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CONSERVATION-DISSOLUTION: A CASE-STUDY OF CHINESE
MEDICINE IN PENINSULAR MALAYSIA

Ooi Giok Ling

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Except where otherwise acknowledged, this thesis
represents my own original research.

Ooi Giok Ling.
16/11/82

ABSTRACT

This thesis examines the delivery and consumption of health care in Malaysia. In particular, it focusses on the encroachment of the dominant Western medical sector within the Malaysian health care delivery system as this threatens the survival of Chinese (and other ethnic) medicine. Attempts are made to detail the nature of this conflict at a national and case-study level by drawing upon the concepts of conservation, dissolution and conservation-dissolution. These concepts are also used to interpret the growth of Western medicine in advanced capitalist and peripheral countries and to explain how practitioners of Chinese medicine have survived major political and economic upheavals in mainland China and East and South-east Asia. A main thrust of the thesis, therefore, is primarily to reflect on the conservation-dissolution framework as a methodology and to comment on other methods of analysing health care.

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INTRODUCTION

The purpose of the thesis is to examine the persistence of Chinese medicine in a Malaysian context. Malaysia has a hybrid health care delivery system. It comprises Chinese, Indian, Malay and Western medicine. Of these diverse forms Western medicine is dominant. Further growth of Western medicine threatens the survival of other ethnic forms. There is not scope within the compass of this thesis, however, to examine the effects of Western dominance on all ethnic forms. Attention is, therefore, concentrated on the attempt of Western medicine to encroach upon the preserve of Chinese practitioners.

This clash between Chinese and Western medicine has been neglected by medical geographers. They have been too busy mapping the spread of diseases and calculating distances travelled by patients to grapple with this key development issue. Consequently, they have contributed little to an understanding of underdevelopment. Even geographers working on so-called informal sector activities in Third World countries have neglected health care problems and conflicts in service delivery for the more obvious targets — the homeless, hawkers, trishaw pedallers and scavengers. If geographers are to probe beneath the 'surface appearances' of informal sector activities they cannot afford to ignore the clash between competing structures.

The task is made more pressing by other social scientists studying Chinese, Indian or Malay medicine in an economic and political vacuum by failing to put their studies into an appropriate context. This narrow perspective has led to popular misconceptions

about non-Western medicine, and Chinese medicine in particular. Chinese practitioners (*chung-i*) have not, as supposed, meekly retreated in the face of a growing Western onslaught but have demonstrated remarkable resilience in withstanding this attack. The survival strategies of Chinese practitioners are, therefore, featured in this study which seeks to explain their adaptation and persistence within a political economy that favours Western domination of health care delivery.

Thesis structure

As an adequate theoretical framework is crucial to studying the survival of Chinese medicine within a health care system dominated by Western medicine four broad methodologies are considered in Chapter One. After a discussion of their relative strengths and weaknesses three models are discarded from further consideration. The remaining framework based on the concepts of conservation and dissolution is considered the most appropriate methodology for interpreting the adaptation and survival of Chinese medicine within an unfavourable milieu. Conservation is used to describe the situation where Chinese medicine is preserved in Peninsular Malaysia by agencies regulating the organisation and consumption of health care delivery. It is used where Western medicine does not have the resources to provide the full range of health services and is willing to acquiesce in the use of practitioners of Chinese medicine (always providing they do not receive equal professional recognition). Dissolution is the preferred term where direct competitors to Western medicine are suppressed. Conservation-dissolution is used to describe the restructuring of Chinese medicine. The initial structure of

Chinese medicine is generally dissolved, reconstituted and thereby conserved in a form more amenable to government regulation that ensures continued Western dominance.

Chapter Two reviews the origins and growth of orthodox Western medicine. In particular, it highlights the political and economic mechanisms that account for its rise and dominance. These mechanisms for subordinating competitors are illustrative of the weapons that Western medicine has brought to bear on the nature of health care delivery in Peninsular Malaysia. Although the weaponry is similar, the expansion of Western medical care in advanced capitalist countries has differed markedly from the process in East and Southeast Asia. Political and economic events associated with the confrontation between Western medicine and non-Western variants are very different. Contemporary health care organisation has developed from the restructuring of pre-existing facilities and personnel in the United States and Europe. In contrast, it was imposed by Western colonialists in East and Southeast Asia — the degree of preservation of Chinese medicine reflecting the sporadic course of economic development and the kind of Western medicine supplied.

Chapter Three provides an account of the origins and growth of Chinese medicine in mainland China. It also traces its transfer to other East and Southeast Asian countries and supplies details of classical Chinese medical organisation prior to its confrontation with Western medicine. While this historical review illustrates basic differences in the original organisation of both Chinese and Western medicine, it also emphasises the 'hybrid' nature of contemporary Chinese medical practice.

Then, Chapter Four focusses on the growth of Chinese and Western medicine in Peninsular Malaysia. Further evidence is provided to support the argument that Western health services used their political and economic clout to dominate competitors. While both forms of foreign health care delivery were introduced simultaneously in Malaysia, Western medicine gained supremacy over Chinese medicine. Unlike their counterparts in mainland China, practitioners of Chinese medicine in Peninsular Malaysia have had to adapt to political and economic pressures without state support.

A study of physicians practising Chinese medicine in Georgetown is undertaken in Chapter Five to expose further modifications to Chinese medical practice. This urban survey includes drug suppliers and medical students — key elements in preserving, adapting and propagating the continued use of Chinese medical services.

Chapter Six discusses a sample study of health care consumers in Georgetown. The survival of Chinese medicine in the city is attributed to unflagging support from patients. However, the nature of patronage has changed in favour of the dispensing of Chinese medicine through retail outlets. On the other hand, full-time practitioners of Chinese medicine are faced with the erosion (and even cessation) of their practices because of the decline in the number of patients. Finally, the strengths and weaknesses of using the conservation-dissolution framework as a methodology for interpreting the nature and outcome of the conflict between Chinese medicine and Western medicine are considered in Chapter Seven.

CHAPTER ONE
CONCEPTUAL FRAMEWORK: ACCOUNTING FOR THE PERSISTENCE
OF CHINESE MEDICINE

Health care delivery is no different from any other service. It obeys the laws of the market place. Therefore, it can be analysed in the same way. Four broad methodologies are available. They are discussed in this chapter with the purpose of selecting the most appropriate for investigating the delivery and consumption of medical care in Malaysia, particularly the threat to the continued existence of Chinese medicine. The discussion centres on both the approaches used by social scientists in their research on Chinese medical care and more radical theorists studying 'underdevelopment' in Third World countries. These approaches to development and underdevelopment can be conveniently classified into three groups according to whether they reflect conventional wisdom, unconventional wisdom, or the challenge to unconventional wisdom (Rimmer *et al* 1978).

Modernisation theory typifies conventional wisdom and is the customary framework used in the study of medicine in terms of traditional and modern organisations (section one). Unconventional wisdom draws its strength from informal sector studies advocating greater use of indigenous technology in Third World development (section two). It is difficult to characterise the challenge to unconventional wisdom. Initially, the main thrust

was the emphasis on marginalisation which focussed on conceptualising the threat to Chinese medicine within a centre and periphery framework (section three). However, Browett (1980) has argued that this led development studies into a cul de sac. This study seeks to avoid the cul de sac and continues to challenge the unconventional wisdom. It does this by drawing upon conservation and dissolution concepts to discuss the threat to Chinese medicine from further encroachment of Western medicine — an emphasis that further exposes the inadequacies of the discarded explanatory frameworks (section four).

1. MODERNISATION: THE CONVENTIONAL WISDOM

What is involved in modernisation is a "total" transformation of a traditional or pre-modern society into the types of technology and associated social organisation that characterize the "advanced", economically prosperous, relatively stable nations of the Western world. Because so many aspects of the social order in the underdeveloped areas of the world do not conform with the models set by the advanced countries, there is room for improvement in practically every direction one looks (Moore 1963: 89-90).

Applying the conventional wisdom of modernisation to medicine results in a preoccupation with the Westernised sector. Modern medicine implies universalistic attitudes, rational and scientific behaviour and advanced and capital-intensive technology (Parsons 1952; Levy 1952; 1966; Nash 1963; Black 1966). It also

emphasises a complex and increasingly sophisticated division of labour through differentiation and specialisation of functions, the growth of impersonal institutions and a technically competent workforce (Durkheim 1949; Tönnies 1955). Thus, the popular image of modern medicine is of an efficient system, highly effective in terms of quick, quantifiable results. Its professional status derives from actual performance (Fox 1976).

The reliability, validity and importance of 'modern' medicine are also supposedly guaranteed by various developments which have made it pre-eminent throughout the world. These involve: the standardisation of university education for doctors; training courses for paramedical workers; hierarchisation within the workforce; the bureaucratic organisation of medical work under doctors; the concentration of operations and treatment in hospitals; state responsibility for preventive and environmental health care provision; the supervision of publicly-sponsored medical services; and the licensing and regulation of all forms of medical practice (Friedson 1963; Illich 1975; Leslie 1976).

Transposed into a Third World context, Western medicine is part of the modernisation package which aims to provide economic growth and a rise in gross national product. Development plans are generally directed at importing capital and equipment to expand the modern sector, phasing out ethnic medicine in the process. Underlying this conventional approach is the belief that the application of modernisation theory can transform a society enmeshed

in a static and stagnating traditionalism. The switch from ethnic, such as Chinese, to Western medicine is assumed to be part of the familiar, linear progression associated with the sequence of development phases modelled by Rostow (1960). Thus, in the progression from a traditional starting point to a modern end-state, there is: a transition from an agricultural to an industrial society; rural-based to highly urbanised communities; low productivity to high productivity economic organisation; and, therefore, from poverty to affluence.

According to modernisation theory, local medicine should fall victim to the same socioeconomic processes that transformed Western medical science in the nineteenth and twentieth centuries, that is, urbanisation, monetisation, industrialisation, spread of literacy, mass communication and political participation by the masses (Lerner 1958). The progress assumed by these changes implies modifications in behaviour, re-orientation of attitudes, beliefs, motivations, aspirations and values that are expected to contribute to the preference for modern rather than traditional medicine (Redfield and Singer 1954; Hoselitz 1960; Hagen 1962). Governments in underdeveloped nations adopt Western medical institutions and technology in order to encourage and hasten modernisation of health care services.

Chinese medicine has drawn the scorn of Western-trained Third World medical planners because it is perceived to be pre-scientific, irrational or superstitious — which are believed to be characteristics

of groups resistant to social and economic change. Ethnic medical practice is associated with simple, small-scale organisation and community-oriented and interpersonal institutions. The minimal division of labour and lack of a technology equivalent to that of modern medicine reinforces the negative, stereotyped image. The quality and credibility of the labour force are disparaged because its status is attributed to either inheritance or cultural acceptance (Table 1.1). In the deprecation of Chinese medicine, much is made of its lack of versatility with instruments. For instance, Wong and Wu (1973:66) have argued that:

By constant use and pure concentration the old-style [Chinese] physicians may have developed this power [of pulse-reading] to such an extent that they can tell many things imperceptible to the average person. Be that as it may, scientific medicine has made such rapid progress and the various tests — both chemical and instrumental — are so accurate and reliable that this feeling of the pulse as a diagnostic method has lost much of its practical value.

Consequently, Third World planners, determined to develop a health service with the trappings of a more prestigious organisation, have excluded Chinese medicine. By their standards, this system of medical care lacks the integrated and systematic infrastructural support necessary for the makings of a definitive and authoritative medicine.

Critique of Conventional Wisdom

This conceptual division of Chinese and Western medicine into traditional and modern is subjective, arbitrary and Eurocentric.

TABLE 1.1 THE ASSUMED CONTRASTS BETWEEN
MODERN AND TRADITIONAL MEDICINE

	Modern medicine	Traditional medicine
Knowledge and behaviour	secular, scientific, rational	sacred, pre-scientific, based on cultural and religious beliefs, irrational or rational-empirical
Skills and status	achieved, specialised, organic, contract, functionalised roles, association-oriented, professionalised	ascribed, from descent or inherited, mechanical, community-oriented, non-standardised
Organisation	greater division of labour, highly organised, large-scale	minimal division of labour, unorganised, flexible, small-scale
Performance	efficient, highly productive	inefficient, backward
Capacity for change	active, fast evolving	passive, static

Sources: Adapted from Durkheim (1949); Levy (1952; 1966); Parsons (1952); Tönnies (1955); Nash (1963); Black (1966).

The notion that a traditional medicine is backward and 'anti-developmental' is based upon the fact that its practitioners, practice, facilities and performance do not conform with the Western conception of a medical system. It is misleading to universalise the institutions and social organisation of health care delivery in advanced and industrialised societies and assume that, ultimately, all other forms of medicine must undergo the same transition with a comparable outcome. Kleinman (1975:596) in his work on medical cultures has argued that:

[A] medical system represents a total cultural organisation of medically-relevant experiences, an integrated system of social (and personal) perception, use, and evaluation [In short,] this ideological and value system supports social institutions, relationships, roles and behaviours, and health activities which taken together constitutes a special segment of social reality.

Thus, all forms of medicine are culture-specific. However, this argument is not evident in the conventional wisdom that sponsors a modern medical sector emphasising only Western concepts. This is an asymmetrical value judgement weighted completely against ethnic medicine. Such a view is based on a fundamental prejudice founded on an extremely limited knowledge of the 'traditional' sector in the Third World.

Chinese medicine uses a comprehensive, deductive and highly logical system of knowledge not only for therapy, but also for diagnosis and prognosis. Medicine is not prescribed and needles

are not inserted until after a clear diagnosis has been made. This is accomplished by the taking of the patient's history and a physical examination, both quite similar to the principles of modern medicine (Porkert 1975; 1976; Dunn 1976; Leslie 1976; Lee 1979). Specific techniques developed within the 'traditional' system, such as acupuncture, have been adopted by Western-trained doctors. There is not an unchanging Chinese form of medicine, as critics imply, since it has adapted and survived more than a century of confrontation with Western health care. Chinese physicians have adopted some Western techniques of diagnosis and are receptive to innovations within Chinese medicine itself. In contrast, modern medicine has been extremely narrow in its conception of illness and therapy and, from its attempts to ban other forms of treatment, has shown itself to be intolerant of competing medical systems.

Conventional medicare wisdom is based on Rostow-like diffusionist ideas which emphasise the injection of Western technology and capital to 'modernise' a static health care organisation in the Third World. Hence, medical materials and knowledge have been transferred from advanced Western countries. This denies the ability of ethnic health care delivery structures, such as Chinese medicine, to modernise whereas, as health expert Dunn (1975) has stressed, contemporary Chinese medical practice is as modern as Western health care organisation. If the term 'traditional' is used to describe the former, it cannot imply it is unchanging or that the modern medical system is devoid of all traditional values.

The contemporary practice of both Chinese and Western medicine retains elements that are scientific and pre-scientific, rational and irrational, individualistic and collectivity-oriented, and this extends to all the criteria cited as the basis of the traditional-modern dichotomy (Table 1.1).

Modernisation theory, thus, obscures a most fundamental issue. The total displacement of traditional by modern activities simply does not occur. There is a transformation of both traditional and modern (or Western) forms in a process of change usually stimulated by their confrontation. Thus, the concept is merely a rationale used by administrators and planners to justify the domination of medicine by the Western sector and the depressed conditions characterising Chinese medical practice. The explanation of unequal relationships between two distinct forms of health care rests on unfounded portrayals of both. It follows that the evolutionary schema inherent in modernisation theory — with a predictable beginning and outcome — has little applicability in medical care. Modernisation theory, therefore, endorses the notion that health services in the Third World should be modelled on the experience of the advanced Western states without considering the wider social, political and economic forces which produced inequalities between 'traditional' and 'modern' sectors in the first place.

Indeed, the transformation of Third World medical practice must be examined in terms of a series of relationships

between the two interacting forms of medicine: Western and ethnic. The examination requires an analytical framework which considers both Chinese and Western medicine at the outset. It needs a concept that recognises the mix of old and new elements in the Third World, not merely a single-minded focus on the conceptualisation of the 'modern'. Dualism, which is a term adopted for convenience here, provides greater insight into the structure of Third World societies and must be distinguished from the dualistic notions promoted by the tradition-modernity dichotomy.

2. DUALISM: THE UNCONVENTIONAL WISDOM

This section focusses discussion on the formal-informal sector approach of the 1970s which grew out of dualistic or two-sector models — fashionable in studies of Third World economies during the 1950s (Dick and Rimmer 1980). These models differed from the sweeping multi-variable characterisation of 'tradition' and 'modernity' (essentially dualistic) by highlighting single-variable differentials perceived to be the chief cause of dualism. A classic conception is that of Boeke (1942) who outlined two incompatible social systems in Indonesia: an imported Western and an indigenous Eastern society. While the former embodied a more advanced and dynamic capitalist character, the latter was portrayed as a static, pre-capitalist agrarian community that was yet still able to hold its own in the face of capitalist penetration. However, Boeke's social dualism was, as Dick and Rimmer (1980) have observed, non-operational, and largely ignored by policy makers.

Nevertheless, dualism — or notions of it — was subsequently made academically respectable by Lewis (1954) and Eckhaus (1955) whose models led to the identification of a technological dualism which was followed by Geertz's (1963) study of a 'firm-centred' and 'bazaar' economy in Indonesian towns. Little interest was shown in these models, at least at the applied level, until it became apparent that benefits from the growth of the 'modern' sector had failed to percolate to the 'traditional' sector.

The 'modern' sector had also failed to create sufficient jobs. Hence, during the 1960s and early 1970s, there was a growing interest in the neglected 'traditional' sector as a means of absorbing labour generated by the burgeoning population of the Third World. There was, already, substantial literature advocating a return to 'traditional' (or at least an intermediate) technology and organisation (Myrdal 1968; Singer 1970; Goulet 1971; Grant 1971; Illich 1972; 1974; 1975; Schumacher 1974). However, it was not until Hart (1973) had highlighted 'informal' income-earning opportunities in a study of Ghana that the informal sector concept was employed by international planners. The formal-informal dichotomy was first used by the International Labour Office (1972) in its report on the Kenyan economy which was aimed at devising employment strategies and the promotion of income equality. While Hart essentially differentiated between self- (informal) and wage- (formal) employment, the International Labour Office characterised the informal sector as involving small-scale activities often operating at the periphery of the modern

urban zone (literally and figuratively). As Table 1.2 shows, these activities are purported to be dichotomously organised *vis-à-vis* the formal sector enterprises in terms of the technology employed, resources used and the market (Dick 1978).

The initial framework formulated has since been applied and modified in a series of empirical and theoretical studies (see Rimmer *et al* 1978; Bromley and Gerry 1979). Such works include the investigation of specific informal sector activities, such as self-employed small-scale producers (Gerry 1974), street vendors (McGee and Yeung 1977; Bromley 1978b; Jellinek 1978), garbage scavengers (Birkbeck 1978), trishaw riders (Forbes 1978; Rimmer 1978a), ice-cream peddlers (Forbes 1980) and small-scale retailers (Tokman 1978a), to list but a few examples. Research has also been undertaken on informal sector employment in South India (Bose 1974; Breman 1976; 1977; Harriss 1978), Africa (Weeks 1975) and Latin American cities (Souza and Tokman 1976).

Generally, studies of the informal sector were motivated by the 'unconventional wisdom' which asserted that indigenous elements in the economy promised potential for vital, dynamic, evolutionary growth and hence, could generate more employment opportunities than Western-derived enterprises. The International Labour Office (1972: 5) has argued:

... the bulk of employment in the informal sector, far from being only marginally productive, is economically efficient and profit-making, though small in scale and limited by simple technologies,

TABLE 1.2 CHARACTERISTICS OF CHINESE AND WESTERN MEDICINE
WITHIN A FORMAL-INFORMAL SECTOR FRAMEWORK

Characteristics	Formal sector	Informal sector
Technology	<i>reliance on overseas resources*</i> (Chinese medicine) (Western medicine)	<i>reliance on indigenous resources</i> (Chinese medicine only to a limited extent)
	<i>capital-intensive, often imported technology</i> (Western medicine)	<i>labour-intensive and adapted technology</i> (Chinese medicine)
	<i>formally acquired skills, often expatriate</i> (Western medicine)	<i>skills acquired outside formal school system</i> (Chinese medicine) (Western medicine in the past)
Market conditions	<i>difficult entry</i> (Chinese medicine) (Western medicine)	<i>ease of entry</i> (applicable to neither Chinese nor Western medicine)
	<i>protected markets</i> (Western medicine)	<i>unregulated and competitive markets</i> (Chinese medicine but trade licenses impose regulatory constraints)
Organisation	<i>corporate ownership</i> (state-supported Western medicine, Western pharmaceutical firms and Chinese medicine wholesalers)	<i>family ownership</i> (Chinese medicine, Western-type pharmacies and private general practice)
	<i>large-scale operation</i> (state-supported Western medicine, Chinese and Western medicine-distributing firms)	<i>small-scale operation</i> (Chinese and Western private medical practice)

* Original characteristics used in the model are italicised.

Source: International Labour Office (1972); Dick (1978).

little capital and lack of links
with the other ("formal") sector.

It was contended in formulations of the informal sector by the International Labour Office (1972), Weeks (1975) and Mazumdar (1976), that its potential was repressed by determinants largely external to it — unlike the formal sector where determinants of growth were internal. This standpoint argued against government neglect or harassment and institutional bias which, in turn, restricted access to the necessary support or state sponsorship and 'union' organisation which had made growth in the formal sector possible. Thus, international planners (International Labour Office 1972) and academics generally regarded the informal activities and their development as a 'solution' to Third World unemployment problems. However, major criticisms of the concept of the informal sector have emerged, particularly among researchers who have tested it in empirical studies.

Critique of Unconventional Wisdom

Firstly, it was emphasised that the delineation of the sectors was arbitrary, rigid and narrowly defined (Bromley 1978b; Harriss 1978), and, therefore, far removed from reality. As so little was known initially of informal activities, they were pre-supposed to be diametrically opposed to the modern, formal sector. Gerry (1978) has criticised the formal-informal sector approach as 'residual analysis' — a term he also applied in his criticism

of the tradition-modernity dichotomy. The sectors classified by the International Labour Office (1972) according to three dichotomies — market organisation, technology and resources used — need not co-incide in any activity (Dick and Rimmer 1980), or have any applicability in dividing up the urban economy (Breman 1976) especially where the dichotomies are difficult to delineate anyway. Often, enterprises fell along a continuum between the two sets of characteristics used in defining the two sectors, that is, a combination of modified traits from both rather than a rigid dualism was prevalent.

