

Relationship between Family Anxiety, Family Support and Quality of Life of Attention Deficit Hiperactivity Disorder (ADHD) Children

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Abstract

Attention Deficit Hiperactivity Disorder (ADHD) is behavioral disorder characterized attention deficit disorder, impulsive behavior, accompanied by excessive activity that is inconsistent with age in childhood, ADHD can impact the decline in the quality of life of children, some of the factors that influence anxiety among families and family support. This study aimed to analyze the relationship between anxiety of family and family support for ADHD children's quality of life in Extraordinary school type C Bandung. The study design was cross-sectional quantitative analytic. The subject of research totally 87 ADHD families with children aged 8-12 years who attend school in 5 pieces of extraordinary school type C Bandung but there was something problem like rejection, no have time and others therefore 63 samples were collected. Sampling using total sampling technique with 3 pieces inventory questionnaire including children's quality of life questionnaire (PedsQL), family anxiety (STAI-S) and family support (CASSS). Data were analyzed using Pearson correlation coefficient. The results showed a correlation between anxiety and family support families with ADHD children's quality of life as well as having a fairly strong correlation ($r = 0.75$ and $r = 0.78$). That is, an increase or decrease in the quality of life can be determined by changes in the anxiety of family and family support simultaneously. Increased family anxiety can reduce the quality of life of children ADHD whereas the increase in family support can improve the quality of life of children ADHD. Nurses are expected to increase school health services by involving schools, families and communities as well as the expected nursing policy makers in order to make policy on the procurement of health-based community health nursing school.

Keywords: ADHD, anxiety, family support, quality of life.

Introduction

Common problems that often hinder the development of school-age children is Attention Deficit Hyperactivity Disorder (ADHD) or Attention Concentration Disorders / Hyperactivity. ADHD which is a behavioral disorder characterized attention deficit disorder (inattentiveness), impulsive behavior (impulsivity), and may be accompanied by excessive activity (overactivity / hyperactivity) that are not in accordance with the age in childhood (American Psychiatric Association / APA, 2000).

ADHD case more often encountered in the community, where the number of events is increasing, especially in children of school age. ADHD prevalence in school-age children around the world about 3%–10%, although the prevalence varied substantially (Polanczyk, de Lima, Horta, Biederman, & Rohde, 2007). Prevalence ADHD in East Asian countries, showed that the prevalence was similar between the West and non-West area which was around 8.1% to 8.6% (Gau, Chong, Chen, & Cheng, 2005; Takahashi, Miyawaki, Suzuki, Mamoto, Matsushima, Tsuji, & Kiriike, 2007). In Indonesia, the number of events are still unaccounted for exact figures, although it looks pretty much abnormality occurs and is often found in children of preschool and school age (Judarwanto, 2007). However, in a study by Wihartono (2007).

The impact of the combination of symptoms ADHD third-symptoms including symptoms of hyperactivity, and impulsivity inatensi which can lead to an abnormal child development so difficult for children with ADHD to excel in school. ADHD hyperactive behavior makes the child have difficulty when it is a social institution (Vaughan, Roberts & Needelman, 2009). Many of the children ADHD have difficulty in school, often problematic forms of discipline or academic difficulties (Weyandt & DuPaul, 2006).

Such conditions would cause suffering and obstacles to children in performing daily functions. A variety of other disorders that can occur in children ADHD such as lack of self-esteem, impaired interact with peers, family and also disturb the readiness of children to

learn and overall will make the decline in the quality of life of children (Escobar, Soutullo & Hervas, 2005; Nijmeijer, Minderaa, & Buitelaar, 2008; Varni & Burwinkle, 2006; Strine, Lesesne, & Okoro, 2006).

ADHD child's quality of life is inseparable from some of the factors that influence it. According to Jeanne, Landgraf, Rich, & Rappaport (2002) factor of the quality of life of children ADHD can be seen from the impact or AIM (ADHD Impact Module) including health status of children, the frequency of experience "success" of children with parents in the home, the assessment of parents (child health, child discipline, parenting to the child, and the child's behavior), a child's diagnosis, how long the child gets treatment, and the role of families in supporting children ADHD. Another factor that affects the quality of life of children ADHD among other demographic factors, family support, clinical, physical, emotional, family and social anxiety (Riley, 2006; Wehmeier, Schacht, & Barkley, 2010; Sánchez, Cortés, Carlos, Moren, 2012; Theole, 2010).

