

Impact of Parental Alcohol Consumption on Emotional and Behavioral Problems in Children Age 3-4 Years

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Background: Children of alcoholic parents have been shown to be at risk for the development of mental health, for instance a reduction in cognitive abilities and deficit in social behavior. Moreover, poor communication, under socialization, neglect, and violence are common and associated with parental drinking related stress.

Objective: To expisit the emotional and behavioral problems generated by their parents drinking behaviors.

Material and Method: The authors conducted a case-control study in 148 children attending the outpatient department at Phramongkutklo Hospital by using the Strength and Difficulty Questionnaire (SDQ), the children were classified into two groups which was the abnormal behavior group and normal behavior. 38 were classified as borderline groups and discarded. Subsequently, the authors used WHO screening instrument; an Alcohol Use Disorder Identification Test (AUDIT) questionnaire to identify parents with hazardous and harmful patterns of alcohol consumption. The emotional and behavioral problems were compared between children whose parents had drinking problems. The authors used descriptive statistics for demographic data and Fisher Exact test for analyzing the difference between the groups of children with and without emotional and behavioral problems. To compare emotional and behavioral problems between children whose parents had alcohol drinking problems and whose parents had no drinking problem, Fisher exact test and odd ratio with 95% confidence interval were performed.

Results: There was no difference in demographic data. 95% of families were married, 73.6% of fathers worked for the government and only 22% had more than 12 years of education. 36% of mothers were employed as well as being housewife mothers. Birth order had statistical difference in both groups ($p = 0.006$). 52% were the last child and 32% were the only child. The overall emotional and behavioral problems were not statistically different ($OR = 1.07$, 95% CI = 0.508-2.27) from those whose parents did not have the problem. More specifically, the hyperactivity and emotional problems were not more common in children with a parental drinking problem ($OR = 1.2$, 95% CI = 0.4-3.4, $OR = 1.17$, 95% CI = 0.07-19.3, respectively). There were no differences between conduct, peer problems and pro social behaviors in children of both groups ($OR = 0.85$, 95% CI = 0.34-2.1, $p = 0.81$; $OR = 0.14$, 95% CI = 0.016-1.2, $OR = 0.4$, 95% CI = 0.14-1.17, respectively).

Conclusion: There was no difference of emotional and behavioral problem in children between the groups of parents with and without alcohol drinking problems. The limitation of the present study was probably due to small sample size, the design of questionnaire and confounding factors which was 21% of both groups who lived in an extended family. Moreover, mothers had the major role in taking care of the children in about half of the families but the parents who had alcohol problems were fathers which was 92 percent.

Keywords: Parent, Alcohol, Children and Behavior

J Med Assoc Thai 2012; 95 (Suppl. 5): S6-S11

Full text. e-Journal: <http://jmat.mat.or.th>

The survey of tobacco and alcohol consumption by National Statistical Office of Thailand; National Health Examination suggested that the number of alcohol drinkers was increasing⁽¹⁾. The survey in 2001

found that the number of drinkers increased from 13.7 million in 1996 to 15.3 million in 2001 or increased 2.3 percent per year. Among those 15.3 million drinkers, 13.0 million were males (55.9 percent of the same age group) and 2.3 million were females (9.8 percent). The highest prevalence was among people at 25-39 years of age (39.3 percent) and young people at 15-24 (21.6 percent)⁽²⁾. 10 percent of the population aged more than 35 in the southern part of Thailand were identified as having a hazardous harmful drinking habit⁽³⁾.

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In Thailand, there have been no specific studies about the incidence of alcoholic parents or influence of alcoholic on child behavioral problems. Children with alcoholic fathers had higher levels of internalizing and externalizing behavior^(4,5) which was prone to have behavioral dysregulation⁽⁶⁾ more than children of nonalcoholic fathers, and were likely to develop alcohol problems four to six times more than the normal population⁽⁷⁾. Three-year-old sons of alcoholic fathers were more impulsive than comparison children, but there was no difference in developmental levels, IQ and behavioral problems. In the same population for an alcoholic family, children of a maternal alcoholic showed more total behavioral problems, externalizing and internalizing behavioral problems⁽⁸⁾.

