DEVOTION
Journal of Research and Community Service

Volume 7, Number 7, July 2026
e-ISSN: 2797-6068 and p-ISSN: 2777-0915

Launching A Digital Mental Health Dictionary in Indonesian Sign Language to Enhance Mental Health Information Accessibility for The Deaf Community

Rivo Mario Warouw Lintuuran[1*] , Laura Lesmana Wijaya[2] , Rodhiyah[3] , Adhesatya Ningsih Moodoeto[4]
Universitas Trisakti, Indonesia[1]
Pusat Bahasa Isyarat Indonesia, Indonesia[2]
Kesehatan Mental Tuli Indonesia, Indonesia[3]
Animo Psikologi, Indonesia[4]
Email: rivo.mario@trisakti.ac.id[1*] , vadera1711@gmail.com[2] , sitirodiah21.sr@gmail.com[3] , adhesatya@live.com[4]

Keywords
Deaf; Indonesian Sign Language; BISINDO; Mental Health; Dictionary; Accessibility

Abstract
Communication barriers remain a major obstacle to accessing mental health information and services among Deaf individuals. The limited availability of mental health terminology in Bahasa Isyarat Indonesia (BISINDO) can hinder communication between Deaf individuals, sign language interpreters, and mental health professionals. This community service program aimed to introduce and disseminate a digital BISINDO mental health dictionary as an accessible resource for mental health education and communication. A one-day community engagement program was conducted involving Deaf community members, sign language interpreters, mental health professionals, students, and government representatives. The program included presentations on the need for a mental health dictionary, the dictionary development process incorporating 80 terminologies, demonstrations of BISINDO mental health terminology through YouTube videos, a talk show featuring a psychiatrist and a clinical psychologist from Mental Health Deaf Indonesia, and an interactive question-and-answer session. Program evaluation was based on participant feedback. Participants expressed positive responses regarding the relevance of the dictionary, the free accessibility of video-based content, and its potential use in mental health education and service settings. Feedback highlighted the importance of standardized mental health terminology in BISINDO and the value of collaboration between Deaf and hearing professionals. The digital BISINDO mental health dictionary shows promise as an accessible communication and educational resource that may support more inclusive mental health services for Deaf communities.

INTRODUCTION

Everyone has the right to obtain optimal mental health to support the fulfillment of their quality of life. Deaf individuals have the same rights as others to access services and appropriate means of communication (United Nations, 2006; Republic of Indonesia, 2016). People with disabilities, including Deaf individuals, often face barriers to accessing healthcare services, which may contribute to health inequities and poorer health outcomes (Gréaux et al., 2023).

Communication barriers are frequently experienced by Deaf individuals in mental health settings. Several international studies have reported barriers to communication access

within Deaf communities (Aldè et al. 2025). A study in the United States found that approximately 41% of mental health facilities did not provide services in sign language (James et al., 2022). A systematic review reported that communication barriers were among the significant risk factors contributing to higher rates of mental disorders among Deaf youth compared with young hearing individuals (Khalid et al., 2025). Communication barriers experienced by Deaf and hard-of-hearing patients were primarily associated with healthcare providers' limited communication skills and lack of familiarity with accessible communication strategies, rather than patients' hearing loss or preferred communication modes (Tannenbaum-Baruchi et al., 2025).

Limited knowledge of effective communication strategies among hearing professionals remains a challenge. Following a Deaf mental health training program in Indonesia, only 38% of participants reported knowing the most appropriate methods for communicating with Deaf clients, despite increased awareness of the importance of sign language in clinical settings (Lintuuran et al., 2026). Deaf individuals may encounter difficulties understanding mental health terminology when concepts such as depression, anxiety, or specific symptoms are not clearly explained. Such misunderstandings may affect diagnostic accuracy and treatment engagement, highlighting the need for accessible mental health vocabulary and literacy resources tailored to Deaf communities (Gould & Clark-Howard, 2025). These findings underscore the need for accessible communication resources, including standardized mental health terminology in Bahasa Isyarat Indonesia (BISINDO) (Mahanani et al. 2026; Pamungkas et al. 2026; Sitharesmi 2025).

