

THE PROCESS OF MAKING A WEB-BASED MODEL FOR DETECTING SEXUAL VIOLENCE IN ELEMENTARY SCHOOL-AGE CHILDREN

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ABSTRAK

Sexual violence against children is a public health problem that is increasing globally around the world. Indonesia. West Sumatra, especially in the city of Padang, the number of cases of sexual violence against children always increases from year to year. The culprit is 90% of the closest people who are well known to the child. Therefore, it requires an effective and efficient prevention model, which can be used by children, mothers and teachers to detect the risks and prevention of sexual violence against children. The purpose of this study is to form a "Model for Early Detection of Risks and Prevention of Sexual Violence Against Children in Padang City. The research method used in this study is a combination of qualitative and quantitative referring to the R&D Model with the ADDIE model. The sample numbered 60 people, consisting of primary school age children, mothers and teachers. The data were analyzed using the GLM Repeated Measure. The study took place from March 2022- November 2022. Conclusion: a Model has been formed: "GIA (teacher, mother and child)" Early Detection of Risks and Prevention of Sexual Violence Against Children. It is recommended in the next study that this existing model be applied to the form of a Website so that it can be used by teachers, mothers and children throughout the city of Padang and throughout Indonesia in general in the context of efforts to prevent sexual violence against children of primary school age.

Keywords: Sexual violence, school-age children, early detection models, prevention, mothers, teacher

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BACKGROUND

The COVID-19 pandemic has had a profound impact on the safety and well-being of children (Mekaoui et al., 2021). The loss of parental jobs and the economic downturn during the COVID-19 pandemic increase the risks and strong predictors of violence against children, one of which is sexual violence (Organization, 2020). This has a bad impact on children, both physically, and psychologically, very detrimental to the future of children as the next generation of the nation (Corner, n.d.), mainly sexual violence.

Sexual violence is a global problem worldwide, with one in 5 women and 1 in 13 men reporting having been sexually abused as children aged 0-17. Then 120 million girls and young women under the age of 20 have been victims of some form of sexual violence(Seddighi et al., 2021). This is also the case in Indonesia, data from the online information system for the protection of women and children that out of 4116 cases of violence against children on January – 30 July 2020, the most cases were sexual violence, namely 2556 cases (SIMFONI PPA). This is also the case in Indonesia, data from the online information system for the protection of women and children that out of 4116 cases of violence against children on January – 30 July 2020, the most cases were sexual violence, namely 2556 cases of 5,73%. The next position is occupied by Gorontalo 4,63%, Nusa Tenggara Barat 4,55%, Kalimantan Timur 4.14%, and Papua 3,46% (BPS, 2020). In 2019 cases of sexual violence in West Sumatra were 144 people, in 2020 it rose to 275 cases, with the highest number in the city of Padang.

With the increasing number of cases in the city of Padang, it requires a model that can be used for more effective prevention and includes people around the child, namely mothers and guru. Currently, Kota Padang already has two primary prevention models of sexual violence against children, namely the Neherta model and the Icas model(Neherta et al., 2017)(Nurdin et al., 2018).If these two models are used, they will be effective and efficient models to become models for preventing sexual violence against children in the city of Padang.

The NEHERTA model is a model that provides increased knowledge and assertive behavior in children about 4 important body organs that must always be taken care of in children given by teachers and health workers (Nurdin et al., 2018). Learning on the NEHERTAmodel method based on the characteristics of elementary school age who like to play and sing(Neherta et al., 2017). The ICAS model, on the other hand, is a model that optimizes the role and function of the mother as a child protector. By increasing the role of mothers, the risk of children becoming victims of violence can be reduced(Neherta & Nurdin, 2018). If the model NEHERTA is combined with the ICAS model will be more effective and efficient because between children, parents, and teachers there is mutual communication in efforts to prevent sexual violence against children.

Metode

The research method used in this study is a combination of qualitative and quantitative referring to the development of the ADDIE model (Analysis, Design, Development, Implementation, Evaluation) aimed at developing learning media in the form of making a model for predicting the risk of becoming a victim of sexual violence and its prevention. This research will be conducted in the city of Padang for 3 years (2022-2024) divided into 3 stages. Phase 1 research from April 2020 to November 2022. The population in this study was: primary school-age children, all mothers who had children of primary school age, and primary school teachers who held classes. Sampling with multi-cuttings random sampling, data were analyzed using the GLM Reveated Measure.