Children of alcoholic parents were associated with increased risks for attention-deficit hyperactivity disorder, conduct disorder and over anxious disorder⁽⁹⁾. Preschool children have to develop the ability of accepting limits as well as maintaining a sense of self direction and self control. Self-control stems from the feeling of being important and loved. Children this age cannot control many aspects of their lives and are also liable to lose internal control which exhibit temper tantrums⁽¹⁰⁾. Moderate to severe behavioral problems in preschool have difficulty changing and tend to have dysfunction in later life. These early behavior problems have been shown to have long term negative effects on peer relationship, child's sense of self development, academic and family functioning⁽¹¹⁾.

The present study objectives were to determine the impact of parental drinking problem on emotional and behavioral problems in their children who were in preschool age and also provided information about the negative impact of alcohol drinking on children behavior and counseling regarding behavior management.

Material and Method

The participants were 148 children attending the pediatrics outpatient department at Phramongkutkloa Hospital during 1 January 2002-31 July 2002. Of those who had no prenatal and postnatal problem with normal physical growth and development. The authors defined case and control by using the Strength and Difficulty Questionnaire (SDQ) which consisted of 25 questions including 10 strengths, 14 difficulties and 1 neutral with 55 sales of 5 items^(12,13). The scales of hyperactivity, emotional symptoms, conduct problems, peer problems and pro social, has a 3-point response not true, somewhat true and certainly true. SDQ has

specificity 0.95 and sensitivity 0.63. The children were classified into 2 groups: normal behavior and abnormal behavior. The behaviors defined as normal behavior, borderline and abnormal behavior respectively which reflected the score of 0-13, 14-16 and 17-40 respectively.

The Alcohol Use Disorder Identification was performed to identify parents with problem drinking. The authors used 5 questions which were; frequency of drinking, number of drinks, unable to stop drinking, failing to do what was normally expected and another person concerned about subject drinking or suggesting that it should be cut down. The cut point was a score of 5 and more implied for having alcohol problems. This 5-question questionnaire has specificity 0.79, sensitivity 0.95 and positive predictive value 0.73⁽¹⁴⁻¹⁶⁾.

The comparison of both questionnaires which were translated into Thai then compared for validity. Reliability was tested in 200 children at kindergartens. Informed consent to target population followed by 2 questionnaires and a demographic data questionnaire were completed by parents.

Descriptive statistic was used for the demographic data. Fisher Exact test was used regarding the difference between the groups of children with and without emotional and behavioral problems. To compare emotional and behavioral problems between children whose parent had alcoholic drinking problems and whose parents had no drinking problem, Fisher Exact test and odds ratio with 95% confidence interval were performed.

The present study was approved by the ethical committee of Phramongkutkloa Hospital and Phramongkutkloa College of Medicine.

Results

There were no differences in demographic data. 95% of families were married, 73.6% of fathers worked for the government and only 22% had more than 12 years of education. 49% of mothers took the major role in upbringing children and 25% both parents took such a role. However, 13.6% were in an extended family whereas 46.4% of parents had alcohol problems most of them were fathers who had a minor role in taking care of the children (Table 1). Birth order had statistical difference in both groups ($p = 0.006$) 52% were the last child and 32% were the only child, (Table 2, 3).

