

JUDO UKEMIS: A TOOL FOR PROTECTING THE HEALTH AND QUALITY OF LIFE OF CHILDREN. SAFE FALL-SAFE SCHOOLS[©].

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The importance of falls in modern society

The World Health Organization (WHO) identifies falls as the second leading cause of death worldwide due to accidental or unintentional injuries. In this scope it is remarked that *prevention strategies should emphasize education, training, creating safer environments, prioritizing fall-related research and establishing effective policies to reduce risk* (WHO, 2021a). Recently, safely recommendations (WHO, 2021b) have been published providing evidence-based strategies to prevent and manage falls for children and other target-groups.

The importance of this issue has long been pointed out by the World Health Organization. This organisation has presented the following data that show us the reality of this serious social problem (WHO, 2021a). This will provide an opportunity to look at a global health and safety problem of which we are often completely unaware. For example, unintentional falls are the second leading cause of death in the child population; they are second only to road traffic accidents. Worldwide there are 37.3 million falls requiring medical attention, 684 000 of them result in death and an estimated 172 million more are left with short or long-term disability. Within this data, children are one of the populations at risk identified by the WHO.

Contextualising this issue further, children between the ages of 4 and 16 will die today in Europe as a result of an unintentional fall; the WHO (2021) reports 14 children. Tomorrow another 14 and so on until the end of the year. But this is only the tip of the iceberg. Two thousand two hundred and forty are hospitalised. Twenty-eight thousand emergency room attendances. These truly outrageous figures must be added an economic and life-year cost that in countries such as the United States is estimated at 50 billion dollars a year. And finally, let us not forget another very important aspect, namely the disabilities and psychological

problems associated with falls. Different studies show the relevance of the topic and how, in addition, this problem does not seem to have a tendency to disappear, on the contrary, it is continuously increasing. In this context, the most recent Eurosafe data presented last November (2022), which for the first time shows that falls are higher than traffic accidents for this population.

Obviously, the WHO could not remain indifferent to this important social and economic problem. In this sense, it challenges the different institutions, pointing out the need and importance of education and research in relation to falls in two target populations: children and older adults.

And what has been the response of the scientific community to this challenge launched by the WHO? Regard this, we can find preventive programmes and educational programmes. Preventive programmes have been proposed, which, although necessary, do not solve the problem, as children continue and will continue to fall. On the other hand, proactive action is proposed in response to the fall. Two programmes are presented here: Vallen is ook een sport (Nauta et al., 2013) and Safe Fall-Safe Schools[©] (DelCastillo-Andrés, et al., 2017). Both are based on combat sports to carry out their intervention in a population of school children. But, the difference between these two programmes is that, the first, Nauta and colleagues, found no significant differences between the experimental and control groups. However, the data obtained in the Safe Fall-Safe Schools[©] programme found significant differences in all its interventions.

Safe Fall-Safe Schools[©] becomes the first programme, worldwide, adapted to the school context for the proactive treatment of falls. At this point, we can establish a convergence between the demand shown by the World Health Organization, and other international organisations, and the proactive proposal of Judo through the Safe Fall-Safe Schools[©] programme. The programme consists in providing trainings on falling prevention and falling skills based on the Ukemi Judo skill to physical education (PE) teachers for them to apply in their classes (not only when teaching Judo, but seeking the fall prevention in any other sport, like gymnastics, volleyball, football, parkour, roller-skating, etc., or physical exercise situation).

To understand the Safe Fall-Safe Schools[©] programme, it is necessary to see judo not only as a sport. We must see it with the philosophy with which Jigoro Kano created it, in his proposal of a judo at the service of society. This social proposal of Judo will be directed towards

improving the health and quality of life of two target populations: older adults and children. It is on this second population, children, that the development of the Safe Fall-Safe Schools[©] programme is focused, specifically on unintentional falls related to this period of life.

What is Safe Fall-Safe Schools[©]?

Is an educational programme based on Judo, methodologically developed through scientific research, to teach children how to fall safely and securely. As it is easy to deduce, Judo presents, in its Ukemis, a perfect tool to address this World Health Organization challenge; Safe Fall can respond to WHO, in a consistent and objective manner.

