

Adolescent patients served in an outpatient child psychiatric clinic

Alisa Wacharasindhu*

Wacharasindhu A. Adolescent patients served in an outpatient child psychiatric clinic. Chula Med J 1995 Jul; 39(7): 491-510

The study of adolescent patients referred to the outpatient child psychiatric clinic at Chulalongkorn Hospital was carried out in order to assess the existing service for the adolescents and to determine whether there is a need to plan for a special service for this age group. A study of the unit registry during a ten-year period (1985-1994) showed that the proportion of adolescent patients referred increased during the previous three years. Adolescent boys outnumbered girls, and boys were referred at younger ages than girls. Of all the cases referred in the past year (n=200), the mean age was 12 years 4 months with a male-female sex ratio of 1.22:1. The most common reasons for referral were behaviour (22.5%), intellectual and learning problems. Mental retardation and adjustment disorder were the most common psychiatric diagnosis found, as well as a group of other problems which did not meet the criteria for diagnosis according to DSM-IV. Comparisons between doctor-referred and parent-referred cases showed that parents tended to refer adolescents with behaviour problems while doctors tended to refer those with somatic problems. Accordingly, conduct disorder, attention deficit hyperactivity disorder (ADHD) and substance use disorder were diagnosed more in the parent-referred group. The diagnosis of mental retardation, pervasive developmental disorder and learning disabilities were diagnosed more in the doctor-referred group. Family functioning of these referred adolescents were recorded as adaptive in only (19.7%) of the cases. The main therapeutic intervention used was

combined individual and family therapy. The findings described provide basic information which can be used to organize better service or to plan for future special service, especially when compared with other studies and community data. They also revealed the direction of teaching and future research, as well as a suggestion for a good and effective model of helping troubled adolescents.

Key words : *Adolescent patients, Outpatient child psychiatric clinic.*

Reprint request : Wacharasindhu A. Department of Psychiatry, Faculty of Medicine,
Chulalongkorn University, Bangkok 10330, Thailand.

Received for publication. May 9, 1995.

อลิสา วัชรสินธุ. ผู้ป่วยวัยรุ่นในคลินิกจิตเวชเด็ก. จุฬาลงกรณ์เวชสาร 2538 กรกฎาคม: 39(7) : 491-510

การศึกษาผู้ป่วยวัยรุ่นในคลินิกจิตเวชเด็ก โรงพยาบาลจุฬาลงกรณ์ เพื่อประเมินการให้บริการที่ทำอยู่ในปัจจุบันและเพื่อใช้ในการพิจารณาการวางแผนการให้บริการพิเศษสำหรับกลุ่มวัยรุ่น พบว่าในระยะ 10 ปีที่ศึกษา (พ.ศ. 2528-2537) สัดส่วนของวัยรุ่นที่ถูกส่งมาปรึกษาเพิ่มขึ้นในระยะ 3 ปีหลัง โดยจำนวนวัยรุ่นชายมากกว่าวัยรุ่นหญิง และวัยรุ่นชายส่วนใหญ่มีอายุน้อยกว่าวัยรุ่นหญิง ในจำนวนวัยรุ่นที่ส่งมาปรึกษาที่คลินิกทั้งหมดในปีที่ผ่านมา (2537) พบอายุเฉลี่ย 12 ปี 4 เดือน อัตราส่วนชายต่อหญิง 1.22 : 1 สาเหตุที่ส่งมาปรึกษาที่พบบ่อย คือ ปัญหาพฤติกรรม (ร้อยละ 22.5) สติปัญญา และการเรียน ภาวะปัญหาอ่อนและการปรับตัวผิดปกติเป็นการวินิจฉัยทางจิตเวชที่พบบ่อยเช่นเดียวกับกลุ่มของปัญหาอื่นที่เข้าไม่ได้กับการวินิจฉัยทางจิตเวชตาม DSM-IV ผลของการเปรียบเทียบของกลุ่มวัยรุ่นที่ส่งมาโดยแพทย์และกลุ่มที่ผู้ปกครองมาปรึกษาด้วยตนเองพบว่า ผู้ปกครองมักมาปรึกษาด้วยสาเหตุปัญหาพฤติกรรม ขณะที่แพทย์มักส่งต่อวัยรุ่นที่มีอาการทางกาย ในกลุ่มวัยรุ่นที่ผู้ปกครองเป็นผู้มาพบเองได้รับการวินิจฉัยว่าเป็นความประพฤติดีผิดปกติ ความผิดปกติแบบสมาธิสั้น อยู่ไม่นิ่ง และการติดสารเสพติดมากกว่ากลุ่มที่แพทย์ส่ง กลุ่มที่แพทย์ส่งได้รับการวินิจฉัยเป็นภาวะปัญหาอ่อน, ออทิสติก และปัญหาการเรียนมากกว่า ครอบครัวของวัยรุ่นที่มาปรึกษามีการปรับตัวและทำหน้าที่ได้ดีเพียงร้อยละ 19.7 การรักษาช่วยเหลือที่ทำมากที่สุด คือ จิตบำบัดตัวต่อตัวร่วมกับครอบครัวบำบัด ผลการศึกษานี้แสดงถึงข้อมูลพื้นฐานของวัยรุ่นที่มาปรึกษาในคลินิกจิตเวชเด็ก ซึ่งสามารถใช้เป็นประโยชน์ในการปรับปรุงการให้บริการ หรือจัดบริการพิเศษสำหรับวัยรุ่น โดยเฉพาะอย่างยิ่งถ้ามีการเปรียบเทียบกับการศึกษาอื่นและข้อมูลจากชุมชน นอกจากนี้ผลการศึกษานี้สามารถช่วยชี้แนะทางการให้การศึกษและการวิจัยเพิ่มเติม รวมทั้งเสนอแนะรูปแบบของการบริการเพื่อช่วยเหลือวัยรุ่นที่มีปัญหาที่ดีและมีประสิทธิภาพ

The total number of adolescent population all over the world is rising. It is estimated that 30% of total world population is in the age range between 10 and 24 year and 80% of these lives in developing countries. In Thailand report from Institute of population studies in the year 1994 showed that adolescent population in the age range between 10 and 19 year constituted 20.84% of total population. Government policy concerning plan to develop children and adolescents between 1992 and 1994 stated the plan to help adolescents in many aspects including physical and mental health, intelligence and abilities, social and moral aspects and specific group such as prostitutes, homelessness, labour and the abused. However it was reported that only 30% of problemed adolescents had been helped.

