Family-Based Intervention Program for Adolescents Vulnerable to Drug Abuse in Dukong Village, Belitung Regency

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ABSTRACT

Keywords: family-based interventions; adolescents; drug abuse; family united; family.

This study adopted a family-based intervention model (Family United) developed by BNN and UNODC. The participants in this study were 8 (eight) vulnerable adolescents aged 14-18 years along with their families who live in Dukong Village. The intervention was carried out for 4 (four) sessions over 4 (four) days. The instruments used were the AntiDrugs Scale, Family Assessment Device and behavioural checklist to measure changes in family communication behaviour and adolescent behaviour to refuse drugs. Family communication behaviour after 4 (four) weeks after the intervention decreased than immediately after the intervention, while adolescents' behaviour to refuse drugs tended to remain. T-test results showed anti-drug scale scores (p<0.001) after and before the intervention was given. Meanwhile, the results of the posttest and pretest of family functioning showed (p<0.001) from the parents' side and the adolescents' side.

Introduction

In a study that reviewed several studies related to the vulnerability factors of adolescents falling into drugs, (Carver, Elliott, Kennedy, & Hanley, 2017) found that there was a relationship in the family with the risk of adolescents falling into juvenile delinquency. (Carver et al., 2017) stated that there are adolescent protection factors and risk factors that cause adolescents to be vulnerable to delinquency. The factors that affect how adolescents fall into drug addiction are further explained in the research conducted by (Goliath & Pretorius, 2016) and (Kobulsky, 2017). This study found that there are risk factors and protective factors related to drug abuse in adolescents. Similar research was also conducted by (Santi, Yuliartini, & Mangku, 2019) which found that the more we understand the interaction between these risk factors and protection, the more we can prepare for the right intervention. The most consistent risk factors related to the family are incomplete family structure, lack of parental warmth, mistreatment, and inadequate parental supervision. Families that have a high risk of drug abuse include families that are not harmonious, there are often conflicts in the family, families that have problems with a history of drug abuse and families that have a history of neurosis are risk factors...
(Nurzahrah, Solahudin, Permata, Shafahiera, & Hadji, 2024). Meanwhile, the protection factor is how parents care for their children. This form of concern can be in the form of good communication between parents and children, discussing good things for the child to know and agree on, as well as good supervision. Therefore, it can be concluded that the family has a big role in preventing drug abuse (Febriantika, Ramadhan, & Virginia, 2023).

Based on the results of various studies on various family intervention programs, UNODC then developed The Strong Families Programme which had a positive impact after being piloted in an Asian country, namely Afghanistan (UNODC, 2019). The adaptation of the program implemented in Afghanistan shows that the program positively improves mental health as well as parenting and family adjustment skills (Haar et al., 2023). In 2019, UNODC revised The Strong Families Programme and called it the Family United Programme. The program is a preventive intervention targeted at three groups, namely parents, children, and families (parents and children). Through activities carried out together, parents and children will get experiences that will increase family attachment between them. The Family United Program trial has been carried out in West Java and East Java (2019). The results of the trial are then used to develop programs that are adapted to conditions in Indonesia. The next program is called the Family Resilience Program. The implementation of the program aims to describe the influence of interventions for negative social impacts, namely on children's behaviour, parenting patterns, and self-reliance (anti)drug (resilience).

Research using the Family United model is carried out universally to strengthen parenting skills has been carried out in several loci in Indonesia (BNN, 2024). The pilot project carried out by BNN was carried out by comparing the family groups that were given intervention and those that were not given intervention (Anjani & Hutasoit, 2022). However, this pilot project is carried out at regional loci that have carried out Narcotics Abuse and Illicit Circulation Prevention and Eradication Activities (P4GN) and with participants with families in general (BNN, 2024). For intervention programs aimed at families who have vulnerabilities, not much has been done, especially in areas outside Java. As is known, the problem of drug abuse does not only occur in urban areas but also circulates in remote areas of the archipelago such as Bangka Belitung province. One of the districts that is of special concern in the prevention of drug abuse is in Belitung Regency (Rachman, 2022).

