

High School Student's Perception of Nursing

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Abstract

The inaugural Summer Institute of Nursing was developed and implemented in the summer of 2012 at Gustavus Adolphus College. Twenty female students participated in the Summer Institute of Nursing, which was designed to provide high school students the opportunity to explore the profession of nursing. A research study examining the perception of high school students on nursing was collected through pre and post surveys distributed at the beginning and end of the week. The five-day week on a college campus was full of learning and utilization of nursing skills, lectures, service projects, tours, and activities. Results from the surveys indicated multiple positive outcomes of the Summer Institute. The Summer Institute was very effective in helping students decide about a nursing career. Statistically significant results were found in the likeliness of students to pursue a career in nursing from before to after the Summer Institute. The implications from this research study contribute to nursing by identifying the perceptions of high school students on the profession of nursing. Their perceptions about the field of nursing may have the largest impact on students' decision to apply to a nursing program and seek opportunities to learn more about the profession. "Nursing needs to maintain and expand its positive attributes, decrease its misperceptions, and position itself as a highly competitive career option."⁴

Keywords: Nursing, Perception, Career

1. Introduction

Student perceptions about the field of nursing may have the largest impact on their decisions to seek opportunities to learn more about the profession.⁴ Research has shown that it is essential for high school students displaying interest in the field of nursing to be identified early, even as young as middle school.⁷ King, Hardie and Conway (2007) note: "It is essential that school students who are likely to pursue a career in nursing be identified during their high school years." The purpose of this exploratory, descriptive study was to examine high school students' perceptions of nursing. This study aims to ask students some critical questions about what they already know about nursing, which roles and personal characteristics are most important to the profession of nursing, and why this Summer Institute may or may not increase students' interest in pursuing a career in nursing. Newton, Kelly, Kremser, Jolly, & Billett note in their 2009 longitudinal study, "The issue of recruitment and retention in nursing is a worldwide concern...because of the increasing complexities of healthcare delivery, an aging population, and staff global migration."⁹

2. Background

Many studies have been conducted over the years indicating an increase in demand for nurses everywhere.⁸ It is critical that students are not only exposed to nursing as a career option, but also experience someone practice nursing in the real world, which can positively influence their image of nursing.⁵ Students can have misconceptions about nursing because many students “do not know someone who is a nurse.”³ Guidance counselors are important within the school system itself to help identify students with interest in many fields, including nursing; and helping students dive into exploration about this career¹. According to Drenkard (2002), successful strategies require the development of public and private partnerships and the building of new alliances and coalitions between the healthcare industry and educational institutions. Through the Summer Institute of Nursing, Gustavus Adolphus College created new relationships. The relationships that were created include connections with local healthcare facilities, the regional Area Health Education Center (AHEC) program, as well as alumni from the college. Positive relationships were created, making collaboration in the future possible.

3. Theoretical Framework

A conceptual framework that was used to guide the Summer Institute of Nursing is Bloom’s Taxonomy of Learning Domains (1956). Bloom’s Taxonomy refers to a classification of learning objectives within education. These different objectives are set by educators for students. Bloom’s Taxonomy of Learning Domains divides the educational objectives into three domains: Cognitive, Affective, and Psychomotor. The Summer Institute of Nursing followed the goal of Bloom’s Taxonomy of Learning Domains by creating a more holistic form of education by focusing on all three domains. Within each of the domains, learning at a higher level is dependent on having attained prerequisite knowledge and skills at a lower level.²

Skills in the Cognitive domain involve six levels in the taxonomy, moving from the lowest order process to the highest: Knowledge, Comprehension, Application, Analysis, Synthesis, and Evaluation. The Affective domain involves five levels: Receiving, Responding, Valuing, Organizing, and Characterizing. The skills in the Affective domain describe the way people react emotionally and their ability to feel another’s emotions or feelings. The Psychomotor domain involves seven levels: Perception, Set, Guided Response, Mechanism, Complex Overt Response, Adaptation, and Origination. The Psychomotor domain describes the ability to physically manipulate a tool or instrument, with the focus on change and/or development in a behavior and/or skill.² The cognitive domain was used throughout all aspects of the Summer Institute. Every lecture and nursing skills session allowed the students to think critically and use the components of the cognitive domain. The affective domain was used during the service projects and nursing skills, as students learned how to interact and adapt to patients’ feelings. Students even utilized this domain while interacting with the other students of the Summer Institute. The psychomotor domain was used during all the nursing skills, but especially during a simulation with a high-fidelity, human patient simulator known as iStan. During this simulation, students used their acquired knowledge to adjust and react to different situations as they occurred.

