

BedMED (Bedside Manner Experience Development): Exploring the acquisition and development of bedside manner among nursing students in the context of an online pre-service nursing gaming

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Abstract

Bedside manner has received little in-depth evaluation in the literature, especially from an advanced nursing practice perspective. Concept analysis revealed specific provider behaviors that are consistently deemed positive or negative by patients. Positive behaviors include displays of respect, courtesy, and listening. Negative behaviors include arrogance, indifference, and disrespect. The patient's perception of provider bedside manner impacts health status, satisfaction, and compliance. Effective bedside manner by Advanced Practice Nurses (APN) is essential for effective patient care as APNs increase as primary care providers. Further research in the area of bedside manner is needed to provide additional clarification of patient expectations and desires from their relationship with the clinician.

I. Introduction

The objective of this research is to develop and improve the patient interpersonal skills (or bedside manner) of student nurses through the development of a pre-service online game. In collaboration with the Miami Dade College's School of Nursing, we will develop an online game called Bedside Manner Experience Development (BedMED) that simulates the patient care experience so that pre-service nurses can acquire, understand, reflect on, and develop their ability to engage with patients in more caring and meaningful ways. The Spelman advisor on this research project will be Dr. Jakita Thomas (CIS) – Assistant Professor at Spelman College, and the collaborator from Miami Dade College will be Dr. Annette Gibson (Nursing) – Professor at Miami Dade College School of Nursing.

In particular, we will explore the following research questions:

- 1)** What opportunities to nursing students have to acquire and develop bedside manner capabilities and practices? In what ways do nursing faculty support that acquisition and development?
- 2)** What difficulties do nursing students face as they are developing their bedside manner capabilities and practices?
- 3)** What do those difficulties suggest about supporting that acquisition and development in the context of an online game?

4) How effective is BedMED at supporting the on-going development of bedside manner practice among student nurses?

II. Literature Reviews

1. A Person, L Finch. Bedside Manner: Concept Analysis and Impact on Advanced Nursing Practice. The Internet Journal of Advanced Nursing Practice. 2008 Volume 10 Number 1.
2. Fong, Jennifer, and Nancy Longnecker. "Doctor-Patient Communication: A Review." The Ochsner Journal, Spring 2010.
3. Wofford, Marcia M., et al. "Patient Complaints about Physician Behaviors: A Qualitative Study." Academic Medicine, vol. 79, no. 2, 2004, pp. 134–138.

III. Method

Phase 0: In-depth Literature Review

During this phase, we will continue our exploration of the literature on bedside manner, pre-service nursing training (including serious games used for training), and the transfer of skills, capabilities, and practices for learning.

Phase 1: Interviews of Advanced Practice Nurses and Miami Dade College School of Nursing Faculty

We will conduct 45-minute semi-structured interviews of advanced practice nurses, or nurses who have 10 years or more experience caring for patients. We will interview them about their experiences in providing patient care and the strategies and best practices they employ to develop and provide expert bedside manner. In addition, we will interview members of the nursing faculty at Miami Dade College's School of Nursing, all of whom are or have been licensed nurses, to identify the bedside manner skills and capabilities that are most important to focus on in the context of pre-service nursing training. We will start with 5 advanced practice nurses (both active and retired) and 5 nursing faculty, but will allow these initial 10 interviewees to suggest others that we should talk to. We plan to conduct at least 10, but no more than 20 interviews. These interviews will be held in person, when possible (in the case of the advanced practice nurses), but also via conference call, google hangout, and skype (in the case of the nursing faculty).

Phase 2: Game Co-Design with Miami Dade College School of Nursing Faculty

Drawing from both the literature as well as the interview data, we will develop an initial storyboard for BedMED. A storyboard is a visual representation of the gameplay that describes how a player will move through the game. Creating a storyboard is common practice in game design and will allow us to more specifically describe gameplay to get useful feedback on the design of the game from users (Fullerton, et. al., 2004). After completing an initial storyboard, we will review the storyboard with Miami Dade College School of Nursing Faculty

incorporating any suggested refinements into the storyboard. Next, we will build the physical prototype, which is a representation of the gameplay in the real-world using everyday objects and craft materials (Fullerton, et. al., 2004). We will use the physical prototype to guide the design of the first software prototype as well as to identify any additional questions we should ask of Miami Dade College School of Nursing Faculty as we are developing the software prototype. Upon completion of an initial software prototype, we will have the Miami Dade College of Nursing Faculty playtest the game. During playtesting, they will play the game. Following gameplay, we will engage in a discussion with them about their game play experience, focusing on the flow of gameplay, the authenticity of the game world and player interactions, and the representation of the developmental trajectory of bedside manner skills and capabilities supported in the game.

Phase 3: User Testing with Pre-Service Nursing Students

During this phase, we will travel, if budget allows, to Miami Dade College’s School of Nursing to meet with the nursing faculty, show them the current state of the prototype, and finalize details for on-site user testing. In addition, we will conduct a round of user testing with nursing students where they will playtest BedMED, followed by interviews around the gameplay experience, the BedMED environment, and any learning that may result from playing and interacting with BedMED. Traveling in person will afford us the best opportunity to observe players as they play the game including their non-verbal communications (facial expressions, body language and posture, etc.) in addition to the computer screen, not only during playtesting, but also during the discussions following playtesting.

Phase 4: Continued Iteration and Dissemination

We will continue iterating on the design and functionality of BedMED, and we will present initial outcomes from the BedMED project at Spelman Research Day as well as the 2016 National Conference for Undergraduate Research (NCUR).

IV. Data Collection

We will collect the following types of data to address our research questions:

| Data Collected | Research Question to Inform | Phase(s) Where Data Will Be Collected | Reasons for Collecting Data |
|--|-----------------------------|---------------------------------------|--|
| Semi-structured interviews of advanced practice nurses | 1, 2, & 3 | 1 | To inform the iterative design of BedMED including skills/capability focus and assessment of development in practice |
| Semi-structured interviews of Miami Dade College School of Nursing Faculty | 1, 2, & 3 | 1 & 2 | To inform the iterative design of BedMED including skills/capability focus |

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| | | | and assessment of development in practice as well as the support of bedside manner in educational settings |
| Video observations of nursing students playtesting BedMED | 3 | 3 | To help us understand how target users interact with BedMED |
| Semi-structured interviews of nursing students following BedMED playtesting | 2, 3, & 4 | 3 | To inform the iterative design of BedMED by target users with a focus on gameplay, flow, functionality, and potential learning |

Table 1: Data to be collected mapped to research questions, phase, and aspects of the research that data will inform

V. Conclusion

Bedside manner in medical treatment has been something of an unfortunate idea in the previous decades. Bedside manner among every medical organization is a significant piece of their patients' recovery. Not only does it influence how patients feel in their healing center, but also how they find out about taking care of themselves at home. In any case, this sort of minding could be the difference between sickness and health, as indicated by specialists, and with a developing spotlight on patient satisfaction, many specialists are observing. Compelling specialist persistent communication is a focal scientific capacity in building a helpful specialist-patient relationship, which is the heart and craft of medical treatment. This is commanding in the delivery of great social insurance. Much patient disappointment and numerous grievances are because of breakdown in the specialist understanding relationship. A specialist's correspondence and relational abilities include the capacity to assemble data keeping in mind the end goal to encourage exact determination, guide suitably, give restorative guidelines, and set up caring associations with patients. A decent specialist-patient relationship can expand work success and strengthen patients' fearlessness, inspiration, and positive perspective of their health status, which may impact their health results.

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