We compared three randomly selected groups of 7-year-old schoolchildren in Melbourne who had mild wheezy bronchitis, moderate wheezy bronchitis, and asthma to a control group and followed up the study until the children were 10 years of age. (The SCP indicates that this paper has been cited in over 235 publications.)

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In 1946 I was appointed head of the Department of Clinical Research in the Royal Children's Hospital, Melbourne. A major field of inquiry in this department was respiratory illness in children. In 1947 I spent eight months at the Department of Child Health in the Faculty of Medicine of the University of Newcastle upon Tyne, England, and was impressed with the importance and value of prospective longitudinal epidemiological research in a randomly selected population in studying illness. The 1,000-family study of Newcastle upon Tyne, which ran from infancy to 15 years, became a landmark for elucidating the natural history of illness in children at ages 7, 10, and 14 years, and my successor in the Department of Thoracic Medicine, Peter D. Phelan, arranged the follow-up at ages 21 and 28 years. The majority of the reports of these studies have been published in the British Medical Journal (see references 1-6).

The accumulated evidence of this longitudinal study indicated that patients with recurrent wheezing had a common basic disorder that included bronchial hyperreactivity and a disordered immunological state; there were also a number of trigger mechanisms that precipitated the attacks of wheezing. In broad concept this was not very different from the description of asthma by Thomas Willis, the English physician who, with extraordinary insight, wrote in 1644:

"An asthma is a most terrible disease, for there is scarce anything more sharp and terrible than fits thereof. But as to the evident causes, there are many, and also of diverse sorts. Asthmatical persons can endure nothing violent, or unaccustomed; from excessive cold or heat, from any vehement motion of the body or mind, by any grave change of the air or of the year, or of the slightest errors about things not natural, yea, from a thousand other occasions they fall into fits of difficult breathing."

If Willis could be present at a world symposium on asthma in 1988, he might well say, "Well, you haven't got much further since my day!"

The follow-up study of 1987 when the patients were aged 28 has shown that those patients in early adolescence who had frequent attacks of wheezing commonly had a poor prognosis and that those with mild or trivial wheezing in adolescence may develop wheezing attacks in the third decade. Other disturbing facts were that many patients with recurrent symptoms and continuing airways obstruction were receiving inadequate treatment and that many were making their condition worse by smoking.

There is little doubt that many patients could enjoy better health if they understood the nature of their disorder, the importance of controlling and monitoring their treatment, and the care of their general health. As with most continuing disabilities, a trusted personal relationship with one physician is the most likely way that patient education and responsibility can be achieved in helping asthmatic subjects to a better way of life.