Jumping Through Hoops, Walking on Egg Shells: The Experiences of Nursing Students With Disabilities

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ABSTRACT

This study describes the experiences of nursing students with disabilities through interviews, observations, and document analysis. The sample included 10 current students and graduate nurses with physical or auditory impairments and 61 nursing faculty members, staff members, patients, and fellow students. The Colaizzi method of data analysis was modified to include additional information from interviews, observations, and documents. The findings reveal important concerns related to potentially unsafe nursing practices. The findings should assist nursing faculty with admission and retention decisions and development of reasonable accommodations. Recommendations for nursing programs to develop enforceable guidelines for admission are included.

The current social, political, and legal climate surrounding inclusion of individuals with disabilities in all walks of life had resulted in increasing numbers of students with disabilities applying to nursing education programs. This is partly because of the passage of the Rehabilitation Act Section 504 (1973) and the Americans with Disabilities Act (1990). Nurse educators require more information about the experiences of nursing students with disabilities to make informed decisions regarding admission, retention, and dismissal. To be prepared, faculty also need to be better informed about accommodations that will facilitate successful outcomes, as well as

possible reactions of clinical agencies, other students, staff nurses, and patients.

PURPOSE OF THE STUDY

The purpose of this study was to describe the experiences of nursing students with disabilities; examine admission guidelines and accommodations; and investigate experiences with patients, faculty, nurses, and other students to better inform nurse educators about these issues. The study also investigated how nursing students and nurses with disabilities can be supported with reasonable accommodations while promoting patient safety.

LITERATURE REVIEW

The literature reveals anecdotal accounts of individuals admitted to nursing (Bueche & Haxton, 1983; Chickadonz, Beach, & Fox, 1983), medical (Martini, 1987; Wainapel, 1987; Webster, 1980; Winkler, 1985), and dental (Javid, Colaizzi, & Allen, 1986) programs and identifies accommodations being made in clinical and classroom settings. Chickadonz, Beach, and Fox (1983) report that a student with a hearing impairment was admitted to the School of Nursing at the Medical College of Ohio/Bowling Green State University/University of Toledo (Toledo, Ohio) in 1979. Bueche and Haxton (1983) report a similar experience with a nursing student with a hearing impairment at Simmons College in Boston, Massachusetts. Both of these students were successful and completed their nursing programs. Accommodations included adapted stethoscopes, narratives for films, a phonic ear, and individual tutoring.

Magilvy and Mitchell (1995) surveyed BSN and ADN programs and found that most of the schools surveyed had contact with students with special needs such as visual, hearing, or mobility impairments, learning disabilities, and mental or chronic illnesses. Most programs had little experience with providing special accommodations. Watson (1995) surveyed 247 baccalaureate nursing

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programs. This study revealed that almost half of the nursing programs surveyed admitted students with disabilities, with the most prevalent being learning disabilities. The study also reported that nursing programs provided a wide array of special services.

This review of the literature reveals a paucity of research regarding the experiences of nursing students with disabilities. Little has been reported regarding reactions of patients, staff members, and fellow students. Examples of unsuccessful experiences or potentially unsafe practices have not been reported.

METHODOLOGY

A qualitative multiple case study design was used for this study. A design method called triangulation was used. It included three data collection techniques—interviews, observations, and document analysis (Yin, 1994). With multiple sources of evidence, the findings are more convincing, accurate, and trustworthy. The findings corroborated or disputed and served to bolster, confirm, and strengthen the rigor of the study (Yin, 1994). Data were collected for 12 months.

To ensure protection of the participants, approval to conduct the study was obtained from the Institutional Review Board, Human Subjects Review Committee, at Florida Atlantic University. When the participants met with researcher for the first time, they were asked to sign an informed consent form. They were informed that the interview would be audiotape recorded and assured that all information would be kept anonymous and confidential.

Sample

For the purposes of this study, a nursing student with a disability was defined as a nursing student with a visual, auditory, or physical impairment. Examples of participants who could have been included were nursing students who were deaf, blind, used crutches or wheelchairs, or suffered from a chronic illness. The actual participants had self-reported auditory or physical impairments (Table 1). Two students with visual impairments declined participation because of personal reasons. This study included a small, yet purposeful, sample of nursing students. The sample size was reflective of the small number of nursing students with disabilities nationally.

