

## Disability Incidence Profile In Sukun Sub-District, Malang City

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### Abstract

Disability can be traced early with early detection/screening at primary health facilities, namely puskesmas, by involving the community. So far, the government has a Family/Community Based Rehabilitation (RBM) program aimed at mobilizing the community in providing assistance and support for persons with disabilities and their families by utilizing the potential of local social welfare sources. Disability can occur in all age groups, including children, adults, and the elderly. Disability that occurs in the elderly can be the result of chronic diseases such as stroke, hypertension, diabetes mellitus, etc. Early detection/screening and early treatment of disabilities are expected to prevent further complications and improve functional status. This activity is an ongoing program that has been carried out since 2019. In 2019, 209 participants participated, in 2021 there were 135 participants and in 2022 there were 233 participants. The target of this activity is the community in the Malang City area represented by the community in Sukun District, Malang City. The methods of this activity include: socialization to persons with disabilities. Disability screening, disability treatment as needed, and provision of assistive devices when needed according to the needs of patients with disabilities. This activity is expected to get great appreciation and interest from the target community, namely the elderly in the Malang City area. Follow-up of this activity is needed to ensure the sustainability of the disability treatment program in accordance with the Family / Community Based Rehabilitation Program.

**Keywords:** Disability, Screening, Treatment, Rehabilitation

### INTRODUCTION

Disability according to the Big Indonesian Dictionary (KBBI) is a deficiency that causes less than perfect quality. Meanwhile, according to the Law of the Republic of Indonesia no. 8 of 2016 concerning Persons with Disabilities, is every person who experiences physical, intellectual, mental and/or sensory limitations for a long period of time who in interacting with the environment can experience obstacles and difficulties to participate fully and effectively with other citizens based on equal rights. Disability can occur in all age groups, including children, adults and the elderly. Disability in the elderly can be the result of chronic diseases such as stroke, hypertension, diabetes mellitus, etc (Cameron 2007, Heerskind 2015).

World Health Surveys in 2002-2004 stated that in the population aged >18 years there were significant difficulties in daily life in 15.6% of the population and very significant difficulties as much as 2.2% (Ministry of Health of the Republic of Indonesia, 2014). Meanwhile, the Global Burden of Disease 2004 states that the rate of moderate or severe disability is 15.3% and severe disability is 2.9% (Ministry of Health, 2014). In Indonesia, based on Susenas in 2012 there were 2.45% of the Indonesian population with disabilities with 39.97% of people with disabilities experiencing more than one type of limitation (Ministry of Health, 2014). Meanwhile, the 2013 Riskesdas stated that the rate of moderate to severe disability was 11% (Ministry of Health, 2014).

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Disability can be traced early with early detection/screening at primary health facilities, namely puskesmas, by involving the community. So far, the government has a Family/Community Based Rehabilitation (RBM) program. This program aims to mobilize the community in providing assistance and support for persons with disabilities and their families by utilizing the potential of local social welfare sources. The RBM program is driven by cadres from the community in a team whose members consist of various related elements and community leaders as well as families and groups of persons with disabilities. The main activities are early detection of disability conditions and the implementation of referrals to potential sources according to the needs of persons with disabilities (Irwanto, 2010).

Early detection/screening and early treatment of disability is expected to prevent further complications and improve functional status. Therefore, it is very necessary to have public knowledge and awareness as well as screening and treatment of disabilities in Malang City through primary health facilities, namely Puskesmas. Early detection/screening and early treatment of disability is expected to prevent further complications and improve functional status. Therefore, there is a need for public knowledge and awareness as well as screening and treatment of disabilities in the community in Malang City through screening which is currently carried out in Sukun sub-district, Malang City.

#### **MATERIAL AND METHOD**

Screening related to disability prevention is expected to provide understanding to the wider community about the long-term effects that can occur. This activity includes providing training & treatment to the community and Puskesmas personnel about disability and the Family / Community Based Rehabilitation (RBM) program so as to prevent further complications related to disability. Providing health services in the form of disability screening for chronic diseases of the elderly & treatment in the form of education, management, and physical exercise so as to prevent

further complications related to disability. Providing assistive devices according to the needs of patients with disabilities (can be a wheelchair, ambulation assistive device, brace, or prosthesis).

Implementation time June-October 2023 in the Sukun sub-district area of Malang city.

1. Coordination with the Health Office of Malang City to determine the target area. Representative areas in Malang City will be selected for disability screening and treatment.
2. Socialization to Puskesmas and caregivers in the form of providing free treatment which includes rehabilitation therapy (exercise and provision of therapeutic modalities) with the Family / Community Based Rehabilitation Program.
3. Disability screening
4. Provision of assistive devices according to the needs of patients with disabilities.

#### **RESULT AND DISCUSSION**

Community Service Activities Screening and Handling of disabilities in Sukun District have been carried out in 4 activities, although the timing of the implementation of this activity has not been in accordance with the scheduling carried out previously. This happened due to several factors including the process of coordinating preparation, submitting proposals, and the licensing process which turned out to require more time. In addition, there are also other activities that are timed almost simultaneously with the timeline for the implementation of this Community Service activity, so that the timeliness of the implementation of this activity is slightly disturbed.

