

Early Therapeutic Interventions for Low Self-esteem among Adolescents with Early Prodromal Signs of Psychosis*

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Abstract

Low self-esteem is an early prodromal sign of psychosis in adolescents. Early intervention is needed to prevent psychosis among this age group. Thus far, no studies have investigated the effects of group cognitive-behavioral therapy (CBT) and family psychoeducation (FPE) on the self-esteem of adolescents in Indonesia. The present study aimed to explore the influence of CBT and FPE on the self-esteem of adolescents with early prodromal signs of psychosis. An experimental study was conducted. Of the 79 participants selected after screening using the prodromal questionnaire and Rosenberg's self-esteem scale questionnaire, 39 were further classified into the intervention group and 40 into the control group using the random sampling technique. The analysis was performed using the paired t-test and analysis of variance. Results revealed that the RSES score of the CBT and FPE groups was significantly higher than that of the control group ($p < .05$). CBT and FPE, which are considered early therapeutic interventions, are recommended to increase the self-esteem of adolescents with early prodromal signs of psychosis.

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Introduction

Early psychosis is defined as presence of initial signs and symptoms of psychosis.¹ The early prodromal stage of psychosis is characterized by changes in an individual's behavior after the psychosis phase is observed for the first time.² An individual with prodromal psychosis has generally negative or unspecified symptoms, such as depression, anxiety, social isolation, and failure at school or work.³ Decreased levels of motivation and loss of interest or powerlessness are signs of low self-esteem, and these symptoms are observed during the early prodromal stage of psychosis. Self-esteem is used to describe how an individual perceives himself and his self-worth based on positive and negative values.⁴ Negative self-evaluation leads to low self-esteem.

Adolescence is a transitional stage; this period can be characterized by discovering or establishing of an individual's identity and self-confidence. Adolescents aged 12-18 years should successfully achieve their self-identity, which involves roles, personal goals, uniqueness, and personal characteristics. However, those who are unsuccessful are more likely to experience role confusion and present with a fragile personality. This condition causes self-concept disturbances.⁵

Interventions are needed to improve low self-esteem, powerlessness, and cognitive distortion in adolescents. Standard nursing intervention for individuals with low self-esteem includes identifying an individual's capabilities and positive aspects; assessing and discussing skills that can be used; helping individuals in choosing activities, selecting coaching activities according to their abilities, and helping and guiding them in planning activities; and providing proper reinforcement toward their success.⁶ The aim of standard nursing intervention is to increase self-confidence according to an individual's capability.

Individuals with low self-esteem usually have negative thoughts, which are more likely related to negative perception, and this

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influences their problem-solving skills.⁷ Cognitive-behavioral therapy (CBT) is defined as a psychosocial treatment that integrates behavioral modification approaches with cognitive restructuring.⁸ CBT can be implemented in individuals or a group of children, adolescents, and adults with varying cultural backgrounds.⁹ Group CBT has a similarly effective to that of individual CBT in adolescents.¹⁰ The aim of CBT is to help an individual to think more accurately and rationally based on facts and logic.¹¹

Families are assigned health tasks to support the adolescents' growth and development. A study concerning family psychoeducation (FPE) for children and adolescents with psychotic¹² and mood disorders^{13,14} was conducted. However, no study has yet investigated the combination of CBT and FPE to obtain more optimal outcomes regarding self-esteem of adolescents with early prodromal signs of psychosis in Indonesia.

Materials and methods

Aim

The present study aimed to explore the influence of group CBT and FPE on the self-esteem of adolescents with early prodromal signs of psychosis.

Study Design and Participants

Please state that the study was approved by an Institutional Review Board (IRB) or other institutional research ethics committee using language similar to "...this institutionally approved study..." An experiment using the control group design was adopted. Participants were included based on the following criteria: adolescents with early prodromal signs of psychosis who were in the eighth grade, those aged 13-14 years, and those living with their parents. Required data were obtained by screening using the prodromal questionnaire (PQ16). Totally, 667 adolescents belonging to two junior high schools were enrolled between February and June 2017. Of these, 543 met the inclusion criteria. Totally, 80 adolescents were willing to participate in the trial. Furthermore, the individuals were divided into the intervention and control groups via simple random sampling.

