Abstract

**Problem:** The World Health Organization acknowledges that inter-professional collaboration among health care professionals is necessary to guarantee the prosperity of primary healthcare. Inter-professional models of healthcare delivery are essential in the underserved populations considering that this vulnerable population has the greatest health care disparity. In an analysis of literature review by (Zwarenstein, Reeves, & Perrier, 2005), eight studies were found specific to inter-professional education interventions, effectiveness of collaboration interventions, and effectiveness of both inter-professional education and collaboration interventions. (West & Slater, 1996; Zwarenstein & Bryant, 2000; Borrell et al., 2001; Cooper et al., 2001; Reeves, 2001; Schmitt, 2001; Zwarenstein et al., 2001; Freeth et al., 2002). However, there are many barriers that prevent inter-professional delivery of care in the underserved population including, lack of cost-effective quality healthcare, lack of cultural competence among healthcare professionals, lack of inter-professional education in healthcare management, lack of knowledge surrounding the benefits of an inter-professional team and defining objectives, responsibilities, and decision making process within the inter-professional team (Ruddy & Rhee, 2005; Smedley, Stith & Nelson, Editors, 2002).

**Evidence:** Litaker et al., (2003) investigate chronic disease management using an inter-professional model of care delivery acknowledged the value of a collaborative team approach to chronic disease management. They were able to demonstrate that collaboration improved patient centered care and clinical outcomes at moderate incremental costs. Greene and colleagues, (2009) examined and focused on chronic disease approach in regards to individuals with diabetes and quality of care using a interdisciplinary team approach to improve diabetic care outcomes. They found that using the interdisciplinary team model there was improvement in the glycosylated hemoglobin A1c, slow improvement noted in ophthalmology screening. In a longitudinal study by (Coster, Norman, Murella, Kitchen, Meerabeau, Sooboodoo & d’Avray, 2008) the investigators addressed inter-professional attitudes among undergraduate students in the health professions with n=1683 participants. The purpose of the study by Coster et al., 2008 was to measure change in readiness for inter-professional learning, professional identification, and amount of contact between students of different professional groups, and to assess the influence of professional group, student characteristics and an inter-professional education course on these scored items over time.

The findings of the study Cost et al., 2008 concluded that the strength of the professional identity in all professional groups was high on entry to the university, but decreased significant overtime for some of the disciplines in the study. Congruently students’ readiness for inter-professional learning remained controlled overtime. Furthermore, the findings of Coster et al., 2008 supports the proposal for introducing inter-professional education at the start of the healthcare students’ professional education to emphasize on students’ readiness for inter-professional learning and professional identities, which appear to be well formed from the beginning (Coster et al., 2008).

In a study by (Wihelmsson, Ponzer, Dahlgren, Timpka & Faresjo, 2011) the investigators compared female students and male students readiness for teamwork and inter-professional collaboration in healthcare. The methodology of the study included medical and nursing student participants at two Swedish universities were invited to fill in the Readiness for Inter-professional Learning Scale. A total of 955 students were invited and 70.2% (n=670) participated in the study. The study by (Wihelmsson et al., 2011) concluded that regardless of the educational
program, female students were more positive to teamwork than male students. Nursing students in general displayed more positive beliefs about teamwork and collaboration than medical students (Wihelmsson et al., 2011).

**Results:** The analysis of the RIPLS was completed using SPSS utilizing a paired T-test to compare the pre and post RIPLS students’ scores. The results were divided by the three subscales, and were found not to be of significance. Although the scores were not of significance from the RIPLS, it did show the students readiness to work together collaboratively. Teamwork collaboration subscale with p=.250, professional identity subscale with p=.213, and roles and responsibilities subscale p=.638. The focus group needs assessment resulted in four main themes: impact on body, mind, and spirit living with diabetes; knowledge deficit; medication side effects; and support system.

**Conclusions/Implications:** The findings of this translational project proposes grounds for more research in the area of inter-professional collaboration and education in the academic curriculum, and pre and post licensure to assess and implement student readiness to work collaboratively together in a professional environment. More research is needed using the inter-professional collaboration and education model in improving health outcomes in other chronic illnesses beyond diabetes. As the result of this project implementation of a diabetic support group with the participants in the focus group will be initiated by graduate nurse practitioner students from Concordia University Wisconsin.