

Quality Of Life For Children With Special Needs

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Abstract:

Quality of life for children with special needs is a subject worthy of attention. Quality of life encompasses a range of factors that impact the happiness and well-being of these children, including physical, psychological, and social factors. Research in this field aims to better understand the experiences and needs of children with special needs and how to improve their quality of life.

Studies indicate that several factors influence the quality of life of these children, including social support from family, community, and school, access to appropriate medical, educational, and psychological services, and a sense of belonging and acceptance in society. Studies also show that attention to individual diversity and the specific needs of each child can play a significant role in improving their quality of life.

In this research, we discuss the influencing factors on the quality of life for children with special needs, the ways to achieve it, and the role of the psychologist and artificial intelligence in enhancing their quality of life.

Keywords: quality of life, children with special needs, psychological well-being, social support.

Introduction

Quality of life for children with special needs encompasses various vital aspects that impact their daily experiences and influence their personal and social lives. This subject represents an important challenge in our modern societies, as improving the quality of life for these children remains a continuous challenge for individuals, communities, and public policies.

Among the fundamental aspects to consider when discussing the quality of life for these children are healthcare, education, social support, and participation in social, cultural, and technological activities. Emphasizing the provision of appropriate healthcare services, suitable education, and inclusive and supportive communities plays a crucial role in enhancing their quality of life.

In addition, enhancing the quality of life for children with special needs requires attention to issues of access to services and opportunities in line with human rights and equality. The efforts made

to ensure their rights to access healthcare, education, and active participation in society enhance their sense of dignity, belonging, and overall quality of life.

Furthermore, the psychological and emotional dimensions of the quality of life for these children cannot be ignored. Psychological and emotional support plays a crucial role in promoting a positive experience for them and reducing the impact of pressures and challenges they face due to their condition.

Considering these aspects, it becomes evident that improving the quality of life for children with special needs requires integrated efforts from all sectors of society, including families, schools, healthcare institutions, governments, and non-governmental organizations. Recognizing the individual needs of each child and providing them with appropriate support and encouragement is essential to ensure a dignified and stable life for these children in our society.

I- Who are Individuals with Special Needs:

The emergence of the concept of individuals with special needs is the result of integrating the words "needs" and "specialness" into a single concept, referring to "insufficiency in a particular attribute or ability that fluctuates between physical and cognitive uniqueness. It can result in deficiencies in performance and achievement, which are essential components for expressing the embodiment of learning or one of its meanings, in the sense of the extent to which an individual can objectively express themselves." (Fatima, 2008, p. 46).

We define individuals with special needs as follows: "They are individuals who experience limitations in their ability to learn or acquire knowledge, skills, and perform tasks that a typically developing individual of the same age and cultural, economic, or educational background can do." (Sulaiman, D.S., p. 4).

In addition to the needs shared with typically developing individuals, individuals with special needs have specific educational, psychological, personal, vocational, economic, and healthcare needs. The community is responsible for providing these needs, considering them as citizens and humans before considering their disabilities.

Many individuals experience limitations in their ability to acquire experiences, skills, or perform specific tasks due to genetic or acquired environmental factors. This can affect their overall performance and reduce their ability to engage in activities with the same efficiency as typically developing individuals of the same age, culture, or economic background. The World Health Organization defines disability as a state of impairment or inability in physical or mental capacities, which can be attributed to genetic or environmental factors. Some activities that individuals with disabilities engage in may pose obstacles to achieving independence and full interaction with the social environment.

2- Definition of Quality of Life:

The World Health Organization (1995) defines quality of life as an individual's perception of their position in life, within the context of culture and values they live in, and the extent to which it aligns with their goals, expectations, values, and concerns related to their physical health, mental well-being, level of independence, social relationships, personal beliefs, and their relationship with the environment as a whole. Based on this, quality of life in this sense refers to self-assessments of an individual's life circumstances. This concept is closely related to the concept of psychological well-being as found in the literature of mental health.

3- Requirements and Needs of Individuals with Special Needs and their Relationship to Quality of Life:

The needs and requirements of individuals with special needs vary depending on the type and severity of the disability, as well as the age group they belong to. This topic is vast and complex and cannot be fully summarized in a single scientific paper. It requires extensive research and studies to comprehensively identify and address all the needs and requirements. In this paper, our focus is on the quality of life of individuals with special needs, specifically on the general needs and requirements related to the concept of quality of life and its indicators. Therefore, the following are the key requirements in the following areas:

3-1- Healthcare: Health services are the primary and essential requirement for individuals with special needs at every stage of disability. Health services encompass therapeutic, rehabilitative, and psychological services. Individuals with disabilities often require medical treatment in many cases; thus, it is crucial to provide treatment services that are highly efficient and comprehensive. They should have access to appropriate treatment at all times when needed, and they should have priority in receiving medical care and health monitoring.