Intervention

Standard nursing intervention for the self-esteem of adolescents was individually administered by psychiatric nurses. Another psychiatric nurse provided CBT and FPE to the 6 intervention groups comprising 6-7 adolescents each. Psychiatric nurses had the necessary qualifications to provide CBT and FPE training and to facilitate CBT and FPE for 1 year. Moreover, the nurses were competent and were able to provide positive outcomes. During the fifth week, nursing intervention was provided to the control group. We provided CBT to the intervention group with each session lasting 90-120 min. The first reassessment was conducted four weeks after completing the group CBT and FPE sessions, whereas the second reassessment was conducted during the fifth week after completing the sessions. The completion rate was 100% for both groups.

Measurement of the Early prodromal signs of psychosis

We used a 16-item questionnaire (PQ-16) as a screening instrument to identify the "caseness" of individuals who were at a significantly high risk for psychosis, with a sensitivity rate of 87%, resulting in a specificity rate of 87% and positive predictive value rate of 44%. The scores of the PQ-16 were as follows: 0 = no, 1 = mild, 2 = moderate, and 3 = severe¹⁵. The reliability ($\alpha = .91$) of the Indonesian version of the PQ-16 is good. Participants with ≥ 6 symptom items were considered at risk for psychosis.

Self-esteem

We used the Indonesian version of the Rosenberg self-esteem scale (RSES) questionnaire, which comprised 10 items.¹⁶ This instrument describes adolescents' self-esteems. The RSES instruments used a four-point scoring system. The scores are calculated as follows: for items 1, 2, 4, 6, 7, and 8, strongly agree = 1, agree = 2, disagree = 3, and strongly disagree = 4. For items 3, 5, 9, and 10 (which are reversed in valence), strongly agree = 0, agree = 1, disagree = 2, and strongly disagree = 3. The scale ranges from 0 to 30. Scores between 15 and 25 are within normal range; scores <15 indicate low self-esteem. The internal consistency and

reliability of the Indonesian version of the RSES is 95.

Statistical Analyses

Data were analyzed using the Statistical Package for the Social Sciences software version 16 for Windows (SPSS Inc., Chicago, IL, USA). Paired t-tests and analysis of variance (ANOVA) were used to explore the influence of group CBT and FPE on the PQ and RSES scales.

Self-esteem was measured twice (pretest and posttest) using the RSES. The pretest, which included the participants, was performed. Then, nursing intervention, such as group CBT and FPE, was provided. Next, a posttest, which included adolescents with early prodromal signs of psychosis (low self-esteem), was conducted.

Results

The average value for the self-esteem of the control group increased from 28.75 to 28.38; however, the result was not significant ($P > 0.05$). This indicated that there is no significant difference in terms of the self-esteem value found in the control group (without nursing interventions: group CBT and FPE). The self-esteem percentage increased from 59.5% to 61.23%. Simultaneously, in the intervention group, the average value for self-esteem after providing nursing interventions (group CBT and FPE) increased from 26.97 to 28.67, and this result was significantly ($P < 0.05$) different with an average of 1.7. This indicated that self-esteem increased after the interventions were conducted. The adolescents's self-esteem percentage increased significantly from 56.57% to 62.23%. The findings indicated that there was a difference in the self-esteem score; however, it is not significant ($P > 0.05$) in the intervention group, which received nursing interventions (group CBT and FPE) compared with the control group (without intervention). The mean difference in the intervention group was higher than that in the control group (Table 1).

The increase in the RSES score was significantly higher in the CBT and FPE groups compared with the control group ($F [2,154] = 5.79$; $p = .004$; $\eta^2_{\text{partial}} = 25.14$). The decrease in the PQ-16 score was significantly higher in the CFPE group than in the control group ($F [1.77] = 20.44$; $p < .001$; $\eta^2_{\text{partial}} = 91.42$).