Secondly, it was not clear in the formulations whether the informal enterprises were coterminous with an 'informal' labour force. A major difficulty in identifying two clear-cut sectors — licensed and unlicensed — has been that, an activity, such as taxi-driving, could be operated in both. Different members of the same household could be employed in one or the other of these sectors.

Finally, the most serious criticism of unconventional wisdom, as couched in the informal sector concept was that it paid scant attention to the relationships which existed between economic activities. If any recognition was given to links between the sectors they were regarded as benign, and the notion was that stronger ties had to be forged to stimulate evolutionary growth in informal sector — a viewpoint with serious implications for policy-making. As Gerry (1974:5 as cited in Sethuraman

1976a: 72), has stressed:

... preoccupation with characterisation and the refining of definitions ... has caused such studies to neglect the fact that, to an important extent, it is the relations between these different systems or subsystems of production which determine those phenomena which will characterise each of the elements of the [productive] ensemble, and will lay the foundations for the functioning of the whole.

Inattention to interaction between the formal and informal sectors reduces the model to an essentially descriptive typology with a far from accurate view of crucial characteristics of Third World urban economies. Historical processes, which are deemed to have shaped inequalities between the sectors, are reduced to the promotion of unrealistic consumption standards by colonialist regimes.

The positive contributions that the formal-informal sector concept made to development theory cannot be discounted. These include: highlighting of conditions under which different economic activities operated; and removing the idea that 'informal' activities were disadvantaged because they were resistant to change. However, the wider socioeconomic and political forces and mechanisms which have shaped and are impinging on so-called informal sector activities are only superficially treated because of the preoccupation with 'forms' rather than relations. The argument that the state's neglect of the small-scale sector is responsible for its plight (Weeks 1975) explains little of the actual domination faced by these activities in the economy.

In short, linkages exist between the large-scale and small-scale enterprises which are heavily weighted in a way that fosters the former's growth. The two-sector schema also encourages an inward-looking perspective of Third World problems. Little recognition is paid to the fact that difficulties in development also stem, to a degree, from trends in the world economy. Actually, the conditions in the socio-political and economic structure are taken for granted and not related, with any depth, to the formal-informal polarisation.

Hence, the model of the formal-informal sector defined by the International Labour Office (1972) and further elaborations by Sethuraman (1976a; 1976b) are of limited use in analysing the interaction between Chinese and Western medicine. In the first place, the dualistic schema proposed by the formal-informal sector approach does not recognise that there is any interaction — merely a dichotomy. The diametrically opposed conditions under which the two medical systems are considered to operate are merely attributed to state sponsorship and organisation or unionisation of Western (formal) medicine with the lack of equivalent resources for Chinese (informal) medicine. Such a viewpoint does not demonstrate anything beyond that which is patently obvious. It leads only to a circular argument concerning the depressed status of the Chinese relative to the Western sector, that is, the deteriorating conditions under which Chinese medical practice operates are due to a lack of state sponsorship which produces, in turn, deteriorating conditions in the Chinese sector.

In the second place, the formal-informal characteristics outlined by the International Labour Office (1972) do not fit both medical systems (see Table 1.2). It is doubtful whether the features highlighted by the formal-informal sector model are relevant to an explanation of the persistence of Chinese medical practice. The subordinate nature of one form of socioeconomic organisation in comparison to another is obscured. Although medicine has not been examined within the framework posed by the formal-informal sector model, it can be shown from other empirical studies that one cannot treat the informal activity in isolation from, for example, large factories and commercial concerns or the wider (national and international) socioeconomic and political conditions. Gerry (1978: 1150) has argued that:

The world of the petty producer, casual worker etc., interpenetrates with that of the multinational corporation, the *maison de commerce*, the international bank and the aid-giving agency there is neither evenness nor equality in the extent and nature of this interpenetration. Each pole of the relationship benefits from and is dependent on the other, but in different ways;

The oversimplistic conceptualisation of the Third World urban economic structure in the formal-informal dichotomy provides no analytical tools for examining the above relations.

Alternative constructs, such as Santos' (1976; 1977; 1979) upper circuit/lower circuit compensated, in part, by stressing the interaction between economic sectors. Santos has

argued that this interrelationship could be seen in the spatial distribution and 'market specialisation' of each circuit. Other compensatory suggestions have included Sinclair's (1976) and Steele's (1977) notion of supplementing the two-sector model with an intermediate category which, contrary to the informal activities, possesses greater potential for generating employment and growth. Sethuraman (1976b) has advocated the further refinement of the formal-informal sector schema. All these attempts, however, have failed to make the dualistic concept acceptable.

Santos' upper/lower circuit concept pays attention to the spatial and market relations existing between two poles of the economy. The terms 'modern' (upper circuit) and 'traditional' (lower circuit) are used without the value-laden connotations attached as in modernisation theory. Though less widely applied to examining Third World economic activities, the construct has been particularly useful in highlighting distributional trends of upper circuit or large-scale activities and their lower circuit or small-scale counterparts, especially the rationale behind differences in the areal specialisation of these enterprises (Missen and Logan 1977). As Table 1.3 demonstrates, the typology used by Santos to characterise the two circuits has limited applicability in differentiating between the distribution and market importance of Chinese and Western medicine. The notion of lower circuit activities operating solely to serve lower-income groups and smaller cities, because upper circuit commodities are unavailable,

TABLE 1.3 CHARACTERISTICS OF CHINESE AND WESTERN
PRACTICE FITTED INTO A TWO-CIRCUIT MODEL

Characteristics	<i>Lower circuit</i> (Chinese medicine)	<i>Upper circuit</i> (Western medicine)
<i>Resources used:</i>		
Technology	<i>labour-intensive*</i> (labour-intensive)	<i>capital-intensive</i> (capital and labour-intensive, often imported technology)
Capital	<i>scarce</i> (considerable to none)	<i>abundant</i> (abundant to considerable)
Overhead capital	<i>dispensable</i> (dispensable)	<i>indispensable</i> (indispensable)
Fixed costs	<i>negligible</i> (important to certain types of practices)	<i>important</i> (important)
Government aid and institutional support	<i>none or almost none</i> (none)	<i>important</i> (important)
Credit	<i>personal, non-institutional</i> (personal, only rarely institutional)	<i>banks or other institutions</i> (government, foreign aid and banks or personal)
<i>Organisation:</i>		
Inventories	<i>small quantities, poor quality</i> (large to moderate quantities and/or high to low quality)	<i>large quantities, high quality</i> (large to moderate quantities and/or high to low quality)
Prices	<i>generally negotiable between buyer and seller</i> (generally fixed)	<i>generally fixed</i> (generally fixed)
Direct dependence on foreign countries	<i>small or none</i> (great)	<i>great, outward-oriented</i> (great)
Relations with clientele	<i>direct, personal</i> (direct, personal)	<i>impersonal, and/or through documentation</i> (direct, personal)
<i>Market conditions:</i>		
Work	<i>abundant</i> (limited)	<i>limited</i> (abundant)

* Original presuppositions for lower and upper circuits are italicised.

Source: Santos (1977).

is difficult to reconcile with the information gathered on the distribution of Chinese physicians and the markets they serve.

Further elaboration of the criteria used to identify the informal sector only serves to add more confusion to the already wide array in existence. Such further refinements, as pointed out by Gerry (1978), do not transcend the limitations of the approach. At best, the formal-informal model can be used as an aid for dismantling the complexities characterising Third World economies as Maude (1980) has stressed. The oversimplistic dualistic model must then be transcended by other frameworks which are amenable to an analysis of relations prevailing within Third World socioeconomic structures. A concept of centre-periphery relationships promised to correct these deficiencies which made use of the formal-informal sector model unsuitable for studying the interaction between Chinese and Western medicine.

3. CENTRE-PERIPHERY RELATIONS: CHALLENGE TO UNCONVENTIONAL WISDOM

At first sight the concept of centre-periphery relations seems to offer a solution to the problems encountered in dualism. Drawing on dependency theory, it concentrates on the relations between production systems co-existing in Third World economies. In rejecting the theory of dual societies and economies, Frank (1972), a leading exponent of dependency theory, highlighted the essential features of centre-periphery relations:

(a) contemporary 'underdevelopment' is in part

the historical product of past and continuing economic and other relations between satellite 'underdeveloped' regions and the now-developed metropolitan countries;

(b) the metropolitan-satellite structure extends in a hierarchy from 'centres' in Europe and the United States to the furthest outpost in the colonies and other peripheral countries; and that

(c) in the structure, each satellite is instrumental in channelling outwards capital or profits from its satellite and directing the whole or part of it to the world metropolises.

Thus, this new perspective on Third World development, or 'underdevelopment' to use Frank's term, emphasised that transfers of capital, institutions, values and technology between 'centre' and 'periphery' were as detrimental to the latter as they were enriching to the former. Economies in the 'periphery' were, therefore, 'underdeveloped' because of their links with the 'centre'. In contrast to diffusionist views championing the import of Western technology and capital as aids to Third World development, Frank and subsequent 'dependency' writers argued that this form of penetration of the Third World exhausted its resources but increased reliance on advanced capitalist countries by cultivating unrealistic consumption trends. The main thrust of these analyses has been to repudiate the conventional claims of modernisation and dualistic models, particularly the idea that diffusion from centre to periphery would generate growth in the latter and close the disparities in wealth and opportunities between them. Rather than attempt to review the diffuse dependency literature, which has been competently undertaken by recent critics of the theory, attention is concentrated

on discussing the main arguments underlying international centre-periphery relations and their connections with local and national centre-periphery linkages.

Writers, such as Furtado (1972), concerned with the disadvantaged position of 'peripheral' countries in the world economic system and the 'peripheral' experience in development, have agreed with Dos Santos (1973: 76) who has argued that dependency is:

... a conditioning situation in which the economies of one group of countries are conditioned by the development and expansion of others. A relationship of interdependence between two or more economies or between such economies and the world trading system becomes a dependent relationship when some countries can expand through self-impulsion while others, being in a dependent position, can only expand as a reflection of the expansion of dominant countries, which may have negative or positive effects on their development.

Two sets of centre-periphery connections are seen as having kept the periphery in a permanently dependent and underdeveloped state in comparison to the developed countries. Firstly, the international division between producers of raw material exports (the periphery) and manufacturers of industrialised products (the centre) means that international terms of trade are heavily weighted in favour of the latter (Pinto and Knakal 1973). Secondly, development strategies, such as import-substitution aimed at saving foreign exchange and reducing reliance on Western industrial nations, have led instead to another form of dependency in the world economy and reliance of the periphery on the centre for intermediate and finished

capital goods. Both sets of centre-periphery linkages have served to worsen rather than correct disparities in economic growth rates with a continued reliance of the periphery on the centre for aid, investments and trade.

In the dependency literature neither the concept of 'development' nor that of 'underdevelopment' has been rigorously defined. Thus, 'underdevelopment' and 'dependency' have been explained by a combination of interrelated phenomena which have been eclectically drawn into the schema. There is a skewed income distribution which worsens with economic growth. Unrealistic consumption trends are oriented towards 'elite' taste because they emulate those prevailing in 'centre' societies. An 'enclave' pattern of growth predominates because benefits of technology and capital imports are limited to specific areas and groups. Strong foreign influence is found not only in the spheres of economic production but also in the cultural, educational and socio-political areas.

Other writers (Cardoso 1972; Sunkel 1972; 1973; Obregon 1974; Stavenhagen 1974) have stressed the internal phenomena of marginality and the processes accounting for it. Invariably, they used as Sunkel (1972: 519) did:

... the concept of "dependencia" ... [to link] the postwar evolution of capitalism internationally to the discriminatory nature of the local process of development, Access to the means of benefits of development is selective; rather than spreading the process tends to ensure a self-reinforcing accumulation of privilege for special groups as well as the continued existence of a marginal class.

Thus, in essence, the focus has been on marginalisation, the cause and effect of which are reflected in the permanent exclusion of individuals and groups from opportunities for earning a reasonable and stable level of income.

Sunkel (1972; 1973) has attributed the polarisation of the world economy into 'developed' and 'underdeveloped' regions and associated imbalances in growth within the latter to transnational capitalism. Cardoso (1972) provided more elaboration in arguing that pre-existing production rationale in the Third World was being displaced by foreign-imposed elements mainly through transnational companies in the post-war period. This has excluded and hence 'marginalised' local entrepreneurs, professionals and workers not absorbed into the foreign-controlled enterprises.

Working at the national and local levels, Obregon (1974) has argued that 'marginalisation' and the creation of a 'marginal' labour force in underdeveloped economies have been due to the 'abrupt' incorporation of science and technology from the 'centre'. He has stressed that new monopolistically organised industries do not eliminate antecedent activities but relegate them to an intermediate or marginalised position in the economy. Indigenous branches of semi-manufacturing, such as clothing or shoe-making, various forms of petty commerce and rural subsistence agriculture, become subordinate to the expansion and profitability of dominant activities. Hence, all these theses have been based on the disruptive consequences which intervention of inputs from the

'centre' has had on socioeconomic change in the 'periphery'. Although the mechanism is unclear, the marginalised are deprived of necessary resources for their evolution. Obregon (1974) has postulated that the resources are channelled into banking institutions or manufacturing firms at the monopolistic level. Such a transfer of profits from the marginal stratum of the economy is because goods consumed or traded in it are produced by monopolistic enterprises.

Hence, as in Frank's theory, the situation of workers in jobs that are dangerous, insecure or low-income, is linked with spatial and social imbalances in development at the national and international levels in one grand explanatory schema. Nevertheless, critical reviews of dependency and its perspective of 'underdevelopment' (Chilcote 1974; Booth 1975; Lall 1975; Brenner 1977; Leaver 1977; Leys 1977; Palma 1978; Browett 1980) generally concur with O'Brien's (1975) opinion that positive contributions have been made. Among these is the radical criticism of previously predominant views of Third World development theory. Also placing national problems into a world system perspective promises more towards understanding development and underdevelopment than the traditional-modern dichotomy or dualistic models. Indeed, dependency theory encouraged substantial revision, at least, in academic circles, of development views — especially those regarding the roles of multinational corporations, capital transfers, aid programmes or the appropriateness of Western science and technology.

Critique of Dependency and Underdevelopment Theory

On the negative side, criticisms of dependency have focussed on various aspects. Firstly, there has been a lack of precision in the conceptual terminology employed. The concepts of marginalisation and marginality have been defined in terms of end-products of a social process. Existing definitions have been imprecise and inconsistent. Stavenhagen (1974) regarded marginality as the experience of workers with zero productivity, which Roberts (1978) then interpreted as encompassing the unemployed and underemployed and workers in low-profit or low-income employment. In Leys' critique (1977: 96), underdevelopment theory as embodied in such a conceptualisation of marginalisation, was:

... a general interpretation of a current situation, a system of mechanisms broadly taken as 'given' rather than putting forward a theory of the 'laws' governing the historical appearance and subsequent evolution of those mechanisms.

Secondly, critics have argued that underdevelopment has been crudely and unconvincingly explained. As Lall (1975) has stressed, the characterisation of underdeveloped and dependent economies is not unique to Third World countries and varying degrees of dependence prevail in relationships among First World nations.

Moreover, the concept of underdevelopment as couched in Frank's and the dependency writers' works, is severely limited in its applicability because it attempts to universalise one experience for economies as diverse as Brazil, India, Singapore and Tanzania.

The view that capitalism has caused underdevelopment has been the bone of contention in firstly Laclau's (1971) and then Warren's (1973) critiques. Laclau's concern was with the mix of pre-capitalist and capitalist activities which characterised underdeveloped economies rather than Frank's view of the penetration of these structures by and conversion to, capitalism from the sixteenth century onwards. Warren's arguments questioned the adequacy of a simple centre-periphery conceptualisation of world economic linkages when obviously a 'middle tier' of countries, such as Taiwan and Singapore, were developing between First and Third Worlds.

Thirdly, due to the crudeness of formulations of underdevelopment, there has been confusion about the units of analysis and this has resulted in the roles of social classes, the state, institutions and ideology being given only brief mention. This list of criticisms is far from exhaustive and pro's and con's for the notion of dependency and underdevelopment are still being enuciated. Dependency and its associated concepts of marginalisation and marginality, as Foster-Carter (1978), Taylor (1979) and Higgott (1980) have pointed out, are not amenable to micro-level work without further refinement. Some studies have demonstrated the shortcomings, such as Navarro's (1974) examination of the maldistribution of health care resources in underdeveloped countries, Gerry's (1977) study of the situation of petty commodity or small-scale producers in Dakar and Drakakis-Smith's (1980) analysis of the predicament of aboriginal

communities in central Australia.

Navarro re-iterates Frank's arguments that the imbalances in distribution of health care benefits between rich and poor and rural and urban areas stemmed from two sources — one, an emphasis on a pattern for the provision of medical care derived from 'centre' countries and, two, the excessive diffusion of sophisticated medical technology and curricula from developed nations which are ill-suited to the majority's needs though they meet those of a few local elite groups. Such a rationale does not transcend that put forward by unconventional wisdom in accounting for the underdevelopment of health care resources in Third World countries. Navarro's study led to similar conclusions reached by health planning consultants of the 1960s — an intermediate technology using medical auxiliaries and health clinics would provide the solution to problems of organising comprehensive and equitably distributed health care.

In examining the nature of the interaction between what can be considered as two opposed organisational forms, Western and ethnic (or Chinese) medicine, dependency and marginalisation provides a macro-level and general perspective of the forces which continue to impinge on their confrontation. However, 'marginalisation' remains a 'metaphor' with limited interpretative value for answering the questions related to the persistence of Chinese medical practice. Perlman (1976) and Gerry (1977) have argued that marginality and marginalisation are 'mythical'

concepts of the end-products of societal processes which should have been the targets for analysis. Researchers, such as Gerry (1977; 1978; 1979), Moser (1978) and Tokman (1978b), working on relationships between large and small-scale activities have looked beyond dependency theory and its sub-constructs for analytical tools which are more amenable to micro-level studies. Attention has been focussed on the notions of conservation-dissolution and dissolution.

4. CONSERVATION-DISSOLUTION

A more promising approach to the task of studying the delivery and consumption of Malaysia's health care system is to employ the conservation-dissolution methodology. Developed by Bettelheim (1972) the methodology is used to comprehend the 'conflict' between two social groups engaged in health care. Specifically, the methodology is used here to pinpoint features about health care and its purveyors that would be neglected if any one of the discarded methodologies were used. This exercise has the potential not only to highlight the intrinsic value of the concept but also to shed light on the nature of peripheral capitalism in Malaysia and other similar settings.

A prime virtue of the conservation-dissolution methodology is that it retains the domination-subordination relationship prominent in marginalisation theory. As the following exposition clearly demonstrates we can point to instances of Chinese medical practitioners operating in 'withered' markets. However there are dangers in attributing this contracted market to organisational and technological factors.

The conservation-dissolution framework allows us to avoid this trap. It permits us to highlight the way in which the dominant group, directly or indirectly, arranges for certain groups to be conserved (i.e. the Chinese medical practitioners). In other words, subordinate groups are not dissolved or developed into a fully-fledged capitalist organisation. They are transformed. In this 'limbo' state the restructured groups provide benefits to the dominant groups by allowing them to accelerate their growth or profitability. Before showing how the conservation-dissolution methodology brings 'life' and understanding to the hybrid Malaysian health care systems its core concepts of dissolution, conservation and conservation-dissolution have to be spelt out.

Dissolution is the process by which competing activities are eliminated because they conflict with dominant activities over either resources or markets (Hobsbawm 1964; Bettelheim 1972; Brenner 1977). Where market forces are insufficient

to render competitive activities inoperative — through the introduction of cheaper goods or new goods and services — dominant activities have to rely on state intervention to force them from the market. As Bradby (1975) has cited, this has involved the British government in exerting its political and economic power during the Opium Wars in China (1839 - 1840 and 1857 - 1858) to maintain lucrative activities on behalf of entrepreneurs and such dominant groups at home. Similarly, Rimmer (1978b) has noted, the forced removal of trishaw pedallers from Bangkok, parts of Jakarta and Kuala Lumpur to facilitate the operation of dominant activities. Thus, the mechanisms used can involve either direct, such as armed repression, or indirect methods. The latter can be either legislative — licenses, contracts and laws — or oppressive through exorbitant taxation as illustrated in Forbes' (1980) study of petty commodity producers in Indonesia. However, as Bettelheim (1972) has argued, dissolution is determined by political and ideological forces. Indeed, the mechanisms used to bring about the process of dissolution vary according to the time that dominant activities allow for phasing out competitors. Thus, before competitive activities disappear, a second process may be involved, that of conservation.

Conservation concerns activities that are not eliminated but are 'partially dissolved' and 'restructured' to facilitate the expansion of dominant enterprises (Bettelheim

1972; Meillassoux 1972; Godelier 1977; Gerry 1978).

Basically, there are two types of subordination. Firstly, there is 'literal subordination' where activities are functionally integrated into the dominant enterprises to serve their production activities witnessed by Gerry (1978) in shoe-making and McGee (1979) in sub-contracting within the construction industry. Secondly, there is a 'figurative' form of subordination where activities, such as subsistence agriculture, are not directly linked to the dominant sector but are maintained in a depressed state to benefit dominant enterprises.

Thus, conservation entails a re-shaping of subordinate activities in the direction, and according to the dictates, of dominant organisational forms. More accurately, it is a process of conservation-dissolution rather than conservation. There are some instances where dissolution predominates and others where conservation-dissolution occurs. The latter involves the structural readjustments of subordinate activities preparatory to their conservation in a 'restructured form', which Meillassoux (1972), Bradby (1975), and Godelier (1977) have called a process of 'destruction-maintenance'.

At the international level, Bettelheim (1972), Poulantzas (1974) and LeBrun and Gerry (1975) have argued that dissolution is the 'main tendency' in advanced capitalist countries with conservation-dissolution a 'secondary tendency'. The existing production system that dominates advanced capitalist

states evolved with the disappearance of pre-capitalist organisational forms. Such a transition is inapplicable in the Third World, where heterogeneity still characterises production activities.