Prevalence rates of psychiatric disorder among adolescents in the general community vary between 10% and 20%, depending upon the method used and population.⁽¹⁾ In the U.K. where the adolescent group accounts for 15% of the population the 1-year period prevalence of psychiatric disorder is about 10-15% and rises to 21% in study focused on older teenagers living in inner cities and used self-report studies.⁽²⁻⁴⁾ The levels are similar to those reported from the U.S.,⁽⁵⁾ Canada,⁽⁶⁾ Australia,⁽⁷⁾ New Zealand,⁽⁸⁾ Scandinavia⁽⁹⁾ and also Thailand.⁽¹⁰⁾ Epidemiological data on age changes in overall prevalence and patterns of psychiatric disorder suggest that adolescence is an age period during which there are striking changes in both the frequency and form of psychiatric disorder.⁽¹¹⁾ The specific types of psychiatric disorder that are noticeably more prominent during adolescence includes schizophrenic illness,⁽¹²⁾ depressive conditions including manic-depressive illness,^(13,14) attempted suicide,⁽¹⁵⁾ social phobia and agoraphobia,⁽¹⁶⁾

obsessive-compulsive disorder⁽¹⁷⁾ and anorexia nervosa and other eating disorders.

Studies of referrals to child and adolescent psychiatric clinics in the US⁽¹⁸⁾ and the UK⁽¹⁹⁾ show a rising rate in referrals from childhood through adolescence with the notice that adolescents are the largest users of psychiatric outpatient clinics in the US.⁽¹⁹⁾ However in general practice psychiatric service for adolescents has been noted to be marked by gaps and duplication.⁽²⁰⁾ Some psychiatrically disturbed adolescents has been served in child psychiatric clinic while the others had gone to adult service. It has been argued whether to have specific adolescent clinic to serve the large number of this specific age group. This decision depends on the type of problems the referred adolescents have comparing with children and adult and the training and expertise of psychiatrists involved in treating them. It had been suggest traditionally that the day's work in adolescent psychiatry need psychiatrists with training in child psychiatry because adolescence is developmentally part of the childhood move from total dependence to independence and best understood from that perspective.⁽²¹⁾

The Chulalongkorn hospital child psychiatric service has long been a service for children and adolescents out-patients and in-patients age from birth to 15 since 1967. This age range certainly includes early adolescence. In practice some of adolescents age over 15 were also referred because of the attitudes and feeling described above that they needed child psychiatrist's experience in understanding and helping them. The aim of this paper is to study the service for adolescents in the unit in past years by describing the proportion and demography of adolescent patients in the unit, types of problems referred, referral sources and diagnosis given.

July 1995

Methods

A unit register in the past 10 year (1985-1994) were reviewed to collect the data concerning the number of adolescent patients (age over 10) referred each year, the proportion of adolescent patients comparing with total patients and demographic details concerning age range and sex. A study of adolescent patients was done in detail for those presenting in the past year (1994) by using the information from the case note which has standarized information sheet and asking the involved clinicians for more information. The following data were recorded: age and sex of referred patients, sources of and reasons for referral, diagnosis and service provided. Comparison between doctor-referred and parent-referred group was done in the aspect of age, sex ratio, reasons for referral and psychiatric diagnosis. Comments about family functioning as well as other important features were also noted.

Results

During the ten-year period (1985-1994), the number of total adolescent patients referred each year varied between 122-213 cases. (the total number of patients referred each year varied from 496-767 cases.) The proportion of adolescent patients referred varied from 23.7-32.3% (Table 1) It is interesting to note that the proportion of adolescent patients referred were increasing for the last 3 years. (Fig 1). The sex distribution showed that boys outnumbered girls in every year except 1989. (Table 1) When considering age range by dividing into 4 groups : 10-11, 12-13, 14-15, 15+ the data had shown that the most common age group being referred were age range from 12-13 for the whole group (not considered which sex) and the female group. However the most common age group among adolescent boys were younger that is 10-11. In addition for the group of girls during 2 year (1992, 1994) the most common age group referred were 14-15. (Table 1)

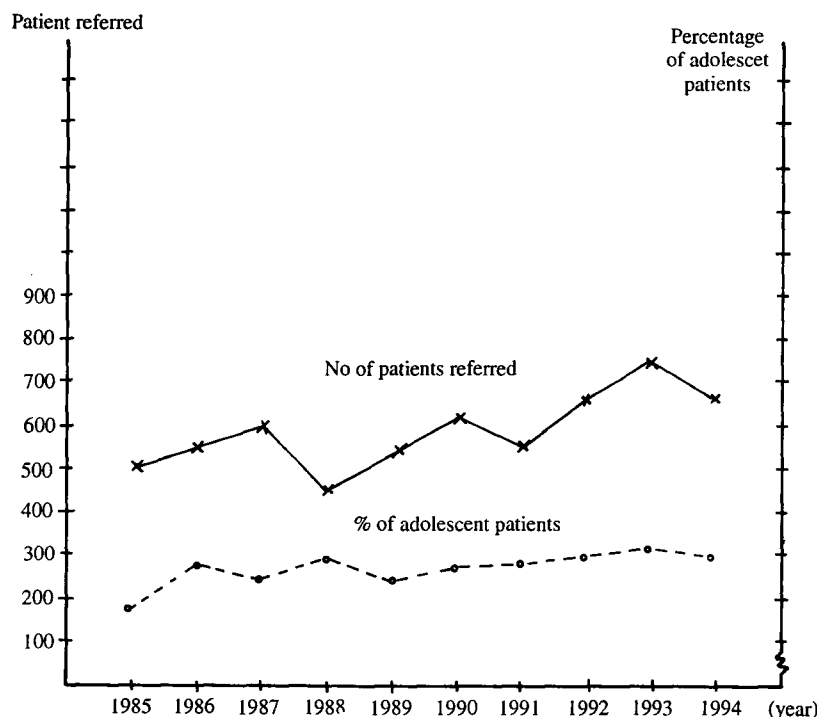


Figure 1. The proportion of adolescent patients referred each year.