Discussion

In the present study, the intervention for low self-esteem among adolescents is expected to decrease the early prodromal signs of psychosis. Approximately 58.1% adolescents in junior high school present with early prodromal signs of psychosis, and this value is used as a standard to assess whether the self-esteem of adolescents would increase or decrease after providing nursing interventions. This is similar to the continuum of scale interpretation.¹⁶ A higher score indicates a higher self-esteem value. Rosenberg also defined self-esteem as an evaluation of an individual's positive or negative judgment, and it is based on the competence of an individual. Here, low self-esteem among adolescents is characterized by inability to finish the quantification subject, a feeling of dumbness and worthlessness, and lack of confidence; this affects adolescents, thus resulting in inability to show positiveness. This condition is similar to the state wherein individuals with low self-esteem are more likely to exhibit negative characteristics.¹⁷ They are quiet, shy, and unhappy. Moreover, these individuals have a hard time socializing, low level of motivation, and poor communication skills. They experience social withdrawal, depend on others, and lack confidence. Individuals with low self-esteem strongly believe that they are the worst. They do not believe in compliments. These individuals feel shy and do not want to be the center of attention.¹⁸

The present study demonstrated that most adolescents are unaware of the definition, signs and symptoms, and effects of and interventions for low self-esteem. Nursing interventions improve an individual's self-esteem by increasing his/her capability to independently perform daily activities. Furthermore, providing positive reinforcement is another intervention that influences and maintains the changes that occur in an individual.⁷

CBT is one of the psychotherapies used to treat problems based on the physiological signs and symptoms correlated with the interaction between emotion, behavior, and thought.¹⁹ Self-esteem might improve with changes in self-perception. Negative thoughts slowly turn into positive self-perception after

undergoing CBT. In this therapy, adolescents are taught how to counteract with automatic negative thoughts (ANTs) caused by negative self-evaluation. This is related to low self-esteem. Further, this method is used in assessing previous positive aspects and capabilities, which are used when adolescents counteract stressors. The integration of behavioral modification approaches to cognitive restructuring⁸ is the key to improving self-esteem.

Group CBT is important for adolescents with low self-esteem, and previous success is expected to improve confidence levels of individuals in terms of solving problems. Group CBT helps individuals counter negative thoughts. However, it still cannot inhibit an individual from having negative thoughts. The changes are not instantly observed, and it still needs additional group CBT sessions. This might be attributed to the fact that only three sessions were conducted in this research. CBT is usually conducted for 12-16 sessions.²⁰ Although CBT can counter negative thoughts and not necessarily inhibit them, prevention of the early prodromal signs of psychosis is still important in improving the self-esteem of adolescents.

Here, a majority of the parents do not understand the reason why children prefer to be with friends rather than family. Parents do not have knowledge on the growth and development of adolescents, and they rarely communicate with their children. FPE aims to share information about mental health care.²¹ This intervention aimed to improve family interaction and function, thus increasing awareness toward family dynamic processes. Thus, the family burden can be reduced, and the emotional safety of the family is improved.²² Families with adolescents are able to solve the problem and increase their child's self-esteem. This study revealed no difference between the intervention and control groups. Adolescents are asked to rehearse the therapy that has been learned at home to make it a habit. However, the adolescents did not practice regularly. Therefore, it did not become a habit. Trust is habitually or automatically built and comprises basic rules in terms of how we live our lives. With practice, individuals are able to explore faith/trust under the threshold of their consciousness.²³ The tasks provided are

a form of therapy. This result indicates that behavior can be attributed to positive repetition and reinforcement.²⁴ Repetition of the tasks is conducted to increase awareness on cognitive distortion and maladaptive behavior to help adolescents automatically counter problems independently. Positive reinforcement improves an individual's motivation to fight ANTs and adaptive behavior.

Conclusions

This section should consist of succinct, numbered statements that are supported by the results of the study.

Self-esteem of adolescents with early prodromal signs of psychosis significantly increased after got group cognitive behaviours therapy and family psychoeducation. Furthermore, by increasing the self-esteem in adolescents, it is expected to reduce the symptoms of early prodromal of psychosis so it can prevent the psychosis.

