Title: Pre- and Postnatal Health Literacy Among Refugees in Mexico and Guatemala

Purpose:

Maternal education plays a crucial role in infant and maternal health, especially in developing countries. We aim to evaluate a pre- and postnatal health education program for the improvement of health literacy regarding pregnancy and infant health among refugee and migrant populations in Mexico and Guatemala.

Methods:

Using a pretest and posttest study design, the effectiveness of a structured educational program focusing on pre- and postnatal health literacy was determined. Program learners (n=44) in five refugee and migrant shelters in Tapachula, Mexico and Tecun Uman, Guatemala voluntarily attended an educational session presented by medical students. A validated and translated (in Spanish) twelve-question test was administered prior to and following the educational program. One-Way ANOVAs and two-sample two-tailed t-tests were conducted to compare pre- and posttest scores and the overall score. Test questions were sorted into relevant health literacy subcategories (e.g. nutrition) to better understand learners’ baseline health literacy and those significant changes, i.e., knowledge gained, following the educational program (p<0.05).

Results:

Overall, scores (out of 100%) improved significantly from an average of 60.5% pretest to 73.1% posttest (p<0.0001). When analyzed by subcategories, pretest scores showed learners’ baseline knowledge of prenatal care (68.2%) and developmental milestones (72.7%) was greater than knowledge of early nutrition (52.3%), breastfeeding (59.1%) and safety (55.3%). Following the program, prenatal care score was the only subcategory score that did not significantly improve, from 68.2% to 76.1% (p=0.146). Early nutrition score improved from 52.3% to 64.4% (p=0.025). Breastfeeding score improved from 59.1% to 70.5% (<0.0001). Safety score improved from 55.3% to 72.7% (p=0.036). Developmental milestones score increased from 72.7% to 86.4% (p=0.011).

Conclusions:

The educational program significantly improved learners’ overall knowledge of pre- and postnatal health, although more content regarding prenatal and early nutrition education is needed to increase the program’s efficacy in the future. Limitations to this study include potential cultural and language barriers that negatively impacted learners’ ability to obtain information presented, as well as the learning environment itself, and measures should be taken to better control for these variables.