

Activity Report

## The past decade of the Aino Disabled Children's Center

Seiichi TSUDA *Department of Occupational Therapy, Faculty of Nursing and Rehabilitation, Aino University*

### Abstract

I have been working as a director of the Aino Disabled Children's Center for the past decade. This center was founded 20 years ago to support the physiological growth and social development of disabled children. I would like to report on the achievements of the center during this past decade, and on the activities of the institute in the last year.

**Key words:** disabled children at preschool age, rehabilitation (treatment and care), drastic measure step.

### 1. Introduction

I have been serving as a director at the Aino Disabled Children's Center since 1st Aug, 1986. This center was established as a part of The Aino Social Welfare Foundation.

On 1st Aug, 1986 this center obtained permission to act as a child welfare institute under medical social insurance (second class of physical therapy and occupation therapy).

The purpose of this center is to support the physiological growth and social development of disabled children at pre-school age. These days, early treatment and care as soon as possible after birth must be made available.

From 1951, compulsory school services for weak children were enforced.

Recently, the positive promotion of disabled child care at kindergartens and day care centers has been promoted. In this situation, I would like to point out the following 2 themes that have been the objectives of this center since its establishment.

1) This center plays an important and central part in the treatment and care of disabled children in the Hokusetsu area.

2) All the staff improve and upgrade their professional skills for the treatment and care of disabled children.

These 2 objectives have been the policy of the center, and have already permeated all staff levels, I believe that this center has been

enjoying high levels of achievement. This center is located in the middle of the Hokusetsu area, and is serving as an important facility for the area.

Herewith, I would like to reflect on the developmental time course of this center from its opening 2 decades ago, hoping that this overview becomes a basis for further advancement of the institute in the next decade.

Along with changes in the methods of treatment and care for disabled children, and changes in government policy and the education system, it is important to reconsider about the present practice, and discuss the future direction of this center.

Recently, some disabled children go to day care centers with healthy children, and day care centers with wonderful results. But I believe firmly that this center is well equipped to give disabled children the highest levels of treatment and care available.

Aino Disabled Children's Care Center has greatly contributed to the welfare of disabled children in the Hokusetsu area, and will continue to play an active and initiative role in the future in this area.

### 2. Outline of the center

- ① Name of institution: Aino Disabled Children's Center
- ② Class of institution: Outpatient clinic for

- disabled children
- ③ Location : 39-4-1 higasioda, Ibaraki city
- ④ Opening day of institution : 1st Aug, 1986
- ⑤ Category of institution : Aino Social Welfare Corporation
- ⑥ Ground area : 3,030.03m<sup>2</sup>
- ⑦ Floor space of building : 674.69m<sup>2</sup>
- ⑧ Capacity : 40 disabled children

### 3. Objective

Aino Disabled Children's Center is an out patient clinic under the child welfare law for disabled children provided by Aino Social Welfare Corporation.

Disabled children before entering primary school are given treatment and care at this center, and have a wide variety of experiences by making many friends with children with similar disabilities. We assist them for the promotion of the effects of treatment and care.

### 4. Staff

Table 1 All staff

Title of staff	Number
Chief (doctor) (orthopedist)	1
Part-time doctor (pediatrician)	4
Physical therapy	4
Occupational therapy	4
Nurse	1
Kindergarten teacher	3
Driver	1
Office worker	1
Cook	3

Table 2 Daily program

Time	Content
A. M 8:00	Children start arriving at the center bus
A. M 9:00	Check of vital signs
A. M 9:15	PT, OT exercise • Care
A. M 10:20	
	Toilet and move
A. M 10:35	PT, OT exercise • Care
A. M 11:50	
	Toilet and preparation for lunch
P. M 12:00	Lunch , brush teeth and free play
P. M 1:00	
P. M 1:00	PT, OT exercise • Care
P. M 2:00	
	Toilet and move
P. M 2:10	PT, OT exercise • Care
P. M 3:00	
P. M 3:00	Children go home
P. M 3:00	Case meetings and reports
P. M 4:30	Cleaning and sterilization of rooms

## 5. Report of last year's activities

### 1. Contents at Aino Disabled Children's Center

#### 1) Clinic

Children are referred from near by clinics, hospitals and public health centers. We correspond to all children by a method of subscription (Orthopedic, Pediatric, Neurology.)

