THE ROLE OF EXTENDED CARE PARAMEDICS IN REDUCING HOSPITAL EMERGENCY DEPARTMENT ATTENDANCE

BACKGROUND

- Emergency department (ED) attendance is growing significantly in New Zealand (NZ), Australia and in almost all developed countries. This includes those with universal health coverage and an integrated primary care network (Finn et al., 2013; Hoyle, Swain, Fake, & Larsen, 2012).
- In parallel, the scope of paramedic roles has expanded substantially over the last ten years with the development internationally and more recently in NZ of extended care paramedics (ECPs) (Mason et al., 2014; Swain, Al-Salam, Hoyle, & Larsen, 2012).
- ECPs are trained to assess and deliver healthcare to patients in their home and can provide ‘see and treat’ or ‘see and refer’ services where clinically appropriate. The focus of these roles has been in the management of minor illnesses and injury conditions, and often focused on the management of the elderly (Darnell, Mason, & Snooks, 2012).
- The aim of the systematic literature review was to identify whether ECPs reduce hospital ED attendance.

METHODS

- The systematic literature review was undertaken using search key words, and inclusion and exclusion criteria.
- Ovid MEDLINE, Cumulative Index of Nursing and Allied Health Literature (CINAHL), Scopus and Cochrane were searched for relevant papers published in English in the last ten years.
- To be included, articles were required to compare paramedics with extended skills with ED attendance outcomes.
- Twelve articles met the selection criteria and were included in this systematic review from a total of 216,586 citation reports.

RESULTS & DISCUSSION

- Two studies were based upon a United Kingdom (UK) cluster Randomised Control Trial of patients over the age of 60 years. These studies identified that ECPs reduced ED attendance for people over the age of 60 by 25% in comparison to standard paramedics (Dixon et al., 2009; Mason et al., 2007).
- A UK based retrospective descriptive analysis found that ECPs reduced ED attendance for elderly patients who had fallen by 25% and for patients with breathing difficulties by 40% (Gray & Walker, 2008).
- Hoyle et al. found differences in the rate of ED conveyance based on the clinical condition. The study reported 34% of falls in comparison to 71% of cardiac events, were conveyed to an ED.
- Appropriate referral services in the community with suitable capacity, particularly after hours, are a key enabler of an effective ECP pathway (Evans, McGovern, Birch, & Newbury-Birch, 2014).
- A limitation of the review findings is the majority of studies (nine) are based in the UK, which differs from the NZ health system.

CONCLUSIONS

1. The literature provides consistent evidence that ECPs reduce ED attendance. The reduction in ED attendance is significant in comparison to standard paramedics.
2. The prioritisation of ECP dispatch to elderly people maximises the reduction in ED attendance.
3. ECPs can safely reduce ED attendance without increased risk in patient mortality (when compared to standard paramedics).
4. The review findings should be used to direct future research, principally into ECP provision of services to the elderly within an urban setting.

REFERENCES


Fig. 1: Elderly Patients seen by ECPs (Gray & Walker, 2008)