

Not just small adults: the metaphors of paediatrics

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It is time to acknowledge that both children and adults belong to the human race

When called upon to lecture and teach others about the essential elements of paediatric practice, paediatricians usually resort to the well worn phrase “children are not just small adults”.^{1,2} Whilst this may be a useful idea for the calculation of drug doses and the assessment of physiological parameters, the definition of child medicine in such defensive, negative and exclusionary terms carries with it some inherent dangers and misconceptions. Both children and adults belong to the human race. Progress in medicine more often than not can be applied to and be of benefit to all and the transition from childhood to adulthood should be one of continuity rather than migration. By emphasising that children are not small adults, we unconsciously negate all that is to be gained through a vision which takes in human beings throughout their lives. There are indeed special qualities in the practice of paediatrics, but they need to be expressed with positive inspiration and a firm recognition of the commonalities of adults and children.

One way to rediscover such a perspective is to look back at the nineteenth and the early twentieth century, when the discipline of paediatrics was being established, to see how early practitioner authors tried to impart what they saw as the unique qualities of their speciality. These authors employed two main metaphors in which the paediatrician was either a veterinary surgeon or an explorer. These metaphors continue to resonate today within contemporary paediatric practice.

Medical texts and commentaries of the period were preoccupied with a fundamental dilemma in the clinical assessment of children, the lack of ability to obtain direct patient history. For Michael Underwood in the preface to the fourth edition of his *A treatise on the diseases of children* of 1799, the absence of speech was “that peculiar veil which is said to obscure infantile disorders...the incapacity of infants to describe their own feelings”.³ It was in response to this obvious difference compared to adult practice that metaphors arose in the medical literature both in the United

Kingdom and North America to help conceptualise for students and practitioners the essence of child medical practice.

THE VETERINARY METAPHOR

The lack of direct patient history and the subsequent emphasis on the primacy of physical examination by the physician, led to the practice of child medicine being compared with veterinary practice.⁴ The British doctor, Sir James Goodhart, physician to the Evelina Hospital for Children in London from 1875 to 1889, in his textbook of 1885 concluded⁵:

Yet there is not so very much difference between the student who has to investigate the diseases of children, and one who has to deal with those of the lower animals. In both cases the diagnosis will chiefly rest upon the doctor's personal observation and examination; in both it is intelligible speech that is wanting.

The American paediatrician, Henry Chapin (president of the American Pediatric Society, 1910–1911 and one of the 43 founding members of the Society), in his review of Goodhart's textbook for the *Archives of pediatrics*, wrote with particular approval of this sentiment.⁶ Similarly Robert Hutchison in his *Lectures on diseases of children*, from the first edition in 1904 to the ninth in 1944, used the analogy to dismiss any consideration of taking a history⁷:

With what are called ‘subjective symptoms’ in children you are not in any way troubled, because there are none. Paediatrics is like veterinary work in this, that the patient is unable to give you an account of his sufferings, and you are thrown back entirely on your own observation, which, of course, makes the necessity for careful examination all the greater.

The veterinary analogy reinforced the need for the physician to develop expertise in direct clinical assessment of the child patient. It also connected with other late nineteenth century observations about the animal characteristics of young

children, which it was felt “recapitulated” the evolution of the species. Ernst Haeckel's recapitulation theory claimed that ontogeny recapitulates phylogeny, that is the individual in its own development repeats the stages of development of the race.⁸ Many authors applied the theory to child development, revealing past atavisms in a baby's reflexes and child behaviour.^{9,10} Thus baby and infant development was easily equated with animal development.^{11,12}

Recapitulation arguments were also extended, on the one hand, to “primitive races”, thereby connecting with the idea of physicians as explorers in the foreign world of childhood, and, on the other hand, women, who were seen to be childlike and primitive with smaller brains and childlike skulls. Men were seen to pass through in their development a “‘woman stage’ of character” where emotion dominates over intellect.¹³

THE EXPLORER METAPHOR

The explorer metaphor was another way of making sense of the absence of a first person patient history. The importance of the physical signs and their peculiarity could confer on those signs the status of a language. The language metaphor was adopted by the French paediatrician, Bouchut, in 1845¹⁴:

Up to this period, then, the practitioner who examines a suffering child, derives nothing from articulate language, since it is insufficient; he must have recourse to other means. Previous to speech, God has given to the child a language which philosophers call natural language: it is the language of signs. The practitioner should recognize it, and should even study it scientifically, in order to avoid the commission of the most serious errors. The knowledge of this language is especially precious to him in the observation of the diseases of infancy; as in the case of a dumb person, a glance of the eye should direct the practitioner so as to apply the resources of medicine.

