Nursing Student Experiences of Clinical Data Use in Clinical Rotations

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Focus of Inquiry

Clinical rotations are an integral part of nursing education. During clinical rotations, nursing students are expected to use clinical data to engage in the clinical judgment learning process by gathering,

analyzing, and synthesizing clinical data to provide quality patient care (Tanner, 2006). Prior to the implementation of EHRs, a patient's clinical data were documented in paper charts, but the implementation of

EHRs in recent years may have changed the way that students interact with and use clinical data (Baillie, Chadwick, Mann, & Brooke-Read, 2012; Tippen, 2014). Various challenges in interacting with clinical

data may exist due to issues such as various designs of different EHRs per facility, various facility policies, security concerns and restrictions regarding student use of EHRs, and little experience with EHRs in

nursing classes or simulation labs may consequently hinder nursing students' development of clinical judgment (Baillie et al., 2012; Baillie, Chadwick, Mann, & Brooke-Read, 2013; Tippen, 2014). These

challenges may consequently hinder nursing students' development of clinical judgment.

It is important to ensure that nursing students develop clinical judgment (Schoessler et al., 2012) and information literacy (Gugerty & Delaney, 2009) so that newly licensed graduate nurses are prepared

to provide safe patient care (Benner, Sutphen, Leonard, & Day, 2009). Various stakeholders in nursing education such as the American Association of Colleges of Nursing (AACN), the National League for

Nursing,the Quality and Safety Education for Nurses project, and the Technology Informatics Guiding Education Reform Initiative have issued position statements or regulations to emphasize nursing students'

competencies in using clinical data (AACN, 2008; Cronenwett et al., 2007; Gugerty & Delaney, 2009; Schoessler et al., 2012).

Existing research is focused on nursing students' experiences of EHRs and the barriers and benefits of using EHRs rather than the phenomenon of nursing student experiences with clinical data use in clinical

rotations. Foley (2011) compared positive behavior intention toward using an EHR upon entry into practice between nursing students who were exposed to EHRs and students who primarily used paper-based

charting. A mixed methods study explored midwifery and nursing student experiences with EHRs in practice including the amount of EHR exposure, perceived preparedness to use EHRs, and perceived

advantages and barriers to using EHRs in the clinical rotations of midwifery and nursing students in the United Kingdom (Baillie et al., 2012; Baillie et al., 2013; Brooke-Read, Baillie, Mann, & Chadwick, 2012).

Mahon, Nickitas, and Nokes (2012) explored the challenges of transition to EHRs from the perspective of clinical nursing faculty and found concerns regarding facility policies and restrictions regarding the

security of patient information and student access of clinical data.

The findings from this study will contribute to a gap in the literature regarding nursing student experiences of clinical data use in clinical rotations. A deep understanding of nursing student experiences with

clinical data use in clinical rotations is preliminary to ensuring an adequate clinical judgment learning process and to developing teaching strategies to enhance clinical nursing education. Nursing education

programs may use these findings to assist in planning and decision making about preparation for clinical rotations, types of placements, or adjunctive activities to support students in clinical data use during

clinical rotations.

Purpose Statement/Research Question

The purpose of this study is to describe the experiences of undergraduate nursing students with using clinical data in clinical rotations. The research question is "What are the experiences of nursing

students with using clinical data in clinical rotations?" Clinical rotation refers to "practice in an inpatient, ambulatory care, or community setting where the student provides care to patients under the guidance

of an instructor or preceptor" (Alexander et al., 2015, p. 40).

Philosophical Framework

This study will use the philosophical framework of phenomenology, which is the study of experience as perceived by each individual within the context of the world (Sokolowski, 2000). Through the

phenomenological approach, human experiences are a valid means by which to develop knowledge about the world (Sokolowski, 2000). The phenomenological tenet of intentionality means that human

consciousness is directed towards an outward object and cannot exist apart from this outward object; similarly, an object is only perceived through consciousness and does not exist without intentionality

(Husserl, 1913/1982). This philosophical assumption allows for first person experiences, as consciousness intentionally interacting with the object, to represent the phenomenon of interest (Sokolowski, 2000).