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Declaration of Interest

The authors report no conflict of interest.

References

1. Breitborde NJ, Srihari VH, Woods SW. Review of the operational definition for first-episode psychosis. *Early Interv Psychiatry*. 2009;3(4):259-65.
2. Yung AR, McGorry PD. The initial prodrome in psychosis: descriptive and qualitative aspects. *Aust N Z J Psy* 1996;30(5):587-99.
3. Larson MK, Walker EF, Compton MT. Early signs, diagnosis and therapeutics of the prodromal phase of schizophrenia and related psychotic disorders. *Expert Rev Neurother* 2010;10(8):1347-59.
4. Baron RA, Byrne D. *Psikologi sosial*. Edisi 2. Jakarta: Erlangga;2012.
5. Keliat BA, Helena N, Farida P. *Manajemen keperawatan psikososial & kader kesehatan jiwa*. Jakarta: EGC;2011.
6. Keliat BA. *Keperawatan kesehatan jiwa komunitas*. Jakarta:EGC;2011.
7. Stuart GW. *Principles and Practice of Psychiatric Nursing*. 10th ed. St. Louis, MO: Mosby Elsevier;2013.
8. Martin PF. CBT. Available at: "<http://www.mindisorder.com/Br-Del/Cognitive-behavioral-therapy.html>". Accessed March 11, 2017.

9. Roth DA, Eng W, Heimberg RG. Cognitive behavior therapy. *Encyclopedia of psychotherapy* 2002;1:451-8.
10. Rapee R, Wignall A, Hudson J, Schniering C. *Treating Anxious Children and Adolescents: an Evidence-Based Approach*. Oakland, CA: New Harbinger;2000.
11. Fontaine KL. *Ment Health Nurs*. NJ: Pearson Prentice Inc;2009.
12. Gearing RE. Evidence-based family psychoeducational interventions for children and adolescents with psychotic disorders. *J Can Acad Child Adolesc Psy* 2008;17(1):2-11.
13. Ong SH, Caron A. Family-based psychoeducation for children and adolescents with mood Disorders. *J Child Fam Stud* 2008;17(6):809-22.
14. Jones R, Thapar A, Stone Z, et al. Psychoeducational interventions in adolescent depression: A systematic review. *Patient Educ Couns* 2018;101(5):804-16.
15. Ising HK, Veling W, Loewy RL, et al. The validity of the 16-item version of the Prodromal Questionnaire (PQ-16) to screen for ultra high risk of developing psychosis in the general help-seeking population. *Schizophr Bull* 2012;38(6):1288-96.
16. Rosenberg. The self esteem scale. Available at: <http://www.wwnorton.com/college/psych/psychsci/media/rosenberg.htm>; Accessed March 10, 2017.
17. Guindon MH. *Self-Esteem Across the Lifespan: Issues and Interventions*. USA:Taylor and Francis Group, LLC, 2010.
18. Sorensen MJ. *Breaking the Chain of Low Self-Esteem*. United States: Wolf Publishing Co;2006.
19. Pedneault KS. S Health disease and condition. *PsychoEduc* 2008.
20. Stallard P. *Children's Guide to Think Good-Feel Good*. British Library of Cataloguing Publication Data, 2005.
21. Varcariolis EM, Halter MJ. *Foundation of Psychiatric Mental Health Nursing*. 6th ed. St. Louis, MO: Mosby Elsevier;2010.
22. Kuotra K, Simos P, Triliva S, Lionis C, Vgontzas AN. Linking family cohesion and flexibility with expressed emotion, family burden and psychological distress in caregivers of patients with psychosis: A path analytic model. *Psy Res* 2016;240:66-75.
23. Froggatt W, Brief A. *Introduction to Rational Emotive Behaviour Therapy*. 3rd ed. New Zealand Centre for Cognitive Behaviour Therapy;2005.
24. Videbeck SL. *Buku Ajar Keperawatan Jiwa*. Jakarta:EGC;2008.