Edited by P. Pichot, P. Vernar, R. Wolf and K. Thau (Plenum Publishing Corporation, 1985)

MENTAL HEALTH SCREENING OF CHILDREN IN JAPAN

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With the use of a computerized system we have carried out two projects on Mental Health Screening of Children since 1975: "Health examination of 10,000 three-year-old children", and "Follow-up study of two cohorts of children from the age of three to their entrance of elementary school". In this paper we would like to present several interesting results and discuss the advantage of the longitudinal periodic health examination and certain desirable health-records keeping methods for study of health and mental health of children.

1) Results from a survey on use of medical services in Chiba

A survey was conducted in Chiba prefecture on the number of children of different age who consulted doctors on a given day in 1978. Of the 166,490 individuals (440 per 10,000) who consulted doctors in 2014 medical institutions or doctor's offices in Chiba Prefecture, those under 12 years of age were 42,527, representing 27 percent of the total consultations. Among them, 3.4 percent were under 1 year old, 9.5 percent between 1 and 3 years old, and 6.8 percent between 4 and 6 years old. The total of preschool children thus accounted for 20 percent and elementary school children formed 7.7 percent of all consultations.

2) Health examination of 10,000 three-year-old children

Health examination of 10,000 three-year-old children revealed that 14.2 percent of the three-year-olds suffer from some kind of physical and/or psychiatric ailments of varying severity requiring the attention of specialists. As shown in Table 1, those clearly diagnosed as physical disorders were 52 (0.7%) and psychiatric disorders were 90 (1.1%) the majority of which suffered from mental retardation. 2.7 percent of all

children examined were mildly mentally retarded, 1.7 suffered from mild motor dysfunction, 2.5 percent had emotional disorders, 4.6 percent had physical ailments, and 4.1 percent were over or underweight.

3) Follow-up study of the children from the age of three to their entrance of elementary school

We made 3-year follow-up studies on two samples at 3 years of age and 6 years of age, as shown in Table 2. Of the three-year-old children, those clearly diagnosed as having physical and/or psychiatric disorders were 3.7 percent in 1976 and 3.5 percent in 1977. When we compared these results to those of follow-up health examinations three years later, we found a considerable difference between them. Those diagnosed as physical and/or psychiatric disorders increased from 3.7 percent to 4.3 percent for Sample I and from 3.5 percent to 4.1 percent for Sample II. The Marked decrease of physical disorders in both samples, from 2.2 percent to 1.1 percent for Sample I and from 1.8 percent to 0.9 percent for Sample II is in striking contrast to the doubling of the prevalence rates of psychiatric disorders, from 1.5 percent to 3.0 percent in Sample I and from 1.3 percent to 3.0 percent in Sample II. While mild motor and physical problems decreased over 3 years in both samples, emotional disorders, weight problems and mild mental retardation increased dramatically in both samples.

These results may be understood by the fact that physical problems discovered by the health examinations of the 3-year-old children have been treated successfully. But the psychiatric or emotional problems have not only been handled ineffectively, they have increased with the advance of age probably due to either increased awareness on the part of the parents or increase of stress in family or kindergarten.

4) Study on the response of family to children with physical and/or psychiatric disturbance

We have followed up 113 cases of all children diagnosed as physical and/or psychiatric disturbances following the medical examination conducted by us. 60 children out of 113 cases were with psychiatric disturbances and 53 with physical problems.

Table 3 shows a marked difference in the age of discovery of physical disorders versus psychiatric disorders. 75 percent of children with physical disturbances were discovered under the age of three, in contrast to only 20 percent of children with mental disorder including mental retardation. 80 percent of the latter were found at the age of four or older. The lack of awareness regarding children's mental functioning is

noteworthy.

Table 4 shows that mothers take a lead in finding their children's problems with physical and psychiatric disturbance. However, the fathers account for only about 5 percent, a dismal figure, which may be an indication of their relative lack of contacts with children of these ages. In cases with physical problems, medical personnel such as specialists, home doctors and public health nurses, account for 43.5 percent. In cases with psychiatric problems, however, medical staff account for only 12.5 percent. It should be noted that 33 percent of the cases with psychiatric problems were not noticed by anyone including mother, any member of the family, or medical people, while every physical problem was accounted for by them.