Descriptive phenomenology engages with subjective, human experience as a valid means to develop knowledge (Spiegelberg, 1971).

In Tanner's (2006) Clinical Judgment Model, clinical data is regarded as a component of contextual material needed for clinical judgment and includes information such as health history and assessment

data. Another component of Tanner's (2006) model is the process of analyzing and clustering clinical data and comparing a patient's expected responses to the actual situation represented by the clinical data.

In this study, Tanner's (2006) Clinical Judgment Model does not serve as a theoretical framework; rather, the model assisted with the synthesis of background information and helped to identify the problem.

Methodology

Phenomenology as Methodology

Phenomenology serves as both a philosophy and a qualitative research methodology in which individual experiences are studied (Creswell, 2013). This philosophical lens supports the assumption that

nursing students themselves are the experts on nursing student experiences with using clinical data in clinical rotations. Phenomenology as a methodology requires that the researcher align the methods of data

collection, analysis, and reporting of findings with phenomenological assumptions (Colaizzi, 1978). The exploration of a human phenomenon also requires the suspension of all preconceived judgments in order

to allow the phenomenon to emerge (Husserl, 1913/1982). The researcher will engage in ongoing bracketing of preconceived knowledge, expectations, assumptions, and expected findings to allow the

phenomenon to emerge from the analytical process.

Participants and Sampling

This study will use purposive sampling, which is governed by the focus of the phenomenon and "purposely seeks both typical and divergent data to maximize the range of information obtained about the

context" (Erlandson, Harris, Skipper, & Allen, 1993, p. 148). Participants for this study will be junior or senior level nursing students in a baccalaureate program who have completed at least one semester of a

clinical course in which they participated in clinical rotations. There are no exclusion criteria for participation in the study. The clinical rotation settings will be inclusive of multiple types of clinical sites

represented in participant experiences such as inpatient acute care medical surgical hospitals, inpatient mental health facilities, community settings, ambulatory settings, and long-term care. The inclusion of

participants with experiences in a variety of types of clinical rotations and the absence of exclusion criteria will assist in maximizing the collection of diverse data in the study. After Institutional Review Board

(IRB) approval, 18 participants were recruited from the two major metropolitan campuses of a baccalaureate nursing program at a public university. Each participant will receive a $20 gift card after completing

the interview.

Data Collection

Data was collected through the use of in-depth interview, which took place in a private location at a time and place mutually agreeable to both researcher and participant. In-depth interviewing is

appropriate for this study because the focus on the experiences of the participants is integrally tied to the philosophical assumptions of phenomenology; that is, that the descriptions of participant experience can

reveal the phenomenon of interest (Wimpenny & Gass, 2000). Each participant completed one interview with an estimated time of 45-60 minutes. In phenomenological research, the researcher is the

instrument. The researcher must ensure that all aspects of the study are conducted according to the philosophical perspective of phenomenology.

Treatment of Data

Data Analysis

This descriptive phenomenological study will use Colaizzi's seven step method of analysis. After data organization, the first step is to transcribe the recorded interviews verbatim and thoroughly read

each transcribed interview. Second, important statements that directly address the phenomenon are extracted. The third step is to create a reconstruction of the previously extracted important statements into

general, representative statements, and the fourth step requires a grouping of the reformulated statements into thematic clusters. The fifth and sixth steps include the development of an exhaustive description

of the phenomenon and a subsequent development of a statement of identification of the phenomenon. Lastly, participants review the findings, and changes that result from the review process are integrated

into the final research report (Colaizzi, 1978).

Scientific Rigor

Scientific rigor will be developed through evidence of trustworthiness, which includes the four components of credibility, dependability, confirmability, and transferability (Lincoln & Guba, 2005).

