Seção Relatos de Experiência Livres

Early visual stimulation services in Brazil: a proposal for developing countries

Serviços de estimulação visual precoce no Brasil: uma proposta para países em desenvolvimento

Ilana de Freitas Pinheiro[1]
Ana Luiza Fontes de Azevedo Costa[2]
Vinicius Stival Veneziano Sobrinho[3]
Samara Lamounier Santana Parreira[4]
Marcia Caires Bestilleiro Lopes[5]
Celia Regina Nakanami[6]
Vagner Rogério dos Santos[7]

ABSTRACT

Purpose: To assess and organize the main structural characteristics of well-known Institutions that offer Early Visual Stimulation (EVS) services in Brazil. Design: Cross sectional survey. Methods: After identifying six Brazilian institutions offering EVS services, we went on a presential visit to assess how each service was structured in regard to: ideal outpatient clinic physical structure, the essential resources needed, the minimum team required, how the patients can access the service, basic and expanded budget for the main materials used. Main Outcome Measure: Features that structure the main institutions offering EVS in Brazil. Results: All the six institutions we visited offer their EVS service through the Unified Health System (SUS), and the approach is multidisciplinary. The resources and techniques used vary from one to another service, and there is no consensus about it. Each service uses a different approach, based on the professionals' experiences and the current scientific evidence. The physical structure is not standardized. Conclusion: From the technical visits we concluded that EVS services are available to the population in Brazil and do provide excellent care, but there is a lack of

1 Universidade Federal de São Paulo (UNIFESP)
Mestra em Tecnologia, Gestão e Saúde Ocular pela UNIFESP
E-mail: fisio.ilana@gmail.com

2 Universidade de São Paulo (USP)
Doutora em Medicina pela Universidade Federal de São Paulo (UNIFESP)
E-mail: luizafacosta@hotmail.com

3 Universidade Federal de Goiás (UFG)
Especialista em Oftalmologia pela UFG
E-mail: vstival@icloud.com

4 Universidade de São Paulo (USP)
Doutora em Ciências da Saúde pela USP
E-mail: samaralamouniersp@gmail.com

5 Universidade Federal de São Paulo (UNIFESP)
Doutora em Neurociências e Comportamento pela Universidade de São Paulo (USP)
E-mail: marciacblopes@gmail.com

6 Universidade Federal de São Paulo (UNIFESP)
Mestra em Medicina pela UNIFESP
E-mail: ce.nakanami@gmail.com

7 Universidade Federal de São Paulo (UNIFESP)
Doutor em Ciências Visuais pela UNIFESP
E-mail: vagner_rogerio@yahoo.com.br

standardization of care in regard to techniques and resources used, professionals involved and service models. We offer a suggestion of structural features and items to help standardize the EVS service.

Keywords: Visual Stimulation. Visual Rehabilitation. Early Visual Stimulation. Ophthalmologic Care.

RESUMO

Objetivo: Avaliar e organizar as principais características estruturais de reconhecidas instituições que oferecem serviços de Estimulação Visual Precoce (EVP) no Brasil. Desenho: Levantamento transversal. Métodos: Após identificarmos seis instituições brasileiras que oferecem serviços de EVP, realizamos uma visita presencial para avaliar como cada serviço estava estruturado em relação a: estrutura física ambulatorial ideal, recursos essenciais necessários, equipe mínima necessária, como os pacientes podem acessar o serviço, orçamento básico e ampliado para os principais materiais utilizados. Principal medida de resultado: Características que estruturam as principais instituições que oferecem EVP no Brasil. Resultados: Todas as seis instituições visitadas oferecem seu serviço de EVP por meio do Sistema Único de Saúde (SUS), e a abordagem é multidisciplinar. Os recursos e técnicas utilizadas variam de um serviço para outro, não havendo consenso sobre isso. Cada serviço adota uma abordagem diferente, baseada na experiência dos profissionais e nas evidências científicas atuais. A estrutura física não é padronizada. Conclusão: Das visitas técnicas concluímos que os serviços de EVP estão disponíveis para a população no Brasil e oferecem um atendimento de excelência, mas há uma falta de padronização do atendimento quanto às técnicas e recursos utilizados, profissionais envolvidos e modelos de atendimento. Oferecemos sugestões de recursos e itens estruturais para ajudar a padronizar o serviço de EVP.

