

Empowering Teachers to Prevent Depression in Deaf Students: A Community-Based Intervention Model

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Abstrak

Masalah kesehatan mental pada siswa tunarungu sering kali tidak terdeteksi akibat hambatan komunikasi serta kurangnya dukungan sistem yang inklusif. Program pemberdayaan ini bertujuan untuk memperkuat peran guru dalam mencegah depresi pada siswa disabilitas di SLB B Yakut Purwokerto. Kegiatan terdiri dari dua tahap, yaitu mini riset mengenai tingkat depresi pada siswa tunarungu dan intervensi edukatif yang dilaksanakan oleh guru melalui sesi pelatihan terstruktur. Metode yang digunakan pada tahap pertama adalah Beck Depression Inventory-II (versi Bahasa Indonesia), yang diberikan sebagai pre-test dan post-test untuk mengukur perubahan pengetahuan guru. Materi intervensi disampaikan melalui podcast dan buku panduan. Hasil mini riset menunjukkan bahwa 100% siswa mengalami depresi pada berbagai tingkat, dengan sebagian besar berada pada kategori sedang. Hasil intervensi menunjukkan adanya peningkatan nilai rata-rata, namun perbedaan tersebut tidak signifikan secara statistik. Beberapa keterbatasan seperti jumlah sampel, durasi, dan partisipasi dalam intervensi memengaruhi hasil penelitian. Kesimpulannya, meskipun program ini meningkatkan kesadaran, diperlukan intervensi yang lebih panjang dan komprehensif untuk memberdayakan guru secara optimal dalam mendukung kesehatan mental siswa tunarungu.

Kata kunci - siswa tunarungu, depresi, guru, pemberdayaan, pendidikan inklusif, kesehatan mental

Abstract

Mental health problems in students who are deaf often have no detected consequences, obstacles to communication, and a lack of system-inclusive support. Empowerment program public. This aims to strengthen the role of teachers in preventing depression in students with disabilities at SLB B Yakut Purwokerto. Activities consist of two stages: a mini-research on the level of depression among deaf students and an educational intervention class conducted by the teacher through structured training sessions. The method used in the first stage is the Beck Depression Inventory-II (Indonesian version), administered as a pre- and post-test in class to measure changes in teacher knowledge. Intervention materials were delivered via podcasts and handbooks. The results of mini Research 100 % students experience depression at various levels, with a large part in the moderate category. In class, the results showed that the average target mark increased, but there were significant differences in the statistical test results. Some limitations, such as sample size, duration, and intervention participation, Influence the results. In conclusion, although this program increased awareness, the intervention term is longer and more comprehensive to better empower teachers to support the mental health of deaf students.

Keywords - Deaf students, depression, teachers, empowerment, inclusive education, mental health

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INTRODUCTION

Mental health is a moderate issue in Indonesia today. Mental health is a state of well-being that enables someone to cope with life's pressures, learn and work effectively, and contribute to their community. Mental health is an integrated component of health, because somebody states that health is good when the situation is good in a way, physical, mental, and social, and not free from disease, allowing life to be productive. (Kementrian Kesehatan Republik Indonesia, 2023)

Depression is one of the most common mental disorders that occurs in society. *The World Health Organization* (WHO) notes that more than 322 million people in the world experience depression. Nationally, the prevalence of depression in Indonesia in 2023 is 1.4%. The prevalence of depression is highest in the group of young children (15-24 years), namely by 2%. Unfortunately, people with disabilities, such as the deaf, often experience limitations in accessing information about mental health disorders, such as depression. (WHO, 2017)(Kementrian Kesehatan Republik Indonesia, 2023).