#### 2) Treatment (O. T & P. T) and care (to take a drastic measure step)

As a rule, children attend this center with parents every day.

The capacity of children is 40.

Age is from 0 to 6 years old.

Location: No restrictions apply, but most children come from Ibaraki and Takatsuki city.

Nursing class: 「usagi class」 ~ many serious middle children in the morning. 「panda class」 ~slightly symptomatic children in the afternoon class.

These children go side by side every day to nursery or kindergarten.

#### 3) Outpatient class

##### (1) PT • OT exercise

After the Dr has examined each child, PT • OT exercise starts.

This exercise is performed in relation to age, and a fixed training course of the center is followed.

##### (2) Exercise and care of children with Down's syndrome.

We perform PT • OT exercise and care on an out patient.

Location: Hokusetsu area.

##### (3) Care of outpatients (kopanda class)

This class of children has mental disturbances (small group).

### 2. New program undertaken last year

1) Our center held a special attendance day for gathering information on social needs.

2) Our center has taken charge of the position of the secretariat of the 14th Kinki Area Disabled Children's Association. This seminar proved successful.

3) Production of a new pamphlet about developmental consultation.

This pamphlet was sent to Osaka Medical College and the public health centers (Ibaraki, Takatsuki).

### 3. Clinical departments

#### 1) Orthopedics

In response to need.

- (1) Need for brace, and check up.
- (2) Need for X-ray, and check up.
- (3) Preparation of medical certificates (medical certificate, need for brace, schedule for drastic measure step, development of disabled persons' handbook etc.).
- 2) Pediatrics and neurology consultation  
We have a consultation 4 times a month.
  - (1) We order various kinds of test (EEG, CT, MRI, Echo, etc.).

Table 3 Number of new patients (out patients) in 2004

The total number	51
New drastic measure step	4

Table 4 Number of patient diseases

Name of disease	Number
Cerebral palsy (C. P)	12
After encephalitis palsy	4
Syndrome (chromosomal abnormality)	5
Arrested development	13
MR • PDD • ADHD	8
Down's syndrome	6
Only contact	3
Total	51

Area	Number
Ibaraki	33
Takatsuki	15
Kobe • Kameoka • Osaka city	3
Total	51

- (2) Program of medicine.
- (3) We refer children to other hospitals.
- (4) Guidance for taking care of children, and on their living environment.
- (5) We have a conference on information on new drastic measure step children, consultations about medical treatment, exercise, and care, but children take a developmental age test at the child guidance center.

#### Collaborative institutions

- (1) Dentist (including feeding technique):  
Osaka Medical College and Osaka Medical Disabled Children's Dentist.
- (2) Speech therapist (communication, feeding,): Osaka City General Hospital.
- (3) Epilepsy : Osaka Medical College.
- (4) Otorhinolaryngology : Osaka Medical College.
- (5) Ophthalmology : Osaka Medical College, Yosihara Clinic, Osaka City General Hospital.
- (6) Urology : Osaka City General Hospital,

Osaka Medical Center for Maternal and Child Health.

#### 4. Role of nurse

- 1) Check of vital signs.

After arriving at our center, the mother checks the temperature, situation of sleep, humor, appetite and nurses should consult the doctor every day.

- 2) Check on degree of growth.

- Measure body weight (as a rule once a month), height, girth of the chest, and circumference of head (at birth and at 6 months post birth).

- Time of check depends on the needs of the child, and doctors should be consulted in cases where growth is abnormal.

- As the growth factor differs by basic disease, we advise parents not to be anxious about the data.

- 3) Mothers record the life rhythm and quantity of nutrition ; this record is based on the doctor's instruction.

- 4) For children with a high risk of swallowing disorders, we check them using a pulse-oxymeter during mealtimes.

