

Position Statement

Elimination of Manual Patient Handling to Prevent Work-Related Musculoskeletal Disorders

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Status: Revised Position Statement
Originated By: Congress on Nursing Practice and Economics
Adopted By: ANA Board of Directors

Purpose: The purpose of this statement is to articulate the professional nurse's role in patient handling, including lifting, repositioning, and transferring; activities conventionally performed by nurses. The performance of these tasks exposes nurses to increased risk for work-related musculoskeletal disorders. With the development of assistive equipment, such as lift and transfer devices, the risk of musculoskeletal injury can be significantly reduced. Effective use of assistive equipment and devices for patient handling creates a safe healthcare environment by separating the physical burden from the nurse and ensuring the safety, comfort, and dignity of the patient.

Statement of ANA position: In order to establish a safe environment of care for nurses and patients, the American Nurses Association (ANA) supports actions and policies that result in the elimination of manual patient handling.

History/previous position statements: The term musculoskeletal disorder describes a collection of conditions affecting, but not limited to, muscles, nerves, tendons, ligaments, joints, cartilage, or spinal discs (National Institute for Occupational Safety and Health, 1997). Common manifestations of musculoskeletal disorders include low back pain, sciatica, rotator cuff injury, and carpal tunnel syndrome (National Research Council and Institute of Medicine, 2001). Job tasks, such as patient handling, can lead to the development of these conditions or exacerbate existing ones.

Nurses suffer a disproportionate amount of musculoskeletal disorders consequent to the cumulative effect of repeated manual patient handling events (de Castro, 2006) often involving unsafe loads. Among nurses, back, neck, and shoulder injuries are commonly noted as the most prevalent and debilitating (Trinkoff, Lipscomb, Geiger-Brown and Brady, 2002). Though nurses have been historically trained to use “proper” body mechanics to prevent injury from lifting and transferring patients, questions arise as to their true value and applicability to the practice of nursing (Nelson, Fragala and Menzel, 2003).

While mostly associated with dependent patient care, the risk for musculoskeletal injury secondary to manual patient handling crosses all specialty areas of nursing. As such, no nurse is effectively clear from the risk of injury. The impact on the nursing workforce may lead to adverse consequences at the organizational level, as well, through increased absenteeism, lost work time, burnout, decreasing retention, high turnover, and threatened recruitment. Moreover, the occurrence of musculoskeletal injuries may have a profoundly discouraging effect within the contexts of nursing shortage, aging nursing workforce, and waning numbers of professional entrants (Powell-Cope, Nelson, Tiesman and Matz, 2003).

Manual Patient Handling

The distinction of manual patient handling specifically refers to tasks such as lifting, transferring, and repositioning of patients without the use of assistive devices. Performing manual patient handling places nurses at increased risk for musculoskeletal disorders. This risk can be attributed to several factors, including weight of load, patient characteristics, awkward posture and positioning, and environmental factors. While attempts to scientifically quantify allowable levels of weight for lifting have been made, designations based on static loads or developed using non-representative study populations cannot be generalized to the nursing workforce (Nelson, Lloyd, Menzel and Gross, 2003). Patients’ bodies have an asymmetric distribution of weight and do not possess available, stable areas to grip thereby making difficult the attempt to hold a patient’s weight close to the nurse’s own body. There also may be occasions when

patients are agitated, combative, non-responsive, or can offer limited levels of assistance potentiating the risk for injury (de Castro, 2006; Owen and Garg, 1993). In addition, the structural physical environment of care may necessitate awkward positions and postures further increasing the susceptibility of developing a musculoskeletal disorder. Altogether, these factors merge to create an unsafe load for nurses to manage capably. Even with assistance from additional staff members, it is critical to note that the exposure to the hazard persists.

Engineering Controls

Engineering controls are the best line of defense for worker protection and can be effectively applied to patient handling. Technology has been successfully applied to significantly reduce the risk of exposure to occupational hazards in the healthcare setting, such as for needlestick injuries and communicable airborne diseases. The healthcare industry must embrace the evolution of technological development in terms of its value to the delivery of quality patient care by a safe and healthy workforce.

Specialized equipment exists to assist in patient handling tasks and the selection of products continues to grow. Examples of patient handling equipment include full-body sling lifts, stand-assist lifts, lateral transfer devices, and friction reducing devices. Assistive equipment removes the manual dimension of patient handling and assumes a large proportion of the patient's weight. The use of assistive equipment relieves the caregiver of the total effort and risk associated with patient handling duties (Nelson, Lloyd, Menzel and Gross, 2003; Owen, 2000). The availability and utility of assistive equipment eliminates the need to engage in total manual patient handling. Though some form of patient handling must be undertaken by nurses, it should be limited to assisting patients while using assistive equipment (e.g., repositioning a patient in a chair after using a lifting device).

The degree of effectiveness of using patient handling equipment and devices to prevent musculoskeletal disorders is significantly dependent on factors related to availability, maintenance, and sufficient space (Nelson, Fragala and Menzel, 2003; Owen, 2000).

