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Introduction: Healthcare professionals are required to work to consistently high standards 24 hours a day, 365 days a year necessitating shift work to be employed. Shift work is often perceived to result in disruption to the worker, manifesting itself in terms of sleep, health, and social disruption, as well as job performance, standards, and safety, with substantial differences in fatigue identified between day and night shift workers.

The London Ambulance Service NHS Trust (LAS) receives 1.1 million medical 999 emergency calls annually. To deal with these the LAS employs emergency medical dispatchers (EMDs), who use the AMPDS call prioritisation software, to triage emergency calls into an order of clinical need. In line with the evidence presented above, concerns have been raised about the potential for reduced levels of care to be delivered on night shifts.

Use of AMPDS is measured through ‘compliance’, which measures the correct application of the protocol against the call taken. Low compliance has been shown to result in reduced levels of accuracy in identifying the patients presenting condition. It is hypothesised that working at night is associated with a decrease in AMPDS compliance.

Sources and data analysis: Compliance data for 176 EMDs were collected for October 2004 and analysed against hours worked, time of day worked, and overall compliance scores. Day shifts were defined as those between 0700 and 1900. Night shifts between 1900 and 0700.

Results: Mean compliance overall 97.5%; mean compliance night shifts 96.5% (out of 100%); mean compliance night shifts 98.4%; p value N/S.

Discussion: The data analysed identifies EMDs working the night shift do not have decreased levels of compliance. This could be because of quieter call volumes, but may equally be influenced through the use of the structured and systemic process of the AMPDS call taking system. Consideration must be given to the fact that results may also be influenced by system design, competence of the managers, staff morale, and/or commitment.

Conclusions: Whether though the use of AMPDS, system design, or reduced call volume, it is not tenable to presume that night work will have a detrimental impact on the performance of the EMD. Questions remain unanswered about the exact aspect(s) that maintains high levels of compliance on nightshifts.

Results: A total of 215 patients were identified by AMPDS as those between 0700 and 1900. Night shifts between 1900 and 0700.

Conclusions: The rate of subsequent emergency healthcare contacts and increased risk of death for older people who fall and are left at home following a 999 call is shocking. Further research needs to explore this practice and appropriate models for delivery of care for this vulnerable group on a wider scale.

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Results: A total of 215 patients were identified by AMPDS as appropriate, of which 100 patients had a full data set.

Of the 100 cases, eight patients were correctly identified by crews as a AMPDS classification other than non-traumatic low back pain; 18 patients were medically diagnosed (13 identified by crews, the remaining five would have been brought for emergency department assessment under the guidelines); 15 patients were diagnosed with a surgical condition (14 identified correctly by the crew, the remaining one would have been brought for assessment under the guidelines); 59 patients were diagnosed with mechanical back pain (54 were discharged from the emergency department, five were admitted who would have been transferred for assessment under the guidelines).

Conclusions: The RCGP ANBP guidelines could potentially be used by the ambulance service to manage patients safely in conjunction with primary care without transfer for emergency department assessment.

Recommendations: A prospective study is required to fully evaluate the effectiveness of this care pathway.