Murdoch Childrens Research Institute

PRODUCTIVITY COMMISSION CIRCULAR

ECONOMIC IMPLICATIONS OF AN AGEING AUSTRALIA

Research data now demonstrate conclusively that the patterns of health (and illness), including mental health, in older people are influenced strongly by patterns that are established early in life. Biological and environmental risk and protective factors, together with early life experiences, affect people's long term health and disease outcomes. In short, the health of our ageing population depends on how healthy they have been as children.

Clearly the ageing of Australia's population has huge economic implications. One of the most effective and cost effective decisions would be to shift the policy emphasis away from treatment in the later stages of disease ("treating the sick") to the promotion of earlier, more effective preventive interventions that are focused on maximising and developing optimal health. Investing in research that helps us understand the impact of risk and protective factors throughout the life course, beginning early in life, will ensure a positive developmental trajectory and positive life course for the ageing population.

Traditionally, risk factors have been categorised into biological or environmental risks. More recent research places greater emphasis on the role of dynamic interaction between genes and environment, and on the mechanisms through which society induces changes in biological and psychological systems. Put another way, how genes are expressed is determined largely by a person's particular physical, psychological and social environment.

There is an expanding research base that is helping us understand how disease and illness patterns are established and maintained, giving important evidence on how these environmental, social, psychological and biological systems interact to influence health and development outcomes. For example, Barker and colleagues have pointed to the importance of early life factors in programming the risk for chronic disease in adults. His group showed that birth weight, together with weight gain in the first year of life, are associated with cardiovascular disease, diabetes, and hypertension in the fifth and sixth decades of life. There is other research evidence demonstrating that many of the problems associated with adult life and an ageing population - obesity and its consequences, mental health problems, welfare dependency, poor literacy and participation in crime - have their origins in pathways that begin early in life.

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There is also an accumulating body of evidence suggesting that problems and risk factors can be identified reliably early in childhood, and effective intervention improves the developmental trajectory and ultimate life outcomes. Such an approach focussing on prevention through early intervention in childhood is likely to lead to major reductions in expenditure on illness later in life.

The research is now overwhelming that an evidence-based public policy that seeks to focus on a healthy ageing population and reducing expenditure later in life can only succeed if it includes a complementary policy that promotes increased investment in infant and child health.

The content of such a policy should include:

- a sound, well coordinated evidence-based and quality service system to support young children and families at a community level
- a strong and well funded system of secondary and tertiary care, both at community and hospital level
- an expanded research program focused on children and the early years, helping us understand the gene/environmental interactions and risk factors that lead to health or illness and the ways to intervene effectively to encourage infant and child health.

There are voluminous references to support the assertions made above, which can be supplied on request. One useful conceptual paper is:

Halfon N and Hockstein M. "Life course health development: an integrated framework for developing health, policy and research" The Millbank Quarterly 2000; 80: 433 - 479.

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