# Psychopathology of Mother with ADHD Child in Jakarta's Primary School

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This study aims to obtain data of psychopathology proportion of mothers who have children with attention deficit/hyperactivity disorder (ADHD) and psychopathology features of mothers who have ADHD child. Subjects (mothers who have ADHD child and living together and function as primary caretakers) were randomly drawn proportionally from 30 elementary schools (from grade one to six) in DKI Jakarta from December 2010 until April 2011. Data were collected through MINI KID, Symptom Check List (SCL)-90, and subject demographic questionnaire. Results reveal that 60,4% of mothers with ADHD child have psychopathological symptoms with somatization (56,7%) as the most common symptom. The more a mother has psychopathological symptoms the worst is her perception towards her child. Through betterment of the mothers' psychopathology, her perception towards her child would be better, so that she could be more involved in the management/caring of her child. So a routine screening of mothers with ADHD child is most suggested.

Keywords: psychopathology, mother, ADHD, somatization

Penelitian ini bertujuan mendapatkan data proporsi psikopatologi ibu yang mempunyai anak dengan gangguan pemusatan perhatian dan hiperaktivitas (GPPH) dan gambaran psikopatologi ibu dengan anak dengan GPPH. Subjek penelitian adalah ibu kandung dari anak sekolah dasar di kelas satu sampai kelas enam yang tinggal bersama dan berfungsi sebagai pengasuh utama anak. Subjek diambil secara acak proporsional dari 30 SD di wilayah DKI Jakarta dari Desember 2010 sampai April 2011. Data diperoleh melelalui perangkat MINI KID, Symptom Check List (SCL)-90, dan kuesioner demografi. Hasil menunjukkan proporsi psikopatologi pada ibu dengan anak GPPH sebesar 60,4% (67 orang) dan gejala yang paling sering muncul adalah somatisasi (56,7%). Ibu yang semakin banyak memiliki gejala psikopatologi dapat memengaruhi persepsinya terhadap anaknya menjadi lebih buruk. Dengan perbaikan psikopatologi ibu maka persepsi terhadap anaknya menjadi lebih baik, sehingga bisa lebih banyak terlibat dalam tatalaksana anaknya. Dianjurkan untuk melakukan skrining rutin pada kaum ibu yang memiliki anak dengan ADHD.

Kata kunci: psikopatologi, ibu, GPPH, somatisasi

Attention deficit/hyperactivity disorder (ADHD) is the most prevalent psychiatric disorder in children (Klassen, Miller, & Fine, 2004; APA, 2000). The prevalence of ADHD is varied. In a national survey in the U.S., the prevalence was 8.7% (Froehlich, Lanphear, Epstein, Barbaresi, Katusic, & Kahn, 2007) in 2004 and in some other countries, the prevalence was around 3% to 11% (Kendall, Leo, Perrin, & Hatton, 2005; Johnston & Mash, 2001). The prevalence of mothers of children with ADHD who experienced major depression was as

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much as 17.9% and 20.5% (McCormick, 1995), with minor depression. In primary school age in Central and West Jakarta, the prevalence was as much as 26.2%, (Saputro, 2004) while in Central Jakarta primary school, it was 2.5% - 4.2% (Kusumaningrum, 2009; Tanjung, 2002).

Attention Deficit and Hyperactive Disorder is behavioral disorder with major symptoms like impulsive, hyperactive and attention disorder (APA, 2000). This disorder causes academic problem and difficulty in social relationship.

This ADHD children give consequences to people who interact with them, especially their parents. The main characteristics of ADHD children are very demanding, giving stress and annoying that they could bring negative reaction

from members of the family and cause chaos in family relationship and psychological function of the parents (Batshaw, 2002; Englander, 2005).

The prevalence of mothers with ADHD children who had anxiety, difficulty in social adjustment, depression symptoms and marriage problem were significantly higher than mothers who did not have ADHD children. Attention Deficit and Hyperactive Disorder in children could predict depression in mothers even without comorbidity with opposing behavior or behavior disorder. It was found that major depression in mothers with ADHD children was 17.9% in primary care and minor depression was 20.5% so that routine screening on parents with diagnosed ADHD children was suggested in primary care.

Parents with ADHD children were known to have authoritative parenting pattern and tended to use compelling orders in controlling their children. Annoying behavior of their children often caused frustration on parents and they tended to behave more negatively on their children. Children often saw unconstructive behavior of their parents as annoying and tended to pretend with the hope of more positively cared for. This cycle continued downward until the relationship of parents and children became worse and irreparable (Johnston & Mash, 2001; Englander, 2005). Parents acted as a complete figure for growing children and had most interaction while children were young so that parents tended to experience negative consequences of ADHD behavior (Englander, 2005).