Seeing the adverse conditions both for children and for families ADHD, it would require the support and participation of health workers, one of them based community health nursing school. Based community health nursing schools do not just pay attention to the quality of life of school children alone but noticed throughout aspect, be it schools, families and society as a whole and organized. According to Centers for Disease Control and Prevention (2011), Murray, Low, Hollis, Cross, & Davis (2007), responsibility for the health community nursing schools include; health education, physical health education, health services, nutrition services, counseling services, psychological, and social services healthy school environment, health promotion staff of teachers in schools, as well as community and family involvement.

But the existence of community-based school health nurse is still active in Indonesia, especially in Bandung. Community nurse completely still watching school health, especially the health of special needs schools. Community nurses in health centers still tend to provide comprehensive primary care to a variety of age groups.

Based on the descriptions above, in

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Indonesia has never done research on the quality of life of children with ADHD. Although the quality of life of children ADHD study ever conducted in the United States and Europe, a similar study is also important in Indonesia because of demographics of these countries are very much different from the demographic situation in Indonesia. Therefore, I am interested to see the relationship between the anxiety of family and family support for quality of life ADHD children's in extraordinary school type C in Bandung.

Method

This research was a quantitative research, used analytic method with cross sectional approach. This study analyzed the relationship of anxiety families and family support on quality of life of children with ADHD. The sample in this study were families who have children of school age who have ADHD the inclusion criteria including; 1) school-age children by the age of 8–12 years old who have a diagnosis of ADHD by a psychiatrist; 2) studying at extraordinary school type C in the Bandung city; 3) live with biological parents; 4) the parents are willing to follow the research process; 5) The family-owned ADHD child does not have a physical disability such as blind, mute, paralyzed and so on.

ADHD children Quality of life was measured using the Pediatric Quality of Life Inventory (PedsQL) Generic Core version 4.0. The questionnaire consists of 23 statements consisting of: 1) Physical Function 8 statements; 2) The function of emotions 5 statements; 3) The social function 5 statements; and 4) The function of school 5 statement. This questionnaire consists of choice answers using a Likert scale (never, sometimes, often and always). The answer is never worth 1, sometimes worth 2, often worth 3 and is always worth 4 for a positive statement while negative questions worth instead. All of the answers will be summed for a total score of the whole. The highest total score of 92 and the lowest score is 23.

Family anxieties instrument used is questionnaire State-Trait Anxiety Inventory (STAI-S) composed of 20 short statement with less than 5 minutes in filling the answer. Choice answers on the questionnaire using Likert scale never, sometimes, often and always with a mark (√) in the column never, sometimes, often and always, value score a minimum of 20 and maximum of 80 with an indication of the higher the score the more anxious. Anxiety is divided in three categories including high, medium and low. High anxiety if the total score 61–80 anxiety, anxiety was for a total score of 41–60 and low anxiety with a total score of 20–40.

Family support instruments used in this study was a questionnaire the Child-Adolescent Social Support Scale (CASSS). This questionnaire consists of 12 items representing 5 subvariable statements include family support; 1) emotional support; 2) The instrumental support; 3) informational support; 4) support awards and 5) social support. All statements have a choice of answers using a Likert scale; always, often, sometimes and never by way menyontreng with a mark (√) in the column always, often, sometimes and never which are available, the highest score value of family support is 48 and the lowest score is 12. Family support expressed either if the total score of 25–48 and less good family support with a value of 12–24.

Overall this questionnaire was to test the validity and reliability tests with Cronbach's Alpha was (0.86; 0.85; 0.90). Overall the questionnaire used is the inventory questionnaire in English, it had previously been done translation (translation) prior to Indonesian and do the translation back to English (back translation) was done and has been examined by two lecturers who are competent in their field. From the results obtained back translation no meaningful difference between the transitional English-Indonesian and Indonesian-English, so that questionnaires can be used. To determine the relationship between anxiety family, family support and quality of life of children ADHD with normal distribution of data used Pearson correlation test.