The new “language of signs” was embraced by the British physician, Charles West, founder of Great Ormond Street Hospital, in his paediatric lectures to medical students in 1848¹⁵:

I must warn you, however, of one difficulty which you will encounter at the very outset – a difficulty that disheartens many, and makes them abandon in despair the study of children's diseases. Your old means of investigating disease will here to a great degree fail you, and you will feel almost as if you had to

learn your alphabet again, or as if, entering a country whose inhabitants you expected to find speaking the same language and having the same manners as the people in the land you had lately left, you were to hear around you everywhere the sounds of a foreign tongue, and to observe manners and customs such as you had never seen before. You cannot question your patient; or if old enough to speak, still, through fear, or from comprehending you but imperfectly, he will probably give you an incorrect reply.... I speak of interrogating them; for though the infant cannot talk, it has yet a language of its own, and this language it must be your first object to learn, if you mean ever to acquire the character of successful practitioners in the diseases of children. But, if you have not cultivated your faculties of observation, you cannot learn it, for it is a language of signs.

The language, specifically a foreign language, metaphor was one way of vividly expressing this special world where the subjective history had to be read from the signs. Thomas Rotch paraphrased West in the opening pages of his *Pediatrics: the hygienic and medical treatment of children*, published in 1896¹⁶:

The mere knowledge that certain diseases exist, and the usual methods of diagnosing them, prove to be very inadequate when we are brought face to face with a sick and fretful child, or with an infant who is unable to describe its symptoms.... In studying, then, the different stages of development in children, we are in reality acquiring an alphabet, which when once thoroughly mastered will enable us to read the otherwise obscure language presented to us for translation by the various diseases of early life. The proper method of learning to understand sick infants and children is first to notice their peculiarities in health and to follow these peculiarities through the different stages of their development up to puberty.... The lack of this preliminary training, this alphabet, places the student who is endeavoring to understand diseases in children, in the position of attempting to read without having first learned his letters.

Thomas Rotch held the first chair in pediatrics at Harvard. Like Charles West, his metaphor went beyond language to an alien culture. In his 1891 presidential address to the American Pediatric Society he described the experience of child

medicine for his colleagues: "We have entered upon the especial investigation of and research in this branch of anthropology with the keen interests of explorers in an almost unknown country".¹⁷

The explorer metaphor was echoed by Abraham Jacobi in his 1889 presidential address to the American Pediatric Society in which he linked "sound and scientific physical and mental hygiene" as supervised by paediatricians to the "true manifest destiny" of the United States.¹⁸ "Manifest destiny" was a key nineteenth century phrase for American domination of the continent, especially over Mexico and the American Indian.^{19 20}

Thus the explorer vied with the veterinary metaphor to make sense of the absence of speech and the resulting reliance on physical signs. Resonances of these metaphors can be detected in paediatric practice today and recognition may help us make sense of our own approaches and responses to children and their parents. Metaphors are not simple devices. When we use metaphor to describe what we do, we carry hidden, sometimes unconscious meanings and implications.²¹ Metaphors can shape how we conceive the essence of our practice. On the one hand, to see paediatrics as about "not just small adults" is to reflexively exclude ideas related to adult medicine and, on the other hand, the historical metaphors discussed carried with them attitudes to women and other racial groups. At another level, though, these historical metaphors do convey two differing notions of the clinical assessment of children, albeit being interpreted here on contemporary terms. The veterinary metaphor connotes the importance of the objective abilities of the physician, with the child to be understood from an observational, passive and non-empathetic distance. The explorer metaphor is adventurous and exciting, recognises that these are human beings and suggests a more engaged approach requiring active learning of a culture and language.

Why would it be useful to revive these historical metaphors? Firstly, whatever their original meanings, they can stand as fresh and inspiring vehicles by which to renew a practitioner's relationship with his or her discipline. Secondly, it is time to go beyond the "not just small adults" conceit. There is no doubt that the phrase has served paediatrics well in helping argue for the development of specialist services and, in the broader context, for the protection of children from exploitation. But when trying to convey to fellow health professionals and students the important differences in paediatric practice, this conceit has the potential of becoming vacuous and precious; and possibly deprives child medicine of significant developments. For all those

who work with children it can permit them to dismiss or misunderstand the essential commonality of children and adults. On the other hand, revisiting and reinventing these historical metaphorical expressions of the meaning of paediatrics can be a way of stating the unique qualities of the specialty, but without disconnecting from the totality of medical knowledge and experience.

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