Palavras-chave: Estimulação Visual. Reabilitação Visual. Estimulação Visual Precoce. Atendimento Oftalmológico.

Introduction

Vision is considered the main source of sensory input, and it acts as a powerful way to acquire knowledge from the world and also oneself. The sense of vision is very important for a child's development, since it facilitates the socialization process and enables navigation and movement in a safe and independent manner (MEDEIROS; SALOMÃO, 2012).

The maturation process of the visual system unfolds progressively since birth until approximately the age of seven years. Whenever the eyes are deprived from visual stimuli or the problem is not addressed during this critical period, the occipital cortex gets used to it, and it may arrest development or even regress it, leading to a low vision state that is usually irreversible. These changes can directly interfere in many aspects of the child's development associated with the abilities mediated by vision (BERDAHL; HARDTEN, 2012).

Children who can see are able to establish a visual interaction with the environment from the first months of life because they are stimulated to look at everything around them and they can track people and objects moving around them even when they're standing still. Vision is the link among the other senses, it enables the connection between image and sound, the ability to mimic a gesture or behavior and the exploration of a delimited space (SÁ; CAMPOS; SILVA, 2007).

When compared to hearing and touch, vision is the sense that yields the most precise spatial information about the environment. Since visual feedback represents one of the most important sources of sensory input for the development of navigation and mobility abilities, children with visual impairment are at great risk of sensory motor developmental delays or deficiencies. The studies by Gori *et al*. (2016) and Lage, Nascentes and Pereira (2016) concluded that the motor milestones are frequently delayed in visually impaired babies.

According to Santos, Passos and Rezende (2007), the use of the remaining visual potential of children with low vision does not depend exclusively on maturation, nor does it develop spontaneously from routine activities. Therefore, every child with low vision must be submitted to a special stimulation program, which helps in the development of the process of discrimination of shapes, contours, figures and symbols.

Early visual stimulation (EVS) is an intervention for children with low vision. It is considered effective in providing consistent visual results in the treatment of eye diseases. One of its goals is to awaken the child's desire and interest to interact with the environment, and as a consequence, it prevents secondary deficiencies. Early diagnosis of visual impairment and timely start of visual stimulation can provide better results on visual efficiency and all aspects of development. (MESSA; NAKANAMI; LOPES, 2012; SCHMITT; PEREIRA, 2016).

As noted by Spera, Melo and Souza (2008), the goals of EVS are based on identifying the child's residual vision, improving visual efficiency through appropriate stimuli, advising and informing parents, prescribing optical aids when appropriate and reintegrating the child into the family, society and school environments.

EVS is a valuable resource to enhance the development of children with low vision. Because it is intimately related to prevention and early detection, it is useful to prevent the onset or aggravation of dysfunctions related to the diseases, as well as to minimize its functional limitations, avoiding developmental delays. (MINISTÉRIO DA SAÚDE, 2007).

According to the Brazilian Ministry of Health's EVS Guidelines, Neonatal Eye Screening is essential for the early identification of visual impairments and timely intervention or rehabilitation (HADDAD; SAMPAIO, 2010). When the Neonatal Eye Screening shows any signs of abnormalities, specific eye exams are needed to diagnose and treat any possible conditions. Once a disability is identified, the child should be referred to a visual rehabilitation service.

The Brazilian Ministry of Health published the Ordinance Nº. 3128 on December 24th of 2008, requiring that the State Networks that care for people with visual impairments should

offer services in primary care, as well as visual rehabilitation services. In this document, Visual Rehabilitation Service is defined as a service that performs diagnosis, specialized therapy and follow-up with a multidisciplinary team, constituting itself as a reference in the qualification / rehabilitation of visually impaired people. It includes multi professional care for visual rehabilitation and qualification, which consist of developing skills to perform activities of daily living and early stimulation to support the patient's global development (MINISTÉRIO DA SAÚDE, 2008).

