

Enhancing The Quality of Healthcare Services for Patients with Visual Impairment in an Outpatient Eye Care Unit

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Abstract

In the year 2015, there was a global estimate of 253 million individuals experiencing visual impairment. Among them, 36 million were classified as blind, and an additional 217 million faced moderate to severe visual impairment (MSVI). The prevalence of those with distance visual impairment was 3.44%, with 0.49% being blind and 2.95% having MSVI. Additionally, it is estimated that 1.1 billion people were affected by functional presbyopia. The combination of a growing and aging population is poised to lead to a significant surge in the population of individuals facing blindness or moderate to severe visual impairment (MSVI). Two additional factors posing substantial risks for the future are the notable global increase in the number of people diagnosed with diabetes (which can result in diabetic retinopathy, a potentially sight-threatening condition) and those experiencing high myopia. In summary, there could be approximately 703 million people dealing with blindness or MSVI by the year 2050. A substantial investment in eye health services, especially in outpatient eye care unit, coupled with measures to shield the poorest segments of society from out-of-pocket expenses, is imperative to ensure universal access to eye health services and prevent a potential future human and societal crisis.

Keywords: Visual impairment; Healthcare services; Blindness; Safety; Quality

1. Introduction

Visual impairment (VI) is characterized by a decrease in visual acuity or field of vision that cannot be corrected by spectacles or contact lenses. Approximately 285 million individuals are estimated to be affected by VI, with 39 million experiencing blindness. Visual impairment can occur from birth, childhood, early adulthood, or later in life, with individuals over 50 comprising the largest segment of the global blind and visually impaired population, accounting for 82% (Pascolini, 2012). The 2012 Susenas survey indicated that approximately 2.45% of the Indonesian population, or around 6,515,000 individuals, had disabilities, with visual impairment (blindness) contributing around 29.63%. Special needs communities, including the visually impaired, face significant challenges in mobility and dependence (Aqila, 2012). The 2018 Riskesdas (Basic Health Research) indicates a disability proportion of 3.3% among individuals aged 5-17 years, 22% among those aged 18-59 years, and 2.6% for individuals aged 60 and above, experiencing severe disabilities and total dependence. Additionally, there has been a decline in road traffic injuries from 42.8% (Riskesdas, 2013) to 31.4% (Litbangkes, 2019). However, alternative sources suggest that the number of people with disabilities in Indonesia has reached 7.8 million (Firdaus and Iswahyudi, 2010). The issue of disabilities appears to receive

less attention compared to other social problems, evident in the lack of public support, including accessible healthcare services for people with disabilities (Irwanto, 2010). Limited health policies supporting disabled individuals, coupled with inadequate socialization efforts, contribute to the underutilization of programs by people with disabilities (Durham et al., 2014).

People with visual impairment or blindness face challenges in accessing healthcare information and facilities, leading to suboptimal healthcare (Cupples, 2012). This marginalized group, including those with visual impairment, is susceptible to health inequities and a heightened risk of patient safety incidents compared to the general population (Lecko, 2013). Studies indicate that individuals with VI are more prone to social isolation, potentially exacerbating their susceptibility to patient safety incidents (Sharts-Hopko, 2010). The visually impaired also face an increased risk of medication errors compared to those without visual impairment (Zhi-Han, 2017). Reasons for this heightened risk include difficulties in opening medication containers, distinguishing between different types of containers and tablets/capsules, forgetting to take medication on time, and taking the wrong medication (Zhi-Han, 2017; Cheraghi-Sohi, 2014). Besides, individuals experiencing visual impairment may face challenges at various stages of their engagement with healthcare services, spanning the identification of potential issues to the continuous management of diagnosed illnesses. The crucial elements in mitigating and addressing these challenges involve effective communication and proactive anticipation of difficulties. There is a need to enhance the quality of health services for patients with visual impairment, especially in an outpatient eye care unit.

2. Healthcare Services Quality

Donabedian characterized quality broadly as "the ability to achieve desirable objectives using legitimate means," acknowledging its application beyond healthcare to various sectors. Quality is a term widely used in different contexts, including hospitals, doctors, food, and cars, contributing to the complexity when addressing healthcare quality. However, Donabedian offered a more specific definition of quality of care, describing it as "care expected to maximize an inclusive measure of patient welfare, considering the balance of expected gains and losses throughout the care process" (Donabedian, 1980).

A decade later, the Institute of Medicine (IOM) in the US defined quality of care as "the degree to which health services increase the likelihood of desired health outcomes and align with current professional knowledge". While the IOM's focus on "health outcomes" might appear more restrictive than Donabedian's concept of "patient welfare," their elaboration clarified that desired health outcomes include patient satisfaction and well-being alongside broader health status or quality-of-life measures. The IOM's definition has influenced how quality is understood by various organizations in the USA and internationally (Busse, 2019).