The sample included 10 current undergraduate and graduate students, and recent graduates. The participants attended universities and colleges primarily located in the southeastern part of the United States. Students from associate, baccalaureate, and master's degree nursing programs were included in this study. In addition, the sample included 61 nursing faculty members, staff nurses, patients, and fellow students.

Participants were obtained through telephone calls to deans and faculty members of nursing schools. They were asked to announce a request for student participation in the study during classes and faculty meetings. Additional access to participants was through networking with professional colleagues and students.

Interviews

Each nursing student and graduate nurse was interviewed using a standardized open-ended questionnaire for approximately 1½ hours. Each interview was audiotape recorded and transcribed. Notes were taken during the interviews as well. The participants were interviewed in private, convenient, natural settings such as universities, hospitals, and other clinical agencies. They were asked to share all of their thoughts, perceptions, and feelings. Some of the questions were:

- Tell me about your disability.
- What, if any, types of accommodations were made for you in the classroom and clinical settings?
- Tell me about your experiences with your patients. The researcher conducted additional interviews with faculty members, staff members, patients, and other students to gain more information regarding the nursing students with disabilities. The length of these interviews varied from 10 to 30 minutes. For example, faculty were asked questions regarding the students' performance in clinical settings. Some of the questions were:
- Tell me about the students' performance in the clinical setting.
- Describe the students' relationships with patients, staff members, and fellow students.
 - Discuss their ability to provide safe nursing care.

Staff members and fellow students were asked to describe their experiences working with the participants. For example, a staff nurse was interviewed privately after the student assisted her with a procedure. If patients were old enough or well enough to talk, they were interviewed privately after the student provided nursing care. Patients were asked to tell about their experiences with the participant as their nurse or student nurse. The researcher conducted all of the interviews.

Observations

Observations were conducted by the researcher who is a nurse educator with 15 years of experience working with students in clinical settings. These observations provided information regarding the participants' ability to provide safe, competent nursing care. The evidence obtained from the observations corroborated or disputed the information obtained in the interviews. Twenty-five observations were made of the participants providing nursing care (e.g., making beds, changing dressings, giving injections, taking vital signs) in hospitals (e.g., pediatric units, oncology units, medical-surgical units, emergency room), clinics, health care agencies, and patient's homes for at least 2 to 4 hours. During the observations particular attention was paid to accommodations made for the students or nurses and issues regarding safe practice. An observation guide was used. Some of the ques-

| | | TABLE | 1 | |
|---------------------|----|---------|---------|---------------------|
| Demographics | of | Nursing | Student | Participants |

| Number | Age | Gender | Degree(s) Held | Current Program | Disability | Limitations | Current Employment |
|--------|-----|--------|-----------------------------------|--------------------|---------------------------------|--|--|
| 1 | 38 | Female | BS | BSN | Back injury Hearing impaired | Lifting restrictions, limited range of motion in neck and back, chronic pain, 70% hearing loss in left ear, 30% hearing loss in right ear. | Nursing Assistant |
| 2 | 40 | Female | ADN | BSN | Hearing impaired | 50% hearing loss bilaterally | Intensive Care Unit Nurse Home Health Care Nurse |
| 3 | 45 | Female | BSN | MSN | Hearing impaired | High frequency hearing loss bilaterally | Home Health Care Nurse Biology Laboratory Instructor |
| 4 | 33 | Female | BSN, MSN | _ | T-4 paraplegic | Uses wheelchair | Medical-Legal Consultant |
| 5 | 45 | Male | ADN, BSN | MSN | Hearing impaired | High frequency hearing loss bilaterally, tinnitus | Emergency Room Nurse |
| 6 | 32 | Female | | BSN | Back injury | Chronic pain, lifting restrictions | Nursing Assistant |
| 7 | 41 | Female | ADN, BSN, MSN | PhD | Scoliosis | Lifting restrictions, arthritic pain, limited range of motion in back (wore full body cast as a BSN student) | Nurse Practitioner |
| 8 | 39 | Female | | BSN | Diabetes | Diet, medication; exercise and stress influence onset of hyperglycemia and hypoglycemia | Nursing Assistant |
| 9 | 32 | Female | nomi <u>H</u> abiya Urang kath | BSN | Crohn's disease | Frequent illness, diarrhea | Nursing Assistant |
| 10 | 36 | Female | | ADN | Hearing impaired | Deaf in right ear | Nursing Assistant |

tions were:

- What assistive technology, if any, did the student use?
- How did the student respond to a patient calling for help?
- How could the participant perform cardiopulmonary resuscitation?
- Did the participant provide nursing care according to standards of practice in the United States?

Document Review

Documents such as admission guidelines and policy statements regarding students with disabilities from the school or college of nursing the participants attend or attended were analyzed. Documents related to services, support, housing, and campus accessibility for students with disabilities were reviewed. The documents were examined regarding accommodations and compliance with the Rehabilitation Act Section 504 (1973) and the Americans with Disabilities Act (1990). A review of documents provided another source of evidence that corroborated or contradicted the evidence obtained in the interviews and observations.

DATA ANALYSIS

The researcher used a combination of data analysis methods (Colaizzi, 1978; Lincoln & Guba, 1985; Merriam, 1988; Miles & Huberman, 1994). The interviews with the nursing student participants were analyzed according to the Colaizzi (1978) method which was modified to include additional information from other interviews, observations, and documents. Significant statements were extracted from the interviews by highlighting words, phrases, or statements that were significant to the study (e.g., disclosure, limitations, support, persistence, safety, accommodations,

TABLE 2 Significant Statements and Formulated Meanings

| Significant Statements | Formulated Meanings | |
|---|---|--|
| The biggest fear is that somebody is going to find out and say, "I'm sorry we have to cut you." (2, 24)* | Fear of disclosure is constant. | |
| People have said, "You can't be a nurse. You're in a wheelchair." (4, 12) | Abilities were questioned by staff. | |
| I would take pain killers and tried the best I could to make it through the clinical experience. (6, 51) | Going the extra mile despite pain. | |
| I couldn't drive a car in my body cast, so I took a bus to visit my patients. (7, 57) | Going the extra mile for patients. | |
| Even though you have diarrhea, it's a symptom you can control for the moment until you get a break. (9, 63) | Physical control was apparent. | |
| I didn't want special accommodations. I didn't want to feel that I hadn't earned it on my own. (10, 67) | Desire to be treated like other students. | |

attitudes). Similar words, phrases, or statements were eliminated to avoid repetition. From the interviews with the nursing student participants, 101 significant statements were extracted and later reduced to 69. Table 2 lists examples of significant statements and formulated meanings

from interviews with some of the nursing students.

The researcher then decided the underlying formulated meaning of the significant statements (Colaizzi, 1978). Table 2 includes examples of the formulated meanings from some of the significant statements. The formulated meanings were organized into clusters of themes. The researcher wrote the formulated meanings on index cards and placed the cards into groups that were similar (Colaizzi, 1978; Miles & Huberman, 1994). Six themes emerged from the formulated meanings.

The findings were formulated into the following exhaustive description of the experiences of nursing students with disabilities: The nursing students with disabilities who participated in the study were supported in diverse ways from family members, faculty, fellow students, and institutions. During their academic program, they encountered more attitudinal barriers than physical barriers. Negative attitudes from faculty, staff, patients, and fellow students were challenges along the way. These nursing students "jumped through hoops" to succeed in nursing programs and "walked on eggshells," fearing the consequences of disclosure. Often, their personal experiences benefited patients. These nursing students were more similar to their peers than different.

The researcher returned to the nursing students with disabilities and asked them to read the exhaustive statement and provide feedback (Miles & Huberman, 1994). They were asked, "How does this description compare with your experience?". They responded with comments such as, "sounds perfect," "great job," "you really got it." The researcher also asked nursing education colleagues to examine the data and evaluate the plausibility of the emerging findings. The following sections provide exam-

ples of the nursing students' interview statements that support the themes which emerged.

