

Effect Considering of Mild and Moderate Visual and Auditory Impairment on the Activities of Daily Living and Balance Performance in the Elderly

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Abstract

Objective: The purpose of this research was to study the effect of mild and moderate visual and auditory impairment on activities of daily living (ADL) and Balance in the elderly people.

Materials & Methods: In this analytical and comparative research, Thirty sexes elderly persons were selected simply and conveniently among 370 men and women whom were residing in 6 sanitariums in the north of Tehran. At the end, Snellen visual chart & Audiometer were used to measure visual acuity & auditory intensity. Samples were taken in 4 groups: 1- with visual impairment 2- with auditory impairment 3- with combined visual & auditory impairment 4- without any sensory impairment. Finally Berg balance scale and physical self maintenance scale as an ADL scale were used in 4 groups.

Results: Relative risk in ADL for visual impairment was 2.46, for auditory impairment was 1.5 and for combined visual and auditory impairment was 2.85. Auditory impairment didn't have any effect on balance and falling. However even mild visual impairment was an effective factor on balance ($P<0.001$). Contemporary auditory and visual impairment was an effective factor on balance ($P<0.001$).

Conclusion: Even mild and moderate auditory impairment can cause disability in the basic ADL. If mild and moderate auditory impairment exist simultaneously with visual impairment, the person had balance disability. Auditory impairment didn't have any effect on balance.

Keywords: Auditory / Visual / Activities of daily living / Balance / Elderly