education courses
- Gather data from local non-profit organizations
- Work with local community health centers to aide with transitioning

Summary

College students have a grasp on the main concepts of managing daily activities, based on the responses of the survey. The participants understood and grasped basic activities of daily living, how to make appointments, answer questions, and fill out documentation as needed.

However, skills were lacking with preparation of questions for medical visits, applying for insurance coverage, and similar tasks. As for student capabilities and skill sets, students do not prepare for medical visits ahead of time but have familiarity with the general expectations and need to start preparing. Students generally manage their own medications to some extent but may lack confidence in their ability to do so. Budgeting and finances are another concern as many students do not understand what their insurance covers regardless of the type of plan.

Colleges and universities face unique challenges as the demographic of students is very diverse. The skills and knowledge of students can be greatly improved by using the TRAQ tool, follow-up educational programs, assessing the needs assessment of students on campus, provide connections to local resources related to health and transitioning, and conduct research to assess how the college is performing and gather feedback.

Health insurance is an area with large disparity and lacking awareness/education, particularly for students who do not have experience or knowledge of the topic. While courses such as finance and public health are taught, courses that manage personal healthcare, insurance and health systems, and other general health information are not offered to students who are outside of the major. It would be beneficial to include general education courses focused on this area to students who may be interested in learning more about health insurance, nutrition, exercise, and other general health topics. Furthermore, this class could be a follow-up to high school health education courses. This course content would be up to the administration and faculty of the colleges to determine the best course of action.

References

- American Academy of Pediatrics, American Academy of Family Physicians, American College of Physicians-American Society of Internal Medicine (2002). A consensus statement on health care transitions for young adults with special care needs. *Pediatrics* 110(6), 1304-1306.
- Annunziato, R., Benkov, K., Colombel, J. F., Dubinsky, M., & Rosen, D. (2016). Transition of inflammatory bowel disease care: Assessment of transition readiness factors and disease outcomes in a young adult population. *Inflammatory Bowel Disease*, 22(3), 702-708.
<https://www.ibdjournal.org>
- Ardoin, S. P., Boyle, B., Higgins, G. C., Jensen, P. T., Kamboj, M., LaCount, S., Paul, G. V., Peng, J., Smallwood, C., & Spencer, C. H. (2017). Assessment of transition readiness in adolescents and young adults with chronic health conditions. *Pediatric Rheumatology*, 15(70), 1-7. <https://doi.org/s12969-017-0197-6>
- Benkov, K., Carlson, K., Dubinsky, M. C., Gordon, J., Haddad, N., Keefer, L., Phan, B. L., & Pittman, N. (2017). Self-efficacy and resilience are useful predictors of transition readiness scores in adolescents with inflammatory bowel diseases. *Inflammatory Bowel Disease*, 23(3), 341-346. DOI 10.1097/MIB.0000000000001038
- Cooley, W. C., Lotstein, D., Mann, M. Y., McAllister, J. W., McManus, M. A., Pollack, L. R., & Strickland, B. (2013). Current status of transition preparation among youth with special needs in the United States. *American Academy of Pediatrics*, 131(6), 1090-1097.
<https://doi.org/10.1542/peds.2012-3050>

- D'Angelo, L., He, J., McCarter, R., Syverson, E. P & Tuchman, L. K. (2016). Adolescents' perceptions of transition importance, readiness, and likelihood of future success. *Clinical Pediatrics*, 55(11), 1020–1025.
<https://doi.org.proxy1.library.eiu.edu/10.1177/0009922816666882>
- Demars, N., Huang, I. -C., Livingood, W., Lukens-Bull, K., Reiss, J., Sawicki, G. S., Wood, D., & Yin, X. (2011). Measuring the transition readiness of youth with special healthcare needs: Validation of the TRAQ- Transition readiness assessment questionnaire. *Journal of Pediatric Psychology*, 36(2), 160-171. <https://doi.org/10.1093/jpepsy/jsp128>
- Denson, L. A., Holbrook, E., Hommel, K. A., Morgan, P. J., Saeed, S. A., & Gray, W. N. (2015). Transition readiness skills acquisition in adolescents and young adults with inflammatory bowel disease: Findings from integrating assessment into clinical practice. *Inflammatory Bowel Disease*, 21(5), 1125-1131. DOI: 10.1097/MIB.0000000000000352
- Ho, J. S., Kennedy, S. E., & Zhang, L. F. (2014). A systemic review of the psychometric properties of transition readiness assessment tools in adolescents with chronic disease. *BMC Pediatrics*, 14(4), 1-10. <https://www.biomedcentral.com/1471-2431/14/4>
- Kelemen, S., Sawicki, G. S., & Weitzman, E. R. (2014). Ready, set, stop: Mismatch between self-care beliefs, transition readiness skills, and transition planning among adolescents, young adults, and parents. *Clinical Pediatrics*, 53(11), 1062-1068.
<https://doi.org/10.1177/0009922814541169>