The Educational Guidelines on EVS from the Ministry of Education and Culture and the United Nations Educational, Scientific and Cultural Organization - MEC / UNESCO (1995), recommend that the ideal EVS team should be composed of a medical doctor, pedagogue, occupational therapist, physiotherapist, physical educator, speech therapist, social worker and electronics technician to adjust the devices being used. It is a transdisciplinary approach based on overcoming the limits of each specialty's fields of knowledge.

The purpose of this study is to assess and organize the main structural characteristics of institutions that offer EVS services in Brazil.

1 Methods

This study was developed in the Innovation and Technology applied to Health and Visual Sciences Department at the Ophthalmology and Visual Sciences Department of the Federal University of São Paulo- UNIFESP- Escola Paulista de Medicina from June until December 2018, and at the University Center of Anápolis - UniEVANGÉLICA, from January until December of 2019. This study was submitted to the Research Ethics Committee from the Federal University of São Paulo- UNIFESP- Escola Paulista de Medicina and approved in the meeting held on May 30tth of 2018 under the number 2095120418/2018.

1.1 Technical visits to the services offering EVS

We verified the main Brazilian institutions offering EVS and selected six as national references located in the Southeast and Midwest regions. For ethical reasons, the institutions were identified by letters. After the selection, face-to-face technical visits to the services were requested and scheduled via e-mail or phone call. The visits for observation and analysis of each service took place on the dates as described in Table 1.

Table 1. Dates of visits to the services offering EVS

Date (DD/MM/YYYY)	Institution	State
16/11/2018	A	Minas Gerais
19/12 e 21/12/2018	B	Goiás
12/04/2019	C	São Paulo
15/04/2019	D	São Paulo
16/04/2019	E	São Paulo
17/04/2019	F	São Paulo

Source: prepared by the author.

1.2 Data collection

During the technical visits, the following aspects were observed: (i) the physical structure; (ii) the therapeutic and technical resources used for EVS; (iii) the professionals involved; and (iv) the source of service remuneration and the service model. A technical visit script structured by the authors was used for the collection of these and other data, as described in Figure 1.

Figure 1. Guide for the technical visit

INSTITUTION:
DATE:
1) Early Visual Stimulation techniques in use Assessment of the main techniques used in Early Visual Stimulation.
2) Existing Early Visual Stimulation technologies Investigation about which types of technologies are being used for Early Visual Stimulation.
3) Structure of the Early Visual Stimulation service Assessment of the Early Visual Stimulation service organization regarding structure, professionals involved, management and resources.
4) Relationship between the Early Visual Stimulation service and the Brazilian Healthcare System (SUS) Assessment of the technical, bureaucratic, planning and structuring relations of the Early Visual Stimulation service with the SUS.
5) Referral, Payments, Classification in the SUS table and legal aspects. Assessment and verification of the bureaucratic steps related to the Early Visual Stimulation service within SUS, including referrals, remuneration of health care professionals and managers, procedure coding in the SUS table, legislation that supports the Early Visual Stimulation service and government financing determined by law.
6) Pedagogical, social, educational and family support. Verification of family, pedagogical, social and educational support related to the Early Visual Stimulation service and possible partnerships to provide professional and family education.

Source: authors.

1.3 Structuring process of an EVS service

Based on the technical visits, the main characteristics for an EVS service structuring were: (i) ideal physical and outpatient structure; (ii) with the development of a floor plan for a basic room and assessment of essential resources; (iii) a minimum team of professionals with which the EVS service is able to function properly; (iv) ways for the public to access the service; and (v) basic and expanded budget for the main materials. The budget for specific EVS materials was assessed by researching items in virtual stores using Brazilian currency (R$, Brazilian reals) and considering the current monthly minimum wage in Brazil in 2019, which was R$ 998.00 (approximately US$ 184). It is worth noting that 1 USD is worth 5.40 Brazilian reals as of February of 2021.