THEME 1: NURSING STUDENTS WITH DISABILITIES ARE SUPPORTED IN DIVERSE WAYS

Family, friends, faculty members, support groups, and religious faith provided support while students attended nursing school. Observations and interviews with faculty and staff members revealed that accommodations, either self-initiated or provided by faculty members or the institution, facilitated their experiences. Technological accommodations were necessary for some of the participants. Documents from the universities and colleges corroborated provision of most of the accommodations and compliance with federal laws.

Family members supported the participants in different ways. One student who uses a wheelchair stated, "my family and friends were incredible...my Dad called me every single morning." Another nursing student with a back injury reported that her children would tell her, "Mom, you can still do it!". Faculty members tutored students and made arrangements for alternate assignments and clinical experiences when students were absent because of illness. A nursing student spoke about faculty support after her back surgery: "They all said that they would teach me at home so that I could complete the semester." A faculty member reported, "I offered to go to her house. She's a good student and I wanted her to be able to continue in the program."

One instructor served as a "look out," protector, and informant. The nursing student reported that:

One of my clinical instructors found out that I had a hearing problem, and she went to the Director of Nursing. One of the other nursing instructors let me know what was said about me in the faculty meetings and she told me to watch it and be careful.

Religious faith was important to many of the participants. One student with a hearing impairment said that "God sat beside me and helped guide my hand into the right answers." A student with a back injury stated, "Each day it's by the grace of God and a lot of prayer that I get out of bed."

Fellow students provided support and friendship to some of the students. Observations revealed fellow students helping some of the participants by copying notes, audiotaping lectures, bringing assignments to their homes, working on assignments with them, and assisting them with ambulating and turning patients in the hospital. Some friends were overly protective of the participants. For example, a student with a hearing impairment stated that he had a couple of friends while he was in nursing school. He added, "I don't know if they watched out for me because I don't hear so good or just wanted to be my friend."

Accommodations

Self-Initiated. A participant with diabetes recalled a clinical day when she suffered from symptoms of hypoglycemia:

It was 10:00, and I was getting mad...setting up an IV...having the professor right there...stressed outI forgot my snack...I started having feelings like I was going to pass out...I got very confused...I had to tell the professor. From that day on, I've always carried a snack in my pocket.

All of the nursing students with back injuries were observed using appropriate body mechanics and wearing back supports while working with patients. They sought assistance from others when indicated. Getting up and walking around in the back of the classroom was necessary for one of the participants. She commented, "I just can't sit for 3 hours...the little desks and the back rests are awful...most of my teachers understand."

Nursing students with hearing impairments put themselves in positions that optimized their hearing potential and used their stronger senses to compensate for their limitations. A participant with a hearing impairment spoke about compensating by using his hands:

As far as hearing human voices or the telephone...that's OK...when I'm listening to breath sounds, I don't hear the high frequency pitches...wheezing I can usually hear...crackles and rales I'm not sure about...but I've adapted by using my hands and 99*. I've fine-tuned my hands so that I can pick up consolidated areas in the lungs just as quick as you can with a stethoscope.

This student was observed working in the Emergency Department. He had all of the monitors and intravenous (IV) equipment turned to face him, and he kept the curtains pulled all the way back. He said:

I don't hear the alarms on machines, so I compensate by keeping my eyes on the equipmentI can't turn my backI'm more aware of what's going on with the patient. My eyes are glued on my patients.

Technological Accommodations. Special stethoscopes, hearing aids, adapted telephones, beepers that vibrate, and audiotape recorders facilitated the study and practice of nursing for some of the participants. Some of these aids were provided by the participant and others were provided by the institutions. A student with a hearing impairment stated, "I went out and bought special ear pieces for my stethoscope...they totally block off all the outside noise." During an observation in the hospital, she used the special ear pieces in her stethoscope when she listened to lung sounds and measured blood pressures.

Institutional Accommodations. Universities and colleges made accommodations that assisted some of the participants with access to classrooms, and some provided accessible living quarters. Health care agencies also made accommodations that assisted the participants with employment.