We check posture during mealtimes and post mealtime.

- 5) Dental check.

Under the guidance of a dentist, individual children are instructed on how to clean their teeth. Mothers also learn the techniques.

- 6) Otorhinolaryngological check.

This check was performed by otorhinolaryngologists at Aino hospital last year and this year. Doctor instruct on methods of aspiration, how to clean a child's ears and nose.

- 7) Food allergy.

Pediatricians consult parents on blood tests and contraindication foods in cases of severe food allergy, or for child with asthma or skin problems.

#### 5. Maneuver for accidents

- (1) We prepare emergency supplies, and provide emergency examination and treatment through instruction by a doctor.

- (2) We communicate with collaborative hospitals at the time of an emergency.

- (3) Children with heart diseases and disease of the respiratory organs are common in this center. When these children catch a cold, this may cause severe respiratory symptom, so we always check vital signs

and spo2 for early discovery, and contact the corresponding hospitals.

#### 6. Instruction for the parent

(1) Instructions on how to deal with emergencies, such as practices using a doll on cardiac resuscitation and artificial respiration (mouth to mouth method etc.).

(2) We practice methods to deal with difficulty in swallowing on a case by case basis with a doctor.

(3) Parents practice how to use an inhalation unit and aspirator by instructor demonstration.

(4) Life saving staff teach resuscitation techniques to our staff and parents.

#### 7. Problems concerning infectious disease (important problem at our center)

(1) As the children of this center are more and more severely disabled, they are at increased risk of many kinds of infectious diseases, correspondingly, the doctors adjust the medication.

(2) We look to the doctor for guidance concerning disinfectants, and hold conferences.

(3) Disinfectants involve Arbos soap and Grince soap liquid using a disposable paper towel.

(4) We check for O-157 every year, and BSE and bird influenza too.

(5) Concerning influenza, the death rate has increased in recent years, and the rate of encephalitis is not decreasing, so children have preventive injections early.

#### 8. On cooperation with Ibaraki and Takatsuki public health nurse centers

We always exchange information (reports) with public health nurse centers on our children, reaffirming the importance of cooperation.

#### 9. Exercise for disabled children

##### 1. Department of physical therapy (P. T)

In the last few years, P. T staff have been serving as instructors of the Vojta method, however many parents have wanted to perform Bobath exercise in recent years in the Kansai area. So, one P. T staff member of this center had training for this, and this center employed one new Bobath instructor last year.

#### 2. Characteristic of exercise at different ages

##### (1) Infant

a) The infant sees a doctor and is treated at an early stage.

b) P. T exercise is performed several times a week.

c) It is more important following childcare, in cooperation with other staff.

##### (2) Child

###### a) Drastic measure step children

1) Individual P. T exercise once a week.

2) Examination of sitting posture.

3) We talk to parents about their children.

###### b) Out patient

1) P. T exercise is done individually once a month.

2) We contact other concerned staff.

###### c) School children

1) Consistent in growth age, if possible, corresponding to the continuation of P. T exercise for the prevention of deformity and contracture in due course.

#### 3. Department of occupational therapy (O. T)

There are four O. T members (three are working full time, one is part time).

One full time O. T. member is qualified as a Bobath instructor, one part time O. T. member is qualified as a vojta instructor.

#### Exercise approach at different child ages

##### 1) Individual exercise

All drastic measure step children exercise once a week.

Out patients receive exercise 1~4 times a month.

##### 2) Exercise for drastic measure step children

- Serious illness: Examination of positioning in daily life including baby chair, baggy etc.

- We follow up child-care, observe the level of recognition by their mothers, and urge child independence and activity.

- Youth: We provide follow-up child-care and support the mother. These children need support to promote personal independence.

- Children go to child care centers & kindergartens side by side: Preparation for group life, experiencing cooperation with other children at the care center etc.

- Pre-school age: Preparation for entering

school. Obtain information on the school-environment, school-life, activity posture, test of operational method of the upper extremities, preparation of essential equipment.