According to BNN Belitung Regency (2023), the number of drug cases in demand in Belitung Regency where children and adolescents become addicted to one brand of commercial cough medicine and glue is very worrying. One of the efforts to solve this problem is to provide family-based interventions to families who have vulnerabilities due to communication problems between parents and children (Melati, 2024). Thus, families who have communication problems make the protection factor stronger and the risk factor weaker.

Against the background of the phenomenon of rampant drug abuse and studies on the effectiveness of family-based interventions, we feel the need to design a study on...
adolescents with mild drug abuse with a study on whether providing family-based interventions can affect adolescents' resilience to drugs, whether providing family-based interventions can affect family functioning both from the parental side and from the adolescent side and whether providing family-based interventions will change parental behaviour in communicating and adolescent behaviour to overcome peer pressure to abuse drugs.

According to (Haar et al., 2023), the Family United Program is based on three theories that form the components of the program session as a whole. First, the Biopsychosocial Vulnerable Model shows that skills to overcome family problems positively such as conflict resolution, active problem-solving skills, and positive communication, can protect each family member and protect adolescents' vulnerability from the negative impact of family conflicts. In this theory, the caregiver's influence on their children is greatest when the children are young and decreases significantly when they enter early adolescence. The second theory is the Resiliency Model, which emphasizes the basic role of caregivers in the family in developing child resilience. Resilience is defined as the ability to bounce back from difficult or bad circumstances and is considered more likely to develop when the child is raised in a family environment where the caregiver is positive and supportive. This theory focuses on life skills that are promoted when the caregiver is supportive, such as reflective skills, emotion management skills, and the ability to solve problems. This theory is supported by research that identifies that the relationship a child has with a caregiver can have a more significant impact on his or her mental health projections compared to when in a difficult conflict situation. The third theory is Social Learning Theory which proposes that children's daily experiences in the world through interaction with others, imitation, and reinforcement they receive, shape their behavior both directly and indirectly. This places the role of caregivers as crucial to healthy social development and also guides family skills interventions to focus on improving the quality of care by improving basic parenting skills. Based on the theoretical foundation above, the Family United module focuses on improving an empathetic and warm approach to parenting; improving family cohesion, communication and relationships; as well as skills for emotional regulation and assertive skills in managing peer pressure. In parenting sessions, caregivers learn how to normalize and manage stress and how to improve their confidence and parenting skills to develop positive parenting strategies. In parallel, children also learn about how to cope with stress better, how they can reduce challenging behaviours and children also learn positive and healthy ways to fit in with peers. The main goal of these family sessions is to improve communication and relationships between children and their caregivers and to reduce pushy parenting behaviours. Overall, Family United aims to reduce risk factors, such as poor parenting skills, high stress levels, and an environment that favours early initiation of drug use and other risky behaviours, as well as improve proactive factors, such as family interactions and relationships, positive non-violent discipline, and prosocial engagement. In the short term, Family United aims to improve parenting skills, child behaviour, and the ability to cope with stress, while in the long term, it aims to reduce
violence, drug use, and risky behaviours, as well as improve mental health for parents and children.

In addition, in a study conducted by (Busse et al., 2021) it was stated that to carry out family-based interventions, skills such as active listening are needed. Furthermore, to be able to listen actively, it is necessary to have elements of active listening, such as positive labelling of negative behaviours without having to accept them as good things, positive labelling of negative behaviours in relationships with the family without having to accept them as natural, developing empathy and the ability to consider other people’s points of view, supporting perspective taking, relational questions being asked, etc. and helps family members feel heard and understood, which reduces defensive attitudes and allows for more productive conversations.

**Research Methods**

This research method uses the Theory of change. Theory of Change is a method that explains how an intervention or a series of interventions are expected to lead to specific changes, based on causal analysis and based on existing evidence (UNDAF, 2017). Broadly speaking, this intervention can be explained through the following figure.

