



Research article

Prevention of child physical and verbal abuse from traditional child discipline methods in rural Thailand

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ABSTRACT

Background: In rural areas of Thailand, physical and verbal abuse are accepted as child discipline strategies due to the strong influence of religious beliefs and social norms.

Objective: To investigate the effects of a nonviolent parenting program on subject's knowledge and attitudes regarding physical and verbal abuse in child discipline.

Participant: This randomized controlled trial enrolled the villagers who had children under care in a rural area of Thailand.

Methods: This study was scheduled in the following three stages with 3-month intervals: before the program (P0); 3 months after the program (P1); and 6 months after the program (P2). We compared knowledge and attitude scores of subjects at each stage.

Results: A total of 85 subjects were enrolled in this study: 50.6% (n = 43) in the control group and 49.4% (n = 42) in the intervention group. In the intervention group, the knowledge score increased after the intervention (P1), decreased 3 months later (P2), but was still higher than the score at P0 ($p < 0.001$). The attitude score increased after the intervention at P1 and was maintained at P2 ($p < 0.001$). In the control group, data did not demonstrate any difference regarding knowledge and attitude toward child discipline.

Conclusions: The nonviolent parenting program was effective in increasing knowledge and changing attitudes in this study. The intervention can be applied effectively in rural communities because of its simplicity, ease of use, and no required technology.

1. Introduction

In Thailand, child abuse, especially physical abuse (e.g., spanking, beating), is accepted as a traditional method for disciplining children. There is an ancient Thai proverb, "If you love your cow, tie it up; if you love your child, beat them." The proverb exemplifies the cultural beliefs and values that encourage physical abuse and preserve its use in Thai culture. Child abuse affects not only the child's psychological, somatic, and social well-being, but also affects the later adult development leading to many negative long-term psychological and emotional consequences for victim, which leads to the increased likelihood of the abused becoming the abusers and finally contributes to negative behaviors and life outcomes [1, 2, 3, 4, 5, 6, 7, 8].

It is the "everyday" violence that many children experience in their homes, schools, and other institutions. According to UNICEF Thailand, 75% of children aged 1–14 years have been subjected to physical abuse by household members [9]. There are many factors associated with

support of physical abuse, such as experience with physical punishment, religion, race and ethnicity, socioeconomic status, region, and social factors [10]. Rates of physical punishment are higher in families with low education and income, in which as many as 94% of parents use this type of discipline [11].

Verbal abuse is a form of interpersonal violence that is used to exert power or control over victims. Verbal abuse triggers anguish, pain, and distress through intimidating or bullying verbal assaults meant to embarrass, harass, humiliate, insult, or threaten vulnerable people [12]. Verbal abuse is one of the most common and also most overlooked forms of abuse on children. Most times it is passed off as a form of "disciplining" or "tough love". ([13]) This ignorant perspective can cause children to experience devastating consequences. Exposure to parental verbal aggression has been shown to exert enduring adverse psychiatric effects [14].

The Theory of Planned Behavior suggests that parents perceived injunctive and descriptive social norms and expectations regarding corporal punishment use might be linked with corporal punishment

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attitudes and behavior [15]. For Thai people who live in rural areas, their primary pattern of settlement is that of villages, and their primary occupation is agriculture. Because they live in remote areas and most of them are poor, they lack education and opportunities. They live under the strong influence of religious beliefs and social norms; thus, using physical and verbal abuse for child discipline is an accepted and continuing practice.

One way of reaching the goal of decreasing physical and verbal abuse of children is through education, especially parenting programs [16]. There are many platforms of education that focus on changing individual affective and cognitive responsiveness, which are essential for behavioral modification, by using video game, video tape, etc., and it shows positive results in intervention group when compare to control group [17, 18, 19, 20]. However, these programs have several barriers to adapt for use in Thailand, especially in rural areas, including racial differences, cost of the program, copyright issue, and reliance on electricity. We developed a simple nonviolent parenting program that is suitable for communities with limited resources, such as in rural areas of Thailand. We chose effective discipline strategies, based on American Academy of Pediatrics recommendations, as a model for our intervention program because it was a comprehensive approach that includes consideration of the parent-child relationship, reinforcement of desired behaviors, and consequences for negative behaviors which encouraged and assisted in the development of methods other than spanking for managing undesired behavior [21].