The corollary, as Bettelheim (1972: 297-298) has argued is that conservation-dissolution is the 'main tendency' in the Third World. This macro-theoretical observation has been complemented by work on petty commodity production by LeBrun and Gerry (1975), Gerry (1978; 1979) and McGee (1979). However, the basic premises of conservation-dissolution are applicable to a wide range of organisations engaged in production throughout the Third World.

Bettelheim's concepts have been taken a step further by McGee (1979) who argued that rates of dissolution and conservation-dissolution differ among Third World economies. For example, dissolution is a 'main tendency' in the export-platform economies of Brazil, Hong Kong and Singapore. However, there has been little clarification of how the rate of conservation-dissolution can be measured. This is not the focal concern of this study as the central issues are to account for the interaction between dominant and subordinate activities and provide an explanation for the latter's persistence.

There is no shortage of ideas to explain the persistence of subordinate activities. Meillassoux (1972) and Bradby

(1975), for example, have postulated that internal restructuring and resistance mounted by subordinate organisations such as petty production, small-scale business or subsistence agriculture, partially account for their survival against competition from dominant activities. Indeed, the picture of a passive subordinate sector being manipulated by the dominant has to be revised as the interaction is a contentious process. As Kahn (1978) and Forbes (1980) have emphasised, the interaction is not merely a unilateral penetration of the dominated by the dominant but a reciprocal process. Survival of the subordinate must, therefore, be attributed to their internal organisational strategies aimed at adjusting to new markets and working conditions controlled by dominant activities. As Long (1975) has found in a study of small-scale entrepreneurs in Peru, these modifications are aided by an established network of interpersonal and intergroup connections. The complexity of these interrelationships established by 'subordinate' operators makes them difficult to dislodge. McGee (1979) has argued that such resistance by both small-scale producers and their clientele is cultural and presumes that dominant activities are inadequate in meeting consumer demands.

Subordinate activities, as Bienefeld (1975) has contended, operate in the interstices of the market neglected by dominant activities because the commodities involved are unprofitable. By using Tanzanian small-scale producers as an example, Bienefeld (1975) also argued that if subordinate enterprises are competing

openly with the dominant by supplying the same product, some form of state support would have been extended to the former. Also LeBrun and Gerry (1975) and Mkwandwire (1977) have argued that subordinate forms, such as petty commodity production, supply a majority of the Third World urban population with most of the basic needs of food and clothing. This cheap source of commodities, in turn, keeps wages low and aids in the expansion of the dominant sector by supplying low-cost labour. Something more than the 'circumstantial' evidence that LeBrun and Gerry (1975), Gerry (1978) and McGee (1979) have cited in their studies of large and petty production is required to bolster these propositions.

In some activities, the subordinate enterprises are directly connected with the dominant. Subcontracting and 'putting-out' operations to small-scale contractors enable large contracting firms to lower production costs (Stretton 1978). Subordinate contracting activities operate with lower-cost labour and are often illegal (Gerry 1978; McGee 1979).

There is much emphasis on the part played by state intervention in overt or tacit support for the conservation of subordinate activities. Indeed, McGee (1979) has argued that the maintenance of small-scale enterprises is saving the state the necessity to provide welfare benefits by absorbing labour and, incidentally providing for dependents. However, there is little elaboration on the theme by other authors. Nevertheless, administrators, due to bureaucratic delays, are unable to eliminate subordinate activities in a short space of time and lags occur

between the passing of legislation and its implementation. This latter can be forestalled by political connections which subordinate activities have established.

Besides working in favour of dominant activities, political and ideological forces can also be selectively applied to the preservation of indigenous society against external domination (Bettelheim 1972). Thus, political institutions, designing to return to the socioeconomic structure that pre-dated foreign penetration can also facilitate conservation-dissolution.

The effect of the 'conservation-dissolution' process on subordinate activities in Third World capitalist countries is generally debilitating. Since the key, and most profitable, activities are largely controlled by dominant organisations there are few avenues for the expansion and development of subordinate activities (Gerry 1978). Hence, conservation-dissolution places subordinate enterprises in an 'involutionary strait-jacket' — they can only develop, grow, regress and disappear within the restrictions and constraints imposed by dominant activities (Bienefeld 1975; LeBrun and Gerry 1975). While the popular view of subordinate activities is a picture of stagnation, a closer examination reveals a pattern of growth and destruction. Activities that are able to make a profit are transformed into small capitalist enterprises. Such an internal differentiation allows the more successful producers to dictate and manipulate those in weaker positions within the subordinate organisation. Indeed, the lobbying strength and political contacts of the more established

small-scale capitalists contribute to their survival and success.

RÉSUMÉ

This chapter has highlighted the difficulties of using three common methodologies — modernisation, informal sector and marginalisation — to study the delivery and consumption of health care in Malaysia. In particular, it emphasises why modernisation theory is irrelevant; why the positive contributions of informal sector models have to be transcended; and why marginalisation has to be rejected as a means of analysing change even though it focusses on social processes and structural relationships prevailing in Third World economies.

The chapter then goes on to argue that the conservation-dissolution framework has the best potential for examining the delivery and consumption of health care in Malaysia (especially the survival and adaptation of Chinese medicine within the context of domination by Western medicine). Subsequent chapters (Two to Six) make use of this methodology to explore (a) the growth and delivery of Western medicine in advanced capitalist countries and developing countries; and (b) the persistence and conservation-dissolution of Chinese medicine at a national and urban case-study level in Malaysia. These studies provide the basis for reflecting on the conservation-dissolution framework as a method (Chapter Seven).

CHAPTER TWO

INTERNATIONAL HEALTH CARE: DISSOLUTION AND
CONSERVATION-DISSOLUTION

Mapping the distribution of manpower strength of orthodox and unorthodox practitioners in a world map based on income differentials highlights the difference in health care between advanced capitalist and Third World countries (Fig. 2.1). In interpreting these spatial differences it is necessary to explore the political ideologies and wider socioeconomic conditions. These have impinged upon and directed the international development of health care. The variance in international health care delivery is explored using the concepts of dissolution and conservation-dissolution (Bettelheim 1972). Dissolution (and therefore direct subsumption) of pre-existing forms of socioeconomic organisation by a new dominant form in advanced capitalist countries has been determined by various ideological, social and economic forces. This predominant tendency of 'dissolution' has, however, been attended by a secondary process, that of conservation-dissolution — the restructuring of antecedent socioeconomic structures and their subordination by the dominant organisation. Nevertheless, as Bettelheim (1972) has argued, the ultimate disappearance of these structures will remain the final stage of the secondary process.

Conservation-dissolution, Bettelheim has further

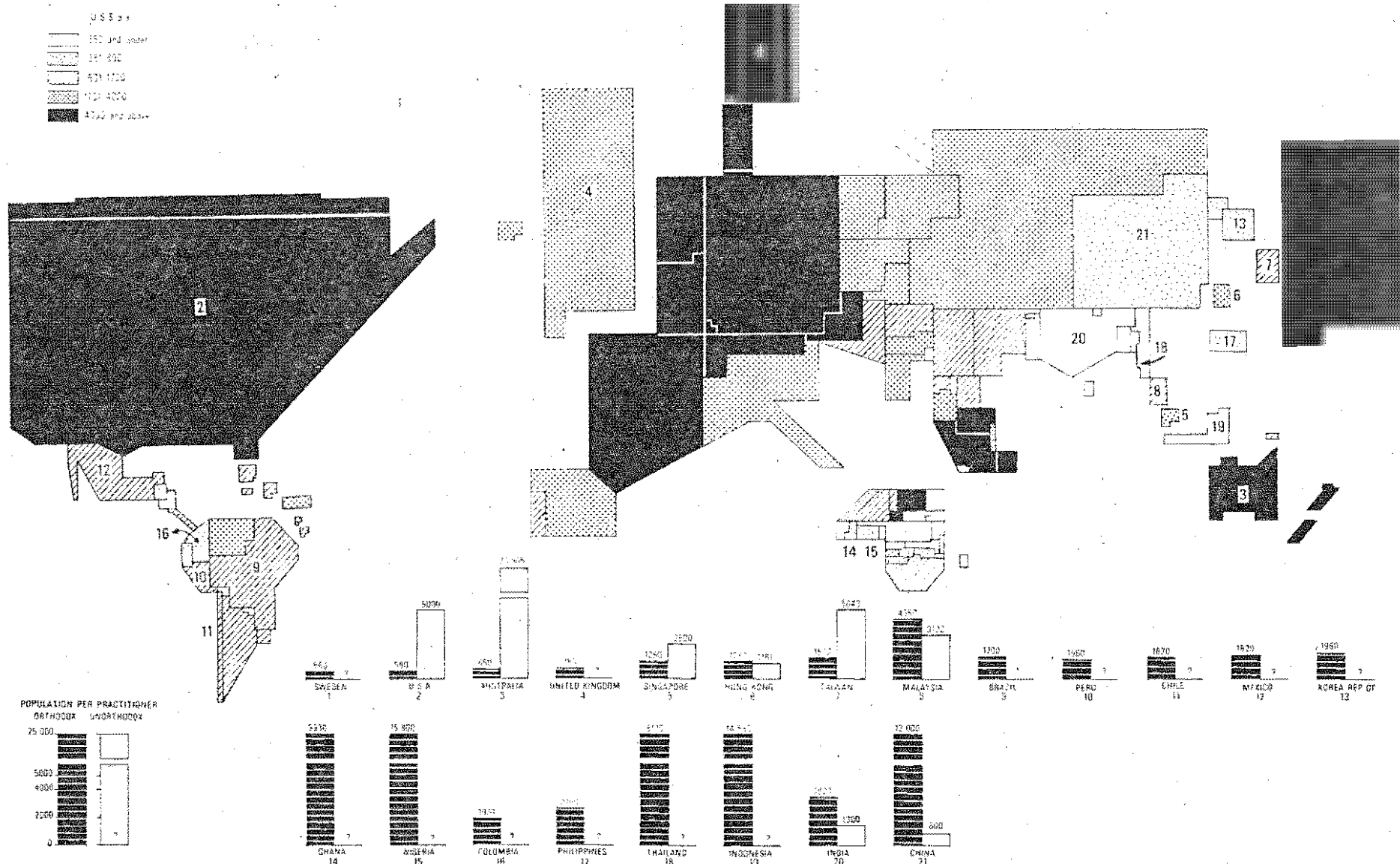


Fig. 2.1 A world map showing gross national product per capita (1975) and bar graphs showing population per orthodoxy and unorthodoxy medical practitioner in selected countries (for various years between 1970 to 1979)

postulated, has prevailed in Third World countries, particularly those integrated selectively by advanced industrialised economies into the world economic system. Writers, such as Szentes (1971), Amin (1974), Obregon (1974) and McGee (1978a), have stressed the importance of historical processes through which advanced Western nations have intervened in, directed and ultimately controlled the internal organisation of Third World underdeveloped economies. The evolution of health care organisation is an important instance of foreign domination and the societal conflicts engendered. Health care organisation in the Third World is illustrative of indigenous activities which have been preserved despite the target of development planning being its dissolution. A variety of cultural, political, economic and social reasons have fostered the backing of Western medicine by political and economic institutions. These have clearly chosen Western medical technology to maintain health standards because indisputably it has come to dominate international health care delivery with scientifically established success rates. Hence, conservation-dissolution is apposite for conceptualising the competitive relations between ethnic and Western medicine and the basis for the survival of the former. Both forms of health care are studied here independently of the intrinsic scientific worth, which remains a subject of much debate and controversy. Attention is focussed instead on the political, social and economic facets of their development.

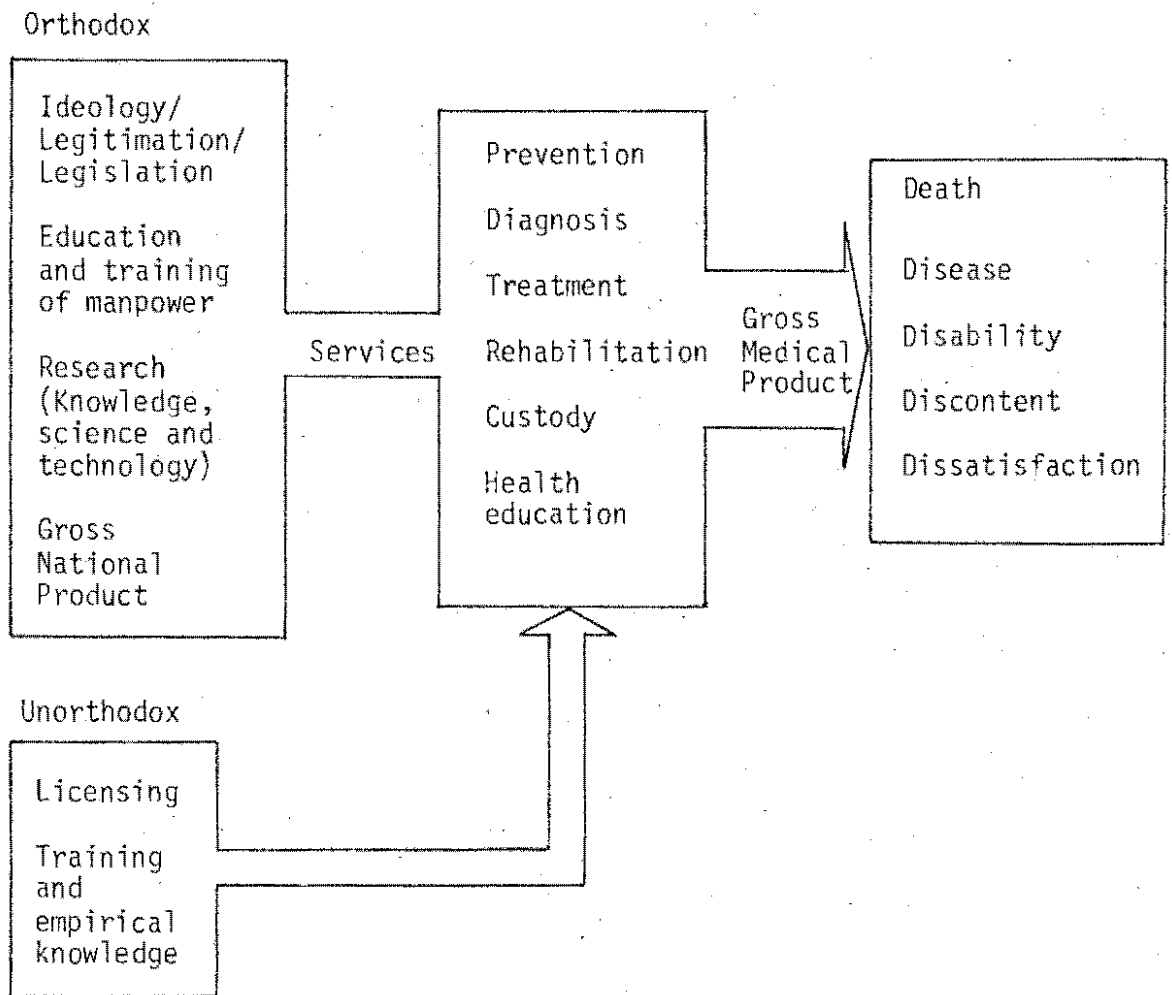
International health care, nonetheless, is dominated

by Western medicine and standards set in advanced capitalist countries. To explain the establishment and maintenance of this dominance, an examination is made of the evolution and organisation of health services in advanced capitalist countries (section one). Then, the pre-eminence of Western medicine in the organisation of health services in the Third World is investigated (section two).

1. HEALTH CARE IN ADVANCED CAPITALIST COUNTRIES

A schematic representation of medicine in its social context, expressed in terms of inputs and functions, is shown in Figure 2.2. Medicine in advanced capitalist countries is a composite of dominant (orthodox) and various subordinate (unorthodox) forms. The allocation of resources towards research, education and training facilities is totally in favour of the former. Lacking institutional support from the government and health insurance agencies, unorthodox medicine has not evolved such a comprehensive infrastructure for research and training. Similarly, it does not enjoy orthodox medicine's legislative and ideological backing.

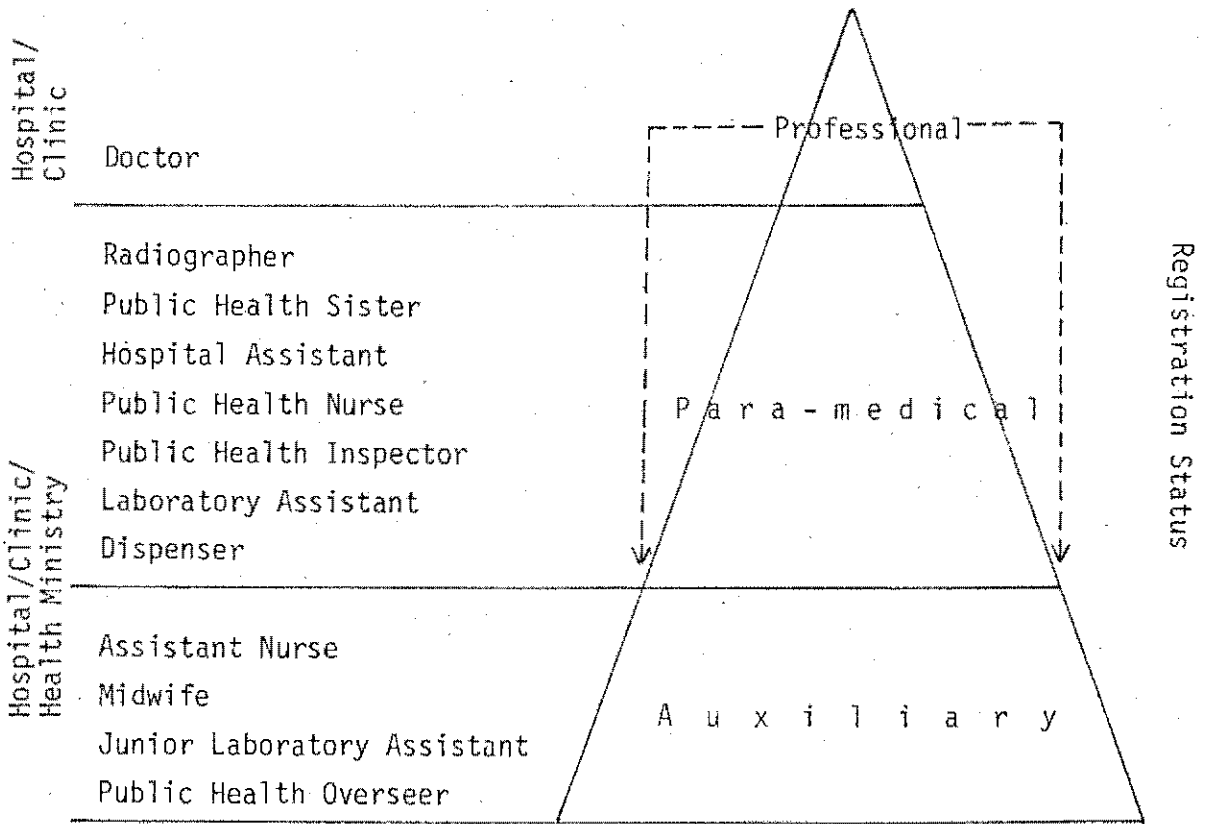
The 'dominant' medical complex, typified in this study by England's orthodox health care delivery system, is also referred to as regular or allopathic medicine. It is composed of a hierarchy of personnel dominated and controlled by the doctor — professional, para-medical and auxiliary. As illustrated in Figure 2.3, each type or stratum of the professional spectrum is associated with a specific set of infrastructural supports. In



Health Care Delivery

Source: Adapted from Field (1975; 1976)

Fig. 2.2 The components of orthodox and unorthodox medical practitioners in advanced capitalist countries



----- Links involving direct administrative control of entry, functions and professional status

Source: Adapted from Chen (1975a).

Fig. 2.3 The professional hierarchy in orthodox Western medicine

contrast, unorthodox and 'subordinate' forms of health care delivery do not exhibit such well-developed hierarchical relationships. However, some unorthodox practitioners have been functionally integrated into the dominant medical sector while others have been repressed.

Before the advent of modern medicine in the 1870s, there was no professional hierarchy. However, since then, there has been a gradual reduction in the numbers and types of freely practising healers (Sigerist 1947; Polgar 1962; Carlson 1975). A standardisation of professional skills, techniques and qualifications under the control of doctors has resulted in the 'subordination' of other personnel within the orthodox system. In the relegation of unorthodox medical personnel to supplementary positions, regulation and licensing were chiefly instrumental.

Restructuring of the orthodox sector in particular, and health care delivery in general, has been brought about by political, economic and social development unleashed during the Industrial Revolution, such as the growth of massive infrastructural support, epitomised by hospital construction, advanced technology especially in surgery, and a burgeoning pharmaceutical industry. In the process, unorthodox medical practice has evolved to challenge the orthodox system's overall technical competence. This has led to conflicts between 'regular' and 'unorthodox' medicine which have resulted in either the functional integration of the latter into the dominant complex — a literal form of subordination — or

their dismissal to inferior positions in health care — a figurative form of subordination or peripheralisation.

Such an evolutionary pattern raises a series of questions about whether Bettelheim's arguments concerning dissolution and conservation-dissolution can be sustained in examining health care. What evidence is there of dissolution and the secondary process of conservation-dissolution in the evolution of health care in advanced capitalist countries? How do the processes operate? What are implications of these findings for health care in advanced capitalist countries? In tackling these questions, attention is focussed on structural relations within health care and the forces responsible for changes in advanced capitalist countries.

Interaction and Conflict in Health Care Organisation

There were two major phases in the evolution of health care in advanced capitalist countries: the early evolutionary phase until the 1900s and the succeeding consolidation phase. The structure of linkages among practitioners of the dominant and subordinate forms of medical practice in each phase is discussed first. Then, the mechanisms and forces which created the conflicts are analysed.