Clinical picture of ADHD is persistent and takes a long period of time so that it is not surprising if parents especially mothers as dominant sitters suffer as a result of difficulty in controlling their children behavior. Mothers play important role in long term management of ADHD, that is why it is important to understand the impact of ADHD children on mothers so that the children management is doing well. The proportion of psychopathology of mothers with ADHD children is not yet documented.

So, it was interesting to study the psychopathology of mothers with ADHD children. The purpose of this study was to understand proportion and picture of psychopathology of mothers with ADHD.

#### **Method**

This study was cross sectional in nature. Inclusive criteria was biological mothers of children with ADHD who studied in first grade until sixth grade primary school, lived together and they functioned as primary sitter of their children. Subjects were randomized from 30 primary school in Jakarta. Three schools were

excluded because one school was in the process of building renovation, one other school was flooded, and still one other school was in preparation of taking national exams. Sample was taken during December 2010 to April 2011. So, the research subjects were taken from 27 primary schools in Jakarta, and 111 mothers with ADHD children were found.

General data was gathered through questionnaire about demography, family condition, parents, and specific data was gathered using SCL-90. After the data was verified, edited, and coded, the data was analyzed using SPSS program. Attention Deficit and Hyperactive Disorder was diagnosed through MINI KID Instrument compatible to diagnostic criteria DSM IV-TR.

Psychopathology is significant clinical symptom linked to suffering and/or social life problem, work or important function problem in daily activities. Psychopathology is tested with SCL-90. Sensitivity and specificity is 82.92-83% during testing with out-patients of Psychiatry Clinic Cipto Mangunkusumo Hospital, conducted by Herianto M. It consists of questionnaire of 90 symptoms of psychopathology. It comprises of 13 questions on depression, ten questions on anxiety, 10 questions on obsessive compulsive, seven questions on phobia. twelve questions on somatisation, nine questions on interpersonal sensitivity, six question son hostility, six questions on paranoia, ten questions on psychosis, and seven additional items. Cut of score (raw score) SCL-90 is 61, meaning that there is no psychopathology if score is less than 61, and there is psychopathology if score is more than 61 (Herianto, 1994).

Besides measuring overall psychopathology tendency, the dominant symptom could also be measured by grouping questions based on symptom type. Raw score was converted to *T*-score. If *T*-score was over 70, it was assumed that the person experienced disorder. So SCL-90 could give two outcomes, the psychopathological condition, and the dominant symptom of psychopathology (Herianto, 1994).

#### **Results**

From 27 primary schools in Jakarta, mothers with ADHD were 111 people with age mean of 36.59 years old, minimal age 24 years old and maximum age 51 years old. Ethnic group spread showed that mothers with ADHD children were mostly Javanese mothers, with education as high as high school (54.1%), work status: not working (85.6%), middle economic status (98.2%), and married (81.9%) (see Table 1).

Table 1
Respondent Characteristics (N=111)

Variable	Frequency	Percentage
Ethnic group		
Javanese	52*	46.8*
Sundanese	19	17.1
Batak	3	2.7
Betawi	24	21.6
Others	13	11.7
Education		
Graduated Junior	25	22.5
High School		
Graduated High	60*	54.1*
School		
Graduated	26	23.4
D1/D3/S1		
Job		
Civil servant	1	0.9
Private employee	13	11.7
Entrepreneur	2	1.8
Housewives	95*	85.6*
Social Status Economy		
Low	1	0.9
Middle	109*	98.2*
High	1	0.9
Marriage Status		
Married	102*	91.9*
Separated	6	5.4
Deceased	3	2.7

<sup>\*</sup>shows the highest frequency

#### Discussion

The mean age of mothers with ADHD children is 36.6 years old with minimal age 24 and maximal age 51 years old. This is in accordance with study conducted by Lewis that the mean age of mothers in his study was 36.7 years old with age range 24-52 years old (Lewis, 1992). Based on monthly income, mostly (98.2%) come from middle economic class with income of Rp618,750 – Rp7,548,750. Mostly mothers are still married (91.9%).

