Public health in Papua New Guinea
Medical possibility and social constraint, 1884–1984

Donald Denoon
The Research School of Pacific Studies,
The Australian National University
with Kathleen Dugan and Leslie Marshall

CAMBRIDGE UNIVERSITY PRESS
CAMBRIDGE
NEW YORK NEW ROCHELLE MELBOURNE SYDNEY
Contents

Acknowledgements vi
Maps of Papua New Guinea vii

Introduction 1

I  The rise and fall of tropical medicine 9
1 Pre-colonial health and disease 18
2 The administration of public health 25
3 Early colonial medical administration 33
4 The political economy of health in Papua between the wars 43
5 The political economy of health in New Guinea between the wars 53
6 Medical education 58
7 The Pacific War: the condition of the people

II  The rise and fall of the great campaigns 67
8 Miracle drugs, new perceptions and the post-war Public Health Department 77
9 The health campaigns 85
10 Women and children last 93
11 Health education 99
12 A national health system 105
13 Primary health care 114
14 The past and the future

Notes 123
Bibliography 140
Index 152
Introduction

The social study of medicine used to be inhibited by the awe which doctors inspired in lay people. Doctors would conduct their esoteric debates among themselves, confident that the leading issues were purely technical in nature. During the past generation, however, the caring professions have become less confident of their prescriptions, and correspondingly willing to discuss their concerns with a wider public. Meanwhile the soaring cost of medical services has provoked wider debate about health policies, and closer attention to the costs and benefits of programmes. The community as a whole now funds services which most individual patients cannot afford.

The new openness is especially marked in those regions roughly described as the ‘third world’, newly emancipated from colonial administrations. Colonial governments discouraged public debate on social policies generally, and consumers of those policies lacked a forum for canvassing their needs. Independence created forums for debate, and continuing poverty and low standards of living promoted discussion of the relative merits of health programmes as against education, or agricultural extension, or any other element of ‘development’. These discussions have also been internationalised, to match the international implications of any single country’s health hazards. The present AIDS epidemic and the remarkable revival of malaria are only the most visible of many concerns which agitate researchers, practitioners and planners throughout the world.

The burgeoning of social studies of medicine during the past decade has opened many useful lines of enquiry for us: nevertheless there are peculiar features which determine the scope of the present enquiry. Perhaps the most peculiar feature is the amorphous nature of our subject matter. Doctors and nurses aspire to promote health, the most diffuse and indefinable of human conditions. We usually value our well-being only when it is impaired, and then each person places a different value on pain, distress and disease. The caring professions do not create a measurable product (though they certainly generate statistics). Nor do they create good health: as a rule they treat specific kinds of illness. The influence of medical workers may be profound, but it cannot be measured accurately.

This observation forced us to abandon our bold intention to study the changing health status of the people of Papua New Guinea. That retreat is justified also by the immense variety of health conditions throughout the country. In the 1980s, some communities enjoy levels of health and
nutrition which are the envy of most of the world; while other communities – usually remote from markets and services – endure appalling privations and high levels of morbidity and mortality. To lump everyone together might produce an average which no single community experiences: it would also obliterate those differences from region to region, between town and country, and between men and women, which should properly be highlighted. From time to time we describe the health status of particular communities; but these accounts are all tentative, and their purpose is to illustrate the problems which doctors and nurses observed and confronted.

The subject matter precludes a study of public health, but it does provide the evidence for examining the caring professions. Although we cannot confidently measure their influence on general health, we can certainly evaluate their impact on public health policy and programmes. Since the 1890s, doctors have largely determined health policy, subject to very little constraint. Until the 1910s, the colonial state in New Guinea and in Papua was too sickly to resist medical advice. In the 1920s an attempt was made to impose planters' interests on the Department of Health in New Guinea; but the medical authorities brushed aside this intrusion into their professional autonomy. During the 1950s it suited the Public Health Department of the amalgamated territories to pretend that it was obeying instructions from the Australian government; but policies were actually proposed and implemented by doctors. On the eve of Independence (in 1975), officers of the department and representatives of the mission services integrated their institutions, and framed health policies for the endorsement of the new democratic government. From time to time doctors have genuinely attempted to involve lay people in the formulation of policy, and in its implementation; yet doctors have always had science on their side, and lay people have been reluctant to interfere. Responsibility for health policy has therefore been much more clearly defined than any other part of policy-formulation.