Early Evolutionary Phase (1750 - 1900)

Until the early 1900s, there was a proliferation of freely practising general practitioners trained in orthodox medicine, plus faith healers, midwives, apothecaries, homeopaths, osteopaths, chiropractors, Christian Scientists and chiropodists. Table 2.1 gives a summary

TABLE 2.1 SELECTED SUBORDINATE FORMS OF MEDICAL CARE IN
ADVANCED CAPITALIST COUNTRIES

	Origins	Services
<u>Homeopathy</u> . Based on theory, 'Like is cured by like'. Remedies concentrated from numerous substances are administered to stimulate body's defences.	Britain, 1810. Samuel Christian Hahnemann	Herbal treatments. Majority of cases are arthritis, influenza, asthma, shingles, back pains, hay fever, eczema, rheumatism, common cold.
<u>Osteopathy</u> . Structure and function in the body believed to be interdependent and disease a perversion of either structure or function. Arteries and their normal functioning are seen as vital to health.	United States, 1892. Andrew Still.	Manipulation and adjustment of the spine are emphasised. Drugs are prescribed. Cases treated include joint problems, sprains, hernias, gall bladder complaints, constipation, fibrositis, sinusitis.
<u>Chiropractic</u> . Ill-positioned joints, especially spinal joints believed to be the source of illness and pain.	United States, 1895. D.D. Palmer.	Manipulation and 'cracking' of joints. Massage. Majority of cases treated for low back pain, neck and arm pain, nervous diseases.
<u>Naturopathy</u> . Opposed orthodox drugs and surgery. Indeterminate beliefs in natural methods of maintaining health. Stress on the practice of psychologic, medical and material sciences of healing including psychotherapy, manipulation, dietetics, gymnastics, in fact every kind of therapy which does not require internal medication.	United States. First school started by B. Just in 1920s.	Range of techniques from diets, fasting, massage, herbal remedies, hot and cold baths, mud packs, steam baths and ray treatments to counteract effects of excessive eating, drinking, smoking and exertion. Mostly resorted to for obesity, intestinal complaints, constipation, stomach troubles, colon, migraine, indigestion and ulcers.
<u>Acupuncture</u> . Derived from Chinese medical theory that the equilibrium of energy flowing through meridians in the body is vital to health.	China, dated back to 400 B.C. Established in France in late nineteenth century. Acupuncture association in Germany in 1937.	Needles are used on various points in the body along the meridians. Most commonly used to treat sinusitis, tonsillitis, bronchitis, bronchial asthma, conjunctivitis, stomach spasms, hiccough, gastritis, constipation, diarrhoea, headache, migraine, neuralgia, sciatica, low back pain and some forms of arthritis.

Sources: Fishbien (1927); Minty (1932); Wardwell (1952); New (1958); Webb (1977);
The National Times, August 31 to September 6, 1980.

of selective types of unorthodox medical practitioners who persist and the kind of services they supply.

In the beginning, large numbers of different types of practitioners and a limited demand from a predominantly low-income population gave orthodox medicine a weak bargaining position. While most practitioners operated on a commercial basis, the formation of professional associations to protect their interests gave orthodox physicians an advantage over other types of healers. Societal movements contributed towards orthodox physicians winning exclusive rights to health care. Some general medical practitioners were contracted to serve a growing urban labour force — predecessors of today's health care prepayment schemes. Such schemes were organised by industrial workers in emerging urban firms. Another group of doctors to develop was that affiliated with hospitals. Although the latter were poorly organised and dependent on voluntary, charity or parish support, they provided necessary infrastructure for health care provision. While simultaneously supplying amenities for the care of middle and upper-income clients, hospitals also served 'charity' patients upon whom doctors practised to gain their empirical experience. This differentiation which developed between hospital-affiliated and non-hospital-affiliated practitioners in England led to the hierarchisation between hospital consultants and general practitioners.¹

¹Anderson's (1972) study of Swedish health care provision presents an international parallel with England by identifying a strong corps of public health officers which repressed the emergence of a private medical sector until the late 1800s and early 1900s.

Development leading to hierarchical stratification in orthodox medicine did not prevent unorthodox medical practitioners from evolving and maintaining their practice in competition with 'regular' personnel. Shortfalls and inadequacies of 'allopathic' medicine and the absence of regulatory mechanisms bolstering orthodox practice, allowed them to compete unhindered. Hence, homeopaths, osteopaths and chiropractors emerged in both England and the United States to challenge what they saw as indiscriminate application of medicine and surgery by orthodox doctors. Other practitioners offered cheaper and often complementary alternatives to the services of orthodox doctors, such as apothecaries who sold prescriptions (Roemer 1977). Indeed, apothecaries were first resorted to by patients for minor illnesses in preference to consultations with physicians. Other healers, such as midwives and chiropodists, supplied specialised types of care which physicians did not deliver.

Where practitioners did not compete with Western orthodox doctors, they survived by offering complementary services. Others — who were competitive — basked in a free licensing era and flourished by supplying alternative therapeutic skills and medical services. (Both Anderson, 1972, and Ginzberg, 1978, have noted that there was no licensing of practitioners until the late nineteenth century in the United States). However, conditions changed in the early 1900s with the growth in intervention by the state, employers and, above all, orthodox medical associations.

Consolidation Phase (1901 - 1980)

Since the early 1900s major changes have occurred in the development of orthodox medicine based on its successes in discovering the causes of major 'Western' illnesses, such as bacteriology. These changes gave practitioners a dominant position in medical science and technology. In the process, the functional integration and 'literal' subordination of practitioners supplying complementary services were reinforced by restrictive regulation and repression. Such major modifications to the relative positions of orthodox and unorthodox medical personnel were made through the use of the same mechanisms and forces that were designed to bring about and maintain the dominance of orthodox medicine. (The analysis of such mechanisms will be dealt with in detail in the following section.)

As part of the evolutionary changes since 1900, orthodox medical doctors acquired: a monopoly over the issue of death and sick leave certification; delivery of health services for reimbursement by state and employer-subsidised health care funds; access to and control of hospitals and their complex of equipment and paramedical staff; and regulatory power over professional medical qualifications. Thus, from being Sigerist's (1947) 'sorcerer, priest and physician all in one', the 'orthodox' doctor came to dominate a hierarchy of paramedical and auxiliary personnel and practitioners of non-orthodox medicine — a position bolstered by the associated infrastructural complex (hospitals and pharmaceutical industry).

The artisan, who mixed his own prescriptions and made home-visits, had been transformed into a professional reliant on a battery of medical equipment and subordinate personnel — nurses, midwives, pharmacists, laboratory assistants and dieticians. As orthodox practitioners have become increasingly specialised, general practice has declined in certain countries, such as the United States.¹

Some previously 'freely practising' medical people, such as midwives, have been integrated into the dominant system. However, their functions have been changed or modified in the process. The integration has not been smooth and has been characterised by resistance. Midwives now operating within the orthodox system, have fought to retain the right to organise their own association rather than be controlled by professional groupings of doctors. While this has been successful in England, the American Medical Association has withheld its recognition, highlighting Carlson's (1975: 43) contention that physicians 'make nearly all the work rules by which other personnel within the medical care systems are governed. [Indeed,] they set the tone for the administration and behaviour of the entire system.'

Other changes in the evolutionary process during this consolidation of the dominant position of physicians over their

¹ Carlson (1975), has noted that only twenty-one per cent of doctors in the American Medical Association classified themselves as general practitioners while the remainder were distributed among sixty-three specialties.

counterparts include the re-definition of the functions of apothecaries which led to the creation of present-day pharmacists. Most of these personnel no longer prepared medical prescriptions but rather, retailed pre-packaged patent or proprietary medicines and dispensed drugs prescribed by physicians.

The unorthodox medical establishment has also acted to control competitive unorthodox personnel who emerged to challenge the supremacy of orthodox physicians in the nineteenth century.

Osteopaths, chiropractors, homeopaths and naturopaths have resisted the orthodox system's attempts at their dissolution and continue to compete. Nevertheless, they compete on unequal terms.

Wardwell (1952), New (1958) and Maynard (1975) have all noted that the unorthodox groups operate under commercial licenses which prevent them from being recognised as full-fledged medical professionals by the state and limit support from health insurance.

In addition, licensing subjects them to restrictive legislation.

Regulation denies them the right to issue death or sick leave certificates, use hospital facilities, treat cancer and injured persons, and employ the title of doctor. These restrictions have successfully transformed unorthodox medical practitioners into a 'subordinate' group of personnel and effectively precluded moves towards establishing equality of legislative and market backing.

While restrictive policy aimed at unorthodox medical practice has not succeeded in bringing about its dissolution, it has triggered off disintegration and division among its personnel. For

instance, the struggle for greater legitimacy by osteopaths has had varied success. Although the British Medical Council effectively quelled all attempts for recognition by osteopaths in the 1930s, American osteopaths in a few states of the United States have won the right to issue death certificates (Fishbien 1927).

Despite efforts at organising medical schools, associations, journals and sanitariums or even hospitals — the chief means through which orthodox physicians have established and consolidated their dominance — subordinate forms of health care delivery have not been able to prevent a decline in their consumer support and market viability, much less promote and propagate their services. Researchers, such as Fishbien (1927) and Minty (1932), noted that homeopaths, at the peak of their popularity in the 1900s — with 300 to 400 adherents among orthodox physicians — operated a hospital, dispensaries and branch hospitals in London and thirty other provincial towns. However, in England and even in the United States — the Mecca for unorthodox medicine — there has been a decline in the market standing of homeopathy. During the late 1920s, its dissolution was predicted when Fishbien (1927: 46) argued that it was little more than:

... a cult [which has] thrived on the weaknesses of the so-called regular medical practice of its period. When scientific medicine began to discard overdoses of too potent drugs and to rely on medicaments of proved value, homeopathy dwindled to its present state of moribundity. During

1925 there were forty-nine homeopathic graduates, and it seems safe to predict that another generation will see the complete passing of this offshoot of regular medicine.

From the original integrative base of the 1900s, variants of subordinate medical practice have disintegrated into factions, each represented by its own association.

Attempts to standardise training levels and qualifications among unorthodox practitioners have created internal conflicts between institute-trained and non-institute-trained (or among association and non-association members). While there was international integration and consolidation of orthodox doctors there has been no equivalent in unorthodox medicine. Although there has been no evidence for England, the Webb report in Australia illustrated the confused mix of qualifications characterising unorthodox practitioners in 1977 (Table 2.2).¹

In a bid to remain competitive, unorthodox medicine has been restructured to such an extent that its organisation resembles the structure of the dominant medical complex. Indeed, New (1958: 413), referring to osteopathic education, has argued that pressures to give it a respectability equal to that of orthodox medical training methods have led to drastic changes:

In the early [early] 1900s all prospective osteopaths were taught the art of manipulative

1

There are two chiropractic associations in the country and this situation is duplicated in the United States.

TABLE 2.2 OCCUPATIONAL DESCRIPTION OF PRACTITIONERS IN
SUBORDINATE MEDICAL SYSTEMS IN AUSTRALIA

Practitioner	number	per cent
Chiropractor	315	53.0
Chiropractor and osteopath	60	10.1
Chiropractor and naturopath	70	11.8
Chiropractor and homeopath	3	0.5
Other combination of chiropractor, osteopath, naturopath and homeopath	71	12.0
Osteopath	39	6.6
Naturopath	23	3.9
Homeopath	5	0.8
Other (none of the above)	8	1.3
Total	594	100.0

Source: Webb (1977)

treatment, and now [1950s], this is only a minor part of the curriculum. A comparison between the stated objects of the catalogues of various osteopathic schools between 1900 and [the 1950s] indicates that radical changes have taken place. Emphasis has now switched from osteopathic manipulation to osteopathic medicine.

Thus, unorthodox medical practice originally organised to provide services inadequately supplied by the orthodox sector, had started to emphasise a similar range of activities to that of the latter. Such changes in the internal workings of unorthodox medicine have had little effect on the restrictive institutional forces used by the dominant sector to maintain its market position and contain competition from unorthodox medical personnel.

Forces of Repression and Domination

Mechanisms which have been critical in establishing the dominance of 'regular' Western medicine were medical associations and schools, subsidised health care by the state and employers, and the pharmaceutical industry. These have wielded ideological, political and economic forces, including market manipulation, legislation and taxes, to advance and propagate orthodox medicine to the exclusion of unorthodox ways of delivering medical care.

Medical associations

The medical association comprises the national 'trade union' of orthodox doctors. Through the use of their association these

personnel have been successful in pressurising the British government to: license only practitioners whose qualifications meet their approval; and pass laws to protect their professional interests (that is, their monopoly rights to control of health care delivery). Similarly, in the United States, the combined might of the American Medical Association and the Association of Medical Colleges forced the government in the 1900s to license only doctors trained in approved colleges. This action brought the proliferation of private medical schools and the training of doctors via apprenticeships to a halt. The action reduced the number of medical schools from 135 to 66 within a decade and effectively controlled the number of orthodox doctors and schools (Anderson 1972; Abel-Smith 1976).

Lacking an integrated front, as witnessed by the numerous associations of unorthodox practitioners, and without the support of the publicised successes of orthodox medical science, subordinate forms of health care delivery have had no bargaining power to equal that of orthodox medical associations. These associations became a major force in shaping the nature of health insurance schemes emerging in advanced industrialised countries in the early 1900s. Prior to this, consumers had consulted with all types of orthodox and unorthodox medical personnel without institutional intervention.

Health prepayment schemes, which were originally developed in England involved transactions between orthodox doctors

and consumers. While most health insurance schemes have been arranged between the state, employers, employees and orthodox physicians, in the United States, parts of West Germany and Spain, practitioner associations have created their own health insurance programmes. The involvement of state and employers in health care provision for the growing labour force has reinforced the professional dominance of orthodox doctors. These personnel have generally been awarded the mandate over the maintenance and evaluation of the health status of the working population and its dependents. Unorthodox practitioners have been excluded from such programmes unless concessions have been made by the orthodox personnel or at the insistence of consumers contributing to the insurance schemes.

The state and employers

The original health prepayment schemes in England began in the form of 'friendly societies' (called mutual benefit societies in other parts of Europe). They were designed to provide workers in industrial cities with medical services and ensure that the doctors were paid. Later, the state and employers — industrial and commercial firms — intervened in the organisation of such health insurance schemes.

Initially, the British Government encouraged industrial workers to join 'sickness' funds. However, state-run health care coverage did not become universal until the 1950s after the government had stepped in to resolve mounting 'price' disputes between consumers and their doctors (Maynard 1975).

Anderson (1972) and Abel-Smith (1976) have argued convincingly that governments encouraged the development of health insurance which required contributions from both employers and employees because this reduced the burden on the former. By minimising work stoppages through illness, health insurance fulfilled the objective of encouraging rapid economic growth. Thus, new legislation was imposed which allowed orthodox health care delivery to be subsidised through contributory funds organised by the state, employers and workers. As Abel-Smith (1976: 14) has stressed:

The feudal obligation of the employer to his work-people was given legislative force in ... [societies] developing national markets where the employers without an obligation to pay to a sick fund might undercut the employer who had such an obligation. One political motive for this initiative was to reduce the cost of poor relief. But much more important was the desire to contain socialist and revolutionary activity by creating a new loyalty of the worker to his employer and the state. Moreover the employers obtained representation in the administration of the insurance funds which had previously been exclusively controlled by workers.

Employers who were providing sickness prepayment benefits could attract more workers than those who were not. Although health care coverage was subsequently required by law, employers complemented the governments' efforts in encouraging consumer use of orthodox medical services, thereby discounting possibilities of the employees consulting with unorthodox medical personnel.

In contemporary advanced capitalist societies, health prepayment schemes generally reimburse fees only for orthodox medical services. This means orthodox medicine has competitive advantage over unorthodox health care for consumers. As major consumer groups are members of health insurance agencies, they are influential in maintaining the *status quo* existing between orthodox and unorthodox medical personnel (Table 2.3). Health insurance, in fact, varies in nature among advanced capitalist countries, depending on the degree of intervention exerted by different institutions — medical associations, employers and employees, pharmaceutical industry, private insurance companies and the state. The exclusion of unorthodox and subordinate health care systems and the major bargaining force commanded by orthodox doctors have been the only consistent characteristics.

Government control over doctors' fees and drug prices is practically absolute in England and other parts of Western Europe.¹ In contrast, free enterprise predominates in the United States.²

¹Maynard (1975) has cited how the British Department of Health and Social Security has kept down the relative wages of doctors despite bitter resistance on the latter's part and their increasing migration to countries offering higher wages. Similarly, the Voluntary Price Regulation Scheme has kept drug prices lower than in the rest of Western Europe.

²The Blue Shield and Blue Cross prepaid health benefits schemes which were among the first insurance programmes for health services to emerge in the United States, were organised by the American Medical Association and the American Hospitals Association respectively (Shannon and Dever 1974).

TABLE 2.3 PROPORTION OF POPULATION COVERED BY SOME FORM OF
HEALTH INSURANCE IN SELECTED ADVANCED CAPITALIST COUNTRIES

Country	Private insurance per cent	Compulsory social insurance per cent
England	-	100.0
West Germany	10.0	88.0*
France	-	99.0*
Holland	30.0	70.0
Sweden	-	100.0
United States	100.0	-

* Remaining population assumed to have no insurance.

Source: Adapted from Maynard (1976).

However, the apparent difference between Western Europe and the United States is superficial because the dominant position of the orthodox medical profession is entrenched under both systems, as Illich (1975: 69) has argued:

Different political approaches have been used to legitimatise the tax-supported output of doctors Some [advanced capitalist countries] intervene with laws and incentives in the organisation of their health care systems. ... the United States launched a national legislative programme to assure the quality of care offered on the 'free market' and has left it entirely to the representatives of the medical profession to determine what shall be considered good care.

Other medical researchers, such as Anderson (1972), Ginzberg (1978) and Taylor (1979), have stressed that the quality of medical care in advanced capitalist countries is evaluated in terms of the money and other resources expended on health services. This has encouraged a proliferation of medical technology but has not led to an increase in personalised attention for patients by professionals.

The pharmaceutical industry

Underpinning the success and dominance of Western medicine has been the drugs and equipment supplied by a rapidly expanding pharmaceutical industry. As emphasised by Anderson (1972) and Abel-Smith (1976), orthodox medical treatment depends almost wholly on drugs produced in industrial laboratories. Doctors have few connections

with the production of the medicines they prescribe, particularly those apparently responsible for some of the most dramatic successes in the post-war period — tranquillisers, anti-malarials, anti-histamines, hypotensives, oral contraceptives, most vitamins and anaesthetics.

Indeed, it is argued in the Far Eastern Economic Review (1977: 45) that the pharmaceutical companies fund the evolutionary momentum and success of orthodox medicine since:

... [their] profit pays for cross-pollination of today's medicine and funds research for tomorrow. Drug research is almost entirely done by industry

The pharmaceutical firms, therefore, subsidise the expansion and propagate the use of orthodox medicine by increasing the availability and convenience of its drugs. Hence, the costs of doctors' services can be kept at competitive levels more easily than those of unorthodox medical practitioners. Investment in medical research made by the pharmaceutical industry is not available to subordinate forms of health care delivery. However, unorthodox medical practitioners, who rely on orthodox medical techniques, are also dependent on the orthodox pharmaceutical industry for equipment. This entrenches their subordinate position because unorthodox medicine is — in contrast to orthodox — an incomplete system of health care reliant on the dominant and competing sector for inputs needed to maintain its practice.

Implications

The combined might of medical associations, subsidisation of their services by state and employers, and the support of the pharmaceutical industry, has bolstered the dominance of orthodox medicine and relegated unorthodox forms to subordinate levels of the health care market. Nevertheless, alternative medicine has persisted, without such political and economic backing, by capitalising on the shortcomings of the dominant sector (and often the alleged gullibility of a clientele seeking alternative forms of relief).

In recent years, the inadequacies of orthodox medicine have led to the rejuvenation of subordinate forms of medical practice. Reviews of the consumption of unorthodox types of health care organised in advanced capitalist countries suggest that patronage is substantial. Although information is unavailable for England, the Webb Report (1977) revealed that a quarter of a million people in Australia make, on average, six visits a year to unorthodox practitioners. Despite such evidence of sustained use of unorthodox medicine, little has been invested in it by the state, employers or the pharmaceutical industry.

Orthodox medical professionals have risen to their exalted position in advanced capitalist countries through a process which has seen the disappearance of some pre-existing types of practitioners and a re-definition of the status of other personnel incorporated into the evolving professional hierarchy. Hence, the

alternative medical systems that emerged to challenge the professional excesses of orthodox medicine post-dated the latter's rise in dominance. Indeed, unorthodox medical practice enjoyed wide popularity before it was suppressed by licensing and regulation initiated at the instigation of orthodox professional associations. However, unorthodox medicine was organised from the outset, along lines similar to those of the orthodox system. Only the regulatory measures have prevented unorthodox practitioners gaining legitimacy and professional recognition on a par with the dominant sector.

Past and continuing relationships between advanced and Third World countries have not only transferred orthodox Western medicine to the latter but also given it greater legitimacy and development status than ethnic medicine. Although unorthodox medicine in advanced capitalist countries post-dated the emergence of orthodox health care, ethnic medicine existed before Western medical services were imposed in the Third World. While dissolution has been the predominant tendency in the evolution of health care delivery in the First World, interaction between the two systems in Third World countries is best conceptualised in terms of conservation-dissolution.

2. HEALTH CARE IN PERIPHERAL CAPITALIST COUNTRIES

Medicine in the Third World is also an amalgam of competing orthodox

(Western) and unorthodox (non-Western or ethnic) forms. The dominant trend has been for Western medicine to expand at the expense of ethnic medical practice — the result of past and continuing relations with advanced capitalist countries. This expansion has promoted conflicts between the two different sets of practitioners which have, in turn, affected the organisation of health care delivery in the Third World. These conflicts are probed by examining firstly, the origins of the dominance of Western medicine and its impact on ethnic medicine; secondly, the process of repression and resistance in the evolution of relations between the two groups of practitioners; and finally, the implications of such relations for health care.

Internationalisation of 'Western Medicine'

Western medicine in many peripheral capitalist countries has its origins in colonialism. Once the hold of subjugated territories was consolidated, colonial governments, aided by missionaries, organised a basic and minimally adequate framework of public health and medical services for army garrisons, the police force and expatriate communities. These medical services were extended to include the labour force employed in mines and plantations of expatriate entrepreneurs, to allow a greater and more effective exploitation of natural resources.