A participant who used a wheelchair recalled accommodations that she needed:

They gave me a parking spot...security always had the gates unlocked when I came...I also had a clicker for the doors...when I went to grad school I had an accessible suite in the dorm.

A nurse with a hearing impairment recalled requesting an accommodation from a home health care agency. She asked the Director, "Could you find me a phone for the hearing impaired because I'm afraid I'm not going to hear the patients." A later interview with the Director revealed that the agency purchased an adapted telephone for the nurse.

THEME 2: NURSING STUDENTS WITH DISABILITIES ENCOUNTER MORE ATTITUDINAL BARRIERS THAN PHYSICAL BARRIERS

The nursing students reported facing more attitudinal barriers than physical barriers in their study of nursing. However, nursing educators, physicians, and employers stressed more concerns about the physical barriers.

Attitudinal Barriers

Often, negative attitudes had an impact on the students' self-esteem and confidence, adding more stress to the experience. A participant who uses a wheelchair stated, "Our biggest barriers are not physical, they're mental...not every nurse needs to give shots...use all 10 fingers...or walk into a room." One student with a hearing impairment explained:

I had my first clinical with a male faculty member, and he was totally intolerant, and the pressure was extremeI think his perception was that I wouldn't be able to do this, right from the beginning...he never even heard me say, "I don't hear you."

A participant with a hearing impairment commented about her feelings of being set up by a faculty member to fail. She recalled:

They knew Nancy was helping me...so what she [the

^{* 99} refers to an examination technique used to elicit vocal or tactile palpable vibrations through the bronchopulmonary system to the chest wall.

faculty member] did was try to trip me up...she put Nancy in one hall and me on the other hall, knowing that I could not get her to help me and I was stranded. [Name has been changed for anonymity purposes.]

Another student with a hearing impairment explained, with tears in her eyes, that she was always picked last to participate in a group. A peer said to her, "I don't believe you can't hear, you can hear anything that you want." A participant with a back injury reported that a peer said, "People like you shouldn't bother taking slots from people like us who don't have disabilities." Another participant with a back injury explained that the other students teased her a lot while she was in a body cast. She said:

It snowed a lot...and they would push me over the snow bank and I couldn't get up...they would razz me and say she's a turtle...can't get out of her shell.

Resentment by other students regarding accommodations was mentioned often by the participants. A participant with a back injury recalled, "My clinical instructor told me that some of the students are complaining that you're not getting the same experience as they are."

A fellow student recalled her experiences with a participant and said:

She gets special attention from the faculty and students. Most of the students really resent her. She misses lots of clinical days, and she still gets an "A." She's a squeaky wheel that uses her disability to her advantage all the time.

Interviews with the participants revealed many comments about the lack of support from and pessimistic attitudes held by staff members, physicians, and employers. A participant who uses a wheelchair explained:

People in the medical field have a hard time with somebody with a disability. They don't know if you're as smart or as hardworking.... People have said to me, "You can't be a nurse, you're in a wheelchair."

A participant with a back injury spoke about her experiences with employers. She commented:

I went to various places.... They all said come back after you're out of your body cast.... Some of them commented, "Who wants a nurse with a bad back? Be real!"

A nurse with a hearing impairment recalled a complaint from a family. He said:

I was taking care of their grandmotherI did her blood pressure by palpation, and they complained to my supervisor. They said I didn't use the stethoscope because they were Black and I didn't want to touch her...they never really believed me.

Physical Barriers

The participants were observed in hospitals, clinics, and homes providing excellent nursing care in most cases. They gave baths, took vital signs, administered medications, changed dressings, monitored IV lines, and provided treatments. Most of the participants were observed doing whatever they could to meet their patients' needs. Yet, some concerns regarding patient safety were

expressed by participants, faculty, and employers.

A participant with a hearing impairment spoke about getting a report on a patient. She said:

I don't hear consonants clearlyI usually know if someone is speaking, but I don't always hear what is said...50, 60, 15, 16 sound much the same to me...if someone is speaking quickly I would lose some of the content because I would look down to write.