Though doctors have been self-consciously the instruments of western science, they have obeyed a most flexible and accommodating master. Policy has always been justified by science, but that statement tells us rather little about the source of policy ideas. To anticipate the argument of the body of this book, medical planners have been guided by continually changing perceptions, and those perceptions are only partly 'scientific': social perceptions are equally significant.

A decisive influence on policy has been the state of medical knowledge: doctors and nurses are naturally most interested in conditions which will respond to treatment or yield to preventive measures, and least interested in conditions which seem likely to endure. New therapeutic possibilities have often persuaded medical authorities to devote their attention and resources to previously tolerated suffering. Quinine focused interest on malaria, arsenicals excited interest in yaws, and BCG provoked a campaign to eradicate tuberculosis. Although New Guinea and Papua
were among the most remote provinces of western medicine, doctors quickly learned about new therapies, and could implement new therapeutic regimes very swiftly.

If therapeutic possibility were the only influence on medical perceptions, this would be a very short monograph; but social possibility is as important as technical opportunity, in shaping perceptions and programmes. The first half of the study deals with the era of ‘tropical medicine’, a body of theory and practice which influenced practitioners in tropical regions from the turn of this century until about the 1940s. Stated simply, that body of theory assumed that health status was largely determined by physical environment. There were distinct tropical diseases which were mainly untreatable. From this starting point, doctors were disposed to treat only those few conditions which would respond to treatment, and to concentrate their efforts on the protection of enclaves of ‘temperate’ settlers and their labourers from the consequences of living in a tropical environment. General improvements in living standards seemed impossible, but quarantine and racial segregation might create a few safe environments for key personnel. The mood of medical planners was usually pessimistic and defensive, and their programmes reflected their pessimism. The second half of the study begins with the Pacific War, and the adoption of remarkable new drugs – the ‘magic bullets’– which inspired heroic offensives against specific killer diseases during the 1950s. These campaigns marked a decisive shift from defence to resolute attack and the optimism survived the limited success of the campaigns themselves. Then as euphoria dwindled, medical planners grasped the new strategic vision of ‘primary health care’, an era which began in the 1950s and is still with us. Again stated simply, the theories brought together under this attractive rubric assumed that the whole population could, and should, enjoy better living conditions and longer life. That vision was more appropriate to democratic independence than to autocratic colonialism, and it implied not only an equalising of access to services throughout the population, but also some involvement of free and responsible citizens in the formulation and implementation of programmes. At first sight, therefore, ‘primary health care’ seems diametrically opposed to the earlier vision of ‘tropical medicine’: optimistic, participatory and egalitarian, where the earlier strategy had been defensive, authoritarian and divisive. Yet the two approaches share some features in common, most notably the fact that each is a strategic vision devised by medical workers and presented to the general population for endorsement rather than discussion. Primary health care is a doctors’ vision of public health, and its adoption does not alter the fact that health policy remains a matter of doctors’ dilemmas.