In this study, we investigated the effects of a nonviolent parenting program on knowledge and attitudes regarding physical and verbal abuse in child discipline in parents who live in rural Thailand. Our hypothesis was parents who had participated in non-violent parenting program will have better knowledge and attitude regarding child discipline than parents who had not participated.

2. Methods

2.1. Study design

This study was approved by the Human Research Ethics Committee of Walailak University, certification ID number WUEC-18-054-01. The first author assumes responsibility for the fidelity of the report to the protocol and the accuracy and completeness of the data. In brief, this open label, randomized controlled trial enrolled villagers who had child/children under care in Nakhon Si Thammarat, a rural area in Thailand, from August 2018 to January 2019. To be eligible for the trial, a villager had to be able to attend all three scheduled sets of study sessions.

2.2. Participants

The sample size was determined by a convenience sample of all the subjects who had children under the care identified in the communities during the study period and calculated by using the method of sample size calculation for randomized controlled trial study. To estimate a rate of change of knowledge and attitudes regarding child discipline of 15%, a sample size of 70 was calculated for 80% power and 95% confidence, assuming the ratio of intervention group to control group as 1:1 [22]. All participants in both control and intervention groups were recruited through posters or flyers around two communities from different villages in order to avoid cross-contamination between the two groups. The intervention group was randomly assigned to one community by simple randomization method, i.e., coin-tossing. A research assistant explained the study before scheduling a participant's baseline session. The inclusion criteria were as follows: subjects who had a child/children younger than 18 years of age under care, and subjects who lived in the rural area. The exclusion criteria were as follows: subjects who declined to participate in the program, and subjects who failed to complete participation in three scheduled sets of study sessions.

This study was scheduled in the following three stages with 3-month intervals between stages: before the study program (P0); 3 months after the study program (P1); and 6 months after the study program (P2). In the intervention group, the questionnaire was applied at three times: P0, P1, and P2 stages. At the P0 stage, the questionnaire was applied before an intervention program administered by the researchers. At P1 and P2 stages, the questionnaire was applied without any intervention. In the control group, the questionnaire was applied at the three-time stages without any intervention.

2.3. Intervention

The intervention program time was approximately 1 h and was divided into two periods: initially, a lecture that consisted of effects and consequences of physical and verbal abuse (biological, cognitive, psychosocial, and behavioral development) [23], and strategies for effective discipline (a positive relationship between the parent(s) and child, use of positive reinforcement strategies, and reduction or elimination of undesired behaviors) [21]. The lecture was presented by a researcher in the form of a poster presentation at rural community center in the village. The lecture time was approximately 40 min. Finally, simulation and role play were used to create active learning environment and subject's cooperation during intervention session. The role play situation (e.g.: your 5-year-old child is having a tantrum after you refused to buy him a toy) was assigned to the subjects. Each subject was invited to help the researcher solve the situation by using the knowledge learned from the previous lecture. This part was essential because prevention of physical and verbal abuse should be applied before the initiation of abuse. The simulation and role play time were approximately 20 min.

2.4. Instrument

The assessment instrument was designed in the form of a questionnaire and its references were based on guidance for effective discipline by the American Academy of Pediatrics [21]. The questionnaire was composed of questions in the following four areas: 1) demographic data; 2) experience of physical and verbal abuse; 3) knowledge regarding child discipline; 4) attitudes regarding child discipline. The demographic data included age, gender, religion, education, career, salary, number of children, child's age, and the relationship to the child. The question about physical and verbal abuse experience evaluated the subject's experience in the past and current practice of physical and verbal abuse. Knowledge regarding child discipline was evaluated by simple choice questions about the principle and strategy of child discipline, and consequences of physical and verbal abuse (total score 10). Finally, there were 10 statements concerning child discipline, and the subject had to choose how much they agreed with the statements ("I completely agree," "I partially agree," or "I disagree") to evaluate the subject's attitude regarding child discipline (total score 20). Completing the questionnaire took approximately 10 min. The questionnaire was translated to an English version (Appendix).

