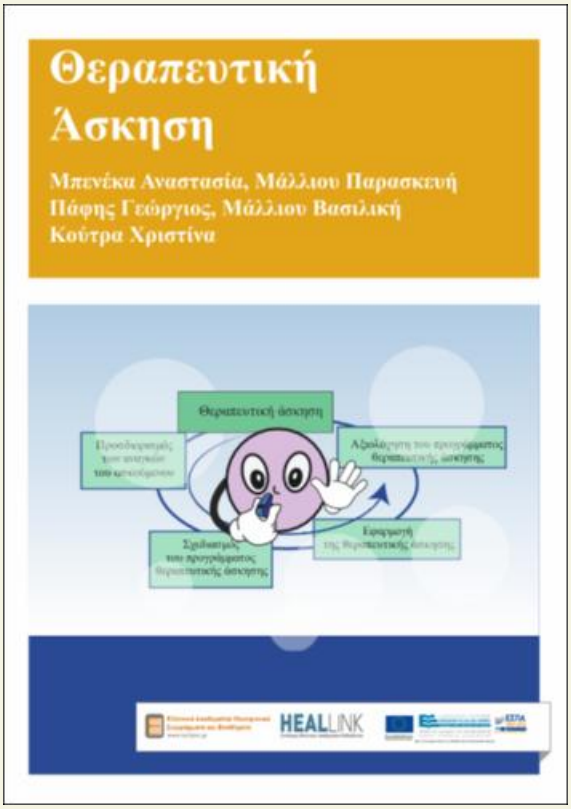

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Abstract

Initially, in the introduction, exercise is presented as a way of treatment for specific health problems and its types and techniques are briefly mentioned. The following chapter describes exercises to improve joint range of motion (passive and active range of motion). The limiting factors of range of motion and the types of exercises proposed to improve range of motion are discussed, so that the student can then design appropriate range of motion improvement programs. After that, reference is made to the types of stretches and the design of programs with stretching exercises. The next chapter deals with isokinetic exercise (concentric and eccentric exercise), isokinetic assessment, isokinetic parameters and their applications. Then both isometric exercise, isometric evaluation and isotonic exercise (concentric and eccentric exercise) and isotonic evaluation are discussed. The distinction between closed and open kinetic chain exercises and when each is selected in therapeutic exercise programs is also presented. The next chapter develops exercises aimed at improving proprioception through balance exercises. It then shows how muscle control improvement can be achieved with Pilates-type exercises and the use of Swiss balls. This is followed by a discussion of acqua exercise and how to design an acqua exercise programm according to the musculoskeletal and neurological problems of the participant. Finally, examples of designing therapeutic exercise programmes are given that follow all all the types of exercise mentioned above in order to improve practical application.

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