

Managing Childhood Speech Disorder: The evaluation on conducting speech screening and educational talk

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Background

Childhood Speech Disorder refers to children who have difficulty in speaking clearly. It adversely affects the child's social, psychological, academic and future occupational success¹⁻³. Two recent large-scale surveys in Australia⁴ and United Kingdom⁵ reported the prevalence rate of speech disorder as 1.7% and 6.4% respectively. Based on the Hong Kong census data in 2004, it is estimated that around 77,000 to 293,000 children below the age of nine have speech problems.

Reports also stated that teachers and parents only accounted for about 16% of the children referred for speech disorder⁵. Parents and teachers are children's significant others. Should they have a better knowledge on the disorder, children could have been identified and managed earlier.

With the aims of arousing the public awareness on the disorder and to equip with parents the basic techniques in assisting children with speech disorders, the Institute of Human Communicative Research and the Hear Talk Foundation has organized an event entitled "Childhood Speech Screening Day" in October 2005. Activities include educational talks and speech screenings by volunteer speech therapists.

Objective

We would like to study the effectiveness of the speech screenings and educational talks in terms of the overall management of the Childhood Speech Disorders from the view of the event participants.

Subjects

1. Audiences who joined the educational talks
2. Parents whose children were screened by speech therapists and identified as having the need for further speech therapy management.

Methods

The event of "Childhood Speech Screening Day" was divided into two parts. The first part consists of educational talks by speech therapist explaining what Childhood

Speech Disorder is and introducing some common management strategies. The effectiveness of the talk was evaluated by asking audience to complete a questionnaire at the end of the talk.

The second part of the event involved screening children’s speech performance by speech therapists on individual basis. When children were identified with speech problem, list of organizations that provide direct speech therapy services will be given to the parents. In addition, simple guidance and home practices gearing to the child’s specific problem will also be given by the speech therapists.

Upon 4 to 6 months after the event, parents of children who were identified with speech problem were contacted for a survey either by telephone or by mail. The survey was mainly on following-up the children’s status and getting the parents comments regarding the screening activity.

Results

Educational Talk

A total of 340 audiences from about 155 families attended the educational talks. 150 evaluation forms were received after the talks. Results are summarized in table 1 and figure 1.

Table 1. Descriptive statistics on the ratings obtained from the post-talk evaluation.

Questions	Mean rating	95% C.I.	Audience rating 4 or 5
Q1.The content of the talk is substantial	4.27	4.18/4.36	96.0%
Q2.The speaker explicate the content clearly	4.51	4.42/4.59	99.3%
Q3.The time duration of the talk is appropriate	4.14	4.04/4.24	86.7%
Q4.The talk makes me understand what articulation problem is	4.37	4.28/4.46	96.7%
Q5.The talk makes me know how to handle children with articulation problems when identified	4.19	4.10/4.29	91.3%
Q6.The talk makes me know how to assist children with articulation problems	4.27	4.17/4.36	92.7%

Rating scale: 1 = strongly disagree; 2 = disagree; 3 = no comment; 4 = agree; 5 = strongly agree

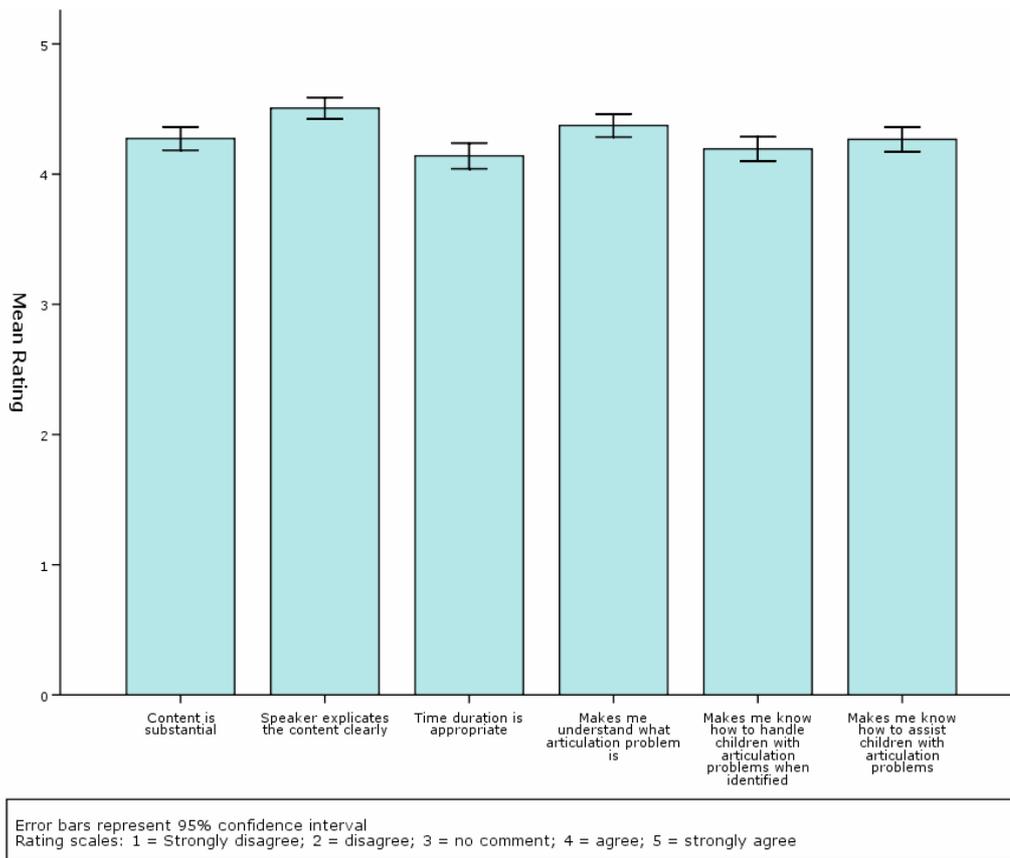


Figure 1. The mean ratings obtained from the post-talk evaluation forms.