Results

The results of this study will look at the relationship between family anxiety, family support and quality of life in children ADHD using Pearson correlation.

Based on Table 1 above shows the relationship between family anxiety and the quality of life of ADHD children with a value of $p = 0,000$ ($p < 0,005$). The relationship analysis of family anxiety with the quality of life of ADHD children showed a positive pattern, meaning that the higher the value of

family anxiety increase the value of quality of life of ADHD children and had a relatively strong relationship ($r=0.75$).

From Table 2 shows the relationship between family support and the quality of life of children with ADHD characterized by the value $p = 0,000$ ($p < 0,005$). Analysis of the relationship between family support and the quality of life of ADHD children showed a positive pattern, meaning that the higher the value of family support, the higher the quality of life of ADHD children and both variables had a relatively strong relationship ($r=0.78$).

Table 1 Relationship Family Anxiety with Quality of life ADHD Children's (N = 63)

Variable	Mean	Std. Deviation	Pearson Correlation	p Value
Family Anxiety	46.71	7.510	0.749	0.000

Table 2 Relationship Family support with Quality of life ADHD Children's (N = 63)

Variable	Mean	Std. Deviation	Pearson Correlation	p Value
Family Support	26.98	7.223	0.783	0.000

Discussion

The results of the study the relationship between the anxiety of families with children living quality of this ADHD gain value ($p = 0.00$), this indicates a significant relationship between anxiety families with children ADHD quality of life and have a relationship that was quite strong ($r = 0.75$). The results of this study are similar to studies Theule (2010), family anxiety had a significant association with the quality of life of children ADHD ($p = 0.000$). The results also in line with research conducted by Lange et al (2005), concerns a family has a significant relationship with the child's quality of life ADHD. Further research by Royen (2007), showed a significant relationship between the quality of life of children with feelings kekhwatiran ADHD family and family functions.

The results of this research project the theory by Semiu (2006), anxiety is not always a bad impact, the adaptive response

of anxiety will increase the motivation of individuals to do something useful. Resubmitted by Murray & Johnson (2006), the anxiety factor family has contributed to the quality of life of children ADHD. Anxiety family will significantly alter the function of the family, the family will improve the supervision of children and consistent approach to discipline the child to reduce the risk of their behavior. Similar delivered by Podoloski & Nigg (2001), family anxiety will affect family coping ADHD to adapt dealing with children, families will tend to look for other sources of information to deal with children ADHD, such as how to improve social support,

Judging from the view of the community nursing, their relationship with the family anxieties lives of children ADHD it indicates that the feelings experienced by the family plays an important role to changes in the quality of life of children ADHD. Community nurses see this phenomenon would be important for the community

nurses in caring for the family anxiety conditions. As presented Mubarak (2006), the support of community nurses prioritize promotive and preventive continuously without neglecting curative and rehabilitative services completely and comprehensively addressed to the individual, family, group to improve life function optimally, so as to be independent in health efforts ,

Independence of the family in maintaining the health and realize health is a major factor to be achieved by community nurses to families who are experiencing anxiety. Community nurse has hope to families that have the ability to identify health problems experienced by, set of health problems and prioritize problems, solve problems, cope with their health hadapai and evaluate the extent of solving the problems they face, which ultimately can improve the ability to maintain the health of independently (self care).

Attainment of independence families would not be separated from the community nursing strategy adopted them; provide health education. Health education in the form of a dynamic process of behavior change, where the change is not just a material transfer process / theory from one person to another and it is not a set procedure. However, these changes occur within the consciousness of individuals, groups or society itself. This family anxiety problems, nurses can provide health education about the positive things that can reduce anxiety among families with spiritual approaches, families are encouraged to draw closer to God Almighty, strive always grateful and believe that all the provisions of his was the best thing and definitely has a wisdom behind it. Then, provide health education related to information important in controlling anxiety families, such as providing health information to improve the health of children ADHD.