**Studi Baseline**

The location of the baseline study was carried out in several places in Belitung Regency from March to April 2024. The researcher conducted interviews with community leaders, the Regency BNN, and Satpol PP. The researcher also conducted a Focus group discussion with the Children’s Forum, the Family Learning Center (Puspaga) and the Dukong Village PATBM Group. The population in this study is adolescents who are in families prone to dysfunction. This is because based on previous background reviews adolescents who come from dysfunctional families often become vulnerable to drug abuse. The data collection method used in this baseline study uses a qualitative approach. In the interview, this troubled teenager is a teenager who comes from a dysfunctional family. Neglect and violence often colour the daily lives of these children.
After conducting a baseline study, the researcher found various information from various sources regarding addictive substance abuse behaviour, so it can be concluded that there is a need for supporting interventions to strengthen communication in the family.

**Intervention Design**

In this study, the type of research used is quasi-experimental research, which is experimental research that is carried out on only one group without any comparison group or control group. The population of the participants in this study is families who have received services and are recommended by the Family Learning Center (Puspaga) and the Community-Based Integrated Child Protection Group (PATBM).

The population of this study is 8 (eight) adolescents and their parents (father or mother). To measure adolescent self-resilience, the measuring tool used is to use the Anti Drug Scale (ADS) which consists of 3 (three) dimensions, namely self-regulation, assertiveness, and reaching out. The indicators of the Self Regulation Dimension are controlling impulses and emotions, controlling the influence of the environment on oneself, being aware of one's thoughts, being aware of and using the necessary sources of information, and feeling obligated to complete tasks. Indicators of the Assertiveness Dimension include directly stating what is desired, expressing directly what is not wanted, and being able to communicate directly, openly and honestly. Meanwhile, the indicators of the Reaching Out Dimension include the ability to improve the positive aspects of life by accepting challenges or using opportunities and increasing connections with others. ADS is compiled by BNN using 23 (twenty-three) items of the Behaviorally Anchored Rating Scale (BARS) scale model. The measurement also uses a Family Assessment Device which is used to measure effective family functioning, from the perspective of adolescents. The Family Assessment Device (FAD) is a measurement tool developed by Ryan, Epstein, Keitner, Miller, and Bishop in 2005. This measurement tool is based on the McMaster Model of Family Function (MMFF). FAD consists of 53 (fifty-three) items that are represented from the dimensions of family functioning according to MMFF (Epstein et al., 1983) totalling 7 dimensions, namely: Problem-Solving, Communication, Roles, Affective Responsiveness, Affective Involvement, Behavior control and General Functioning.

In addition to ADS and FAD, the researcher also used a behavioural checklist to measure changes in parental communication behaviour to children and adolescent behaviour to cope with peer pressure measured after the intervention and 4 (four) weeks after the intervention.

**Results and Discussion**

Preparation for the intervention began by coordinating with the Family Learning Center and the Dukong Village PATBM Group to obtain participant recommendations. There were 4 (four) participants aged 15 years, 3 (three) participants aged 16 years and 1 (one) participant aged 17 years. There were 2 (two) male participants and 6 (six) female participants. For parent participants, as many as 100% of parent participants who
participated in the activity were mothers of adolescent participants. The implementation of this intervention was carried out in 4 (four) sessions for 4 (four) days. The first session of intervention was held on Thursday, May 16, 2024, the second session was held on Saturday, May 18, 2024, the third session was held on Tuesday, May 21, 2024, and the fourth session was held on Friday, May 24, 2024. The class is divided into adolescent, parent and family classes.

**Intervention Session-1**

The first session of the parent class aims to help parents feel comfortable in the group, introduce the importance of parenting skills and help parents listen and reward their children. The parent participants also discussed the development of adolescents their physical changes, and social and emotional ways of thinking. Meanwhile, in the adolescent class, the aim is to help adolescents get to know each other, encourage adolescents to think positively about the qualities they develop and help adolescents understand parental responsibilities and the qualities of themselves that they want to develop when they grow up. Through the self-quality card game, adolescent participants were guided to identify their qualities. Then all participants gathered in the family class (class with parents and teenagers), the facilitator guided each family to recognize the qualities of other family members by making a picture of the family tree.