## **Psychopathological Mothers**

This study used SCL-90 as instrument with cut-off score 61 to determine the possibility of psychopath-logical condition of mothers with ADHD children. The proportion of psychopathological condition of mothers is 67 people (60.4%). Difficulty in parent-children relationship, family stress, less satisfaction and effectiveness in parenting, less ability in taking care of hyperactive and aggressive children compared with normal

mothers, these all make up the psychopath-logical condition (Johnston & Mash, 2001). In this study it was found psychopathological cases in 67 out of 111 respondents (60.4%). Table 2 shows in detail the tendency of dominant psychological symptoms experienced by respondents. From the above table it is known that somatisation is the most dominant psychopathological symptom, as much as 56.7%.

Table 2
Characteristics and Proportion of Psychopathological
Symptoms Experienced by 67 Respondents

Psychopathology Symptoms	Frequency	Percentage
Somatisation		
Yes	38	56.7*
No	29	43.3
Depression		
Yes	27	40.3
No	40	59.7
Obsessive Compulsive		
Yes	20	29.9
No	47	70.1
Anxiety		
Yes	15	22.4
No	52	77.6
Interpersonal Sensitivity		
Yes	13	19.4
No	54	80.6
Psychotic symptoms		
Yes	9	13.4
No	58	86.8
Paranoia		
Yes	3	4.5
No	64	95.5
Phobia		
Yes	1	1.5
No	66	98.5
Hostility		
Yes	0	0
No	67	100
Additional symptoms		
Yes	6	9
No	61	91

<sup>\*</sup> shows highest frequency

If raw score of women suffering from psychopathology is converted to T-score, 48 respondent scores are above 70, a score considered as experiencing psychopathological symptoms, while the scores of 19 respondents did not exceed T-score 70. The most frequent psychopathological symptom is somatisation (56.7%), and then depression (40.3%). This results are in accordance with other study using the same instrument on parents

population with ADHD children in primary school age that the most prominent symptom was somatisation (Tzang, Chang, & Liu, 2009).

Nowadays Nosologi stend to see somatisation as a bunch of symptoms or variation in behavior overlap with affective disorder, anxiety or other disorder. According to Freud, somatisation was a form of self defence mechanism to counter against distress being experienced. Somatisation is a way to stay away from depression and anxiety that some individuals develop physical symptoms. Up to now, somatisation is considered as symptoms connected to depression and anxiety, but it has specific role in psychopathology or in social process. Physiological, psychological, interpersonal and sociocultural factors can be integrated in a cycle that induces somatisation symptoms that can not be explained from medical view (Kirmayer & Young, 1998).

It was believed that Asians tend to express their anxiety through somatisation. From studies in India and China, it can be concluded that in their culture, psychological disorder like depression and anxiety can be recognized through somatisation symptoms. In general, they have a low linguistic ability so that they find it difficult to express their feeling verbally so that those emotional disorders emerge as somatisation (Yang, Jong, Hsu, & Tsai, 2007).

Somatisation can also be triggered by language, so there is language limitation to express correctly what is being felt by patients. In some Asian countries, it is a taboo to express feeling because it is considered as weakness. People with physical limitation are treated better than people with psychiatric disorder so they choose to express their emotional disorder as somatic symptoms. Somatisation is considered as alternative to express emotional disorder they suffer. Depression and somatisation can be found more in women than men. It is linked to the high prevalence of anxiety in women (Tzang, Chang, & Liu, 2009; Kirmayer & Young, 1998; Yang, Jong, Hsu, & Tsai, 2007).

The condition of mothers with ADHD children influence the effectiveness of children medication and therapy, such as education background, how they give support to their children, and how they monitor the development of their children. The more the mother has psychopathological symptoms, the less their perception on their children. With the improvement in their psychopathological condition, their involvement in children management is better, so it is important to know the mothers' disorder in order to help them cope with circumstances and find a way out, and their children get a good management (Johnston, Murray, & Hinshaw, 2002).

Mothers with ADHD children who had psychopathology problems have been given counseling and education

to make them understand what is going on with their lives, what made them feel, think and behave the way they were as reaction to reality. It is hoped that later on they would find what they hope for, and have the courage to take necessary steps to solve any problems.

# **Conclusion and Suggestions**

The purpose of this study was to know the proportion and picture of mothers with ADHD children in 27 primary schools in Jakarta. It is concluded that the proportion of psychopathological mothers with ADHD children is quite big (60.4%). The dominant psychopathology is somatisation (56.7%). Improvement of psychopathological condition makes a better mothers' perception on children so that their management is also better. A regular detection of psychopathological mothers with ADHD children is needed so that intervention can be applied as early as possible. Counseling is needed for mothers with ADHD children. Further study is needed to find factors contributed to high prevalence of somatisation in mothers with ADHD children. Further study is needed to evaluate causal relation between psychopathological mothers with psychosocial stress, family reaction and comorbidity in ADHD children.

