

“BACK SCHOOL” - A SPANISH INITIATIVE TO PROTECT BACK HEALTH AMONG WORKERS IN RESIDENTIAL CARE

Introduction

‘Back School’ is an initiative developed by a Spanish residential care sector company that aims to prevent back injuries as a result of physical overload among residential care workers through education, ergonomic techniques and exercise routines. There is a high incidence of work-related back injuries in the Spanish residential care sector, predominantly affecting nursing assistants and geriatric caregivers due to manual and patient handling tasks and physical exertion. In response, the company Gestión de Servicios Residenciales Sociedad Cooperativa¹ (GSR S Coop) implemented the ‘School of the Back’ initiative, based on a combination of theoretical instruction on back health with practical training on safe lifting techniques and strengthening exercises.

The ‘Back School’ initiative has resulted in several positive quantitative and qualitative outcomes and results. According to an ad hoc survey conducted among company workers,² a large part of the workforce (approximately 72%) considers the initiative beneficial, both for their personal health and their ability to perform daily tasks at work more comfortably. Approximately three in 10 workers reported an increase in flexibility as a result of participating in the exercise programme and have experienced a reduction in back pain.

This case study is part of a research project³ carried out with the aim to provide an overview of research on accidents at work in the health and social care (HeSCare) sector.

Description of the case

Background information: accidents at work in the residential care sector in Spain

The residential care sector (NACE 87) plays a vital economic and social role in Spain. As of 2024, there are 4,433 companies in the sector (Instituto Nacional de estadística, 2025a), providing 395,065 residential care beds (2023 data) (Asociación de Directoras y Gerentes de Servicios Sociales, 2025) and generating a turnover of €7.29 billion (TechSci Research, 2025). Demand for residential care is rising due to an ageing population, increased life expectancy, specialised care needs, changing family structures and a shift in traditional care models, influenced by the greater participation of women in the workforce. Twenty-two per cent of companies in the sector employ more than 50 workers (Instituto Nacional de estadística, 2025a).

The residential care sector is a significant employer in Spain, with over 416,100 workers, according to the most recent estimates of the Spanish Labour Force Survey (Instituto Nacional de estadística, 2025b). In 2020, the most common occupation was nursing assistants, comprising 41% of the workforce. The sector has an ageing workforce, as 42% of workers are aged 45-59, and 7.6% are 60 or older. Additionally, it is a highly feminised industry, with 83% of workers being women. These demographic factors impact workplace dynamics and occupational health, particularly regarding physical strain and injury risks (INSST, 2022).

¹ For further information on the company, see: <https://www.gsr.coop/es/>

² This survey was conducted in 2017.

³ The full report is available at: <https://osha.europa.eu/en/publications/accidents-work-health-and-social-care-sector>

From an occupational safety and health (OSH) perspective, the residential care sector in Spain is one of the most accident-prone industries within the third sector, particularly for women. Thus, the incidence rate of accidents at work⁴ for the sector in 2023 was 4,917.9, well above the average for the total third Spanish sector (2,160.1) and the whole Spanish economy (2,812.4).

From a female perspective, the residential care sector occupied the third position out of 99 riskiest sectors for women, with this position remaining practically similar in the time period 2019-2023 (INSST, 2023). Notwithstanding these figures, and despite the high incidence rates, most of the sector accidents are classified as minor, with 99% considered non-severe.

The nature of work in residential care facilities, which involves assisting elderly and disabled individuals with mobility, hygiene and general care, exposes workers to significant and varied physical and psychosocial hazards. In this regard, one of the primary concerns in this sector is the high incidence of work-related injuries caused by overexertion, affecting the back and other anatomical regions such as the neck, shoulders and arms. In fact, approximately 53% of workplace accidents in residential care are linked to physical overload on the musculoskeletal system (back, neck, shoulders and arms) (INSST, 2022). Particularly, such injuries result from repetitive movements, frequent manual handling of residents, and prolonged periods of standing or bending. The most common types of injuries include sprains and strains, which account for 50.8% of recorded cases (INSST, 2022).