4. Method

Institutional Review Board Approval, along with parental consent and minor assent, were obtained prior to the start of the study. Twenty female high school students from a five different states, between the ages of sixteen and seventeen, participated in the survey. Staff for the Summer Institute included: nursing professors, nursing students, and a regional AHEC member. The college arranged dorm rooms for all students and staff members for the five days. Meals were provided.

Data on high school students’ perceptions of nursing was collected through pre and post surveys administered at the start and conclusion of the Summer Institute, respectively. The survey was designed in correlation with Bloom’s Taxonomy of Learning Domains (1956). Through the Summer Institute, students were able to learn, feel, and practice like a nurse through the cognitive, affective and psychomotor domains. The structure of each day for the Summer Institute was filled with nursing skills and activities that formed relationships between the students and allowed them to reflect on their academic progress.

Nursing lab skills sessions were taught by nursing students throughout the five days. The sessions included heart and lung sounds, pulse and oxygen saturation, blood pressure, hand washing, suturing, nasogastric tubes, catheters,

and medication administration. Lectures were given by both nursing professors and students, along with the AHEC member. Lectures were included in all skills labs, as well as the history and image of nursing, the nursing process, and a library session. Other nursing activities included CPR training, geriatric sensitivity (in which activities were designed around the concepts and difficulties of aging, such as placing pills into a small pill organizer wearing bulky gloves and blinding goggles), patient confidentiality/ HIPAA, an alumni panel discussion, head-to-toe assessment, and lastly a final simulation utilizing a high fidelity human patient simulator (iStan). Service projects and tours of healthcare facilities were also implemented into the schedule. Students toured the mental state hospital of St. Peter and participated in a short fellow study of perceptions of mental health and mental health nursing. A debriefing session also took place. Tours of the River's Edge Hospital and geriatric living arrangements were also included. Service projects ranged from Germ City Booth at the local high school to geriatric visits at a nursing home and serving food at the local soup kitchen in St. Peter.

The pre and post surveys about perceptions of nursing included qualitative and quantitative measures. The pre survey was given to the students the first night the students arrived on campus, and the post survey was given the last afternoon before the students departed camp. Table 1 below describes the schedule created for the duration of the Summer Institute. Days were very rigorously packed with activities, tours, lectures, and peer interaction.

Table 1: Summer Institute of Nursing Schedule

Day 1	Day 2	Day 3	Day 4	Day 5
3:00pm- 5:00pm Check-in and Registration	7:00am- 8:00am Breakfast	7:45am- 8:45am Breakfast	7:00am- 8:00am Breakfast and Group Photo	8:00am- 8:45am Breakfast
5:15pm- 6:00pm Dinner	8:15am- 8:45am Welcome, Icebreaker, Overview	9:00am- 10:30am Nurse Alumni Panel	8:00am- 11:30am Tour of local hospital and presentation by staff	8:45am- 10:45am Simulation with iStan
6:15pm- 9:45pm Get-to-know-you activities: Campus Tour, snack, movie, survey	9:00am- 9:30am History and Image of Nursing	10:45am- 11:00am Break	11:30am- 1:00pm Lunch	10:45am- 12:15pm Debriefing
10:00pm- 11:00pm Quiet Time and Lights Out	9:45am- 10:00am Break	11:00am- 12:00pm Nursing Skills (Part 2)	1:15pm- 3:00pm Survey & tour of local state hospital museum	12:15pm- 1:15pm Lunch
	10:00am- 10:30am Nursing Process Lecture	12:15pm- 1:00pm Lunch	3:00pm- 4:00pm Debriefing Activity	1:15pm- 2:15pm Ice Cream Social with Admissions
	10:45am- 2:30pm Nursing Skills (part 1)	1:15pm-1:45pm Library Research Session	4:15pm-6:00pm Nursing Skills (Part 4)	2:15pm- 2:45pm Applying to the Nursing Program
	12:45pm- 1:30pm Lunch	2:00pm- 2:24pm Geriatric Sensitivity Activity	6:15pm- 7:00pm Dinner	2:45pm- 3:15pm Closing Evaluations and Surveys
	1:45pm- 4:30pm First Aid Training	3:00pm- 4:15pm Nursing Skills (Part 3)	7:15pm- 9:45pm Evening Activity	3:30pm- 4:30pm Pack and meet Parents
	4:45pm-5:00pm Activity and Snack	4:30pm- 5:00pm Complementary Therapies	10:00pm- 11:00pm Quiet Time and Lights out	4:45pm-6:00pm Closing Banquet
	5:15pm- 7:30pm Service project at local soup kitchen	5:15pm- 5:45pm Patient Confidentiality & Dinner		
	7:45pm-8:30pm Pizza Party	6:00pm- 6:45pm Geriatric Visits		
	8:45pm-10:00pm Evening Activities (Bonfire and	7:00pm 7:45pm Relax		
		8:00pm-9:00pm		