A faculty member raised serious concerns regarding this student's ability to hear lung sounds. She stated, "She could miss an important assessment...she wouldn't know when to seek another opinion." Despite faculty concerns and the student's admitted limitations, the student went on the graduate from the nursing program. Questions were raised regarding the university's potential liability for allowing this student to graduate.

In an outpatient clinic, an interview with a physician revealed serious concerns regarding a student's inability to hear certain high-pitched lung sounds. The physician recommended the student get a special stethoscope. A follow-up conversation with the student indicated that he had done so. He reported, "It has made such a difference in my practice and my confidenceI can now hear high-pitched sounds."

A review of documents from the university this student attended revealed that the faculty used core performance standards for admission. Examples of necessary activities were: hearing monitor alarms, emergency signals, auscultatory sounds, and cries for help. This participant clearly did not demonstrate these abilities during observations of him in the hospital or through his interviews. Nonetheless, he graduated from the program. This situation raises important questions regarding the potential liability of the university for allowing this student to graduate.

An interview with a Director of Nursing regarding a participant with a hearing impairment revealed her concerns. She stated:

My concern is that it's so obvious in her speech, and she doesn't think that people can tell. I think she's in denial. I don't think I would hire her for a full-time position, not because of her disability but because I'm afraid that she wouldn't ask for help. I'm concerned about her ability to do a good cardiac and respiratory assessment. She doesn't use a special stethoscope.

A faculty member refuted this view when she stated that the participant's "other senses are strong...her assessments were consistently accurate and appropriate." Observations of this participant revealed that she took a long time to listen to every lung field of her patients. She deflated the blood pressure cuff slowly and took two readings. When she did not hear something a patient said, she asked the patient to repeat it. The patients she cared for were all elderly individuals. They repeatedly commented, "She's a great nurse."

Another student with a hearing impairment was observed working on a medical-surgical floor of a hospital. An IV machine was beeping. The participant looked into different rooms to identify which IV was beeping. She stated, "I can't hear well enough to localize the sound of a

beeping IV machine, so I have to look in the rooms."

During an observation of another participant with a hearing impairment, a patient called out the student's name four times. When she was told her patient was calling her, the participant replied, "Good thing you heard her, I didn't hear her at all." The admission guidelines from the university this student attended stated that "An individual that poses a direct threat to the health or safety of others may be denied admission or progression." The student went on to graduate from the program with honors.

Mobility Barriers

Participants with limited mobility demonstrated behaviors that could have an impact on patient safety. A participant with a back injury and a gait disturbance was observed walking down the hall of a hospital. She tripped on the carpet and almost fell. She stated she "always walks close to the wall in order to prevent a possible fall."

Another student with a back injury was observed refusing to take a patient assignment because the patient's bed was broken and could not be raised. She explained, "I can't bend over to make his bed, give his bath, and change his abdominal wound dressing." The instructor gave the patient assignment to another student. Given this student's limitation in movement, it would be difficult for her to care for patients in nonmoveable beds or provide emergency care that required complete range of motion (e.g., cardiopulmonary resuscitation).

THEME 3: NURSING STUDENTS WITH DISABILITIES "JUMP THROUGH HOOPS" TO SUCCEED IN NURSING PROGRAMS

The nursing students who participated in the study walked and drove long distances (one was observed sleeping overnight in her van), made up clinical and written assignments, and endured physical and mental pain. Determination was evident as a participant recalled her journey to nursing school. She said:

I was a handicapped child. Who wants to encourage somebody that cannot hear?I was never encouraged...it was my own challenge to know that they told me I couldn't to begin with...my determination and knowing that I could do it got me through.

Persistence was demonstrated by a participant with a back injury who stated:

I applied to hundreds of programs. This is the first program to accept me from Rhode Island down to FloridaI even offered to sign medical waivers.

Another participant shared the story of her recovery and return to nursing school after an automobile accident. She said:

I'm a T-4 paraplegicI was on a ventilator for about a month...and then I was on a Striker frame...then I wore a body cast for about 6 monthsI went to rehab...to learn to transfer, dress, catheterize myself...then I went back to nursing school.

Another participant with a back injury recalled that while she attended nursing school in a body cast, she was unable to drive. She walked approximately one mile to get to school and when required to make home visits, as part of a community health nursing course, she took the bus.

