DEVELOPMENT AND EVALUATION OF *CONTEXT-BASED UNDERGRADUATE BIOCHEMISTRY FOR HEALTH SCIENCES* (*CUBHS*) RESOURCES FOR FUTURE HEALTH WORKERS

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BACKGROUND

The Context-based Undergraduate Biochemistry for Health Science (CUBHS) learning resource is designed to link biochemistry concepts to students' future clinical practice in nursing, pharmacy and psychology in preparation for ever-changing professional contexts. Our research aimed to develop and evaluate CUBHS resources.

DESIGN AND DEVELOPMENT

In designing contexts for the resources, relevant clinical scenarios were identified and tasks that linked context with Biochemistry concepts were collaboratively designed through a series of 15 interviews with health professionals/educators. Then, resources for nursing, pharmacy and psychology were developed.

PILOT TEST AND EVALUATION

CUBHS resources were piloted in workshops involving 43 (nursing, pharmacy, psychology) students. Our pilot test determined the effects of CUBHS on perception of relevance (PR), attitude towards biochemistry (AB) and achievement. Surveys, biochemistry quizzes and focus groups were conducted.

Our survey revealed a significant difference ($p < 0.05$) in the pre-to-post scores in perceived relevance to future professional life (PR) and anxiety (AB). Pre-to-post quiz scores showed a significant difference ($p < 0.001$). Focus group data confirmed the relevance of CUBHS to interactions with patients and health professionals, fun/engaging learning and strengthening of understanding of concepts.

IMPLEMENTATION

Our results serve as basis for implementation and development of more resources, which are adapted to COVID-19 clinical contexts.