Table 1. Adolescent patients divided into 4 age group.

Year	Male					Female				
	Total	10-11 yr	12-13 yr	14-15 yr	15 + yr	Total	10-11 yr	12-13 yr	14-15 yr	15 + yr
1985	61	31	20	13	-	61	20	28	13	-
1986	91	35	37	18	1	69	23	22	20	4
1987	80	23	40	16	1	79	24	30	21	4
1988	83	27	31	22	3	64	23	26	14	1
1989	74	34	24	15	1	76	20	39	17	-
1990	93	34	32	24	3	84	29	30	22	3
1991	88	23	36	26	3	76	24	18	31	3
1992	106	37	36	20	13	92	26	30	30	6
1993	128	50	48	20	10	108	33	44	25	6
1994	119	50	36	25	8	94	19	27	31	17

Details concerning the adolescent patients attending the clinic in the year 1994 had shown that the total number of patients was 200 with the mean age of 12 years 4 months and the sex ratio male : female of 1.22 : 1

Reasons for Referral

The reasons for referral for all adolescent patients in the year 1994 by age and sex was described in table 2. The most common reason for referral for all is behaviour problem which account for 22.5%. These behaviour problems varied from misbehaviour including disruption and quarrelling at home and/or school, stealing at home or outside to more serious misbehaviour including running away from home. The behaviour changes that warrant psychiatric assessment of serious psychiatric disorder were also included in this category. The second and third reason for referral were intellectual and learning problems.

The intellectual problems were noted when the referrer thought that the adolescent has a problem with his/her IQ while the learning problems included every school-related problem such as attention in the classroom. The fourth reason for referral were somatic complaints which included headache, abdominal pain, hyperventilation and others which remind referrer of physical illness but no illness detected. The problem of abuse which included physical and sexual abuse was the fifth reason for referral. The sixth reason for referral was emotional problems which included depression, anxiety, fear and obsession-compulsion. Habit problems including eating, sleeping, toilet training was the seventh reason for referral. Suicidal attempt came the eight in the list with the same frequency as other problems which included sexual, social relationship and language problem. Lastly three cases in this particular year came to the out-patient because of abusing drug.

July 1995

Table 2. Reasons for referral of adolescent patients (1994) by Age and Sex.

Reasons for referral	Male				Female			
	10-11	12-13	14-15	15 ⁺	10-11	12-13	14-15	15 ⁺
1. Intellectual	8	7	6	-	5	6	2	-
2. Learning (including attention school problem)	11	7	3	1	1	1	1	-
*3. Behaviour (Conduct)	11	7	6	2	-	4	6	-
4. Emotional	-	2	2	-	1	1	4	-
5. Somatic	3	2	-	-	1	6	7	1
6. Suicidal attempt	-	-	1	-	-	2	2	-
7. Habit (including feeding, sleeping, toilet training)	1	-	1	-	1	2	1	-
8. Abuse	-	-	-	-	1	-	4	10
9. Substance use	-	-	2	-	-	1	-	-
10. Development (including language)	1	1	1	-	1	-	-	-
11. Social relationship	1	-	-	-	-	-	-	-

The data concerning the reasons for referral were looked into in details divided by sex and age range. (Table 2) For the adolescent boys, the order of the first five most common reasons for referral was the same as the reasons for all cases without considering sex that is behaviour, intellectual, learning, somatic and emotional problem respectively. It is noted that no cases of adolescent boys came because the reason of being abused. Only one boy came to the out-patient after attempted suicide. (Male : Female ratio = 1 : 4). Two out of three cases of drug abused were adolescent boys. (Male : Female ratio = 2 : 1)

When the data were looked into in the group of adolescent girl. It is interesting to see

the change in the order of frequency of the reasons for referral. The most common reasons for referral were the problem of being abused. The somatic complaints came the second. While the intellectual problem was still the third, the learning problems became less important and being the seventh. The behaviour problems were also less important and came on the fifth. The emotional problems were considered the fifth which is similar to the group of adolescent boys while girls outnumbered boys in the problem of suicidal attempt. Adolescent girls comprised the group of habit problems e.g. bedwetting more than boys with the ratio of 2 : 1. The reasons for referral were different in different age group. The most common reasons for referral for

younger age group (10-11 and 12-13) was intellectual problem while the older group (14-15) the most common reasons for referral was behaviour problem. The problem of abuse is the most common reasons for referral in the oldest group (15 up). In general it is noted that intellectual and learning problems are common reasons for referral in younger age group. The behaviour problems are the common reasons for referral in all age group but marked more common in older group. The somatic and habit problem are the reasons for referral which were found to distribute in every age group. The reasons for referral that were seen more common in older age group are the emotional problem, suicidal attempt, abuse and substance use.

Psychiatric diagnosis

The diagnosis was divided into 8 categories according to DSM-IV classification⁽²²⁾ and the data concerning psychiatric diagnosis was looked into in details by considering age group and sex. (Table 3) The most common psychiatric diagnosis for all cases was Mental Retardation (including borderline Intelligence and developmental delay). The second most common diagnosis was the group of other problems not met the criteria for the diagnosis according to DSM-IV. The third most common diagnosis were adjustment disorder and abuse. Psychosis was the fourth in the list. Attention-deficit hyperactivity disorder (ADHD) was the fifth most common diagnosis as well as the group of normal or no diagnosis. Depression was the sixth in order of commonest while conduct disorder, organic brain syndrome, enuresis, learning disabilities and child rearing or relationship were the seventh in order. The less common diagnosis (the eighth and ninth

in order) includes conversion disorder (including hyperventilation syndrome), other emotional disorder (including anxiety, obsessive disorder) and psychological factors affecting physical condition. There were one case of pervasive developmental disorder and one of substance use disorder.