At Independence, an indigenous system based on ethnic medicine could have emerged, particularly in peripheral

capitalist countries where it remained the chief source of medical care. However, national development ideologies have merely reinforced the framework established by colonial governments. The 'development' priority enjoyed by Western medicine was perpetuated. An examination of the general development of health care in the periphery reveals that such domination has not eliminated non-Western forms of medical practice.

By introducing an emergent Western medical sector into a situation monopolised hitherto by ethnic medical practice, colonial actions in health care created a two-level system. Ethnic medical practice was tolerated provided it did not interfere with colonial activities — mining and plantations and the maintenance of a cheap and servile labour force. Where it did interfere with the implementation of 'essential' Western medical programming — as in the case of the midwives in India (*dais*) and Malaysia (*bidan kampung*) — practitioners were prohibited from operating or undermined by the provision of free services to overcome consumer resistance (Chen 1975b; World Bank 1975a; Bannerman 1979; Wan 1979). Local leaders were often coerced into aiding such schemes (Kennedy 1970).

As there was no pressure from Western-styled professional groups, ethnic medical practice was otherwise allowed to survive because it reduced the colonial government's expenditure on welfare provision for *compradore* and indigenous populations. However, there was little interaction between ethnic and Western medical practice because each served different segments of society

that evolved under the colonial regime. Thus, the bi-polar medical structure allowed colonialists to concentrate on the prime objective — the exploitation of local resources to maintain metropolitan industrial expansion.

From the outset, 'colonial medicine' was centralised, capital-intensive and spatially restricted in its distribution, being tied to either hospital or dispensary located in government administrative centres or economic foci, such as mines or rural estates. Outside of these centres, Western medicine was unavailable for indigenous communities except where some rudimentary services were provided by missionaries. Such communities relied on ethnic (or local) medicine which Table 2.4 shows was spatially and socially more highly diffused. Although there was little standardisation of skills among ethnically-trained practitioners, several characteristics were common to such disparate groups as the *curanderos* or healers of the Andean highland Indians, the jungle dwellers along the Amazon River in Brazil and the *mestizo* communities of Mexico; the *vaid*s and Unani *hakims* of India; and the *chung-i* of Hong Kong, Taiwan, Malaysia and Singapore.

Indigenous healers were closely adapted to the local socioeconomic framework using existing resources, such as local herbs (Table 2.4). Their services were exchanged for different kinds of payment — in kind, deferred fees or given free. Most practitioners were part-time farmers, small land owners or scholars who were accepted figures in the social order with either

TABLE 2.4 INTERNATIONAL PERSPECTIVE OF THE DISTRIBUTION AND COMPOSITION OF DOMINANT AND SUBORDINATE MEDICAL SYSTEMS

	Local	Regional	International
Medical systems	Folk medicine	Ayurvedic, Unani-Tibbi, Chinese medicine, chiropractic, osteopathy	Modern, Western or scientific medicine
	Indigenous	Indigenous, scholarly	Imposed and adopted
Area specialisation	Local, either rural or urban	Regional, rural and urban in Asia, Southeast Asia, advanced capitalist countries	Global, largely urban, slowly expanding rural emphasis
Practitioners characteristics	Male or female	Male (incipient feminisation)	Male dominance (lessening)
	Part-time	Full-time and part-time	Full-time
	Limited specialisation	Increasing specialisation	Strong specialisation
Training	Self-training family resources such as father-son or master-pupil apprenticeships	Master-pupil relation or education at a school; some self-training	Formal
Entry	Self-designation or by inheritance	Examinations and commercial licensing	Examinations, fully registered professionals

Source: Adapted from Dunn (1976).

long-established family traditions or extensive experience in medical care. Apart from mutual aid guilds, there were no formal schools or associations. As instanced by the Peninsular Malaysian aborigines and the *voodoo* doctors of Nigeria and Ghana, continuity of medical practice was assured by apprenticeships. Recognition as a full-fledged practitioner depended on successful treatment of a specific number of cases and general approval by the community in which the apprentice was to serve. Hence, ethnic medicine was functionally integrated into indigenous society.

The absence of interaction between Western and non-Western medicine did not prevent the imposition of the former from arresting or attenuating the development of the latter. Deprived of access to capital resources, ethnic medical practice experienced incipient deterioration. Hopes of a revival when the former colonies became independent quickly evaporated.

Post-Colonial Repression

The main post-Independence change has been decentralisation of the formerly urban and elite-based Western health care system to the urban poor and rural areas — regarded by the World Bank (1975a) and Roemer (1977) as the last bastions of ethnic medicine. Measures taken by the health ministries, dominated by Western-trained doctors, have included stepping up of programmes for professional and paramedical personnel, provision of university hospitals and hospital-based services, and tariff relief for

imported pharmaceuticals. These measures have not only propagated the use of Western medicine but promoted its direct conflict with ethnic medical practice.

Simultaneously, action has been taken by health ministries to suppress competition from ethnic medicine. Legislation has been passed to repress the professional standing of ethnically-trained practitioners. As in advanced capitalist countries, these personnel, for example, are prohibited from advertising their practice in any way that would lead the public to construe their skills and services as being equal to those of Western-trained doctors — a prohibition including the use of titles, names for their practices and also techniques employed. Indeed, they are only allowed to operate under commercial licenses that prevent them from practising in government or industry-sponsored facilities or obtaining tariff relief on imported medications.

This suppression of ethnic medicine and the propagation of its Western counterpart has been underscored by international aid agencies, such as the World Bank and World Health Organisation. As evident from Table 2.5, international aid makes significant contributions towards health care programmes in the Third World, particularly in the specified countries. Originally, the development targets of aid donors — international organisations and various advanced capitalist countries — were to supply teaching hospitals and support specialist training in advanced capitalist countries, as instanced by German and French

TABLE 2.5 INTERNATIONAL AID FOR HEALTH AND
RELATED PROGRAMMES 1976/77

	Amount of Aid US\$ (in millions)	Bangladesh	Nepal	Burma	India	Vietnam	Pakistan	Sri Lanka	Indonesia	Thailand	Philippines	Korea	Malaysia	Hong Kong	Singapore
<u>International Agencies</u>															
World Health Organisation	16.00	x	x	x	x			x	x	x		x			
<u>Bilateral Agencies</u>															
US Agency for International Development	41.88	x	x		x		x	x	x	x	x	x	x	x	x
British Ministry of Overseas Development	8.00	x	x												x
Danish International Development Agency	7.10	x			x					x		x			
Swedish International Development Authority	12.69	x				x		x					x		
Norwegian Agency for International Development				x	x		x		x						
Japan International Cooperating Agency	9.00				x				x						
Netherlands									x						
Canadian International Development Agency										x	x	x	x		
International Development Research Centre (Canada)										x	x	x	x		
<u>Foundations</u>															
Asia Foundation		x							x	x	x	x	x	x	x
Ford Foundation		x			x		x		x	x	x				x
Rockefeller Foundation					x				x	x	x	x			
Pathfinder Fund		x			x				x	x	x				
Population Council		x			x		x		x	x	x	x	x		x
Oxfam					x				x	x		x			x
World Neighbours					x				x		x				
American Public Health Association									x	x				x	
CARE					x		x	x	x		x	x		x	
Thomas A. Dooley Foundation			x												
Project Concern									x						

Source: World Bank (1975b); Voulgaropoulos (1977).

aid to African countries (Segall 1972-73; Rifkin and Kaplinsky 1973; Frankenberg and Leeson 1974; World Bank 1975a). Recognition of the inappropriateness of such priorities in guaranteeing the equitable distribution of health services led experts to switch their attention to intermediate technology and organisation — medical auxiliaries, clinics and district hospital — a service that consolidated the dominance of the 'imposed' orthodox medical system. These innovations were designed to bring about 'health care for all by 2000' (Wan 1979). However, local communities have found it difficult to assimilate such innovations. This was seen in conflicts in Zaire triggered off by the introduction of medical auxiliaries (Frankenberg and Leeson 1974) These personnel, predominantly male, found it difficult to work within a professional hierarchy which subjected them to the control of female nurses. They also had little success in reconciling their knowledge with that of ethnic medical practitioners. At the start, the intent was to displace ethnically-trained practitioners with Western-trained auxiliaries. When it was realised that training sufficient numbers of medical auxiliaries would be impossible by the year 2000, thought was then given to integrating ethnically-trained practitioners into the health programmes.

In general, therefore, intermediate technology has not been well-received by 'target' consumer groups, such as the rural population. Ethnically-trained practitioners have been held

as the scapegoats and selective incorporation of these personnel has been exercised to make Western-trained personnel acceptable. For instance, Bannerman (1979) has noted that birth attendants in African countries have been integrated into orthodox medicine with unmitigated success!

Resistance and Change

The activities of post-colonial governments, the establishment of pharmaceutical firms, and the emergence of orthodox doctors' associations, have reinforced the position of Western medicine, relegating ethnic competitors to supplementary and indirectly subordinate levels in the health care market. However, relationships between dominant and subordinate sectors are not static in health care organisation. Unorthodox practitioners have not passively accepted their subordinate position but have reacted to increasing pressures in ways calculated — if not to enlarge their share of the medicare market — to guarantee their continuing existence. Their aim has been to integrate practitioners, standardise qualifications and achieve respectability for ethnic medicine on par with that of Western medicine. Associations have emerged to fight for such parity.

Ayurvedic *vaidyas*, for instance, established a Central Council of Indian Medicine (1971) which acts as a regulatory body charged with standardising and examining educational levels and maintaining a central registry of practitioners

(Neuman and Bhatia 1973; Djukanovich and Mach 1975; Leslie 1976). Similarly, other boards established at the provincial level in India, exist to provide the required registration status to non-Western medicine that the Western organisation refuses to supply.

The work of associations have been paralleled by the establishment of related institutions — colleges and schools — to regulate the teaching of ethnic medicine and maintain the continuity of ethnic medical practice. Some institutes have established free clinics to advertise ethnic medical services. Exchanges of teaching staff from these medical schools have forged international links which have been augmented by exchanges of journals. Conversely, without the fillip of schools and journals, certain types of skilled herbalists and other ethnically-trained practitioners, such as the *bomoh* (Malay healers) and the *poyang* (aboriginal medicine men) in Malaysia, have declined in numbers. This decline has been partly because the chief means of transmitting medical skills has remained unchanged from the old pattern of apprentice training and maintenance of family trade secrets (Dunn 1975).

Western medical technology has also been adapted by ethnic medicine to improve its competitiveness. Patented or proprietary medicaments have been mass-produced to counter the competition from cheap Western drugs. These activities are well-established in Chinese medicine but have only recently been

extended to Indian medical care. For example, the Arya Vaidya Pharmacy (Coimbatore Trust) in India operates a factory which manufactures 500 items using extremely sophisticated machinery (Coimbatore 1979). This complex is managed along Western lines using trustees and a directorate. These modifications to ethnic Indian medicine reflects a major structural change because the organisation of the firm bears little resemblance to the hitherto predominant family-based structure.

Hybrid development in ethnic medical practice has occurred with the incorporation of Western drugs, equipment and medical techniques, particularly by practitioners who have been unable to mass-produce fast-working medicines. Despite rigid legislation against these measures, lax implementation and bureaucratic delays in enforcing legislation have allowed the proliferation of the use of Western drugs among ethnically-trained practitioners. A survey of Indian ethnic medical practitioners by Bhatia *et al.* (1975) for instance, showed that 90 per cent used Western medicines. Almost 10 per cent used no ethnic types of medicines at all. In addition, 77 per cent had thermometers, 87 per cent had stethoscopes and 2 per cent had blood pressure apparatus. Similarly, the *dukun* in Indonesia (Jaspán 1976) and healers in Nigeria (Asuni 1979) were also reported to be using Western drugs, such as aspirins. This adoption of Western therapeutic techniques and equipment has helped unorthodox practitioners maintain their credibility among their patrons in the face of Western

competition.

Working strategies have also been revamped to meet the threat from the expansion of the Western sector. Various organisational changes have occurred. Practitioners have survived by: working on a part-time basis; retailing medicines; operating in a number of different locations during a working day; and by relocating businesses from high to low rent areas. Thus, it is common for practitioners of non-Western medicine to be farmers for part of the day and healers for the remainder.

Associations, schools, mass-produced medicines and enterprising working strategies have allowed ethnic medical practice to remain an integrated part of the socioeconomic structure. Some unorthodox practitioners have amassed enough profits to invest in different sectors of the economy. Others have built up interpersonal relations with politicians. The latter have been particularly important in reversing earlier post-colonial policies in India aimed at eliminating ethnic medical practice.

The persistence of unorthodox practitioners has been aided by resistance on the part of consumers. These are either people who live beyond the reach of Western medical services or patients who have consulted with but not received adequate care from Western-trained personnel. As shown in Table 2.6, ethnically-trained practitioners outnumber Western-trained doctors in India. Indeed, some systems of non-Western medical care have survived because they offer more effective alternatives, such as in

TABLE 2.6 CONTEMPORARY UNORTHODOX MEDICAL PRACTITIONERS IN
PERIPHERAL CAPITALIST COUNTRIES

	Unorthodox practitioners (number) ratio	Western- trained doctors ratio	Comments on unorthodox medical practitioners	Source
<u>Low income*</u> <u>countries:</u>				
India	(400,000) 1:1300	1:4805	Still the primary source of services in most rural areas.	Neumann and Bhatia (1973)
Tanzania: Dar-es-Salaam	(700) 1:454	1:20,702	Practising Zaramo medicine men. Ethnic medicine is a large occupational group falling outside official surveys.	Good (1977)
<u>Middle income*</u> <u>countries:</u>				
Ghana: Techman Local	(63) 1:843	1:12,954	These are licensed practitioners. Total number of unorthodox healers is estimated at 126 or 1:421.	Good (1977)
Ghana: Danfa Project	(263) 1:137	-	Registered non- Western trained birth attendants only.	Good (1977)
Nigeria: Ibadan	- 1:532	1:30,000	Based on urban sample enlarged for city.	Good (1977)

* Following World Bank (1979) classification.

psychiatric care (Asuni 1979). This is further illustrated in the revived use of temple mediums to treat mental disorders by the Chinese communities in Taiwan (Kleinman and Sung 1979). Thus, in essence, ethnic medical practice has resisted repression by operating within the interstices of the market neglected by Western medicine and by supplying a competitive and alternative form of health care.

Implications

In the interaction between ethnic and Western medicine, the latter has dominated state sponsorship and public funding but the former has persisted, with internal adjustments. Hence, conservation-dissolution in the periphery, has been the predominant 'tendency'. The major implication of this conservation of ethnic medicine in the face of Western competition is best construed as the 'underdevelopment' of health care. This is characterised by an inadequate system of Western services and the maintenance of ethnic medical care, with conflicts between the two as yet unresolved. Shortfalls in the achievements of Western medicine between selected Third World and advanced capitalist societies are shown in Table 2.7. There has been a persistent problem of maldistribution of Western health care facilities and personnel which has been attributed to manpower shortage, especially Western-trained doctors (World Bank 1975a). These shortcomings have been exacerbated in many Third World countries by the post-colonial pursuit of

TABLE 2.7 INTERNATIONAL COMPARISONS OF HEALTH STATUS
AND STATISTICS 1978

	Gross National Product per capita \$US	Western- trained doctors* ratio	Hospital beds+ ratio	Life expectancy years	Infant mortality** rate (aged less than one) number
<u>Advanced capitalist countries:</u>					
Sweden	10,210	560	88	75	(8)
United States	9,590	580	152	73	(14)
United Kingdom	5,030	750	109++	73	(14)
<u>Peripheral capitalist countries:</u>					
<u>Middle income:</u>					
Singapore	3,290	1,260	281	70	(12)
Hong Kong	3,040	1,280	241	72	12
Taiwan	1,400	(1,570)	-	72	(25)
Malaysia	1,090	(4,350)	273***	67	(31)
Korea, Republic of	1,160	1,960	-	63	-
Philippines	510	2,760	-	60	(65)
Thailand	490	(8,170)	809	61	(68)
<u>Low income:</u>					
Indonesia	360	(14,580)	1,560	47	-
India	180	3,620	1,289	51	-

* Population per doctor for 1977 unless otherwise specified.
Figures in brackets are for 1975.

+ 1975 population per bed ratios.

** Number of infants per thousand live births per year who die
before they are one-year old. Figures in brackets are for
1976.

++ For 1970.

*** For Peninsular Malaysia only.

Source: World Bank (1975a; 1979).

displacing ethnically-trained medical practitioners. Such an objective has been interpreted as the substitution of a spatially and socially more highly diffused form of health care.

Both ethnic and Western medical sectors depend on imports of pharmaceutical products. Table 2.8 illustrates in part, the dependence on imports of Western pharmaceutical products by member-countries of the Association of Southeast Asian Nations (ASEAN). National level studies would reveal that — despite the establishment of research facilities in Western medicine — there is as yet, no systematic means for introducing innovations and ensuring their even spread among doctors in both the private and public sectors. On the other hand, the evolution of ethnic medicine has been stultified in its confrontation with the Western system. Competition has meant that non-Western medicine has to concentrate all its resources on the struggle to maintain its continuity and commercial viability. Ethnic medical practice has not developed links with state sponsorship except in a few Third World states, such as India, or gained the endorsement of the evolving private firm sector. Most ethnically-trained practitioners are self-employed and operate at a 'petty commodity' level, subject to the uncertainties prevailing in the private commercial sector. 'Involutionary' modifications have been forced on ethnic medicine which threatens its identity as an alternative form of health care. If the paradoxical situation in which ethnic medicine operates is to be understood, an analysis

TABLE 2.8 ESTIMATED PHARMACEUTICAL EXPENDITURE
IN ASEAN COUNTRIES 1976
(in US\$ thousands)

Country	Public	Private	Total
Indonesia	26,000	325,000	351,000
Malaysia	n.a.	n.a.	50,000
Philippines	n.a.	n.a.	137,000
Singapore	n.a.	n.a.	16,000
Thailand	49,020	185,820	234,840
Total			788,860

Source: Adapted from United Nations Asian and Pacific Development Institute (1978).

is required into the impact of 'restructuring' on relationships within the system and with the wider socioeconomic structure.

As an international survey is inadequate for more than a general review of the situation of health care delivery in a Third World context, two other levels of analysis are interposed — a national survey of ethnic medical practice and a micro-level examination of non-Western medicine and its practitioners in an urban setting. Since it is beyond the resources of the study to deal with all forms of ethnic medicine in the Third World, interest is centred on Chinese medicine and its interaction with the Western system. Malaysia has been chosen as the focus for study because its health care delivery system featured a well-developed Western sector and three forms of ethnic medical practice.

CHAPTER THREE

CONSERVATION-DISSOLUTION: REGIONAL TRANSFER AND
TRANSFORMATION OF CHINESE MEDICINE

As a means of comprehending the workings of the 'world system', the concept of conservation-dissolution is selectively applied to Chinese medicine *in situ* and to its transplanted regional variants in East and Southeast Asia. This raises the question as to whether Chinese medical practice in capitalist and socialist states can be conceptualised in terms of conservation-dissolution. It can only be answered by a comparative analysis of the classical structure of Chinese medicine and its modified form in present-day mainland China and selected Third World countries. The analysis is related to changes within Chinese medical practice as they were affected by conditions in the wider socioeconomic structure of both its heartland and adopted areas.

Initially, attention is concentrated on interpreting the evolution of Chinese medical care from its classical origins to its hybridised form in the People's Republic of China (section one). Then the transformation of the ethnic system in selected Third World countries is considered (section two). A guide to the types of practitioners — classical and hybridised — is given in Table 3.1.

TABLE 3.1 TYPES OF PRACTITIONERS: CLASSICAL AND
HYBRIDISED CHINESE MEDICINE

Period/place	Categories	Functions/specialities
3rd. century B.C. (c. period of the Contending States)	<i>Chou-i</i>	Military physicians
T'ang (678-907 A. D.) to Communist takeover in 1949	<i>Ju-i</i>	Confucian medical theoreticians who learnt medicine first to serve their own needs, the Court's and to acquire greater social standing.
	<i>Ming-i</i>	Highest in group of <i>yung-i</i> (professionals). Part-time professionals using inherited family knowledge.
	<i>Shih-i</i>	Full-time professionals. Together with <i>ming-i</i> , are known for a specific specialty.
	<i>Chuan-i</i>	Full-time general practitioners.
	<i>Ling-i</i>	'Wandering' physicians. Served in areas of the health care market neglected by others.
1949 onwards (in mainland China)	Pavement practitioners	Includes midwives, <i>shamans</i> herbalists, apothecaries, Taoist adepts, self-taught practitioners, bone-setters, priest-healers, acupuncturists, fortune-tellers, magicians and exorcists who served common people only.
	<i>Chung-i</i>	Old-style practitioners with programming in Western medicine.
Late 1800s onwards (in East and Southeast Asia)	'Barefoot doctors'	Paramedical workers trained in both Chinese and Western medicine at a primary health care level.
	Scholar- physicians	Government or civil service personnel who charged no fees for services but was in medicine for own needs and social prestige.
	Professional <i>Chung-i</i>	Herbalists, acupuncturists and haemorrhoid specialists who practise for a livelihood.
	Medicine retailers	Sometimes <i>chung-i</i> but usually businessmen with extensive knowledge of inventory of Chinese medications.
	Itinerant medicine men	Indeterminate functions but serve rural areas and small towns.

Source: Dunn (1976), Unschuld (1976; 1979).

1. THE DEVELOPMENT OF HYBRIDISED CHINESE MEDICINE

In the historical development of medicine within China three major phases are deemed critical: the development of classical medicine (1122 B.C. - 1911 A.D.), its threatened dissolution (1912 - 1949), and its conservation-dissolution in a hybridised form (since 1950). In examining each phase, attention is centred on the organisational aspects of classical Chinese medicine in relation to the political and ideological forces that have helped shape the structure of health care delivery. Only limited and highly disparate materials are available on the origins of classical Chinese medicine especially its social, economic and political aspects. However, a macro-level perspective is given to help focus the subsequent discussion on the transformation of Chinese medicine during its evolutionary phase, first in mainland China and then in East and Southeast Asian countries.

