

Quality of Life for Visually Impaired People

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Received: February 17, 2021; **Published:** March 31, 2021

Abstract

Introduction: Low vision can be congenital or acquired. The socialization of people with major visual impairment is a reality in rich countries. In Africa poverty and illiteracy are still their daily conditions.

Objective: To assess the quality of life of visually impaired people in Brazzaville.

Materials and Methods: Analytical cross-sectional study carried out over a period of 7 months. The sample was made up of 3 groups of 35 adults each matched for their age. Group 1 (G1) and group 2 (G2) were formed respectively of people with congenital and acquired blindness, group 3 or control group formed of people without visual impairment (10/10-P2). The parameters analyzed: Illiteracy, unemployment, celibacy, help for getting around and for reading, society's view. The Odd ratio with its significance threshold ($p < 0.05$) was the statistical test used for data analysis and comparison.

Results: Average age: 48.6 ± 7.4 years vs 49.4 ± 8.6 years vs 51.7 ± 7.9 years ($p > 0.05$). Illiteracy rate: 71.4% vs 17.1% vs 14.2% ($p < 0.05$). Unemployment rate: 91.4% vs 60.0% vs 37.1% ($p < 0.05$). Celibacy rate: 94.3% vs 80% vs 5.7% ($p < 0.05$). Help for getting around: 65.7% (G1) vs 31.4% (G2) ($p < 0.05$). Help for reading: 71.4% (G1) vs 14.3% (G2) ($p < 0.05$). Society's view: Compassionate (85.7%) vs Contemptuous (94.3%) vs Benevolent (97.1%).

Conclusion: Low vision is a source of school dropout, unemployment, celibacy, social discrimination and great psychological distress.

Keywords: Visual Impairment; Illiteracy; Poverty; Desocialization

Introduction

Low vision impairs the interactions of the sick individual with his environment, in particular when the means of support are not available. The quality of life differs depending on whether the person was born with this disability or when this disability appears years after birth [1]. Acceptance of the disability linked to low vision and quality of life seems for many authors to be easier when this situation is

congenital [1 - 3]. Acquired low vision is difficult to accept; it is sometimes the cause of social tragedies such as divorce, poverty and sometimes even suicide (seen this 09 February 2021: <https://www.marianne.net/societe/aveugles-et-malvoyants-ces-invisibles-de-toujours-aux-yeux-des-politiques>). In developed countries the socialization of people living with major visual impairment is a reality. The existence of low vision units, training centers for companion animals such as dogs, and the learning of Braille can be counted among the advances made in recent decades [2-4]. In poor countries, in Africa in particular, the situation is quite different. The virtual non-existence of social security services is a real concern in the majority of countries. Poverty and illiteracy are common in communities of the visually impaired.

Objective of the Study

The objective of this survey was to assess and compare the main difficulties encountered by people living with congenital low vision and those suffering from acquired blindness.

Materials and Methods

This was a cross-sectional analytical study carried out in 3 centers in Brazzaville, the Ophthalmology department of the University Hospital, the Clinique Medicale Optique and the National Institute for the Blind of Congo. It was carried out over a 7-month period, from March 01, 2020 to September 30, 2020. Three (3) groups of 35 adults each were formed, regardless of gender, as follows:

1. Group 1: People with congenital low vision.
2. Group 2: People with acquired low vision.
3. Group 3: Control group, made up of healthy people with a visual acuity of 10/10 P2 without correction.

Congenital low vision was defined as low vision present from birth. Acquired low vision was defined as low vision that occurred years after birth.

These groups had to meet the following inclusion criteria:

- Informed patient consent obtained.
- For groups 1 and 2: bilateral visual impairment with better visual acuity not exceeding the finger count at 20 cm.

The parameters analyzed and compared in the three (3) groups were:

- Social: illiteracy rate, celibacy rate, views of society.
- Economic: unemployment rate.
- Type of help: for getting around and for reading.

Illiteracy was defined as the inability to read and write. Celibacy was defined by the absence of a sexual partner for at least 2 years. The views of society was appreciated by three (3) words, Contemptuous, Compassionate or Benevolent, expressing all the words heard by the disabled person in their environment.

After full information on the need for this work, in simple and understandable terms, in French or in one of the two local languages (Lingala, Kituba), a consent form was given to a close relative for groups 1 and 2, and to each participant for group 3.

The Odd ratio with its significance threshold p less than 0.05 was the statistical test used for the analysis and comparison of data between different groups.

Results

Table 1 shows the distribution by age group of visually impaired people (group 1 and group 2) and people without visual impairment (group 3).

Year	Group 1 and 2 n = 70 (100%)	Group 3 n = 35 (100%)	OR [IC ₉₅]	p
25 - 35	20 (28.6%)	9 (25.7%)	2.89 [0.67 - 12.6]	0.08
35 - 45	15 (21.4%)	8 (22.8%)	1.22 [0.21 - 6.92]	0.09
45 - 55	30 (42.8%)	16 (45.7%)	3.4 [0.8 - 11.2]	0.07
55 - 65	5 (7.3%)	2 (5.8%)	2.03 [0.7 - 4.8]	0.06

Table 1: Distribution according to age groups of visually impaired people and people without visual disabilities seen in Brazzaville between March 2020 and September 2020.

Table 2 shows the distribution according to the rates of illiteracy, celibacy and unemployment between people suffering from congenital and acquired low vision, and people without visual disabilities.