Rehabilitation and physical therapy also hold significance as they contribute to improving their lives and enhancing their ability to benefit from other available potentials in their personalities and

bodies. Psychological problems such as anxiety and depression are closely associated with disabilities. Social isolation and feelings of inadequacy and helplessness can lead to various psychological issues that require treatment and overcoming, whether through pharmacological or behavioral and rehabilitative psychological therapy. Every individual with a disability needs psychological and social therapeutic support at some point in their lives to achieve psychological adaptation, social harmony, a sense of importance, realistic awareness, happiness, and the ability to solve problems, and sometimes even creativity and excellence.

Self-care, engaging in physical activities and diverse hobbies, and the ability to cope with stress, as well as cultural identity, are known indicators of overall health and mental well-being associated with the quality of life for an individual. Therefore, it is essential to address and assess these aspects to recognize that individuals with special needs can enjoy a good level of quality of life.

3-2- Education: Education is a fundamental right for every individual, and therefore, it is necessary to provide an appropriate educational environment that caters to the needs and abilities of each individual. Thus, it is crucial to design suitable educational environments for individuals with special needs. These environments include school buildings, learning resource centers, libraries, and comprehensive accessibility to all educational services with ease and convenience. Learning resources should incorporate the latest educational aids and modern assistive devices that facilitate the educational process and align with the nature of each type of disability or impairment. This ensures that, by the end of the academic year, every individual with a disability has equal access to comprehensive educational opportunities on par with their peers without disabilities. Specialized professionals, including teachers and qualified assistants in relevant fields, should be available to effectively cater to the educational needs of individuals with special needs. (Ashraf Abdulqader, 2005).

3-3- Infrastructure and Public Services:

Undoubtedly, individuals with special needs have specific requirements in terms of building structures and the availability of facilities that enable them to lead their lives in a natural manner. This includes the provision of suitable public and private transportation means that guarantee their freedom of movement and the ability to engage in their daily activities with ease and smoothness. Therefore, it is essential to provide assistive means according to the highest international standards applied in providing safe and appropriate transportation for individuals with special needs. This includes allocating specific parking spaces for them and placing sufficient signage indicating the allocation of designated areas for them in public spaces and public transportation. Communication devices and similar aids should be available in public transportation and taxis. Additionally, roads, streets, and buildings should be equipped to facilitate easy accessibility, and special housing should be designated for each type of disability and made available to them to ensure their benefit. Public facilities within buildings and markets should be equipped to cater to the needs of different types of disabilities.

3-4- Technology and Information

Technology: Harnessing technology in the education of individuals with special needs and in specialized employment sectors, and providing applications and technological tools that assist them in using and leveraging technology in their lives on par with their non-disabled counterparts, while overcoming digital illiteracy, especially among young individuals who rely on technology in their daily lives and in communicating with the environment they live in, as well as in managing their affairs. (Ashraf Abdulqader, 2005).

- Factors Influencing the Quality of Life of Children with Special Needs

Children with special needs are influenced by several factors that directly affect their quality of life. These factors include social, psychological, health, and educational aspects, which are interconnected to determine their individual experiences and the challenges they face.

- **Social Factors:** Social factors encompass social marginalization and isolation, lack of understanding and acceptance in society, and difficulties in accessing available opportunities for children with special needs. For instance, a study conducted in 2020 and published in the "Social Development" journal revealed that 70% of children with special needs experience social marginalization in public schools.

- **Psychological Factors:** Psychological factors include stress and anxiety resulting from daily challenges they encounter, as well as depression and low self-confidence due to non-acceptance and discrimination.

- **Health Factors:** Health factors encompass physical disabilities and psychological health issues that may negatively impact their quality of life and hinder their ability to actively participate in daily life. According to a report by the World Health Organization in 2018, children with special needs face difficulties in accessing necessary and appropriate healthcare tailored to their specific needs.

- **Educational Factors:** Educational factors include access to appropriate education, academic achievement, and adaptation to the learning environment. The lack of sufficient educational support can affect the quality of life of children with special needs (Isa, Ishak et al., 2021).

- Social Support and Its Impact on the Quality of Life of Children with Special Needs:

Social support is essential for the quality of life of children with special needs as it helps them adapt to challenges and overcome obstacles. Social support includes family, community, and school support.

Social support plays a crucial role in enhancing the quality of life for children with special needs. It helps them realize their full potential and actively participate in society.

Promoting social support: Promoting social support involves various types of support, including emotional support, practical support,

moral support, positive support, guidance, and counseling. Strategies to enhance social support include encouraging the building of strong relationships, providing emotional and moral assistance, and promoting a sense of belonging and solidarity within the community (Hadjicharalambous, 2021).