For the examination of validity of the questionnaire, each experts in pediatrics (e.g., developmental and behavioral pediatricians, pediatric neurologists) independently rated the relevance of each item on the knowledge and attitude part of the questionnaire, using a scale of +1 (clear agreement), 0 (unclear), or -1 (no clear agreement). The item-objective congruence (IOC) for each item was the summation of scores given by the experts divided by the number of experts. The average IOC score for the knowledge part of the questionnaire was 0.86, and for the attitude part of questionnaire was 0.93. For the examination of reliability, Cronbach's alpha was calculated to assess the internal consistency of the questionnaire. The Cronbach's alpha coefficient for the score of the knowledge part of questionnaire was 0.81, and for the attitudes part of questionnaire was 0.83.

2.5. Statistical analysis

All statistical analyses were conducted using IBM SPSS Statistics version 22 for Windows. Categorical variables were present as proportion and percentage. Continuous variables were submitted to the Kolmogorov-Smirnov test to verify a normal distribution and presented as the mean $\pm$ standard deviation (SD). Comparing categorical data between two groups, bivariate analysis was performed by using the Chi-square test. Due to non-normal distributed data issue, pair analyses with the Wilcoxon signed-rank test were conducted to compare mean score of knowledge and attitude regarding child discipline during the stages (P0 vs. P1, P1 vs. P2, and P0 vs. P2) in either intervention or control group. Statistical significance was accepted at a p-value of <0.05 . Effect sizes were computed and classified as small ($d = 0.2$), medium ($d = 0.5$), and large ($d \geq 0.8$) by using Cohen D's classification system [24].

3. Results

Eighty-five subjects completed the questionnaire: 50.6% ($n = 43$) were in the control group and 49.4% ($n = 42$) were in the intervention group. All of them completed three scheduled sets of study sessions and included in analysis (Figure 1). The general characteristics of the subject sample are described in Table 1. There was no statistically significant difference between the two groups with respect to age, sex, religion, education, career, salary, average number of children under care/adult, child's mean age, and relationship to child. Considering the subject's experiences in the past and current practice regarding physical and verbal abuse, the data did not show any statistically significant difference in both physical and verbal abuse between the groups (Table 2) (Table 3). In this study, most of the subjects were spanked by their parent and they, likewise, spanked their child for discipline. The most common method of physical abuse was hand spanking. Spanking by an object was the strongest method. The objects commonly used for spanking were most often household accessories, such as clothes hanger, feather duster, and

wooden stick. There were three methods of verbal abuse found in this study: scolding, yelling, and threatening. Yelling was the most common method of verbal abuse.

3.1. Knowledge regarding child discipline

Concerning knowledge regarding child discipline, mean scores of correct answers at each stage is shown in Figure 2. In the intervention group, subjects had a mean $\pm$ SD score at P0 of 7.38 ± 1.68 , P1 of 8.57 ± 1.27 and P2 of 8.42 ± 1.17 . Acquired knowledge initially increased after the intervention (P1), but decreased 3 months later (P2), and was still higher than at the P0 stage ($p < 0.001$).

In the control group subjects, subjects had a mean $\pm$ SD score at P0 of 6.88 ± 1.33 , P1 of 6.44 ± 1.36 and P2 of 6.41 ± 1.09 . The knowledge slightly decreased after P0, but the difference is not statistically significant between P0 and P1, and between P1 and P2; however, there was a statistically significant difference between P0 and P2 stage ($P = 0.004$).

The effect size for knowledge score after intervention program at 3 months (P1) and 6 months (P2) were 0.79, 0.71 respectively.

3.2. Attitudes regarding child discipline

Concerning attitudes regarding child discipline, mean attitudes scores at each stage is shown in Figure 3. In the intervention group, subjects had a mean $\pm$ SD score at P0 of 13.80 ± 3.15 , P1 of 16.30 ± 2.11 and P2 of 16.14 ± 2.22 . The attitude score increased after the intervention at P1 stage and was maintained at the P2 stage ($p < 0.001$) (Figure 3).

In the control group, subjects had a mean $\pm$ SD score at P0 of 13.34 ± 2.64 , P1 of 13.25 ± 2.23 and P2 of 12.88 ± 2.36 . There was no statistically significant difference in the mean attitudes scores between each stage.