Vulnerable populations, particularly individuals with disabilities such as the deaf, face additional challenges due to limited access to mental health information, communication barriers, and inadequate psychosocial support, which exacerbate the risk of undetected and untreated depression (Hammad et al., 2024). Systematic evidence shows that deaf and hard-of-hearing youth experience higher rates of internalizing disorders, such as anxiety and depression, due to social exclusion, communication barriers, and stigma. Additionally, adverse childhood experiences and elevated stress levels have been empirically linked with lower psychological well-being in deaf adolescents, highlighting heightened vulnerability to mental health disturbances (Martijn et al., 2025). These limitations highlight the urgent need for targeted mental health education and intervention programs, including teacher-mediated strategies, accessible psycho-educational resources, and community-based awareness campaigns, to ensure early detection, emotional support, and prevention of depression in this high-risk group (Rahmi et al., 2025).

Teenagers who are deaf have 2-4 times greater risk of experiencing depression compared to teenagers who are listeners. Language and communication barriers are one of the main challenges in detecting and handling depression in deaf adolescents deaf (Easwar et al., 2025). Social pressures and stigma, including bullying, discrimination, social isolation, and difficulties in adapting to the surrounding environment, further contribute to the increased prevalence of depressive symptoms among deaf adolescents (Aanondsen et al., 2023). In addition, factors that play a role in incident depression in adolescent deaf students are the role of teachers in the school environment. Teachers who have a supportive, empathetic, and communicative role play a very important role in detecting early and responsive emotional problems in the middle experienced by deaf students. Therefore , a teacher empowerment program is needed that focuses on strengthening their role in supporting student mental well-being, especially for students with special needs, such as the deaf. Through an educational and psychosocial approach, teachers can equip deaf teenagers with practical skills to create a safe and emotionally supportive class environment for deaf teenagers who experience depression. (Rulanggi & Hastjarjo, 2016).

Through empowerment programs, it is hoped that teachers can understand the importance of an approach to inclusive and empathetic teaching to help students face challenges, emotional and social.

METHOD

Activity: This uses a series of devotionals based on research. Implementation March-May 2025 on high school teachers at SLB B Yakut Purwokerto. Activities: These activities use two-stage activities, namely depression assessment in students and classes fostered for teachers. The approach used is participatory. (Ahmad Mustanir, Rifni Nikmat Syarifuddin, 2019), with teachers as the main actors in the empowerment process. Activity flow can be seen in the chart following :

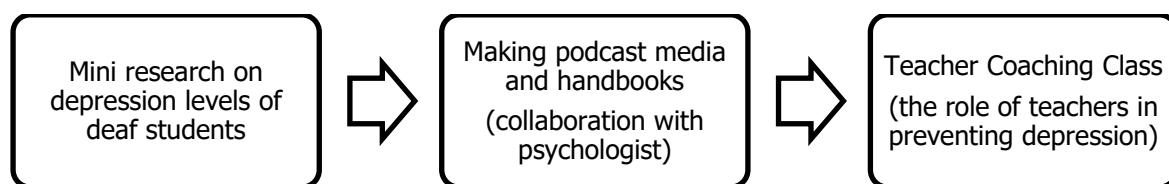


Figure 1. Activity Flow

At this stage, the first instrument measuring using the Indonesian (Ginting et al., 2023) version of the Beck Depression Inventory-II (BDI-II) for measuring depression in students. The instruments consist of 21 question items. Measuring the level of depression using total score, no depression (0–13), depression mild (14–19), depression moderate (20–28), and depression heavy (29–63). Data collection techniques were carried out with a total sampling method, involving over 19 high school students.

At the second stage, the activity class was conducted for 14 teachers, using the oral socialization method with aids such as PowerPoint, podcasts, and a handbook, with a focus on the role of teachers in the level of depression of deaf students. To evaluate teacher knowledge, pre-test and post-test questionnaires were used. Data analysis was carried out with statistical tests, a paired sample t-test, to see the difference in average score before and after the intervention.