Credibility, dependability, and confirmability will be established through the use of reflexive journaling to provide insight, assist with ongoing bracketing, and assist in methodological decisions. Field notes will

be used during the entire research process to provide a clear audit trail regarding analytical decisions. Dissertation committee debriefing will be utilized alongside field notes to support authenticity and promote

the researcher's objectivity (Polit & Beck, 2012). Lastly, the use of participant review and feedback on the detailed description of the phenomenon that is developed from the analysis will promote authenticity of

the research (Colaizzi, 1978; Lincoln and Guba, 2005).

Title:

Nursing Student Experiences of Clinical Data Use in Clinical Rotations

Keywords:

clinical data, clinical rotations and nursing student

References:

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Abstract Summary:

This ongoing study explores nursing student experiences with using clinical data in clinical rotations. Students must gather, analyze, and synthesize clinical data to engage in the clinical judgment learning process. An understanding of student experiences is needed to determine effectiveness of current approaches and to develop strategies to enhance learning.

Content Outline:

I. Introduction

A. Focus of Inquiry

1. During clinical rotations, nursing students are expected to use clinical data to engage in the clinical judgment

learning process by gathering, analyzing, and synthesizing clinical data to provide quality patient care (Tanner,

2006).

2. Prior to the implementation of EHRs, a patient's clinical data were documented in paper charts, but the

implementation of EHRs in recent years may have changed the way that students interact with and use clinical data

(Baillie, Chadwick, Mann, & Brooke-Read, 2012; Tippen, 2014).

3. Various challenges in interacting with clinical data may exist due to issues such as various designs of different

EHRs per facility, various facility policies, security concerns and restrictions regarding student use of EHRs, and little

experience with EHRs in nursing classes or simulation labs may consequently hinder nursing students' development

of clinical judgment (Baillie et al., 2012; Baillie, Chadwick, Mann, & Brooke-Read, 2013; Tippen, 2014).

B. Background

1. The development of clinical judgment (Schoessler et al., 2012) and information literacy (Gugerty & Delaney, 2009)

important so that newly licensed graduate nurses are prepared to provide safe patient care (Benner, Sutphen,

Leonard, & Day, 2009).

2. Existing research is focused on nursing students' experiences of EHRs and the barriers and benefits of using EHRs

rather than the phenomenon of nursing student experiences with clinical data use in clinical rotations.

3. A deep understanding of nursing student experiences with clinical data use in clinical rotations is preliminary to

ensuring an adequate clinical judgment learning process and to developing teaching strategies to enhance clinical

nursing education.

C. Purpose Statement and Research Question

1. The purpose of this study is to describe the experiences of undergraduate nursing students with using clinical data

in clinical rotations.

2. The research question is "What are the experiences of nursing students with using clinical data in clinical

rotations?"

II. Philosophical Framework

A. Phenomenology

1. This study will use the philosophical framework of phenomenology, which is the study of experience as perceived

by each individual within the context of the world (Sokolowski, 2000).

2. Through the phenomenological approach, human experiences are a valid means by which to develop knowledge

about the world (Sokolowski, 2000).

3. The phenomenological tenet of intentionality means that human consciousness is directed towards an outward

object and cannot exist apart from this outward object; this philosophical assumption allows for first person

experiences, as consciousness intentionally interacting with the object, to represent the phenomenon of interest

(Sokolowski, 2000).

4. Descriptive phenomenology engages with subjective, human experience as a valid means to develop knowledge

(Spiegelberg, 1971).

5. Descriptive phenomenology is in a unique paradigm that embraces both subjective, experiential data and

positivist, objective approaches to developing knowledge.

B. Tanner's Clinical Judgment Model

1. In Tanner's (2006) Clinical Judgment Model, clinical data is regarded as a component of contextual material

needed for clinical judgment and includes information such as health history and assessment data.