How did family members regard their children's abnormality? The family members' attitude toward their children with physical problems differs greatly from those with psychiatric problems. In cases with physical problems, those who "found their children's abnormal signs in its early stage" accounted for 35.9 percent. Those who "found their children strange, not corresponding to the normal development" were 35.9 percent, and those who "felt strange without knowing why" were 34 percent. There were only a few family members who refused to acknowledge their children's abnormality and considered that their children with physical problems" could not yet acquire daily practice or "were just a baby and too immature" or "were restless and short-tempered".

The situation was quire different in the cases with psychiatric problems. On the one hand relatively few family members discovered their children's abnormality. Those who "found their children's abnormal signs in the early stage" accounted for only 7.5 percent, whose who "found their children strange, not corresponding to the normal development" were 7.5 percent. On the other hand, many family members did not acknowledge their children's abnormality and tried to trace their abnormality to different origins. Those who thought their children with psychiatric problems only "were slow learners" accounted for 77.5 percent, those who thought their children "could not acquire daily life skills" formed 57.5 percent. It seems that the Japanese family finds it difficult to recognize the signs of psychiatric disturbances or mental retardation in children. This difficulty seems to be reinforced by the traditional stigma against mental disorders that still prevails in Japan. Many family members refused to admit the presence of signs of psychiatric disturbances or mental retardation in their children and tend to seek other explanations for the abnormality. This results in their contrasting attitudes to the children with physical versus psychiatric problems as well as the patterns of seeking help to solve the problems.

Table 5 shows that about 57 percent of all cases with physical ailments consulted a doctor immediately, 20 percent consulted special public institutions such as Child Consultation Center or Public Health Center. For the cases with psychiatric disorders, however, 25 percent of children did not receive any help from anyone or any agency. Only 15 percent of them "consulted school or kindergarten teachers" and 12.5 percent consulted doctors.

Table 6 shows that only 26.4 percent of children with physical disability are attending regular elementary schools, in contrast to 71.9 percent of children with psychiatric problems that are in the school. 34 percent of children with physical problems are in hospital care and 39.6 percent in welfare institutions for the handicapped, as compared to only 1.7 percent of children with psychiatric problems who are cared for in hospitals and 26.7 percent in welfare institutions for long-term care. These figures clearly indicate the lack of public interest and lack of public resources for care of children with psychiatric problems in Japan, while the family and the regular school are left with the burden of providing care for them.

Discussion

In Japan the health examination system for children is now established firmly and put into practice nationwide. It is conducted for neonates, children under the age of one, one and a half, three, before entrance of elementary school, and school children. At present, however, health examinations are performed without uniformity or continuity. Each physician or public health officer uses his or her own methods and there is no provision for keeping he records the same child systematically for a long period of time. Furthermore, there seems to be very little attention given to psychological, mental or social aspects. We strongly advocate a comprehensive and longitudinal health examination system for all children at various ages of their development. The recent advance in computerized record-keeping technique and its availability and economy certainly will make such an important health examination system within the reach of many who are concerned and interested in the wholesome growth and development of children in Japan and elsewhere.

The marked differences observed between physical and psychiatric problems of children in a number of important aspects deserve special attention. The physical disorders are recognized earlier by the family and are better taken care of by specialized care programs or institutions, while psychiatric disorders of mental retardation tend to come to the attention of their parents and other family members late and receive little special care. The prevalence rates of the children with physical problems decrease to

half in three years in both Samples, I and II, while those of children with psychiatric problems rose in the same periods – speaking eloquently of this desparate attitude and handling by the family and society of these two categories of children's problems.

