

Critical appraisal skills should be front and centre of workforce development agendas? A pseudo-experimental before and after study.

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Background: The ability of health professionals to critically appraise scientific literature provides the foundation for evidence based practice. This study evaluated the effectiveness of a simple capacity building activity to identify and modify the confidence of staff working within a tertiary hospital dietetics department to critically appraise scientific literature.

Methods: A pragmatically focussed pseudo-experimental before and after study conducted during a 90 minute scheduled professional development session. A convenience sample of fourteen dietetic staff members were available for inclusion. Four experienced dietitians applied a recognised quality criteria checklist tool with other resources to facilitate small group critical evaluation of four previously identified and distributed research articles. A simple anonymous paper based survey was provided to all participants before and after the workshop for evaluation purposes. This survey included demographic data and a 10-point scale question designed to measure individual confidence in the ability to critically appraise literature. A score of 10 indicated 100% confidence.

Results: Completion rate was 100% pre and post survey (n=14). There was a breadth of clinical experience across participants (<2years n=2; 2-5 years n=4; 6-10 years n=4; >10yrs n=2). Reported confidence levels improved in all staff; a paired t-test demonstrated a significant improvement in individual confidence levels (p<0.001). A significant increase in the group mean reported confidence levels was observed following the intervention (4.57 (SD 1.28) to 7.21 (SD 0.89); p<0.001).

Discussion: Despite inclusion of clinicians with a broad range of experience, the reported baseline confidence in the ability to critically analyse literature was poor. This simple yet effective intervention improved staff confidence in a skill considered fundamental for professional advancement. Allied health departments should regularly undertake capacity building exercises to improve the confidence of staff to critical appraise scientific evidence.