The accident data also highlight that 42.9% of reported injuries involve direct interaction with residents, making them the primary agent of injury. Given the physical nature of caregiving tasks, the risk of sudden muscle injuries, such as dislocations or superficial lesions, is very high. Additionally, 58% of accidents are associated with movements requiring physical exertion (24.9% linked to lifting, carrying or standing up, and 15.7% are related to uncoordinated movements, sudden gestures or inappropriate gestures). These figures underscore the ergonomic challenges faced by caregivers and the risks of overexertion injuries affecting the back and other anatomical regions. As already mentioned, the feminised workforce, combined with an ageing worker demographic, further exacerbates these challenges, increasing vulnerability to physical health issues (INSST, 2022).

GSR S Coop is a cooperative organisation based in Spain, specialised in the provision of comprehensive socio-health services. Established in 2003, GSR S Coop operates over 30 centres and residences across the Basque Autonomous Community, Navarra, Cantabria and La Rioja, employing more than 1,400 individuals. The company is a member of the Mondragón Corporation.

The company, affected by these back-related injuries as a result of physical overload and common to the sector in general, decided to take proactive action. In this regard, the GSR S Coop's Committee of Occupational Safety and Health decided in 2009 to launch an initiative called 'Escuela de la Espalda' ('School of the Back' in English), basically aimed at improving the health and wellbeing of company workers in relation to back pain and primarily aimed at the group of workers most affected (i.e. nursing assistants and geriatric caregivers).

Aims

The 'Back School' initiative, implemented by GSR S Coop, has been primarily designed to address the high incidence of back injuries as a result of physical overload among workers within the company, particularly among nursing assistants and geriatric caregivers. In this regard, the main goals pursued by the initiative are the following:

- Preventing injuries and accidents at work, reducing the occurrence of back pain and back-related disorders among staff, while minimising workplace accidents caused by improper handling of loads or poor posture.
- Educating workers on the structure and function of the back so as to enhance their understanding of the importance of proper postural awareness. Also, providing workers with

⁴ Incidence rate measures as number of accidents with sick leave per 100,000 workers. A work accident with sick leave refers to cases where the injury or illness leads to temporary incapacity, meaning the worker cannot return to work and is granted a medical leave starting from the first day of absence.

theoretical and practical instruction on correct body postures and mechanics, including lifting techniques, bending postures and ergonomic positioning in order to better protect their back health.

- Training workers to recognise workplace risk situations that may contribute to back injuries, allowing them to take proactive steps to mitigate risks, and ensuring that workers incorporate ergonomic and postural safety measures into their daily caregiving tasks, such as patient mobilisation and lifting.
- Encouraging workers to adopt healthier occupational habits in daily work that benefit both their professional and personal lives, including the promotion of daily flexibility exercises, stretching routines and regular physical activity that strengthen the back and core muscles to improve resilience against injuries.

The 'Back School' initiative represents a proactive approach to workplace safety, aiming to create a long-term cultural shift towards prevention and self-care within the company. The programme, developed in the time period 2009-2015, is currently implemented by the company, and it is regarded as a positive tool in reducing back-related occupational health hazards and enhancing worker wellbeing.

What was done and how

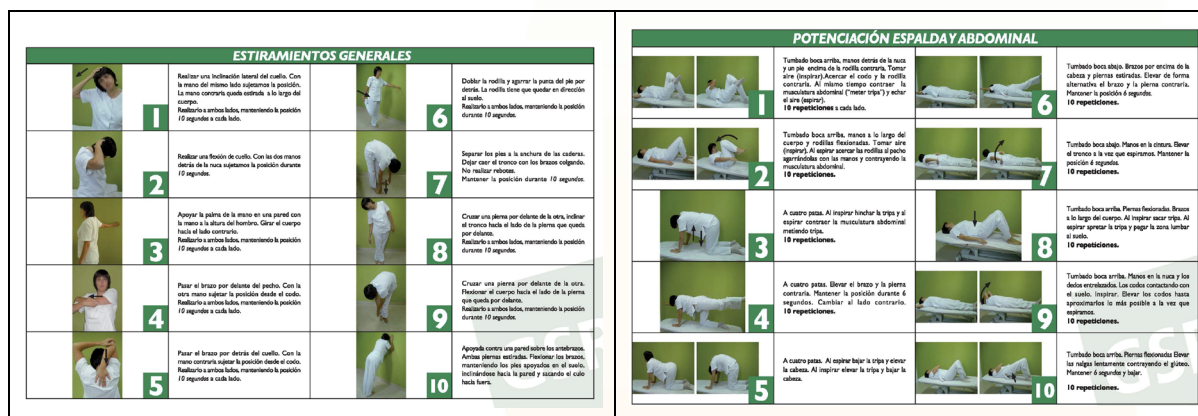
In order to achieve these objectives, the 'Back School' initiative has been based on a structured training programme provided by in-company physiotherapists that combines theoretical and practical sessions across company residential centres in order to ensure that workers receive standardised and effective training.