When the group of adolescent boys and girls were divided (Table 3), the most common psychiatric diagnosis was still mental retardation. There were boys and girls in equal proportion in the diagnosis of depression, psychosis, adjustment disorder and child rearing problem. However adolescent girls outnumbered boys in the diagnosis of abuse, conversion disorder (including hyperventilation syndrome) and enuresis. There were higher proportion of boys than girls in the diagnosis of conduct disorder, attention deficit hyperactivity disorder (ADHD), organic brain syndrome and learning disabilities. Two cases of pervasive developmental disorder and substance abuse were all boys.

The data concerning psychiatric diagnosis was also looked into in details concerning different age group and it had shown that most of the psychiatric diagnosis had been distributed equally among different age group. (Fig 6) These diagnosis included emotional disorder (including anxiety and obsessive-compulsive disorder), psychological factors affecting physical condition, adjustment disorder, abuse, mental retardation (including hyperventilation syndrome), enuresis and child rearing problem. However attention deficit hyperactivity disorder (ADHD), organic brain syndrome and learning abilities were found in younger age group more than older age group. The psychiatric diagnosis that were found in older age group more than younger age group includes conduct disorder, depression, psychosis and substance use disorder

Table 3. Psychiatric diagnosis of adolescent patients (1994) by Age and Sex.

Reasons for referral	Male				Female			
	10-11	12-13	14-15	15 ⁺	10-11	12-13	14-15	15 ⁺
1. Conduct disorder	-	1	3	-	-	-	-	-
2. Depression (Dysthymia)	1	2	1	-	-	-	2	1
3. Emotional disorder (including anxiety, obsessive-compulsive disorder)	-	1	1	-	-	-	-	-
4. Attention deficit hyperactivity disorder (ADHD)	5	2	1	-	-	-	-	-
5. Psychological factors affecting physical condition	-	1	-	-	-	1	-	-
6. Psychosis	1	1	2	1	-	2	4	-
7. Adjustment disorder	3	3	-	-	1	7	3	-
8. Abuse	-	1	-	-	1	1	5	9
9. Mental Retardation (MR) (including Borderline intelligence, developmental delay)	6	5	6	-	7	6	4	-
10. Organic brain syndrome	4	-	-	-	-	-	-	-
11. Pervasive developmental disorder (PDD)	1	-	-	-	-	-	-	-
12. Conversion dis (including hyperventilation syndrome) disorder)	-	-	-	-	1	2	-	-
13. Enuresis	1	-	-	-	1	2	-	-
14. Substance use disorder	-	-	1	-	-	-	-	-
15. Other (including sexual problem, suicidal attempt, child rearing problem)	5	5	1	2	-	2	3	-
16. Child rearing or relationship problem	1	-	2	-	-	-	1	-
17. Learning disability	4	-	-	-	-	-	-	-
18. Normal or No diagnosis	2	2	2	-	-	-	2	-

Sources of referral

The referral sources were divided into two large group : doctor-referred and parent-referred.

The comparison was done between two group in term of demography, reasons for referral and psychia-tric diagnosis. (Table 4,5,6)

Table 4. Comparison of demographic data between different referral sources.

Demographic data	Dr.referred (n= 93)	Parent-referred (n=107)	t-test
1) Mean age	12 yr. 9 mo.	13 yr. 1 mo.	n.s.
2) Sex (M:F)	1.11:1	1.55:1	x ² test n.s.

Table 5. Comparison of Reasons for referral between different referral sources.

Reasons for referral	Dr. refered (n = 78)	Parent-referred (n = 82)	x ²
1. Intellectual	19.38 %	1.88 %	17.84***
2. Learning (including attention, school problem)	0.63 %	15.00 %	13.20***
*3. Behaviour (Conduct)	4.38 %	18.13 %	8.38**
4. Emotional	4.38 %	1.88 %	3.62
5. Somatic	11.25 %	1.88 %	6.70**
6. Suicidal attempt	2.50 %	0.63 %	ns
7. Habit (including feeding, sleeping, toilet training)	2.50 %	1.25 %	ns
8. Abuse	1.25 %	8.13 %	5.05*
9. Substance use	0.63 %	1.25 %	ns
10. Development (including language)	1.25 %	1.25 %	ns
11. Social relationship	0.63 %	-	ns

* P <.05, ** P < .01, *** P < .001

Table 6. Comparison of Psychiatric diagnoses between different referral sources.

Psychiatric Dx	Dr.referred (n=75)	Parent-referred (n=76)	χ^2
1. Conduct disorder, ADHD (including substance use disorder)	0.66 %	9.27 %	7.44**
2. Emotional disorder (including depression, anxiety, obsessive- compulsive disorder)	1.32 %	3.97 %	ns.
3. Mental Retardation, Pervasive developmental	19.21 %	7.28 %	5.04*
4. Habit disorder (enuresis)	1.32 %	1.32 %	ns.
5. Psychological factors affecting physical condition	1.32 %	-	ns.
6. Psychosis	4.64 %	2.65 %	ns.
7. Adjustment disorder	5.96 %	5.30 %	ns.
8. Abuse	1.32 %	9.93 %	6.93**
9. Organic brain syndrome	0.66 %	1.32 %	ns.
10. Conversion disorder (including	2.65 %	-	ns.
11. Other (including) sexual prob., suicidal attempt child rearing problem, no Dx.	10.60 %	9.27 %	ns.