There was no statistical difference on emotional and behavioral problems in children between 2 groups of parents with and without alcohol drinking problem (OR = 1.07, 95% CI = 0.508-2.27). Children

Table 1. Demographic Based on Children's behaviors

	Overall (n = 110), n (%)	Abnormal behaviors (n = 55) (%)	Normal behaviors (n = 55) (%)	p
Gender				0.56
Male	52 (47.3)	28 (25.5)	24 (21.8)	
Female	58 (52.7)	27 (24.5)	31 (28.2)	
Parental marital status				0.6
Married	105 (95.45)	52 (47.3)	53 (48.1)	
Divorced	4 (3.63)	3 (2.7)	1 (0.9)	
Maternal death	1 (0.9)	0	1 (0.9)	
Father education				0.17
Less than high school	13 (11.8)	10 (9)	3 (2.7)	
High school	73 (66.4)	37 (33.7)	36 (32.7)	
College	24 (21.8)	8 (7.3)	16 (14.6)	
Mother education				0.4
Less than high school	31 (28.2)	18 (16.4)	13 (11.8)	
High school	47 (42.7)	22 (20.0)	25 (22.7)	
College	32 (29.1)	15 (13.6)	17 (15.5)	
Father occupation				0.79
Civil servant	81 (73.6)	41 (74.6)	40 (72.7)	
Employee	26 (23.6)	13 (23.6)	13 (23.6)	
Self employ	3 (2.8)	1 (1.8)	2 (3.7)	
Mother occupation				0.146
Civil servant	12 (10.9)	5 (9.1)	7 (12.7)	
Employee	47 (42.7)	21 (38.1)	26 (47.2)	
Self employ	10 (9.1)	4 (7.3)	6 (10.1)	
Housewife	41 (37.3)	25 (45.5)	16 (29.0)	
Birth order				0.006*
First	17 (15.5)	14 (12.7)	3 (2.7)	
Middle	2 (1.8)	1 (0.9)	1 (0.9)	
Last	56 (50.9)	28 (25.5)	28 (25.5)	
Only child	35 (31.8)	12 (10.9)	23 (20.9)	
Care takers				0.8
Father	7 (6.4)	4 (3.6)	3 (2.7)	
Mother	53 (48.2)	26 (23.6)	27 (24.5)	
Parent	27 (24.5)	12 (10.9)	15 (13.6)	
Relatives	15 (13.6)	9 (8.2)	6 (5.5)	
Sitters	8 (7.3)	4 (3.6)	4 (3.6)	

Table 2. Strengths and Difficulties in children based on 5 items of SDQ

Behaviors	Parents with alcohol problems		Parents without alcohol problems		Odds ratio (95% CI)
	Case (%)	Control (%)	Case (%)	Control (%)	
Hyperactivity	8 (14.6)	28 (50.9)	10 (18.2)	42 (76.4)	1.20 (0.4-3.4)
Emotional symptoms	1 (1.8)	45 (81.8)	1 (1.8)	53 (96.4)	1.17 (0.07-19.3)
Conduct problems	12 (21.8)	31 (56.4)	14 (25.5)	31 (56.4)	0.85 (0.34-2.1)
Peers problems	1 (1.8)	24 (43.6)	8 (14.6)	27 (49.1)	0.14 (0.016-1.2)
Pro-social behaviors	6 (10.9)	35 (63.6)	14 (25.5)	43 (78.1)	0.40 (0.14-1.17)
Total abnormal behaviors	26 (47.3)	25 (45.5)	29 (52.7)	30 (54.5)	1.07 (0.508-2.27)

SDQ = Strength and Difficulty Questionnaire

Table 3. Specific behavior problems

	Odd ratio	95% CI	p-value
Total abnormal behavior	1.07	5.08-2.27	1.0
Hyperactivity	1.20	0.40-3.4	0.79
Emotional problem	1.17	0.07-19.3	1.0
Conduct problems	0.85	0.34-2.1	0.81
Peer problem	0.14	0.016-1.2	0.06
Pro-social behaviors	0.40	0.14-1.17	0.12

enrolled were 148, members of normal and abnormal emotion and behavior were equally 55:55 and 38 children who had borderline were excluded. More specifically, the hyperactivity and emotional problems tend to be common in children with parental drinking problems (OR = 1.2, 95% CI = 0.4-3.4, OR = 1.17, 95% CI = 0.07-19.3). There were no difference between conduct, peer problems and pro-social behaviors in children of both groups (OR = 0.85, 95% CI = 0.34-2.1, OR = 0.14, 95% CI = 0.016-1.2, OR = 0.4, 95% CI = 0.14-1.17 respectively).

