

# This Week's Citation Classic®

Walsh J A & Warren K S. Selective primary health care: an interim strategy for disease control in developing countries. *N. Engl. J. Med.* 301:967-74, 1979. [Rockefeller Foundation, New York, NY]

We determined the major causes of Third World morbidity and mortality—the diarrheas and respiratory infections, followed by malaria and measles—and proposed "selective primary health care," an interim strategy comprising immunization, breast-feeding, antimalarials, and oral rehydration. [The SC<sup>®</sup> and the SSC<sup>®</sup> indicate that this paper has been cited in more than 415 publications.]

## The Start of a Global Health Strategy

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After 21 years as a biomedical investigator of tropical diseases at the National Institutes of Health and Case Western Reserve Medical School, during which I applied immunology to the pathogenesis of schistosomiasis, I was called to the Rockefeller Foundation as director for health sciences, to bring the power of modern biomedical science to bear on the great neglected diseases of mankind. Soon after my arrival I was asked to organize a meeting on health care delivery, but declined on the basis of not knowing the field and not really caring: the typical arrogance of a biomedical researcher of those days. Prior to the meeting a paper prepared by a health economist was circulated.<sup>1</sup> It compared life expectancy with health, economic, and social indicators, and concluded that social factors were predominant. Since life expectancy is a composite of all causes of death, I began to wonder about the relative roles of each of the lethal diseases of the developing world, and if knowing this would enable the development of a strategy to prevent major causes of death in a cost-effective manner.

And then along came Julia A. Walsh, an assistant professor of medicine at New York University, just returned from the London School of Hygiene and Tropical Medicine. Walsh was willing to collaborate on this project as a visiting research fellow of the foundation and has continued to update the mortality data.<sup>2</sup> From the data, a viable strategy for rapidly reducing infant and child mortality at a reasonable cost became obvious. Deaths from many of the most prevalent diseases could be prevented by immuniza-

tion (only 15 percent of children were immunized at that time), oral rehydration, breast-feeding, and antimalarial drugs for African children.

We presented a paper at the foundation's meeting, but it was completely ignored in the summation. We then decided it might be noticed if it were published in the *New England Journal of Medicine*. When it appeared therein the journal received a spate of letters, all negative. The controversy continued,<sup>3,4</sup> and in 1988 an entire issue of *Social Science and Medicine* was devoted to it.<sup>5</sup> The essence of the conflict was between comprehensive or "horizontal" health care and selective or "vertical" health care, and an enormous degree of heat developed around these highly charged terms.

In the midst of this ferment, UNICEF<sup>®</sup> declared a "children's revolution" based on "new scientific and technological breakthroughs which have been made against some of the most widespread and intractable problems of health and nutrition." These included oral rehydration therapy, universal child immunization, breast-feeding, and growth charts. In May 1983, Jonas Salk and Robert McNamara convinced James Grant of UNICEF that the Expanded Programme on Immunization of the World Health Organisation (WHO) needed to be accelerated. In 1984 the Rockefeller Foundation helped to organize a consortium of agencies, including the above, plus the World Bank and the United Nations Development Programme, to foster that goal, and within six years 80 percent immunization was achieved. During that period, WHO, UNICEF, and the US Agency for International Development made a major effort to disseminate oral rehydration.

In 1990 the horizontal vs. vertical controversy was resolved at a meeting at Talloires, France, by the Director General of WHO, Halfdan Mahler, who drew vertical lines perpendicular to a horizontal line, noting that the former provided "knowledge and motivation" and thereby improved primary health care. This contention was supported by the World Bank,<sup>6</sup> which observed that in 21 developing countries with long-term acceptable estimates, the fall in child mortality doubled in the 1980s over that of the 1960s, leading to an overall life expectancy in the developing world of 63.

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6. Walsh J & Adamson P. *The state of the world's children 1982-83*. Oxford, England: Oxford University Press, 1982. 131 p.

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