*p < .05, ** p < .01

The total cases of the doctor-referred group in the year 1994 was 93 with the mean age of 12 years 9 month while the total cases of the parent-referred group was 107 with the mean age of 13 years 1 month. Using t-test two group were not different in mean age of referred. The sex ratio of doctor-referred group was 1.11 : 1 while it was 1.55 : 1 in parent-referred group. It was noted that adolescent boys outnumbered girls in both group. Using χ^2 test there were no significant difference in two group in term of sex ratio.

The comparison between two group in term of 11 reasons for referral has shown that there were significant difference at $P < .001$ using χ^2 test for 2 reasons which included intellectual and learning problems. It is noted that doctor referred more of intellectual problem while parents referred more of learning problems which included attention and school-related problems. The other 2 reasons for referral that were significantly difference at $P < .01$ between 2 group using χ^2 test were behaviour problems and

somatic problems. The data had shown that behaviour problems were the reasons for referral from parents more than doctor and doctor referred more somatic problems than parent did. There were also significant difference at $P < .05$ between 2 group using X^2 test for the problem of abuse in which the data had shown that doctor referred this type of problem less.

The psychiatric diagnosis among two group were compared by grouping into 10 diagnostic categories. There were significant difference at $P < .01$ when using X^2 test between two group for 2 diagnosis which were the group of conduct disorder and the problem of abuse in that the diagnosis of conduct disorder, attention-deficit-hyperactivity disorder (ADHD) and substance use disorder were diagnosed more in the parent-referred group than the doctor-referred group as well as the problem of abuse. Conversely the doctor-referred group were diagnosed mental retardation, pervasive developmental disorder and learning disabilities more than the parent referred group. (The difference was statistically significant at $P < .05$ using X^2 test.) Moreover it is noted that the diagnosis of psychological factors affecting physical condition and conversion disorder (including hyperventilation syndrome) were diagnosed only in the doctor-referred group. No cases was found in the parent-referred group.

Family function

Structure and function of the family was available in 81 cases. Family functioning was recorded as adaptive in only 19.7% (16 cases). The remainder can be described as abnormal structured and functioned families. Families with abnormal structure include death of parents,

parental divorce, reconstituted family and adoption. Other features related to abnormal structure were parental separation by work circumstance in which parents were working in different provinces or countries leading the children to be reared by only one parent, parental extramarriage and children who were not reared by parent (mostly reared by grandparents). Abnormal family functioning includes parental mental illness, mental health and related problem, physical abuse and marital discord. The details of each category are shown in Table 7.

Table 7. Categories of abnormal structured and function families (n=81).

Abnormal family structure	(n=37)	45.7 %
- Parental divorce	9	
- Death of parent	7	
- Reconstituted family	6	
- Not reared by parent	5	
- Parental extramarriage	4	
- Adoption	3	
- Parental separation by work	3	
Abnormal family function	(n=28)	34.6%
- Mental illness in family	15	
- Alcohol abuse	7	
- Depression dis	3	
- Psychosis	2	
- Anxiety dis	1	
- Intellectual problem	1	
- Homosexual	1	
- Mental health and related problems	13	
- Emotional parent (s)	6	
- Stress (e.g. insomnia)	4	
- Physical abuse	2	
- Marital discord	1	

July 1995

Intervention

The main therapeutic intervention used was combined individual and family therapy. Family were involved in most cases although few were having only family therapy without giving individual help. Individual therapy ranged from counselling to many forms of psychotherapy such as supportive, cognitive-behavioural psychotherapy. Group therapy was done in the group of sexually abused adolescent girls. Use of drugs were spared for certain diagnosis such as antipsychotics for psychosis, antidepressant for depression and enuresis and stimulants for attention deficit-hyperactivity disorder (ADHD). Multidisciplinary team involved in certain cases—psychologists with learning problems and social worker with social problems. Consultation with other professional was done which included contact with teacher in cases with learning problems and liaison with paediatricians for presence of physical problems.

Discussion

This study concerns a large sample of adolescent being served in a child psychiatric unit of one hospital over certain period of time. The findings need several interpretation and comparison with other studies either community or clinical samples. However the findings may give some clues for developing programs uniquely suited the adolescent years.

Adolescent years start from puberty and end at adulthood. In recent years the idea had been held that there is a trend of increasing years of adolescence which resulted from the earlier puberty and later adulthood status found in every society. The sample of this study covered the age range from 10 up. which reflect the

adolescent patients who came to child psychiatric clinic. Traditionally adolescent patients whose age are over 15 should go to see psychiatric in adult psychiatric clinic but in practice some of them and their families still wanted to attend child psychiatric clinic. This problem needs discussion about where they should go to—child psychiatric clinic, adult psychiatric clinic or special adolescent psychiatric clinic.

The data over ten-year period (1985-1994) had shown that the proportion of adolescent patients referred were increasing for the last 3 years. This warrant evaluation of services currently provided and plan for the future. As adolescent services are said to be marked by gaps and duplication⁽²⁰⁾, the assessment of need of special adolescent psychiatric clinic should be done. In general there are three ways of doing this which includes epidemiological studies in community, asking potential users of services what they want and looking at the types of request and referral actually made to services for adolescents. The findings from this study contributed to the last one.

Analysis of the age group of referred adolescents over ten year period had shown that the common age range referred was between 12-13 which is approximately around the age of puberty or adolescence. This age group represents the the time of many biological, cognitive, psychological and social changes.⁽¹¹⁾ It is therefore worth evaluating the problems concerned by the parents or doctor and the disorder found in this group of adolescents to plan whether this special age group should be best helped separately in a specialized adolescent unit with special service or continue being served in routinely child psychiatric unit and transfer to adult psychiatric

unit when growing up to the age of adult. Experience from seeing adolescents in child psychiatric clinic had shown that many adolescent patients reported feeling uncomfortable sitting in the waiting area with younger children. However many parents also reported anxiety when sitting with adolescents in adult psychiatry clinic. It seemed as if specialized adolescent clinic is useful and needed but before planning for one care should be taken in planning special service and intervention that will be beneficial to the group of adolescents extra to the routine service provided in child and adult psychiatry clinic.