The effect size for attitude score after the intervention program at 3 months (P1) and 6 months (P2) were 0.93, 0.85 respectively.

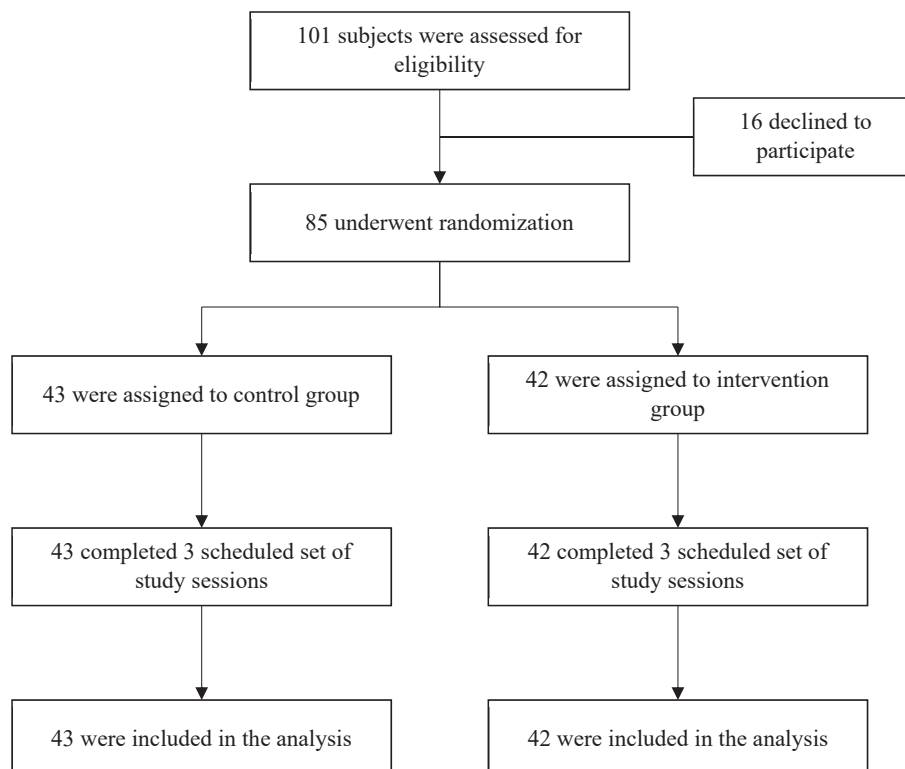


Figure 1. Screening, randomization, and follow-up.

Table 1. Summary of general characteristics of the study participants.

Characteristic	Total	Subject group		p-value
		Control	Intervention	
no. of subjects	85	43	42	
Mean age (yrs.)	51.12 ± 12.12	53.34 ± 11.54	48.85 ± 12.41	0.08
Female sex	78	37 (86%)	41 (97%)	0.05
Religion				
<i>Buddhist</i>	85	43 (100%)	42 (100%)	
Education				0.64
<i>None</i>	3	1 (2%)	2 (5%)	
<i>Primary school</i>	45	24 (56%)	21 (50%)	
<i>High school</i>	28	15 (35%)	13 (31%)	
<i>Bachelor's degree</i>	9	3 (7%)	6 (14%)	
Occupation				0.06
<i>None</i>	22	14 (32%)	8 (19%)	
<i>Merchant</i>	14	5 (12%)	9 (21%)	
<i>Agriculturist</i>	34	20 (47%)	14 (34%)	
<i>Employee</i>	15	4 (9%)	11 (26%)	
Salary				0.17
<i>< 300 USD</i>	61	34 (79%)	27 (64%)	
<i>300 – 600 USD</i>	22	9 (21%)	13 (31%)	
<i>> 600 USD</i>	2	0	2 (5%)	
no. of children	117	63	54	
Average no. of children under care/adult	1.38	1.47	1.29	0.20
Child's mean age				
<i>Boy, mean age (yrs.)</i>	4.80 ± 5.50	4.45 ± 5.62	5.16 ± 5.42	0.55
<i>Girl, mean age (yrs.)</i>	3.78 ± 4.78	4.39 ± 5.02	3.16 ± 4.50	0.23
Relationship to child				0.16
<i>Parent</i>	38	21 (49%)	17 (40%)	
<i>Cousin</i>	39	16 (37%)	23 (55%)	
<i>Acquaintance</i>	8	6 (14%)	2 (5%)	