To continue, a brief overview of the programme's background is provided. Knowing the past gives us a better understanding of where we are going. In 2016, during the European Judo Union Congress, held in Porec, we put forward the idea of developing the slogan judo more than sport. For this, as you can see, the concepts, judo for education, judo for health and judo for society should be related. With the purpose of training children and youth and prevent falling and learning how to fall, the European Judo Union (EJU) and the University of Seville (US), with the support of the Andalusian Federation of Judo and Associated Disciplines (FANJYDA), are developing, since 2016, the programme Safe Fall-Safe Schools[©] at schools.

To carry it out, the University of Seville, the EJU and the Andalusian Judo Federation signed an Agreement of Collaboration, and began to carry out research and to improve the Safe Fall-Safe Schools[©] programme. Two years later, in view of the promising results of the research carried out, the World Health Organization invited us to a meeting in Copeinaiguen to present our project and the data obtained so far. In this way, our ultimate goal will be achieved: Judo, through its Ukemis, to become, first, a promising program for the World Health Organization and, subsequently, for it to recommend judo for the proactive treatment of falls. This will respond to the social demands of the WHO.

The programme has been structured as follows. A progressive teaching method is established, adapted to the school context, looking for developing the falling skill. Therefore, we have four classification criteria that have been used to establish the design and progression of the exercises proposed in Safe Fall-Safe Schools[©]. The first of all, Centre of gravity height, will lead to the establishment of the different levels (initial, average and advanced). We will always start with the initial level where the centre of gravity is in contact with the ground.

Secondly, the number of axes of rotation. We can establish falls on the longitudinal, transverse and sagittal axes. The more axes combined, the greater the difficulty of the exercise. Third, number of participants and level of uncertainty in decision-making (first we will pose exercises in which the person decides when to fall. Then a partner will decide when to fall and finally, among several partners, we will not know who will cause the fall). Fourthly, we will propose exercises from lower to higher speed and inertia in order to progress in difficulty. And finally, we have the direction of the fall. We will use Ushiro, Yoko, Mae and Zempo Kaiten. The progression of the exercises will be adapted to the methodology and didactic principles of Physical Education.

Based on the above, the combination of all the above variables has allowed us to design, so far, more than 129 specific exercises to teach children to fall in a safe and secure way. So, from our point of view, the overall vision of the programme has enough identity and coherence to consider including a new motor skill in the school context, “the falling skill”.

Moreover, in this way, we would bring Judo closer to the school, thus highlighting its educational and social potential.

What have the countries involved in the program done so far?

The programme is currently being developed more intensively in Hungary, Italy, Denmark, Croatia and Spain. In these terms, 48 world and international congresses have been attended, 4 doctoral thesis on proactive fall prevention based on Judo was published, and 17 Master's theses were completed. Likewise, the following have been published 15 papers in high academic impact, 11 book chapters have been written and, presented the programme at 4 international seminars, reaching out in training to more than 15 countries in the European and worldwide context.

What are the material and infrastructure needs for Safe Fall-Safe Schools®?

In relation to the programme, the answer is that we don't need any additional material to what the centres have for their Physical Education class. We believe that this is a great strength. Another great strength is its transferability to all sports.

What are the benefits for Judo from the Safe Fall-Safe Schools[®] programme?

To answer this question we must look again to the World Health Organisation. Through the Safe Fall-Safe Schools[®] programme, Judo could be recommended by the WHO as a useful tool for the proactive treatment of falls in their target populations. This would put Judo at the forefront as a healthy sport for children, with the potential increase of Judo practitioners worldwide.

This perspective, Judo will be seen as an activity committed to protect the health and safety of children. This will enhance the image of Judo further, from a social perspective. Includes a wide range of exercises to work on ukemis in the clubs, interesting to motivate our students.

Conclusion

In conclusion, we can say that Safe Fall-Safe Schools[®] is a useful programme to reduce the harmful consequences of falls. The Safe Fall-Safe Schools[®] programme can be easily introduced in physical education classes and could visualise Judo at school for students, teachers and parents.

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