Physical pain was a problem for one of the participants following surgery on her spine. She stated, "I would take pain killers and tried the best I could to make it through the clinical experience."

Physical self-control was evident in a participant's description of how she worked as a student nurse. She stated:

Even though you have diarrhea...it's a symptom you can control for the moment until you can get a break...say I've got to give two more meds and just hang on...that's how it is for me.

THEME 4: NURSING STUDENTS WITH DISABILITIES "WALK ON EGGSHELLS" BECAUSE OF THE FEAR OF THE CONSEQUENCES OF DISCLOSURE

Fear of the consequences of disclosure of the students' disabilities was mentioned frequently by participants. One participant with a hearing impairment stated:

I admitted that I had a hearing problem, and the Director told me she didn't think I could make nursing school...so I got my bachelor degree in business...then I reapplied to nursing school without telling anyone about my impairment...you can't see that I wear a hearing aid...I always wear my hair down.

An automobile accident caused a back injury for one participant during her senior year in a Bachelor of Science in Nursing program. When the university discovered her injury, they dismissed her from the program. Later, when this participant went on to apply to another university, she said:

I didn't exactly delineate in the letter what my disabilities wereI just let them know that I was a handicapped student and that I would have weight-lifting restrictions.

A nurse with a hearing impairment commented:

From the time they knew I had a hearing problem, they
were waiting for me to slip up, the biggest fear is that

were waiting for me to slip up, the...biggest fear is that somebody is going to find out and say "I'm sorry, we've got to cut you," that is a fear you can't imagine.

THEME 5: NURSING STUDENTS WITH DISABILITIES HAVE PERSONAL EXPERIENCES THAT BENEFIT THEMSELVES AND PATIENTS BY "TURNING THE TABLES"

Some participants discussed their personal experiences as patients and living with a disability. Many felt their experiences gave them great insight into the needs of their patients by "turning the tables." Their experiences made them better nurses. Often, they seemed to know what to do without having to be taught. They had learned

from their own experiences.

A student with a back injury commented, "You wonder how you can survive the day, but somehow giving to someone else helps you get through the aches and pains." Similar comments were made by another student with a back injury who said, "I have great respect for patients with pain, more so than anybody." She was observed on a medical-surgical unit requesting a physician to change a pain medication for a patient.

A nurse who returned to nursing school using a wheelchair recalled:

One of my patients was in a wheelchair, a high-level [quadriplegic]. The guy was like 6'2", and his wife was 5 feet tall. I taught her how to do all his turning and [catheterizing] and all his program at home. I think I was really good for them, and they were good for me. They helped my self-esteem. I had a specialty already.

A participant with a back injury stated:

After 7 months in the hospital, you learn a lot about being a patient. I go out of my way to do the picky stuff...making sure they have things close at hand, making sure their feet are soaked.

THEME 6: NURSING STUDENTS WITH DISABILITIES "PUT THEIR PANTS ON" GENERALLY THE SAME WAY AS THEIR PEERS

Numerous statements from participants expressed their desire to be treated and accepted as typical students. The participants viewed their accomplishments, struggles, and stress as similar to their peers. A student with a hearing impairment described the experience as:

It's a lot of stress...juggling school, family, and jobs. There are more similarities than differences...what we had in common was being students.

A participant with a back injury commented:

An instructor...just treated me like I was any other student. I figured that once I got in the door, they would figure that I put my pants on generally the same way that they do, and we would all be in the same boat.

Another student with a back injury stated that she "didn't want any special accommodations. I didn't want to feel that I hadn't earned it...I think I feel as all students."

SUMMARY

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The results of this study document and support the findings in the literature (Magilvy & Mitchell, 1995; Watson, 1995) that students with disabilities are being admitted to nursing education programs. They are progressing, graduating, passing national licensing examinations, and gaining employment in the field of nursing. Some have pursued advanced degrees in nursing.