4. Discussion

Concerning harsh parental discipline (e.g., yelling, spanking, or hitting the child with an object), it constitutes "crossing the line" from discipline to child abuse and leads to many consequences [3, 6]. Although there are many parenting programs shown to be effective in child discipline and child abuse prevention, they are most practical in high-income countries, and to date, the research on parenting program effectiveness in low-income countries is limited [25]. In low-income countries, cultural beliefs and values might preserve the use of harsh

Table 2. Summary of physical and verbal abuse experiences in the subject sample.

Characteristics	Subject group		p-value
	Control (N = 43)	Intervention (N = 42)	
No. of subjects that have been physically abused by their parent	43 (100%)	40 (95%)	0.14
Strongest method of physical abuse			0.32
<i>Hand spanking</i>	17 (40%)	14 (35%)	
<i>Object spanking</i>	26 (60%)	26 (65%)	
No. of subjects that have been verbally abused by their parent	41 (95%)	40 (95%)	0.98
Strongest method of verbal abuse			0.42
<i>Scolding</i>	16 (39%)	22 (55%)	
<i>Yelling</i>	24 (59%)	18 (45%)	
<i>Threatening</i>	1 (2%)	0	

Table 3. Summary of physical and verbal abuse current practices in the subject sample.

Characteristics	Subject group		p-value
	Control (N = 43)	Intervention (N = 42)	
No. of subjects that currently practice physical abuse of their child	42 (98%)	40 (95%)	0.54
Strongest method of physical abuse			0.74
<i>Hand spanking</i>	19 (45%)	16 (40%)	
<i>Object spanking</i>	23 (55%)	24 (60%)	
Regular method of physical abuse			0.68
<i>Hand spanking</i>	41 (98%)	38 (95%)	
<i>Object spanking</i>	1 (2%)	2 (5%)	
No. of subjects that currently practice verbal abuse of their child	41 (95%)	41 (98%)	0.57
Strongest method of verbal abuse			0.15
<i>Scolding</i>	12 (29%)	19 (47%)	
<i>Yelling</i>	26 (64%)	22 (53%)	
<i>Threatening</i>	3 (7%)	0	
Regular method of verbal abuse			0.30
<i>Scolding</i>	0	2 (5%)	
<i>Yelling</i>	41 (100%)	39 (95%)	
<i>Threatening</i>	0	0	

parental discipline as a form of child discipline; therefore, the parenting program is important for developing knowledge, skills, and awareness to prevent child discipline from becoming child abuse.

In this study, the villagers who live in rural Thailand were chosen because we believed this group could represent the general population in low-income countries. Our subject samples consisted of poor people, who were mostly educated below the high school level and who earn their living from agriculture. Religion, culture, beliefs, and ethnic customs strongly influence their daily life; thus, child discipline in form of physical and verbal abuse are accepted and passed down from generation to generation. We found that physical and verbal abuse were very common in this study. Over 95% of subjects had experienced or practiced physical and verbal abuse in their daily lives. These findings are consistent with a previous study demonstrating that child abuse is a common problem in developing countries [26, 27]. In our study, spanking by hand was the most common method of physical abuse and yelling was the most common method of verbal abuse. In addition, the questionnaires show that both methods were often used simultaneously when disciplining their child. The other form of physical abuse (i.e., spanking by object), or verbal abuse (e.g., threatening and scolding) were mostly used when parents lost control of their emotions.

The knowledge and attitudes regarding child discipline were significantly increased at 3 and 6 months among subjects who participated in the intervention program. These results are the same as those of another study, in which findings showed that the participants gained a better understanding of effective parenting techniques after an intervention program [28]. A slight decrease in knowledge and attitudes was noted at 6 months compared with 3 months in the intervention group. This change is probably due to lack of continuing education related to the intervention program.