Post screening survey

Out of the 240 children received speech screening, 93 (38.75%) have speech problems that required further management. Upon four to six month post screening, a follow-up survey was conducted on the parents of the 93 children. A total of 68 respondents were obtained. Table 2 and 3 shows the results of the survey.

Table 2. Survey results on questions 1 to 3

Questions	Mean score	95% C.I.	Respondents rating 1 or 2
Q1.Do you think the speech screening provided on the event day is helpful to you?	2.14	1.99/2.29	84.3%
Q2.Do you think the training guidance provided on the event day is helpful in improving your child’s speech errors?	2.41	2.22/2.62	70.6%
Q3.Do you think the information regarding the Speech Therapy service provider available on the event day is helpful to you?	2.38	2.18/2.58	67.6%

Rating scale: 1 = very helpful; 2 = helpful; 3 = no comment; 4 = unhelpful; 5 = very unhelpful

Table 3. Survey results on questions 4 to 7

Questions	Yes	No
Q4. Since the event day, have you contacted any organization for speech therapy service?	57.35%	42.65%
Q5. Since the screening day, has your child been receiving speech therapy service?	35.9%	64.1%
Q6. With limited resources, direct speech therapy service was not provided in the event day. Some parents may then rather not to know about the child's condition. With this piece of information, would you still choose to attend the event?	94.03%	5.97%
Q7. Are you interested in joining similar future events?	87.5%	12.5%

For the 39 children who had contacted organizations for speech therapy services, further information on the type of organization they approached was obtained. Figure 2 shows the breakdown of the various organizations where the 39 families have contacted for speech therapy services after the screening day.

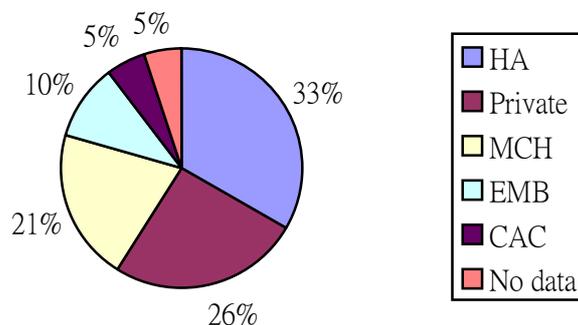


Figure 2. Organizations where families have approached for speech therapy services after the screening day.

Conclusions

Educational talks

The majority of the audiences are parents (96%) while others are teachers and school nurses. The feedbacks on the educational talks are positive in general. Audiences are satisfied with the overall content and format. Over 90% of the respondents agreed that they have learnt new knowledge and skills in managing the childhood speech problem during the 45-minute seminar.

Children identified with speech disorders

The number of children identified having speech problem (38.75%) in the event day is much higher than the prevalence rates reported in the literatures (1.7% in Australia and 6.4% in United Kingdom). The higher incidence is understandable as children joining the event were on voluntary basis rather than on random sampling. Those who joined the activity may represent parents who have already noticed some speech problem in their children and would like to seek further information and assistance. A larger scale of research with random sampling is needed if one wants to ascertain the prevalence of Childhood Speech Disorder in Hong Kong.

The figures, nevertheless, reflect there are considerable number of children having speech disorders. The concern of the parents towards the problem was shown in the overwhelming responses of the number of the event participants. The quotas for speech screening were quickly filled up within 2 weeks and we were unable to meet the demands of at least 100 parents who also indicated their interest to join the event.

Results from the post-screening survey indicated participants regard the screenings and the information given during the event day is helpful. Out of the 68 children who were advised to seek further speech therapy service, nevertheless, only about half of the parents (57.35%) did actually approach various organizations for services. This signifies parents may not be aware of the possible serious negative consequences of the speech disorder. More work still needs to be done on arousing the public awareness of the possible adverse effects on a child's development if the disorder is not properly dealt with.

For those who have approached the various organizations, 30.76% of them actually receiving speech therapy treatment after a 6 month period. 41.66% (5/12) of them are receiving Speech Therapy service from private organizations. This shows that the demand for the service is high and children have to wait for long time before services from the public sectors could be provided.

In summary, we believe there is a role for organizing educational talks and speech screenings for early identification and management of children with speech disorders. Although no immediate direct therapy could be provided to the children in need due

to the heavy resources required, parents still show great support to the activities. A healthy attitude towards handling of Childhood Speech Disorder could be established and parents reported they benefit tremendously from knowledge obtained in educational talks. The basic exercises and guidance provided also help to alleviate the child's problem while waiting for direct speech therapy services.

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