**Second Session Intervention**

In the second session, teenagers and parents returned to their respective classes. In the adolescent class, adolescent participants recognized symptoms of stress in themselves. In the second activity, the facilitator guided the adolescent participants to role-play how to cope with stress. The facilitator then showed you a stress card and guided you through the slow breathing technique. Adolescent participants were then guided to understand stress in parents. In the parent class, parent participants know the challenges they face and help parents recognize the sources, symptoms, and effects of stress caused by the challenges they face. In the family class, the first activity carried out is to understand the stress of each family member with a stress thermometer game. To help teen participants and parents how relieve stress, the facilitator guides the bingo card game. The game encourages parents and teens to identify what they enjoy doing when they are stressed.

**Third Session Intervention**

In the parent class, the third session aims to provide parents with an understanding of how to respond to the negative behaviour of adolescents, train parents on how to change adolescent behaviour and help parents practice written agreements on behaviour to change behaviour. In the adolescent class, child participants reflected that sometimes a person feels worried about how to be accepted by their peers. To recognize peer pressure, child participants practiced peer pressure role play using 5 W 1 H questions. In the family class, parent and youth participants discuss the values that are most important to them, help family members build communication skills and encourage families to talk about things they can do to build family relationships.

**Fourth Session Intervention**
To help parents learn to recognize adolescent aggressive behaviour, the Facilitator guided parent participants to listen to adolescents’ anxieties and concerns in releasing the pressure they felt. The second way is clear rules about what is and is not allowed. The activity in the adolescent class is to understand the characteristics of good friends with a debrief that in the daily association, you will meet friends of various characteristics, both good and bad, external appearance does not guarantee that the character is good. If adolescent participants recognize which are good and bad friends, it will help attitudes in the association.

Table 1
Descriptive Statistical Results of Anti Drugs Scale Instrument Dimensions

<table>
<thead>
<tr>
<th>Dimensi</th>
<th>Self Regulation</th>
<th>Assertiveness</th>
<th>Reaching Out</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre Mean per-item</td>
<td>Post Mean per-item</td>
<td>Pre Mean per-item</td>
</tr>
<tr>
<td>Mean</td>
<td>17.60</td>
<td>24.0</td>
<td>20.0</td>
</tr>
<tr>
<td>N</td>
<td>8</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>SD</td>
<td>2.3</td>
<td>1.93</td>
<td>1.85</td>
</tr>
</tbody>
</table>

For the self-regulation dimension, the mean difference of 6.4 indicates a change in the attitude of adolescent participants to control impulses and emotions, control environmental influences on themselves, be aware of their thoughts, be aware of and use the necessary information sources, and feel obligated to complete tasks. The number of items (n=7) in the self-regulation dimension showed that the average participant answered 2.51 before the intervention and 3.42 after the intervention. This shows a change of 0.91 in the self-regulatory dimension.

Meanwhile, in the Assertiveness dimension, the difference in mean post-test and pretest of 8.6 also showed a change in the attitude of adolescent participants to express directly what they wanted or did not want to others firmly. With the number of items (n=8), the mean difference per posttest-pretest item is 1.07. This shows the difference in the change in the average item of the participants from the average answer at 2.5 then to 3.57. In the Reaching Out dimension, the difference between the mean pretest and the postest of 8.1 also shows the ability to improve the positive aspects of life by accepting challenges or using opportunities and increasing connections with others. With the number of items (n=8), the average participant answered 2.25 before the intervention and 3.26 after the intervention. This shows a change in the Reaching Out Per Item dimension item score of 1.01.
Overall, there was a significant mean difference between adolescent resilience scores after the intervention and before the intervention 23.2. While the average value per item in the pre-test is 2.41 and the post-test is 3.42, this shows the average change in items (number of items=23) of 1.01. This shows that overall adolescent participants have an increased understanding of self-resilience from drug abuse.

