

Evaluation of Drug and Food Education Information Communication Strategy in Special Schools in the Yogyakarta Special Province

Wulandari

BBPOM in Yogyakarta

Corresponding auhor, email: wulandari@pom.go.id

Article History: Received 25/10/2024

Revised 18/01/2025

Accepted 24/05/2025

Published 22/06/2025

Abstract

BBPOM in Yogyakarta took the initiative expanding the scope of communication, information, and education (KIE) for Drugs and Food by implementing KIE in special schools (SLB). The purpose of this study is to ensure that educational messages can be delivered in a way that is appropriate and effective for the SLB community. With this evaluation, the effectiveness of communication strategies can be assessed, obstacles identified, influences analyzed, and perceptions of the SLB community regarding the IEC program that has been implemented can be explored. The research is in the form of an evaluation (Evaluation Research), using quantitative methods with surveys via questionnaires and document studies, based on the IEC dimensions in Decree Number 104 of 2022 concerning Guidelines for Information and Education Communication Strategies, namely target group strategy, creative, message, media amplification, activity program, and implementation of IEC. The survey was conducted on 7 SLBs that had received IEC during 2023 to April 2024. The respondents numbered 135 consisting of students, principals, teachers, employees, and canteen managers. The strategies implemented received good assessments from respondents, namely target group strategy 86.1%, creative 85.1%, message 82.4%, media amplification 85.0%, activity program 84.2%, and implementation of IEC 84.7%, there was input for IEC to be implemented periodically and it was necessary to exemplify the review of food in schools. The IEC strategy for Drugs and Food in SLB by BBPOM in Yogyakarta is good and appropriate. The implementation of IEC for SLB in DIY can be accelerated with a tiered method, namely providing training to representatives of each SLB first. Constraints related to limited student abilities can be overcome by developing more creative, interesting, and specific educational materials according to the needs of the SLB community.

Keywords: educational information communication, special schools, drugs and food

Introduction

The Center for Food and Drug Control (BBPOM) in Yogyakarta is a Technical Implementation Unit (UPT) of the POM Agency which has been established in

accordance with the Decree of the Head of BPOM No. 05018/SK/KBPOM in 2001 with the latest amendment to the Regulation of the Head of BPOM number 12 of 2018.

In carrying out these main tasks, the UPT has 12 (twelve) main tasks and functions, one of which is the management of communication, information, education (KIE) and public complaints in the field of Drug and Food supervision. One form of activity carried out is by implementing activities to disseminate drug and food information to the public so that the public can become smart consumers and be able to choose safe Drug and Food products (BPOM Agency, 2018).

BBPOM in Yogyakarta carries out IEC to all levels of society including vulnerable groups. The vulnerable groups referred to in accordance with Law Number 25 of 2009 concerning Public Services and Circular Letter of the Minister of PANRB Number 66 of 2020 concerning Provision of Facilities and Infrastructure for Vulnerable Groups in the Provision of Public Services are pregnant women, breastfeeding mothers, children, elderly people with disabilities and victims of disasters/social (SE MenpanRB, 2020).

In relation to services for vulnerable groups, BBPOM in Yogyakarta has developed an innovation, namely Santan Prima or Sambangan Kelompok Tantan for Prima Service in the form of educational information communication or IEC to Special Schools or SLB.IEC to SLB with the main material Choosing Healthy and Safe Food(BBPOM in Yogyakarta, 2023).

BBPOM in Yogyakarta is a Technical Implementation Unit (UPT) of the POM Agency which has been established in accordance with the Decree of the Head of BPOM No. 05018/SK/KBPOM in 2001 with the latest amendment to the Regulation of the Head of BPOM number 12 of 2018. In carrying out these main tasks, the UPT has 12 (twelve) main tasks and functions, one of which is the management of communication, information, education (KIE) and public complaints in the field of Drug and Food supervision. One form of activity carried out is by implementing activities to disseminate drug and food information to the public so that the public can become smart consumers and be able to choose safe Drug and Food products (BPOM Agency, 2018).