Several studies have examined communication barriers and mental health accessibility among Deaf communities. James et al. (2022) found that a significant proportion of mental health facilities in the United States lacked sign language services, highlighting systemic gaps in accessibility. Khalid et al. (2025) identified communication barriers as significant risk factors contributing to higher rates of mental disorders among Deaf youth. Tannenbaum-Baruchi et al. (2025) revealed that communication barriers primarily originated from healthcare providers' limited communication skills and unfamiliarity with accessible communication strategies. In Indonesia, Lintuuran et al. (2026) reported that only 38% of training participants were aware of appropriate communication methods for Deaf clients. Gould and Clark-Howard (2025) emphasized the need for accessible mental health vocabulary resources. McKee et al. (2012) demonstrated that health resources developed in partnership with Deaf communities are more responsive to community needs. Choi et al. (2023) and Morisod et al. (2022) showed the effectiveness of sign language videos and digital health education interventions for Deaf populations. However, research specifically addressing the development and dissemination of digital mental health dictionaries in BISINDO remains limited, particularly regarding stakeholder engagement and community feedback.

Based on the review of previous studies, several gaps highlight the urgency of this program. First, although research has documented communication barriers in mental health settings, studies on the development of accessible mental health terminology resources in Bahasa Isyarat Indonesia (BISINDO) remain scarce. Second, most existing resources have been developed without active involvement from Deaf communities, potentially limiting their cultural and linguistic appropriateness. Third, digital mental health resources specifically designed for Deaf communities in Indonesia remain limited, particularly those utilizing video-

based sign language demonstrations (Mease et al. 2018). Fourth, documentation of stakeholder engagement and feedback in the development and dissemination of such resources remains insufficient (Cottrell et al. 2015; Mease et al. 2018; Petkovic et al. 2020; Ray et al. 2017). This community service program addresses these gaps by introducing and disseminating a digital BISINDO mental health dictionary developed through collaboration among Deaf community members, sign language interpreters, and mental health professionals.

The novelty of this program lies in several aspects that distinguish it from previous initiatives. First, this program introduces a digital BISINDO mental health dictionary containing 80 standardized mental health terminologies presented through sign language videos, addressing the lack of accessible mental health vocabulary resources in Indonesia. Second, the program involves active collaboration among Deaf community members, sign language interpreters, mental health professionals, and government representatives throughout the development process, ensuring cultural and linguistic appropriateness. Third, the program utilizes a free and scalable video-based platform (YouTube) for dissemination, enabling self-directed learning and repeated access to the materials. Fourth, this program documents stakeholder feedback and engagement, providing insights for future development and integration into mental health education and service settings.

The absence of standardized mental health vocabulary in BISINDO may limit effective communication and access to mental health education and services. Therefore, developing and disseminating a digital BISINDO mental health dictionary containing key mental health terms presented through sign language videos is necessary. The launch of the dictionary aims to introduce and disseminate the resource while obtaining initial feedback from key stakeholders.

This community service program aimed to introduce and disseminate a digital BISINDO mental health dictionary as an accessible resource for mental health education and communication, as well as to obtain initial feedback from key stakeholders, including Deaf community members, sign language interpreters, mental health professionals, and government representatives. This program is expected to contribute to the development of more inclusive mental health services by providing accessible mental health terminology resources, serving as a reference for mental health professionals and sign language interpreters in clinical communication, and offering a model for collaborative development of accessible health resources involving Deaf communities.

METHOD

This community service initiative was implemented as a one-day educational and dissemination event focused on the launch of a digital BISINDO Mental Health Dictionary. The event was held in Jakarta on May 20, 2026, and was conducted both offline and online by Kesehatan Mental Tuli Indonesia (KMTI) or Deaf Mental Health Indonesia working group in collaboration with the Starbucks Foundation. The targeted participants included Deaf community members, sign language interpreters, mental health professionals, and government representatives, including the National Disability Committee and related ministries. The activity consisted of three phases:

Phase 1: Preparation (prior to the launch).

Beginning in February 2026, a development team was established to prepare the dictionary, involving KMTI (including mental health professionals), Gerakan untuk

Kesejahteraan Tuli Indonesia (Gerkatin), Pusat Bahasa Isyarat Indonesia (Pusbisindo), sign language interpreters, Deaf and hearing linguistic consultants, and Deaf signers for video production. The team compiled mental health terminology based on input from mental health professionals working with Deaf clients, Deaf mental health advocates, and suggestions from the Deaf community. Several meetings were conducted to select, define, and validate the relevance and usability of the sign vocabulary for the Deaf community. A final list of 80 sign vocabulary terms was compiled, primarily consisting of terminology commonly used in mental health consultations. The process continued with video recording of Deaf signers demonstrating the selected vocabulary and uploading the videos to YouTube as the final stage. Promotional materials and invitations were distributed to mental health professionals, Deaf community members, and other stakeholders to participate in the launch through online access or onsite attendance.

