

# DISCUSSION PAPER

## Speech Therapy And General Practice In Hong Kong

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### Summary

*Speech therapy services in Hong Kong have changed dramatically in the past two decades. Further development is urgently required in three main areas; norms of speech and language development in Cantonese, descriptions of disordered communication in adults and children, and the development of screening and diagnostic speech and language instruments. General Practitioners and speech therapists can work in concert to develop a database on normal and disordered speech and language skills of the Hong Kong population, to increase the likelihood of identification of disability and referral to an appropriate agency, and to develop assessment tools. (HK Pract 1997;19:374-379)*

### 摘要

過去二十年來，香港語言治療服務發生了顯著變化，但仍極需在三個方面加以改進：設立粵語的發音和語言標準；成人以及兒童的語言溝通障礙的描述，發展有關的篩選和診斷儀器。全科醫生、和語言治療師可以攜手建立一個香港正常和異常發音、語言技能的資料庫，提高診斷率並轉介至適當的專科，同時開發檢測的儀器。

Speech therapy services first started in Hong Kong in the mid-sixties as a subspecialty of the ear, nose and throat speciality. However, it was not until the early eighties that the government recognised the importance of speech therapy and began a scheme of training therapists overseas. Since then, the education of speech therapists and speech therapy services have changed rapidly. Local training of Cantonese-speaking speech therapists was first established at the University of Hong Kong in 1988.

The mode of service delivery has changed dramatically in the last 10 years, not only in Hong Kong, but world-wide. Whereas therapists once worked only with individual patients in clinical settings, they now also work with individuals and groups in schools and nursing homes, in collaboration with other professionals such as nurses and teachers. Models of service delivery have broadened to a wider range of recipients and venues. Speech therapy services used to be based on an 'expert model' but

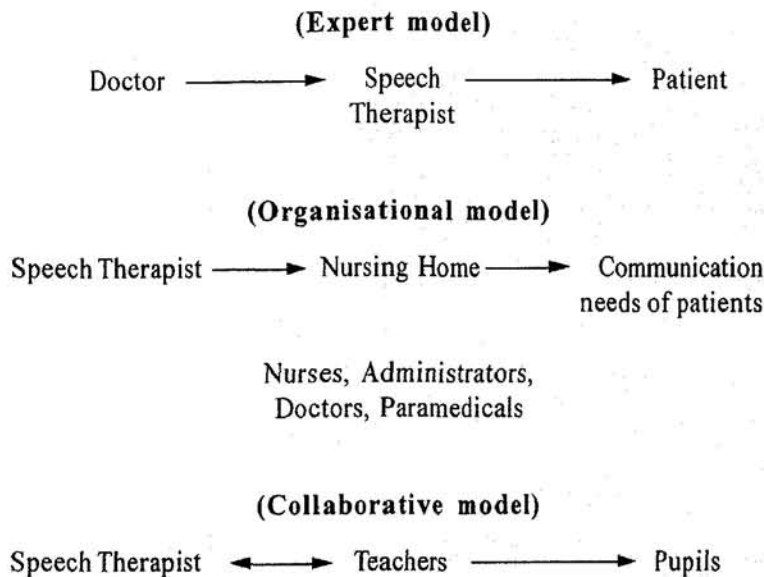
are beginning to evolve to either an 'organisational model' or a 'collaborative model.' (Figure 1).

The 'organisational model' is useful in helping an institution, like a nursing home, to provide more opportunities for patients to communicate. The 'collaborative model' requires a long-term commitment from team members to engage in problem identification, planning, implementation and evaluation of programmes.

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**Figure 1: Models of service delivery in speech therapy**



3. Child Assessment Centres are supervised by the Health Department. Children are seen only by a doctor's referral (usually a general practitioner). The Child Assessment Centre has a close link with the Maternal and Child Health Centres, which conduct regular developmental screenings, also supervised by the Health Department.
4. Hospital Authority inpatient and outpatient services which accept only a doctor's referral.
5. Private Agencies

Therefore, a patient with suspected speech problems seen by a medical general practitioner can be referred to the Child Assessment Centres, Hospital Authority Outpatient Clinics or private speech therapy clinics.

