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Fatigue in Emergency Medicine Advanced Clinical Practitioners: Examination of intershift recovery

AUTHORS:
Rob Fenwick, Lead ACP EM, UHB (HGS)
Rebecca Price, ACP EM, UHB (HGS)
Tanya Kershaw, Lead ACP EM, UHB (HGS)
Jo Watts, ACP EM, UHB (HGS)

Background

In the United Kingdom (UK), providing effective and safe emergency care has become increasingly difficult as patient demand increases and resources become more constrained (Royal College of Emergency Medicine (RCEM) 2018).

Advanced Clinical Practitioners (ACPs) have been employed in UK Emergency Medicine (EM) since 2006 as part of a blended workforce solution to the problems of increasing demand, inadequate medical staffing provision and as a way of keeping senior and experienced staff clinically focussed. ACPs are typically from a nursing or Allied Health Professional (AHP) background and have gained considerable clinical experience prior to starting the ACP role.

Emergency Departments (ED) provide emergency care to patients 24 hours a day for the entirety of the year. This regularly requires ACPs and other staff to work long and unsociable shifts for consecutive periods, which can result in fatigue.

While numerous objective measures of fatigue exist, indirect measurement of fatigue using the Need For Recovery (NFR) score is an attractive alternative as it is relatively quick to perform and has previously been validated in large populations including healthcare workers (Jansen et al 2002, Van Veldhoven & Broersen 2003).

The NFR score consists of 11 questions and was originally developed in the Netherlands (NL) to assess how work demands affect intershift recovery. It has been suggested that the NFR between shifts is an early feature of (or potentially a discrete precursor to) occupational burnout.

This work sought to determine the baseline NFR score for a group of EM ACPs and to pilot the score for a larger national study.

Methodology

All local EM ACPs were invited to participate in an online anonymous survey which was open to responses for 7 days. The ACPs worked between two hospital sites, seeing the full spectrum of patient acuity and are deployed to different clinical areas at the discretion of the EM consultant on duty for that shift.

The primary outcome was the baseline NFR score. Secondary outcomes included self-assessment of current burnout and the perceived risk of future occupational burnout.

The survey consisted of the 11 questions of the NFR score which were then used to generate an overall percentage (0-100%, with 100% indicating the highest levels of fatigue). Participants were additionally asked to record current and perceived risk of occupational burnout by recording "yes", "no", or "prefer not to say"

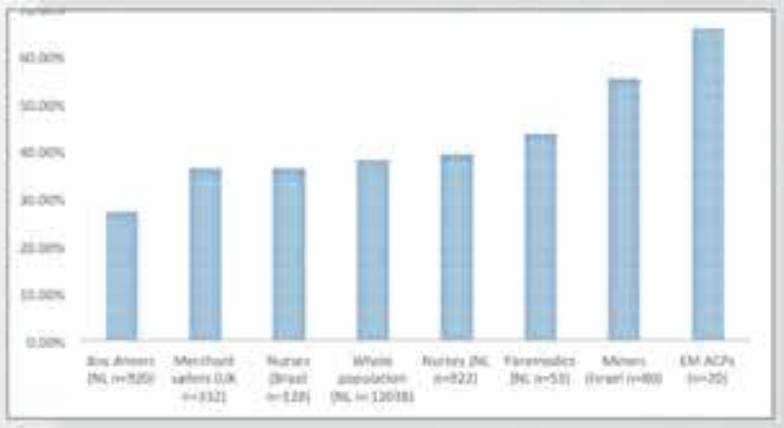
The results were compiled and analysed on Microsoft Excel.

Results

A total of 20 ACPs completed the survey, reflecting a response rate of 91% of the local team. This consisted of 15 trained and 5 trainee ACPs. The overall NFR score was 65.91%. This was only slightly different between qualified (65.45%) and trainee (67.27%) respondents.

One respondent (5%) indicated they felt they were currently suffering with occupational burnout with another two preferring not to say (10%). 35% (n=7) indicated they felt they were at high risk of future burnout at the time of the study. In this group, the NFR score was 77.92% compared to 58.56% in those who didn't feel they were at risk (n=11).

Table 1 – International comparison of EM ACP NFR score with other professions (additional data from Jansen et al 2002).



Discussion

It is recognised that fatigue in healthcare has multiple negative effects including reduced productivity and an increased risk of human error (Rosenberg 2014). It may also impact safety, effectiveness and experience of care (Rosenberg 2014). The NFR score has the potential to identify fatigue and act as an early indicator of occupational burnout. Burnout is characterised as a syndrome which may include symptoms such as a loss of job satisfaction, depersonalisation, emotional exhaustion and also been linked to worse health outcomes for sufferers (e.g. depression and suicide) (Arora et al 2013).

This is the first examination of the NFR in EM ACPs. It has demonstrated a substantially higher NFR in this group than in any of the other previously published studies (table 1). Although not powered to detect significant differences, there is also an increased NFR in those respondents who self-report a high risk of future burnout (77.92% vs 58.56%).

These findings should be used to inform a national baseline EM ACP NFR study, with a focus on identification of factors which are amenable to change and may reduce fatigue.

Conclusion

In this study, the NFR score of EM ACPs is higher than any other professional group previously included in the published literature.

Given the links between fatigue and occupational burnout, strategies to reduce the NFR (and therefore intershift recovery) should be examined further so that effective solutions can be identified and implemented proactively.

A national examination of the baseline NFR amongst EM ACPs is planned and will be informed by this work.

References

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