Phase 2: Launch of the Digital Dictionary on May 20, 2026.

The launch event consisted of five sessions:

a. Session 1: The Need for a Mental Health Dictionary

b. Session 2: Development Process of the Dictionary

c. Session 3: Demonstration of the Digital Dictionary through Free YouTube-Based Access

d. Session 4: Expert Talk Show with a Clinical Psychologist and Psychiatrist

e. Session 5: Interactive Discussion

Phase 3: Evaluation.

At the end of the event, an evaluation was conducted through participant attendance records, observation of participant engagement, and collection of participant feedback.

RESULTS AND DISCUSSION

The program was successfully launched with enthusiastic interest and reception from Jakarta and outside of Jakarta. There were 50 attendees onsite and 64 live online participants through zoom media. Those in attendants were from KMTI, government representatives (Social and Health Ministries, National Disability Commission), mental health professionals, sign language interpreters and Deaf community (Photo 1a).

The digital dictionary contains 80 mental health terms categorized into emotions, psychological symptoms, mental disorders, mental health services, and general mental health related concepts. Each term is presented through BISINDO video demonstrations accompanied by brief explanations. All videos are available for free through Youtube (Photo 1b).

Qualitative findings from participants through discussion and feedback revealed several themes. One theme showed the relevance of the dictionary for Deaf and hearing communities. Participants reported that the dictionary addressed an important gap in mental health communication. The digital dictionary also helps explain mental health concepts more clearly for Deaf user and for professionals in clinical settings communication. Another theme is the accessibility of video-based learning. Participants appreciated the use of sign language videos, which enabled self-directed learning and repeated viewing for mastery. The video format makes learning easier and more engaging. Participants also gave several suggestions for the potential applications of the dictionary. The future use of the digital dictionary could be used not just in mental health services (hospitals, clinics), but also in educational settings (at school, campus), training for interpreters, community programs, and awareness campaigns.

(a) (b)

Figure 1. (a). Launching event. (b). Digital Dictionary

Language accessibility is an essential component of equitable healthcare access for Deaf individuals (Selby et al., 2026). The dictionary is expected to support mental health accessibility by providing culturally and linguistically accessible mental health terminology for Deaf communities. The involvement of Deaf community members throughout the development process contributes to cultural and linguistic appropriateness. Previous study recommended that health resources developed in partnership with Deaf communities are more likely to be responsive to community needs than resources developed without Deaf stakeholder involvement (McKee et al., 2012). Consistent with previous evidence demonstrating the effectiveness of sign language videos and digital health education interventions for Deaf populations, the BISINDO Mental health Dictionary may provide a scalable and sustainable platform for disseminating mental health information and supporting health literacy within Deaf community (Choi et al., 2022; Morisod et al., 2022). Furthermore, it may facilitate more effective communication between Deaf clients, interpreters, psychologists, psychiatrists, and other healthcare providers. This is particularly relevant given evidence that communication barriers contribute to diagnostic challenges, reduced health literacy, and difficulties in accessing mental health services among Deaf signers (Jacob et al., 2022) . Future recommendations would direct towards expansion of mental health terminology, integration into professional training programs, and evaluation of impact on mental health literacy and service accessibility.

CONCLUSION

The launch of the digital BISINDO Mental Health Dictionary successfully introduced an accessible mental health communication resource developed through collaboration between Deaf community members and mental health professionals. Participant feedback indicated that the dictionary was relevant, accessible, and potentially useful for educational and clinical settings. Continued development and broader dissemination of the resource may contribute to more inclusive mental health services and improved mental health literacy among Deaf communities.

REFERENCES

Aldè, M., Ambrosetti, U., Barozzi, S., & Aldè, S. (2025). The ongoing challenges of hearing loss: Stigma, socio-cultural differences, and accessibility barriers. Audiology Research, 15(3), 46.

Choi, G. W., Lee, K. E., Chang, S. J., & Kim, H. J. (2023). Health education interventions for individuals with hearing impairment: A systematic review. Patient Education and Counseling, 114, 107830.

Cottrell, E. K., et al. (2015). Defining the benefits and challenges of stakeholder engagement in systematic reviews. Comparative Effectiveness Research, 5, 13–19.