Furthermore, the results of this study add information to the literature that demonstrates important concerns related to potentially unsafe nursing practice. Monitor sounds and patients' calls for help were not heard by some students with hearing impairments. In other situations, breath sounds may not have been heard correctly. One student almost fell down because of a gait disturbance, and another student was dizzy and confused because of a hypoglycemic attack. Fortunately, the limitations of the participants did not result in any known harm to the patients they cared for, but the potential threats to patients' health and safety must be emphasized.

As previously reported in the literature, accommodations (Watson, 1995) and technology facilitated the successful outcomes of some of the nursing students. All of the nursing programs had documents related to students with disabilities that addressed compliance with federal laws. The documents also corroborated most of the accommodations identified in the interviews and observations. Often, the accommodations had a negative impact on the participants' classmates.

Adding further to the literature, the nursing students studied coped with pessimistic, negative attitudes from society, institutions, faculty, staff, peers, patients, and employers. Most students felt disclosure was a risk that usually resulted in negative consequences from either the institution, faculty members, or peers. The nursing students studied wanted to be accepted on the basis of their abilities and treated like other students.

The findings of this study highlight that it is time for nurse educators to address some difficult questions. The data show that in some situations, the university's guidelines for admission were not enforced. Students who were unable to demonstrate the abilities outlined in the admission guidelines did graduate from nursing programs. These data call on nurse educators to examine or reexamine the legal rights of nursing students with disabilities considering the potential threats to patient safety. Nurse educators also need to consider that if the guidelines had been enforced, some of these nursing students would have been denied the opportunity to pursue a career in nursing and patients would have been denied the benefit of the unique gifts these students bring to the profession.

RECOMMENDATIONS

Nurse educators have the responsibility of upholding federal laws ensuring that students have equal access to the nursing profession. Nurse educators also have the responsibility to make admission and retention decisions that promote successful student outcomes as well as patient safety. High standards should be upheld for all nursing students.

Enforceable Guidelines

It is imperative that nursing education programs develop enforceable guidelines for admission and retention of students. Guidelines should be related to essential functions and requirements of participation in the nursing education program. The guidelines should contain

concrete, measurable examples of essential activities. Accommodations need to be made on an individual basis based on the students' disabilities and individual learning needs. When guidelines are in place, nurse educators should be compelled to uphold the guidelines in their admission decisions and subsequent evaluations of the students' performance.

Disclosure

Nursing faculty need to be aware that some nursing students are being admitted without disclosing their disabilities. Nursing programs need to become more open, receptive, and accommodating to students with disabilities to promote disclosure from students. Faculty need to be alert to students who are reading lips or are unable to hear monitor or breath sounds, so appropriate action can be taken and accommodations made if indicated. Policies and procedures should be developed regarding faculty identification of students with suspected disabilities. The potential safety concerns regarding these students are important. An accident involving patient care or legal action against a college or university may be waiting to occur in nursing education programs.

Support

Students with disabilities should be referred to the Office of Students with Disabilities and other support groups during initial advisement. The Office of Students with Disabilities should be able to inform students regarding available campus accommodations, support services, and technological aids. Faculty and students may consider role play and rehearsed responses in preparation for negative attitudes from others. Sensitivity training related to disabilities should be presented in workshops for faculty and presented to students as part of the curriculum. Content also should be presented that informs students and faculty regarding federal laws that ensure the rights of students with disabilities to reasonable accommodations.

Research

Further research is needed that describes the experiences of more nursing students with a wide range of disabilities. Studies need to focus on safety concerns and accommodations. Information related to accommodations and technology needs to be shared for the benefit of other students with disabilities as well as nurses who become disabled later in life. Studies focusing on the reactions of fellow students, patients, and staff members may help faculty and students be better prepared. A longitudinal

study of the career paths of graduates would be helpful for advisement regarding employment opportunities.

CONCLUSION

The future promises to find more nursing students with disabilities in classrooms and clinical sites. There is a place for nurses with disabilities within the profession, but educators and employers must be aware of individuals' limitations to make appropriate accommodations that will promote patient safety.

The more knowledge nurse educators have regarding the experiences of nursing students with disabilities, the better informed they will be to make appropriate admission decisions and accommodations. Admission decisions should be made on a case-by-case basis using enforceable guidelines that include core performance standards.

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