RESULT

A model of early detection of risks and prevention of sexual violence against children of primary school age by involving three forces, namely the child mother and teacher (CMT). The three strengths are children, mothers and teachers are three components that have the potential to carry out early detection and prevention of sexual violence against children. The following are the stages of forming the CMT model using the ADDIE method stages (analysis, design, development, implementation, and evaluation).

Analysis Stage

- Thearachistic analysis of participants was a primary school-age child, a class teacher, and a mother of a primary school-aged child.
- Analysis of necessary learning needs: effective learning materials and media to improve children's understanding so as not to become victims of sexual violence. The learning material is a combination of the Neherta model material and the maternal role optimization model for the prevention of sexual violence against school-aged children in learningFormed concept maps and flow charts provide a clear direction for product production
- Learning media, PPT, discussion of illustrated stories, short videos, role plays, leaflets
- Obstacles found during the implementation of research can be resolved
- Assessment of learning competencies based on existing material accordingly includes assignments, worksheets, and quizzes.
- Analysis of the results of the intervention between pre and post.

Learning materials needed for children of primary school age (grades 4,5,6,). In accordance with the characteristics of the respondent, in order to prevent himself from becoming a victim of sexual harassment, among others, the following:

- a) Materials for respondents Children of primary school age grades 4,5 and 6
 - Definition of sexual violence
 - Types and forms of sexual violence
 - Perpetrators of sexual violence
 - Motives for sexual assault
 - Places at risk of sexual violence (at home)
 - Places at risk of sexual violence (in schools)
 - Efforts to Prevent Sexual Violence
 - What to do if anyone is a victim

b) Materials for mother respondents and teacher respondents

Material for Mother Respondents	Materials for Teacher Respondents
 Definition of sexual violence Types and Forms of sexual violence Perpetrators of sexual violence Motives of the Perpetrators At Risk of Being a Victim of Sexual Assault Places at risk of sexual violence (at home) Places at risk of sexual violence (in schools) Efforts to Prevent Sexual Violence Pay attention to the child's behavior: when waking up, leaving school, going home from school, and going to bed 	 Definition of sexual violence Types and Forms of sexual violence Perpetrators of sexual violence Motives of the Perpetrators At Risk of Being a Victim of Sexual Assault Places at risk of sexual violence (at home) Places at risk of sexual violence (in schools) Efforts to Prevent Sexual Violence

Design stage

The design of this study includes Learning objectives, namely: increased knowledge/understanding of early detection and prevention of sexual violence against children of primary school age. The implementation of learning uses an elementary school student room equipped with electronic devices: wireless, loudspeakers, laptops, and projectors. Complete learning) is readily available. For method learning: case studies, discovery, jigsaw, group discussion, and role-playing. Meanwhile, learning is available: using PPT, short videos, discuss using illustrated stories, leaflets, and banners.

The form of teaching materials to achieve learning objectives in this first stage is made in the form of modules so that they are easy to understand. There are three modules, namely for children, mothers, and teachers. Then the existing modules are poured into learning media that have been adjusted to the characteristics of the respondent. The form of teaching materials to achieve learning objectives in this first stage is made in the form of modules so that they are easy to understand. There are three modules, namely for children, mothers, and teachers. Then the existing modules are poured into learning media that have been adjusted to the characteristics of the respondent.

Stages of development

The presentation of all respondents about the combined material of the Neherta Model and the Icas Model has been conducted Focus discussion group of respondents. This focus group discussion activity was carried out in an elementary school with three classrooms according to the group of child respondents, mothers, and teachers.

The results of the focus group discussion and the similarity of perceptions agreed that the material for the child is sufficient for the existing material. However, for the material given to respondents, mothers and teachers need to add material so that the respondent's understanding is better. The addition of the material presented is as follows: However, for the material given to respondents, mothers and teachers need to add material so that the respondent's understanding is better. The addition of the material presented is as follows:

Mother respondents:

- Punishment For perpetrators
- Signs a child has been a victim of Sexual Assault
- What to do if the child becomes a victim

Teacher Respondents:

- Punishment For perpetrators
- Signs a child has been a victim of Sexual Assault
- Pay attention to the behavior of the child: when entering the classroom: Just enter the classroom after the hour of recess.

Stages of Implementation

At this stage, it is the stage of implementing the design of teaching materials that have been developed in real situations in the classroom. The following are the results of a joint material trial conducted on 20 respondents of children of primary school age grades 4,5 and 6, 20 maternal respondents, and 20 teacher respondents.

