

장애아동 양육자의 정신과적 문제에 관한 연구

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The Study of Psychiatric Problem of the Caregivers of Children with Disability

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<국문요약>

본 연구는 일부지역 장애아동 양육자의 정신과적 문제를 알아보기 위해 우울증 지수를 검사하고 분석함으로써 그 심각성을 확인하고 장애아동 양육자의 정신보건의 필요성을 알리기 위한 기초자료를 제공하는데 목적이 있다. 본 연구는 2011년 8월부터 9월까지 경주 및 인근지역에서 지적장애아동과 지체장애아동을 둔 전업주부의 정신과적 문제를 알아보기 위해 양육 스트레스로 인한 우울증 정도를 알아보았다.

연구대상자는 3개의 치료기관 및 치료 관련기관에서 지적장애 또는 지체장애 아동을 양육하고 있는 부모 각 20명씩을 대상으로 하였다. 우울증 평가도구는 한국형 우울증 검사(Korean Depression Scale; KDS)를 이용하였다. 결과는 첫째, 지적장애아동과 지체장애아동 양육자 모두 우울증이 있는 것으로 나타났고 각각의 차이 비교에는 유의성이 없었다. 둘째, 지적장애아동과 지체장애아동 양육자의 우울증 세부항목에서는 의욕상실 부분에서만 유의성이 있었다. 셋째, 지적장애아동 양육자의 우울증 세부항목간의 비교에서는 유의성이 있었다. 넷째, 지체장애아동 양육자의 우울증 세부항목간의 비교에서는 유의성이 있었다. 다섯째, 지적장애아동 양육자의 우울증과 세부항목의 상관관계에서는 의욕상실에서 유의한 상관성이 있었다. 여섯째, 지체장애아동 양육자의 우울증과 세부항목의 상관관계에서는 의욕상실에서 유의한 상관성이 있었다. 본 연구에서는 두 장애아동의 양육자간 차이는 없었으며 우울증은 장애유형에 상관없이 모두 나타났다. 그리고 세부항목과 우울증의 상관성에서는 의욕상실에서 유의한 상관성을 보였다. 이것은 장애아동의 양육에서 치료의 지연으로 인한 의욕상실에서 우울증이 많이 유발됨을 알 수 있다.

Key Words : Depression, Intellectual Disability, Physical Disability

I . Introduce

A rapid development of society and medical development results in economic growth and improvement of quality of life, but increasing survival rate of a underweight and premature baby coincidentally. This also causes increasing the number of disabled children and caregivers relatively every year. According to the ministry of education, science and technology in 2010, the children who is an object of special education are totaled 79,711. This numerical value is increased 17,000 in four years. A birth of children with disability imposes a heavy burden on family, especially mother who spend most time on parenting. This causes high frequency of depression to mother[1].

The increased stress levels in the parents of children with disability are the interactions among stressors, family resources and supports, and personality characteristics of parents[2]. First, child-related stressors include the disorder-related characteristics and the severity of symptoms such as the child's adaptability to their physical or social environment, the demanding behavior of the child, ambiguity of the symptoms, dependency and lifelong care. Second, family resources and supports include factors such as the long process and delay in obtaining a diagnosis, availability of social support, social understanding and acceptance, financial issues, and family cohesiveness and changes in lifestyle such as lower marital satisfaction and greater marital discord and social isolation. Finally, the personality characteristics of parents include a lower control locus, lower levels of self-esteem,

difficulties in accepting the child's diagnosis, parental perceptions of the child as being less attractive, intelligent or appropriate than desired, gaps between parental expectations for self-help and independence and the child's achievement, and parental vulnerability to mental health problems, including depression[2].

Caring for a child with disability imposes high physical, financial, and emotional demands on parents[3]. They reported mothers and fathers of children with disability had high levels of parenting stress, with 84% of mothers' and 67% of fathers' scores, and poorer health than parents of children without disability. Stress of parents is associated with the severity of the child's disability[4], especially when they have communication skills and behavior problems[5].