Volleyball)	Zumba
10:15pm- 11:00pm	9:00pm- 10:30pm
Quiet Time and Lights Out	Movie
	10:30pm- 11:00pm
	Quiet Time and Lights Out

5. Results:

Students were anonymously surveyed on the first and last day of the Summer Institute about their perceptions of nursing as a profession, and how likely they were to pursue nursing as a career in the future. Six out of twenty students knew a nurse personally, which is where they gained their current knowledge about nursing. The rest of the students (fourteen) did not know a nurse on a personal level, which could lead to misperceptions about the profession of nursing.

Within the post survey (Table 2) the students were asked what was the most useful in benefitting their knowledge on nursing, in which most stated the head-to-toe assessment. Others also mentioned learning how to take vital signs, along with medication administration. Many students also appreciated attending the alumni panel, in which Gustavus alumni who currently practice as various types of nurses were available to answer questions about their studies and career tracks. The post survey also asked the students if they feel like there are a variety of career opportunities in the profession of nursing and if they feel like there are advancement/ leadership opportunities in the profession of nursing (Table 2). For 100% of the campers, the experience of the Summer Institute of Nursing confirmed positive feelings about the profession of nursing by giving a 5 (Very Much) to both of the questions. Another component to the survey asked the students how likely they were to pursue a career in nursing before and after the Summer Institute, in which the responses were just as positive. The data was analyzed using a paired t-test, which showed that the Summer Institute of Nursing statistically showed significance $t(19) = 4.41, p < .001$ in the likeliness of pursuing a career in nursing before ($M = 4.05$) and after ($M = 4.95$) the experience.