- The Impact of Family Support on the Quality of Life of Children with Special Needs:

The family plays a critical role in improving the quality of life for children with special needs. Family support is a influential factor in promoting social and psychological adaptation among children and enhancing their satisfaction with life.

Family support includes emotional support, practical support, educational support, and emphasizing capabilities and potentials. It is important to respond to the child's emotional needs, provide social and moral support, offer assistance in education and rehabilitation, and actively engage in decisions related to the child.

Promoting family support: Strategies to promote family support include providing training programs and workshops for parents to learn how to address the child's needs, providing necessary resources and services to meet the child's needs, and encouraging effective communication between the family and the community (Hadjicharalambous, 2021).

- The Role of a Psychologist in Providing Psychological Services to Improve the Quality of Life for Children with Special Needs:

1. **Development and implementation of counseling and preventive programs:** Psychologists prepare and implement awareness and prevention programs for children and parents to reduce disabilities and chronic illnesses. They provide age-appropriate and tailored information to promote understanding and enhance their cognitive development.

2. **Early detection and intervention:** Psychologists work on identifying and addressing problems that may hinder a child's growth and impact their

adaptation to the environment. They intervene early to overcome these challenges.

3. Clinical diagnosis and assessment: Psychologists evaluate the child's capabilities and the impact of psychological issues through interviews and appropriate assessments. They focus on identifying the child's specific needs and develop an appropriate treatment plan.

4. Decision-making regarding children's admission to institutions: Psychologists make important decisions regarding the acceptance of children into institutions based on their study of the case, assessment of their needs, and potential for improvement (Jamal, 2016).

5. Classification and placement of children within the institution: After accepting children into the institution, it is the responsibility of the psychologist to classify and place them into appropriate categories or levels to meet their specific needs and ensure effective care.

6. Participation in the development and implementation of individual or group programs: The psychologist contributes to the development and implementation of specialized programs for children, with a focus on addressing their individual needs and enhancing their capabilities, as well as improving their social and emotional skills.

7. Individual or group counseling and guidance: The psychologist provides support and guidance to children with disabilities or chronic illnesses through individual or group sessions, with an emphasis on improving their self-understanding, enhancing their ability to cope with problems, and fostering a sense of responsibility.

8. Their role in providing psychological therapy and behavior modification for children: Given that children with disabilities or chronic illnesses may face various psychological issues, the psychologist plays a vital role in providing appropriate psychological therapy. Psychological therapy is one of the essential tasks performed by the psychologist, as they work on providing psychological support and behavior modification

to help children adapt to their challenging circumstances (Jamal, 2016).

9. His role in providing counseling and psychological therapy services to parents:

The psychologist provides counseling and psychological therapy services to parents of children with special needs to help them understand their children's needs and provide necessary support. The psychological work focuses on enhancing parents' understanding of their children's condition and providing emotional and professional support to improve the quality of care they provide.

10. His role in providing counseling and psychological therapy services to siblings:

The psychologist contributes to providing counseling and psychological therapy services to siblings of children with special needs to help them adapt to challenging circumstances and improve family relationships. The psychological work focuses on promoting positive communication and providing psychological support to siblings to overcome the challenges they may face.

11. His role in helping the sick child and their family understand and accept their hospital stay:

The psychologist provides psychological support to sick children and their families to help them cope with their hospital stay. They assist children and their families in understanding medical procedures and provide emotional support during the treatment period in the hospital, thereby reducing psychological stress and improving the quality of healthcare.

12. The role of the psychologist in providing psychological services to the school environment: This role involves providing psychological support to children with disabilities or chronic illnesses upon their return to school. The psychologist assists in delivering specialized counseling programs to teachers, peers, and the school healthcare team to enable them to effectively interact with these children.

13. The role of the psychologist in providing psychological care services to families after the death of their disabled or ill child: The psychologist provides support and assistance to family members after the death of their disabled or ill child through counseling programs that help them cope with this emotionally challenging loss. This includes providing guidance, teaching them coping skills, and alleviating negative emotions such as grief and depression.

14. The role of the psychologist in conducting scientific research in the field of disabilities and chronic illnesses in children: The psychologist conducts scientific research that contributes to understanding and analyzing the factors underlying psychological disorders and improving treatment and care conditions. This includes applied research that provides recommendations for enhancing therapy and rehabilitation programs for children with disabilities or illnesses. (Jamal, 2016)

Palliative care as a comprehensive approach to child care:

Palliative care, despite being misunderstood and underutilized, may be the most well-known example of health care designed explicitly to improve the quality of life for children with special needs and their families. Its core principles involve alleviating suffering (such as pain, psychological, social, practical, and spiritual distress), improving quality of life for both the child and the family, facilitating informed decision-making, and coordinating care across providers and systems.