Cummin[6] reported that in comparison to parents of typically developing children, parents of children with disability tend to report poorer subjective wellbeing and are at risk of physical and mental health problems, such as clinical depression[3]. Parenting children with disabilities is associated with impaired mental health, higher levels of stress, sense of devaluation and blame, and also impaired physical functioning tiredness or exhaustion in mothers and fathers[7]. Many parents of children with disability experienced feelings of intense anger, guilt, depression or anxiety most of the time. These feelings were frequently expressed in psychosomatic problems[7][8].

The experience of depression may be so emotionally overwhelming that their functioning in a multiple aspects of their lives, including parenting, is very limited. The high level of

stress that is experienced in raising a child with developmental problems may lead to the cognitions and emotions that are associated with depression[9]. Mothers of children with intellectual disabilities expressed psychological variables like acceptance, mindfulness, and avoidant coping. Acceptance of these was reliably negatively associated with maternal anxiety, depression and stress. Mothers who were generally more accepting reported fewer had psychological problems. Therefore, acceptance was a significant predictor of symptoms of depression[10].

Hasting & Brown[11] showed maternal self-efficacy mediated the relationship between the behaviour problems of their child with autism and maternal depression. That is, having a child with high levels of behaviour problems reduced mothers' feelings of efficacy, which, in turn, predicted increased depression[10]. Successful efforts to reduce the stress of parents of children with disabilities may not only enhance parental well-being but result in better child outcomes as well[12]. Although the government and a local government supports actively, there is not enough social support to family and parents of children with disability, especially there is few support to depression resulting from psychiatric problem actually.

A policy of disabled children is restricted on themselves in Korea psychiatric health service. It tends to overlook a social problem resulting from psychiatric problem of parents. Over the past three decades, several researchers have studied interventions designed either directly or indirectly to reduce depressive symptoms and

improve well being in an advanced country[13]. Therefore, in this study, we tested and analysed depression index to know psychiatric problem of parents of children with disability. It aims at providing a basic data to introduce a necessity of psychiatric health service.

II. Method

1. Subject

The participants in the study were 40 mothers participating in 3 clinics, who are parenting children with disability in Gyeongju and neighborhoods in that vicinity.

Based on the medical provider's categorization, we set the type and degree of disability. The children were divided into two diagnostic groups. There were 20 children with a primary diagnosis of intellectual disability and 20 children with a primary diagnosis of physical disability. The subjects were mothers. We made a selection the mothers who agree with our experiment at random sampling.

We performed the test using the way of structured, open question to exclude researcher of personal opinion.

2. Procedure

We tried to know degree of depression of caregivers who have stress resulting from parenting children with intellectual and physical disability from Aug to Sep, 2011 in Gyeongju and neighborhoods in that vicinity. There were

tools to measure problem like depression index and so on. In the study, we try to know psychiatric problem a caregivers who have children with disability by depression index. The participants are 20 mothers who have children with intellectual and physical disability, respectively. All mothers were primary carers for their children who lived at home full-time.

We did survey about common characteristics first, and then took depression test soon. Depression were measured using the Korean Depression Scale(KDS). The KDS to use this study was modified to aim self-report korea depression scale reflecting depression type of korean. It completed through preliminary questions, subdimension composition, surveyed table home, and analysis procedure. Test validity of a construct was developed by exploratory factor analysis, reliability test, confirmatory factor analysis, discrimination validity, and diagnostic value test of a standard. Sex and age were set with T point classification. T point means conversion point that transforms point distribution as original point distribution is average 50, standard deviation 10. Cut-off point of female established a standard as original 70 point. She was categorized as depression when she gets over 70 point. Subitems of depression index included negative thinking for future and oneself, anxiety and restlessness, a melancholy mood, somatization symptoms, and chilling effect.

The test was performed for 4 weeks. We collected data and draw a conclusion.

3. Measures

A total of 60 questionnaires were sent out to all caregivers, we excluded missing and wrong answer paper, and insincere paper. We collected 20 questionnaires of caregivers of children with intellectual disability and physical disability, respectively and analysed. We carried out Spsswin 17.0K to analyse by coding of value of results. Characteristics of Caregivers of children with disability were carried out by analysis of frequency. Independent sample t-test and one-way ANOVA was administrated to compare depression with subitems of caregivers of children with intellectual disability and physical disability. Pearson's correlation coefficients were carried out to know a correlation of inter-subitems.