When comparing pre-test and post-test measurements, it can be seen that the average anti-drug scale score is quite low and needs to be improved. Meanwhile, the average post-test score was 78.8, whereas the anti-drug scale score managed to increase by 23.2 after being given family-based interventions. Supported by the results of the differential test analysis in the table above, it can be seen that p (0.014) < 0.001, it can be concluded that there is a significant difference between the self-resilience of adolescent participants before the intervention and after the intervention.

The researcher also conducted a t-test to see the relationship between pre-test and post-test on family functioning in parental participants.

### Table 2
**Hasil Perbedaan Mean Pretest-Posttest Anti Drugs Scale**

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Pretest Mean</th>
<th>Pretest per-item</th>
<th>Posttest Mean</th>
<th>Posttest per-item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>8</td>
<td>55.6</td>
<td>2.41</td>
<td>78.8</td>
<td>3.42</td>
</tr>
<tr>
<td>Median</td>
<td>8</td>
<td>55</td>
<td>2.39</td>
<td>78.5</td>
<td>3.41</td>
</tr>
<tr>
<td>SD</td>
<td>8</td>
<td>4.0</td>
<td>4.03</td>
<td>3.69</td>
<td>3.69</td>
</tr>
<tr>
<td>SE</td>
<td>8</td>
<td>1.4</td>
<td>1.43</td>
<td>1.31</td>
<td>1.31</td>
</tr>
</tbody>
</table>

### Table 3
**Results of the ADS Pre-Test and Post-Test**

<table>
<thead>
<tr>
<th>Post-Test Post-Test</th>
<th>Df</th>
<th>P</th>
<th>Mean Difference</th>
<th>SE Difference</th>
<th>Effect Size</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7.00</td>
<td>&lt;0.01</td>
<td>-23.2</td>
<td>2.19</td>
<td>-1.00</td>
</tr>
<tr>
<td></td>
<td>0.014</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Table 4
**Results of Pretest and Post-Test FAD Measurement of Parent Participants**

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Pretest</th>
<th>Mean</th>
<th>Postest</th>
<th>Mean</th>
</tr>
</thead>
</table>
In the table above, it can be seen that there is a difference in the mean in the measurement of the functioning of the family of the parent participants by 55. This shows a change in the extent to which parents view that the family can carry out their duties and interact in their daily lives. With participants coming from families with communication problems, this intervention has a transformative impact on improving parental communication with adolescents. As for the difference in the average per item, it can be seen that before the intervention, the parent participants answered with an average of 2.39 per item, while after the intervention the parent participants answered 3.43.

Meanwhile, to see the difference between the pretest and the family functioning posttest, you can see the table below.

### Table 5
Results of the Difference between Pre-Test and Post-Test FAD in Parent Participants

<table>
<thead>
<tr>
<th></th>
<th>Post-test</th>
<th>df</th>
<th>p</th>
<th>Mean difference</th>
<th>SE difference</th>
<th>Effect size</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-test</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>7.00</td>
<td>&lt;0.01</td>
<td>-55.0</td>
<td>1.63</td>
<td>-1.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.008</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In the table, it can be seen that p (0.008) < 0.001, it can be concluded that there is a significant difference between the functioning of the family of the parent participants before the intervention and after the intervention is given. This shows that family-based interventions are proven to improve family functioning. As for adolescent participants, family functioning can be seen in the following table.

### Table 6
Results of Pretest and Post-Test FAD Measurement of Adolescent Participants

<table>
<thead>
<tr>
<th>FAD</th>
<th>N</th>
<th>Pretest</th>
<th>Postest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>8</td>
<td>125</td>
<td>184</td>
</tr>
<tr>
<td>Median</td>
<td>8</td>
<td>131</td>
<td>187</td>
</tr>
<tr>
<td>SD</td>
<td>8</td>
<td>16.9</td>
<td>9.74</td>
</tr>
</tbody>
</table>
In the table above, it can be seen that there is a difference in the mean in the measurement of the functioning of the family of adolescent participants. This shows a change in the extent to which adolescents see that their families can carry out their duties and interact in their daily lives. With adolescent participants from families who had communication problems and vulnerability to juvenile delinquent behaviour, this intervention had a transformative impact on improving adolescent communication in the family. Meanwhile, to see the difference between pretest and posttest of family functioning from the side of adolescent participants, you can see in the table below.