The overall emotional and behavioral problems were not statistically different between children from those whose parents had and did not have the problem. More specifically, the hyperactivity and emotional problems tended to be more common in children with parental drinking problems. There were no differences between conduct, peers and pro social problems in children of both groups.

Discussion

The results of the present study did not show any statistical difference between the 2 groups. However, overall behavior problem tended to have more problems in a parent with the alcohol problem group as well as hyperactivity and emotional problems. In contrast, conduct problem, peer problems and pro-social behavior tended to have fewer problems in a parent with alcohol problem group. The results of the present study were not consistent with the results studied by others regarding the influence of alcoholic parents⁽⁹⁾. According to parent report of children's development and self-report of alcohol problems has weaknesses. Parents tended to report their children's behaviors as normal because of their love and protection. Moreover, self-report of alcohol problems may not be disclosed because drinking is not acceptable in Thai culture. Alcoholism was considered as "family secret". Almost all parents worked for the government which alcoholic will be in penal record. Alcohol drinking

is also violated to the "5 Sila" which is virtue or moral conduct of Buddhism. Because of 13.6% of children lived in an extended family, the effect of parental alcohol drinking may not have such a strong influence. Furthermore, 49% of mothers took the major role in upbringing children and 25% both fathers and mothers took that role. 46.4% of parents had alcohol problem most of them were fathers who took a minor role in taking care of children. Difference of child rearing practice in different birth order may affect the behaviors of children, first born children had more internalized symptoms than the second born child⁽¹⁷⁾. The other factors which have influence on children behaviors. One of those is television viewing. Only 45% were reported about TV viewing. In the present study the normal and abnormal behavior group had TV viewing time 3 and 2.28 hours/day respectively. Moreover, the questionnaire did not mention about television programs. Another factor which has influence on children's behavior is mother infant attachment. Children of alcoholic parents with secure attachment had significantly lower externalizing behavior than insecure attachment children⁽⁴⁾.

Conclusion

The present study has shown no statistical difference on emotional and behavior problems in children between groups of parents with and without alcohol drinking problems. The emotional problems tended to increase in children whose parents had alcoholic problems. There were no differences between conduct, peer problems and pro-social behaviors in children of both groups. The limitation of the present study was probably due to a small sample size and the design of the questionnaire. However, this preliminary study could provide useful information for a further community based study. In Thai society there has been public awareness of drinking problems especially drinking and driving for has 15 years but have no campaign about the influence of alcohol drinking parents on their children.

Potential conflicts of interest

Phramongkutklao Hospital's Foundation under Her Royal Highness Princess Maha Chakri Sirindhorn's Patronage.

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ผลกระทบของการดื่มแอลกอฮอล์ของบิดามารดาต่อปัญหาอารมณ์และพฤติกรรมในเด็กอายุ 3-4 ปี

ปัญจมา ปาจารย์, ซาครียา ธีรเนตร

ภูมิหลัง: เด็กที่บิดามารดาดื่มแอลกอฮอล์ มีความเสี่ยงที่จะเกิดปัญหาสุขภาพจิต โดยเฉพาะอย่างยิ่งสติปัญญาบกพร่อง, ทักษะทางสังคมบกพร่อง, การสื่อสารไม่สมวัย นอกจากนี้ยังมีโอกาสถูกละเลยทอดทิ้งได้รับผลกระทบจากความก้าวร้าวที่สัมพันธ์กับความเครียดของบิดามารดาที่ดื่มแอลกอฮอล์

วัตถุประสงค์: เพื่อศึกษาผลกระทบที่มีต่อปัญหาอารมณ์และพฤติกรรมในเด็กที่มีบิดามารดาดื่มแอลกอฮอล์