RESULTS AND DISCUSSION

Activity devotion to the public has implemented in accordance with planned stages and schedules. Activities devoted to society. This is in the form of mini-research and intervention activities, which are fostered in the class. Activities implemented at SMA SLB B Yakut Purwokerto, Regency Banyumas, Central Java, Indonesia. Activities: This themed Deaf Friends Prevent Depression with the *tagline* "Expression deaf without limit".

A mini research stage about the level of depression was conducted on 19 deaf students. Activities were done by the team devotion, and a lecturer at Jenderal University Soedirman on March 17, 2025. Research results of the total students who became respondents, women 52.6% and men 47.4%. All students show symptoms of depression, as detailed in Table 1.

Table 1. Depression levels of students based on the BDI-II score

Depression Level	Number of Students	Percentage
Mild Depression	5	26.3%
Moderate Depression	9	47.4%
Major Depression	5	26.3%
Total	19	100%

Analysis results state that level depression student deaf at SMA SLB B Yakut Purwokerto, 47.4% experienced depression category medium, and the rest experience depression level light and heavy by 26.3%.

The results show that all over the population, respondents have their own symptoms of depression at various levels of severity, without any of the students being in a normal emotional condition. This condition shows the need for urgent intervention and the importance of psycho-educational and preventive measures, specifically for teachers at school, outside the norm, such as SLB. Deaf children, as a group, are vulnerable and often face challenges in communication, limitations in accessing information, and potential isolation, which contribute to their psychological risk, as supported by Indonesian evidence showing that barriers in communication and psychosocial support for deaf children and their families are linked with increased stress and mental health vulnerability in special needs contexts (Mariani et al., 2024).



Figure 2. Implementation of mini research on deaf students at SLB B Yakut Purwokerto

Based on the results, the team will cooperate with psychologist Gisella Arnis G., S.Psi., MA, to make a podcast and a *handbook*. Media *podcasts* containing content about depression in children with disabilities and the role of teachers in prevention efforts. The podcast *media* used has been published on YouTube with the link <https://youtu.be/GG82-sdwFDY?si=b4-6Awid7iriyQP>. The second media created is a teacher's role handbook for preventing depression in deaf children, which has published on the link https://drive.google.com/file/d/1eCpDb9dIIAcjmr6U_2QbaVNuderY4C2a/view?usp=drivesdk. Both media have registered as Property Rights Intellectual Property (IPR) on March 29, 2025.



Figure 3. Property Rights Certificate Intellectual Property (IPR)



Figure 4. Podcast Creation



Figure 5. Making a handbook

Intervention was furthermore delivered through class development that included educational and health media (*podcasts and handbooks*). Implementation activities on April 24, 2025, in the teacher's room of SLB B Yakut Purwokerto, involving 14 teachers and principals from the school.



Figure 6. Implementation of Guided Classes

Measurement influence intervention done through pretest and posttest using 15 questions. Analysis results testing can be seen in Table 2.

Table 2. Results of the Paired Sample T-Test on teacher knowledge

Variables	Average Score	P-value
Pretest	13.14	0.459
Posttest	13.36	

Based on analysis test there is improvement score average, but based on mark significance ($p=0.459$), intervention This Not yet show significant impact in a way statistics to teacher knowledge.

Results that are not significant can be due to a number of factors, such as the first sample being too small. In this research, the sample size was only 14 people. According to (Fraenkel et al., 2012) A small sample size can lower the strength of statistics (statistical power), so that the possibility of not detecting the real difference Increases (*Type II error*). Therefore, the results of this study were not significant, which may be influenced by the limited number of participants. In studies of mental health interventions, low statistical power due to small sample sizes has been consistently observed, especially in trials examining psychological treatments for mood disorders such as depression (De Vries et al., 2023) which underscores the risk that underpowered designs may not detect real effects even when they exist.

The second factor often involves counseling or consultation with an expert, such as a psychologist, regarding mental health. If teachers have frequently received information and training on mental health, including depression, prior to the intervention, their baseline knowledge may already be high. This can result in a ceiling effect, where pretest scores are already near the maximum, making it more difficult to detect significant improvement (Rulangi & Hastjarjo, 2016). Recent studies in psychology and education indicate that participants with high initial scores tend to show minimal measurable change post-intervention, leading to non-significant results (Wang & Li, 2026).