The following is a graph of the understanding of elementary school-aged children in the city of Padang before and after the Health Education Intervention on the prevention of sexual violence against children. The results of statistical GLM Repeated Measure tests showed an increase in the average score of knowledge and assertive attitudes of child respondents after health education interventions to prevent sexual violence were carried out, as shown in Table 1 below. The multivariate test in Table 2, shows that the given intervention significantly increases knowledge and assertiveness in preventing sexual violence.

Table 1: Knowledge of children's descriptive statistics after receiving the intervention.

		Std.	
	Mean	Deviation	N
Knowledge 1 Child	4.90	1.373	20
Knowledge 2 Child	7.70	1.031	20
Knowledge 3 Child	8.70	1.081	20
Assertive behavior 1	6.70	1.302	20
Assertive behavior 2	8.50	1.147	20
Assertive behavior 3	8.50	1.147	20

Tabel 2: uji Multivariate

With	in Subjects			Hypothesi	Error		Partial Eta
Effec	ct	Value	F	s df	df	Sig.	Squared
Tim	Pillai's Trace	.923	16.294	4.000	76.000	<.001	.462
е	Wilks' Lambda	.136	31.618 ^c	4.000	74.000	<.001	.631
	Hotelling's	5.902	53.117	4.000	72.000	<.001	.747
	Trace						
	Roy's Largest	5.827	110.70	2.000	38.000	<.001	.854
	Root		9 ^d				

This improvement is also seen through the In-Subject Contrast Test and Between-Subject Effects Test. Increased knowledge and attitudes of child respondents after receiving health education about sexual violence prevention can be seen in graphic Figura 1 and Figura 2.

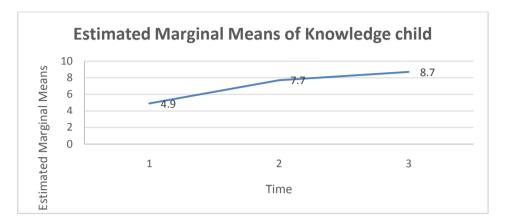


Figura 1: increasing children's knowledge after receiving intervention to prevent sexual violence against children 3 times.

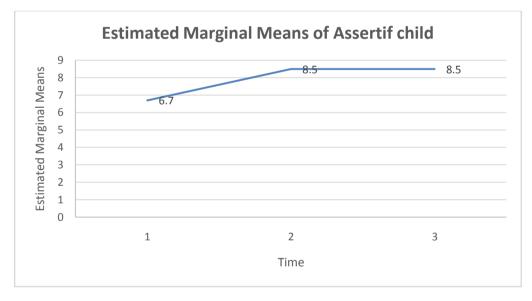


Figure 2: Increased assertiveness of children after receiving an intervention to prevent sexual violence against children 3 times.

Mother.

From the results of the GLM Reveated Measure statistical test, the increase in knowledge and assertiveness in mothers also experienced a significant increase. The increase is clearly visible in table 3 and table 4. This improvement is also seen through the In-Subject Contrast Test and Between-Subject Effects Test. Increased knowledge and attitudes of child respondents after receiving health education about sexual violence prevention can be seen in graphic Figura3 and Figura 4.

Table 3: Increased knowledge of mothers after receiving the interventionTo prevent sexual violence 3 times.

		Std.	
	Mean	Deviation	N
Knowledge 1	6.05	1.572	20
Knowledge 2	7.75	.967	20
Knowledge 3	9.35	.671	20
Assertive behavior 1	7.00	.973	20
Assertive behavior 2	8.75	.716	20
Assertive behavior 3	9.75	.444	20

Tabel4: uji Multivariate

				Hypothesis		
Within St	ubjects Effect	Value	F	df	Error df	Sig.
Time	Pillai's Trace	.950	17.185	4.000	76.000	<.001
	Wilks' Lambda	.084	45.333 ^c	4.000	74.000	<.001
	Hotelling's Trace	10.502	94.521	4.000	72.000	<.001
	Roy's Largest	10.464	198.813 ^d	2.000	38.000	<.001
	Root					

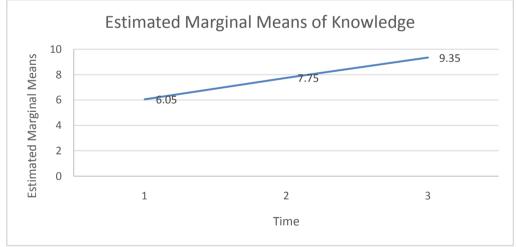


Figura3: Increased knowledge of mothers after receiving the intervention To prevent sexual violence 3 times.