วัสดุและวิธีการ: ทำการศึกษาในผู้ช่วยเด็กและผู้เลี้ยงดูของเด็กที่มาการตรวจรักษาที่โรงพยาบาลพระมงกุฎเกล้า จำนวน 110 คน แบ่งผู้ช่วย 2 กลุ่ม คือกลุ่มที่มีปัญหาพฤติกรรมและกลุ่มที่ไม่มีปัญหาพฤติกรรม โดยใช้แบบสอบถาม strength & difficulties questionnaire (SDQ) และจำแนกว่าแต่ละกลุ่มมีผู้เลี้ยงดูที่มีปัญหาติดเครื่องดื่ม แอลกอฮอล์หรือไม่ โดยใช้แบบสอบถามการดื่มแอลกอฮอล์ (alcohol use disorder identification test) ศึกษาเปรียบเทียบความเสี่ยงในการเกิดปัญหาด้านอารมณ์และพฤติกรรมในผู้ช่วยเด็ก ระหว่างกลุ่มผู้เลี้ยงดูที่ดื่ม แอลกอฮอล์และผู้เลี้ยงดูที่ไม่ดื่มแอลกอฮอล์

สถิติ: ใช้สถิติเชิงพรรณนา (descriptive study) และ Fisher exact test ในการวิเคราะห์ข้อมูลส่วนผลการเปรียบเทียบความเสี่ยงในการเกิดปัญหาด้านอารมณ์และพฤติกรรมในผู้ช่วยเด็ก ระหว่างผู้เลี้ยงดูที่ดื่มแอลกอฮอล์และผู้เลี้ยงดูที่ไม่ดื่มแอลกอฮอล์ใช้ odds ratio (OR) และ 95% Confidence Interval (95%CI)

ผลการศึกษา: กลุ่มผู้ช่วยเด็กที่มีผู้เลี้ยงดูที่ติดเครื่องดื่มแอลกอฮอล์ มีความเสี่ยงต่อการเกิดปัญหาด้านอารมณ์และพฤติกรรมโดยรวมคิดเป็น (OR 1.07 95% CI = 0.508-2.27) เมื่อเปรียบเทียบกับกลุ่มที่มีผู้เลี้ยงดูที่ไม่ดื่มเครื่องดื่มแอลกอฮอล์ ส่วนปัญหาด้านต่อต้าน ความสัมพันธ์กับเพื่อนผิดปกติ และพฤติกรรมส่งเสริมสังคมในกลุ่มผู้ช่วยเด็กที่มีผู้เลี้ยงดูที่ดื่มแอลกอฮอล์เทียบกับกลุ่มที่มีผู้เลี้ยงดูไม่ดื่มแอลกอฮอล์ คิดเป็น OR 1.2 เท่า (95% CI = 0.4-3.4) $p = 0.97$ และ 1.17 (95% CI = 0.07-19.3) OR 0.14 (95% CI = 0.016-1.2) และ OR 0.4 (95% CI = 0.14-1.17) ตามลำดับ

สรุป: กลุ่มผู้ช่วยเด็กที่มีผู้เลี้ยงดูที่ดื่มแอลกอฮอล์ มีความเสี่ยงในการเกิดปัญหาด้านอารมณ์และพฤติกรรมไม่แตกต่างจากกลุ่มที่มีผู้เลี้ยงดูที่ไม่ดื่มแอลกอฮอล์ ข้อจำกัดของเด็กครั้งนี้ว่าจะเกิดจากประชากรมีขนาดเล็ก และแบบสอบถามที่ยังอาจมีข้อจำกัด หรืออาจเนื่องจากเด็กร้อยละ 21 อาศัยอยู่ในครอบครัวใหญ่ ซึ่งมีผู้เลี้ยงดูอื่นที่ไม่ติดแอลกอฮอล์คอยดูแลทำให้ผลกระทบของการเลี้ยงดูจากบิดามารดาไม่เด่นชัด และควรมีการศึกษาวิจัยในระดับชุมชน