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## **Impacts of visual impairment on quality of life and family functioning in adult population**

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### **Abstract**

**Background:** Impairment of vision can adversely impact the patient's quality of life and negatively affect the family dynamic. However, evaluation of the implications of visual impairment on the patient's family is often overlooked.

**Objectives:** To summarize the impacts of visual impairment on the patient's quality of life and to explore the negative implications of visual impairment on the patient's family dynamic.

**Methods:** Electronic Medline database search was conducted between 1946 and 2015 to evaluate the impacts of visual impairment on the quality of life and its effects on the patient's family functioning and relationship. The search was restricted to articles published in English and adult more than 18 years old. The initial 80 articles were reviewed and 16 relevant studies were selected in this analysis.

**Results:** Twelve studies assessed the impact of visual impairment on the patients' quality of life. Four studies investigated the effects of visual impairment on the patient's family dynamic. Visual impairment has negative impacts on different aspects of life including social, psychological, and physical health. Family functioning and relationship can be severely influenced by visual impairment.

**Conclusion:** Assessment of family functioning is crucial in the evaluation of visually impaired patients. Enhancement of adaptation in patients with visual impairment can be accomplished when working with patients and their families.

**Keywords:** Visual impairment, psychosocial impacts, quality of life, family relationships, family functioning.

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### **1. Introduction**

Visual impairment is a common health problem affecting about 285 million individuals worldwide [1]. Negative impacts of visual impairment on patients' quality of life were well documented by various studies [6-17]. Data collected from twelve countries have shown the adverse impacts of visual impairment on individuals' employment [2]. Involvement of family members in the rehabilitation services of visually impaired individuals has shown many advantages [3]. Family support either physically or emotionally is crucial in the adjustment process of patients with visual impairment [4]. Thus, attending to family concerns is an integral part to avoid maladjustment of those patients.

Negative impacts of visual impairment are not exclusive to patients but can extend to involve their families [18-21]. However impact of visual impairments on the patient's family is usually underestimated [5]. The objective

of this analysis is to explore the impacts of visual impairment on the patient's quality of life and the family dynamic.

### **2. Methods**

The electronic database of OVID MEDLINE was searched to identify relevant articles published between 1946 and 2015. The following Keywords were used: visual impairment, quality of life, social isolation, stress, depression, family relations, and family functioning. The search was restricted to article published in English language and adult older than 18 years old. The initial 80 articles were reviewed and 16 relevant studies were selected and included in this analysis.

### 3. Results

Twelve studies examined the impact of visual impairment on quality of life. Four studies evaluated the effects on family functioning.

#### 3.1 Visual impairment and patient's quality of life

Consequences of visual impairment on patient's quality of life were evaluated by many studies [6-17]. Individuals with impaired vision were at high risk to develop depressive symptoms and being more functionally impaired [6]. A case-control study revealed that visual impairment is substantially associated with emotional distress and functional impairment [7]. Mobility and daily tasks of visually impaired individuals were significantly affected [8]. The areas of greatest restriction were associated with reading, outdoor mobility, participation in leisure activities, and shopping [9]. Furthermore, visual impairment was identified as a contributing factor to nursing home placement [10,11]. Moreover, driving difficulty, risk of fracture, and high rate of falls and use of walking aids were associated with visual impairment [11]. In addition, visual impairment was indicated as a significant risk factor for hip fracture [12]. In one study, participants aged 40 years and older with visual impairment were followed for 5 years and mortality rate was high in this group [13]. Visual impairment reduces independency of individuals and increases the reliance on family and friends support [14]. Attending social and religious activities was significantly reduced [15]. The adverse effects on the quality of life are not limited to bilateral visual impairment. Patients with unilateral visual impairment (Visual Acuity less than 6/24 in the worse eye) had significant limitation due to physical, social and emotional issues [16]. Furthermore, those individuals had safety problems especially falling and more dependent living [17].

#### 3.2 Visual impairment and family dynamic

Investigation of family malfunctioning as a result of visual impairment of one family member has been examined in many studies [18-21]. Visual impairment may change the roles and responsibilities within family system and family members may develop care giver strain [18]. Furthermore, feeling of guilt for being a burden may isolate visually impaired individuals from their families [18]. Development of depression in visually impaired individuals can lead to depression of their spouses [19]. This finding was supported by another study which revealed that visual impairment had negative implications on patient's partner including limitation of physical activity, and social participation and development of depression [20]. Women were affected more when their spouses have suffered from visual impairment [20]. Moreover, Bernbaum *et al* reported a direct correlation between severity of visual impairment and separation of spouses [21].

### 4. Discussion

There is a great number of evidences described the negative impacts of visual impairment on the quality of life of individuals with visual impairment [6-17]. Visually impaired individuals who receive positive family support revealed better psychological wellbeing, more life satisfaction, less depressive symptom and easier adaptation to their situations [22]. Although negative impacts of visual impairment can affect family relationship [18-21], evaluation of family functioning is often overlooked.

This review proves that assessment of the family functioning is an integral part of the evaluation of individuals with visual impairment. Visual impairment may disrupt the family homeostasis and underestimation of family concerns may affect the adjustment process of visually impaired patients and their families. Therefore, better outcome can be achieved with family-centered approach rather than patient-centered approach when dealing with a patient with visual impairment.