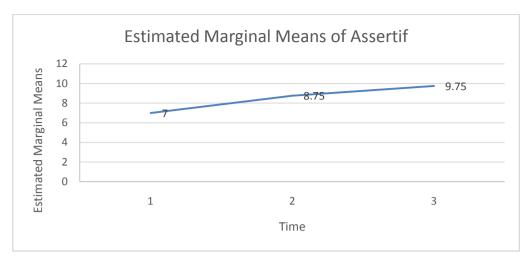


Figure 4: Increased assertiveness of mother after receiving an intervention to prevent sexual violence 3 times.

Teacher

Increased knowledge and assertiveness in teachers also experienced a significant increase. The increase is shown in table 5 and table 6. From the results of the GLM Repeated Measure statistical test, it can also be seen from the In-Subject Contrast Test and Between-Subject Effects Test. The influence of health education interventions on the prevention of sexual violence against children is evident in the graphs of Figure 5 and Figure 6.

Table 5: Increased knowledge of teacher after receiving the InterventionTo prevent sexual violence 3 times.

	•		
		Std.	
	Mean	Deviation	N
Knowledge 1	7.70	1.129	20
Knowledge 2	9.50	.513	20
Knowledge 3	9.75	.444	20
Assertive behavior 1	8.00	.725	20
Assertive behavior 2	9.35	.489	20
Assertive behavior 3	9.70	.470	20

Table6: uji Multivariate

				Hypothesis		
Within S	ubjects Effect	Value	F	df	Error df	Sig.
Time	Pillai's Trace	.874	14.733	4.000	76.000	<.001
	Wilks' Lambda	.133	32.235 ^c	4.000	74.000	<.001
	Hotelling's Trace	6.472	58.250	4.000	72.000	<.001
	Roy's Largest	6.465	122.830 ^d	2.000	38.000	<.001
	Root					

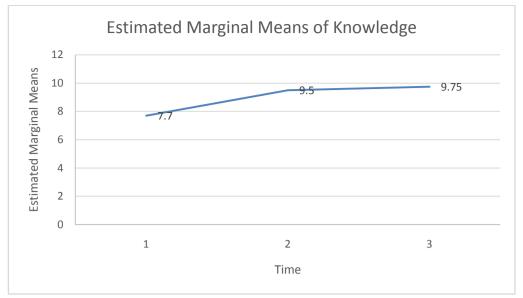


Figura5: increasing teacher's knowledge after receiving intervention to prevent sexual violence 3 times.

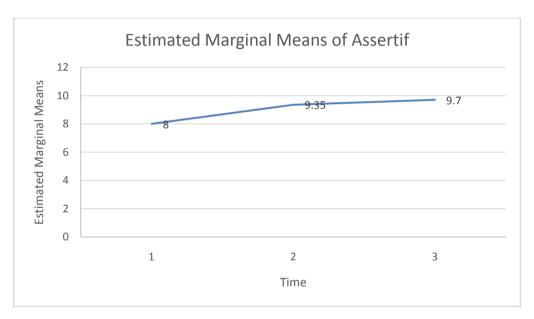


Figure 6: Increased teacher assertiveness after receiving the intervention to prevent sexual violence 3 times.

Evaluation Stages

Evaluation is the last step of the ADDIE learning system design model to provide value for developing teaching materials in learning. Evaluation is carried out in two forms, namely formative evaluation, and summative evaluation. Formative evaluation is carried out at the end of each face-to-face (weekly). Summative evaluation measures the final competence or learning objectives to be achieved. The evaluation results are used to provide feedback on the development of teaching materials.

DISCUSSION

Model ADDIE has advantages over other methods for developing teaching materials because this method is simple and easy to learn and it's a systematic structure. Model ADDIE consists of 5 components that are interrelated and systematically structured which means that from the first stage to the fifth stage in its application must be systematic. (Abdul Syakur et al., 2020; Neherta et al., 2015b), Can't be sorted randomly by the one we want right? Because these five stages/steps are already very simple when compared to other design models. It'ssimple and systematically structured nature, then this design model will be easy to learn(*EBook-Innovative-Medical-Education.Pdf*, n.d.).