	Group 1 n = 35 (100%)	Group 2 n = 35 (100%)	Group 3 n = 35 (100%)	OR [IC ₉₅]	p
Illiteracy	25 (71.4%)	6 (17.1%)	5 (14.2%)	2.1 [3.0 - 7.3]	0.025
Unemployment	32 (91.4%)	21 (60.0%)	13 (37.1%)	3.2 [3.4 - 8.7]	0.031
Celibacy	33 (94.3%)	28 (80.0%)	2 (5.7%)	1.8 [2.8 - 6.9]	0.018

Table 2: Distribution according to the rates of illiteracy, unemployment and celibacy between people suffering from congenital and acquired low vision, and people without visual disabilities seen in Brazzaville between March 2020 and September 2020.

Table 3 shows the distribution of aids for getting around and aids for reading in people suffering from congenital and acquired low vision.

	Group 1 n = 35 (100%)	Group 2 n = 35 (100%)	OR [IC ₉₅]	p
Help for getting around	23 (65.7%)	11 (31.4%)	23.4 [2.1 - 7.9]	0.012
Help for reading	25 (71.4%)	5 (14.3%)	18.5 [3.7 - 8.6]	0.025

Table 3: Distribution of aids for getting around and aids for reading in people suffering from congenital and acquired low vision seen in Brazzaville between March 2020 and September 2020.

Type of help for getting around: the white cane in 100% of cases.

Type of help for reading: the Braille's alphabet in 100% of cases.

Table 4 shows the view of society according to people living with visual disabilities and people without visual disabilities.

	Group 1 n = 35 (100%)	Group 2 n = 35 (100%)	Group 3 n = 35 (100%)
Compassionate	30 (85.7%)	2 (5.7%)	0 (0.0%)
Contemptuous	3 (8.6%)	33 (94.3%)	1 (2.9%)
Benevolent	2 (5.7%)	0 (0.0%)	34 (97.1%)

Table 4: View of society according to people living with visual disabilities and people without visual disabilities seen in Brazzaville between March 2020 and September 2020.

Discussion

The match in age of visually impaired people on the one hand and people without visual disabilities on the other confirms the results of analysis and comparison of the parameters studied.

The illiteracy rate is very high in the population of people with congenital low vision, over 70%. According to numerous surveys, the illiteracy rate in the general population in Africa hovers around 15% (seen on December 17, 2020: <http://uis.unesco.org/fr..>). This particularly high illiteracy among people with congenital low vision can be explained by three factors. Firstly, poverty, which is a brake on education in Africa, this reality is even more so when the child to be educated is sick (seen on February 12, 2021: <http://uis.unesco.org/fr/topic/education-in-Africa>). Second, society's view of children born with a deformity. These children are sometimes rejected and sometimes even abandoned by their own parents (Seen on February 12, 2021: <https://www.cairn.info/revue-perspectives-psy-2015-1-page-30.htm>). Finally, the lack of specialized schools to welcome these children is an additional difficulty even for very proactive parents [1,5,6]. An emblematic example of the integration of people living with congenital low vision in rich countries is that of Mr. David Blunkett. He was successively deputy and minister in the governments of British Prime Minister Tony Blair (Seen on December 17, 2020: http://wikipedia.org/fr/David_Blunkett). This gentleman came to the Council of Ministers with his help dog for the visually impaired, a black Labrador. Illiteracy rates in groups of people with acquired low vision and those without visual impairment are similar. This is probably explained by the fact that the acquired form occurs after years of an almost normal life during which these people have mostly been in school.

The high unemployment in the group of people with congenital visual impairment is the consequence of their not attending school. The superiority of the unemployment rate among people with acquired visual impairment compared to people without visual impairment is probably due to the loss of jobs due to the disease. The unemployment rate of unemployed people in the control group is close to 40% unemployment in the general population recognized by the bodies of the united nations (Seen on December 17, 2020: <https://hal.archives-ouvertes.fr>).

The high rate of celibacy in group 1 is probably directly related to unemployment. In group 2, vision loss is most often responsible for job loss leading to social crises, including divorce [7]. The lack of a spouse or partner is a source of social and psychological distress because Maslow's basic needs are not met (Seen on December 17, 2020: <http://www.mieux-vivre-autrement.com>).

The white cane was the only way to get around for the visually impaired. The rate of use of the white cane is low in group 2 compared to group 1. This difference is probably due to the fact that in group 1 people had to learn from childhood with the help of parents the use white cane. On the other hand, in the case of people with acquired low vision or the disability sometimes occurring in adulthood, these people most often use a family member as a helper. So it is not uncommon to meet in large African cities a child dragging a visually im-

paired adult by the hand. In both groups, no one was using a guide dog. In developed countries a number of independent aids are offered to the visually impaired person, in particular the dog. The virtual non-existence of dog training centers specializing in helping visually impaired people explains this difference.

The proportion of people who learned Braille was significantly lower in group 2 compared to group 1. This difference is probably explained by the fact that people in group 1, who depend on their parents from an early age, accept more easily the aids available to them. On the other hand, acquired low vision which sometimes occurs at a fairly advanced age makes certain learning difficult. In rich countries, almost all visually impaired people have Braille tablets at their disposal and many other tools available in low vision centers (Seen on November 30, 2020: <https://www.handicap.fr>).

The image society has of visually impaired people is generally poor. These people are the object of indifference and sometimes even rejection (seen December 17, 2020: <http://www.bbc.com>). They are often forced into begging and wandering with as only guide a little girl or a little boy himself/herself unschooled. Low vision is a major source of anxiety and psychological distress [8,9].

Conclusion

The quality of life of visually impaired people is poor in Brazzaville. The absence of a real system of support by the administrative authorities exposes these people to illiteracy, to unemployment with the corollary of begging and celibacy.

Conflict of Interest

None.

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Volume 12 Issue 4 April 2021

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