2. Another component of Tanner's (2006) model is the process of analyzing and clustering clinical data and

comparing a patient's expected responses to the actual situation represented by the clinical data.

3. In this study, Tanner's (2006) Clinical Judgment Model does not serve as a theoretical framework; rather, the

model assisted with the synthesis of background information and helped to identify the problem.

III. Data Collection

A. Phenomenology as Methodology

1. Phenomenology serves as both a philosophy and a qualitative research methodology in which individual

experiences are studied (Creswell, 2013).

2. This philosophical lens supports the assumption that nursing students themselves are the experts on nursing

student experiences with using clinical data in clinical rotations, and phenomenology as a methodology requires that

the researcher align the methods of data collection, analysis, and reporting of findings with phenomenological

assumptions (Colaizzi, 1978).

3. The exploration of a human phenomenon also requires the suspension of all preconceived judgments in order to

allow the phenomenon to emerge (Husserl, 1913/1982).

B. Participants and Sampling

1. This study uses purposive sampling, which is governed by the focus of the phenomenon and "purposely seeks both

typical and divergent data to maximize the range of information obtained about the context" (Erlandson, Harris,

Skipper, & Allen, 1993, p. 148).

2. Participants for this study are junior or senior level nursing students in a baccalaureate program who have

completed at least one semester of a clinical course in which they participated in clinical rotations.

3. There are no exclusion criteria for participation in the study.

4. The clinical rotation settings are inclusive of multiple types of clinical sites represented in participant experiences.

5. After Institutional Review Board (IRB) approval, 18 participants were recruited from the two major

metropolitan campuses of a baccalaureate nursing program at a public university.

C. Data Collection

1. Data will be collected through the use of in-depth interview, which will take place in a private location at a time

and place mutually agreeable to both researcher and participant.

2. In-depth interviewing is appropriate for this study because the focus on the experiences of the participants is

integrally tied to the philosophical assumptions of phenomenology; that is, that the descriptions of participant

experience can reveal the phenomenon of interest (Wimpenny & Gass, 2000).

3. An interview guide with open-ended questions will be used to elicit descriptions of the phenomenon (Colaizzi,

1978), and probing questions will be used to ask participants for clarification or to expand on a description

(Wimpenny & Gass, 2000).

4. Each participant will be asked to complete one interview with an estimated time of 45-60 minutes (Creswell,

2013).

5. In phenomenological research, the researcher is the instrument and must ensure that all aspects of the study are

conducted according to the philosophical perspective of phenomenology.

D. Treatment of Data

1. Colaizzi's Seven Step Method of Analysis

a) The first step is to transcribe the recorded interviews verbatim and thoroughly read each transcribed interview.

b) Second, important statements that directly address the phenomenon are extracted.

c) The third step is to create a reconstruction of the previously extracted important statements into general,

representative statements

d) The fourth step requires a grouping of the reformulated statements into thematic clusters.

e) The fifth include the development of an exhaustive description of the phenomenon

f) The sixth step is the subsequent development of a statement of identification of the phenomenon.

g) Lastly, participants review the findings, and changes that result from the review process are integrated into the

final research report (Colaizzi, 1978).

2. Scientific Rigor

a) Scientific rigor will be developed through evidence of trustworthiness, which includes the four components of

credibility, dependability, confirmability, and transferability (Lincoln & Guba, 2005).

b) Credibility, dependability, and confirmability will be established through the use of reflexive journaling to provide

insight, assist with ongoing bracketing, and assist in methodological decisions.

c) Field notes will be used during the entire research process to provide a clear audit trail regarding analytical

decisions.

d) Dissertation committee debriefing will be utilized alongside field notes to support authenticity and promote the

researcher's objectivity (Polit & Beck, 2012).

e) Lastly, the use of participant review and feedback on the detailed description of the phenomenon that is developed

from the analysis will promote authenticity of the research

(Note: Data analysis is in progress, and findings will be presented if analysis is completed prior to the poster presentation).

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