The sex distribution of adolescent patients in the clinic is similar to other clinical and community studies with children and early adolescents in that boys outnumbered girls.^(2-4,10,18) It is interesting to note also that adolescent boys were referred at younger age that is 10-11 than adolescent girls (12-13 or 14-15). This finding correlates with the study of child psychiatric disorder from Ontario, Canada⁽⁶⁾ which showed that for the child age 4-11 there were boys more than girls having psychiatric disorder while there were more girls having psychiatric disorder than boys in the adolescents age 12-16. The data in the year 1994 about the mean age and sex ratio confirmed the mean age of 12 year which is in the early adolescent period. The sex ratio was the same as the previous years in that boys outnumbered girls in the ratio of 1.22 : 1. However this ratio is low when compared to the community data⁽¹⁰⁾ of 2 : 1 or more. The explanation that adolescent boys are referred less than adolescent girls even if they has more problems may be the answer.

Behaviour problems was the most common reason for referral to the unit. This is

consistent with the data drawn from several accounts concerning the types of disorder likely to be seen in a general psychiatric service for adolescents⁽²¹⁾ However the proportion is lower (20% comparing to 30% in most studies). This may reflect the tolerance of Thai parents or their knowledge of access to psychiatric service. In addition the high percentage of intellectual and learning problems compared to other studies may be related to the lower proportion of behaviour problems in explaining that Thai parents concerned more with academic achievement than day to day misbehaviour. This explanation may be the right answer but needs careful scrutiny as the fact that intellectual problems is still the real important problem of the country. The somatic complaints constituted an important proportion reason for referral. This is understandable that adolescents and their family used this complaints as an "admission tickets" for the access of service based in hospital setting. Moreover the high frequency of this complaint compared to the studies in the West confirmed the idea that has been held that Asian people tended to "somatize" more but expressed feelings less. This last notion is also supported by the data that the emotional problems was not the common reason for referral in this study and the previous one done in the group of in-patient.⁽²³⁾ Finally the explanation of the overrepresentation of the problem of the abuse as reason for referral was the good relationship and collaboration between the unit and the non-government organizations (NGO) concerning with this problem. The details of this particular problem will be reported elsewhere.

It is also interesting to look at the reasons for referral in term of sex and age range. Behaviour problems is considered less important in

July 1995

girls while the somatic complaints became more important. In the same direction the data had shown that all cases of abused were girls while all cases of drug abuse were boys and there were more girls than boys attempted suicide. One of the explanation for all those results would be the different outlet or ways of showing distress between sex in that boys will show misbehaviour while girls need to be submissive, repressed emotion and ended with somatic symptoms. This difference is confirmed by the community study that boys often have externalizing problem while girls often have internalizing problem.⁽¹⁰⁾

The high proportion of intellectual and learning problems can be explained in term of age range in this study. As this study included patient from age 10 according to the age limits of 10-19 years in the definition of adolescence, as recommended by the World Health Organization⁽²⁴⁾, the high proportion of younger age group in the results made the intellectual and learning problems become common. It is seen that in the older age group in the study the behaviour problems become more common. The high proportion of younger age group may also explained the low rates of emotional problem, suicidal attempt and substance use.

Mental Retardation was the most common psychiatric diagnosis. This is consistent with the reason for referral and confirmed that intellectual problem is a real important problem. Most cases referred can not be diagnosed according to psychiatric classification. These cases grouped into other problems. This result is interesting in planning the service. The large number of cases in this group as well as the large number of cases diagnosed as adjustment disorder pointed out

that clinic were dealing with mild cases without definite psychiatric disorder and therefore family and social factors should be looked for when assessing the case as well as early intervention and prevention of future damage. However the psychiatric diagnosis categories of psychosis, attention-deficit disorder with hyperactivity and depression comprised a certain amount of cases. This is important because this group of diagnosis categories were considered close to "disease" in that drug treatment can help to improve the problem. Considering the commonest of behaviour problems for the reasons for referral and the psychiatric diagnosis labelled it can concluded that the problemed behaviour that adolescents referred to the clinic have can be divided into the first group of mild problems not warranted psychiatric diagnosis but worth helping to prevent future damage and the second group of definite psychiatric disorder with certain specific psychiatric treatment such as pharmacotherapy. The severe and hopeless cases of conduct disorder were seen less. However this specific category may be seen elsewhere in other setting such as community child psychiatric clinic or court in the same way as conversion disorder would be seen more in paediatric setting.⁽²⁵⁾

In general adolescents referred for psychiatric help may be classified into three main groups : serious psychiatric disorders which are found in a minority of referred young people, disorders of mood and behaviour which are problematic, but which fall short of serious psychiatric disorder which are common and are strongly influenced by family and social factors and lastly transient reactions to adverse circumstances which take the form of mild deviations from the norm.⁽²⁴⁾ The results of this study con-

firmed this idea. In addition it also guided to the idea whether we should continue to serve these first two groups in our clinic or would rather change to serve only the first group and leave the second group to other professionals involved by developing good programmes such as consultation, mental health education. There were controversies on type of adolescent services. The one emphasis on "majority consumer group" conduct problems rather than the less common psychoses and the one which is limited to certain group but coherent approach.⁽²⁰⁾ The choice of type if the unit aims to set a special adolescent clinic in the future depends on the personnels and the intervention given as well as the other professional networks dealing with adolescents.