III. Results

1. Common Characteristics of a Subjects

In case of children with intellectual disability, 12(60%) were girls and 8(40%) were boys, 11(55%) were the second degree of disability, 12(60%) had 4 family members and 2 children mother look after, the ages of 7(35%) mothers ranged from 36 to 40 years old, the mothers in the sample were well educated, with 12(60%) having a college or university education, 7 graduating from high school, and only 1 graduating from a graduate school, and 8(40%) had no religion or christianity, respectively. In

case of children with physical disability, 11(55%) were boys and 9(45%) were girls, 10(50%) were the first degree of disability, 15(75%) had 4 family members, 16(80%) had 2 children mother look after, the ages of 13(65%) mothers ranged from 31 to 35 years old, 10(50%) graduated from college or university, 15(75%) had no religion <Table 1>.

<Table 1> Common Characteristics of a Subjects (n=40)

variable	type	mental disorder (%)	physical disability (%)
	classification		
child sex	male	40.0	55.0
	female	60.0	45.0
disability ratings	1 class	25.0	50.0
	2 class	55.0	35.0
	3 class	20	15.0
family members	3	15.0	20.0
	4	60.0	75.0
	5	25.0	5.0
domestic family	1	15.0	15.0
	2	60.0	80.0
	3	25.0	5.0
ages of caregivers	below 30	0.0	10.0
	31~35	20.0	65.0
	36~40	35.0	10.0
	41~45	20.0	10.0
	46~50	10.0	5.0
highest levels of caregivers	over 51	15.0	0.0
	a high school graduate	35.0	40.0
	a university graduate	65.0	60.0
	nothing	40.0	75.0
religion	christian	40.0	15.0
	catholic	10.0	0.0
	buddhist	10.0	5.0
total		100.0	100.0

2. Comparison between depression of caregivers of children with intellectual disability and with physical disability

As a result of comparison between depression of caregivers of children with intellectual disability and depression of caregivers of children with physical disability, both of them had depression, but there was no significant difference. That means depression of caregivers of children with disability independent of type of disability. Results are shown in <Table 2>.

<Table 2> Comparison between depression of caregivers of children with intellectual disability and with physical disability

item	M	SD	t	p
intellectual	71.75	2.99	-.943	.352
physical	72.65	3.05		

3. Comparison between subitems in depression index of caregivers of children with intellectual disability and with physical disability

As a result, there was a significant difference between chilling effect of caregivers of children with intellectual disability and with physical disability, there was no difference between the rest of subitems. Results are shown in <Table 3>.

<Table 3> Comparison between subitems in depression index of caregivers of children with intellectual disability and with physical disability

item	disability	M	SD	t	p
negative thinking for the future	intellectual	85.90	6.56	.508	.614
	physical	94.85	6.50		
negative thinking for oneself	intellectual	68.25	5.52	.915	.366
	physical	66.50	6.53		
anxiety and restlessness	intellectual	64.00	5.68	-.844	.404
	physical	65.70	6.99		
A melancholy mood	intellectual	64.85	5.89	-.399	.692
	physical	65.70	7.48		
somatization symptom	intellectual	65.90	5.78	1.338	.189
	physical	63.50	5.57		
chilling effect	intellectual	73.85	3.67	-3.198	.003
	physical	79.10	6.36		

4. Comparison inter-subitems of caregivers of children with intellectual disability

As a result, there were significant differences inter-subitems using ANOVA. There was a significant difference between negative thinking for the future and the rest of subitems and between chilling effect and the rest of subitems using posterior analysis. There was a significant difference between negative thinking for oneself and anxiety and restlessness. We could know the caregivers of children with intellectual disability had skeptic thinking about recovery of the children. In addition, it disproves chilling effect causes a depression at last. Results are shown in <Table 4>.