Development of Classical Chinese Medicine (1122 B.C. - 1911 A.D.)

By the time Western capitalism had penetrated China in the late sixteenth century classical medicine had already been in existence for an estimated four thousand years, as documented in historical accounts by Veith (1949), Amber and Babey-Brooke (1966), Croizier (1968), Huard and Wong (1968), Risse (1973), Porkert (1975), Hume (1975) and Lu and Needham (1980).

It had acquired by then a distinctive organisational structure comprising a 'court' sector serving the Imperial family and its retinue and a 'commercial' sector for the rest of the population. Practitioners in the latter sector provided some state-endorsed medical services for the poor but these were perfunctory compared to their commercial and profit-based activities. Among commercial practitioners, there was a crude distinction between 'professional' and 'pavement' types. According to Morse (1978) — following an earlier definition by Wong and Wu (1973: 141) 'pavement' types of practitioners included:

... [the] labourer who inherits a few prescriptions from his ancestors, or an old woman who has had some experience from rearing her children, will put up a sign-board and start a practice. Going a little higher we find a class of men who are too lazy or too weak for manual labour, or not educated sufficiently for literary work; for a few months they ransack some old medical books and then take to medicine to earn a means of livelihood.

The 'professional' category, again, following Wong and Wu's (1973: 141) account were those who had served:

... an apprenticeship ... either under an old doctor, or in a druggist shop, to enable the beginner to pick up some knowledge of medicine before he commences practice Most confidence is placed in those who spring from medical families or those who can point to large numbers of professional ancestors.

This structuring of classical Chinese medicine had its origins in the Chou Dynasty (1122 - 770 B.C.) with the emergence of a court-based health care delivery element in the form of the Imperial

Medical Department. Table 3.2 gives a chronological summary of the social, economic and political conditions attending the course of evolution of Chinese medicine. Since historical chronicling of this evolutionary process has been less concerned with the social and economic aspects of Chinese medicine and more with its scientific contents the table is an amalgam culled from various sources — the accuracy of dates and events remains the subject of on-going debate.

Often, as Kleinman (1975) has pointed out, imperial medical services have been erroneously identified with the whole of Chinese medicine. Court medical services however, were not extended to the majority of Chinese people who resorted to a largely unrecorded and non-scholarly form of medical care (Kleinman 1973). This 'commercial' sector or publicly available health services promoted the strong empirical emphasis in Chinese medicine. As Agren (1975) has noted, techniques, such as acupuncture and various forms of herbal treatment were incorporated into 'court' medical practice from its commercial counterpart.

The distinction between court and public medicine — chiefly organisational — was reinforced after the Chou era by the increase in political stability and economic growth. As noted by Huard and Wong (1968) and Inschuld (1979), hierarchical relations among practitioners during the T'ang era, almost two thousand years later, demonstrated a similar division between court-supported and public medical sectors which had developed during the

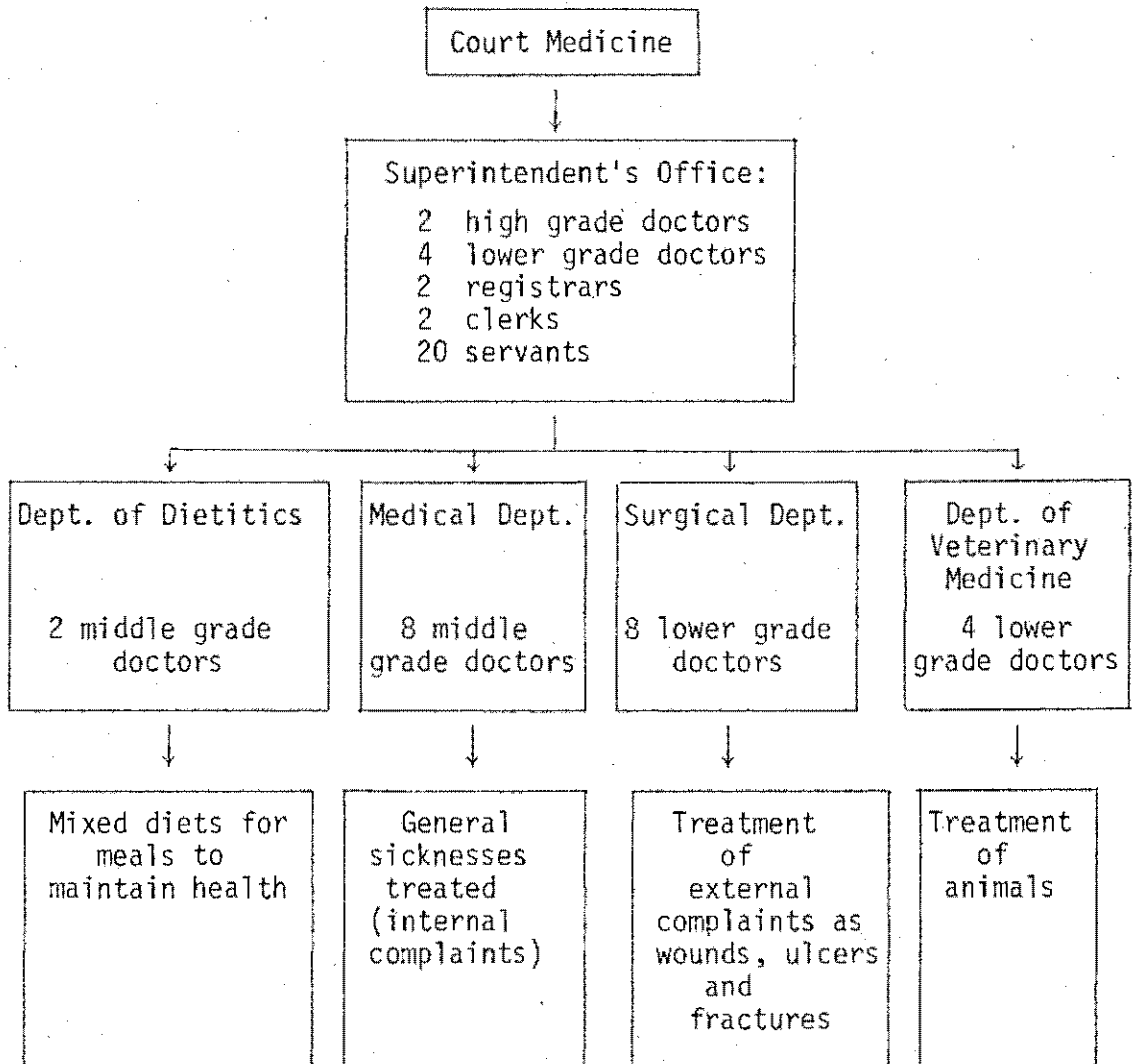
TABLE 3.2 CHRONOLOGY OF DEVELOPMENT IN CHINESE MEDICINE AND ASSOCIATED SOCIOECONOMIC CONDITIONS IN MAINLAND CHINA

Dynasty	Date	Chinese Medicine	Socio-Political and Economic Conditions	Ideological Conditions	Important Figures in Chinese Medicine
Hsia	2205-1766 B.C.	Simple empiricism of plant lore, religious beliefs, faith healing; shamans, doctors and magicians; use of medicinal herbs; oracle bones discovered with names of diseases.	Legendary rulers; patriarchism; village communities. Rulers referred to as <i>huang</i> (king). Primitive implements and trade by barter. Capital cities of Chang An and Loyang had been established.	Shamanism and magic.	
Shang-Yin	1765-1122 B.C.				
Chou	1122-770 B.C.	Inclusion of the <i>Yin-Yang</i> principle and the five elements (<i>wu-hsing</i>) in medicine. Regional differences in methods of healing. (Shantung: stone needles. Shenst: medicinal herbs. Hopei: moxa. Hupei: metal needles. Honan: massage). Book of Ailments, 3rd-2nd centuries.	Transitional phase between original communal-based, pre-historical society and the emergence of warring principalities; early form of feudal system. Trade by barter between the domains controlled by various rulers.	Appearance of the Book of Changes, or <i>I-Ching</i> . Development of the <i>Yin-Yang</i> principle and the doctrine of the 'five elements' (<i>wu-hsing</i>). Important philosophers: Kung-Tzu, 551-479, main work, <i>Lun-yu</i> ; Lao-tzu, 4th.-3rd. centuries, main work <i>Tao-te Ching</i> ; old imperial legends; Age of philosophy. Time of Confucius, Mencius and other prominent philosophers of Chinese thought.	Pien Chu'ueh, the "Father of the Pulse", 5th. century; Tso Chiu-ming, 5th.-3rd. centuries, the first to mention acupuncture and moxibustion.
Period of* Springs and Autumns	770-475 B.C.				
Period of* the Contending States	475-221 B.C.				Fragments of the classical medical text, <i>Huang-ti Nei-ching</i> , attributed to legendary emperor, Huang-ti.
Ch'in	221-206 B.C.		Emergence of a patrician aristocracy in the towns; trade concentrates at centres of communication.	Shih Huang-ti, the founder of the dynasty, has all books burned except the medical ones. Age of historical scholars. Beginning of the Age of Science in China.	Shun-yu Yi (c. 216-154 B.C.) associated with some form of clinical medicine in Chinese medical practice.
Han	206-220 A.D.	The <i>Huang-ti Nei-ching</i> , (Yellow Emperor's Classic of Internal Medicine; <i>Book of Medicaments of Shun-yu</i> ; <i>Treatise on the Various Kinds of Fever</i> , 2nd-3rd. centuries, <i>Short Version of the Golden Chamber</i> , 2nd-3rd centuries, <i>Book of the Pulse</i> , 3rd century.	Patrician aristocracy in the towns seizes power.	Beginning of cultural links with India; awareness of Buddhism. Taoism organised, Buddhism welcomed.	Hua T'ao (c. 141-207), founder of Chinese surgery and anaesthesia, Chang-chung Ching (c. 142-212), author of the treatise on various kinds of fever.
The Three Kingdoms	220-80 A.D.	Translations of great medical works. (The book, <i>Pao P'u-Tsu</i> , 4th century).	Late forms of feudalism; Patriarchal form of taxation.	Intensified cultural exchange with foreign countries like India. Start of an era of struggles with barbarian or non-Han people.	
Western Chin	265-316 A.D.				Wang Shu-ho (c. Third century), pulse theorist.
Eastern Chin	317-420 A.D.			Printing of Buddhist Books. Destruction of monasteries.	Ko Hung (281-341), renowned physical and alchemist.
Northern and Southern Dynasties	420-589 A.D.				
Sui	589-618 A.D.			Taoism the State religion.	T'ao Hung-ching (425-536), editor of the collective work on Chinese herbal knowledge attributed to legendary emperor Shen-nung. Ch'ao Yuan-fang, exponent of Chinese etiology [seventh century].

Chou period (Fig. 3.1). For instance, the *ju-i* comprised Confucian medical theoreticians (including court officials and Confucian scholars who had developed a side-interest in medicine). The *yung-i* constituted freely-practising professionals (including *chuan-i*, *ming-i* and *shih-i* or practitioners trained in classical medicine and practising for a living). Both major sets of practitioners differed in their training background, nature of medical practice, amount of backing from the state and type of clientele.

Division among the different types of practitioners was further enhanced by the development of health care infrastructure between Chou (1122 - 770 B.C.) and T'ang (618 - 907 A.D.) periods. State-sponsored health facilities during the Han period (206 B.C. - 220 A.D.), approximately at the half-way point between the Chou and T'ang eras, were concentrated in the state capitals and commercial centres. Facilities included public nursing homes, sanitation, medical colleges and centralised physical examinations for the people. This restricted distribution of state-financed medical services meant that court-based practitioners and medical scholars who furnished much of the written Chinese medical theory, depended on the government for their survival. As expected, the 'commercial sector' relied on the 'free market'.

Different market forces, therefore, were responsible for the structuring of the two main components of classical Chinese medical practice. Hence, a decline in the political power of



Source: Wong and Wu (1973)

Fig. 3.1 Structure of Chinese medicine,
Chou period (1122 - 770 B.C.)

rulers usually threatened court medicine with destruction and resulted in a constant flux in the amount of support available to court physicians.¹ In concert with changes in the political situation, medical colleges were dissolved only to be reinstated; standardisation of medical education emerged and then disappeared; and the overall organisation of the scholarly or written form of classical medicine waxed and waned. By comparison, the medicine of freely practising classical Chinese physicians was based solely on closely-guarded trade secrets — medical formulae or therapeutic techniques. These failed to promote evolutionary growth in the profession because they would be transmitted only to sons and disciples but not professional rivals. Hence, the empirical knowledge gained was never integrated and often lost.

Classical medical theory was propagated through the works of Confucian scholars but even these reflected the lack of coordination in the structuring of classical Chinese medicine and its dependence on highly individualistic, fragmented and isolated achievements. Individual scholar-physicians owed their findings to empirical observations among the common people. Thus, in terms of the intrinsic nature of classical practice, there was little difference between court and public sector practitioners.

Prominent works in classical Chinese medicine, such as the *Pen-t'sao*

¹For example, an Imperial Edict in the Ching period (1644-1911) banned the use of acupuncture because of the Emperor's conviction that the needles violated the wholeness of the human body and spirit.

kang-mu, (a compendium on herbal remedies by Li Shih-chen [1518-1593 A.D.]) and the *Shang Han tsa-ping lun*, (a treatise on various kinds of fever by Chang Chung-ching [c. 142 - 212 A.D.]), were produced, according to Palos (1972), after extensive experience in healing the common people. However, during this evolutionary phase, there was no means of systematically producing, introducing and maintaining new medical skills and knowledge.

By the early sixteenth century, historical records showed that Chinese medical practice was beset with internal dissent concerning the interpretation of classical medical theories, especially within court-based medicine. This resulted in separatist cults among practitioners. Western capitalist penetration and the introduction of Western medicine proved to be the corrosive forces which enhanced the internal division among practitioners. In turn, structural changes were triggered off but change was slow and the cumulative effects only became visible at the end of the nineteenth century.

Dissolution Threat (1912 - 1949)

The cumulative impact of concessions made to Western powers in the early nineteenth century and the poor performance in the Sino-Japanese War (1895) led to threats to the existence of classical Chinese medicine. Kowloon had been opened as a port to the Westerners, Amoy in Southern China had been ceded to Portugal and Japan had obtained both Taiwan and the Liaotung Peninsula in

Manchuria (Schurmann and Schell 1967b).

A reform movement started during the 1910s with the intent of modernising all aspects of China's 'feudal' socioeconomic structure. The entire institutional structure based on its Confucian values was questioned by reformists headed by Dr Sun Yat who in 1911 had overthrown Manchu dynastic rule and established a republican government. These reformists were also supported in their struggle against Manchu rule by overseas Chinese communities in East and Southeast Asia which had been generally more open about accepting Western institutions. By this time China had started sending students to Western countries, a practice dating back to the late 1870s which created new groups of administrators with widely differing ideologies from those that had prevailed during Manchu leadership. Hence, the train of events stimulated a reaction against old institutions and organisations, particularly among officials of the new administration. Initially, attention was concentrated on education but with the propagation of Western medicine, it was extended to health care.

Attempts were made during the 1910s by classical medical practitioners to stave off dissolution through incorporating aspects of Western medicine into the curricula of private medical schools. These had been established by practitioners themselves, drug guilds and medical societies. The inadequacy of Chinese medical care as it had existed at the beginning of the twentieth century — despite major organisational changes — was exposed by the

Manchurian Plague of 1910. Shortcomings of available internal Western health facilities and Chinese medicine were aggravated by socioeconomic conditions that had degenerated through civil strife and warlordism, famines, floods and epidemics in rural areas and persistent poverty, malnutrition and poor sanitation in urban areas (Kleinman 1973).

Further deterioration in health conditions led in 1910 to the establishment of the Manchurian Plague Prevention Service, headed by a Western-trained doctor. This medical organisation laid the groundwork for basic Western health organisation in mainland China, which had previously been left to religious institutions and Western communities stationed at the major ports and capital cities. In a move to dissolve ethnic forms of health care, the Imperial College of Physicians — the foremost institution in the teaching of Chinese medicine — was abolished in 1912. Three years later, candidates for jobs in the public health service were required to be doctors trained exclusively in Western medicine. Croizier (1973) has noted that the national medical association of Western-trained doctors, organised in 1915, not surprisingly pressed for the regulation of classical medical practice according to the standards fixed by them. In 1922, the licensing of classical medical practitioners was imposed. For the first time in the history of Chinese health care organisation, there was distinction between *chung-i* (classical medical practitioners) and *tze-i* (Western-trained doctors).

Regulations favouring the establishment of Western medicine were strengthened by the development of its own hospitals, schools and clinics. Originally, these had been mission-based and limited to expatriate communities within the treaty ports of Macao, Canton and Shanghai. Following the familiar pattern, missionaries extended their services to rural areas while their initial urban bias was increasingly useful to Western commercial interests (and profits). As the commercial thrust was relatively weak in the beginning, classical Chinese medicine was able to resist Western medical dominance which aimed at dissolution of ethnic medical practice. In this, mainland Chinese physicians received support from overseas *chung-i*. Indeed, federations of Chinese physicians in China successfully stopped the 1914 and 1929 propositions by the Chinese Republican governments to dissolve classical medical practice.

Conservation-Dissolution (since 1950)

The initiative in conserving classical medical practice gained fresh ideological support during the different set of political and economic conditions that prevailed in mainland China after 1949. Isolated from Western medical facilities during the continuous guerilla warfare of the 1930s and the Long March of 1934-1935, the Communist leaders were taught the effectiveness of classical Chinese medicine, particularly the use of freely-available local herbs. Their predilection towards reviving the use of *chung-i*

was prompted by the deplorable state of health care organisation after 1949. For example, Horn (1969), Vogel (1973) and Agren (1975) have noted that the ratio of Western-trained doctors to population was 1: 417,000, while that of Chinese physicians to population was 1: 12,500. The latter figure underestimated the number of practitioners because unregistered personnel were excluded, such as midwives, sorcerers, faith healers, magicians, mediums and medicine retailers — who served the local people even when Western medicine was used as a complement.

In the 1950s, interest was centred on extending a Western medical system from the urban foci on the east coast into the interior of China through supplementing and expanding existing public health facilities. Besides the need to resolve conflicts between ethnic and Western medical personnel, even the qualifications of Western-trained doctors had to be standardised because educational schema had varied considerably in the turbulence characterising previous political conditions. However, the crucial issue concerned the continuity of classical Chinese medical practitioners and the choice of dissolving their practice or integrating them into the developing health care delivery system. The second option was adopted.

Initially, the thrust of the government's policy was to give some rudimentary training in Western medicine and public health work to the *chung-i*. These practitioners were re-organised

into 'health-worker unions' and 'united clinics' and some measure of regulation was attempted by placing all physicians into 'improvement classes'. Thus, the *chung-i* and the type of medicine they practised was conserved but re-organised according to institutional forms which were part of the political and ideological structure being imposed on the Chinese society at that stage of its history. These adjustments to classical medical practice by the communist government, were to all intents and purposes, to use classical medicine as a stopgap measure until sufficient numbers of Western-trained doctors (*tze-i*) could be produced. Hence, classical Chinese medicine was preserved but 'peripheralised' and relegated to a complementary position in relation to overall changes in the emerging health care programme.

A reappraisal of Chinese medicine however, occurred during the late 1950s. The impetus, according to Croizier (1973), Kleinman (1973) and Vogel (1973), was political and stemmed from the Communist Party's desire to control the emerging elitist, technocratic class of Western-trained doctors. This problem was tackled by making Chinese medicine a compulsory subject in their education. As part of this programme, 2,000 Western-trained doctors were withdrawn from regular practice for three years of full-time study in classical medicine. The objective was the imposition of a new ideology — new-style, Western-trained physicians should learn from old-style practitioners.

In 1958, the political fervour generated by the

'Great Leap Forward' led to the *chung-i*'s reinstatement to equal if not higher status than the *tse-i*. However, their heightened value did not survive the economic setbacks and political upheavals which followed the adoption of such development strategies characterising this period of Chinese history. During the first half of the 1960s, Croizier (1973: 42) observed that in restructuring classical medical practice:

Chinese medicine was not so much being integrated with Western medicine as it was being relegated to a supplementary and somewhat inferior position despite the support of research centres and training of dual system doctors, In medical education the schools for training new Chinese-style doctors were only a fraction of those giving Western medical training. And in medical practice, although Chinese medicine evidently remained popular, especially in the countryside, it was generally practised alongside of, not integrated with, Western medicine.

This subordination of ethnic Chinese classical medicine parallels the conservation-dissolution experience observed in Ayurvedic medicine within India (cf. Chapter Two). In attempting to mould non-Western medical practice to fit into a framework based on the organisation of Western medicine, the assets of classical Chinese medicine were undermined. Western medical organisation was aimed at large-scale teaching and standardised forms of health care delivery, whereas classical medical practice stressed personalised services, small-scale organisational forms and highly individualistic expertise.

Further changes in Chinese medicine followed during the 'Great Proletarian Cultural Revolution' of 1965. Dissatisfaction was expressed with medical policy focussed on expensive, specialised facilities for an urban elite. This led to a concern with distributing health care resources more equitably, particularly to China's rural areas. Such deliberations led to the development of the 'barefoot doctor' as a means of extending basic medicare to the villages. Relying heavily on classical Chinese medicine and local material supplies, barefoot doctors used acupuncture and herbal cures. Their training included both elements of Western and classical Chinese medicine with an emphasis on the treatment of common diseases.

The creation of 'barefoot doctors' meant that the state-sponsored health care delivery system was provided by four sets of practitioners: the Western-trained doctors with knowledge of Chinese medicine; the *chung-i* with some basic Western medical training; 'middle doctors' who were ex-trainees of the first set and had established their own clinics; and the 'barefoot doctors' who were people chosen by their fellow collective-farm workers to receive three months of medical training in Western and Chinese systems before returning to serve their home communities (Dunn 1976).