Time is also a consideration. Equipment and devices must be readily available to staff in order to encourage their use (Trinkoff, Brady and Nielsen, 2003). Availability incorporates quantity, location, and access of equipment commensurate with staff and patient needs. Further, equipment and devices must be maintained in good operational condition to ensure optimum utility.

Disrepair and dilapidation unnecessarily subjects both caregiver and patient to preventable risk for injury. Also, adequate space within patient care settings that accommodates use of patient handling equipment and devices is essential. Barriers and obstacles within the physical patient care environment, such as, but not limited to furniture, walls, or other treatment equipment, may be prohibitive aspects to patient handling situations. The extent to which any of these factors are limited can strongly influence the risk for musculoskeletal injury.

Quality Patient Care

The use of assistive equipment for patient handling tasks also benefits patients (Owen and Fragala, 1999). Patient adverse events related to patient handling and movement include pain (i.e., when lifting patients under their arms) and injury (e.g., falls, contusions, and skin tears). The use of assistive equipment directly contributes to preventing such adverse events and improving patient safety, comfort, and dignity – reflecting ANA's commitment to Patient Safety/Advocacy. Through the elimination of manual patient handling, patients are afforded more secure and stable means to progress through their care. Also, assistive equipment can be designed to incorporate patient comfort and dignity considerations as a way to respect patients' rights and to improve the overall quality of care.

Employer/Management Commitment

Employers and managers should adopt a policy that commits the institution to the safest approach to handling and moving patients. The safest approach prioritizes the use of assistive equipment and discourages the performance of manual patient handling.

Organizational actions must support the use of assistive equipment for patient handling tasks by investing in an adequate supply of appropriate assistive equipment, ensuring that equipment is readily available to staff, assuring that staff are well-trained in the use of equipment, and designating resource specialists skilled in the assessment and evaluation of patient handling (Nelson et al., 2003). Additionally, any policy related to the elimination of manual patient handling must be non-punitive. Nursing staff should be encouraged to participate in effectively implementing requirements for safe patient handling and not made fearful of reporting incidents of work-related injury. These elements are necessary to ensure that a policy restricting manual patient handling successfully serves to reduce the risk of musculoskeletal disorders.

Employee Participation

Employee participation is vital for the success of workplace health and safety interventions. Front-line staff nurses should be motivated and provided with support to allow them to be involved in the development and implementation of efforts to restrict manual patient handling. Staff can provide essential information about organization-specific hazards associated with patient handling and can help guide actions to ensure effectiveness (United States Department of Labor - Occupational Safety and Health Administration, 2003). Staff must also hold decision-making authority in the evaluation and selection of patient handling devices and equipment (Nelson, Fragala and Menzel, 2003). Further, initial and on-going training in the assessment of case-specific patient handling as well as the use of devices and equipment is necessary.

Exceptional Situations

There may be occasions when manual patient handling cannot be avoided. Nurses may be presented with exceptional or life-threatening situations prohibiting the use of assistive patient handling equipment. In addition, manual patient handling may be performed if the action does not involve lifting most or all of a patient's weight. Other exceptions include the care of pediatric (infant or small child) or other small patients and the use of therapeutic touch. In any and all cases, effort towards patient handling should be minimized wherever possible without compromising patient care or exceeding the

abilities and skills of the nurse.

Regulation and Enforcement

ANA continues the call for a federal Occupational Safety and Health Administration (OSHA) standard to control ergonomic hazards in the workplace for the prevention of work-related musculoskeletal disorders. A regulation that includes stipulations requiring healthcare settings to use engineering controls (i.e., assistive lift and transfer equipment) for patient handling tasks would lead to the elimination of total manual patient handling. In the absence of a national standard, ANA also supports efforts undertaken at the state level to enact ergonomic legislation. Regulation and enforcement are necessary components of the overall effort to prevent work-related musculoskeletal disorders.

Research

ANA seeks the commitment and consultation of the scientific community in the on-going development of interventions dedicated to the prevention of musculoskeletal disorders related to patient handling. The knowledge base and research evidence describing methods of safe patient handling, particularly the use of assistive equipment, continues to expand. The prompt communication of emerging study findings is fundamental for their timely incorporation into professional practice and education of nursing students. The expanding body of evidence also demonstrates the effectiveness of ergonomic intervention programs in reducing injury rates, as well as, demonstrating cost-savings to employers (Arnetz, Sjogren, Rydehn, and Meisel, R., 2003; Baptiste, Boda, Nelson, Lloyd and William, 2006; de Castro, 2006; Grayson, Dale, Bohr, Wolf and Evanoff, 2005; Hendrich, and Lee, 2005; Menzel, Hughes, Waters, Shores and Nelson, 2007; Nelson, Matz, Chen, Siddharthan, Lloyd and Fragala, 2006; Siddharthan, K, Nelson and Weisenborn, 2005; Waters, Collins, Galinsky and Caruso, 2006).