This comprehensive approach works to activate the key components of family-centered care. It is worth noting that families have identified the following three aspects as the most valuable in palliative care services: symptom management, providing psychological support for their children, and communication and coordination across multiple providers and systems.

Due to various factors, including a lack of provider education and difficulties in obtaining insurance coverage, many children with special needs and their families are unable to routinely access palliative care outside of the hospital setting.

However, medical homes and other primary care settings can integrate the core principles of palliative care (primary palliative care) into their models, and alternatively, it can be provided as a specialized service to increase access to limited specialized palliative care. (Cara L., Mia and others, 2022).

The role of artificial intelligence in improving the quality of life for children with special needs:

The development of artificial intelligence (AI) is a source of optimism for improving the quality of life for children with special needs. Research shows that AI-based applications can provide significant opportunities to support these children in various aspects of life, including education, communication, and achieving independence.

1. Enhancing communication and social interaction: AI contributes to the development of applications that enhance communication and social interaction for children with special needs. By utilizing AI techniques, applications can be developed to improve communication skills, understanding emotions, and promoting social interaction.

2. Supporting independence and motivation: AI-based applications can support the independence of children with special needs by providing support and motivation during daily tasks. These applications work to increase self-confidence and enhance independence in mobility and interacting with the surrounding environment. (Suman Raj, Sarfaraz Masood, 2020).

3- Education

I- The Need for Artificial Intelligence in Special Education

Educating students in special education involves meeting unique educational needs due to physical, mental, emotional, or behavioral conditions. These students often require individualized educational programs to meet their specific learning needs. Traditional education may not be sufficient to address these diverse needs.

Artificial intelligence represents a significant opportunity to improve special education, going beyond meeting the current needs of students. Ongoing advancements in this field provide future opportunities for development and continuous improvement.

- Providing customized educational experiences that adapt to the unique needs of students.
- Enhancing assistive technology such as speech recognition and predictive text tools.
- Improving accessibility for students with visual or hearing impairments.
- Analyzing data to identify learning patterns and provide effective teaching strategies.

The potentials of artificial intelligence in education are among the key innovations that transform the approach to special education, making it more personalized, effective, and inclusive. (Athanasios S. Drigas, Rodi-Eleni Ioannidou, 2011).

Personalized Learning:

- Providing customized educational experiences that align with each student's needs.
- Analyzing learning patterns and adapting educational content accordingly.
- Providing personalized instructions and feedback to students.

Assistive Technology:

- Supporting the development of assistive technology for special education.
- Real-time speech-to-text and text-to-speech conversion.
- Providing assistive devices for students with disabilities.

Improving Accessibility:

- Making educational materials more easily accessible for students with disabilities.
- Using predictive analytics to identify learning barriers and provide timely interventions.

- Creating a more inclusive and effective learning environment.

- Offering advanced and effective solutions for students with special needs.

- Artificial Intelligence in Speech and Language Therapy

- Analyzing students' speech patterns and providing customized exercises to improve speech and language skills.

- Providing real-time feedback on pronunciation and fluency.

- Tracking student progress and adjusting therapy programs as needed.

2- The Role of Artificial Intelligence in Early Detection, Diagnosis, and Intervention for Children with Special Needs:

Artificial intelligence plays a crucial role in improving early detection and intervention for children with special needs, which can significantly enhance their educational and developmental outcomes.

- Early Detection:

- Artificial intelligence can analyze medical data and recognize patterns of behavior and developmental milestones in children.

- AI algorithms can be used to identify signs of developmental delays or potential disorders.

- Accurate Diagnosis:

- Artificial intelligence can analyze clinical data and psychological tests to more accurately determine a child's needs.

- Machine learning can identify typical and atypical patterns in language, social, and motor development.

- Early Intervention:

- AI can be used to design tailored training programs that target the specific needs of each child.

- Interactive educational tools supported by artificial intelligence can facilitate development in various areas.

- Family Guidance:

- Artificial intelligence can provide resources and support for families to better understand their children's needs and how to effectively support them.

- AI can offer advice and guidance to parents on interacting with their children and fostering their skills. (Anderson, Martinez, 2022).

Conclusion:

The quality of life for children with special needs is vital for their well-being and happiness. Providing a supportive environment and appropriate educational and healthcare opportunities significantly contribute to enhancing their lives. By addressing individual needs and providing necessary support, the community and relevant entities can improve the quality of life for these children, fostering their inclusiveness and participation in society. Quality of life should be a central concern in education, health, and social care policies, with a focus on providing equal opportunities and necessary support for every child to live a life filled with dignity, purpose, and joy.

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