



Qualitative Evaluation of a Toddlers' Speech Delay Early Detection Poster

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Abstract

The estimated number of 0 to 4-years-old children with speech disorders in Indonesia is 1.3 million people. If they are not treated properly, they will have serious consequences in adulthood. The Ministry of health of Indonesia has launched a speech disorder detection in The Child Development Monitoring Programs carried out by Posyandu cadres or Community Health Center officers. To support the program, a poster design for the early Detection of Speech Disorders in Toddlers (DeGabbi) has been created. Prior to dissemination, it is necessary to evaluate the effectiveness of the poster by conducting qualitative research. FGDs with toddlers' mothers and posyandu cadres were conducted using an open interview guideline regarding the message, the language, and the appearance of the poster. Triangulation was carried out on Puskesmas officers, media design experts, and Indonesian language experts. Prior to the FGD, informants were asked to look at DeGabbi's poster on the room wall for 5 minutes. Results of the FGD showed that all informants understood the poster messages that stated, "Whether the child is a speech delay or not at this age." Regarding the contents of the poster, one informant stated that could not understand the foreign terms, and another informant suggested to add arrows as a flow guide. Concerning the appearance, one informant thought it was better to use a stiffer material and increase the poster size. The triangulation on media design experts provided feedback relating to the images, layout, and flow of posters, while Indonesian language experts provided feedback on the diction of substitute words for foreign terms and the more effective sentences and phrases. After knowing the weaknesses of the DeGabbi poster, it then will be corrected. The DeGabbi poster is expected to be an effective and have leverage for early detection of speech disorders.

Keywords: Detection, Poster, Speech Disorder, Toddler

1. Introduction

Speech and language disorders in children often occur with a prevalence in the USA in children aged 2 to 5 years of 5% - 12%. (Law et al., 2000) The estimated number of speech and language disorders in children aged 0-4 years in Indonesia using the prevalence in the USA is 1.3 million people. Speech and language disorders in preschool-age children that are not handled properly will have serious consequences that are prolonged even into adulthood.

School-age children who have a history of speech and language disorders at preschool age are at higher risk of language-based learning disabilities, namely reading and writing. (Catts et al., 2002) Adults with a history of speech and language disorders at preschool age have lower job skills and are at risk of being laid off from their jobs. (Law et al., 2009).

The lasting consequences of speech disorders above require detection and intervention as early as possible. Interventions carried out during the golden period of child development, namely before the age of 5 years, will have an optimal impact because they are carried out while the development of the brain and nerve fibers is still occurring. (Law et al., 2003).

The Indonesian government, in this case the Ministry of Health, has launched the Stimulation, Detection and Early Intervention of Child Development (SDIDTK) program for children aged 0-6 years. This program contains detection instruments, guidelines, monitoring and evaluation of children's growth and development including detection of speech delays. Activities in this program are carried out at the basic health service level, namely the Puskesmas or Posyandu with trained cadres (Kemenkes RI, 2016).

The implementation of the SDIDTK program, especially in terms of detecting and treating speech disorders in toddlers, requires the cooperation of many parties, especially families who have children under five. Early intervention in toddlers is not possible without early detection. Unfortunately, there are still many parents in Indonesia who seem to be ignorant of this and consider it a normal condition and are not worried about the serious impact on their child's future. (Bargiela et al., 2016).

Early diagnosis and immediate treatment of cases of speech delay in toddlers can be improved by educating families who have children under five. One quite effective way is to make educational media in the form of posters to increase the awareness of parents of toddlers and to be able to carry out early detection of speech disorders independently

A poster design for Early Detection of Speech and Language Disorders in Toddlers (DeGabbi) has been made using a cartoon character icon named DeGabbi to make it more attractive and easy to remember. This poster is expected to be an effective and broad-reaching educational medium for the laity. So, to meet these expectations, it is necessary to evaluate the effectiveness of the poster before dissemination.

2. Literature Review

The choice of poster media for socializing speech and language disorders in toddlers is based on broader achievement considerations. The geographical condition of Indonesia as an archipelagic country has many remote areas that are difficult to reach. It is not known whether these remote areas already have an internet network to access information through digital media, so poster media is still the choice for wider coverage in Indonesia. The advantages of poster media compared to digital media are lower costs, flexibility in placement, more permanent and can be accessed in areas not covered by classic mass media such as newspapers, magazines, radio and television (Pauwels, 2015).

Currently there is no poster media to detect speech and language disorders in toddlers in Indonesia that have gone through a process of scientific validity and reliability. Information about speech delays has been made in the form of leaflets and is proven to increase parents' understanding of the theory and concept of speech delays (Afriany et al., 2022).

Based on the description above regarding the advantages of poster media, a poster design for the detection of speech and language disorders in toddlers has been initiated. To attract more attention, the poster design is made using a cartoon character icon named DeGabbi which stands for detection of speech and language disorders in toddlers.

