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[Intervention Review]

Interprofessional education: effects on professional practice and healthcare outcomes

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ABSTRACT

Background

The delivery of effective, high-quality patient care is a complex activity. It demands health and social care professionals collaborate in an effective manner. Research continues to suggest that collaboration between these professionals can be problematic. Interprofessional education (IPE) offers a possible way to improve interprofessional collaboration and patient care.

Objectives

To assess the effectiveness of IPE interventions compared to separate, profession-specific education interventions; and to assess the effectiveness of IPE interventions compared to no education intervention.

Search methods

For this update we searched the Cochrane Effective Practice and Organisation of Care Group specialised register, MEDLINE and CINAHL, for the years 2006 to 2011. We also handsearched the *Journal of Interprofessional Care* (2006 to 2011), reference lists of all included studies, the proceedings of leading IPE conferences, and websites of IPE organisations.

Selection criteria

Randomised controlled trials (RCTs), controlled before and after (CBA) studies and interrupted time series (ITS) studies of IPE interventions that reported objectively measured or self reported (validated instrument) patient/client or healthcare process outcomes.

Data collection and analysis

At least two review authors independently assessed the eligibility of potentially relevant studies. For included studies, at least two review authors extracted data and assessed study quality. A meta-analysis of study outcomes was not possible due to heterogeneity in study designs and outcome measures. Consequently, the results are presented in a narrative format.

Main results

This update located nine new studies, which were added to the six studies from our last update in 2008. This review now includes 15 studies (eight RCTs, five CBA and two ITS studies). All of these studies measured the effectiveness of IPE interventions compared to no

educational intervention. Seven studies indicated that IPE produced positive outcomes in the following areas: diabetes care, emergency department culture and patient satisfaction; collaborative team behaviour and reduction of clinical error rates for emergency department teams; collaborative team behaviour in operating rooms; management of care delivered in cases of domestic violence; and mental health practitioner competencies related to the delivery of patient care. In addition, four of the studies reported mixed outcomes (positive and neutral) and four studies reported that the IPE interventions had no impact on either professional practice or patient care.

Authors' conclusions

This updated review reports on 15 studies that met the inclusion criteria (nine studies from this update and six studies from the 2008 update). Although these studies reported some positive outcomes, due to the small number of studies and the heterogeneity of interventions and outcome measures, it is not possible to draw generalisable inferences about the key elements of IPE and its effectiveness. To improve the quality of evidence relating to IPE and patient outcomes or healthcare process outcomes, the following three gaps will need to be filled: first, studies that assess the effectiveness of IPE interventions compared to separate, profession-specific interventions; second, RCT, CBA or ITS studies with qualitative strands examining processes relating to the IPE and practice changes; third, cost-benefit analyses.

PLAIN LANGUAGE SUMMARY

Training health and social care professionals to work together effectively

Interprofessional education (IPE) is defined as an intervention where the members of more than one health or social care profession, or both, learn interactively together, for the explicit purpose of improving interprofessional collaboration or the health/well being of patients/clients, or both. This review evaluated the effectiveness of IPE compared to educational interventions in which different professional groups were learning separately from one another and IPE compared with interventions in which no IPE was offered to a comparison group. This review was restricted to studies that measured patient outcomes or healthcare processes. This excluded qualitative studies and quantitative studies that reported on the impact that IPE can have on participants' attitudes, knowledge and skills of collaboration. This does not imply that qualitative studies and those focused on attitudes, knowledge and skills do not offer useful insights for certain purposes; simply that they are not the focus of this review.

Nine studies met the inclusion criteria for the review. These studies were added to the six that we found the last time we updated the review, bringing the total to 15 studies. Seven of these studies reported positive outcomes for healthcare processes or patient outcomes, or both, four studies reported mixed outcomes (positive and neutral) and four reported no effects of IPE. The studies differed in many respects. They were conducted in different areas of clinical practice and included different IPE interventions. The study designs and outcome measures were also different. All 15 studies compared outcomes following an IPE intervention to outcomes, either in similar clinical settings that did not receive the IPE intervention, or in the same clinical setting before the intervention was made. Because no studies compared an interprofessional intervention to a profession-specific intervention, our understanding of interprofessional interventions is limited. The small number of studies included in this review, and their varied nature, limit our understanding of the key components of IPE and its effectiveness. More studies are needed to allow sound conclusions to be reached about the effectiveness of IPE, as well as to inform IPE policy development. In particular, these should include: first, studies that assess the effectiveness of IPE interventions compared to separate, profession-specific interventions; second, RCT, CBA or ITS studies with qualitative strands examining processes relating to the IPE and practice changes; third, cost-benefit analyses.