- Communication problems: Departures from the broad range of normality in communication may have origins in emotionality, psychoneurosis, mental retardation, upper or lower motor neuron loss, or localized or generalized brain dysfunction. Communication defects may include reading and writing disabilities. These communication defects require neural integration that is most complex and represents the highest level of neural function by O. T exercise.
- Down's syndrome: The patients require an appropriate sitting position in daily life, and we check their posture at meal-times (improvement of chair, baby-W/C).
- Youth: Support child-care. Pay attention to activity and posture, promote the independence and activity of disabled children.

#### 4. Department of care

##### 1) Purpose of care

Staff members of this department understand the whole picture (degree of the development of physical exercise and the psychosocial disorders of each disabled child), and how to conduct suitable exercise with each child.

The purpose of care is that every child communicates with other children and extends A. D. L, giving indirect aid to the disability acceptance of parents and raise care ability.

Instances of L.D. (learning disability), PDD (pervasive developmental disorder) have been increasing over the last few years.

Consideration of the previously mentioned neurological deficits, frequently observed in disabled children, should make it clear that any one of them might, in isolated form, comprise a learning disability. I think that the children with a spastic type of neurological involvement average significantly lower in

intellectual capacity than those with athetotic movements.

A delayed reading skill is one of the most common learning disabilities.

We do not imply that all children with a delayed reading skill have a disabling condition, for there are problems with instructional methods, motivation, emotional factors, and genetic factors that may play a role in this disability.

Visual and auditory deficits also have facets that relate to problems with reading. These problems, including cerebral dominance and altered or delayed concepts of body image, impinge on the learning problems that confront the special educator working with disabled children.

The teacher must recognize these problems and be aware of techniques for circumventing or minimizing the effects of these disabilities in learning.

Finally, it should be acknowledged that although numerous studies have indicated the poor educational performance of disabled children, there are extrinsic factors that contribute significantly to this poor performance, such as frequent and prolonged periods of absence from school related to medical care, transportation difficulties, and the inadequate numbers of schools providing the special educational opportunities that these children need.

Clearly, society and its decreasing birth-rate is a topic of conversation, but we have seen more severely disabled children with changes in the social environment, severe illness (with tracheotomy, gastrostomy, nasal feeding) and the discovery of various diseases (development of genetic biochemistry etc.) over the past several years.

In respect to this, we cooperate through a referral system to deal with these challenging cases.

In this way, the care of many kinds of disabled children takes place at our center using effective welfare activities and efficient training programs for staff, and we will strive to do so in the future.

1) Number of PT managed patients

Y. m	working days	objective	total patients			average of one day patients
		number of drastic mesure steps (n o d m s)	(n o d m s)	out patients	sum	
16. 4	23	24	144	181	325	14.1
16. 5	20	26	161	149	310	15.5
16. 6	24	26	177	186	363	15.1
16. 7	23	25	174	179	353	15.4
16. 8	22	26	122	161	283	12.9
16. 9	22	26	178	162	340	15.5
16.10	22	27	183	173	356	16.2
16.11	22	28	203	147	350	15.9
16.12	22	28	186	160	346	15.7
17. 1	21	30	183	152	335	16.0
17. 2	21	31	204	133	337	16.1
17. 3	24	31	196	161	357	14.9

2) Number of OT manage patient

Y. m	working days	objective	total patients			average of one day patients
		number of drastic mesure steps (n o d m s)	(n o d m s)	out patients	sum	
16. 4	23	25	166	51	217	9.4
16. 5	20	26	190	49	239	11.9
16. 6	24	26	208	84	292	12.2
16. 7	23	25	207	63	270	12.0
16. 8	23	26	147	68	215	9.3
16. 9	22	26	197	58	255	11.6
16.10	23	27	203	56	259	11.3
16.11	22	28	243	57	300	13.6
16.12	21	28	221	61	282	13.4
17. 1	20	30	196	38	234	11.7
17. 2	20	31	196	31	227	11.3
17. 3	24	31	225	46	271	11.2