The Effect of the Poverty Simulation on BSN Student Knowledge, Skills, and Attitudes

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Background and Significance- An estimated 14.5 % of people in the United States lived below the poverty line in 2014 (United States Census Bureau, 2015). In Arkansas, overall poverty rates are estimated at 18.5%, and are as high as 26% for families with young children. It is important to educate and sensitize nursing students to the realities of living in poverty, as well as to the impact poverty has on health and health-related decisions. High-fidelity simulation is one teaching strategy being used to help nursing students acquire knowledge, skills, and attitudes necessary to provide culturally competent patient-centered care (Patterson, & Hulton, 2012). The purpose of this research was to test the effectiveness of a high-fidelity simulation activity – the Poverty Simulation (Missouri Association for Community Action, 2011) – on knowledge, skills, and attitudes of poverty and poor people, of junior level nursing students enrolled in a pre-licensure BSN program.

Methods - For this mixed-method study, a total of 67 pre-licensure nursing students completed the Attitudes toward Poverty and Poor People survey (short form) at the beginning of the spring semester. The 21-item Likert scale has established validity and reliability (Yun & Weaver, 2010) and was used to determine pre-intervention knowledge and attitudes. Eight weeks later, the Poverty Simulation was conducted. The simulation took place in a large open room with 16 tables representing various community agencies set up around the perimeter and 11 clusters of tables/chairs set up in the center of the room representing families and individuals. Student participants assumed the role of individuals in low-income families. Family scenarios helped participants decide how to seek services and support, obtain financial assistance, and determine how to spend their money. The task of each "family" was to provide for basic necessities for one month, which was represented by four 15-minute time periods. The entire activity, including simulation and debriefing, lasted approximately 3 hours. A total of sixty-five students participated in the simulation activity. Immediately following the simulation activity, students again completed the Attitudes toward Poverty and Poor People survey (short form). Differences between baseline and post-simulation scores were analyzed. In addition, student participants submitted post-intervention reflections on the Poverty Simulation experience that were analyzed using qualitative methods that included coding, identification of common themes, and constant comparison.

Results – A total of 65 pre- and post-survey pairs were included in the final analysis. Participants had a mean age of 21.86 years, were predominantly white (86.2%), and most identified themselves as "Christian" (96.9%). The majority of participants (89.6%) described their families of origin as financially "somewhat secure" to "very secure" with the remaining 10.7% indicating "somewhat insecure" to "very insecure". Fourteen (21.5%) participants indicated that their families had received public assistance.

The Wilcoxon signed ranks test was used to analyze survey data. Z scores were statistically significant ($p < .05$) for 12 of the 21 items; indicating a shift toward more understanding and sensitivity toward the challenges faced by those living in poverty. Qualitative analysis suggested that the Poverty Simulation was "an eye opening experience" that helped students gain "insight" and "awareness". Students described feelings ranging from "helplessness" and "sadness" to "guilt" and "frustration" as they worked through the simulation scenarios.

Conclusions – The results of this research suggests that the high-fidelity poverty simulation is an effective teaching strategy and is useful in improving BSN student attitudes toward poverty and poor people. While the generalizability of these findings are limited due to the relative homogeneity of the sample and the single site, the findings are consistent with a previous studies (Clarke, Sedlacek, & Watson, 2016; Patterson, & Hulton, 2012; Yang, Woomer, Agbemenu, & Williams, 2014) that found

participation in the poverty simulation led to greater empathy for the experiences of those living with limited resources. In addition, participants indicated that the simulation really helped them to understand the importance of knowing what community resources are available. Use of the high-fidelity poverty simulation has the potential to have a positive impact on culturally competent care of BSN students.

Title:

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Keywords:

Poverty, Simulation and attitudes

References:

Clarke, C., Sedlacek, R. K., & Watson, S. B. (2016). Impact of a simulation exercise on pharmacy student attitude toward poverty. *American journal of pharmaceutical education, 80*(2), 1-7.