2 Results

Table 2 presents the structure observed in the institutions we visited, including the professionals that composed the EVS team, therapeutic resources used in each service regarding technology and playful features, physical structure, inter or multidisciplinary service models and the main source of remuneration that supports the service.

Table 2. Data from the EVS services visited

	INSTITUTION					
	A	**B**	**C**	**D**	**E**	**F**
Professionals						
Ophthalmologist	X	X	X	X	X	X
Physiotherapist	X	X	-	-	X	X
Occupational Therapist	X	X	X	-	X	X
Orthoptist	-	X	X	-	-	-
Physical Educator	-	-	X	-	X	-
Psychologist	-	X	X	-	X	X
Social worker	-	-	X	-	X	-
Psychopedagogue	X	X	X	X	X	X
Ophthalmic technician	-	-	-	-	-	X
Speech Therapist	-	-	-	-	X	X
Service model						
Multidisciplinary	X	X	X	X	X	-
Interdisciplinary	X	-	-	-	-	X
Therapeutic resources						
Technologic	X	X	-	-	X	-
Non technologic	X	X	X	X	X	X
Playful	X	X	X	X	X	X
Handmade	X	X	X	X	X	X
Structure						
Large room	X	-	-	-	X	X
Small room		X	X	X	-	-
Shared room	X	-	X	-	-	X
Remuneration source						
Public (government)	X	X	X	X	X	X
Private	-	-	-	-	-	-

Source: prepared by the author.

Having the data that we collected during the technical visits along with documents from the Brazilian Ministry of Health, the World Health Organization and the International Consensus on Visual Rehabilitation Standards (2015), we elaborated a suggestion on how to build an EVS service, either public or private, detailing aspects of a functional physical structure for the outpatient clinic, main resources required and the professionals that should be involved.

2.1 Ideal Physical Structure of the Outpatient Clinic

The physical structure of an EVS service, either public or private, needs to offer easy access to its patients and has to be adapted to the accessibility standards. It is important to have a reception area with a front desk to provide the initial steps and register the child and family or legal guardian.

The room used for EVS should not measure less than 3.50 x 2.50 meters in length, being the ideal at least: 4.50 x 2.50 meters. It is essential to have illumination brightness control that enables the room illumination to range from completely illuminated to completely dark. The illumination control can be done with light blocking windows, curtains and special lamps. The walls have to be painted with homogeneous colors, preferably gray tones.

2.2 Main resources for EVS

In the EVS room, the following materials are the minimum necessary: desk and chairs for the interview with the parents or guardians; a 1.5m x 1.5m mat made of Ethylene Vinyl Acetate (EVA) or other material, preferably black and / or of other primary colors such as yellow, blue, green and red for working on the ground with the child; mid-tilt positioning wedge; toys and simple figures of regular shapes and contours and with good contrast; a table lamp and a small flashlight, EVA plates in green, red, blue, yellow, black and white to serve as a screen for objects. If available, other materials are suggested, such as: a tablet with specific applications for EVS; stools of many sizes; 65 cm Swiss ball and a children's table and chair set. Chart 1 illustrates some specific features and their functions in the EVS.

Chart 1. Main resources used in EVS

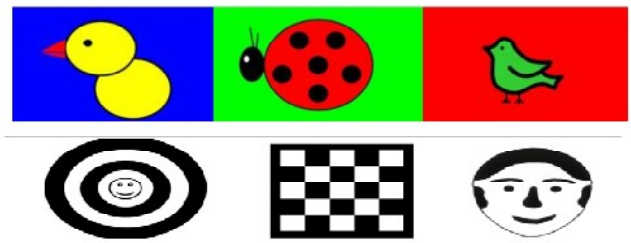
RESOURCE	FUNCTION	PICTURE
Flashlight and simple table lamp	Illumination reinforcement for photoreceptor activation by increasing the intensity and contrast.	
Simple shape fitting toys with regular shape, contour and good contrast.	Stimulate contour, contrast and stereopsis perception along with eye-hand coordination.	
Simple figures, regular contours, single primary colors with good contrast.	Support basic and oculomotor functions, further the discriminative capacity and improve visual field.	
Objects in single varied colors.	Perform pairing, visual discrimination and eye-hand coordination.	

