

What is the evidence for 24-hour posture management? Lauren Osborne, Millbrook Healthcare

Summary

A scoping review exploring the evidence base for 24-hour posture management. Considering definitions of 24-hour posture management and secondary complications that can arise from the influence of gravity for people who are unable to change position independently. Current service provision, national guidelines and policies. Proposed recommendations for future practice.

Aims and objectives

To search for evidence of 24-hour posture management and consider the impact on quality of life. To explore definitions of 24-hour posture management and how it's developed. To consider how posture management fits within the International Classification of Functioning, Disability and Health (ICF) and Personal Wheelchair Budgets. Examining current service provision, challenges, and unmet needs. Analysing how national guidelines and policies are applied. Making recommendations for future practice of posture management.

Background

A 24-hour posture management approach can be applied to any individual who is unable to independently change their position, and therefore is unable to counteract the forces of gravity. The position adopted in each orientation of lying, sitting, and standing will have an effect on the positions adopted in each other orientation, and therefore a 24-hour approach is required. It is more efficient and cost effective to consider all orientations of posture during the assessment process, to ensure that any interventions prescribed work in harmony with each other, and are not counterproductive.

Provision of postural management equipment across the United Kingdom is patchy and inconsistent due to complicated commissioning procedures, funding differences and pre-registration training of therapy staff is variable. The introduction of Personal Wheelchair Budgets in England offers an opportunity to consider posture management over a 24-hour period because it is focused on a comprehensive assessment, including consideration of the individual's lifestyle as well as their clinical needs. The ICF provides an ideal framework for assessment and service provision as it takes a holistic approach, considering the body structures and functions as well as environmental and personal factors, all of which influence and are affected by posture management.

A scoping review was chosen because the body of literature available relating to 24-hour posture management is a mixture of published and grey literature. A list of key search terms was created from the author's knowledge of the field, and a Problem/Patient/Population, Intervention/Indicator, Comparison, Outcome (PICO) framework was used to ensure all possible aspects for the search were considered. Initially, the search terms were too broad and returned hundreds of thousands of results, so these were then condensed into 4 terms: postur* management, night-time positioning, seating assessment, and postur* seating.

Four databases were searched: CINAHL, Psych INFO, Web of Science and Medline, to give a range of results. Inclusion and exclusion criteria were set, and citation chaining was used to ensure saturation. A total of 44 papers were included. These were then classified into four categories of literature: Theoretical, Research, Practice and Policy. Emerging themes were developed from the literature and examined in detail:

1. Definitions of posture management
2. Need for 24-hour posture management
3. Posture management in lying
4. Posture management in sitting
5. Posture management in standing
6. Occupational performance/participation
7. Service provision – commenting on the current provision and making recommendations for possible future provision.
8. Training for families/carer and healthcare professionals

The evidence is mostly from clinical expertise and small exploratory studies which were considered weak in design and low-quality due to sample size. However, the specialty does not easily lend itself to conducting large randomised controlled trials to test theories, due to complex ethical considerations, and the population is relatively small and highly complex. Further research is required to build the evidence base from real-life case studies.

Discussion

The core values of occupational therapy are centred around maximising participation in daily life. If an individual is unable to maintain their position, they will either waste their energy trying to, or be unable to, engage in activities and with people around them. Therefore posture management is a prerequisite to occupational performance. Sitting position is largely influenced by lying position, and both need to be considered together. Failure to provide appropriate posture management equipment prevents people participating in daily life as equal citizens, and therefore breaches their human rights. Secondary complications that can arise from a lack of posture management are a safeguarding issue that need to be addressed.

National guidance on posture management is needed with input from clinicians with skills and expertise in the specialty. More training is needed for healthcare professionals, as well as families and carers, in the appropriate use of positioning equipment as they are providing hands-on care on a daily basis. There needs to be more cohesive multidisciplinary service provision for posture management, which could be services working in a more integrated way, or the development of a dedicated posture management service that provides wheelchairs, postural seating and night-time positioning equipment as well as training for therapy staff (pre and post registration), and training and support for families and carers as one cohesive service.

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