Effects of an online school-based intervention on postural education knowledge in primary school teachers: The PEPE study

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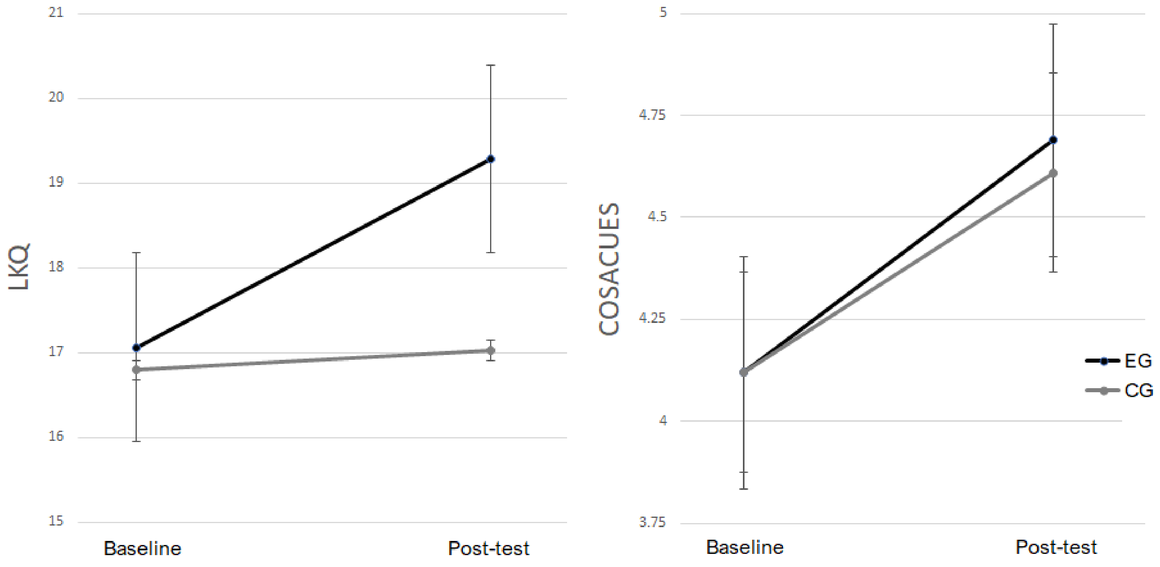
INTRODUCTION

Low back pain (LBP) is a prevalent musculoskeletal disease that affects a large percentage of the working population, including teachers. The WHO has identified the **school as an effective environment** for improving child health. For this reason, **the figure of the teacher** is a fundamental piece in the process of knowledge acquisition about postural education and prevention of LBP among schoolchildren. The present study aims to determine the effect of a **telematic postural education program** on back care knowledge in primary school teachers.

METHODS

The PEPE study (Proyecto de Educación Postural en la Escuela) was performed in Majorca (Spain), with 85 primary school teachers, of whom 17.6% were physical education teachers and 82.4% were classroom teachers. Participants were evaluated two times, at baseline and after 16 weeks of intervention. The instruments used were: **Low Back Pain Knowledge Questionnaire (LKQ)**, to investigate into specific knowledge about LBP; and **COSACUES-AEF Questionnaire**, that aims to measure the knowledge that young people have about health and back care related to the practice of activity and physical exercise.

RESULTS



	Experimental group	Control group	*P*-value*		
			Time	Group	Time*Group
LKQ					
General aspects	0.84 (1.65)	-0.35 (1.72)	0.066	0.088	0.046
Concepts	0.50 (1.02)	0.14 (1.03)	0.018	0.834	0.172
Treatment	0.88 (2.92)	0.14 (2.50)	0.153	0.024	0.296
Total score	2.22 (4.05)	0.24 (3.93)	0.020	0.028	0.058
Cosacues					
Total score	0.57 (3.13)	0.48 (2.30)	0.146	0.921	0.907

At baseline lifetime **LBP prevalence** rate was 95.1% in the study sample. Last 7-days LBP prevalence was 41% and LBP point prevalence was 29.5%. The average of **specific knowledge** about LBP was 16.93 (range 0-24). The knowledge score about **health and back care** related to the practice of activity and physical exercise was 4.12 (range 1-10).

The total scores of LKQ significantly increased in the groups (*p-time=0.020*), and also comparing increases in both groups (*p-group=0.028*). However, no significant interaction between time and group about changes in total scores was found either with LKQ (*p-time*group= 0.058*) and COSACUES questionnaire (*p-time*group=0.907*).

CONCLUSION

The present intervention, based on postural education and carried out **100% telematically**, has not managed to improve postural knowledge as expected. However, after the intervention, the postural education knowledge in the EG was significantly higher than at baseline. We recommend the **use of mixed face to face and telematic** interventions to achieve better results.

The **findings** highlight the need of specific investments in strengthening the **capabilities of teachers** to implement health and back care promotion in schools in order to **implement** new **school health strategies** from early ages

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