BBPOM in Yogyakarta carries out IEC to all levels of society including vulnerable groups. The vulnerable groups referred to in accordance with Law Number 25 of 2009 concerning Public Services and Circular Letter of the Minister of PANRB Number 66 of 2020 concerning Provision of Facilities and Infrastructure for Vulnerable Groups in the Provision of Public Services are pregnant women, breastfeeding mothers, children, elderly people with disabilities and victims of disasters/social (SE MenpanRB, 2020).

In relation to services for vulnerable groups, BBPOM in Yogyakarta has developed an innovation, namely Santan Prima or Sambangan Kelompok Tantan for Prima Service in the form of educational information communication or IEC to Special Schools or SLB. IEC to SLB with the main material Choosing Healthy and Safe Food (BBPOM in Yogyakarta, 2023).

Method

This paper is an evaluative research (Evaluation Research) and uses a survey method with a questionnaire and document study based on the IEC dimensions in Decree Number 104 of 2022 concerning Guidelines for Information and Education Communication Strategies. The variables studied were 6 (six) strategies, namely target group strategy, creative, message, media amplification, activity program, and implementation of IEC which were derived in 12 (twelve) indicators and 1 (one) open question. The evaluation target (object) in this study is the Drug and Food IEC Program implemented in SLB. In this study, primary data was collected through a survey, while secondary data in this study was collected from books, reports and work reference frameworks. Qualitative data in the form of descriptive narratives from the results of document studies, while quantitative data in the form of numerical data from the results of a survey of the school community participating in IEC (principals, teachers, employees, students, and canteen staff) in 2023 to April 2024, with a population of 135 (one hundred and thirty-five) people from 7 (seven) SLBs, namely SLB Dharma Rena Ring 1 Sleman, SLB Marsudi Putra Bantul, SLB Tegar Harapan Sleman, SLBN 2 Bantul, SLBN 1 Yogyakarta, SLB PGRI Sentolo Kulon Progo, and SLBN 1 Gunungkidul.

Data collection was conducted through an online survey by sending a survey link to respondents, conducted from 11 to 18 July 2024 with a total of 135 (one hundred and thirty five) respondents, consisting of 54 (fifty four) students, 67 (sixty seven) principals and teachers, 10 (ten) employees, and 4 (four) school canteen managers. The survey was completed by SLB students accompanied by teachers or parents.

The questionnaire consists of 6 (six) parameters of the IEC strategy described with 12 (twelve) statements and 5 answer choices, namely Strongly Disagree (STS), Disagree (TS), Undecided (R), Agree (S), Strongly Agree (SS). Data analysis with Likert Scale calculation with results translated based on interval analysis (Sugiyono, 2008)

Discussion

Based on the research results, general data were obtained from respondents consisting of gender and education, as shown in Table 1. The levels of SLB that have been given IEC range from Elementary School (SD) students to Senior High School (SMA), while other levels of education are from respondents who are principals/teachers, employees, and canteen managers.

Table 1. General Data of Respondents

Parameter	Description	Amount
Gender	Man	43
	Woman	92
	Total	135
Education	SD	30
	JUNIOR HIGH SCHOOL	16
	SENIOR HIGH SCHOOL	20
	D4/ S1	23
	S2	6
	Total	135

Document review of activity reports and direct observation of the implementation of IEC in the field, during 2023 to April 2024, BBPOM in Yogyakarta 7 (seven) times with the results as shown in Table 2.

Table 2. List of IEC Activities at SLB in 2023-2024

No	School name	Address	Visit Date	Number of IEC Participants
1	Dharma Rena Special Needs School Ring 1 Sleman	Gg. Meranti No.177c, Gowok, Caturtunggal, Depok District, Sleman Regency, Special Region of Yogyakarta 55281	May 15, 2023	40
2	Marsudi Putra Special Needs School Bantul	Jl. Dr. Wahidin Sudiro Husodo No. 5 Bantul	October 11, 2023	71
3	Tegar Harapan Special Needs School in Sleman	New Sanggrahan Road, Banaran, Sendangadi, Mlati District, Sleman Regency, Special Region of Yogyakarta 55285	November 16, 2023	75
4	Special Needs School 2 Bantul	Jl. West Imogiri No.4,5, Tanjung, Bangunharjo, Sewon District, Bantul Regency, Special Region of Yogyakarta 55187	June 16, 2023	120
5	Special Needs School 1 Yogyakarta	Jl. Sea Captain Samadikun No.3, Wirogunan, Mergangsan District, Yogyakarta City, Special Region of Yogyakarta 55151	November 16, 2023	141
6	PGRI Special Needs School in Sentolo, Kulon Progo	Jl. Raya Wates - Jogjakarta No.KM. 16, Sentolo Kidul, Sentolo, Sentolo District, Kulon Progo Regency, Special Region of Yogyakarta 55664	February 7, 2024	65

