Introduction

Root cause analysis (RCA) is now routinely used in healthcare to investigate serious patient safety incidents and facilitate organizational learning. Despite the limitations of the RCA evidence base, healthcare authorities and decision makers in NHS Scotland – similar to those internationally - have invested heavily in developing training programmes to build local capacity and capability, and this is a cornerstone of many organizational policies for investigating safety-critical issues. However, to our knowledge there has been no systematic attempt to follow-up and evaluate post-training experiences of RCA-trained staff in Scotland. Given the significant investment in people, time and funding we therefore aimed to capture and learn from the reported experiences, benefits and attitudes of RCA-trained staff and the perceived impact on healthcare systems and safety.

Methods

We adapted a questionnaire previously used in a published Australian research study to undertake a cross sectional online survey of health care professionals (e.g. nursing & midwifery, medical doctors and pharmacists) formally trained in RCA by a single territorial health board region in NHS Scotland in 2011.

Conclusion

This study quantified some important experiences within a single NHS board’s RCA training programme which will be of wider interest in Scotland and internationally. It also adds to our knowledge and understanding of the need to improve the effectiveness of RCA training and frontline practices in healthcare settings. There is an assumption that organizations can train staff in RCA and learn from associated outcomes as if it is a linear, ‘rational, robust and rigorous process’. However, healthcare authorities may wish to look more critically at the system and cultural complexities which impact RCA investigations; the professional groupings and numbers of staff whom they select to attend training; and how these programmes are delivered and supported educationally in the longer term to maximize cost-benefits, organizational learning and safer patient care. A deeper understanding of the socio-cultural issues at play is also necessary, but this will require a policy commitment to resource more in-depth social research and evaluation, particularly if developing, testing and implementing new training paradigms.

Results

- A total of 228/469 of invited staff completed the survey (48%);
- The majority of respondents had yet to participate in a post-training RCA investigation (n=127, 55.7%);
- Of RCA-experienced staff, 71 had assumed a lead investigator role (70.3%) on one or more occasions;
- A clear majority indicated that their improvement recommendations were generally or partly implemented (82%);
- The top three perceived barriers to RCA success were cited as: lack of time (54.6%), unwilling colleagues (34%) and inter-professional differences (31%);
- Differences in agreement levels between RCA-experienced and inexperienced respondents were noted on whether a follow-up session would be beneficial after conducting RCA (65.3% v 39.4%) and if peer feedback on RCA reports would be of educational value (83.2% v 37.0%);
- Comparisons with the previous research highlighted significant differences such as less reported difficulties within 3 RCA teams (P<0.001) and a greater proportion of respondents taking on RCA leadership roles in this study (P<0.001).

References

Braithwaite J, Westbrook MT, Mallock NA, Travaglia JF, Iedema RA. Experiences of health professionals who conducted root cause analyses after undergoing a safety improvement programme. Quality & Safety in Health Care 2006;15:303