In paediatric speech therapy clinics in Hong Kong, children with speech and language problems usually have concomitant disorders such as autism, mental retardation, cleft palate, cerebral palsy, congenital syndromes or hearing impairment. Although a pure language disorder exists without a concomitant disability (specific language impairment), this disorder is often neglected in Hong Kong. At present, this may be due to the lack of identification criteria and methods. General practitioners can play a major role in the identification of developmental speech/language disabilities. Apart from obvious conditions for referral to a speech therapist, such as the disabilities mentioned above, there are indicators of developmental disability which require referral to a speech therapist (**Table 1**).

The following examples illustrate how a speech therapist can work on an organisational or a collaborative model. A speech therapist

- 1) works with teachers to incorporate specific speech and language goals into the classroom curricula;
- 2) provides information on child language development to groups of parents;
- 3) trains child care workers on intervention techniques for children with special needs;
- 4) consults with nurses on facilitation of communication in speech/language impaired adults;
- 5) trains family members on facilitation of communication in stroke patients.

In short, speech therapy services have become community-based.

However, doctor's referral remains the most common source of referral to speech therapy.

## Agencies and referral practices

In Hong Kong, most speech therapy services are provided by five main agencies:

1. Special Schools and Special Education Division, supervised by the Education Department. Children are usually referred to the school by medical social workers, or via Child Assessment Centres.
2. Special Education Services Centres (such as Heep Hong Society and the Spastic Association), supervised by the Social Welfare Department. Children are referred by Child Assessment Centres.

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The symptoms listed in **Table 1** can indicate a developmental speech/language disability in the absence of other disability. These children may simply be delayed and outgrow their slow start, or they may have a pervasive disorder which will result in poor social development and impaired academic achievement. In short, "developmental disabilities affecting language are extremely serious..."<sup>1</sup> A complete speech/language assessment is required to determine the degree of impairment and type of problem.

In adult speech therapy clinics, voice problems and neurological communication disorders are the most commonly seen cases. The majority of these cases are referred to speech therapy clinics by specialists such as ear, nose and throat surgeons, neurologists or physicians. Patients with speech disorders caused by, for example, hearing impairment, dysfluency or articulation disorders (e.g. unclear speech or imprecise articulation) generally see a general practitioner first. The general practitioner plays an important role in the identification and referral process. **Table 2** lists the characteristics of some of the common speech and language disorders in adults.

### Therapy

Following assessment, a therapeutic programme is devised which usually operates similarly to **Figure 2**. The programme will vary according to the service delivery model, but should include the components shown in **Figure 2**.

**Table 1: Indicators of developmental speech and language disability**

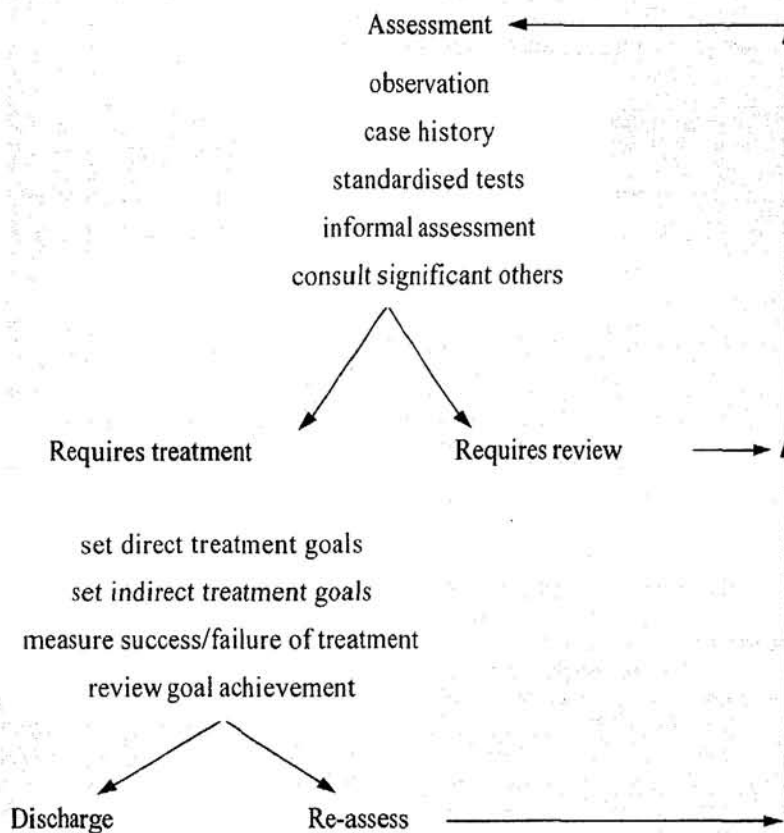
Age	Symptom
Under 1 year	Does not respond to name Does not babble/jargon
12 to 18 months	Does not say about 12 single words
18 to 24 months	Does not increase vocabulary to about 50 words Does not follow simple instructions
24 to 30 months	Does not combine words (2-3 word phrases) Does not understand 'what', 'where' questions
30 to 36 months	Does not use simple sentences Does not understand 'who' questions
36 to 48 months	Does not use long sentences, 'and', 'but', 'then' Does not understand 'why', 'when' questions
Above 48 months	Cannot tell a simple story

