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Brief Report

Health Literacy and Intercultural Competence Training

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ABSTRACT

Intercultural competence (ICC) and health literacy (HL) are vital components of patient education. The purpose of this study was to determine if an educational intervention that combined ICC and HL was effective at changing second-year nursing students' self-efficacy, beliefs, and knowledge. A total of 157 second-year nursing students in two different programs participated in pre- and post-surveys consisting of the Transcultural Self-Efficacy Tool and Health Literacy Beliefs and Knowledge survey. Students attended a two-part lecture with a moderated panel on ICC and health literacy and began clinical fieldwork. Results were analyzed using Wilcoxon signed-rank test and Pearson correlation. There was a statistically significant difference in all ICC subscales after an educational intervention and clinical fieldwork (cognitive $z = 7.681$, $p < .001$; practical $z = 7.319$, $p < .001$; affective $z = 6.533$, $p < .001$). HL knowledge and belief measures showed statistically significant difference after the intervention ($z = 3.037$, $p < .001$). There was a statistically significant correlation between intercultural self-efficacy and HL beliefs (Pearson's $r = .486$, $p < .001$). Self-efficacy in ICC and beliefs and knowledge in HL increased over time for nursing students, indicating that it may be beneficial to train students about these two constructs simultaneously. **[*HLRP: Health Literacy Research and Practice*. 2021;5(4):e283-e286.]**

Nurses communicate with patients about diagnoses, prognoses, medications, and treatment plans while listening to patients express concerns, discuss symptoms, and ask questions. Patient-centered care encourages shared decision-making, which can increase patient satisfaction while promoting a healthy relationship with meaningful dialogue (Ha & Longnecker, 2010). Nurses often develop relationships with patients that allow for communication about personal beliefs (Ha & Longnecker, 2010). Relationships between nurses and patients establish trust, which can put patients more at ease and encourage patients to ask questions and discuss concerns (Chichirez & Purcărea, 2018; Schub & Balderrama, 2017).

Nurses need intercultural competence (ICC) to care for people of different cultural backgrounds. ICC is the ability to communicate and understand your own and other cultures' beliefs (Centers for Disease Control and Prevention [CDC], 2015). The way a nurse provides care can influence a patient's health care experience. Feeling shame or embarrassment can unfavorably affect a patient's emotional well-being, which can lead to abstention from future care (Flynn et al., 2020). However, patients reported lower levels of embarrassment when they felt that their health care provider treated them with cultural competence (Flynn et al., 2020).

Health literacy (HL) refers to how patients find, understand, and use information to make health-related decisions (Institute of Medicine, 2004). It is crucial for nurses to consider HL when interacting with patients because anyone can have low HL at any time depending on the situation (Liang & Brach, 2017). Communication is greatly influenced by both HL and cultural beliefs (CDC, 2019). Nurses must deliver health information to patients in ways that are understandable and meet individual cultural needs. ICC and HL combined can influence patient interactions and health outcomes (Lie et al., 2012).

Lack of skills in either ICC or HL can result in poor care (Baker, 2006; Lie et al., 2012). Acknowledging cultural differences when communicating, and accepting differences allows development of a culturally appropriate care plan that satisfies both patients and nurses (Chichirez & Purcărea, 2018; Newell & Jordan, 2015; Saha et al., 2008). HL allows nurses to reduce miscommunication and improve the quality of health care (CDC, 2019; Lie et al., 2012).

Nursing curricula should include preparing students to meet communication needs of diverse patients. Research shows that some nursing programs include HL training (Scott, 2016); ICC has mostly been taught through research

interventions (Kaihlanen et al., 2019; Khanna et al., 2009). Research has focused on teaching nursing students about ICC and HL separately (Lie et al., 2012; Shaya & Gbarayor, 2006). However, because both constructs are critical to improving patient outcomes and reducing health disparities, we believe that teaching these skills together can better prepare students to interact with patients of varying backgrounds and needs. The purpose of this study was to determine if a combined ICC and HL educational intervention, along with clinical fieldwork, was effective at improving second-year nursing students' ICC and HL:

- Research Question (RQ)1: Are there differences in students' ICC and self-efficacy before and after an education training intervention and clinical fieldwork?
- RQ2: Are there differences in students' HL beliefs and knowledge before and after an education training intervention and clinical fieldwork?
- RQ3: Is there a relationship between ICC self-efficacy and HL beliefs before and after an education training intervention and clinical fieldwork?

METHODS

Sample

We received a secondary dataset consisting of 157 responses from second-year nursing students in two different programs in one university in Georgia. One set of responses (n = 60) came from second-year nursing students in a 4-year bachelor's of science in nursing degree program; 97 responses were from students in their final semester of a 2-year associate's degree nursing program. The students received the pre- and post-surveys and educational intervention as part of a regularly scheduled class session. We received no demographic information on the students. However, the nursing program consists of 1,883 undergraduate students and 589 graduate students of which 84% are women and 69% are racial and ethnic minorities (Georgia State University, 2021). The data were originally collected as part of a standard educational activity, were de-identified, and exempt from Georgia State University Institutional Review Board approval.