There are many test and screening tools to detect speech delay in children, but until now none has been stated as a standard reference or gold standard. DeGabbi's poster content uses the table of indications for referral of delays and speech and language disorders in preschool children from M. Fieldman, with a slight modification referring to the table of signs of speech development problems in children from the Indonesian Pediatrician Association (IDAI).

In Table M. Fieldman, the signs and symptoms of both expressive and receptive speech disorders are explained in different age groups, from birth to 60 months of age (Feldman, 2005). DeGabbi's poster content is limited to the age of 3 years or toddlers with the consideration that the earlier the detection is carried out, the faster the handling process and the maximum results will be obtained (Mondal et al., 2016). In addition, to simplify the poster content so that it is more easily accepted by the public.

The initial design of the DeGabbi poster has gone through the revision phase I following a trial outreach to posyandu cadres in the working area of the Rusanawa Health Center, Arcamanik District, Bandung City in 2019. In the trials that have been conducted, it is known that the initial design of the poster can increase knowledge about speech delay and have a positive influence ($Y = 7.48 + 0.037X$) on the motivation of the cadre to socialize it (Sheba et al., 2020).

The effectiveness of posters must be tested before a poster is socialized or disseminated to the public so that the information in the poster can be received by the target audience. The effectiveness test trip should be preceded by an evaluation of the acceptance of the poster by the target candidate. According to Pauwels (2015), well-designed and properly displayed posters can prove to be important media for health education. The criteria for a good poster must provide clear information, be able to attract attention and have the retention power of the message conveyed (Pauwels, 2015). While other experts stated that health posters must have appeal in terms of size, pictures, colors, materials, layout, and letters as well as understanding of words and sentences (Kim & Sin, 2016).

3. Materials and Methods

The research design is a qualitative research with a phenomenological approach, namely conducting in-depth interviews to determine respondents' opinions about the DeGabbi poster. The research respondents were Batita mothers in the Teratai II Posyandu area, Cisaranten Kulon Village, Arcamanik District, Bandung City. Respondents were selected using purposive sampling, namely, choosing respondents who have toddlers from a list of community members who have toddlers in the Posyandu Teratai II area. The number of respondents is determined based on data saturation. Additional respondents were 2 cadres of Posyandu Teratai II and 1 health promotion officer at the Rusanawa Public Health Center, Arcamanik District, Bandung City, as triangulation respondents.

The poster is printed in color using laser technology on Flexi Frontlite 280 Gsm material which is flexible and

relatively weather resistant with a width of 60 cm and a length of 85 cm. The posters were put up on the posyandu walls, and before the Focus Group Discussion (FGD), the respondents were asked first to observe DeGabbi's poster for 5 minutes.

The FGD was conducted at the Teratai II Posyandu in Bandung City using an open question interview guide which was compiled based on the theory of procedures for compiling attractive and informative health posters, namely interest in terms of size, image, color, material, layout, and letters as well as understanding of words and sentences.

Trust is built from the results of interviews, namely by using interview guide sheets, voice recordings, confirmation of each respondent's answers (member check) and approval of all respondents' answers at the end of the interview session (confirmability). Furthermore, data processing was carried out after each interview with 1 respondent, namely the interview results in the form of recordings were made transcripts (transferability), checked again. If there were unclear answers, then they were confirmed. Back to the respondent. Transcript continued with reduction, and coding. This process is repeated until data saturation occurs.

Data analysis is carried out directly at the early, middle and final stages of the data collection process to avoid residual data. After coding, categorization is arranged, themes are developed and followed by data interpretation. The next process of this stage of the research was triangulation which was carried out on 2 cadres of Posyandu Teratai II and 1 health promotion officer at the Rusunawa Health Center, Arcamanik District, Bandung City. As for the final stage, before the second revision was carried out, the poster was shown to 2 experts, namely media design experts and Indonesian language experts to get input and suggestions.

4. Results and Discussion

The results of the FGD showed that all informants could receive messages on the poster with the meaning, "This is about the child's ability to speak, whether he is late or not at this age". Regarding the contents of the poster, one informant stated that he did not understand the written foreign terms, and another informant gave suggestions for adding arrows as a flow guide when reading the poster. Regarding the appearance of the poster, one informant thought it was better to use a stiffer material and increase the size, another informant suggested using a more contrasting color.

The triangulation results for media design experts provided feedback on the images, layout, and flow of posters, while Indonesian language experts provided feedback on the choice of substitute words for foreign terms and the more effective use of sentences and phrases. After knowing the weaknesses and shortcomings of the DeGabbi poster, improvements will be made to the poster.

5. Conclusion

The health education material evaluation served some very useful purposes. It is highlighted the value of doing formative evaluation of the media with a sample of the target audience and expert opinion before printing and distribution. As a result of this evaluation further editing and restructuring of the DeGabbi poster proved necessary. The poster content regarding the medical term and English phrase as well as the background image was highlighted during the research. The DeGabbi poster is expected to be an effective and have leverage for early detection of speech disorders.

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