As a case study, Papua New Guinea presents a number of unusual features which need to be remembered if comparisons are drawn with other countries. The eastern half of the island of New Guinea, together with the islands to the north and east, are compact in size but varied in ecology. The
territory is well within the tropics (from 2°S to 10°S), but the environment varies from steamy lowlands to crisp highlands ranging above 3,000 metres. The present population is small (about three million people), but culturally and economically diverse. In the nineteenth century the people chose to live in such small and self-contained communities that something like 700 distinct languages evolved; and their precarious well-being was largely the consequence of their isolation from each other and the rest of the world. Partly because of health hazards, but also through the country's isolation from major trade routes, colonisation was relatively late. Only in 1884 did Germany annex New Guinea, while Britain declared a protectorate over British New Guinea (soon re-named Papua). The country is divided from Australia by the narrow and shallow Torres Strait, so Australia became (and remains) the dominant external power. The new Commonwealth of Australia succeeded Great Britain as the colonial authority in Papua in 1906, and conquered the German garrison in New Guinea in 1914, retaining that territory under a League of Nations Mandate. After the Japanese invasion of 1942, New Guinea and Papua were amalgamated administratively in 1945, and became independent in 1975.

Colonialism was not only late, but also perfunctory. The densely populated highlands were explored only in the 1920s and 1930s, and regularly administered after the Pacific War: many people could boast that they remembered the arrival of the Australians when they formally withdrew 30 years later. One consequence of this dilatoriness was that economic development was slow. The early colonial economy was based squarely upon copra, supplemented by gold in the 1890s and especially during the 1930s. Since the 1960s the cash economy has diversified into coffee and cocoa, while large mining enclaves project export copper and some silver and gold. However, social services did not wait upon the growth of the colonial economy. Since the 1950s, high levels of Australian aid have enabled the government to provide a wider range of social services than the colonial economy could sustain on its own. Among the most impressive of these services was the Public Health Department, which first supplemented and later incorporated the work of medical missions, integrating them all into a single national health care system by the time of Independence. Medical programmes have scarcely been constrained by finance: a more serious obstacle has been the difficulty of attracting or training sufficient doctors and nurses to realise the ambitious visions of health planners.

Medical authorities enjoyed an autonomy from the colonial state, which may be unusual. The administration was implemented by a variety of technical departments, each of which looked to its Australian counterpart and was only loosely coordinated with other branches of the local administration. Among the specialist departments, Public Health enjoyed remarkable eminence, employing almost all the graduate workers in the country, deploying a large proportion of the financial resources, and claiming the greatest ability to transform lives. The medical authorities took
advantage of a narrow enthusiasm for technique which influenced all branches of government, and encouraged the view that each department must be the best judge of its own programmes. Only with the advent of self-government and Independence were the departments firmly subordinated to coordination and political control.

Independence did not decisively change the status of health workers. Many experienced medical administrators left the country, but they were replaced by indigenous doctors, and the department preserved the tradition that senior medical administrators must possess medical qualifications. Since Independence was late and amicable, colonial administrators enjoyed an Indian summer which was denied their counterparts in Africa and Asia; and the independent government felt no need to revolutionise the structures which it inherited.

In most dimensions, the present regime of public health in Papua New Guinea is remarkable: the population enjoys better access to more impressive services than most other parts of the ‘third world’, and any criticism of those services must be tempered by that perception. Medical authorities successfully anticipated Independence, so that the elected government inherited a more integrated, more responsive public health system than the colonial state enjoyed. At first sight this may seem to vindicate the strategy of primary health care. In the body of the book, however, we suggest that the rising living standards and increasing access of Papua New Guineans cannot be explained by the adoption of this new strategy. We also suggest that further advances in public health may require precisely the public involvement in policy and programmes which ‘primary health care’ proposed but cannot achieve.

We hope that the present work will add to an understanding of Papua New Guinea's particular experience; but we also hope to promote wider understanding and discussion of medical institutions generally. From the 1890s until the 1940s, medical authorities neglected many strategies for promoting the people's health; thereafter they grasped many of the opportunities which evolved technology presented; and increasingly they have construed good health as a goal which requires popular knowledge and enthusiastic participation as well as sophisticated drugs and techniques. Our purpose is to reinforce that perception, by demonstrating that health is not simply a series of doctors' dilemmas but – as a matter of life and death – a proper subject for universal concern and popular participation.