The initiative is primarily aimed at educating workers on the risks associated with their daily work routines and the best practices for mitigating those risks. This theoretical training is regarded as crucial to ensure that workers do not simply receive a set of exercises to follow but also gain an understanding of why these exercises are necessary. Specifically, this training covers several key areas, including:

- The anatomy and function of the spine, so company workers are provided with foundational knowledge about spinal anatomy and the mechanics of the spinal column, the mechanics of movement, the role of supporting muscles and the root factors that explain back pain.
- The identification of the most common work-related back injuries within the residential care sector, particularly those caused by overexertion, repetitive movements and improper lifting techniques.
- The relationship between physical activity and pain prevention, including an introduction to the preventive benefits of movement and stretching and the role that proactive engagement in exercise can play in reducing any discomfort and injury risk over time.

In addition to this theoretical training, the initiative includes practical training in order to develop hands-on skills for safer work practices. For this purpose, the initiative includes practical training on a structured set of exercises and stretching routines aimed at strengthening the muscles that support the spine and improving flexibility. Specifically, four key exercise categories are presented, namely: i) general stretching exercises, designed to loosen stiff muscles and enhance flexibility; ii) upper body warm-up exercises, focused on preparing the arms, shoulders and back for lifting and repetitive motions; iii) core and back strengthening routine exercises, designed to enhance core stability and spinal support; and iv) lower body strengthening exercises, reinforcing leg strength, particularly quadriceps, hamstrings and glutes.

Figure 1: Screenshot of the general stretching and core and back strengthening routine exercises proposed by the 'Back School' initiative



Source: GSR S Coop

The initiative recommends workers perform both the general stretching and the upper body warm-up exercises before beginning each shift and engage in both core/back and lower body strengthening exercise routines at least twice per week.

To ensure that the lessons learned in training sessions are not forgotten, posters and signage have been placed in dressing rooms, illustrating proper lifting techniques and recommended stretches to serve as constant reminders of the importance of these activities.

In addition to the 'Back School' activities, the company also provides ad hoc training and guidance activities on the correct and optimal use of existing assistive technical equipment (patient cranes, electric articulated beds, ergonomic chairs, etc), as well as training on ergonomic techniques and safe postures for real-life tasks (patient handling, object lifting), always under the supervision of in-house physiotherapists. All these activities are aimed at minimising physical effort and reducing the likelihood of back strain.

What was achieved?

The 'Back School' initiative has resulted in several positive quantitative and qualitative outcomes and results. According to an ad hoc survey conducted among company workers,⁵ a large part of the workforce (approximately 72%) considers the initiative beneficial, both for their personal health and their ability to perform daily tasks at work more comfortably. Approximately three in 10 workers reported an increase in flexibility as a result of participating in the exercise programme and have experienced a reduction in back pain. By way of contrast, only 27% of workers suggested not having experienced changes.

The initiative has also heightened awareness of existing occupational health risks among workers and the importance of injury prevention and ergonomic safety activities, particularly those related to back injuries as a result of physical overload. In this regard, an interviewee noted that workers are provided with information and knowledge to better understand back health and ergonomic principles, empowering them to identify and mitigate risk factors that they may have previously overlooked. Also, the initiative has reinforced the existing organisational workplace OSH-related culture, further promoting workplace health and wellbeing as a collective priority.

Despite these positive results, the initiative has only moderately reduced the back-related incidence rate of accidents with sick leave among the company workforce.⁶ Several reasons are mentioned as

⁵ This survey was conducted in 2017.

⁶ Even more, and according to information for the time period 2020-2022 (latest available years), the incidence rate has experienced an upward trend (GSR, 2022).

possible explanations for this result. Firstly, it is not clear that the largest proportion of company workers regularly perform the recommended exercises and incorporate them into their daily pre-shift working routines. Secondly, there is still a dominant OSH culture among workers that prioritises treatment over prevention, in the sense that many workers continue to seek physiotherapy services only after they begin experiencing discomfort, rather than incorporating regular stretching and strengthening exercises to prevent injuries before they occur.

