Evidence-Based Stillbirth Prevention Strategies: Combining Empirical & Theoretical Paradigms To Inform Health Planning And Decision-Making

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ABSTRACT

Introduction:
A global health project undertaken in Qatar on the Arabian Peninsula immersed undergraduate nursing students in hands-on learning to address the question: what strategies are effective in preventing stillbirth? Worldwide stillbirth estimates of 2.6 million/year (Cousens et al., 2011) and the high rate in the Eastern Mediterranean Region (EMR) of 27/1000 total live births provided the stimulus for this inquiry (WHO, 2011).

Methods:
We used a dual empirical and theoretical approach that combined the principles of evidence-based practice and population health planning. Students were assisted to translate pre-appraised literature based on the 6S hierarchical pyramid of evidence (DiCenso, Bayley & Haynes, 2009). The PRECEDE-PROCEED (P-P) model (Green & Kreuter, 2005) served as an organizing template to assemble data extracted from the appraisal of 21 systematic literature reviews ± meta-analyses, 2 synopses of synthesized reports and 9 individual studies summarizing stillbirth prevention strategies in low, middle and high income countries. Consistent with elements of the P-P model, stillbirth prevention strategies were classified as social, epidemiological, educational, ecological, administrative or policy.

Results:
Ten recommendations with clear evidence of effectiveness in preventing stillbirth in low, middle and/or high income countries were identified (Bhutta et al, 2011). These strategies for stillbirth prevention are depicted on the P-P template in Figure 3. Several other promising interventions were identified with weak, uncertain or inconclusive evidence. These require further rigorous testing.

Conclusions:
Two complementary paradigms, evidence-based practice and an ecological population health program planning model, helped baccalaureate nursing students transfer research evidence into useable knowledge for practice. They learned the importance of comprehensive assessments and evidence-informed interventions. The multidimensional elements of the P-P model sensitized students to the complex interrelated factors influencing stillbirth and its prevention.