Then, a strategy that can be applied to families: partnership (cooperation). Various health problems that occur within the family environment. Therefore, cooperation is needed in order to achieve the purpose of nursing care through these efforts the various problems in the family will be resolved faster. This cooperation strategy will involve schools, families and communities. The

school, family and community to get referrals to provide moral support and social terhadap those families who have children ADHD, so expect the support of the collective of the school, the community towards families with children ADHD so do not feel isolated or embarrassed by her condition.

Apart from the role of community nurses, this study also showed relatively good family economic circumstances. It would be good for families, in addition to their role as well as community nurses, school and community. Established economic status present a materially prosperous. so that all good family needs a healthy family needs and the needs of families who are sick can be fulfilled properly without increasing the burden on families. Landgraf, Rich and Rappaport (2002) describe the quality of life of older people was good, will have an impact on the behavior of parents of children ADHD. Most of the quality of life of parents are well illustrated by the lives of good economic status as well.

Caring for a child ADHD not only requires sensitivity, positive aspects and the role of parents is needed. However, to shape the child's behavior is very necessary ADHD internal cognitive and affective adequate parents (Belsky, 1984 in Theule, 2010). Internal cognitive aspect is characterized by a high level of education. Higher education can bring out the sensitivity of parents to their children what was needed, a sense of responsibility, consistent and their unity (Belsky, 1984; Erickson & Reimer, 1999, in Theule, 2010).

The results of the research study Moen (2014), parents with children ADHD in Sweden do not always have lower education, more than half (69%) of parents have a higher education. ADHD parents with children not only need patience and a positive attitude, but more than it should have special skills (cognitive) in providing good care to children with ADHD.

The level of education has associated with the behavior, especially the behavior of parents of children with ADHD. Higher education reflects the mindset of someone who is able to adopt a positive attitude so well that it will be useful in the application of health care in children with ADHD. In

line with the opinions Notoatmodjo (2008), educational level is an indicator that someone has menepuh formal education in a specific field which is an indicator that someone has mastered several disciplines. Someone with a good education, a more mature toward processes of change in themselves and change others and the environment, making it easier to accept outside influences are positive, objective and open to a variety of information including health information.

Families who live with children with special needs tend to worry and difficulty in maintaining and caring for a child with special needs, especially children ADHD. ADHD child showing hyperactive behavior, impulsivity and inatensi that tend to harm both the family and for others. This will lead to increase the feeling of fear the family so that the family tried to find a solution how to provide care to improve the health of children ADHD.

In addition, factors that support families to improve child care ADHD a good level of education that is family owned so that families have sufficient knowledge in receiving and managing information on child care ADHD to improve the quality of life of children with special needs. Internal cognitive aspect is characterized by a high level of education. Higher education can bring out the sensitivity of parents to their children what is needed, a sense of responsibility, consistent and their unity (Belsky, 1984; Erickson & Reimer, 1999, in Theule, 2010).

The results of the study showed that the relationship between family support ADHD child's quality of life obtain the value ($p = 0.00$), this indicated a significant relationship between family support with the quality of life of children ADHD. and have a relationship that was quite strong ($r = 0.78$). In line with the research Riley (2006), the results of research states that behavioral factors and support families who are not well significantly to the quality of life of children ADHD ($p = 0.00$). Family support that is not balanced, as not motivate the child, there is no time to play with children, do not protect children and do not understand the characteristics of children will have an impact on the psychological side of the child, the child felt ignored by a family so this has an impact on the quality of life of

children with ADHD.

Next, the research by Rommelse, Altink, Oosterlaan, Buschgens, Buitelaar, and Sergeant (2008) The results showed a good family support had a significant relationship with the child's quality of life was good ADHD ($p = 0.00$). Lange, Sheerin, Carr, Dooley, Barton, Marshall and Doyle (2005) in The observations mentioned that family support is very influential on children's health improvement ADHD.

Based on the theory of Friedman (2003), family support is an attitude, actions and acceptance of family to sick patients. Family members saw that the people who are supportive are always ready to provide help and assistance if needed. The family is an important part of the health for the whole family. Parents are the most important part in the survival of a family, a good parent has the potential to promote health, feeling happy (well-being) and the development of physical and emotional, as well as the prevention of diseases and social problems that afflict the next generation (Gage, Everett & Bullock 2006).

