



Inclusive health and economy: Strategies for empowering persons with disabilities in sustainable development

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Abstract

Inclusion-based health and economic strategies are strategic approaches that ensure the full participation of people with disabilities in sustainable development, aligning with Sustainable Development Goals (SDGs) No. 8, which advocates for decent work and economic growth, and SDGs No. 10, which focuses on reducing inequalities. Key challenges faced by individuals with disabilities in accessing healthcare and economic opportunities include discrimination, structural barriers, and a lack of supportive policies. Strengthening the role of people with disabilities can be achieved through holistic strategies, such as providing universal access to adaptive technologies, developing market-driven skill training programs, and implementing affirmative policies oriented toward inclusivity. This study also explores the contribution of the private sectors and civil society in creating an inclusive ecosystem that fosters equality. Through cross-sectoral analysis, it highlights that investments in inclusive healthcare programs and creative economies not only enhance the quality of life for people with disabilities but also contribute to overall economic growth. Thus, inclusion-based approaches are pivotal to ensuring sustainable development involves all layers of society equally, leaving no one behind.

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Keywords

Introduction

SDGs, disabilities, inclusion strategies

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Selection and Peerreview under the responsibility of the 6th BIS-HSS 2024 Committee Sustainable development within the framework of the Sustainable Development Goals (SDGs) aims to ensure a balance between social, economic, and environmental needs in global development. The SDGs encompass 17 main goals, including poverty eradication, improved education, access to healthcare, reduced inequality, and environmental protection. As a global commitment to be achieved by 2030, the SDGs encourage

integration between national policies and international cooperation to address global challenges such as climate change, ecosystem degradation, and economic inequality (Khairina et al., 2020).

The increasing number of people with disabilities in Pekalongan Regency, from 800 individuals in 2019 to 6,000 in 2021, has become a concern for the local government, especially the Social Services Department of Pekalongan Regency (Dinsos Kabupaten Pekalongan, 2023). This has driven the Social Services Department to empower individuals with disabilities to enhance their independence through various approaches, including training and business support. However, training programs provided in collaboration with the Serasi Madani Forum Community face challenges, particularly concerning physical disabilities that involve mobility and functional impairments.

Regulations such as Pekalongan Regent Regulation No. 2 of 2020 on the protection and fulfillment of the rights of persons with disabilities and Pekalongan Regent Regulation No. 85 of 2022 on health services at community health centers aim to enhance healthcare services for individuals with disabilities. Nevertheless, individuals with disabilities in Pekalongan Regency still require empowerment to improve their potential and productivity to ensure their welfare.

Financial well-being can be achieved when individuals maintain good health and fitness (Colberg et al., 2010). However, individuals with physical disabilities often experience mobility and functional challenges that can affect their physical fitness. Therefore, there is a need for health and economic assistance programs to improve physical independence and entrepreneurial skills. As Indonesia's largest batik-producing region, Pekalongan Regency offers significant potential for individuals with physical disabilities to create handicrafts, such as batik, tailored to their abilities.

Through health assistance programs with physiotherapy to provide healthcare services, batik production, and digital marketing support for batik products, individuals with disabilities can work towards economic independence. This aligns with the motto of the Social Services Department of Pekalongan Regency. The program is designed to implement the Pekalongan Regent Regulation No. 2 of 2020, which emphasizes the fulfillment of the rights of persons with disabilities.

This activity plan seeks to foster the independence of individuals with disabilities by offering entrepreneurship services in line with the initiatives of the Social Services Department in Pekalongan Regency. Nevertheless, several obstacles remain, including uncertainty regarding the continuity of empowerment efforts, low self-esteem among persons with disabilities in initiating business activities, limited support from families and the surrounding community, as well as inadequate facilities, especially in batikmaking that are crucial for entrepreneurial development. In light of these challenges, this study aims to identify and analyze the specific needs of individuals with disabilities to support their self-reliance, particularly in terms of health and economic empowerment.

Method

This research employs a phenomenological method, a qualitative approach that seeks to understand individuals' subjective experiences of specific phenomena from their perspectives. This method is used to explore the profound meaning of personal experiences, focusing on how individuals interpret and assign significance to the events, situations, or phenomena they encounter.

According to the WHO, disability refers to the inability to perform specific activities typically carried out by people without disabilities. The phenomenological approach is applied to uncover the experiences of individuals with disabilities regarding independence, particularly in health and economic aspects.

Sample

The study's population consists of individuals with physical disabilities in Pekalongan Regency. Initially, 50 individuals with disabilities were identified. A selection process was carried out based on specific criteria: (1) Physically disabled individuals capable of performing activities independently without assistance; (2) Individuals with disabilities who can operate an Android device. From this selection process, 25 individuals meeting the criteria were chosen. These 25 participants were then interviewed in-depth to gain insights into achieving sustainable health and economic independence.

Data Analysis

1. Enhancing Health Independence Through Physiotherapy Interventions

Efforts to improve the health and economic independence of individuals with disabilities in Pekalongan Regency involved 25 participants, selected from an initial pool of 50 who had undergone physiotherapy support. Participants included individuals with various physical disabilities such as amputation, cerebral palsy, polio, muscular dystrophy, scoliosis, and others.