<Table 4> Comparison inter-subitems of caregivers of children with intellectual disability

item	M	SD	F	p
negative thinking for the future	85.90	6.56	44.69	.000*
negative thinking for oneself	68.25	5.52		
anxiety and restlessness	64.00	5.68		
A melancholy mood	64.85	5.89		
somatization symptom	65.90	5.78		
chilling effect	73.85	3.67		

5. Comparison inter-subitems of caregivers of children with physical disability

There were significant differences inter-subitems using ANOVA. There was a significant difference between negative thinking for the future and the rest of subitems and between chilling effect and the rest of subitems using posterior analysis. The caregivers of children with physical disability had negative thinking of the future and high chilling effect. Results are shown in <Table 5>.

<Table 5> Comparison inter-subitems of caregivers of children with physical disability

item	M	SD	F	p
negative thinking for the future	84.85	6.50	35.86	.000
negative thinking for oneself	66.50	6.53		
anxiety and restlessness	65.70	6.99		
A melancholy mood	65.70	7.48		
somatization symptom	63.50	5.57		
chilling effect	79.10	6.36		

6. Comparison of correlation between depression and subitems of caregivers of children with intellectual disability

There was a significant correlation between depression and chilling effect. There was no correlation between depression and the rest of subitems. Results are shown in <Table 6>.

7. Comparison of correlation between depression and subitems of caregivers of children with physical disability

There was a significant correlation between depression and chilling effect. There was no correlation between depression and the rest of subitems. Results are shown in <Table 7>.

<Table 6> Comparison of correlation between depression and subitems of caregivers of children with intellectual disability

item	negative thinking for the future	negative thinking for oneself	anxiety and restlessness	A melancholy mood	somatization symptom	chilling effect
negative thinking for oneself	.201					
anxiety and restlessness	-.254	-.307				
A melancholy mood	-.172	.194	.052			
somatization symptom	.178	.090	-.005	.188		
chilling effect	-.033	-.112	.098	.308	-.063	
depression	.068	-.073	-.279	-.131	.241	.404*

*p<.05

<Table 7> Comparison of correlation between depression and subitems of caregivers of children with physical disability

item	negative thinking for the future	negative thinking for oneself	anxiety and restlessness	A melancholy mood	somatization symptom	chilling effect
negative thinking for oneself	.101					
anxiety and restlessness	-.111	-.276				
A melancholy mood	-.090	-.502	.425			
somatization symptom	.238	-.200	.246	.278		
chilling effect	.044	-.058	.172	-.006	-.013	
depression	-.005	.033	-.176	.182	.023	.730*

*p<.05

IV. Discussion and Conclusion

1. Discussion

Parental psychopathology might negatively influence their feelings of competence in dealing with their child's problems themselves. Circumstances that make it more likely to know what help is available were also related to needing support[14]. Overall, the needs most often reported were not aimed at directly dealing with their child's problems, but rather at providing the parents informal or emotional support, or advice. In contrast, fewer parents needed formal support or professional help[14].

In this study, caregivers of children with disability had psychiatric problem as depression in general. Consistent with previous studies, stress of mothers who have children with disability was markedly increased risk of suffering from psychological distress and depression[15]. High stress caused by the difficult behaviour of a child in combination with restrictions in personal life may be some of the factors that contribute to a higher risk of depression in mothers of children with disability[15]. It is important to offer appropriate psychiatric support for parents who are depressed since this is a serious condition not only for the parent, but also for the rest of the family[15, 16]. Olsson & Hwang[15] reported parents of children with intellectual disability experienced higher depression than parents of children without disability. The experience of parenting a child with disability increases the

risk of provoking feelings of loss, helplessness, and failure. Parenting a child with cerebral palsy is more stressful than caring for a child without disability[18]. The rate of stress in parents of children with hemiplegia is about double that among parents of children without disability, with a fourfold increase in clinical anxiety and a fivefold increase in moderate depression[18]. This level of stress clinically significant and requires support and intervention from professional services[17]. Mouridsen and colleague reported psychiatric disorders were found in 15.7% of mothers with autistic children, which was significantly higher than control group[19].