Presented by Moen (2014), besides impact on self and social life, the impact of children with ADHD also felt by the family. Families must adapt to maladaptive behavior arising from ADHD children and families should prepare something unexpected happens to the child every day. Families should develop special skills in providing support, confidence and guidance to children with ADHD. In addition, families with children ADHD tend to have extreme experiences for their children, thus requiring them to adapt or have a positive coping with ADHD face child to care for, maintain and improve their quality of life (Podoloski & Nigg, 2001).

Scaramella & Leve (2004) describe the family is the most convenient place and the development of positive behaviors early on to children by teaching children about social values that exist in the home, school and community, as well as instilling religious values and other values. As well as providing protective treatment to the child's behavior. In addition, Tripp, Schaugency, Langlands & Mouat (2007) described the family was a source of support for the warmth / friendliness towards children at any time, the interaction

and the ability to interact with others and the environment and a comfortable place to play and fun for children. Overall support of the family can realize an optimal quality of life for children.

As a community nurse, the results of this study can be used as an initiation for nurses to use support families by involving schools, families and communities. Acting as a coordinator, a nurse can foster co-operation with schools, with the nearest health center, families and communities in order to provide health education, health promotion related to how to give good support to children ADHD family support at home, at school social support and social support surrounding communities. In addition, nurses are able to communicate to your family needs, so as to use the resources in family support to maintain and improve the health of individuals and family members (Ryan & Scullion, 2000).

Family support comes from a family that has a value of warmth, comfort and a high sincerity it will touch the child as a human instinct, so that the child will be more easily directed to the better in order to improve the quality of life. With the support of the family collective, it is not independent of family wisdom involving external environment (school and community) that together can improve the quality of life of children ADHD.

Based on these findings, the important thing is the anxiety of this growing family will have an impact on the quality of life of children ADHD reduction and increased family support will improve the quality of life of children ADHD. Family anxiety problems is a major issue that must be addressed by a community nurse. Nurses can pursue health promotion by involving families in an organized manner by solving the problems that they have to use the nursing process approach and expected them to be independent in maintaining their health through health education (Mubarak & Chayatin, 2009).

Health education efforts to the problem of family anxiety can nurse health counseling on how to cope with family anxieties by providing information about the child penanggulangan ADHD, along with a spiritual approach method. So families can obtain information about how to improve and

optimize efforts ADHD child health as their treatment can be given, the therapy can be given as well as schools that can foster a child with ADHD to realize the quality of life of children ADHD better.

Based on these findings show that family anxiety and support the family has a relationship simultaneously with the quality of life of children ADHD. That is, an increase or decrease in the quality of life can be determined by changes in the anxiety of family and family support simultaneously.

Studies conducted Ostberg & Hagekull (2000) in Sweden, the anxiety of family and family support had a significant association with the quality of life of children ADHD. Family anxiety can lead to increased family support. Families are anxious, have the initiative to seek solutions in solving problems that occur in family members, especially children ADHD so that such solutions will influence the changes in the role and function of a good family to family attention to children ADHD, compassion good and social support others. The linkage anxiety which leads to increased family family support can have a positive effect on quality of life of children ADHD.

According Crnic & Greenberg (1990), family anxieties contextually predictable various things including frustration experienced by the family, turmoil of family functioning and family stressors factors, but it is inseparable from the social circumstances support the family including friends, family and community. From the theory reveals that anxiety has a very close relationship with family support.

Problems link between the anxiety of family and family support for children's quality of life ADHD impact on the role of community nursing, especially nursing school health. As a result, the role of nurses to be double, nurses must be able to direct the family anxiety that can be projected into the emergence of a good family support so as to realize the quality of life of children ADHD.

Conclusion

There is a relationship between anxiety and quality of life for ADHD children.

Each increase in one family anxiety unit will increase the value of quality of life for ADHD children. And also relationship between family support and the quality of life of ADHD children. Every increase in one family support unit will increase quality of life for ADHD children.

Because quality of life children ADHD have connected with family anxiety and support nurse are expected to increase school health services by involving schools, families and communities as well as the expected nursing policy makers in order to make policy on the procurement of health-based community health nursing school.

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