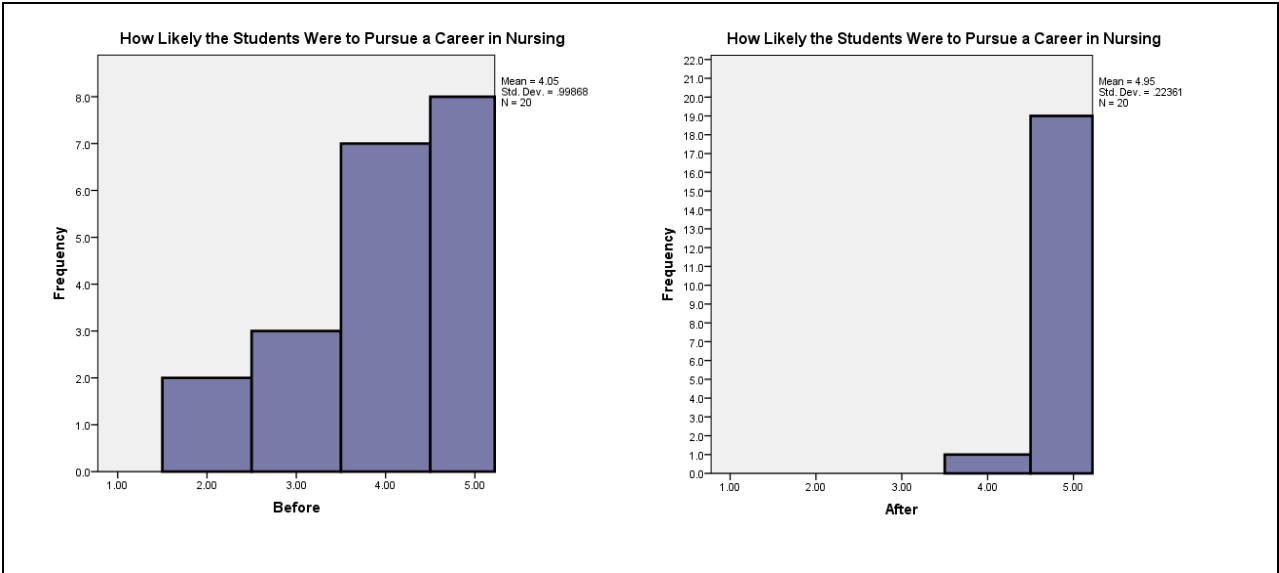


Chart 1. How Likely the Students Were to Pursue a Career in Nursing

Chart 1: The left chart shows the students views on their likeliness of pursuing a career in nursing before The Summer Institute of Nursing. The right chart shows the students views on their likeliness of pursuing a career after the five days of The Summer Institute of Nursing.

In analyzing the qualitative research findings from the pre and post surveys, many common themes were identified from the students' responses: students viewed nursing as rewarding, challenging, and full of job variety and interaction with people. All students agreed there were certain qualities needed to be dynamic nurses, including ethical commitment, integrity, timeliness, honesty, compassion, and good communication. In the pre survey, the students were asked to describe what they already knew about nursing, and in the post survey they were asked if there is anything they learned during the Summer Institute that changed their opinion about nursing. The Summer Institute proved to be effective in helping the students to understand "that nurses do so much more than previously thought," and "changed everything known about nursing (in a good way)." Several students stated they learned much more than they thought they ever would, and that "it will be helpful in the future." Nineteen of twenty students stated their interest in a certain field of nursing currently resided in pediatrics, with one interested in endocrinology. Students also maintained that nursing was so much more than a job to go to every day. Students noted that nursing seemed more of a permanent role within society, a professional role, which seemed attractive to a majority of the campers.

Table 2: Sample questions asked in the post survey to students

1) "Please rate the following statements on a scale of 1 (Not at all) to 5 (Very Much) using scale for each question: a. I feel like there are a variety of career opportunities in the profession of nursing and b. I feel like there are advancement/ leadership opportunities in the profession of nursing."
2) "How likely are you to pursue a career in nursing a. Before Summer Institute b. After Summer Institute"
3) Which nursing skill was most useful for you to learn over the course of the Summer Institute? Why?

6. Conclusion

This new and innovative Summer Institute will contribute to the science of nursing in attempting to attract students to a nursing major, and eventually a nursing career, as well as fulfill the educational domains of Bloom's theories on learning.

The Summer Institute helped the students gain knowledge regarding the nursing profession, and most students stated they learned things from the Summer Institute that changed their views on nursing. Students found that the hands on nursing skills and head-to-toe assessment were the most useful in their learning experience. All the students responded positively, indicating that the Summer Institute was beneficial to their learning about the nursing profession, and it was effective in helping them decide about a nursing as a career $t(19) = 4.41, p < .001$ before ($M = 4.05$) and after ($M = 4.95$) the experience.

Some limitations that were discovered about the Summer Institute include lack of diversity, considering both ethnicity and gender. Demographic data could have been utilized for statistical comparisons between the students. The pre and post surveys could have had more identical questions making it possible for further statistical analyses of the data.

The implications for nursing include helping attract talented students into the profession of nursing. The Summer Institute gives students the opportunity to learn more about the field of nursing, allowing them to be exposed to experiences in which they may have not been able to in any other way. Students are able to learn about nursing in a variety of ways, giving them a holistic view on nursing, which will positively affect their perceptions on the profession. The ability to work with a younger set of peers attracts students to the field because they are working with current nursing students who are also in the process of learning. The Summer Institute helps support students' decisions on applying to nursing schools, and eventually entering the field of nursing.

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