Physiotherapy plays a pivotal role in improving functional mobility and activity for individuals with disabilities by focusing on physical strengthening, posture correction, and movement adaptation (Harbourne et al., 2021). Tailored therapeutic exercises are crucial for addressing mobility constraints caused by neurological, orthopaedic, or musculoskeletal conditions. The key interventions include:

- a. **Passive and Active Mobility Exercises:** Designed for patients with limited movement, such as post-stroke survivors, to improve joint range and encourage active movement as progress is made.
- b. **Balance Training:** Using stability balls or inclined platforms to enhance postural stability, critical for preventing falls in conditions like cerebral palsy.
- c. **Muscle Strengthening Exercises:** Utilizing light weights, resistance bands, or modified bodyweight exercises to build muscle strength.

- d. **Gait Training:** Involving walking exercises with support tools like walkers or treadmills for individuals with amputations or hemiparesis.
- e. **Functional Training:** Simulating daily activities such as standing, object transfer, or stair climbing to develop practical motor skills.
- f. **Proprioceptive Training:** Exercises to improve body awareness and control, such as single-leg stands or balance board activities.
- 2. Economic Independence for Individuals with Disabilities

This initiative aims to ensure individuals with disabilities can access equitable economic opportunities, manage resources independently, and actively contribute to economic development. Challenges include social stigma, lack of access to inclusive education and skill training, labor market discrimination, and physical and technological barriers.

Strategies to address these challenges include:

- a. Market-Driven Skill Training: Programs aligned with current market demands.
- b. Access to Adaptive Technologies: To enhance productivity and inclusivity.
- c. **Entrepreneurial Support:** Providing microfinance, business mentorship, and community support to bolster entrepreneurial ventures (Novrianda et al., 2023).
- d. **Policy Interventions:** Affirmative action policies like work quotas and antidiscrimination regulations.

Research highlights the importance of collaborative, multi-sectoral approaches involving government, private sectors, and civil society to create inclusive ecosystems. A holistic approach can reduce dependency and increase the contributions of individuals with disabilities to national development (Tan, 2021).

Results and Discussion

Health Independence

Functional physiotherapy exercises have proven to be an effective approach to enhancing the independence of individuals with disabilities by focusing on movements that align with daily activities. These exercises simulate specific tasks, such as walking, sitting, standing, or object manipulation, engaging major muscle groups and coordination systems. By leveraging neuroplasticity principles, functional exercises improve damaged movement patterns, muscle strength, postural stability, and motor control (Cubukcu & Paraoglu, 2020).

Success relies on adapting exercises to each patient's abilities and needs, allowing significant progressive improvement in functional capabilities. Research indicates taskbased training not only enhances motor performance but also facilitates reintegration into daily life, reducing reliance on external aid. Integrating technologies like robotic assistive devices and real-time feedback further bolsters this approach, particularly for severe impairments (Haskell et al., 2007). This holistic strategy also contributes to psychosocial aspects, improving confidence and quality of life (Krisnawati & Anggiat, 2021).

Economic Independence

Enhancing economic independence for people with disabilities requires addressing their unique challenges and ensuring equal access to income opportunities. Efforts include inclusive skill development that considers economic, social, and technological advancements, fostering competitiveness through initiatives such as:

- 1. Inclusive Batik Training
- a. Introduction to Batik Techniques: Teaching basic skills such as hand-drawn batik, stamping, and hybrid methods.
- b. Creative Design Development: Encouraging unique designs to attract market interest.
- c. Team-Based Production: Promoting collaboration for efficiency and quality output.
- 2. Inclusive Digital Marketing Training
- a. E-Commerce Training: Teaching online store creation on platforms like Shopee or Tokopedia.
- b. Social Media Utilization: Using Instagram, Facebook, and TikTok for visual and interactive product promotion.
- c. Search Engine Optimization (SEO): Helping participants optimize their products for search engines.
- d. Photography and Product Design: Assisting in creating attractive visuals for marketing.
- 3. Program Benefits
- a. Income Growth: Producing and selling batik generates sustainable income.
- b. Skill Development: Training imparts market-relevant skills.
- c. Social Empowerment: Boosts confidence and reduces stigma.
- d. Supports SDGs: Aligns with SDG 8 (Decent Work and Economic Growth) and SDG 10 (Reduced Inequalities).

Evaluation

A one-year evaluation of the program showed that 70% of participants continued health and economic education programs. Physiotherapy exercises enhanced physical function and reduced motion limitations (Kisner & Colby, 2012). Gradual exercise progression reduced injury risks, improved physical fitness, and mitigated degenerative processes (Ibrahim et al., 2015). In economic evaluations, 70% of participants actively utilized Instagram for business, while only 20% managed to use Shopee due to technical difficulties and inadequate devices. Digital marketing skills among participants remain limited, requiring additional facilitation for accessible platforms (Novrianda et al., 2023). Education and motivation significantly influence digital marketing proficiency (Rizal, 2024). Digital marketing offers convenience, enabling individuals with physical disabilities to market products efficiently.

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