Measure

Students took two surveys prior to the intervention. The Transcultural Self-Efficacy Tool measures self-efficacy in performing nursing skills among diverse populations, has a content validity index of 0.91, and has three subscales (cognitive, practical, affective) (Jeffreys, 2016). All subscales are measured on a 1 (*not confident*) to 10 (*extremely confident*) Likert-style scale. The second measure was a HL Beliefs (Abrams et al., 2012) and Knowledge survey; the beliefs section was scored in Likert- style scale ranging from 1 (*not at all important*) to 10 (*very important*) and the knowledge section was scored as correct or incorrect. Both sets of measures were delivered via Qualtrics and took 15 minutes to complete. Sample questions from the survey are located in **Table A**.

The pre-intervention survey was taken early in both the Fall and Spring semesters and was followed by a 3-hour class session on ICC and HL. The presentations focused on a description of HL, practical applications of HL, an examination of refugee health and wellbeing, and the importance of ICC, and was followed by a panel of refugees and community health care workers. Students spent 10 weeks in community clinics that served refugees or low socio-economic status patients. Students gained experience educating patients about medication and providing discharge instructions. The post-intervention survey took place shortly before the end of each semester.

RESULTS

All tests were conducted using Bonferroni adjusted alpha levels of .008. To answer RQ1, we ran a Wilcoxon signed-rank test on each subscale. All subscales showed statistical significance with moderate effect size as fol-

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lows: cognitive post-test score (Mdn = 8.76) versus pre-test score (Mdn = 7.52), $z = 7.681$, $p < .001$; practical post-test score (Mdn = 8.79), versus pre-test (Mdn = 7.32), z = 7.319, $p < .001$; affective post-test score (Mdn = 9.18), versus pre-test (Mdn = 8.63), $z = 6.533$, $p < .001$. Internal consistency and reliability were measured with a Cronbach's alpha coefficient of .982 pre-intervention and .979 post-intervention for cognitive ($n = 25$), a .989 pre-intervention and .986 post-intervention for practical ($n = 28$), and .977 pre-intervention and .970 post-intervention for affective ($n = 30$).

To answer RQ2, we ran a Wilcoxon signed-rank test on the HL beliefs scale. Post-test score (Mdn = 98) showed a statistically significant difference than the pre-test (Mdn = 97), z = 3.037, $p = .002$ with weak effect size. Internal consistency and reliability for this scale was measured with a Cronbach's alpha coefficient of .970 pre-intervention and .947 post-intervention ($n = 10$). To measure knowledge, we used a Wilcoxin signed–rank test; there was a statistically significant difference ($z = 3.406$, $p < .001$) with weak effect size.

To answer RQ3, the relationship between IC self-efficacy and HL beliefs shows moderate correlation at Pearson's r = .414 (pre) and .486 (post), respectively with significance for both at $p < .001$.

DISCUSSION

Results from our study indicate an increase in second-year nursing students' confidence and self-efficacy in ICC and HL. Knowledge, attitude, and skills are essential components of developing expertise in ICC and HL communication (Murphy, 2011; Parry, 2008). The more knowledge nursing students have about a topic, the more confidence and self-efficacy they will have (Boswell, 2013). Students also had first-hand experiences interacting with patients, which may also contribute to the increase in scores.

Results show that an intervention and clinical fieldwork increased student beliefs and knowledge about ICC and HL communication. HL beliefs and knowledge scores were high in both assessments, indicating that the measures are prone to higher scores. Skills in ICC enable a nurse to discuss patient beliefs and preferences nonjudgmentally. Skills in HL help nurses explain complicated health information that may impact patient quality of life. It is important to have skills in both.

ICC and HL training can provide nursing students with awareness about how to approach patient care plans based on individual beliefs. Developing ICC skills such as communicating across different cultures and having positive views of cultural differences can enhance patient satisfaction and compliance (Flynn et al., 2020). HL skills such as using plain language and techniques like the teach-back method can help ensure understandable information is delivered. Without these conversations, patients may leave the health care setting with a treatment plan that does not fit their beliefs or that they may not understand.

Combining these two sets of skills into nursing curricula will allow students to both develop and practice applying them. Practicing patient communication is a skill that nursing students should develop early on in their academic program as developing these skill sets early on gives students more time to refine them. Training that consists of only lectures and theory have been found to be less effective (Parry, 2008). In our study, nursing students had a unique experience to discuss these topics with an expert panel and hear individual narratives; they were also able to spend weeks practicing these skills in community clinics. Training that allows students to participate and have experiences are more effective (Parry, 2008). Hands-on learning can help improve communication skills and increase problem-solving and critical thinking abilities (Woten, 2018). Additionally, students report that they learn best when they have the opportunity to practice materials and skills that were taught in the classroom in a real-world setting (Ogrodnick et al., 2020).

LIMITATIONS

There are a few limitations to this study. First, we did not have information regarding students' previous experience with HL or ICC. Other factors such as age and educational experience could also be confounders and influenced results. All items were self-report and could have response bias. The study design was a single group pre- and post-design without a control group. Furthermore, we did not collect objective data where we observed and compared how students interacted with patients before and after the intervention.

CONCLUSION

Our study results show that combing ICC and HL training with clinical practice may be effective in increasing ICC and HL beliefs and knowledge. Giving students time to practice skills in the field may help improve their confidence about ICC and health literacy. Simultaneously teaching nursing students about ICC and HL may ensure that students develop the combined necessary skills to care for people with diverse backgrounds.

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