7	Gunungkidul 1 Special School	Jl. Pemuda No.227, Rejosari, Baleharjo, Wonosari District, Gunung Kidul Regency, Special Region of Yogyakarta 55851	April 26, 2024	210
Amount				722

Source: BBPOM Activity Report in Yogyakarta

Based on field observations, the activity was carried out for approximately one hour with a series of events as presented in Table 3. Resource persons 1 and 2 carried out IEC simultaneously, resource person 1 in front of IEC participants in a meeting room and resource person 2 carried out IEC in the SLB canteen. The main material presented was about healthy and safe food, as well as additional material about drugs, cosmetics, traditional medicines and health supplements. BBPOM resource persons in Yogyakarta delivered the material simultaneously, resource person 1 in front of IEC participants and resource person 2 in the school canteen:

Table 3. Description of IEC Activities in SLB

No	Activity Description	Duration	Information
1	Opening	2 minutes	MC
2	Welcome	5 minutes	Headmaster
3	Presentation of Material	15 minutes	BBPOM Resource Person in Yogyakarta 1 and Companion Teacher from SLB
4	Games and distribution of information materials and souvenirs	30 minutes	BBPOM Resource Person in Yogyakarta 1 and Companion Teacher from SLB
5	Test Kit Testing and Visit to School Canteen	30 minutes	BBPOM resource person in Yogyakarta 2 (same time as resource person 1)
6	Delivery of Test Kit Results and Visits to the School Canteen	5 minutes	BBPOM resource person in Yogyakarta 2
7	Closing	3 minutes	MC

Source: Report on Activities and Implementation of KIE SLB BBPOM in Yogyakarta

The difference in the implementation of IEC in SLB with IEC in general is the attention to the presentation of materials that must be more infographic in SLB, with slower narration and the presence of companions for students (Table.4). The strategy for implementing IEC for Drugs and Food is greatly influenced by the variety and target audience or participants which include gender, educational background, age, and profession (BPOM Agency, 2023). :

Table 4. Differences between KIE for Drugs and Food in SLB and General KIE

No	Elements of IEC	General IEC	IEC in SLB
1	Material	General images and text	More images with simple and large writing
2	Delivery of Material	General tone of voice	Slower down
3	Audience	Can interact directly	Requires a companion (sign language interpreter, etc.)
4	Information Material	Videos, leaflets, general games	Videos, leaflets, games that are friendly for people with disabilities (contrasting colors, simple writing and pictures)
5	Evaluation	Feedback can be directly with IEC participants	Feedback via intermediary/mentor

Source: Report on Activities and Implementation of KIE SLB BBPOM in Yogyakarta

The results of respondents' assessments of the 6 (six) IEC strategy parameters showed that all strategy dimensions received responses ranging from agree to strongly agree, which means good/appropriate and very good/very appropriate (Table 5).

Table 5. Results of the Evaluation of the Drug and Food IEC Strategy for Special Needs Schools in DIY

Dimensions of Strategy	Percentage	Respondent's statement
Target Group Strategy	86.1%	Agree and Strongly agree

Creative Strategy	85.1%	Agree and Strongly agree
Message Strategy	82.4%	Agree and Strongly agree
Media Amplification Strategy	85.0%	Agree and Strongly agree
Program Activity Strategy	84.2%	Agree and Strongly agree
IEC Implementation Strategy	84.7%	Agree and Strongly agree