The contribution of sex and age range to psychiatric diagnosis is worth discussing. The result that showed that adolescent boys outnumbered girls in the diagnosis of attention deficit hyperactivity disorder (ADHD), conduct disorder and substance abuse is consistent with the large sample community study in U.S.A.⁽²⁵⁾ The larger numbers of adolescent girls while no adolescent boys diagnosed as abuse is understandable as well as the explanation for girls more than boys being diagnosed as conversion disorder which is consistent with more somatic complaints as reasons for referral in girls. The equal proportion of boys and girls for the diagnosis of depression may also contribute to this result by the notion that Thai female adolescents somatized distress than showing depressive feelings. In addition age group may be another factor involved. The study in U.S.A.⁽²⁵⁾ had shown that major depression shows a pattern suggestive of a role for the onset of puberty. The result that depression were found in older age group confirmed this trend. For the

younger age group the diagnosis attention deficit hyperactivity disorder is marked especially in adolescent boys who in general reach the stage of puberty later than girls.

The comparison of doctor-referred and parent-referred group for the reasons for referral has shown that even if parents and doctors were equally interested in cognitive aspect by parental concern with learning problem and doctor's concern with intellectual problems parents concerned and referred more behavioural problems while doctors concerned and referred more of somatic problems. This result is similar to the study in Hong Kong⁽²⁶⁾ which stated similarly that parents worried most about the conduct problems of their children, while doctors were concerned by somatic complaints. The knowledge learned from this result will affect health and public education policy that doctors especially paediatricians should be told to be interested in the problemed behaviour of the adolescents in addition to their physical health while the parents should be taught to know that children and adolescents can show their distress through physical symptoms.

Psychiatric diagnosis compared between the two group showed consistent result as the reason for referral that adolescents in the parent-referred group had been diagnosed conduct disorder more than the doctor-referred group. The diagnosis of mental retardation, pervasive developmental disorder and learning disabilities were made in the doctor-referred group more than parent-referred group. This may show that the doctors had good knowledge and precise prediction of these disadvantaged adolescents while parents, even referred many learning problems, the real diagnosis are diversified. The lower

July 1995

number of abused cases in the doctor-referred group may be explained by the high number of cases referred to the unit from non-government organization. However the need to educate doctors about the problems of abuse should not be overlooked. The two diagnosis found to be significant difference between the two groups in Hong-Kong studies⁽²⁶⁾ - psychosis and psychophysiological disorder were not differed significantly in this study. However psychosis were diagnosed more in the doctor-referred group, being in the same direction as in Hong-Kong. Psychological factors affecting physical condition were also diagnosed more in the doctor-referred group. In fact no case of psychological factors affecting physical condition as well as conversion disorder was diagnosed in the parent-referred group. This is understandable in the route in which these kinds of patients always reached paediatricians before child psychiatrists

Family plays an important role in adolescents as well as children. The survey of school counselling services in Bangkok⁽²⁷⁾ had shown that school counselors thought that family conflict was the most frequent problems in adolescent student. The community study in Lopburi⁽¹⁰⁾ had shown that marital status of parents and pattern of child rearing were significantly associated with behaviour problems. In this study abnormal structured and functioned families was found 81%. Abnormal family structures found in decreasing order were parental divorce, death of parent, reconstituted family, not reared by parent, parental extramarriage, parental separation by work. Abnormal family function includes mental illness and mental health related problems. Alcohol abuse was the most frequent problem. The other mental illness found in decreasing

order were depressive disorder, psychosis, anxiety disorder, intellectual problem and homosexual. Apart from mental illness, other related mental health problems are important. Certain amount of parents described themselves as being emotional and lot of them were under stress such as from work and showed signs such as insomnia. Severe physical abuse and marital discord were found only in few cases but mild forms of these problems were distributed in many cases.

Given the major contribution of the family to problemed adolescents it is understandable that combined individual and family therapy was the most frequent intervention. Other kinds of treatment such as drug treatment, group therapy and consultation were tailored to the individual diagnosis.

It is acknowledged that this kind of study has a limit in that it is specific in certain service in certain period of time. However the results may give useful idea and concept as well as certain suggestion for future studies and practice in the field of adolescent psychiatry.

The future of adolescent psychiatry in the U.K. was studies in the context of the changing concept and connotations of adolescent, the history and present position of adolescent psychiatry, and the rationale for separate services. Predictions were derived using trend extrapolation in relation to a number of factors likely to determine the future which included the social value attached to adolescence and youth, the status of adolescent medicine, the definition of clinical boundaries, the upper age-limit of services, investment in prevention, postgraduate training, research, the evaluation and marketing of adolescent psychiatry and its recognition as a separate subspecialty. The conclusions of the results of pre-

dictions suggest that adolescent psychiatry will assume an expanding clinical role and increasing academic influence in the 21st century.⁽²⁸⁾

Adolescent psychiatry in Thailand is still in an early state. However the future development of it as a sub-specialty should move in the same direction as the rest of the world according to the concept of globalization. The results of this study had shown the variety of reasons for referral, diagnosis and intervention traditionally used for adolescents in a child psychiatric unit. The future studies should include the epidemiological studies of psychiatric problems in the community, the basic information and knowledge about existing services for adolescent, the routes to psychiatric and other help or agencies referring the patients and the studies of views of families and adolescent using these services. In practice the trust between different practitioners and agencies is an important thing to be established. The trends in adolescent psychiatry in the developed countries is pointing to more work in community and pushing back from highly technical special specialists, emphasizing help on a consultative basis. This leads to the reappraisal of the core function of psychiatric practice and the evaluation of the role of adolescent psychiatrists. The result of wide range of problems referred, psychiatric diagnosis and intervention in this study suggest that if a specialized adolescent clinic or unit is to be set (which in fact it should) in the future, goals should be made to cover the group of adolescents who need specific treatment expertise of psychiatrists such as drug treatment in depression, psychosis and ADHD, crisis intervention for suicidal adolescents and group treatment for sexual abused cases. However good assessment and treatment should be done in every

cases either in the unit with the multidisciplinary team (such as psychologists, social worker) or on the consultation basis with the personnels in the education system (teacher) and social agencies. This model of work is recommended to be suitable to give help to a large number of troubled adolescents effectively.