Over the past two decades, various frameworks have emerged with the objective of enhancing comprehension of health systems and facilitating assessments of health system performance (Papanicolas, 2013; Fekri, Macarayan & Klazinga, 2018). While most of these frameworks acknowledge quality as a crucial goal within health systems, they vary in their definitions of quality and in delineating its role in accomplishing overarching health system objectives. One notably influential framework is the WHO (2006a) "building blocks" framework for health systems strengthening. This framework conceptualizes health systems through building blocks such as service delivery, health workforce, information, medical products, financing, and leadership/governance. Additionally, quality and safety are defined within the framework as intermediate goals of health systems, alongside access and coverage. The attainment of these intermediate goals is anticipated to contribute to the overall achievement of health system objectives, encompassing improved health, responsiveness, financial protection, and enhanced efficiency (Busse, 2019).

3. Information Delivery for Patients with Visual Impairment

A review published by RNIB emphasized the significant impact of receiving inaccessible health information on blind and partially sighted individuals. This impact includes the loss of privacy and independence, as someone else is required to read the information for them, potential risks to personal safety (especially concerning medication), and the inability to make informed choices about healthcare. The example provided underscores the serious consequences of a delayed consultation, possibly resulting from the patient's inability to read appointment letters. Many individuals may be hesitant to disclose health or eyesight issues to friends or family, making it challenging to seek assistance for tasks such as finding contact numbers for appointments, arranging transportation to medical facilities, and navigating the attendance process. Additionally, individuals may miss information presented in leaflets or posters (Sibley, 2009; Cupples, 2012).

When dealing with patients with visual impairment, it is crucial to carefully consider how to share information appropriately with the patient, their family, and points of referral. Depending on the patient's level of disability, suitable communication methods may involve sending letters in large print, using different font styles, employing background contrast, or offering information in audio format, via telephone, or electronically (email or compact disc) rather than traditional letters. For individuals with profound visual impairment, the use of Braille letters or information may be necessary. Healthcare providers should inquire about the patient's support network of family or friends and explore how it can be leveraged to assist with their healthcare needs. Possibly the central emphasis in providing information should be to guarantee that details regarding accessibility to general practitioners' surgeries and clinics are presented in diverse formats, encompassing both visual (Cupples, 2012).

4. Assisting Patients with Visual Impairment in Unfamiliar Settings

Initial greetings in healthcare settings should include verbal offers of assistance, especially for individuals with visual impairment who may need clear instructions or physical guidance to navigate the premises. Key considerations for guiding such individuals include furniture placement, lighting, glare reduction, contrasting colors, and the use of tactile, audio, and visual signage. Challenges may arise for visually impaired patients in reading signs, observing others, or communicating effectively with staff. The adoption of electronic systems in healthcare facilities may also pose difficulties for these patients, leading to missed appointments. Healthcare staff should be attentive to identify individuals facing challenges with electronic systems, especially those relying on visual instructions (Cupples, 2012).

In a clinical setting, it is advisable to approach the waiting room to call patients and provide guidance to the consultation room if necessary. Utilize precise and specific language when offering directions or describing the layout of a room, avoiding vague terms like "over there." Considering the limited ability to perceive non-verbal cues, gestures, or visual information, take the time to elucidate the room's layout and provide detailed descriptions of item placements, especially when patients are in unfamiliar surroundings. An illustrative incident involved a blind patient who, due to a lack of information about the bathroom layout, suffered a fall, head injury, and subsequent embarrassment, highlighting the importance of staff awareness in preventing such experiences (Cupples, 2012).

5. Safety Needs

According to Moore and Miller (2003), falls leading to fractures, dislocations, and lacerations are commonly associated with visual impairment in older individuals. Visual impairment is further linked to limited mobility and challenges in performing daily activities. Being placed in the unfamiliar hospital

environment can undoubtedly cause some degree of disorientation for visually impaired patients. To address safety needs, enhance orientation, and foster a sense of security, it is recommended to escort the patient around the new environment as needed. Sensitively inquire whether the patient requires assistance, allowing them to take the nurse's arm or hand. The nurse should walk slightly ahead, providing clear directions and alerting to any potential obstacles. Approaching doors, the nurse should stand on the side of the door handle, open the door, step through, and hand the door handle to the patient for control over closing. In narrow spaces, the nurse's arm should be placed behind, and the patient asked to walk behind. When encountering stairs, the nurse should lead, offering instructions on whether to step up or down. Nurses should take the initiative in implementing safety measures, including adequate lighting, positioning the bedside locker appropriately, and ensuring the call bell is within easy reach. Supervision is crucial when a patient needs to use the toilet (Watkinson, 2004).