## References

American Psychiatric Association. (2000). *Diagnostic* and Statistical Manual of Mental Disorder-IV-Text Revision. 4th ed. Washington: APA

Batshaw, M. L. (2002). *Children with Disabilities*. 5th ed. Paul H. Brookes Publishing Co.

Englander A. Childhood ADHD and its effect on Parents and the Family System. 2005.

Froehlich, T. E., Lanphear, B. P., Epstein, J. N., Barbaresi, W. J., Katusic, S. K., & Kahn, R. S. (2007). Prevalence, recognition, and treatment of attention-deficit/ hyperactivity disorder in a national sample of US children. *Archives of Pediatrics & Adolescent Medicine*, 161 (9), 857-864

Herianto, M. (1994). *Penentuan T Score Standar Normal Instrumen Psikometrik SCL-90 dan Uji Coba 1994*. Jakarta: Departemen Psikiatri Fakultas Kedokteran Universitas Indonesia

Johnston, C., & Mash, E. J. (2001). Families of children with ADHD: review and recommendations for future research. Clinical Child and Family Psychology Review, 4 (3), 183-207

Johnston, C., Murray, C., & Hinshaw, S. P., Pelham Jr. W. E., Hoza, B. (2002). Responsiveness in interactions of

- mothers and sons with ADHD: Relations to maternal and child characteristics attention-deficit hyperactivity disorder Statistical Data Included. *Journal of Abnormal Child Psychology*, 30 (1), 77-88
- Kendall J, Leo MC, Perrin N, Hatton D. (2005).
  Modeling ADHD child and family relationships.
  Western Journal of Nursing Research, 27 (4), 500-18
- Kirmayer, L. J., & Young, A. (1998). Culture and somatization: Clinical, epidemiological, and ethnography perspectives. *Psychosomatic Medicine* 60 (4), 420-430
- Klassen A. F., Miller, A., & Fine, S. (2004). Health-related quality of life in children and adolescents who have a diagnosis of ADHD. *Pediatrics*, 114 (5), 541-547
- Kusumaningrum, P. (2009). Proporsi Relasi Keluarga Tidak Sehat pada Murid Sekolah Dasar dengan Gangguan Pemusatan Perhatian /Hiperaktivitas (GPPH) di Jakarta Pusat dan faktor-faktor yang berkaitan (tesis). Departemen Psikiatri FKUI/RSCM.
- Lewis, K. (1992). Family functioning as perceived by parents of boys with attention deficit disorder. *Issues in Mental Health Nursing*, *13* (4), 369-386
- McCormick, L. H. (1995). Depression in mothers of children with attention deficit hyperactivity disorder. *Acadiana Family Practice* 27 (3), 176-179.

- Saputro, D. (2004). Gangguan hiperkinetik pada anak di DKI Jakarta: penyusunan instrumen baru, penentuan prevalensi, penelitian patofisiologi dan upaya terapi (disertasi). Yogyakarta: Fakultas Kedokteran Universitas Gadjah Mada.
- Sheehan, D. V., Lecrubier, Y., Sheehan K.H., Amorim, P., Janavs, J., Weiller, E., Hergueta, T., Baker, R., & Dunbar, G. C. (1998). The Mini-International Neuropsychiatric Interview (M.I.N.I): The development and validation of a structured diagnostic psychiatric interview for DSM-IV and ICD-10. *Journal Clinical Psychiatry* 59 (S20), 22-23.
- Tanjung, I. S. (2002). Prevalensi Gangguan pemusatan perhatian dan hiperaktivitas (GPPH) pada murid sekolah dasar kelas I-III di wilayah Jakarta Pusat (tesis). Departemen Psikiatri FKUI/RSCM
- Tzang, R. F., Chang, Y. C., & Liu, S. I. (2009). The association between children's ADHD subtype and parenting stress and parental symptoms. *International Journal of Psychiatry in Clinical Practice*, *13* (4), 318-325.
- Yang, P., Jong, Y. J., Hsu, H. Y., & Tsai, J. H. (2007). Psychiatric features and parenting stress profiles of subtypes of attention-deficit/hyperactivity disorder: Results from a clinically referred Taiwanese sample. *Journal Developmental Behavior Pediatric*, 28, 369-375