Chart 1: Chart showing images of the resources used for Early Vision Stimulation sucha as lamp, flashlight, images with high contrast and colors, simple colored plug-in toys. Source: Pictures kindly yielded by Lopes, MCB & Santos, MA.

Sources: authors and pictures kindly yielded by Lopes, MCB & Santos, MA.

2.3 Professionals involved

According to Ordinance Nº. 3128 of December 24th, 2008, from the Brazilian Ministry of Health (2008), the minimum team required to compose a Visual Rehabilitation service should be: 1 ophthalmologist, 2 visual rehabilitation certified professionals (pedagogue, physiotherapist or occupational therapist), 1 social worker, 1 psychologist and 1 technician in mobility and navigation. Beyond the professionals mentioned, the ophthalmic technician can also be part of the team.

The team must be able to work in the area and have education in the following subjects: the visual system and its implications in the neuropsychomotor development; early visual stimulation, assessment of functional vision and treatment techniques.

2.4 Investment

The investment includes the payment of the professionals involved, the materials and the location where the service will be structured. In this study, only the costs of the materials were described. Table 3 illustrates the estimated cost of basic materials used in an EVS service, and Table 4 presents other equipment that can complement and improve the service. Furniture such as chairs and tables are not included in this estimate, only EVS-specific materials. The reference for the cited values is the minimum wage in Brazil in 2019, of R$ 998.00 (approximately US$ 184 as of the exchange rate of 5.40 on February of 2021).

Table3. Estimated cost of basic materials for the Early Visual Stimulation room

Description	Cost of a single piece	Amount needed	Total cost
Foam pillow 40x60cm	USD 5,00	2	USD 10,00
EVA mat 50X 50cm, 10 mm in black, yellow, blue, green or red color	USD 1,40	16	USD 22,40
Small positioning roller 40x 15cm	USD 11,40	1	USD 11,40
Medium wedge 50x50x30 cm	USD 26,00	1	USD 26,00
Swiss ball 65 cm	USD 13,80	1	USD 13,80
Table lamp	USD 10,00	1	USD 10,00
Small flashlight	USD 9,00	1	USD 9,00
Simple toys with regular shapes and good contrast	USD 36,00	-	USD 36,00
EVA plates in red, green, yellow, blue, black or white color (SHEET)	USD 0,40	6	USD 2,40
TOTAL			USD 141,00

Source: prepared by the author.

Table 4. Estimated cost with additional materials for the Early Visual Stimulation room

Description	Cost of a single piece	Amount needed	Total cost
Foam pillow in synthetic leather 40x60 cm	USD 5,00	2	USD 10,00
EVA mat 50X 50cm, 10 mm in black, yellow, blue, green or red color	USD 1,40	16	USD 22,40
Small positioning roller 40x 15cm	USD 11,40	1	USD 11,40
Medium wedge 50x50x30 cm	USD 26,00	1	USD 26,00
Large positioning roller 60x25cm	USD 22,20	1	USD 22,20
Gym/yoga mat 180x140x5cm	USD 67,00	1	USD 67,00
Swiss ball 65 cm	USD 13,80	1	USD 13,80
Swiss ball 45 cm	USD 8,00	1	USD 8,00
Scooter stool 30x30x32cm	USD 73,20	1	USD 73,20
Nesting benches set of 3	USD 60,00	1	USD 60,00
Tablet 10 inches	USD 300,00	1	USD 300,00
Table lamp	USD 10,00	1	USD 10,00
Small flashlight	USD 9,00	1	USD 9,00
Simple toys with regular shapes and good contrast	USD 36,00	-	USD 36,00
EVA plates in red, green, yellow, blue, black or white color	USD 0,40	6	USD 2,40
TOTAL			USD 671,40

Source: prepared by the author.