Analysis: In this study, the results of the analysis of the need for learning materials needed for the prevention of sexual violence for elementary school-age children (grades 4,5,6,) were made according to the characteristics of the respondents. Therefore, the materials needed to prevent himself from becoming a victim of sexual violence include 1) a Definition of sexual violence, 2) Types and forms of sexual violence, 3) Perpetrators of sexual violence, 4) Motives for perpetrators of sexual violence, 5) Places of sexual violence. places where there is a risk of sexual violence (at home). 6) Places that are prone to sexual violence (in schools), 7) Efforts to prevent sexual violence. 8) All these materials need to be given to children, 9) mothers and teachers as an effort to prevent sexual violence against children(Hanafi et al., 2020).

The problem of sexual violence against children of primary school age is a global problem, occurring in almost all countries of the world. Teachers and mothers are the ones who know the child's situation best, at home close to the mother while in the dean's school with the teacher as the mother's replacement (Mekaoui et al., 2021). When children are in the school environment, the teacher is the one who knows the child best. Therefore, mothers and teachers must also gain an understanding of the prevention of sexual violence against school-age children (Poddar & Mukherjee, 2020).

Design; The design of this study aims to increase knowledge/understanding of early detection and prevention of sexual violence against children of primary school age(Abdul Syakur et al., 2020).

The implementation of learning using an elementary school study room equipped with all electronic: walls, loudspeakers, laptops, and projectors are readily available. For method learning: with case studies, discovery, jigsaw, group discussion, and role-playing. Meanwhile, learning is available: using PPT, short videos, discuss using illustrated stories, leaflets, and banners and Game.

Development; Material for respondents' learning: is a combination of Neherta model material and Icas model. Materi learning for child respondents, mothers, and teachers will be different because there are additional points of material that are given to child respondents (Cahyadi, 2019a).

This is based on the results of group discussions conducted according to the respondent groups of children, mothers, and teachers. The results of the FGD and the common perception agreed that the material for children was sufficient from the existing material. However, for the material given to the respondent, mothers and teachers need to add material so that the respondent's understanding is better(Clendinneng et al., 2022). The form of teaching materials to achieve learning objectives in this first stage is made in the form of modules so that they are easy to understand. There are three modules, namely for children, mothers, and teachers(Cahyadi, 2019b). Then the existing modules are poured into learning media that have been adjusted to the characteristics of the respondent.

Implementation; At this stage, it is the stage of implementation of the teaching material design that has been developed in real situations in the classroom (Wahyudin et al., 2022a). The combined material trial conducted on 20 respondents of elementary school-age children in grades 4.5 and 6, 20 respondents from mothers, and 20 respondents from teachers showed an increase in the understanding and assertiveness of child respondents towards efforts to prevent sexual violence against children in the city of Padang. This proves that children can receive the material provided well, as well as teachers and mothers, namely, there is an increase in the understanding of mothers and teachers after receiving the intervention, health education on early detection of the risks of preventing sexual violence against children after the addition of some material based on needs analysis. With the material that has been obtained, then mothers and teachers with children can make efforts to prevent sexual violence against children, which currently always increases the number of victims in almost all countries in the world.

Evaluation; Evaluation is the last step of the ADDIE learning system design model to provide value to the development of teaching materials in learning (Wahyudin et al., 2022b). Evaluation is carried out in two forms, namely formative evaluation, and summative evaluation. Formative evaluation is carried out at the end of each face-to-face while summative evaluation is carried out after the activity ends as a whole. Summative evaluation measures the final competence or learning goal to be achieved. The results of the evaluation are used to provide feedback on the development of teaching materials so that they can be continued at the following stage, namely the formation of the Website.

CONCLUSIONS AND SUGGESTIONS

A Model of "CMT" (Child, Mother, and Teacher) has been formed for the Early Detection of Risks and Prevention of Sexual Violence Against Children in Padang City of Padang". It is suggested that the next study can be applied to the form of a Web-site so that it can be used by teachers, mothers, and children widely, especially throughout the city of Padang and throughout Indonesia in general in the context of efforts to prevent sexual violence against children of primary school age.

EthicalApproval: This research has passed the health research ethics test from the Health Research Ethics Committee of RSUP Dr. M Djamil Padang no: LB. 0202/5.7/249/2022

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Conflict of interest: none

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