Missouri Association for Community Action (2011). *Community action poverty simulation.* Retrieved October 10, 2016, from: http://www.povertysimulation.net/

Patterson, N., & Hulton, L. J. (2012). Enhancing nursing students' understanding of poverty through simulation. *Public Health Nursing, 29*(2), 143-151.

United States Census Bureau. (2015). Retrieved October 10, 2016 from: https://www.census.gov/library/publications/2016/demo/p60-256.html.

Yang, K., Woomer, G. R., Agbemenu, K., & Williams, L. (2014). Relate better and judge less: Poverty simulation promoting culturally competent care in community health nursing. *Nurse Education in Practice, 14,* 680-685.

Yun, S., & Weaver, R. D. (2010). Development and validation of a short form of the attitude toward poverty scale. *Advances in Social Work, 11*(2), 174-187.

Abstract Summary:

The purpose of this research was to test the effectiveness of a high-fidelity poverty simulation on knowledge, skills, and attitudes of poverty and poor people, of junior level nursing students enrolled in a pre-licensure BSN program.

Content Outline:

I. Introduction

A. An estimated 14.5 % of people in the United States lived below the poverty line in 2014 (CDC, 2015). In Arkansas, overall poverty rates are estimated at 18.5%, and are as high as 26% for families with young children.

B. High-fidelity simulation is one teaching strategy being used to help nursing students acquire knowledge, skills, and attitudes necessary to provide quality patient-centered care.

C. The purpose of this research was to test the effectiveness of a high-fidelity simulation activity – the Poverty Simulation (Missouri Association for Community Action, 2011) – on knowledge, skills, and

attitudes of poverty and poor people, of junior level nursing students enrolled in a pre-licensure BSN program.

II. Body

A. Methods

1. A total of 67 pre-licensure students participated

2. Participants completed the 21-item Attitudes toward Poverty and Poor People (short form) six weeks prior and immediately after the simulation activity. Following the simulation participants also submitted a personal reflection on the simulation experience.

3. The poverty simulation (Missouri Association for Community Action, 2011) took place in a large open room with 16 tables representing various community agencies set up around the perimeter and 11 clusters of tables/chairs set up in the center of the room representing families and individuals. Student participants assumed the role of individuals in low-income families. Family scenarios helped participants decide how to seek services and support, obtain financial assistance, and determine how to spend their money. The task of each "family" was to provide for basic necessities for one month, which was represented by four 15-minute time periods. The entire activity, including simulation and debriefing, lasted approximately 3 hours.

4. Descriptive statistics were used to describe the sample. Pre- and Post-survey scores were compated using the Wilcoxon signed ranks test. Qualitative data from participant reflections were analyzed using coding and constant comparison.

B. Results

1. A total of 65 pre- and post-survey pairs were included in the final analysis. Participants had a mean age of 21.86 years, were predominantly white (86.2%), and most identified themselves as "Christian" (96.9%). The majority of participants (89.6%) described their families of origin as financially "somewhat secure" to "very secure" with the remaining 10.7% indicating "somewhat insecure" to "very insecure". Fourteen (21.5%) participants indicated that their families had received public assistance.

2. The Wilcoxon signed ranks test was used to analyze survey data. Z scores were statistically significant ($p < .05$) for 12 of the 21 items; indicating a shift toward more understanding and sensitivity toward the challenges faced by those living in poverty.

3. Qualitative analysis suggested that the Poverty Simulation was "an eye opening experience" that helped students gain "insight" and "awareness". Students described feelings ranging from "helplessness" and "sadness" to "guilt" and "frustration" as they worked through the simulation scenarios.

III. Conclusion

A. The results of this research suggests that the high-fidelity poverty simulation is an effective teaching strategy and is useful in improving BSN student attitudes toward poverty and poor people.

B. While the generalizability of these findings are limited due to the relative homogeneity of the sample, the findings are consistent with a previous studies (Patterson, & Hulton, 2012; Yang, Woomer, Agbemenu, & Williams, 2014) that found participation in the poverty simulation led to greater empathy for the experiences of those living with limited resources.

C. participants indicated that the simulation really helped them to understand the importance of knowing what community resources are available.

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