2.4 The experience in the city of Anápolis – Goiás

Anápolis is a city located just 53 kilometers from Goiás' capital, Goiânia. It is one of the largest road junctions in the country, and it is about 130 kilometers far from the Brazilian Federal Capital - Brasilia. According to an estimate by the Brazilian Institute of Geography and Statistics - IBGE for 2018, the population of the city of Anápolis is 381,970 inhabitants (PREFEITURA MUNICIPAL DE ANÁPOLIS, 2019; INSTITUTO BRASILEIRO DE GEOGRAFIA E ESTATÍSTICA, 2019).

The city of Anápolis has four institutions that provide assistance to children. One of the institutions is a non-profit service that provides care for patients who depend on the Brazilian public health system (SUS). The is also a private institution, a municipal health unit and a higher education institution. None of these institutions covers all types of disabilities

that affect the population. There is only one service in the educational area that provides services to people with disabilities, including visual impairment, but it does not offer EVS services (CADASTRO NACIONAL DE ESTABELECIMENTOS DE SAÚDE, 2019).

Based on the situation observed and the absence of an EVS service, we planned to establish a structured EVS service in the city of Anápolis based on the information collected during the technical visits and also bibliographic research. The EVS service was then established at the Eye Hospital of Anápolis, inside the Low Vision Department, under the technical direction of the ophthalmologist Dr. Vinicius Stival. The service opened in May 2019 and has already performed more than 200 appointments in low vision and early visual stimulation, with interventions being offered only once a week. The Figure 2 shows the EVS room we structured.

Figure 2. Image of an EVS room

Figure 2: Image of an EVS room composed of a foam rug in black and white; black and white toys, small pool with colorful foam, transparent balls, and colorful light; three blue stools of different heights with a cloud-shaped lamp and a lamp with colorful lights; a big transparent ball; white positioning roll; small green pillow; blue positioning wedge; 50 inches TV attached to the wall and a big closet with 5 spaces to store equipment.

Source: prepared by the author.

3 Discussion

A study developed by Chotikavanich *et al*. (2018) investigated, for 5 years, the goals regarding quality of life of patients with visual impairments, the causes of visual impairment and the visual rehabilitation services in Thailand. The study included 992 charts of 760 adults and 232 children. Among the children, the most common recommendation for quality of life improvement was EVS and development stimulation.

Due to being a dominant sense, vision is essential in each stage of life. The newborn relies on vision to recognize and establish a relationship with the mother; children to acquire balance and learn how to walk; students to navigate to school, read and learn; young adults to be able to work and the elderly to maintain autonomy (WORLD HEALTH ORGANIZATION, 2019). In 2013 the World Health Organization launched the 2014–2019 global eye health action plan that aimed to reduce preventable visual impairment as a public health problem and ensure access to rehabilitation services for the visually impaired (WORLD HEALTH ORGANIZATION, 2013).

The action plan was part of the Vision 2020 Project, which culminated in the publication, in 2019, of the World Vision Report, which offers recommendations on ensuring comprehensive and integrated eye care worldwide. In fact, this report recommends five important actions, including: making eye care a part of the universal health coverage; implementing integrated and people-centered eye care in the health systems; promoting high-quality research in health systems, improving the existing evidence for effective eye treatment (WORLD HEALTH ORGANIZATION, 2019).

According to the United Nations - UN Convention on the Rights of Persons with Disabilities, it is necessary that rehabilitation and habilitation services and programs are expanded and strengthened, so that they can offer care since the earliest stage possible with a multidisciplinary approach to address each individual's needs and strengths (HADDAD; SAMPAIO; SUSANNA JUNIOR, 2020).

Vision is involved in many functions, from cognitive development, motor learning, postural and motor control to the countless ways of relating to other people and the environment. Visual impairment during childhood poses a risk for the child's global development. Therefore, early intervention in the first years of life of children with visual impairment is essential for them to be able to enhance their neuropsychomotor and social development (GONDO *et al*., 2020).