From the survey results, the highest respondent assessment was in the first statement as much as 86.1% on the target group strategy, meaning that the IEC activities in SLB have been implemented correctly, and respondents support this activity. The target group strategy to SLB implemented by BBPOM in Yogyakarta is correct. Based on the Decree of the POM Agency Number 104 of 2022, information on Drugs and Food is conveyed to the entire community, and a special target sharpening is needed that is believed to be able to represent community groups and become the spearhead of wider information dissemination. In this SLB community group, the target recipients of IEC messages are students, employees, canteen managers, and parents, while the target of the message delivery is the principal and teachers. The involvement of educators and parents in the process of delivering IEC is very important, and still needs to be improved. Based on One Data Indonesia, Ministry of Education and Culture, Research, and Technology, the number of SLB in Indonesia is 2,267, and 81 SLB are in DIY. With the IEC method per SLB, the achievement of IEC to date is still relatively small, namely 7 SLBs out of 81 SLBs, namely 8.6%. IEC SLB can be effective and faster by being carried out in stages by means of, BBPOM in Yogyakarta conducting training related to Drug and Food safety first to representatives of the SLB community (principals, teachers, canteen managers, parents), after which information is disseminated to each SLB with assistance from the hall officers in stages.

Strategy creative received a good rating of 85.1%, meaning that the Drug and Food material presented by BBPOM in Yogyakarta and the communication process carried out were appropriate, clear, and interesting. Based on BPOM Decree Number 104 of 2022, the creative strategy approach is intended to build public trust so that BPOM is used as a trusted reference source regarding information on Safe Drugs and Food. Creative strategies include providing information in the form of information materials

(books, posters, merchandise) that contain food safety messages and the KataBPOM tagline and games. BBPOM in Yogyakarta has compiled a Food Safety Book for Vulnerable Groups, which can be reproduced so that it can be distributed to IEC participants. The skills of the office officers as message deliverers can be improved so that they are more creative and interesting. Currently, the game presented is Tepuk Cek KLIK, which invites IEC participants to remember tips for choosing packaged foods by checking the packaging, labels, distribution permits, and expiration dates while clapping. Educational games can be added with singing together, quizzes, guessing pictures, and others.

ForThe lowest assessment was in the message strategy indicator, which was 82.4%, meaning that IEC participants had received the message well but not optimally and still needed to be improved in receiving the message delivered. Based on the Decree of the POM Agency Number 104 of 2022, the message delivery strategy aims to implement effective and efficient implementation patterns. The pattern of disseminating IEC messages can be divided into 3 (three) patterns, namely thematic messages, tactical messages, and regular messages. BBPOM in Yogyakarta has implemented IEC in SLB with a thematic pattern, namely Safe and Healthy Snacks, as well as Check Packaging, Labels, Distribution Permits, and Expiration (Cek KLIK). The tactical pattern has also been implemented by delivering messages during joint gymnastics and cooking practice. While the regular pattern has not been implemented yet, BBPOM in Yogyakarta has opened up opportunities for schools to be proactive in submitting IEC applications periodically in the future. The development of messages delivered in the form of educational materials needs to be simplified again according to the specific needs of students in SLB

Strategy media amplification received a rating of 85.0%This means that IEC participants have well received the media used in IEC in the form of material presentations (ppt), video screenings, Braille product demonstrations, and information materials (books, posters, merchandise). BBPOM in Yogyakarta has prepared simple material presentations with displays that emphasize images and writing so that they can be easily accepted by participants, especially participants with disabilities. For the use of videos, BBPOM in Yogyakarta does not yet have educational videos in sign language. In its implementation, the resource person chooses short educational videos

that emphasize images and writing, for sign language assisted by teachers at the SLB. In preparing IEC media, BBPOM in Yogyakarta needs to involve representatives from SLB, and organizations such as the Disability Committee and the Indonesian Association of People with Disabilities. The media created can be supplemented with brochures that are specifically for SLB, interactive and interesting educational videos, direct practice applications reviewing food available at school, or information boards installed in the school environment.

