Falls prevention environmental assessment and modification in regional and rural settings

Linda Furness¹, Anna Tynan¹, Alison Pighills¹
¹Queensland Health

Introduction

One older person dies every five hours following a fall in the home and falls are the leading cause of injury induced mortality in people aged 75 years and over. Research findings indicate that Environmental Assessment and Modification (EAM) is an effective approach to reducing falls and that EAM for falls prevention should be of high intensity, provided by occupational therapists and targeted to high risk populations. The focus of EAM rests on the premise that falls among older people can be reduced by modification of the environment. This is achieved through two key mechanisms, namely 1) by minimising known falls hazards and 2) by changing how a person interacts with their surroundings (1-3). OT led EAM has been shown to be feasible to implement, cost effective and time efficient with estimations suggesting it only takes around 1.5 hours to carry out the assessment (4-7). Empirical and anecdotal evidence suggests that OT led EAM is not routinely implemented in clinical practice (8). In regional and rural Australia, further difficulties exist due to the extensive geographical areas in which OTs work and the associated travel time required.

Some specific difficulties have been noted in the uptake of best practice among regional and rural practitioners. Geographical and professional isolation experienced by health professionals practicing in rural and remote areas can result in difficulties accessing educational opportunities (9-11). Access to resources such as journals are impacted on by distance, lack of internet service or, if available, very slow access over phone lines (10). Professionals in rural settings are also required to be multi-skilled generalists with a wide-range of practice knowledge with reported limitations on time to engage in professional development activities (12). Minimal research has been conducted specifically for uptake of best practice by rural OTs.

The aim of this study is to identify factors that support the local adoption of best practice by OTs in EAM in falls prevention within a regional and rural health service. The Health service district services an area covering 90000km² and provides healthcare to 280000 people living in regional and rural areas. Services are structured in a ‘hub and spoke’ model with a regional hospital as the hub and rural hospitals as spokes. OTs working in rural hospitals work in generalist roles providing OT services across a range of contexts (including inpatient, outpatient, outreach) and service types (including paediatrics, rehabilitation, home assessment and aged care).

Method

A concurrent mixed methods approach incorporating the Promoting Action on Research Implementation in Health Services Framework (PAHRIS) framework (13)—a framework that assists in diagnosing critical elements related to implementation of best practice to enable successful and sustained change—was used. Data collection to examine current OT practice in falls prevention and define local barriers and enablers to uptake of best practice EAM included: chart audit; self-report survey of current OT practice; and semi-structured focus group discussions with OTs. Data collection took place from November 2016 to February 2017.
Results

58 charts were audited. A total of 14 OTs completed the survey with a response rate of 67%. Twelve of the OTs also participated in the focus group discussions which were divided up into 2 groups. Group 1 included OTs based in the regional centre and group 2 included OT providing services in rural areas.

Preliminary results suggest a number of issues that have implications for the implementation of best practice EAM. Among the OTs surveyed, there appeared to be a mixed level of understanding of the available evidence for the implementation of OT led EAM for falls prevention. The OTs however showed a high level of confidence in being able to conduct home falls prevention assessments. Despite this, chart audits revealed limited evidence of actual application of best practice EAM. Findings from the FGDs also suggested limited evidence of actual application of best practice EAM.

Results suggest a number of contextual issues impacting on uptake of best practice and future implementation including knowledge of OT role by referrers and multidisciplinary team members. Specific to rural and regional OT work, noted difficulties included limited training and work shadowing opportunities to upskill in EAM and access to necessary resources such as cars to complete home visiting across a broad geographical area. Operational management for OTs in rural areas is also typically not provided by an OT. Professional isolation of rural based OTs within teams led by non-OT profession therefore means greater need for support and knowledge of local management with diverse professional backgrounds to facilitate OT service delivery changes to align with best practice. Further to this, difficulties were also noted in motivation and sustainability of service change for a dispersed and sometimes transient OT workforce.

Discussion and conclusion

The Promoting Action on Research Implementation in Health Services Framework (PAHRIS)(13) framework considers the impacts of available evidence, service context and the facilitation approaches required to implement best practice to enable successful and sustained change. The findings suggest that context has an impact on delivery of best practice EAM. The difficulties of regional and rural service delivery such as geographical areas serviced and the generalist nature of OT caseloads results in challenges not experienced in metropolitan practice. Implementation of evidence is complicated in regional and rural settings by having non-OT service managers, distance to access professional development and availability of peer support. Approaches to facilitate implementation of best practice EAM will need to consider the regional and rural health service setting. Consideration will need to be given to methods to communicate and engage with OTs and operational managers, strategies to support access to training and education and the need to educate referrers and multidisciplinary team members on the OT role in EAM. It is hoped that findings from this project will assist in the development of strategies to guide and facilitate implementation of best practice EAM in regional and rural health service contexts.

Funding acknowledgement

The authors wish to acknowledge a research grant provided by Toowoomba Hospital Foundation which supported this project.
References


Presenter

Linda Furness graduated as an occupational therapist in 1989, and since that time has worked in rural and regional service delivery. She has worked in a number of clinical, case management, management and education roles. Linda is currently employed as a Clinical Education Support Officer within the Occupational Therapy Clinical Education Program (OTCEP), a program aimed at supporting the clinical education of pre-entry occupational therapy students and new graduates in Queensland Health Hospital and Health Service facilities. She is also involved in a number of research projects aimed at enhancing rural and regional occupational therapy service delivery.