The third factor is limited duration. The duration of a short intervention can become another cause of no significant results. Changes in knowledge and behavior, especially in the context of mental health, such as depression, need time, reinforcement repeatedly, and deep experience (Arini, 2021). If the intervention is only done one time or for a limited time, then the impact is possible, but not yet strong enough for a change in perception and behavior in a significant way. If the intervention is only done one time or for a limited time, then the impact is possible, but not yet strong enough for a change in perception and behavior in a significant way. Previous research on mental health intervention outcomes indicates that long-term interventions, such as extended exercise programs or sustained psychosocial support, are more consistently linked with significant improvements in depressive symptoms, whereas very brief or short-term approaches may yield smaller or inconsistent effects. For example, a systematic review and meta-analysis of psychosocial interventions for adolescents found that longer durations (up to one–two years) were associated with more sustained reductions in depressive symptoms, whereas shorter follow-ups were less conclusive (Duagi et al., 2024). Likewise, a meta-analysis of exercise interventions in students showed that the length and frequency of intervention periods influenced effect sizes on depression, with extended intervention periods demonstrating stronger effects on depressive outcomes (Li et al., 2025)

Based on the second stage, there is inequality between knowledge and attitude, with a still high incidence of depression in students. Inequality. This becomes a problem. Important things to discuss more continue. Some studies show that knowledge is not enough to ensure the effectiveness of the role of teachers in handling problem students' mental health. Research (Törmänen, 2025) who developed the competency model, teachers' emotions that include skills in managing personal emotions and understanding students' emotions, the important thing is to support the mental well-being of students. In addition, the deaf tend to use an emphasis strategy expression (emotional suppression) to arrange emotions negatively, not a better adaptive strategy, such as reappraisal (assessment repeated in a cognitive way), which will impact their difficulties in disclosing negative emotions and symptoms of difficult depression recognized by both teachers and parents. This is a strong reason for the occurrence of inequality in handling depression in deaf students, not only from teachers but also their internal characteristics alone, making it difficult for them to express emotions they (Dong et al., 2024). Other factors such as availability of service, psychological, communication with students who are deaf, and a lack of sustainable training in practice can also directly contribute to inequality the (Shafwa et al., 2023)

Thus, the inequality between students' heights and teachers' knowledge levels reflects the need to expand teachers' roles beyond being only recipients of information to active agents in detecting early, mentoring, and creating an emotionally supportive school environment. Intervention for the front should not only focus on improving teachers' cognitive skills, but also affective and technical adaptive approaches to meet the needs of children who are deaf.

CONCLUSION

Based on results and discussion, it can be concluded that the activity of empowering the public through the Deaf Friends Prevent program Depression, with the tagline "Expression deaf without limits," succeeded in identifying the high prevalence of depression in deaf students and strengthened teacher awareness of the important role they play in detecting and supporting the mental health of students. Although intervention educative term short Not yet show difference significant in a way statistics, activities This give impact positive in the form of increasing mental health literacy, creating educational media with IPR, as well as trigger commitment school For build a more environment supportive in a way emotional. Activities. This is beneficial in an open, cross-disciplinary dialogue space between educators, psychologists, and academics, for supporting children with disabilities in a comprehensive way.

For empowerment to continue, it is recommended to do so in a practical training term, with emphasis on skills, affective and visual-emotional communication, appropriate to the characteristics of deaf students. Findings from the activity. This is an intervention model design, collaborative and based on affective-visual, which can become a prototype approach to teacher empowerment in schools outside the usual context, with potential replication in the context of disability. This model merges educational theory, media-based language signals, and empathy training as a method strategically based on proof for the prevention of depression in children in need of special care.

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