Strategy the activity program received an assessment of 84.2%, This means that the IEC participants have received the IEC activity program at SLB well which is implemented by BBPOM in Yogyakarta. The activity program strategy is carried out to design efforts to convey ideas to the target audience through various forms of activity programs so that they can be well received. BBPOM in Yogyakarta in implementing the IEC activity program in other forms, for example, invites the SLB community to visit the BBPOM public service in Yogyakarta, camping in the context of Disability Day, webinars or food safety campaigns, and others. Previous research stated that Journalism workshops in schools can also promote critical thinking and effective communication skills among students (Lamonaca, 2021) Effective communication in schools is essential for developing critical citizens, as it enhances students' ability to verify information and engage thoughtfully with diverse media and messages.

Strategy implementation of IEC received a score of 84.7%, This means that IEC participants have well received the IEC implementation strategy in SLB implemented by BBPOM in Yogyakarta. The IEC implementation strategy includes internal and external aspects that are needed to continue to be consistent and become the legitimacy of BPOM's IEC validation to the community. Internally, the organization has provided an explanation in the form of guidelines, opportunities, and facilities so that the information dissemination process can be carried out effectively and efficiently. The implementation of IEC externally, BBPOM in Yogyakarta has implemented it one by one IEC to SLB. This has the advantage that the entire school community can participate in IEC activities together, but has the disadvantage that it takes a long time for other SLBs to receive their turn at the IEC program. To be more effective and efficient, BBPOM in Yogyakarta can implement IEC for SLB collectively, for example by inviting school representatives to a meeting, and the school representatives are

appointed as cadres who are required to convey information on Safe Drugs and Food to their respective school communities. In addition, it can also utilize the dissemination of information through social media or other online media. Previous research stated that special schools use a variety of communication strategies, including text messages, written notes, and face-to-face meetings, ensuring accessibility and understanding for families in their communities (Cheminais, 2011).

In addition to statements and questionnaires, respondents provided suggestions and input through an open question. The following are the results of the suggestions and input submitted by respondents:

- IEC should be implemented periodically, for example during the School Environment Introduction Period (MPLS) because the students are new, and parents are also involved because they are the ones who make the food.
- Pleased with the activities carried out by BBPOM because the school and parents are calm because the students' food is being monitored.
- It should be carried out more routinely, for example every semester or every year so that the schedule can be displayed on the wall magazine. It would be better if the snacks available at school were reviewed directly, for example, this drink has so much sugar, this snack has so much preservative or sweetener.
- The material is appropriate, children can understand and practice how to buy good snacks, children also remind each other

In the IEC activities in SLB implemented by BBPOM in Yogyakarta, parents have not been fully involved as participants due to limited space. A special session for parents of students needs to be scheduled, considering that parents play an important role in preparing daily consumption for children and their families. Previous research has stated that establishing consistent two-way communication with families is very important (Cheminais, 2011)

Conclusion

The implementation of IEC in SLB by BBPOM in Yogyakarta has been carried out since April 7, 2023, based on the evaluation, the results showed that the IEC strategy for Drugs and Food in SLB that was implemented was good and appropriate. The implementation of IEC in SLB in DIY can be accelerated with a tiered method, namely

providing training to representatives of each SLB first. Obstacles related to limited student abilities can be overcome by developing more creative, interesting, and specific educational materials according to the needs of the SLB community.

Recommendations

In order to sustain IEC in SLB, BBPOM in Yogyakarta can continue to implement and improve IEC activities by:

- a. Improve communication strategies between resource persons and participants through collective, thematic, periodic and creative activities.
- b. Creating information materials that are friendly to vulnerable groups, especially sign language educational games and videos, reviewing IEC materials with disability experts, and increasing the number of Food Safety Books for Vulnerable Groups so that they can be distributed to IEC participants.
- c. Conduct training related to Drugs and Food to representatives of each SLB community in DIY (principals, teachers, canteen managers, parents).

Thank-you note

Thanks to the Training Supervisor Professor Doctor Gono Semiadi from Biomaterial Research Center, National Research and Innovation Agency (BRIN), Head of BBPOM in Yogyakarta Bagus Heri Purnomo, SSi, Apt, Head of the Infocom Group Substance Team Etty Rusmawati, STP, BBPOM Team in Yogyakarta, and all respondents and sources from SLB in DIY.