Table 1: Type of Physical and/or Psychiatric Disorders
(Health examination of 10,000 three-year-old children)

YEAE 1978 N=7,950		
Physically and/or Psychiatrically ill	195	2.5%
Physical Disorders	52	0.7%
Psychiatric Disorders	90	1.1%
Others	53	0.7%
Mild Mental Retardation	215	2.7%
Mild Motor Dysfunction	135	1.7%
Mild Emotional Disorders	199	2.5%
Mild Physical Ailment	366	4.6%
Weight Problems	326	4.1%
Result of First Step Screening	1,158	14.6%

Table 2: Three Year Follow-up of Three Year Olds
(Medical examination of 10,000 three year-old children)

	SAMPLE I					
	Three-Year	-Old	School Age			
YEARE	1976		1979			
TOTA NUMBER OF CHILDREN	544		532			
	No.	%	No.	%		
Physically and/or	21	3.9	23	4.3		
Psychiatrically ill						
Physical Disorders	12	2.2	6	1.1		
Psychiatric Disorders	8	1.5	16	3.0		
Others	1	0.2	1	0.2		
Mild Mental Retardation	9	1.7	20	3.8		
Mild Motor Dysfunction	8	1.5	4	0.8		
Mild Emotional Disorders	5	0.9	7	1.3		
Mild Physical Ailment	24	4.4	12	2.3		
Weight Problems	23	4.2	33	6.2		
Result of First Step Screening	84	15.4	86	16.2		

	SAMPLE II			
YEARE	197		1980	
TOTAL NUMBER OF CHILDREN	545			533
	No.	%	No.	%
Physically and/or	19	3.5	22	4.1
Psychiatrically ill				
Physical Disorders	10	1.8	5	0.9
Psychiatric Disorders	7	1.3	16	3.0
Others	2	0.4	1	0.2
Mild Mental Retardation	9	1.7	19	3.6
Mild Motor Dysfunction	7	1.3	3	0.6
Mild Emotional Disorders	4	0.7	6	1.1
Mild Physical Ailment	16	2.9	16	3.0
Weight Problems	20	3.7	39	7.3
Result of First Step Screening	71	13.0	83	15.6

Table 3: Time of Discovery

	Physical		Phychiatric	
Subjects	Disturbance		Disturbance	
·	53		60	
	3	5.7%	0	
	6	11.3%	. 0	
	10	18.9%	3	5.0%
	15	28.3%	5	8.3%
	6	11.3%	8	13.3%
	3	5.7%	9	15.0%
	1	1.9%	1.3	21.7%
	1	1.9%	2	3.3%
	8	15.1%	20	33.3%
	Subjects	Subjects Distu 53 3 6 10 15 6 3 1 1 1	Subjects Disturbance 53 3 5.7% 6 11.3% 10 18.9% 15 28.3% 6 11.3% 3 5.7% 1 1.9% 1 1.9%	Subjects Disturbance Disturbance 53 60 3 5.7% 0 6 11.3% 0 10 18.9% 3 15 28.3% 5 6 11.3% 8 3 5.7% 9 1 1.9% 13 1 1.9% 2

Table 4: Discoverer of Children's Problems

	Physical		Psychiatric	
Subjects	Distu	rbance	Distur	bance
Discoverer	53		60	
Mother	18	34.0%	21	35.0%
Father	13	5.7%	3	5.0%
Grandparents	0		3	5.0%
School Teacher	2	3.8%	4	6.7%
Home Doctor	4	7.7%	2	3.3%
Medical Specialist	15	28.3%	2	3.3%
Public Health Nurse	4	7.7%	1	1.7%
Others	4	7.7%	2	3.3%
Not noticed	0		20	33.3%

Table 5: Help-Seeking: Consultations and Treatment

	Phys	sical	Psychiatric	
Subjects	Disturbance		Disturbance	
Adviser	53		40	
Home Doctor	4	7.6%	2	5.0%
Medical Specialist	26	49.1%	3	7.5%
Child Consultation Center	6	11.3%	6	15.0%
Public Health Center	4	7.6%	2	5.0%
Social Welfare Office	1	1.9%	1	2.5%
School or Kindergarten Teacher	2	3.8%	6	15.0%
Other Families	10	18.7%	10	25.0%
None	0		10	25.0%

Table 6: Institutional Care at School Age

	Physical Subjects Disturbance		Psychiatric Disturbance	
Subjects				
Treatment	53		60	
Child Welfare Institution	21	39.6%	16	26.7%
Hospital	18	34.0%	1	1.7%
Elementary School	14	26.4%	43	71.7%