

## Paladai for feeding babies

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The paladai is a cup-like utensil with a narrow tip that has been used traditionally to feed babies in India<sup>1</sup> when the mother cannot breast feed. It is used to hold expressed breast milk or other types of liquid or semi-solids. The baby is held reclining while being fed. The narrow tip makes it easier to place the paladai into the baby's mouth. It is also easier to clean after use than a feeding bottle and is usually made of metal so that it is not easily broken.

The cup in the Museum's collection (Fig 1), on permanent loan from the Alice Ho Miu Ling Nethersole Charity Foundation, is similar to the paladai but has a curved hood over the top to lessen spillage, and is ceramic. It is probably a European version of the paladai. In the past, the hood was also added to some of the spoons used to feed babies with cleft palate, but this has now gone out of fashion.

Babies with cleft palate are difficult to feed for two main reasons. First, they cannot create a vacuum in the mouth to suck. Second, the milk can easily enter the nasal cavity and cause irritation.

Various devices have been used to help make feeding easier. While some use a narrow spoon to place the feed into the baby's mouth, others use a cup. The paladai may be regarded as a special cup used for this purpose. Some used a syringe pump with a rubber tube at the tip. Various specially designed bottles and nipples have also been used such as the Medela Special Needs feeder (formerly called Haberman feeder after its inventor),<sup>2</sup> the Dr Brown's bottle,<sup>3</sup> and the Pigeon nipple.<sup>4</sup> All use a one-way valve to keep the nipple filled. Pressure on the nipple prompts milk flow into the mouth and release of

pressure allows the nipple to be refilled from the bottle. The Haberman design has a compressible neck between the teat and the bottle, which can be controlled by the feeder. The Dr Brown's specialty bottle comes with a one-way valve for the nipple and an air-vent for the bottle to reduce the air that the baby swallows as it feeds. The Pigeon nipple has only a one-way valve and can be used with an ordinary milk bottle. The Enfamil Cleft Lip/Palate Nurser uses a compressible bottle to control milk flow and may be used with an ordinary nipple with the hole widened by a crosscut.

Feeding milk from a bottle is now a preferred method of feeding for babies with cleft palate, as it makes the whole feeding process look more normal. To minimise milk entering the nasal cavity, it is usually advised to hold the baby in a semi-upright position.

Dr Edward Hamilton Paterson came to Hong Kong in 1951. He began his career in Hong Kong as the senior surgeon of Alice Ho Miu Ling Nethersole



FIG 1. Feeding cup (modified paladai) previously used in Alice Ho Miu Ling Nethersole Hospital

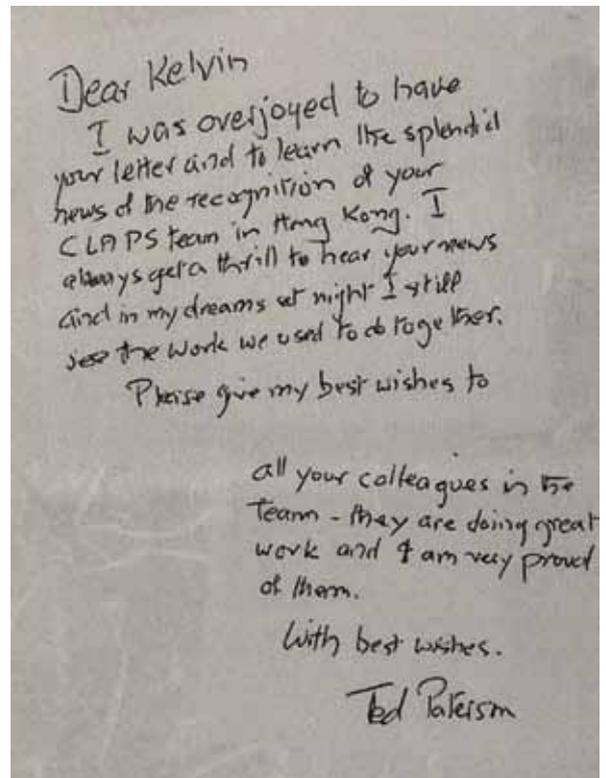


FIG 2. Congratulatory letter from Dr EH Paterson to Dr Kevin KW Liu, by courtesy of Dr Kevin KW Liu

Hospital, and became medical superintendent in 1963. As a surgeon, he took a special interest in cleft lip and palate surgery. He devised the heptagon operation for repair of bilateral cleft lip.<sup>5</sup> In those days I was in awe of the excellent results of repairs done by Dr Paterson in patients who came to see me. He became the medical superintendent of the new United Christian Hospital in 1972 when it opened in Kwun Tong. There, he advocated the concept of a 'hospital without walls', an initiative to extend patient care beyond the hospital into the community. Relying on outside funding, he established the community nursing service in Hong Kong that was subsequently taken over by the government and recognised as a model of good practice. Such a care model, among many other works, helped him earn the degree of Doctor of Social Sciences, *honoris causa*, conferred by The University of Hong Kong,<sup>6</sup> as well as Justice of the Peace and OBE by the Hong Kong Government.

Although administration took up much of his time, he nevertheless continued to develop the service for individuals with cleft lip and malformed palate. In addition, he pioneered a team approach in the care of such children, involving a surgeon, speech therapist, and dentist. The service and the multidisciplinary approach were further expanded by Dr Kevin KW Liu, who joined United Christian Hospital in 1997. In 2010, the team was recognised by the Hospital Authority as a Centre of Excellence for the management of children with severe cleft deformity and in the following year won the Outstanding Team Award. Dr Paterson was overjoyed when he heard the news, as it was part of his legacy (Fig 2).

Patterns of care and utensils may change, but the paladai from the Alice Ho Miu Ling Nethersole Hospital will remind us of its past use and it may still be useful as a form of cup feeding for many years to come.

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## References

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