Declaration

Funding statement

This research was conducted with the support of DIPA BBPOM in Yogyakarta in 2024

Authorship statement

The research and preparation of this paper was carried out by the Young Expert Functional Officer of BBPOM in Yogyakarta Wulandari, STP, MIKOM. and corrected by Head of the Infocom Group Substance Team Etty Rusmawati, STP and Head of BBPOM in Yogyakarta Bagus Heri Purnomo, S.Si., Apt.

AI usage statement

This paper was compiled using the assistance of the ChatGPT, Scispace, and Mendeley application programs.

Reference

- Abdimas Umtas. (2024). Healthy food education for students in Kula Langat, Malaysia. <https://doi.org/10.35568/abdimas.v7i3.4857>
- Badan Pengawas Obat dan Makanan. (2001). Keputusan Kepala BPOM No. 05018/SK/KBPM Tahun 2001.
- Badan Pengawas Obat dan Makanan. (2013). Keputusan Kepala BPOM Nomor HK.04.1.21.07.13.3789 Tahun 2013 tentang Pedoman Penyusunan Perencanaan dan Penganggaran Responsif Gender di Lingkungan BPOM.
- Badan Pengawas Obat dan Makanan. (2018). Peraturan Kepala BPOM Nomor 12 Tahun 2018.
- Badan Pengawas Obat dan Makanan. (2022a). Keputusan Kepala BPOM Nomor 104 Tahun 2022.
- Badan Pengawas Obat dan Makanan. (2022b). Standar Operasional Prosedur (SOP) KIE POM-08.04/CFM.01/SOP.01.
- Balai Besar POM di Yogyakarta. (2022). Laporan Tahunan BBPOM di Yogyakarta 2022. Yogyakarta.
- Balai Besar POM di Yogyakarta. (2023). Laporan Tahunan BBPOM di Yogyakarta 2023. Yogyakarta.
- Cheminais, R. (2011). Communicating with families. In [Judul buku tidak tersedia] (Chap. 2). <https://doi.org/10.4135/9781446251256.N7>
- Grygiel, A. (2006). Polish students trapped in a process of socialization: Socialization at Polish schools and preservation of social gender roles. [Judul sumber tidak tersedia].
- Instruksi Presiden Republik Indonesia Nomor 9 Tahun 2000 tentang Pengarusutamaan Gender dalam Pembangunan Nasional. (2000).
- Jukić, R., & Kakuk, S. (2019). Socialization role of school and hidden curriculum. In EDULEARN19 Proceedings. <https://doi.org/10.21125/edulearn.2019.0910>
- Kementerian Pendayagunaan Aparatur Negara dan Reformasi Birokrasi. (2020). Surat Edaran Menteri PANRB Nomor 66 Tahun 2020 tentang Penyediaan Sarana dan Prasarana bagi Kelompok Rentan dalam Penyelenggaraan Pelayanan Publik.
- Lamonaca, S. (2021). Journalism and communication at school in order to form critical citizens. In Handbook of Research on Media Education in the Digital Age (Chap. 10). <https://doi.org/10.4018/978-1-7998-7638-0.CH010>
- Peraturan Presiden Republik Indonesia Nomor 59 Tahun 2017 tentang Pelaksanaan Pencapaian Tujuan Pembangunan Berkelanjutan. (2017).

- Rahman, A., Sarwono, A., Suryawan, I. W. K., Marsono, M. R., Aulia, W., Vindriani, E., ... & Zulfi, M. A. (2022). Counseling at the Special School of the Indonesian Charity Foundation to achieve the dream of building achievements together. *Innovation Barn: Journal of Community Service*, 7(2), 148–152.
- Reeves, S. (2020). Current research in nutrition in the school curriculum in England. In [Judul buku tidak tersedia] (Chap. 3). https://doi.org/10.1007/978-3-030-393397_15
- Sugiyono. (2008). Metode penelitian kuantitatif. Bandung: Alfabeta. Sukardi, S. (2017). Communication in successful learning in school. *The Elementary School Teacher*.
- Yuliani, R. (2020). Communication patterns of teachers with autistic students at the Mitra Iswara Special School (SLB), Tasikmalaya Regency. *Metacommunication: Jurnal Ilmu Komunikasi*, 5(2), 168–175.