Efforts to synthesise Western and classical Chinese medicine has led to the restructuring of both, and a hybrid form of health care delivery has emerged. Only components of classical

Chinese medicine which fit into the rationale of health care organisation along scientific, Western lines were conserved. Although the *chung-i* — practising prior to major changes in health care organisation — were allowed to participate as staff of hospitals, research institutions and public health care programs, they filled subsidiary roles in health care. In rural areas, they have been displaced by practitioners trained in both Chinese and Western medicine — the 'barefoot doctors' being pre-eminent. In essence, the pre-existing classical medical organisation of practitioners has been dissolved. The *ju-i* (scholar-physicians) and the *yung-i* (professional practitioners) and the complement of midwives, faith-healers and mediums have disappeared. In the process, classical Chinese medical education has been transformed to a degree best illustrated in the barefoot doctors' acupuncture training, where of the 365 acupuncture points known in classical medicine, only twelve of the most commonly used were taught. This abbreviation of training was prompted by the critical need for medical personnel and also financial expediency.

Summary

Classical Chinese medical practice has, therefore, undergone a series of adjustments and readjustments triggered off by changes in government and attendant upheavals in financial or economic conditions and health care policy. The state, consumers and penetration by Western powers and Western medicine have contributed

towards a continuous revision of the value of Chinese medicine. From the wide variety of different and competing types of healers, there now exist four categories, none of which resembles the original groups of practitioners. However, all employ modified forms of ethnic medicine. Conservation-dissolution, therefore, best conceptualises the survival of a form of service provision organised prior to the emergence of the contemporary socioeconomic structure in mainland China. Survival of classical medicine depended on the strategems of individual practitioners and state-sponsorship before capitalist penetration. The wide variety of practitioner types flourished by filling in the interstices of the health care market left by a court-based medicine concerned only with imperial and centralised medical services. Group strategies — professional associations and related training institutions — were required to resist elimination of practitioners after Western penetration and the institution of a republican government. State endorsement determined the nature of the conservation of classical medical practice after the Communist take-over. Political and ideological forces, desirous of formulating a pragmatic solution to the health problems of China, protecting the integrity of the cultural heritage of China and reducing reliance on 'foreign' medicine of advanced capitalist nations, mitigated against the dissolution of classical Chinese medicine.

2. CHINESE MEDICINE IN EAST AND SOUTHEAST ASIAN CAPITALIST COUNTRIES: CONSERVATION-DISSOLUTION

Conservation of classical medicine was, as in mainland China, the predominant process within East and Southeast Asia. Table 3.3 shows ratios of *chung-i* and Western-trained doctors in selected Third World countries. However, there are marked differences between the two areas because classical Chinese medicine was transferred to other Asian capitalist societies during the Ching period (1641 - 1911) when it was stagnating in terms of theoretical and organisational innovations. It was a period when classical medical practice had degenerated into 'one grand free-for-all profession' embracing college-trained and 'self-taught' 'practitioners. The latter included those with family-based medical knowledge, extensive and established experience in skills, such as midwifery, and medicine retailers and their apprentices.

Outward migration of labourers, particularly from the South China provinces, followed by other groups of Chinese people during the period of political chaos before and after the establishment of Communist rule in 1949 and the efforts of visitors from Western countries to China were instrumental in the spread of classical medical practice. Both the dominance of Western medicine and introduction of classical Chinese medicine in various Southeast Asian countries, had their origins in colonialism. Hence, the survival of classical Chinese medicine against the

TABLE 3.3 COMAPRISON OF ETHNICALLY-TRAINED CHINESE AND WESTERN-TRAINED MEDICAL MANPOWER IN SELECTED PERIPHERAL CAPITALIST COUNTRIES

Country	<i>Chung-i</i>	<i>Tze-i</i>	Comments	Source
Hong Kong	1:1161	1:1720	<i>Tze-i</i> concentrated in better neighbourhoods. <i>Chung-i</i> either because of economic circumstances or otherwise are located in rich and poor areas. (1970 figures)	Lee (1979)
Malaysia	1:3122	1:4347	Both <i>tze-i</i> and <i>chung-i</i> urban concentrated but Chinese clientele also predominantly urban. (1975 figures)	Chen (1975)
Singapore	1:2500	1:1536	Figure for <i>chung-i</i> an estimate only since exact number is unknown. (1975 figures)	Quah (1977) Field data 1979
Taiwan	1:5043	1:3224	Figure for registered <i>chung-i</i> only. Many <i>tze-i</i> would know Chinese medicine as well. (1970 figures)	Unschuld (1976)

domination of Western health care occurred through a different set of contending forces.

Colonial Forces: Pre-1950s

Colonial health care policy generally tolerated non-Western medical practice because it obviated the responsibility for welfare provision among ethnic communities, such as the Chinese. Nevertheless, Western medical care was imposed, despite resistance from Chinese people, when health problems threatened colonial socioeconomic interests. An example was the threat posed by the intermittent decimation of the immigrant labour force by tropical diseases — plague, malaria and cholera. These isolated and far from concerted efforts at the elimination of Chinese medicine only showed up the disadvantaged position in which ethnic medical systems were placed by the intrusion of Western health care organisation. Other instances of foreign domination also demonstrated discrimination against Chinese medicine. For example, during the period of Japanese influence in Taiwan before 1925, a tight control on the registration and licensing of Chinese physicians was maintained. In fact, dissolution was pursued by allowing only existing medical practitioners to register within an allotted period of one year.

Health care policy by foreign powers in the pre-1950s phase — depending on the rigidity with which repression was imposed — led to the varying rates of decline in the number of

chung-i. Unschuld (1976) has reported that in Taiwan, there were only some thirty or forty physicians during the 1930s and 1940s. In Malaysia, Chu (1976) has suggested that the numbers fell steadily between 1891 and 1911.

The incipient deterioration in working conditions for the *chung-i* reached its nadir with the greater colonial commitment to Western-styled health care provision. Constraints on Chinese medical practice have accompanied the expansion of colonial medical services — tariffs on imported medical supplies, withholding professional recognition via licensing, restriction on functions, or exclusion from the use of various therapeutic techniques and prescriptions.

Chinese physicians have not been passive in the face of such repression. The imposition of tariffs and various permits to trade in Chinese medicines resulted in the formation of associations to help member practitioners meet regulations and either maintain or secure a niche in the colonial structure. This motive, together with the aim of challenging the threat to eliminate Chinese medical practice in mainland China, drove practitioners to develop strategies for obtaining the political influence necessary for survival. *Chung-i* associations emerged in Malaysia, Singapore and the Philippines to preserve Chinese medical practice and resist government pressures.

Colonial governments did not pursue a deliberate and sequential programme to repress Chinese medical practice.

The British colonial authorities in Peninsular Malaysia during the late nineteenth century, initially tolerated Chinese physicians. However, during this period their involvement in health care delivery — investments of personnel and equipment — resulted in the increasing restriction of ethnic medicine. Resistance in Hong Kong and Southeast Asian countries has involved, in part, the incorporation and adaptation of Western medical technology by the *chung-i*. Extra impetus to these survival strategies was generated by the severe shortage of Chinese medical supplies during the period of the two World Wars, 1914 to 1918 and again from 1945 to the 1950s.

Conservation of Chinese medical practice prior to 1950 in Southeast Asian countries meant a complete reliance on medicine distributors for maintaining supplies of inputs required by practitioners. For instance, there was no development of either local sources of herbal medicines or rejuvenation of techniques, such as acupuncture. Failure to innovate perpetuated dependence on supplies from mainland China. Table 3.4 shows the size of trade turnover of selected major distributor firms located in Malaysia and Singapore. The core of Chinese health care delivery in East and Southeast Asia revolved around the buying and selling of Chinese medicines. The import-export trade, wholesaling and retailing activities were essential to the maintenance of Chinese medical practice. Such dependence on medical supplies from mainland China stemmed from the 'stifling' of innovations which had

TABLE 3.4 TRADE IN CHINESE MEDICINES IN
MALAYSIAN FIRMS 1979

Company (Location)	Net assets \$M thousands	Trade turnover \$M thousands
Eu Yan Sang (Singapore with branches in Malaysia)*	8,946*	10,901*
Chung Kuo (Singapore with branches in Malaysia)	n.a.	4,900**
Chup Sang (Malaysia with interests in major cities)	n.a.	4,000

* Turnover includes returns from investments in manufacture of medicines and real estate.

** Figure for 1978

Source: Based on fieldwork data collected in 1979 unless otherwise specified.

fuelled evolutionary growth in Chinese medicine in the past. A commercial network was established between overseas Chinese centres, such as Hong Kong and Taiwan, with countries in Southeast Asia which had established a business community interested in maintaining the continued transfer of medicinal stocks from mainland China to the overseas Chinese communities. Prominent among those in the struggle to preserve Chinese medical practice were business entrepreneurs who organised guilds and associations with related institutions — medical schools, free clinics and lobby groups — all aimed at guaranteeing the continuity of the profitable international trade in Chinese medicines. During this period the structure of Chinese communities in East and Southeast Asia was dominated by wealthy merchants, particularly since the two main social groupings were businessmen or labourers.

Strategems had to be devised to maintain private commercial practices and make them provide a livelihood at the same time. Such working conditions induced Chinese physicians to rely on a constant repetition of knowledge learnt from classical medical texts or tutors. Innovations were beyond the organisational means of individual practitioners. They required substantial investment in research for cheaper goods or alternatives for those therapies which employed medicines that were unavailable locally. The reluctance to make such investments was compounded when access to Chinese medicines in the post-1950s period increased, largely because political and socioeconomic stability was established

among Chinese communities both in mainland China and East and Southeast Asia. For example, in Singapore before 1950, there was one distributor to 200 retailers. In the post-1950s the number of distributors (wholesalers) had increased to an estimated five or six international firms and more than 500 retailers.

Post-1950s' Repression

The disintegration of Chinese health care delivery into a medicine retailing activity has been aggravated by post-colonial or post-1950s development ideology in East and Southeast Asian countries.

Universal health care was one of the foremost priorities in efforts to ratify shortfalls of colonial medical services. Their concentration in urban areas and other colonial socioeconomic foci, such as mines and plantations, was regarded by post-Independence governments as the only problem in the conflict between use of ethnic and Western medicine. The emphasis in health care development has been on the training of personnel in Western medicine.

Measures to achieve this goal and ensure the propagation of Western medical services devolved on the expansion of an infrastructure which also maintained the supply of Western-trained personnel — university or teaching hospitals, general hospitals and clinics, Western pharmaceutical firms and research centres.

Patients' health care expenditures are now subsidised only if they patronise Western medical facilities. Subsidies are,

therefore, not extended to the *chung-i*'s service charges which shore up the market position of Western medicine to the disadvantage of the former. Unschuld (1976) has noted that in Taiwan, the 790,000 consumers who contribute to health insurance endorsed by the state, receive only Western health care provision. Further, Western-trained doctors alone can study Chinese medicine in the state-supported China Medical College in Taichung. This dominance of Western-trained professionals has enabled them to make state-subsidised training in Chinese medicine their sole prerogative because the *chung-i* who have no Western-type qualifications are being excluded.

Medical registration ordinances, instigated by Western-trained professional associations but designed by Western-styled doctors in the health departments and ministries, have aimed at protecting their members' interests. In the process, the functions and market position of the *chung-i* have been reduced to subordinate and supplementary levels. In Hong Kong, a Chinese physician can be prosecuted for using any title, name or description employed by a Western-trained doctor. Further, Lee (1979) has noted that the pharmacy and poisons and antibiotics regulations stipulate that *chung-i* cannot prescribe most Western drugs, undertake surgery, treat eye diseases or use X-rays. While legislation served to constrain the practitioner component of Chinese medicine, it could not prevent the 'trader' aspect from becoming well-integrated into local socioeconomic activities. As

trading activities flourished, medicine retailers have become more numerous than practitioners, as evident in Table 3.5. Yet, such economic vitality has not guaranteed evolutionary growth in Chinese medical care through the upgrading of techniques. Despite organisational changes among the *chung-i* — such as in training methods requiring medical schools rather than apprenticeships — practitioners still base their services on old methods. However, the revival and assimilation of techniques discontinued in classical medicine, such as acupuncture, have been noted among the more innovative.

The number of associations established by *chung-i* has proliferated because of disagreement over the regulation and standardisation of qualifications among members and aspiring members. Often practitioners who have sought to distinguish their qualifications and special skills from those of other physicians, have organised their own associations. Thus, according to this survey, there were: twenty associations and as many medical schools in Hong Kong alone; five associations and three schools in Singapore; and twenty-four associations and three medical institutes in Malaysia. However, the present Singapore Chinese Physicians' Association, Chinese Drug Importers' and Exporters' Union and the Singapore Chinese Druggists' Association are break-away units from an organisation originally known as the Singapore Chinese Medical Union.

Diversity within Chinese medical practice has not

TABLE 3.5 COMPARISON OF NUMERICAL STRENGTH OF MEDICINE
RETAILERS AND PRACTITIONERS IN SELECTED
EAST AND SOUTHEAST ASIAN COUNTRIES

Country/District	<i>Chung-i</i>	Medicine retailers	Comments	Source
Hong Kong (for Kwun Tong District only)	174	182	<i>Chung-i</i> include 109 herbalists some of whom have medicine-retailing enterprises. (1970 figures)	Lee (1973)
Malaysia	695	1942	Many <i>chung-i</i> are also medicine retailers. Registered members only. (1976 figures)	Field data 1979*
Singapore	369	579	Many <i>chung-i</i> are medicine retailers. (1960 figures)	Field data 1979*
Taiwan (Taipeh only)	348	515	(1970 figures)	Unschuld (1976)

* Based on information made available by local sources during fieldwork in 1979.

dimmed the awareness that some unification scheme is necessary for the *chung-i* to survive. Chinese medical practice lacks the systematic infrastructure to encourage the unification of personnel because each practitioner organises his practice in a different way depending on whether he is self-employed or working in a publicly-sponsored organisation. Hence, the *chung-i* can operate from free clinics, Western-styled offices, medicine shops, temples or clan associations and other Chinese community centres. Such different working contexts aggravate further the incipient disintegration evident among Chinese physicians and in the organisation of Chinese medical practice. Apart from the struggle for professional recognition, the practitioners operating from a temple would have few interests in common with a *chung-i* in a wholesaling or retailing enterprise. In such circumstances, the requirements of some groups of practitioners have superseded those of the remaining personnel, as instanced by the traders' domination of association lobbies and activities.

Consumer resistance has matched the efforts of physicians in sustaining Chinese medical practice. However, such consumer support is characterised by the same lack of coordination as that typifying practitioner resistance. Lacking government sponsorship, Chinese physicians rely entirely on the support of their clientele. Clientele needs have encouraged physicians to specialise in fields, such as bone-setting, acupuncture or children's illnesses. This intensifies division and differentiation among the *chung-i*. In Hong Kong, Lee (1973)

has listed 109 herbalists, forty-nine bone-setters, twelve acupuncturists and four haemorrhoid specialists among 174 physicians in one Hong Kong district. While it would be difficult to construe a direct relationship between consumer needs and the modifications made to Chinese medical practice, two features are evident. Firstly, patrons of Chinese medicine lack the integrative base which health insurance programmes and state sponsorship provide for Western health care consumers. Secondly, physicians must, therefore, respond in terms of their skills and services in accordance to their understanding of health care needs or consumer requirements without any institutional mediation equivalent to that in the Western medical sector. The importance of the reciprocal interaction between consumers and Chinese medical practice can be gauged from the size of clientele patronising selected free clinics operated by *chung-i* associations in Malaysia and Singapore (Table 3.6).

Summary

Chinese medical practice has been conserved due to modifications which, in turn, have hamstrung its evolutionary growth in the various East and Southeast Asian countries to which it was transferred by immigrants. These changes have been forced on Chinese medicine chiefly because of competition from colonial and post-colonial Western medical services. State intervention has been geared towards dissolving ethnic medicine and substituting Western health care.

TABLE 3.6 CLIENT USE OF CHINESE MEDICINE IN
SINGAPORE AND MALAYSIA

Country/District	Patient numbers	Comments	Surveys/ Sources
Malaysia (Kuala Lumpur and Penang)	35,000- 40,000	Approximate total figures for three free clinics in 1978.	Field data (1979)
Singapore	663,165	Patient figures from three institutions which ran free clinics in 1978.	Singapore Chinese Physicians' Association (1979)
Singapore (3 neighbourhoods: Geylang Road, Serangoon Road, Telok Ayer Road)	269,033	Figures from three clinics in 1975.	Quah (1977)

Resistance mounted by the *chung-i*, have resulted in the creation of a hybridised form of medicine — very different from the original imported from mainland China. While modifications in mainland China suited state objectives of correcting conflicts between the two opposing medical systems and making both contribute equally to health care delivery, political, economic and social changes in East and Southeast Asia have undermined the position of the *chung-i*. This is manifested in the stagnating or small increase in patronage. In Hong Kong, a nation-wide survey showed that forty-three per cent of consumers were equally confident about consulting both Chinese and Western-trained physicians while only eight per cent were more confident about Chinese medicine (Lee 1979). Patient numbers at the Singapore Chung Hwa Free Clinic have increased relatively slowly from 223,333 patients in 1970 to 263,243 in 1978.

The major implication arising from the transfer of Chinese medical practice since its introduction to East and Southeast Asian countries is that drastic innovations are required to propel Chinese medicine out of the stagnation which external forces (competition with Western medicine and subsequent legislation) and its internal organisation have fostered. While numbers of consumers of Chinese medical care services have not increased substantially, they are nevertheless significant to the health care market and of interest to planners who are aiming at developing health services of acceptable standards to all consumers.

Internally, the *chung-i* have failed to reconcile Western-derived institutional modifications with the maintenance of classical Chinese medical practice, that is, make the institutions a force towards propagating and developing Chinese medicine rather than merely resisting dissolution. This is extended to its external conflicts with other institutional elements in East and Southeast Asian societies which, because they have been only partially resolved, contribute to the overall 'underdevelopment' for practitioners and consumers must be further clarified by investigations at the national and local levels.

CHAPTER FOUR

CONSERVATION-DISSOLUTION AT THE NATIONAL LEVEL: CHINESE
MEDICINE IN PENINSULAR MALAYSIA

Health care in Peninsular Malaysia presents the classic colonial and post-colonial conflict — Western versus ethnic variants, such as Chinese, Malay, Indian and Orang Asli or aboriginal medicine. Of the latter, Chinese medicine has remained most competitive in its interaction with the Western sector, chiefly by undergoing continual structural modifications. Malay and Indian forms have not shown comparable resilience or succeeded in matching their Chinese counterparts in the resistance against domination. The Chinese have established strong linkages with the evolving Malaysian economy as it was progressively incorporated into world trade and exchange by a series of Western powers. Thus, the divergent effects arising from the interaction between ethnic and Western medicine best conceptualised as conservation-dissolution depended on the response of ethnic medicine to changing political and socioeconomic conditions in Malaysia.

The origins of Western medical dominance and preservation of ethnic practices in Peninsular Malaysia are examined in the early colonial period (section one). Then, changes calculated to re-define the position of indigenous medicine with

greater colonial intervention in Malaysian affairs are discussed (section two). This leads to an analysis of the impact of the colonial legacy on post-colonial health care (section three).

1. EARLY COLONIAL PERIOD (1511 - 1874)

Portuguese (1511-1641), Dutch (1641-1824) and the early stage of British (1824-1874) rule had little impact on the Malay peninsula's antecedent indigenous socioeconomic structure because, as Jackson (1961) and Sandhu (1973) have noted, there was little resistance to colonialism. Where such opposition occurred, it was quickly crushed as when both the Portuguese and Dutch removed the Malacca Sultans on two separate occasions.

As ethnic medical practice did not pose a similar threat it survived the externalities in the context within which it existed. Western medicine, with its rudimentary facilities, infirmaries and clinics, was the preserve of Europeans then engaged in trade and maritime activities. Ports like Malacca were important footholds in the commercial structure established by these colonialists. Hence, Western health services were confined to them during the initial period of contact with indigenous medicine. Malay medicine was the predominant ethnic counterpart during the early colonial period. However, mechanisms and forces responsible for its structure were non-Western in origin. According to Newbold (1971), Sandhu (1973), Dunn (1975), and

Manderson (1980), the Malays owe their medical theory and knowledge of anatomy to the Arabs and various health beliefs to the folklore brought by Indian traders. Early colonial medicine made no appreciable contribution to the Malay medical structure. Thus, in an analysis of the interaction between colonialists and the local communities during this period of Malaysian history, Caldwell (1970: 377) has argued that aspects of Malay socioeconomic organisation which includes its medical practice, survived because:

European merchants fitted themselves in to the existing pattern, as traders, plunderers, and rulers of the ports they were able to capture and hold. Penetration into the hinterland was sporadic and temporary, contingent upon the needs of security or acquisition of local produce. The indigenous social structure remained unaffected: at the base the homeostatic, amoeboid and broadly self-sufficient village community, growing rice and, depending upon geographical location, fishing, holding land in common ..., and to a large extent ... self-governing

Malay healers formed part of this subsistence-based, rural economy and their practice focussed on immediate needs, existing local resources and customary cultural beliefs about environmental conditions and their effects on health and illness.

Centred on the production activities of Malay communities — rice cultivation, fishing and mining — part-time ethnic practitioners comprised: the *pawang* (priest or religious healers who mediated with the natural forces for good health,

harvests, catches and tin strikes); *bomoh* (medicine men) who were mostly farmers skilled in treating common illnesses with local herbs and religious rites; *bidan kampung* (midwives); and the *mudim* (barber-surgeons) who dealt with operations required for Islamic circumcision rites. Services were paid for in kind and could be deferred — a practice that precluded medical personnel earning a living from full-time medical practice.

If the Malay medical structure was isolated from early colonial inroads into the peninsula, that of the aboriginal groups, was further removed. The aborigines had been driven inland from their riverine settlements by the Malays. As Newbold (1971) and Werner (1979) have observed, there were fewer types of aboriginal 'curers' in terms of specialised skills compared to Malay communities. Drawing on their exceptional understanding of the natural environment, these *panyang* or priests, incantators and exorcists, were believed to be skilled in healing. Such skills corresponded with the needs of the hunting and gathering activities that characterised aboriginal production activities at that time. The physical segregation of these communities from early colonial contact effectively prevented any interrelationships between their ethnic medicine and foreign Western medicine, at least until the first decades of the British phase of colonialism.