Gould, J., & Clark-Howard, K. (2025). A qualitative synthesis of literature on mental health therapies for Deaf and hard-of-hearing people from multiple perspectives: The Deaf client, the mental health practitioner and the sign language interpreter. Counselling Psychology Quarterly, 38(4), 870–894. https://doi.org/10.1080/09515070.2025.2472373

Gréaux, M., Moro, M. F., Kamenov, K., Russell, A. M., Barrett, D., & Cieza, A. (2023). Health equity for persons with disabilities: A global scoping review on barriers and interventions in healthcare services. International Journal for Equity in Health, 22(1), 236.

Jacob, S. A., Palanisamy, U. D., Napier, J., Verstegen, D., Dhanoa, A., & Chong, E. Y. C. (2022). Health care needs of deaf signers: The case for culturally competent health care providers. Academic Medicine, 97(3), 335–340.

James, T. G., Argenyi, M. S., Guardino, D. L., McKee, M. M., Wilson, J. A., Sullivan, M. K., et al. (2022). Communication access in mental health and substance use treatment facilities for Deaf American Sign Language users. Health Affairs, 41(10), 1413–1422.

Khalid, U., Majeed, N., Chovaz, C. J., Choudhary, F. R., & Munawa, K. (2025). Psychological well-being and mental health risks in deaf and hard of hearing youth: A systematic review. European Child & Adolescent Psychiatry, 1–15.

Lintuuran, R. M. W., Wijaya, L. L., Klein, H., Moodoeto, A. N., & Layanto, M. (2026). Menjembatani komunitas tuli dan dengar melalui pelatihan komunitas untuk kesehatan mental: Penelitian. Jurnal Pengabdian Masyarakat dan Riset Pendidikan, 4(3), 20755–20762.

Mahanani, A. H., Az Zahara, N. A., & Ramadhani, N. M. (2026). SahabatInklusi: A catalyst for change toward a more inclusive and disability-friendly Indonesia through artificial intelligence (AI) and computer vision. Journal of Gender Equality Disability Social Inclusion and Children, 3(2), 132–148.

McKee, M., Thew, D., Starr, M., Kushalnagar, P., Reid, J. T., Graybill, P., et al. (2012). Engaging the Deaf American Sign Language community: Lessons from a community-based participatory research center. Progress in Community Health Partnerships: Research, Education, and Action, 6(3), 321–329.

Mease, L. A., Erickson, A., & Hicks, C. (2018). Engagement takes a (fishing) village to manage a resource: Principles and practice of effective stakeholder engagement. Journal of Environmental Management, 212, 248–257.

Morisod, K., Malebranche, M., Marti, J., Spycher, J., Grazioli, V. S., & Bodenmann, P. (2022). Interventions aimed at improving healthcare and health education equity for adult d/Deaf patients: A systematic review. European Journal of Public Health, 32(4), 548–556. https://doi.org/10.1093/eurpub/ckac056

Pamungkas, B., Jamaludin, A., & Wahab, R. (2026). How do Deaf students learn to shalat? A descriptive study at Darul Ashom Islamic Boarding School for Deaf Students in Yogyakarta, Indonesia. Journal of ICSAR, 36–52.

Petkovic, J., et al. (2020). Protocol for the development of guidance for stakeholder

engagement in health and healthcare guideline development and implementation. Systematic Reviews, 9(1), 21.
Ray, K. N., & Miller, E. (2017). Strengthening stakeholder-engaged research and research on stakeholder engagement. Journal of Comparative Effectiveness Research, 6(4), 375–389.
Republic of Indonesia. (2016). Undang-Undang Republik Indonesia Nomor 8 Tahun 2016 tentang Penyandang Disabilitas. https://peraturan.bpk.go.id/Details/37251/uu-no-8-tahun-2016
Selby, A., Sutton, A., Bamford, E., & Booth, A. (2026). Factors and mitigating strategies impacting receipt of healthcare by the Deaf community: An umbrella review. BMC Health Services Research.
Sitharesmi, R. D. (2025). Exploring BISINDO (Indonesian Sign Language) in the short movie's dialogues for the Deaf empowerment. In International Joint Conference on Arts and Humanities 2024 (IJCAH 2024) (pp. 1056–1065). Atlantis Press.
Tannenbaum-Baruchi, C., Feder-Bubis, P., & Aharonson-Daniel, L. (2025). Communication barriers to optimal access to emergency rooms according to deaf and hard-of-hearing patients and health care workers: A mixed-methods study. Academic Emergency Medicine, 32(3), 246–259.
United Nations. (2006). Convention on the Rights of Persons with Disabilities. https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities.html