Success factors and challenges

The implementation of the 'Back School' initiative has resulted in both meaningful results and outcomes, as well as several challenges. One of the foremost reasons for the initiative's success refers to its specific focus intended to provide a solution to an ad hoc OSH-related problem particularly acute among sector workers in general and especially among nursing assistants and geriatric caregivers.

Another success factor refers to the comprehensive, well-structured and practically oriented approach of the initiative that has been based on a structured training programme to ensure that workers receive standardised and effective training across all residential centres of the company. Also, the initiative does not merely offer theoretical knowledge but also incorporates practical training. This dual approach, combining theoretical education with hands-on application, allows workers to understand why these measures are important but also how to implement them effectively in their daily routines.

Another major element underpinning the positive outcomes is the direct involvement of in-house physiotherapists in the training process. This not only enhances the credibility of the training among workers but also ensures that this training is tailored to the specific company workers' needs and risks associated with their work environment.

Furthermore, the widespread acceptance and perceived value of the initiative among workers (72% of participants positively viewed the initiative) shows that the initiative has been positively perceived as beneficial for the worker's back health and daily work activities, fostering at the same time an increased awareness of OSH issues.

Despite these successes, the 'Back School' initiative has faced several challenges, the most significant being the difficulty in ensuring consistent integration of the preventive techniques into the workforce's daily work routines (surveys conducted in 2017 show that 57% of workers only practised the exercises occasionally).

In this regard, the initiative has not yet resulted in a deep cultural, behaviour-related change to ensure the consistent application of these techniques beyond the training environment, so the workforce prioritises OSH-related preventive solutions over reactive ones.⁷ This cultural shift is still difficult to be implemented, as it takes time to change and implies an additional need for sustained managerial reinforcement and support activities in order to maintain GSR S Coop workforce's engagement over time, including the management of periodic refresher courses and campaigns and leadership support. Without such reinforcements, the initial enthusiasm among workers tends to disappear and they revert to old habits, so challenges remain in fostering long-term behavioural change and ensure sustained participation.

Transferability to other EU Member States

The 'Back School' initiative can be regarded as a valuable model for preventing work-related back injuries in the residential care sector, with high potential transferability of the initiative to other EU Member States. Firstly, the risks associated with moving, lifting and repositioning elderly or disabled individuals exist in all residential care environments, regardless of geographical location. Secondly, the core principles of the initiative (that is, theoretical education combined with ergonomic education and strengthening exercises) can be applied in any professional setting where such physical demands are prevalent.

⁷ Typically, workers unconsciously opt for receiving physiotherapy treatment once discomfort or pain has already manifested, rather than consistently practising exercises to prevent such issues from arising in the first place.

Additionally, the management of the initiative is straightforward and cost-effective, relying primarily on in-house physiotherapists and specialists to conduct training sessions. This makes the initiative easier to integrate into existing company OSH frameworks.

Finally, the initiative aligns with broader EU priorities on workplace safety and health, particularly reflected in the current 'EU Strategic Framework on Health and Safety at Work 2021-2027', which stresses among other elements the importance of improving prevention activities of work-related diseases and accidents across various sectors.

Notwithstanding the initiative's potential for adaptation across different EU Member States, the successful implementation in different national contexts would require careful adaptation to local regulatory frameworks, workforce demographics and organisational cultures. Thus, EU Member States might have varied cultural attitudes towards preventive healthcare and self-care, influencing how receptive workers are towards the initiative's activities and recommendations (for instance, workers in some EU Member States may be less inclined to participate in structured physical activity during work hours). In this regard, the initiative should be customised and tailored to each national context in order to reflect specific national traits and action preferences at Member State level, via for instance pilot testing projects to allow for adjustments based on worker feedback and organisational needs. Additionally, and based on the concrete company experience, it is important to encourage workers' participation so that they may integrate exercises into shift routines through awareness campaigns, incentives and peer support mechanisms. Finally, it should not be forgotten that the initiative should be aligned to each country's OSH regulations and training practices.

Further information

Gestión de Servicios Residenciales Sociedad Cooperativa (GSR S Coop).

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