The intervention program was found to be effective in increasing knowledge and changing attitudes in this study because of its simplicity, easy-to-follow contents, and no technology required. Finding the right instructor for the intervention program is also essential because getting the audience's attention is considerably important. Presentation style should not only be a one-way communication, like giving lecture, but rather it should be an audience-centered activity. In this situation, we think role play was a successful strategy because the subjects enjoyed the participation; thus, everyone was willing to cooperate. As a result, the study subjects have learned about non-violent child discipline strategies

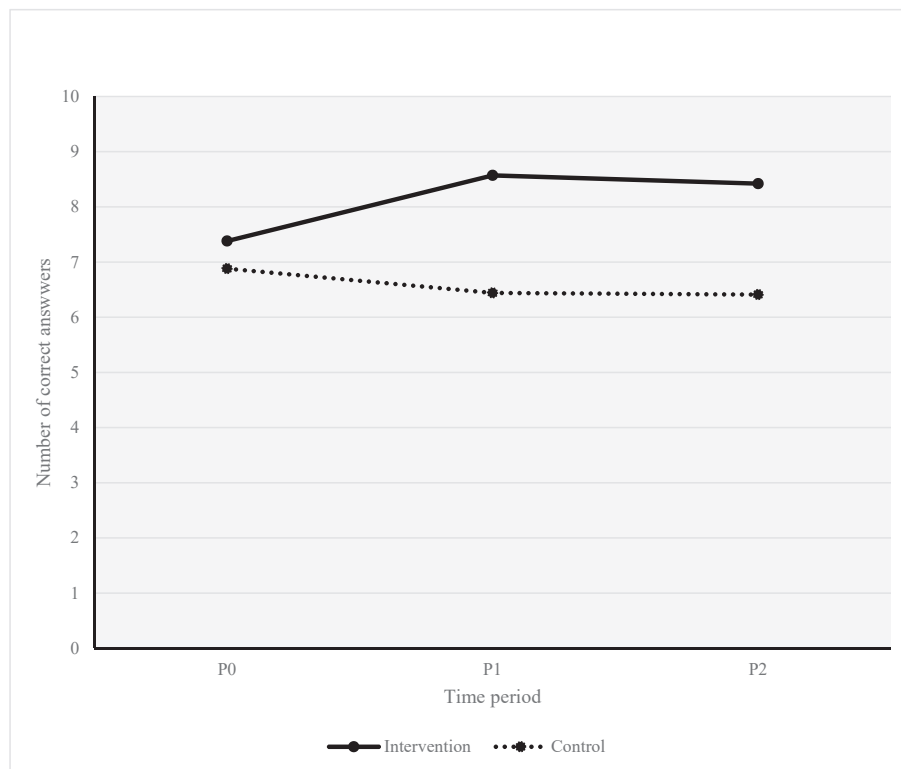


Figure 2. Graph showing mean scores of correct answers on knowledge regarding child discipline. Paired analyses of the intervention group: P0 (7.38 ± 1.68) and P1 (8.57 ± 1.27), $p < 0.001$; P1 (8.57 ± 1.27) and P2 (8.42 ± 1.17), $p = 0.405$; P0 (7.38 ± 1.68) and P2 (8.42 ± 1.17), $p = < 0.001$. Paired analyses of the control group: P0 (6.88 ± 1.33) and P1 (6.44 ± 1.36), $p = 0.066$; P1 (6.44 ± 1.36) and P2 (6.41 ± 1.09), $p = 0.883$; P0 (6.88 ± 1.33) and P2 (6.41 ± 1.09), $p = 0.004$.

