P-1039 – Exploring knowledge sharing intention of doctors on integrated blended learning platform for diabetes education and care

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Background

Healthcare in Bangladesh is riddled with problems despite making impressive gains in many of the MDGs¹. With a highly pluralistic healthcare system of just five physicians and two nurses per 10,000, Bangladesh has both a shortage and an imbalance in health workforce distribution between urban and rural areas.

In recent times, plenty of initiatives have been taken across the global to mix both online and face-to-face learning in healthcare into what is known as blending learning solutions enabling medical educators to benefit from the best of both worlds. In addition, social media has been playing an important role in connecting professionals and helping them share their knowledge. Hence, improving the way physicians can share their knowledge and experience with colleagues and experts online is likely to play an important role in complementing existing continued medical education, thus improving healthcare services.

Aims

Bangladesh Diabetic Somity (BADAS), established in 1956, is an association currently dedicated to delivering and improving diabetic care in Bangladesh. It runs a distant learning program (DLP) that offers an IDF recognised certificate course on diabetology (CCD) for occupational physicians as part of their continuing education. As part of BADAS's commitment to research and education in diabetes, it recently has taken an initiative to counter the inadequacies in knowledge among physicians on diabetic care around the country by designing an integrated platform. The platform will bring together a blended learning approach and combine it with a doctors' professional network. The professional network will not only enable verified registered health care providers to share their knowledge and experience, but also connect with BADAS's existing doctors and with the 12,000 physicians who received the CCD.

This study – the first of a series of studies – aims to understand and investigate the knowledge sharing intentions of physicians during a blended learning experience on the proposed integrated distance learning and distance clinical care (DLDDCC) platform. The outcomes of this studies will help identify the crucial factors that will be important in designing the proposed doctors' professional network. The findings will also help shape and modify the future studies to be conducted.

Method

Using the theory of planned behaviour (TPB)² a self-administered survey questionnaire was developed for occupational physicians. The questionnaires were given to trainees in the 28 regional training centres of DLP. A total of 353 self-administered questionnaires were returned, with a refusal rate of less than 15%. Since the study focuses mostly on occupational physicians coming in contact with potentially or currently admitted patients in multi-encounter pluralistic health services, samples were brought down to 219 after screening. Furthermore, to obtain highly robust results with PLS-SEM, samples contain missing values were screened out, bringing down the study sample size to 131.

Results

About 57% respondents were male and 43% female. Roughly two-thirds of the respondents were either Medical Officer or Indoor Medical Officer. About 176 respondents who chose to rank the various forms of knowledge sharing media or conduit ranked the two most easily accessible conduits – face-to-face conversations and small group discussions – as the two least preferred option. The two most preferred media or conduit for knowledge sharing are international scientific conference and other electronic media (such as, emails, official messaging services, or SMS).

The PLS-SEM results using the SmartPLS software version 2 showed that the coefficient of determination, R^2 , is 0.38 for Knowledge Sharing Intention, meaning all three latent variables (Attitude, Subjective Norm and Perceived Behavioural Control) moderately explain 38% of the variance in Knowledge Sharing Intention – Subjective Norm appeared to have the strongest effect on Knowledge Sharing Intention. Internal consistency reliability, measured through composite reliability, were all above 0.7, indicating high levels of internal consistency of all the constructs used for an exploratory study like this.

Discussion

Improving knowledge sharing behaviour amongst doctors will no doubt improve the quality of diabetes management by reducing treatment errors and increasing effectiveness. Since Attitude and Perceived Behavioural Control – two key variables in TPB – has not been able to explain any significant knowledge sharing intention, more variable will need to be incorporated in order to recommend the ideal model to help design the proposed platform. Other studies in knowledge sharing behaviour speaks about at least three dozen individual, group and organizational barriers that affect knowledge sharing barriers.

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