**Table 7**

Results of Different Pre-Test and Post-Test FAD in Adolescent Participants

<table>
<thead>
<tr>
<th>Pre-test-Post-test</th>
<th>df</th>
<th>p</th>
<th>Mean difference</th>
<th>SE difference</th>
<th>Effect size</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.00</td>
<td>&lt;0.01</td>
<td>0.006</td>
<td>-59.0</td>
<td>3.37</td>
<td>-1.00</td>
</tr>
</tbody>
</table>

In Table 7, it is seen that $p(0.006) < 0.01$, so it can be concluded that there is a significant difference between family functioning seen from the adolescent's side before the intervention and after the intervention is given. This shows that family-based interventions are proven to improve family functioning from the perspective of adolescents.

The results of the behavioural checklist showed that there was the least difference in behavioural frequency, namely on the indicator of giving touch with n after the intervention = 7, but after 4 (four) weeks after the intervention, the frequency was reduced to 5. This shows that it is still difficult to give a touch to some parents with the background of previous habits. This reduction in frequency showed that with an interval of 4 weeks
after the intervention, there was a decrease in behaviour changes. It can be understood that measurements immediately after the intervention tend to be high because they are still fresh with the material provided during the intervention. For this behaviour to tend to be settled, participants need to continue practising. In this case, the researcher felt that it was necessary to provide a follow-up intervention that was useful to reinforce the desired behaviour after the intervention was given.

![Behavioral checklist Partisipan Anak](image)

In the diagram above, it can be concluded that the child participants have understood and internalized how to overcome peer pressure by expressing opinions firmly, respectfully refusing, expressing self-limits, and controlling emotions both after the intervention and within 4 (four) weeks after the intervention. This shows that adolescents’ skills to cope with peer pressure can be understood and internalized by adolescent participants which is expected to appear in daily behavior.

In the diagram above, it can also be seen that for the indicator of sharing stories or asking for the opinion of friends, there are 1 (one) adolescent participant who has not been able to show this behavior in the measurement after the intervention and 2 (two) adolescent participants who have not been able to show this behavior. It can also be understood that to ask for the opinion of a friend, some participants have not shown this behavior. But overall that adolescent participants already know what to do when they are pressured by peers to engage in negative behavior is good.

**Conclusion**

By providing family-based interventions, it can improve family functioning both from the parent side and from the adolescent side. With a family background that has problems so that adolescents are vulnerable to negative behavior, the provision of family-based interventions is considered good to improve the quality of the relationship between parents and adolescents. Thus, the 7 (seven) dimensions in Family Functioning also change for the better when parent and adolescent participants view the family to be more positive. When associated with the flow of behavior change in the theory of change, it can be concluded that this behavior change has an impact on fewer dysfunctional families
and fewer adolescents who behave negatively. The expected impact is also present in the community that this intervention contributes to the welfare of families and communities.

By providing family-based interventions, it can change the communication behavior of parents in their children. Changes in parental communication behavior to adolescents that occur during role play shortly after the intervention and 4 (four) weeks after the intervention show that this behavior change needs to be strengthened. For this reason, further interventions to strengthen can be considered in future research.

By providing family-based interventions, it has a direct impact on adolescent participants to equip themselves with the skills to cope with peer or environmental pressures from negative influences. Changes in the behavior of adolescent participants tended to be sedentary, which indicates that adolescent participants internalized the ability to identify good and bad friends. Thus, this skill is expected to be useful for adolescents' lives in their daily lives and future.
Bibliography


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