6. Conclusions

Patients with visual impairments are a vulnerable group entitled to access quality healthcare services. Efforts are needed to enhance the quality of healthcare services, particularly for patients with visual impairments who require outpatient care, such as eye outpatient services. Improving the quality of healthcare services for patients with visual impairments in eye outpatient services may involve providing information in a manner understandable to patients, directly assisting patients in accessing healthcare services, and ensuring patient safety aspects in accessing healthcare services.

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References

- Aqila Smart. (2012). Anak Cacat Bukan Kiamat. Yogyakarta. Katahati.
- Busse, R., Panteli, D., & Quentin, W. (2019). An introduction to healthcare quality: defining and explaining its role in health systems. In R. Busse, N. Klazinga, D. Panteli, et al. (Eds.), *Improving healthcare quality in Europe: Characteristics, effectiveness and implementation of different strategies* (Health Policy Series, No. 53). European Observatory on Health Systems and Policies. <https://www.ncbi.nlm.nih.gov/books/NBK549277/>
- Cheraghi-Sohi, S., Jeffries, M., Stevenson, F., Ashcroft, D. M., Carr, M., Oliver, K., et al. (2015). The influence of personal communities on the self-management of medication taking: A wider exploration of medicine work. *Chronic Illness*, 11(2), 77–92. <https://doi.org/10.1177/1742395314537841>
- Cupples, M. E., Hart, P. M., Johnston, A., & lainnya. (2012). Improving healthcare access for people with visual impairment and blindness. *BMJ*, 344, 4. <https://doi.org/10.1136/bmj.d4>
- Durham, J., Brolan, C.E., Mukandi, B. (2014). *The Convention on the Rights of Persons With Disabilities: A Foundation for Ethical Disability and Health Research in Developing Countries*. American Journal of Public Health.
- Donabedian, A. (1980). *The Definition of Quality and Approaches to Its Assessment* (Vol. 1, Explorations in Quality Assessment and Monitoring). Health Administration Press.
- Fekri, O., Macarayan, E. R., & Klazinga, N. (2018). Health system performance assessment in the WHO European Region: Which domains and indicators have been used by Member States for its measurement? (Health Evidence Network (HEN) synthesis report 55). WHO Regional Office for Europe.
- Firdaus, Ferry dan Iswahyudi, Fajar, 2010, Aksesibilitas Dalam Pelayanan Publik Untuk Masyarakat Dengan Kebutuhan Khusus, *Jurnal Borneo Administrato*
- Irwanto, (2010). *Situasi Penyandang Disabilitas di Indonesia: Sebuah Desk Review*. Depok
- Kementerian Kesehatan RI. (2019). *Badan Penelitian dan Pengembangan Kesehatan; LITBANGKES*. Jakarta: Balitbang Kemenkes RI
- Kementerian Kesehatan RI. (2013). *Riset Kesehatan Dasar; RISKESDAS*. Jakarta: Balitbang Kemenkes RI
- Kementerian Kesehatan RI. (2018). *Riset Kesehatan Dasar; RISKESDAS*. Jakarta: Balitbang Kemenkes RI

- Lecko, C. (2013). Patient safety and nutrition and hydration in the elderly. The Health Foundation.
- Papanicolas, I. (2013). International frameworks for health system comparison. In I. Papanicolas & P. Smith (Eds.), *Health system performance comparison: An agenda for policy, information and research* (European Observatory on Health Systems and Policies). Open University Press.
- Pascolini, D., & Mariotti, S. P. (2012). Global estimates of visual impairment: 2010. *British Journal of Ophthalmology*, 96(5), 614–618. <https://doi.org/10.1136/bjophthalmol-2011-300539>.
- Sharts-Hopko, N. C., Smeltzer, S. C., Ott, B. B., et al. (2010). Healthcare experiences of women with visual impairment. *Clinical Nurse Specialist*, 24(3), 149-153.
- Sibley, E., & Alexandrou, B. (n.d.). Towards an inclusive health service: A research report into the availability of information for blind and partially sighted people. Retrieved from www.mib.org.uk/aboutus/Research/reports/2009andearlier/Access_Health.pdf
- Watkinson, S., & Scott, E. (2004). Managing the care of patients who have visual impairment. *Nursing times*, 100(1), 40–42.
- Zhi-Han, L., Hui-Yin, Y., & Makmor-Bakry, M. (2017). Medication-handling challenges among visually impaired population. *Archives of Pharmacy Practice*, 8(1), 8–14.