It has been stated that the preparadigmatic state of adolescent psychiatry has to be recognised and accepted if progress is to continue successfully.⁽²⁸⁾ In addition the position of children and adolescence in society is an important subject and put developments in adolescent psychiatry into perspective. The fact that as child health measures ensure that most children reach puberty, the quality of adolescent life assumes greater importance and the role of psychological medicine increases correspondingly.

Summary

This study revealed patterns of reasons for referral, psychiatric diagnosis and intervention for adolescents referred to child psychiatric clinic. The comparison of sources of referral as well as family factors involved were also included to show the picture of a subgroup of adolescent psychiatry.

A model for adolescent psychiatric services as well as future research needed were recommended to get along with the future trend of adolescent psychiatry in the rest of the world.

References

1. Wieselberg M. Classification and epidemiology. In : Black D, Cottrell D, eds. *Seminars in Child and Adolescent Psychiatry*. London : Royal College of Psychiatrists, 1993 : 65-9

July 1995

2. Graham P, Rutter M. Psychaitric disorder in the young adolescent, a follow-up study Proc R Soc Med 1973 Dec; 66(12): 1226-9
3. Leslie S. Psychiatric disorder in the young adolescents of an industrial town. Br Psychiatry 1974 Aug; 125(2):113-24
4. Rutter M, Graham P, Chadwick L, Yule W. Adolescent turmoil : fact or fiction? J Child Psychol Psychiatry 1976 Jan; 17(1):35-6
5. Feldman R & Stiffman A. Mental health disorder in adolescence : issues and prospects. In : Feldman R & Stiffman A. (eds) Advances in Adolescent Mental Health. Greenwich, CT; JAI Press, 1986: 1-18
6. Offord DR, Boyle MH, Szatmari P, Rae-Grant NI, Links PS, Cadman DT, Byles JA, Crawford JW, Blum HM, Byrne C. Ontario child health study II. Six month prevalence of disorder and rates of service utilisation. Arch Gen Psychiatry 1987 Sep; 44(9); 832-6
7. Krupinski J, Baikie AG, Stoller A, Graves J, O' Day DM, Polke P. A community mental health survey of Heyfield, Victoria. Med J Aust 1967 Jun 17; 1(2): 1204-11
8. McGee R, Feehan M, William S, Partridge F, Silva PA, Kelly J. DSM-III disorders in a large sample of adolescents. J Am Acad Child Adolescent Psychiatry 1990 Jul; 29(4): 611-9
9. Lavik N. Urban-rural differences in rates of disorder. A comparative psychiatric population study of Norwegian adolescents. In : Graham P, ed. Epidemiological Approaches in Child Psychiatry. London : Academic Press, 1977 : 223-51
10. Mumbansao P. Behaviour problems in adolescence secondary school under department of general education. Lopburi province. 1994 MSc. Thesis Department of Psychiatry, Graduate School Chulalongkorn University, 1994
11. Rutter, M. Changing patterns of psychiatric disorders over adolescence. In Bancroft J, Reinisch J, eds. Adolescence. Oxford: Oxford University Press,
12. Weiner IB, Del Gaudio AC. Psychopathology in adolescence : an epidemiological study. Arch Gen Psychiatry 1976 Feb; 33(2):187-93
13. Loranger AW, Levine PM. Age of onset of bipolar affective illness. Arch Gen Psychiatry 1978 Nov; 35(11):1345-8
14. Lewinsohn PM, Duncan EM, Stanton AK, Hautzinger M. Age at first onset for nonbipolar depression. J Abnormal Psychology 1986 Nov; 95(4):378-383
15. Hawton K, O' Grady J, Osborne M, Cole D. Adolescents who take overdoses : their characteristics, problems and contacts with helping agencies. Br J Psychiatry 1982 Feb; 140:118-23
16. Abe K, Masui T. Age-sex trends of phobic and anxiety symptoms in adolescents. Br J Psychiatry 1981 Apr; 138:297-302
17. Rapoport J. Obsessive-compulsive Disorder in Children and Adolescent. Washington. DC: American Psychaitric Press, 1989.
18. Rosen BM, Bahn AK, Shellow R, Bower EM. Adolescent patients served in out patient psychiatric clinics. Am J Public Health 1965 Oct; 55(10):1563-77

19. Wing JK, Fryers T. Psychiatric Services in Camberwell and Salford : Statistics from the Camberwell and Salford Psychiatric Registers 1954-1974. London : Institute of Psychiatry, 1976
20. Steinberg D. Adolescent Services In : Rutter M, Taylor E, Hersov L, eds. Child and Adolescent Psychiatry Modern Approaches 3rd ed. Oxford : Blackwell Scientific Publications, 1994 : 1006-22
21. Steinberg D. Basic Adolescent Psychiatry. Oxford : Blackwell Scientific Publications, 1987
22. American Psychiatric Association-Diagnostic and Statistical Manual of Mental Disorder. 4th ed. Washington DC : 1994
23. Wacharasindhu A. Patterns of inpatient referral to a child psychiatric service. Chula Med J. 1992 Aug; 36 (8) : 601-610
24. Steinberg D. Adolescent psychiatry. Med Int 1991; 4(16):3963-7
25. Cohen P, Cohen J, Kasen S, Velez CN, Hartmark C, Johnson J, Rojas M, Brook J, Steuning EL. An epidemiological study of disorders in late childhood and adolescence - I. Age-and Gender-Specific Prevalence. J Child Psychol Psychiatry and Allied Disciplines. 1993 Sep; 34(6): 851-67
26. Chung SY, Luk SL, Soo J. Comparison of parent-referred and doctor-referred patients to child psychiatrists in Hong Kong : a research note. J Child Psychiatr Psychology Allied Disciplines 1990 Sep; 31(6): 993-9
27. Kasantikul D, Worakul P, Sugkondhabirom B. Counseling services for adolescent students in the Bangkok metropolis - A pilot study. Chula Med J 1986 Aug; 30 (8) : 731-8
28. Parry-Jones W LL. The future of adolescent psychiatry. Br J Psychiatry 1995 Mar; 166(3): 299-305