There was a contrary concept in previous study. It is not all parents of children with intellectual disability who report significant distress. For many parents, having a child with intellectual disability can also make positive contributions to family life[20, 21]. Byrne and Cunningham[22] argued that many studies assumed, and so focussed on finding, stress, but failed to look at those families that did not experience heightened levels of stress. Later studies reported that while parents of children with disabilities were at risk of above average stress levels, stress was not inevitable[23]. It means caregivers of disabled children could overcome by their own will and social support. To solve psychiatric problem of parents, we should approach in way of systematic, realistic method. These were divided into three categories for comparative purposes[13]. First, behavioral parent training(BPT) designed to teach parents skills for interacting effectively with their children in order to improve children's problem

behavior, increase their skills, or promote a secure attachment. In conclusion, there was significant improvement in adaptive behavior or decreases in problem behavior. Benefits of BPT were reducing depressive symptoms in mothers. Second, cognitive behavioral training(CBT) designed to teach coping skills to parents to directly reduce psychiatric distress associated with stress. The interventions were directly aimed at supporting parents to learn and use skills that would reduce the impact of daily stress. Unlike the BPT, reductions in parental distress were the primary target of these interventions. CBT was used to provide parents with coping skills for reducing or preventing the effects of environmental stress associated with parenting children with developmental disabilities. Third, there was multiple component treatments which included BPT and CBT and other support services. This intervention was clearly more effective than BPT or CBT alone.

Mothers of children with disabilities had higher depression scores than fathers of children with disabilities[15]. It is caused by the fact that mothers take on a larger part of the extra care and practical work that the child with disabilities requires[24, 15]. They more often give up their job and feel unable to pursue their own interests[25, 15]. They all feel more burdened with their children's dependence on care than do fathers and perceive limitations for the family associated with the intensity of that care more clearly[26]. There is correlation between depression and loss of desire of subitems in this study. It means it is important to consider loss of desire to provoke depression

of caregivers with disabled children. Therefore, a programme of psychiatric health service should be focused on promoting desire of caregivers with disabled children in local government.

2. Conclusion

We investigated psychiatric problem of mothers of children with disability using depression index in some areas. The subjects in the study were 40 mothers participating in 3 clinics, who are parenting children with disability. All mothers were primary carers for their children who lived at home full-time.

The results are as follow:

First, they had depression in both caregivers of children with intellectual and physical disability, but there was no difference between the degree of depression of caregivers of children with intellectual and physical disability.

Second, there was a significant difference between chilling effect among subitems of caregivers of children with intellectual and physical disability.

Third, there was a significant difference between 6 subitems of depression of caregivers of children with intellectual disability.

Forth, there was a significant difference between 6 subitems of depression of caregivers of children with physical disability.

Fifth, there was a significant correlation between chilling effect and depression of caregivers of children with intellectual disability.

Sixth, there was a significant correlation between chilling effect and depression of caregivers of children with physical disability.

Although there was no difference between mothers of children with intellectual disability and mothers of children with physical disability, both of them had depression. There was a significant correlation between depression and chilling effect. That means depression was caused by chilling effect resulting from delayed treatment of children. Depression could result in not only increasing psychiatric problem of caregivers but decreasing quality of life of children. Therefore, it is needed to develop and perform a programme for caregivers of children with disability in psychiatric health service of local society.