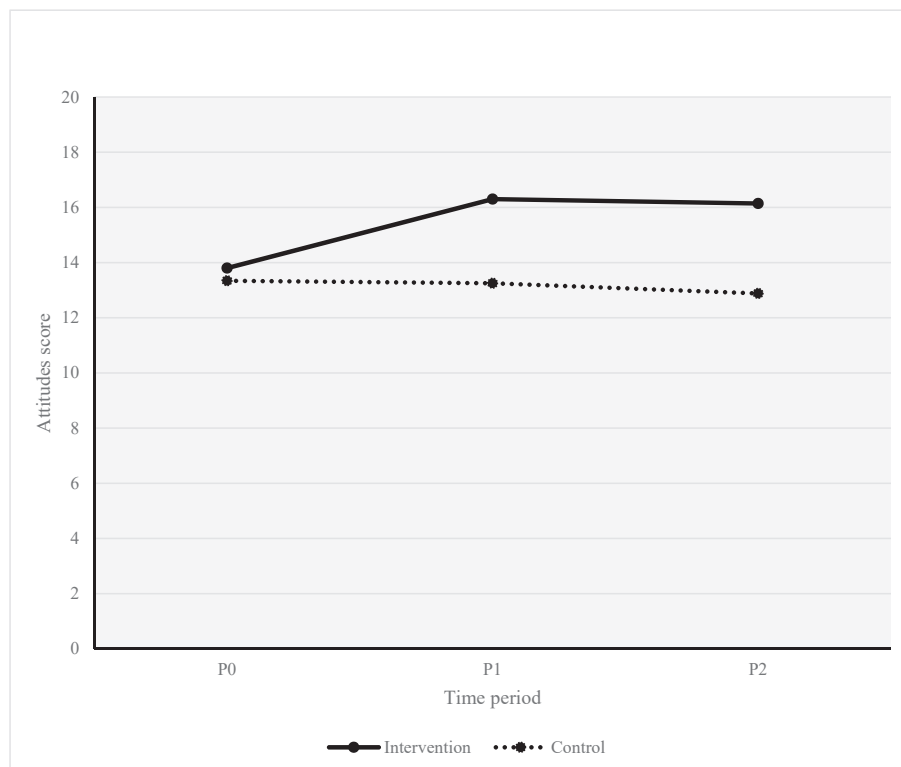


Figure 3. Graph showing mean scores of attitudes regarding child discipline. Paired analyses of the intervention group: P0 (13.80 ± 3.15), and P1 (16.30 ± 2.11), $p < 0.001$; P1 (16.30 ± 2.11) and P2 (16.14 ± 2.22), $p = 0.420$; P0 (13.80 ± 3.15) and P2 (16.14 ± 2.22), $p = < 0.001$. Paired analyses of the control group: P0 (13.34 ± 2.64) and P1 (13.25 ± 2.23), $p = 0.730$; P1 (13.25 ± 2.23) and P2 (12.88 ± 2.36), $p = 0.074$; P0 (13.34 ± 2.64) and P2 (12.88 ± 2.36), $p = 0.078$.

as we expected; we hope the knowledge will reduce the incidence of child abuse in their community.

5. Conclusion

Physical and verbal abuse are not effective and that more effective non-violence disciplinary methods existed. Parents should be educated in the use of alternative methods of discipline, with an emphasis on employing evidence-based techniques to discipline their child without resorting to violence. Uneducated, poor income, and living in a remote area are important barrier for parents accessing education. To focus on this target group, the intervention program that simple, easy and flexible in various limited resources situations is necessary.

6. Implementation

We believe that the intervention program in this research will improve the knowledge and attitude regarding child discipline in people living in remote and rural context. Continued advancement will take a willingness of researcher to implement this intervention and measure its effectiveness. The challenges of implementing this intervention are similar any process changes in large public. Changing individual child discipline practice requires mentoring to ensure that intervention program is thoughtfully applied. It will be necessary to assign mentors within the community to implement knowledge and strategies in this intervention program. These mentors will need to educate their peers and serve as resources for implementation and continuous learning.

7. Limitations

However, some potential limitations should be noted. First, due to the limited number of previous studies on this topic in Thailand, the questionnaire survey conducted in this study lacked use of previously established and validated measurement scale for the measure of knowledge attitudes change. Second, this study did not include a measure of participants' behavior because of time constraint. Third, the convenience sample, mostly female caregivers participated in the intervention program because it was working hour for men when we conducted the survey and intervention. They were therefore subject to biases that may have influenced our results. However, these limitation of this research point toward topics addressed in the future. Further qualitative long-term study is recommended.

Declarations

Author contribution statement

C. Rerkswattavorn: Conceived and designed the experiments; Performed the experiments; Analyzed and interpreted the data; Contributed reagents, materials, analysis tools or data; Wrote the paper.

W. Chanprasertpinyo: Performed the experiments; Analyzed and interpreted the data; Contributed reagents, materials, analysis tools or data; Wrote the paper.

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Competing interest statement

The authors declare no conflict of interest.

Additional information

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