Summary: The American Nurses Association (ANA) believes that manual patient handling is unsafe and is directly responsible for musculoskeletal disorders suffered by nurses. Patient handling can be performed safely with the use of assistive equipment

and devices that serve as engineering controls for ergonomic hazards. The benefit of assistive patient handling equipment is characterized by the simultaneous reduction of the risk of injury for nursing staff and improvement in the quality of care for patient populations.

References

- Arnetz, B.B., Sjogren, B., Rydehn, B., & Meisel, R. (2003). Early workplace intervention for employees with musculoskeletal-related absenteeism: a prospective controlled intervention. *Journal of Occupational and Environmental Medicine*, 45(5): 499-506.
- Baptiste, A., Boda, S.V., Nelson, A.L., Lloyd, J.D., & William, E.L. (2006). Friction reducing devices for lateral patient transfers. A clinical evaluation. *American Association of Occupational Health Nurses Journal*, 54(4): 173-180.
- de Castro, A.B. (2006). Handle with Care®: The American Nurses Association's campaign to address work-related musculoskeletal disorders. *Orthopaedic Nursing*, 25(6): 356-365.
- Grayson, D., Dale, A.M., Bohr, P., Wolf, L., & Evanoff, B. (2005). Ergonomic evaluation. Part of a treatment protocol for musculoskeletal injuries. *American Association of Occupational Health Nurses Journal*, 53(10): 450-457.
- Hendrich, A.L. and Lee, N. (2005). Intra-unit patient transports: Time, motion, and cost impact on hospital efficiency. *Nursing Economic\$,* 23(4): 157-164.
- Menzel, N.N., Hughes, N.L., Waters, T., Shores, L.S. and Nelson, A. (2007). Preventing musculoskeletal disorders in nurses: A safe patient handling curriculum model for nursing schools. *Nurse Educator*, 32(3): 130-135.

National Institute for Occupational Safety and Health. (1997). *Elements of ergonomics programs*. DHHS (NIOSH) Publication No. 97-117. Cincinnati: Author.

National Research Council and Institute of Medicine. (2001). *Musculoskeletal disorders and the workplace - low back and upper extremities*. National Academy of Sciences. Washington, DC: National Academy Press.

Nelson, A., Fragala, G., and Menzel, N. (2003). Myths and facts about back injuries in nursing. *American Journal of Nursing*, 103(2), 32-40.

Nelson, A., Lloyd, J.D., Menzel, N. and Gross, C. (2003). Preventing nursing back injuries. *American Association of Occupational Health Nursing Journal*, 51(3), 126-134.

Nelson, A., Matz, M., Chen, F., Siddharthan, K., Lloyd, J., & Fragala, G. (2006). Development and evaluation of a multifaceted ergonomics program to prevent injuries associated with patient handling tasks. *International Journal of Nursing Studies*, 43, 717-733.

Nelson, A., Owen, B., Lloyd, J.D., Fragala, G., Matz, M.W., Amato, M., et al. (2003). Safe patient handling movement. *American Journal of Nursing*, 103(3), 32-44.

Owen, B.D. (2000). Preventing injuries using an ergonomic approach. *Association of Operating Room Nurses Journal*, 72(6), 1031-1036.

Owen, B.D. and Fragala, G. (1999). Reducing perceived physical stress while transferring residents. *American Association of Occupational Health Nursing Journal* 47(7), 316-322.

Owen, B. and Garg, A. (1993). Back stress isn't part of the job. *American Journal of Nursing*, 93(2), 48-51.

- Powell-Cope, G., Nelson, A., Tiesman, H. and Matz, M. (2003). Nurses' working conditions and the nursing shortage (Letter to the editor). *Journal of the American Medical Association*, 289(13), 1632.
- Siddharthan, K., Nelson, A., & Weisenborn, G. (2005). A business case for patient care ergonomic interventions. *Nursing Administration Quarterly*, 29(1), 63-71.
- Trinkoff, A.M., Brady, B. and Nielsen, K. (2003) Workplace prevention and musculoskeletal injuries in nurses. *Journal of Nursing Administration* 33(3), 153-158.
- Trinkoff, A.M., Lipscomb, J.A., Geiger-Brown, J., & Brady, B. (2002) Musculoskeletal problems of the neck, shoulder, and back and functional consequences in nurses. *American Journal of Industrial Medicine*, 41(3), 170-178.
- United States Department of Labor - Occupational Safety and Health Administration. (2003). Guidelines for nursing homes: Ergonomics for the prevention of musculoskeletal disorders. Washington, DC.
- Waters, T., Collins, J., Galinsky, T., & Caruso, C. (2006). NIOSH research efforts to prevent musculoskeletal disorder in the healthcare industry. *Orthopaedic Nursing*, 24(6), 380-389.

Related Past Action:

1. 1992 *The Profession's Responsibility for the Occupational Health, Safety, and Wellness for Nurses*
2. 1993 *Health and Safety in the Workplace*

Supersedes:

American Nurses Association. (2003). Position Statement: *On elimination of manual patient handling to prevent work-related musculoskeletal disorders*. Washington, DC: Author.

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