Visual stimulation can be understood as a set of interventions that sensitize the perceptual-visual capacity, aiming at the adequate use of vision, improving the overall learning development and the performance in everyday life. Children with moderate to profound visual loss, if not trained to use the remaining vision, may become more dependent on others or with additional disabilities that can interfere with the quality of life (ARAGÃO *et al*., 2013; BRANDÃO, 2017).

Visual stimulation should be offered from birth. Human faces are the most appealing visual targets to newborns, followed by colorful and shiny objects. Families should be educated and oriented to present such stimuli frequently to the baby, noticing if the baby is fixating his gaze and following the movement of the human face or the toy. Playful activities using mirrors should also be attempted once the baby is able to fixate well (ARAGÃO *et al*., 2013).

EVS is an intervention to help children with visual impairment. It is considered effective due to its competence to provide consistent results. The EVS service should be composed of a multi professional team with the ability to offer training in daily life activities and other interventions to enhance the patient's global development (NOGUEIRA, 2020).

Up to now, the number of institutions offering visual rehabilitation services in Brazil is insufficient, and many of the institutions are still in the process of training its professionals. Regarding the multi professional team and its work, the specificity of each professional is still subject to discoveries, systematization and consolidation of evaluation parameters, intervention and consequent scientific production (BRANDÃO, 2017).

In general, the EVS services we evaluated in Brazil are composed of professionals from different areas: health, education and social. The professionals involved are ophthalmologists, physiotherapists, social workers, occupational therapists, physical educators, orthoptists, psychologists, and psychopedagogues.

All the six institutions we visited offer their EVS service through the Brazilian public health care system (SUS), and the approach is multidisciplinary. Two institutions offered an interdisciplinary care, with professionals from different areas practicing in the same surroundings and each contributing with their knowledge in favor of the patient's global development.

The resources and techniques used vary from one to another service, and there is no consensus about it. Each service uses a different approach, based on the professionals' experiences and the current scientific evidence. The physical structure is not standardized. The

institutions have both large rooms that house several professionals as well as small rooms that are shared with other services whenever not being used for the EVS.

The city of Anápolis has only one institution offering special care for the visually impaired. For this reason, the EVS service we recently structured has the main goal of minimizing the consequences of the absence of assistance in visual rehabilitation in Anápolis. This service wants to provide visually impaired children with a possibility of improving their remaining visual functions and global development, while directly impacting their quality of life with more autonomy.

The strengths of this study were the fact that data from the main EVS services in Brazil were assessed and collected, making it possible for us to highlight their contribution to the Brazilian population; the planning and execution of the first EVS service establishment in the city of Anápolis; and the elaboration of directions on to implement EVS services anywhere. Among the limitations, is it worth mentioning the difficulty in finding and selecting the main EVS services in Brazil, since some are not widely disclosed, and access is limited; the limited amount of literature on the subject and the non-standardization of techniques and resources to perform visual stimulation.

Conclusion

EVS is an intervention for children with low vision and it is considered effective to yield consistent visual results in the treatment of eye diseases. The functional use of the remaining vision should be promoted through an interdisciplinary program aiming at the prevention of possible dysfunctions related to the visual impairment. From the technical visits we concluded that EVS services are available to the population and provide excellent care, but there is a lack of standardization of care in regard to techniques and resources used, professionals involved and service models.

The proposal to implement an EVS service in the city of Anápolis was structured based on the available bibliography and the knowledge acquired from the technical visits that were carried out. The physical-financial planning turned out to be feasible and it was possible to establish an EVS room in a private service that will provide assistance to the population of Anápolis and surrounding areas, thus contributing to the quality of life of the visually impaired children and their families.

From all that has been exposed in this study, we conclude that the act of planning and implementing EVS services in Brazil and other places worldwide will contribute to and improve the global and visual development of children. EVS is an essential tool to minimize the consequences of visual impairment in childhood while promoting the social and functional inclusion of children and their families.

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