### 5. Conclusion

Quality of life is adversely influenced in individuals with visual impairment. Negative impacts of visual impairment can be manifested as family malfunctioning. Therefore, Assessment of visual impairment should include patients and their families. Better adjustment to visual impairment can be achieved with family-centered approach.

### References

- [1] Mariotti, A. P., & Pascolini, D. Global estimates of visual impairment. *Br J Ophthalmol*, 2012; 96: 614-618.
- [2] Mojon-Azzi, S. M., Sousa-Poza, A., & Mojon, D. S. Impact of low vision on employment. *Ophthalmologica*, 2010; 224(6): 381-388.
- [3] Rees, G., Saw, C., Larizza, M., Lamoureux, E., & Keefe, J. Should family and friends be involved in group-based rehabilitation programs for adults with low vision?. *British Journal of Visual Impairment*, 2007; 25(2): 155-168.
- [4] McIlvane, J. M., & Reinhardt, J. P. Interactive effect of support from family and friends in visually impaired elders. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 2001; 56(6): P374-P382.
- [5] Seybold, D. The psychosocial impact of acquired vision loss-Particularly related to rehabilitation involving orientation and mobility. *In International congress series Elsevier*. 2005; 1282: 298-301.
- [6] Rovner, B. W., & Ganguli, M. Depression and disability associated with impaired vision: the MoVies Project. *Journal of the American Geriatrics Society*, 1998; 46(5): 617-619.

- [7] Scott, I. U., Schein, O. D., Feuer, W. J., Folstein, M. F., & Bandeen-Roche, K. Emotional distress in patients with retinal disease. *American Journal of Ophthalmology*, 2001; 131(5): 584-589.
- [8] West, S. K., Rubin, G. S., Broman, A. T., Munoz, B., Bandeen-Roche, K., & Turano, K. How does visual impairment affect performance on tasks of everyday life? The SEE Project. *Archives of Ophthalmology*, 2002; 120(6): 774-780.
- [9] Lamoureux, E. L., Hassell, J. B., & Keeffe, J. E. The determinants of participation in activities of daily living in people with impaired vision. *American Journal of Ophthalmology*, 2004; 137(2): 265-270.
- [10] Wang, J. J., Mitchell, P., Cumming, R. G., & Smith, W. Visual impairment and nursing home placement in older Australians: the Blue Mountains Eye Study. *Neuro-Ophthalmology*, 2003; 10(1): 3-13.
- [11] Klein, B. E., Moss, S. E., Klein, R., Lee, K. E., & Cruickshanks, K. J. Associations of visual function with physical outcomes and limitations 5 years later in an older population: the Beaver Dam eye study. *Ophthalmology*, 2003; 110(4): 644-650.
- [12] Ivers, R. Q., Optom, B., Cumming, R. G., Mitchell, P., Simpson, J. M., & Peduto, A. J. Visual risk factors for hip fracture in older people. *Journal of the American Geriatrics Society*, 2003; 51(3): 356-363.
- [13] McCarty, C. A., Nanjan, M. B., & Taylor, H. R. Vision impairment predicts 5 year mortality. *British Journal of Ophthalmology*, 2001; 85(3): 322-326.
- [14] Wang, J. J., Mitchell, P., Smith, W., Cumming, R. G., & Attebo, K. Impact of visual impairment on use of community support services by elderly persons: the Blue Mountains Eye Study. *Invest Ophthalmol Vis Sci*, 1999; 40(1): 12-19.
- [15] West, S. K., Munoz, B., Rubin, G. S., Schein, O., Bandeen-Roche, K., Zeger, S. & Fried, L. P. Function and visual impairment in a population-based study of older adults. *Invest Ophthalmol Vis Sci*, 1997; 38(1): 72-82.
- [16] Chia, E. M., Mitchell, P., Rochtchina, E., Foran, S., & Wang, J. J. Unilateral visual impairment and health related quality of life: the Blue Mountains Eye Study. *British Journal of Ophthalmology*, 2003; 87(4): 392-395.
- [17] Vu, H. T. V., Keeffe, J. E., McCarty, C. A., & Taylor, H. R. Impact of unilateral and bilateral vision loss on quality of life. *British journal of Ophthalmology*, 2005; 89(3): 360-363.
- [18] Percival, J., & Hanson, J. 'I'm Like a Tree a Million Miles from the Water's Edge': Social Care and Inclusion of Older People with Visual Impairment. *British Journal of Social Work*, 2005; 35(2): 189-205.
- [19] Goodman, C. R., & Shippy, R. A. Is it contagious? Affect similarity among spouses. *Aging & Mental Health*, 2002; 6(3): 266-274.
- [20] Strawbridge, W. J., Wallhagen, M. I., & Shema, S. J. Impact of spouse vision impairment on partner health and well-being: A longitudinal analysis of couples. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 2007; 62(5): S315-S322.
- [21] Bernbaum, M., Albert, S. G., Duckro, P. N., & Merkel, W. Personal and family stress in individuals with diabetes and vision loss. *Journal of Clinical Psychology*, 1993; 49(5): 670-677.
- [22] Reinhardt, J. P., Boerner, K., & Horowitz, A. Good to have but not to use: Differential impact of perceived and received support on well-being. *Journal of Social and Personal Relationships*, 2006; 23(1): 117-129.