In the implementation of disability screening and also handling according to the indications of each elderly person also received a very good response, which can be seen from the enthusiasm of the community participating in this activity. In this activity, other divisions such as the ENT, psychiatry, psychology and pediatrician divisions also participated in providing treatment and consultation to people with disabilities.

**Table 1.** The number of participants

Sex	Total	Percentage
Laki-Laki	92	67 %
Perempuan	46	33%

**Table 2.** Type of Disability

Type of Disability	Total	Percentage
Tuna Rungu	28	20.2%
Tuna Wicara	28	20.2%
Tuna Daksa	28	20.2%
Tuna Netra	4	2.8 %
Lain-Lain	35	25.3 %



**Figure 1.** Activity in July 9th 2023



**Figure 2.** Activity in July 15th 2023



**Figure 3.** Activity in July 16th 2023

## RESULT AND DISCUSSION

Disability screening and treatment activities in Sukun Sub-district, Malang City involved 138 participants, with 92 people (67%) being male and 46 people (33%) being female. From the screening results, it was found that the most common disabilities experienced by participants were hearing and speech impairments, each with 28 people (20.2%). There were also 28 people (20.2%) who were physically disabled. Meanwhile, there were 4 people (2.8%) with visual impairments and 35 people (25.3%) with other types of disabilities.

The higher number of male participants than female participants could be due to several factors, such as the level of participation, awareness, or access to information in participating in disability screening and treatment activities. Efforts should be made to increase women's participation in similar activities in the future, by providing wider education and socialization to the community. The high rates of hearing, speech, and physical disabilities indicate the need for special attention in the provision of appropriate services and facilities to deal with these types of disabilities.

Participants with hearing impairments were further screened by the ENT team and an introduction was made for hearing loss screening, which helped them to obtain hearing aids as needed. Participants with physical disabilities are advised to join a rehabilitation program at the nearest health facility, to improve their functional abilities. Participants with visual impairments were advised to obtain a walking stick to assist with their mobility. The presence of participants with autism and ADHD disorders indicates the need for appropriate consultation and therapy services, which in this

activity are facilitated by the psychiatry and psychology team.

There is a need for follow-up and monitoring for participants who require further treatment, such as regular control at health facilities or rehabilitation therapy. Counseling and guidance for caregivers or families of participants is important so that they can care for people with disabilities independently. Strengthening cooperation between the Health Office, Puskesmas, community cadres, and the community is needed to improve the Community-Based Rehabilitation (CBR) program related to disability. Disability screening and treatment activities need to be carried out on an ongoing basis to monitor the progress of participants' conditions and provide appropriate services. For those who still require further treatment, it is facilitated to be able to continue consultation and therapy at the RSSA medical rehab clinic or the nearest medical rehab clinic.

#### **IMPACT OF ACTIVITIES**

From this disability screening and treatment activity, it was found that some participants had stable physical conditions. Most of them have been able to adapt to their limitations. The lack of facilitators to be able to continue therapy to higher health centers is one of the obstacles for participants to routine control, so it is necessary to hold counseling or guidance for their caregivers to be able to care for people with disabilities independently. This screening provides an overview for further community service activities to follow up and follow up on the results of this activity so that screening and management of disabilities in the elderly can be sustainable. It is necessary to strengthen cooperation from the Malang City Health Office, Puskesmas, community cadres, and also the community itself to be able to further improve the Community Based Rehabilitation (RBM) program, especially related to disability.

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#### **REFERENCES**

- Apriani, F. D. (2018). Deteksi Dini Cerebral Palsy Pada Bayi Sebagai Upaya Pencegahan Keterlambatan Dalam Diagnosis. *Gema Kesehatan*, 10(2), 70-76.
- Cameron, M. H., & Monroe, L. (2007). *Physical Rehabilitation-E-Book: Evidence-based examination, evaluation, and intervention*. Elsevier Health Sciences.
- Herskind, A., Greisen, G., & Nielsen, J. B. (2015). Early identification and intervention in cerebral palsy. *Developmental Medicine & Child Neurology*, 57(1), 29-36.
- Irwanto, E. R. K., Fransiska, A., Lusli, M., & Okta, S. (2010). Analisis situasi penyandang disabilitas di Indonesia: Sebuah desk-review. Pusat kajian disabilitas Fakultas ilmu-ilmu Sosial dan Politik. Universitas Indonesia. AusAID. Depok.
- Jendela, B. Informasi kesehatan. 2014. Situasi Penyandang Disabilitas. Semester II. Kementerian kesehatan RI. Data ISSN.
- Nasional, D. P. (2019). Kamus besar bahasa Indonesia.
- Peel, N. M., Kuys, S. S., & Klein, K. (2013). Gait speed as a measure in geriatric assessment in clinical settings: a systematic review. *The Journals of Gerontology: Series A*, 68(1), 39-46.
- Vasluian, E., de Jong, I. G., Janssen, W. G., Poelma, M. J., van Wijk, I., Reinders-Messelink, H. A., & van der Sluis, C. K. (2013). Opinions of youngsters with congenital below-elbow deficiency, and those of their parents and professionals concerning prosthetic use and rehabilitation treatment. *PLoS one*, 8(6), e67101.