LETTER TO THE EDITOR OF *MEDICAL TEACHER*

A shift from passive teaching at medical conferences to more interactive methods improves physician learning

Sir.

Medical conferences provide one of the main avenues for continuing physician education, maintenance of professional standards and professional accreditation (Davis et al. 1995, 1999). Traditional medical conferences remain predominantly didactic and passive, employing lectures or presentations with minimal audience interaction or discussion. These methods have consistently been found to not alter physician behaviour, improve clinical performance or change patient outcome (Davis et al. 1995, 1999; O'Brien et al. 2001; Weller & Harrison 2004), leading some to surmise that conferences are generally ineffective in changing in physician behaviour (Davis et al. 1999).

However, systematic meta-analyses indicate that conferences that deliver interactive sessions designed to enhance physician participation, such as role play, small discussion groups, workshops, hands-on training, problem- or case-based learning and individualised training sessions, are effective. The educational benefit of mixed didactic and interactive activities is intermediate (Davis et al. 1995, 1999; O'Brien et al. 2001). Interactive sessions provide opportunities to practice novel or infrequently used procedural skills, allowing more streamlined transition into clinical practice (O'Brien et al. 2001).

For instance, New Zealand consultant anaesthetists rated simulation and skills workshops significantly more useful than traditional conferences (Weller & Harrison 2004). The learning advantage of participatory over passive teaching appear to benefit specialist trainees as well. Although more resource-intensive, small group interactive learning improved evidence-based knowledge base, critical appraisal skills and had higher satisfaction ratings than traditional conferences, in internal medicine residents (Thomas et al. 2005). Didactic teaching conferences, on the other hand, did not improve examination scores for internal medicine residents in another study (Fitzgerald & Wenger 2003).

Continuing medical education ideally comprises lifelong post-graduate learning, the ongoing process of reflection and self-assessment that allows the acquisition of knowledge and skills that facilitates a change in physician practice for the better (Weller & Harrison 2004). Better evidence of improved physician performance and consequently patient outcome is required for any educational intervention (Leist & Green 2000). This already exists for the interactive and discussion components of medical conferences (Davis et al. 1995, 1999; O'Brien et al. 2001; Weller & Harrison 2004), and should provide the impetus for a shift in emphasis from traditional didactic or passive teaching at medical conferences to more effective methods of learning that require audience participation and engagement.

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References

Davis D, O'Brien MAT, Freemantle N, Wolf FM, Mazmanian P, Taylor-Vaisey A. 1999. Impact of formal continuing medical education: Do conferences, workshops, rounds, and other traditional continuing education activities change physician behaviour or health care outcomes?. J Am Med Assoc 282:867–874.

Davis D, Thomson MA, Oxman AD, Haynes RB. 1995. Changing physician performance: A systematic review of the effect of continuing medical education strategies. J Am Med Assoc 274:700–705.

Fitzgerald JD, Wenger NS. 2003. Didactic teaching conferences for IM residents: Who attends, and is attendance related to medical certifying examination scores?. Acad Med 78:84–89.

Leist JC, Green JS. 2000. Congress 2000: A continuing medical education summit with implications for the future. J Contin Educ Health Prof 20:247–251.

O'Brien T, Freemantle N, Oxman AD, Wolf F, Davis DA, Herrin J. 2001. Continuing education meetings and workshops: Effects on professional practice and health care outcomes. Cochrane Database of Systematic Reviews, 2: CD003030.

Thomas KG, Thomas MR, York EB, Dupras DM, Schultz HJ, Kolars JC. 2005. Teaching evidence-based medicine to internal medicine residents: The efficacy of conferences versus small-group discussion. Teach Learn Med 17:130–135.

Weller J, Harrison M. 2004. Continuing education and New Zealand anaesthetists. Anaesth Intensive Care 32:59-65.