**Table 2: Characteristics of some common adult speech and language disability**

	Characteristics	Action required
Dysphonia	Harsh or husky voice	Refer to ENT surgeons before seeing a speech therapist
Articulation disorders	Imprecise or unclear speech lisp	Refer to speech therapists
Dysarthria/ Aphasia	Inability to communicate (speaking or understanding) after a stroke or head injury	Refer to speech therapists
Fluency disorder	Stuttering, blocking	Refer to speech therapists

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**Figure 2: Components of speech therapy**



### State-of-the-art in Hong Kong

Identification of disability is dependent on the establishment of a normative database, description of the characteristics of disability, and valid and reliable assessment tools. In Hong Kong there is an urgent need for a database of normal speech and language development. We have some information of phonological development which shows that most children acquire tones and vowels by the age of two, and that 75% of children have acquired all speech sounds by the age of 3.6 years.<sup>2</sup> However the aspiration contrast is not

fully established until after the age of five.<sup>3,4</sup> We know very little about the development of semantics and syntax, despite studies of classifiers,<sup>5,6</sup> aspect markers,<sup>7</sup> question formation<sup>8</sup> and locative markers.<sup>9</sup> We know that children begin to use noun phrase constituents (e.g. classifiers) and verb phrase constituents (e.g. aspect markers) before two years of age and that early development of question words seems to be dependent on verb types<sup>8</sup> and the positioning of the question word in a sentence (e.g. 'bingo' at the beginning of a sentence is learned before 'bingo' at the end of a sentence).<sup>10</sup> A new database of developmental Cantonese is a computerised collection of language

samples held at Carnegie Mellon University, which can be accessed by the Web.<sup>11</sup> This database is beginning to characterise language development. Whilst research teams and individuals have contributed valuable information to our knowledge of this area<sup>12</sup> there is still much to be done.

A second field of investigation which requires urgent attention is the nature of speech/language disability in Cantonese-speaking children and aphasic individuals. Again, some publications are available<sup>13-21</sup> but work is in its infancy. The third area, the development of standardised tests, has progressed more quickly. Therapists now have access to tests of receptive vocabulary,<sup>22</sup> receptive language,<sup>23</sup> speech accuracy,<sup>24</sup> and aphasia tests.<sup>25</sup>

### The role of the general practitioner

General practitioners can contribute greatly to the identification and characterisation of speech/language disability in Hong Kong. Patients with speech and language difficulties will rarely know of speech therapy services, and will consult their doctors in the first instance. Therefore, it is important for general practitioners to identify patients who require speech therapy services. It would be helpful to reinforce communication between general practitioners and speech therapists. This can be achieved by establishing a dialogue between the College of General Practitioners and the Hong Kong Association of

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### Key messages

1. Speech therapy models of service delivery have evolved to include community-based services.
2. Speech therapy services in Hong Kong are provided by five main agencies.
3. General Practitioners can play a major role in the identification of Specific Language Impairment in children, (which at present is largely unrecognized in Hong Kong) and in the referral of adults with voice problems and neurogenic communication disorders.
4. In Hong Kong there is an urgent need for a database of normal speech and language development.
5. Collaboration between General Practitioners and speech/language therapists will facilitate the study of speech/language disorders in Hong Kong.

Speech Therapists, or the University of Hong Kong. Such a dialogue could include discussion of types of cases seen in general practice, referral criteria and follow-up. Optimally, the establishment of research collaboration would contribute to our database on speech/language disability in Hong Kong. ■

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