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Assessing Student and Healthcare Professional Interprofessional Education Learning Using the Interprofessional Education Collaboration (IPEC) Survey

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Abstract:

Purpose of the Study: Few well-designed assessment tools exist to evaluate the benefits of interprofessional education (IPE) in preparing students to function effectively in team-based collaborative practice. This study provides the results of the interprofessional competency learning of participants that attended the Spring 2017 IPE Symposium entitled, Error Disclosure, using the Interprofessional Education Collaborative (IPEC) survey instrument. The IPEC questionnaire is a 42-item self-assessment instrument divided into four competency domains of values and ethics, roles and responsibilities, interprofessional communication, and teams and teamwork as defined by the 2011 Interprofessional Education Collaborative.

Procedure: The IPE workshop had five objectives: (a) recognize perceived personal and organizational barriers to transparent error disclosure; (b) demonstrate the seven key target behaviors required to communicate a medical error to a family member; (c) identify a situation in which error disclosure may impact their profession; (d) practice a team approach in a simulated error disclosure; and (e) gain an understanding for the benefit of team disclosure. The IPE workshop included presentations on error disclosure from subject matter experts of various disciplines and a case study. Students and health professionals discussed several prepared questions regarding the case study in small interprofessional groups. Using a pre/post design with the IPEC questionnaire, this investigation was conducted to measure whether interprofessional learning of core competencies improved after participation in IPE workshops, and if such improvements were different between students and health professionals.

Results: In this study, 99 participants attended the Error Disclosure workshop. Of these, 26 students and 29 health professionals consented to participate and completed the IPEC survey. Paired t-tests revealed no significant difference (p > .05) in the total mean competency ratings between pre-and post workshops for students in the values and ethics domain. However, paired t-tests revealed students rated the overall mean competencies for the post-workshop IPEC survey significantly higher than the pre-workshop IPEC survey for the roles and responsibilities domain, $t(24) = -2.80$, $p = .010$, $d = .606$; the interprofessional communication domain, $t(24) = -4.18$, $p = .000$; $d = .966$; and the team and teamwork

domain t(24) = -4.22, p = .000; d = .992, with medium to large effect sizes. In contrast, paired t-tests revealed health providers rated the overall mean competencies for the post-workshop IPEC survey significantly higher than the pre-workshop IPEC survey for the values and ethics domain, t(28) = -4.47, p = .000; d = .868; roles and responsibilities domain, t(28) = -5.04, p = .000; d = 1.049; the interprofessional communication domain, , t(28) = -6.25, p = .000; d = 1.484; and the team and teamwork domain, t(28) = -5.54, p = .000; d = 1.358, with large effects sizes. Several explanations for the differences in IPEC competency ratings between students and health professionals as well as directions for future research are presented.