REFERENCES

1. Bo Geum Choi(1994), The Stress and Depression of Mothers of Handicapped Children, The Graduate School of Corea University, pp.4-16.
2. Mori K, Ujiie T, Smith A and Howlin P(2009), Parental Stress Associated with Caring for Children with Asperger's Syndrome or Autism, *Pediatrics International*, Vol.51;364-370.
3. Oelofsen N & Richardson P(2006), Sense of Coherence and Parenting Stress in Mothers and Fathers of Preschool Children with Developmental Disability, *J of Intellectual and Develop Disability*, Vol.31(1);1-12.
4. Minnes PM: Family Resources and Stress Associated with having a Mentally Retarede Child, *American J ofn Mental Retardation*, Vol.93;184-192.
5. Quine L & Pahl J(1991), Stress and Coping in Mothers Caring for a Child with Severe Learning Difficulties: a Test of Lazarus' Transactional Model of Coping, *J of Community and Applied Social Psychology*, Vol.1;57-70.
6. Cummins RA(2001), The Subjective Well-being of People Caring for a Family Member with a Severe Disability at Home: A Review, *J of Intellectual and Develop Disability*, Vol.26(1);83-100.
7. Allik H, Larsson JO, Smedje H(2006), Health-related Quality of Life in Parents of School-age Children with Asperger Syndrome or High-Funtioning Autism, Health and Quality of Life Outcomes, Vol.4(1);1-8.
8. Weiss SJ(1991), Stressors Experienced by Family Caregivers of Children with Pervasive Developmental Disorders, *Child Psychiatry Hum Dev*, Vol.21;203-216.
9. Davis NO & Carter AS(2008), Parenting Stress in Mothers and Fathers of Toddlers with Autism Spectrum Disorders: Associations with Child Characteristics, *J Autism Dev Disord*, Vol.38;1278-1291.
10. Lloyd T & Hastings RP(2008), Psychological Variables as Correlates of Adjustment in Mothers of Children with Intellectual Disabilities: Cross-Sectional and Longitudinal Relationships, *J of Intellectual Disability Research*, Vol.53;37-48.
11. Hastings RP & Brown T(2002), Coping Strategies and the Impact of Challenging Behaviour on Special Educators' Burnout, *Mental Retardation*, Vol.40;148-156.
12. Guralnick MJ, Hammond MA, Neville B & Connor RT(2008), The Relationship between Sources and Functions of Social Support and Dimensions of Child and Parent Related Stress, *J of Intellectual Disability Research*, Vol.52(12);1138-1154.
13. Singer GHS, Ethridge BL, & Aldana SI(2007), Primary and Secondary Effects of Parenting and

- Stress Management Interventions for Parents of Children with Developmental Disabilities: A meta-analysis, *Mental Retard and Develop Disabi*, Vol.13;357-369.
14. Douma JCH, Dekker MC & Koot HM(2006), Supporting Parents of Youths with Intellectual Disabilities and Psychopathology, *J of Intellectual Disability Research*, Vol.50(8);570-581.
 15. Olsson, H. B, & Hwang, C. P.(2001), Depression in Mothers and Fathers of Children with Intellectual Disabilities, *Journal of intellectual Disability Research*, Vol.45;535-545.
 16. Blacher J & Lopez S(1997), Contributions to Depression in Latina Mothers with and without Children with Retardation: Implications for Care-giving, *Family Relations: Interdisciplinary, J of Applied Family Studies*, Vol.46;325-334.
 17. Abidin RR.(1995) Parenting Stress Index. 3rd ed. Lutz, FL: Psychological Assessment Resources, Inc.
 18. Parkes J, Caravale B, Marcelli M, Franco F, Colver A(2011), Parenting Stress and Children with Cerebral Palsy: a European Cross-Sectional Survey, *Develop Medi & Child neurology*, pp.815-821.
 19. Mouridsen SE, Rich B, Isager T, & Nedergaard NJ(2007), Psychiatric Disorders in the Parents of Individuals With Infantile autism: A case-Control Study, *Psychopathology* 40(3);166-171.
 20. Helff CM & Glidden LM(1998), More positive or less negative? Trends in Research on Adjustment of Families Rearing Children with Developmental Disabilities, *Mental Retard* Vol.36;457-464.
 21. Hastings RP & Taunt HM(2002), Positive Perceptions in Families of Children with Developmental Disabilities, *Jmerican J on Mental Retard* Vol.107;116-127,
 22. Byrne EZ & Cunningham CC(1985), The Effects of Mentally Handicapped Children on Families: a Conceptual Review, *J of Child Psychology and Psychiatry*, Vol.26;847-864.
 23. Byrne EA, Cunnungham CC & Sloper P(1988), Families and Their Children with Down's Syndrome: One Feature in Common, *Routledge*, pp.71-86.
 24. Moes D, KoeGLE R, Schreiber L & Loos L(1992), Stress Profiles for Mothers and Fathers of Children with Autism, *Psychological Reports*, Vol.71;1272-1274.
 25. Breslau N, Staruch KS, & Mortimer EA(1982), Psychological Distress in Mothers of Disabled Children, *American J of Diseases of Child*, Vol.136;682-686.
 26. Dabrowska A & Pisula E(2010), Parenting Stress and Coping Styles in Mothers and Fathers of Pre-school Children with Autism and Down Syndrome, *J of Intelle Disab Resear*, Vol.54(3); 266-280.

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