

Evidence assessment: Summary of a systematic review

Who is this summary for?

This summary is for policy makers, district health managers, non-governmental associations and community based associations who organise and participate in continued education for health personnel.

Continuing education meetings and workshops: effects on professional practice and health care outcomes

Key findings

Educational meetings are courses or workshops with varying characteristics. Educational meetings alone or in combination with other interventions are effective in improving health care outcomes and professional practice. This effect is small, and similar to other interventions like audit, feedback and educational outreach visits. Educational meetings may not be effective in changing complex behaviours. These findings were obtained from trials conducted in a wide variety of countries.

Background

Each year billions of dollars are spent on medical education activities. It is believed that training medical professionals improves their practice and therefore patient outcomes. Educational meetings are the most common educational activity.

Continuing education in Cameroon: In Cameroon on-the-job training is exemplified by numerous workshops and seminars for the management of malaria, HIV, tuberculosis and obstetric emergencies. In recent years more comprehensive trainings have been introduced e.g. the Integrated Management of Childhood Illnesses (IMCI). Brief training sessions often occur before immunisation and mother and child health campaigns. Additional techniques like facilitative supervision are now being used to improve quality of care. Despite these initiatives, changes in professional practice and patients outcomes are hardly ever measured after educational interventions.

Question

Are educational meetings and workshops, alone or in combination with other interventions, effective in improving professional practice or healthcare outcomes?

Table 1: Summary of the systematic review

| | What the review authors searched for | What the review authors found |
|----------------------|--|--|
| Studies | Randomised controlled trials (RCTs) | Almost all the trials were cluster randomized trials; only seven were individual provider randomized. |
| Participants | Studies involving qualified health professionals or health professionals in postgraduate training (for example resident physicians). Studies involving only undergraduate students were excluded. | In most trials the health professionals were physicians. In two studies the providers were nurses; in three studies they were pharmacists or non-physician prescribers and 18 studies involved mixed providers. |
| Interventions | The following types of educational meetings: conferences, lectures, workshops, seminars, symposia, and courses. | Twenty-three studies examined the effectiveness of interactive educational meetings and 10 studies examined the effectiveness of didactic educational meetings, while 43 studies tested a mixed format. In three studies it was not clear how the intervention should be characterised. In addition, two studies had more than two arms. These compared interactive, didactic, and mixed formats; or an interactive format compared to didactic. |
| Controls | No controls specified | Educational meetings were compared to no intervention (80 studies); educational outreach and improvement of office systems (2 studies); other types of educational meetings (1 study). Interactive educational meetings were compared to didactic meetings (2 studies). |
| Outcomes | The authors sought for objectively measured health professional practice behaviours or patient outcomes in a healthcare setting. Studies using patients' (or simulated patients') subjective ratings of health professionals' performance were included. | Professional practice, patient outcomes, or both, were studied in: 58 (72%), 9 (11%), and 14 (17%) of the studies respectively. The time to follow up varied from 14 days to two years, with a median follow up of six months. |

Date of the most recent search: 29 June 2008

Limitations: This is a good quality systematic review, but the findings may be limited by the quality of the studies included.

Review citation: Forsetlund L, Bjørndal A, Rashidian A, Jamtvedt G, O'Brien MA, Wolf F, Davis D, Odgaard-Jensen J, Oxman AD. Continuing education meetings and workshops: effects on professional practice and health care outcomes. Cochrane Database of Systematic Reviews 2009, Issue 2. Art. No.: CD003030. DOI: 10.1002/14651858.CD003030.pub2.

Summary of Findings table

Table 2 summarises the effects of educational meetings on compliance with desired practice and patient outcomes

| Patient or population: Health care professionals Settings: Primary and secondary care Intervention: Educational meetings with or without other interventions Comparison: No intervention | | | | |
|---|---|-------------------|---------------------------------|---|
| Outcomes | Adjusted absolute improvement (risk difference) Median (Interquartile range) | Number of studies | Quality of the evidence (GRADE) | Comments |
| Compliance with desired practice | Median 6% (1.8 to 15.9) | 30 | ⊕⊕⊕⊕ Moderate | The effect appears to be larger with higher attendance at the educational meetings and with mixed interactive and didactic educational meetings. Educational meetings did not appear to be effective for complex behaviours and they appeared to be less effective for less serious outcomes. |
| Patient outcomes | Median 3% (0.1 % to 4.0%) | 5 | ⊕⊕⊕⊕ Moderate | |

Applicability

Thirty-two trials were based in North America; 34 in Europe; three in Australia; two in Indonesia and South-Africa; and one each in Mali, Thailand, Peru, Mexico, Zambia, Sri Lanka, New Zealand, and Brazil. The findings of this review can be applied in a wide variety of settings.

Conclusions

Educational meetings, alone or combined with other interventions, can improve professional practice and patient outcomes. The effect is most likely to be small and similar to other types of continuing medical education, such as audit and feedback and educational outreach visits.

Prepared by

Lawrence Mbuagbaw; Pierre Ongolo-Zogo: Centre for the Development of Best Practices in Health, Yaoundé, Cameroon.

February 2012