

## EXPERTISE EYE EXAMINATION: COMPARISON OF CRITERIA USED IN THE UNITED STATES OF AMERICA, SPAIN AND BRAZIL.

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**INTRODUCTION:** The expertise medical evaluation in eye diseases should be performed by medical experts who have adequate knowledge in ophthalmology in order to make it able to properly relate the parameters of the eyes and their surrounding structures exam to the activities performed by visually impaired patients (1) . Moreover, it is imperative that medical professionals also master the principles of occupational medicine, in order to correlate the visual condition of the patient with the work to be performed by itself, considering the parameters laid out in Social Security legislation.

**OBJECTIVE:** To identify and compare the criteria set forth in current legislation to be applied in eye expert evaluation for evidence of incapacity due to ocular causes in Brazil, the United States and Spain.

**METHOD:** This study was a literature review on Medline, Lilacs and Scielo databases using the keywords “perícia”, “exame oftalmológico” and “perícia oftalmológica”, as well as sites related to the National Social Security Institute (INSS) of the brazilian Ministério da Previdência e Assistência Social, Social Security Administration of the United States and Ministerio de Empleo y Seguridad Social from Spain.

**RESULTS:** In Brazil, the criteria normally used are described in Decree 5296 of 02 December 2004 (2), which considers visually impaired those ones who matches the following parameters: visual acuity and visual field. With respect to visual acuity, two concepts are used, based on the Snellen methodology: blindness - visual acuity of 0,05 or less in the better eye with the use of a correcting lens, and low vision - visual acuity between 0,30 and 0,05 in the better eye with best optical correction. As for the visual field, it is considered as the sum of the visual field in both eyes less than 60 degrees. The simultaneous occurrence of any of the above conditions must also be considered. In the

United States, the statutory blindness is defined in the Social Security Act (the Act)(3), which is based on three criteria: visual acuity, visual field and visual efficiency. For loss of visual acuity, the Snellen methodology is also considered: remaining vision in the better eye after best correction is 20/200 or less. On examination of the visual field, it is considered the widest diameter subtending an angle around the point of fixation no greater than 20 degrees or a mean deviation of -22 or worse, determined by automated static threshold perimetry or a visual field efficiency of 20 percent or less as determined by kinetic perimetry. For loss of visual efficiency, it is considered the visual efficiency of the better eye of 20 percent or less after best correction. For some of them, the disability is considered only if the visual disorder also meets the duration requirement. In Spain, based on Royal Decree 1971/1999 (4), it is used the International Classification of Functioning, Disability and Health proposed by the World Health Organization (WHO) (5), which subdivides disabilities in 16 chapters (corresponding to Annex 1A), based on different organs and systems which make up the human body, whereas chapter 12 related to the visual apparatus. Moreover, they are taken into account the personal and social circumstances of the individual, which may influence its ability, further increasing its loss (corresponding to Annex 1B). Parameters such as visual acuity, visual field, ocular motility, color vision and night vision are used in Annex 1A to determine, in percentage, the degree of visual impairment, based on predetermined tables. In turn, parameters such as communication skills, physical activities, manual functions and activities of self care are used in Annex 1B to determine, in percentage, the degree of social disability, also based on predetermined tables. The degree of disability will be determined by summing the percentage of disability resulting from the application contained in Annex 1A and Annex 1B.

**DISCUSSION:** In the expert assessment of disability, concepts such as visual acuity and visual field are discussed on all of three laws. For visual acuity, in Brazil, it is considered the value of 0.05 for blindness and 0.3 to 0.05 for low vision. There is no such distinction in the United States, which consider only the value of 0.10 for blindness. In Spain, the deficit in visual acuity is measured through pre-set tables that correlate visual acuity of better eye with the worse eye, graduating in acuity values that will later be converted into percentage of disability. Regarding the visual field, Brazil and the United States do not consider the same values, but the method employed by them is the same, based on perimetry. As for visual acuity, Spain sets out criteria based on conversion tables for visual field deficit and quantify, in percentage, the degree of disability, considering the possibility of simultaneous

occurrence of losses in the field and visual acuity. U.S. law also consider the visual efficiency as a parameter of disability. In Brazil, the visual efficiency is adopted by Social Security based on internal guidance for 2004 (6). In Spain, the personal and social circumstances in which the individual belongs are also considered in the evaluation of disability. In addition to visual impairment quantitative, the assessment takes into account patients difficulties to perform daily and self care activities.

CONCLUSION: Comparing the expert parameters adopted by Brazil, the United States and Spain, it was identified similarities between them, but Spain takes into account personal and social criteria which patients are inserted in, based on the classification proposed by WHO. Brazil should include these parameters, contained in the International Classification of Functioning (ICF).

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