

Prevention of low-back pathologies in health care professions

Recommendations emerging from the expert workshop organised by the ISSA Health Services Section in DRESDEN on 25th - 27th January 2006

The International Social Security Association (ISSA) brings together social security organisations and institutions from more than 135 countries. Its Special Commission on Occupational Risk Prevention has created branch-related sections assigned to designing and promoting occupational health and safety improvements.

In 1997, the Health Services Section set up an Ergonomics Working Group to complement its two existing working groups on chemical and infectious risks to which healthcare personnel are exposed.

The Ergonomics Working Group focused its activity on preventing back diseases, the main cause of sick leave and incapacity amongst healthcare personnel.

In 1998, an international symposium on the state of knowledge regarding assessment and prevention of this risk was held in Hamburg.

In 2002, the Ergonomics Working Group organised an experts' workshop in Paris to study different training concepts in relation to the safe handling of patients.

In 2006, a new experts' workshop was organised to establish recommendations aimed at implementing global programmes for preventing the risk of acute or chronic low-back diseases in healthcare personnel. These recommendations are presented in this paper.

BACKGROUND

Nearly 10% of the working population worldwide are employed in the health and social services sector. This percentage is constantly rising; In some countries an increase in the average age of healthcare personnel can also be observed. At the same time, we observe a reduction in the number of beds per inhabitant and in the average stay in healthcare establishments.

In these countries, aging of employees and concentration of heavy healthcare operations during shorter hospitalisation periods can only augment this risk of low-back diseases.

ISSUES

The prime objective of these recommendations is obviously to prevent the appearance and chronic development of low-back pathologies in healthcare personnel. There is therefore not only a human, but also an economic issue since coverage of these pathologies and absenteeism represents a heavy financial burden for healthcare establishments and social insurances.

Prevention of low-back pathologies in healthcare personnel is also a very major issue on the social level: most western countries are confronted by lack of qualified personnel and strong growth in healthcare demand, especially for the elderly. It is therefore urgent to reconsider the conditions in which these occupations are exercised to make them more attractive to the young and to maintain healthcare personnel employability until retirement age.

METHOD

45 experts representing 12 countries met in Dresden between 25th and 27th January 2006. They were divided into five topical workshops to establish basic principles and proposed recommendations for the prevention of low-back diseases in healthcare personnel. These proposals were discussed by all experts at a plenary session, then structured and formatted by the ISSA Health Services Section's Ergonomics Working Group.

BASIC PRINCIPLES AND RECOMMENDATIONS

The summary document comprises five indissociable parts ensuring global, efficient coverage of low-back diseases prevention at healthcare establishments. We will first define the basic principles that healthcare workers should be able to apply in their daily work activity. Implementing these basic principles makes it necessary to organise prevention from an early stage, according to the recommendations presented around four topics, namely organisation, workplace layout, technical aids and training.

According to the basic principles, healthcare workers should:

- analyse risk factors related to low-back pain in their work environment,
- use handling aids rather than physical strength,
- mobilise patient motor resources,
- preserve their know-how and fitness,
- wear suitable work clothing and shoes.

In **organisation** terms, recommendations include:

- developing a health and ergonomics culture in relation to healthcare establishment personnel, fostered by managers and hierarchy,
- setting up a health and safety organisation and designating a manager for this organisation that is competent in ergonomics or supported by specialists external to the establishment, to implement and assess a prevention policy in conjunction with healthcare managers and personnel. This organisation can be part of an existing risk and quality management organisation.
- providing financial resources to ensure safety organisation operation, investment in and maintenance of technical aids and premises, and training of personnel,
- establishing participative management of prevention problems to encourage involvement and changes in personnel behaviour,
- organising work coherently (methods, personnel numbers and skills, working hours) in relation to department constraints (patient numbers and autonomy, type of care) and environment (workplace layout, available technical aids),
- defining a workstation reception and training procedure for new and temporary personnel, which details operating instructions for handling department patients and information on available technical aids and their usage.

In **workplace layout** terms, we recommend:

- expressing clearly in writing the ergonomic ambitions of each project as soon as the operation has been launched by the client,
- organising consultation between architect and premises users during the design phase,
- giving special attention to the following critical areas:
 - . floor areas of rooms and toilets suited to using technical aids,
 - . sufficient volume and functional positioning of storage rooms,
 - . corridor dimensioning, floor coverings and lifts facilitating movement of equipment and persons,

- . arrangement of a comfortable, functional, safe department central zone to facilitate communication and relations within the healthcare team and with both patients and their families,
- performing post-assessment of changes observed after each construction or layout operation to draw conclusions of value for future work.

In **technical aid** terms, recommendations are as follows:

- provide personnel with suitable aids in sufficient number,
- train personnel to correctly use these aids,
- assert the essential nature of these aids for the safety of both the healthcare worker and the patient,
- create conditions allowing these aids to be accepted and used in total safety,
- use a patient lifting device, when care requires to raise the patient,
- install electric height adjustable beds, or at least hydraulic height adjustable beds with electric head positioning as an equipment basis for all healthcare operations,
- promote usage of small technical aids favouring patient mobility and reducing healthcare worker workload.

In initial and continued **training** terms, recommendations comprise:

- integrating personnel training in back diseases prevention into a global health and safety policy established following risk assessment,
- convincing management of the advantages of these training courses; the instructor must be capable of demonstrating these advantages by both qualitative and quantitative assessment of results,
- adapting training to healthcare personnel level of knowledge and their working environment; liaison personnel should be designated in departments to assess training needs and multiply prevention messages,
- designing programmes around the five basic elements, namely risk assessment, equipment usage, patient psychomotor capacity analysis, working environment adaptation and problem solving,
- teaching during initial training patient handling and movement methods, which preserve the safety of both patient and healthcare worker,
- updating and consolidating knowledge, learning to find solutions to difficult cases through continued training.

CONCLUSION

These recommendations are interdependent; they fall within a global prevention approach. Each one contributes to improving the situation, but none is sufficient for solving alone the problem.

These recommendations are not of statutory or normative nature. They constitute a benchmark, a support for institutions, management and trade unions, who wish to enhance efficiency in preventing low-back pathologies in the healthcare environment by addressing the causes of the trouble and no longer just its consequences.

The full text of these recommendations will be available in three languages – English, French and German – at the ISSA Health Services Section website.