Early British rule, which officially began in 1824, saw more substantial efforts at introducing Western, Chinese and Indian medical care to combat rampant epidemics. Chroniclers of

the period up to 1870, such as Cameron (1965), Begbie (1967) and Newbold (1971), have reported that death rates from endemic fevers were very high among Malay, Indian and Chinese people, particularly in the Straits Settlements and their immediate environs. Sandhu (1973) has recorded that up until the 1960s, mortality among Indian settlers was registered at eighty to ninety per cent. As Mills (1966) and Begbie (1967) have noted in their journalistic accounts of this period, British officials were also susceptible to tropical illnesses. In fact, illness almost brought their administration to a standstill as happened during the cholera outbreak in Penang in 1833.

Difficulties with maintaining health levels did not deter the British from opening up the peninsula for commodity exploitation and production. However, the construction of new townships near malarial swamps brought further health problems. Conditions worsened in Straits Settlements towns because, despite the continual influx of people, there were no adequate sanitation facilities, particularly in the crowded quarters of non-Western communities. Health care facilities provided by the colonial and immigrant ethnic sectors to curb epidemics and deterioration in health conditions were initially perfunctory. Colonial medicare was persistently short of money, men and premises. Its organisation was frequently interrupted by political events in India because the Colonial Office there controlled the Straits Settlements until 1867.

The Malay peninsula was also forced to accept the lower priority given its needs by the administration particularly in its deliberations regarding intervention in the local socioeconomic organisation. Following the Indian mutiny in 1857, the Straits authorities were ordered, according to Turnbull (1972), to halt all public works programmes. Nevertheless, despite the difficulties, a rudimentary infrastructure was set up in the major Straits towns of Penang and Malacca — general hospitals, district, prison and pauper medical facilities. Most of the hospitals catering to local ethnic communities, such as those in Penang, were paid for by wealthy Chinese merchants. Taxes on Chinese religious ceremonies and the sale of pork funded whatever sanitation facilities were provided and the maintenance of a few hospitals. Each of the two major Straits towns had a medical department but these were understaffed and the personnel were paid such low salaries that they were also engaged in other part-time employment.

Most of the earnings of transitory Indian and Chinese immigrants were remitted to their home countries and little was invested in Peninsular Malaysia. Moreover, they were largely labourers, who, at best, could afford only processions and other religious ceremonies to fight off epidemics so common during this phase of British colonialism. As Campbell (1971) has noted, the resultant conditions in coolie (labourer) lines in Chinese-owned mines frequently prompted British health officers to order their demolition. However, members of the wealthy merchant

community could contract ethnically-trained practitioners from mainland China as their personal physicians. Low, (1972: 317), a British resident in Malaysia during the 1820s, has observed that non-Westerners would resort to colonial medical services only as the final course of action, despite the prevalence of ill health:

The chief diseases which prevail amongst the natives throughout the population ... are fevers, remittent and intermittent; the fever often proving fatal. It is only surprising how any of them do recover from acute illnesses, when the low state of native medicine is considered.

Thus, the attitude towards non-Western medicine was one of tolerant contempt. Native services did not receive financial or technical support from the colonial government.

The majority of Malays continued to patronise their own practitioners unlike the immigrants who permutated Western medicine and their own ethnic medical variant according to the particular circumstances. However, on several occasions, Low (1972) has highlighted that the poor performance of colonial facilities and services was generally sufficient deterrent to its sustained use by both Malay and immigrant communities. Indeed, Turnbull (1972) has noted that patronage had to be compelled by the police.

Until the 1870s, therefore, the organisation of health care delivery made little progress. The situation was further aggravated by the lack of interaction between Western and ethnic medicine. Increased British economic and political

commitment in Peninsular Malaysia after 1874 changed these conditions.

2. LATE COLONIAL PERIOD (1874 - 1957)

Changes in colonial activities during the late nineteenth century and the first four decades of the twentieth, saw the transformation of the western area of Peninsular Malaysia into one of the most intensively exploited regions in Southeast Asia. Colonial entrepreneurs — Europeans and Chinese — and the local Malay elite directed profits from tin mining activities into rubber plantations along the western coast of Peninsular Malaysia.

The massive investments had to be safeguarded against two threats — faction fighting among Malay leaders (aided by Chinese secret societies) and malaria. In the latter case, death tolls among imported Indian labour communities in newly-opened rubber estates within the jungles of interior Peninsular Malaysia jeopardised productivity and the entrepreneurs' profits. Indeed, the Institute of Medical Research reports (1923; 1924; 1925) have noted that death rate on rubber plantations in the early 1900s was 62 per 1,000 from fevers alone. Ooi (1963) confirmed that individual estates, such as Highland Para Limited, lost twenty per cent of its labourers during the first few years of its establishment. Conditions in the mining centres were similar

and in Taiping, for instance, the malarial mortality rate was 62 per 1000 for a three month period in the early 1900s.

There was, therefore, continual agitation among the merchants for British intervention in Perak, Selangor, Pahang and Negri Sembilan where their vested interests were under the greatest threat from political in-fighting and lack of amenities.

Responding to the demands of entrepreneurs wanting to protect and maintain the number of indentured labourers brought into the peninsula, British protection was imposed on these four states (later known as the Federated Malay States).

The remaining inland Sultanates were coerced into accepting British advisors, whose recommendations in all matters, including health care, had, according to Loh (1969) and Khoo (1972), to be implemented. In the process, more financial resources were allocated to the development of Western medical services in Peninsular Malaysia. According to reports in the Straits Settlements Blue Books, expenditure on Western medicine soared by 152 per cent in fiscal terms between 1877 and 1901 (Table 4.1).¹ As a result, British-sponsored hospitals previously

¹In on-going research on capitalist development in advanced capitalist countries, Gough (1979), Gibson and Horvath (1980) and Thrift and Taylor (1980) have noted that 1870 was used as the point of transition to competitive capitalism. The period before 1870 was characterised by mercantile interests of industrialising economies, such as the British in the Malay peninsula. After 1870 increased British political and economic commitment resulted in the exploitation of local commodities and the establishment of a labour force to sustain increased economic activity. Periods after 1870 have been described by Gibson and Horvath (1980) as competitive capitalism (1870 - 1914), monopoly capitalism (1914 - 1955) and global capitalism (1955 onwards).

TABLE 4.1 HEALTH CARE EXPENDITURE DURING THE
LATE BRITISH COLONIAL PERIOD (1874-1957)

Year	Health care expenditure* \$SS	Annual rate of increase per cent
1877	77,412	-
1883	93,911	3.5
1900	193,551	6.2
1901	195,422	1.0
1911	4,178,742	203.8
1921	8,747,969	10.9
1931	11,755,555	3.4

* Includes Singapore.

Source: Straits Settlements (1877; 1883; 1900; 1901; 1911;
1921; 1931).

concentrated in the Straits towns were extended to inland state capitals. Urban sanitary boards were established, medical departments increased their staff and the Institute of Medical Research was created in Kuala Lumpur in 1900 to supervise quarantine procedures and investigate tropical diseases which had undermined British colonial administration and economic activities. As anticipated, the institute was controlled from London and Liverpool universities. Medical materials used in the Western sector, such as equipment and drugs, were imported entirely from England.

Hence, the colonial medical organisation was moving from the direct coercion and imposition of the use of Western medical care to the establishment of an institutional and ideological base for the propagation of Western medical services. In 1905, the Singapore Medical College was set up to train local people in Western medicine. The trainees were then sent to staff medical institutions in the Malay Peninsula. These medical establishments were controlled by medical departments during the early period of British administration. A Health Branch and Malaria Advisory Board were added to this curative structure in 1911 — the addition of the preventive components laying the groundwork for a comprehensive Western medical sector in the country. Annual reports of the Institute of Medical Research, together with the Straits Settlements Blue Books recorded the progress made in extending Western health services to inland areas of Peninsular Malaysia. The Malaria Advisory Board, was, in essence, the

first attempt by the colonial government to provide for rural people and areas. However, allocations for anti-mosquito work only assumed significant proportions in the early 1920s — \$588,936 in Penang and \$32,957 in Malacca.

Other attempts to impose Western medicine on rural Malay settlements during this period included the establishment of infant welfare centres (though the initial unit was organised in Kuala Lumpur in 1922). Health workers were also appointed to attend to mothers and children brought in from their villages and travelling dispensaries on buses and boats were used for more remote areas in Pahang and Kedah.

Nevertheless, major deterrents to a full substitution of Western medicine for indigenous medicine remained. Despite greater stress on rural areas within the colonial medical structure, services were still programmed from state capitals and major towns, such as Georgetown in Penang, Ipoh in Perak and Kuala Lumpur in Selangor. Curative facilities — hospitals and clinics — which received more than 50 per cent of medical funds remained concentrated in towns. Yet, there was expansion of the hospital network. Of fifty-two hospitals, there were four in Kuala Lumpur, four in Georgetown, three in Malacca and the remainder were all in smaller district centres (Straits Settlements 1900). This impressive supply of physical plant was not, however, matched by the quality of the personnel employed to man it. Until the 1930s, hospitals were staffed by part-time paramedical workers. Even

with the training of paramedical supports — beginning in the late 1870s — there was a chronic shortage of medical manpower in the Western health care sector. In 1877, for example, there were only two part-time non-nursing staff in the Penang General Hospital despite an intake of 687 patients (Straits Settlements 1877). Similarly, in 1925, the Health branch of the Kuala Lumpur Medical Department reported that its activities were handicapped by the shortage of personnel (Institute of Medical Research 1925). During that year only one health officer had been recruited so that medical officers from the curative branch had to be seconded. Moreover, the medical staff was predominantly Indian and British rather than Malay and Chinese, although the two latter groups comprised the majority of the population.¹

Government-sponsored medical services carried a stigma because of their pauper and charity emphasis. This was aggravated by the segregation between institutions supplied for Europeans and those for Asiatics. A large proportion of hospital beds for non-Western people was in pauper institutions or establishments providing for the decrepit, destitute, lepers and lunatics. Where Europeans also had access to such hospitals

¹In the 1891 census, 38.8 per cent and 50.9 per cent in the Straits Settlements, were respectively, Malay and Chinese. In the Federated Malay States the two races comprised 43.1 per cent and 44.7 per cent of the population (Straits Settlements 1900).

there was differentiation in wards for Western and non-Western patients. Moreover, death rates among admissions remained high — 7 per cent of admissions to the Penang General Hospital died in 1877 and the proportion increased to 10 per cent in 1931! Nevertheless, hospital registers showed increasing use by non-Western communities, especially among women (Straits Settlements 1877; 1946). The proportion of females among patients at the Malacca General Hospital, for example, increased from less than 1 per cent in 1877 to 23 per cent in 1931. Outpatients also increased as the Federated Malay States Government Gazette (1925) had recorded that travelling dispensary boats on the Pahang River doubled the number of patients treated from 9,817 in 1924 to 16,931 in 1925.

Infiltration of the local society by a Western-derived consumption pattern was, therefore, successfully achieved through the institutional network and programming designed by the colonial medical complex. Confirmation of the success of such tactics was seen in the increased patronage of Western-type hospitals and infant welfare clinics in the Federated Malay States between 1924 and 1925 (Table 4.2).

Resistance to Western medicine was weakened but this did not eliminate the patronage of ethnic medicine by non-Western communities — a reflection of the persistence of ethnic medical practice. As colonial health care authorities were concerned by the failure to dissolve Chinese medicine, renewed conflict in the organisation of medical services ensued. However, the

TABLE 4.2 USE OF 'LATE COLONIAL' MEDICAL
FACILITIES (1924-1925)

Place	Patients	
	1924 number	1925 number
<u>Hospitals and dispensaries:</u>		
Perak	221,096	216,282
Selangor	177,896	219,739
Negri Sembilan	96,432	99,047
Pahang	88,837	86,725
<u>Infant welfare clinics:</u>		
Kuala Lumpur	16,238	23,134
Ipoh	10,257	15,523
Taiping	7,342	18,259

Source: Federated Malay States (1926).

colonial medical framework was originally structured to attack problems which threatened administrative control or economic activities.

Hence, the Western medical sector was not concerned with supplying comprehensive services, but directed its resources selectively to the areas deemed most important to colonial activities.

Vaccination and infant and maternal welfare services were emphasised. No effort was spared to reconcile Western medicine with ethnic medical practices. As only \$546 was allocated for vaccinating the whole population of the Malay peninsula in 1883, it is assumed that little would be allocated to programmes for facilitating local acceptance of the services (Straits Settlements 1883). Direct force was, therefore, a common resort. Malay rulers, according to Kennedy (1970), were threatened that they would be deposed unless they persuaded their subjects to cooperate with the health care personnel of the colonial regime and their objectives.

In the destruction of antecedent socioeconomic practices Godelier (1977), the French anthropologist, has noted that new organisational forms often assumed some elements of the old to gain acceptance. Hence, local Malay girls were trained to supersede the *bidan kampung* and other ethnically-trained midwives. Incentives were given in the form of salary bonuses to non-Malay but Western-trained midwives already on the hospital staff when they passed Malay language examinations. This qualification was necessary in propagating the use of Western medicine among the local Malay people (Straits Settlements 1921). In these ways the British colonial

medical organisation penetrated the Malay community — the most stable ethnic group. Other racial communities were obviously too transient to warrant a similar welfare investment. Moreover, the Chinese were being taken care of by their employers who were wealthy merchants while the Indians relied on European employers.

The British programme for the dissolution of non-Western medicine was, therefore, selective. Initial clashes directly involved Malay medicine and the midwives in particular. However, Chinese and Indian ethnically-trained midwives also became involved. In 1924, for instance, legislation was passed which restricted the activities of all non-Western practitioners in midwifery. As Chen (1975b) has observed, prosecution of these unorthodox personnel was lax and only applied to the immediate environs of urban centres. However, the treatment of ethnic medical practice as an unorthodox form of health care delivery originated from this period of the peninsula's colonial history. There existed also for the first time an orthodox and officially-supported medical organisation. Nevertheless, chronic manpower shortages meant that unorthodox practitioners continued to be useful in meeting the shortfalls of the colonial health care complex.

The inadequacies of Western medicine were due to other factors apart from a deficiency in staffing, as illustrated by the flourishing of Indian medical practice among labourers in rubber estates. Jain (1973: 157-158) has argued that South Indian plantation labourers preferred indigenous health care to subsidised

Western medical services despite the fact that:

... the cost of [ethnic] medical consultations and medicines is another drain on the labourers' earnings. This is somewhat paradoxical, considering that [Western] medical services are provided free to all estate workers and their dependents The paradox is resolved, however, when it is realised that estate workers have a deep-seated mistrust of Western medicine and an equally strong faith in the efficacy of the indigenous pharmacopoeia.

Fragmentation within the Indian community due to the caste system and the complete control which estate owners wielded over their labour force mitigated against the comprehensive and collective organisation of Indian medical practice.

Parallel native prejudice against Western medicine was not shown by the majority of the Chinese, who demonstrated that both indigenous and British forms of health care organisation were equally effective in their respective ways. Both Western and Chinese medical services were supplied by members of the Chinese community. Wealthy merchants, especially those given the office of *Kapitan Cina* by the colonial government, established Occidental types of hospitals for paupers and lepers and maternity services in the major Straits Settlements towns. Simultaneously, Western-styled facilities offering classical Chinese medical care through free clinics were organised. In 1884, the *kapitan* group initiated the first free clinic in Penang, the Lam Wah Ee, while the Tung Shin Hospital in Kuala Lumpur, established in 1892, owed

its origin to Kapitan Yap Ah Loy who funded the institution to supply medical care to his Chinese wage-workers and their dependents. Both hospitals engaged *chung-i* from mainland China and thereby promoted the transfer of Chinese classical medical practice to Peninsular Malaysia. Thus, compared to Indian or Malay medicine, a relatively more vigorous Chinese medical system evolved. In 1883, a census taken by the British authorities recorded a total of 139 Chinese chemists and druggists in the Straits Settlements as opposed to seventeen Indian and forty-two Malay personnel of this type.

Upkeep of Chinese health care facilities was transferred to the Chinese public. The colonial authorities assumed responsibility only for maintaining Western-based establishments, such as the leper and pauper institutions. While Chinese medicine was accepted because of its Western institutional form and characteristics, it did not receive technical or financial aid from the colonial medical sector. However, the Tung Shin records (Tung Shin Hospital, not dated) have shown that a sum of \$55,000 was donated by the Selangor British health authorities to its initial operations but even this was derived from tariffs placed on tin produced and sold by the Chinese miners.

Being viewed as self-sufficient from the beginning of their immigration to the Malay peninsula, the Chinese people were incidental beneficiaries of colonial health care programming. Thus, their medicine was the last ethnic variant to clash openly

with the Western health sector. The conflict occurred in the 1920s when the colonial government imposed import tariffs on medical supplies from mainland China, ostensibly to recover deficits in public funds which had been exhausted during the First World War. By this time the collective strength of the *chung-i* was sufficient to counter such a repressive measure. Associations of Chinese physicians emerged throughout Peninsular Malaysia to lobby against import levies. A second motivating force for such a consolidated movement was to protest against the threat of the mainland Chinese government to dissolve classical Chinese medical practice in favour of Western health care.¹

The onset of the Japanese Occupation of Peninsular Malaysia in the 1940s forced this 'resistance' movement among Chinese physicians into quiescence. However, it stressed the need for associations to maintain the continuity of Chinese medical practice. Japanese rulers permitted Chinese medical businesses to operate but required that regular reports of their activities be furnished by chosen representatives. Together, the Second World War with the

¹ National delegates were sent to plead the cause for the continuity of Chinese medical practice in Peking in 1915 and again in 1922. Existing associations lobbied with telegrams and newspaper articles for the retention of Chinese physicians and their practices. The success of these efforts have been triumphantly chronicled in historical records covering the formation of associations in Peninsular Malaysia, particularly those in Georgetown, Ipoh and Kuala Lumpur.

dislocation of socioeconomic activities in Peninsular Malaysia and the imposition of stricter immigration laws on movements between mainland China and the peninsula threatened the conventional supply of *chung-i*, medicines and training facilities. However, the dissolution of local Chinese medical practice was forestalled by the establishment of medical schools, the search for local herbs and renewed interest in medicine-free techniques such as acupuncture. The first Chinese medical institute was established by the Central Malayan Physicians' and Druggists' Association in Kuala Lumpur in 1955. Such retaliatory measures not only staved off depredatory effects of the colonial health care policy but ensured the evolution of classical medical practice into a full-scale profession in Peninsular Malaysia.

These associations of Chinese practitioners were also able to wage a successful campaign against the exclusion of their medicines from 'new villages' established during the Emergency period in Peninsular Malaysia in the early 1950s. These 'new villages' resettled rural Chinese people to prevent them aiding Communist insurgents. In the beginning, however, only Western medical services were provided and the use of Chinese medications disallowed. The *chung-i* in Ipoh lobbied successfully to remove this prohibition and organised visits to the villages to deliver health care.

Summary

Malay and Indian practitioners could not organise a well-integrated response to colonial repression during British rule. They lacked the cohesiveness and internal characteristics — a written body of medical knowledge and a network of personnel — typifying Chinese medicine. Malay healers and their Indian counterparts were highly fragmented as they were located in widely-dispersed communities. Among the Indians, the physical distance was compounded by social segregation between Indian merchants, labourers and convicts. As a result, the development of Indian medicine was jettisoned and further evolution of the Malay system blocked. It was consumer rather than practitioner resistance that sustained the other ethnic variants against the onslaught of colonial health care programmes. Yet, towards the end of colonial rule, such forms of support for Malay and Indian ethnic medical services were undermined. As Rudner (1977) has documented, village chiefs in Malay *kampung* near urban centres, demanded Western-style dispensaries and Western-trained doctors. Consumption of Indian medical care remained restricted to Tamil and small urban communities and failed to expand before the incorporation of ethnic Indians into the Western sector, as both professional and paramedical workers. Together, the deprivation of government sponsorship and a stagnating or even declining market undermined the positions of Indian and Malay healers. They failed to organise the

institutional means through which their Chinese counterparts contested the suppression policy pursued by the colonial health authorities. Yet, they were integrated into the new socioeconomic structure which evolved under late British colonial rule as a complementary and subordinate form of health care but with an unknown number of personnel. Similarly, the *chung-i* had established a strong commercial network closely linked with the colonial complex and institutions which competed with those established in the Western sector. Thus, the differing extent of conservation-dissolution within various ethnic medical systems depended not only on external forces but also the degree of internal resistance and its nature.

3. POST-COLONIAL PERIOD (SINCE 1957)

Following Independence, the Malaysian government sought to make ethnic medical services superfluous by extending Western health care to the last repositories of tradition — the poor areas and rural villages. The Second Five-Year Plan 1961-1965 (Malaya 1961) and Jayesuria's (1967) scheme for a rural health service planned a comprehensive takeover of health delivery by Western medicine. At this stage of health care development in Peninsular Malaysia, a World Health Organisation assessment team, Roemer and Manning (1969: 14) have suggested that:

... the continued use of traditional healing
can be taken as a barometer of the effectiveness

of the RHSS [Rural Health Service Scheme]
or vice-versa

In this expansion, 'exclusive' control of entry into state-sponsored health care delivery was held by Western-trained personnel. This effectively prevented ethnically-trained healers from practising as orthodox medical practitioners in Peninsular Malaysia, as demonstrated in the post-colonial hierarchy of medical professionals which was established (Table 4.3).

The new development ideology' stressed the importance of Western-trained doctors' control of 'modern' health services. As there was a shortage of these orthodox professionals, Malaysia imported them from other Third World countries to boost manpower ratios. In the mid-1970s, the aim in the Mid-Term Review of the Third Malaysia Plan (Malaysia 1979: 73) was:

To achieve the national target of one doctor per 3,000 population, one dental doctor per 10,000 population and one pharmacist for every 12,000 population would require a total of 4,600 medical doctors, 1,390 dental doctors and 1,160 pharmacists by 1980. Thus, while efforts are being made to increase the supply of these personnel locally, the likely shortage of about 870 doctors, 580 dental doctors and 730 pharmacists in 1980 ... will be partially met by recruitment of foreign doctors on contract basis.

Indeed, the Western-based sector's determination to replace ethnic with Western health care, even before the Third Malaysia Plan (1975-1980) commenced, exceeded World Bank (1975a) yardsticks for basic health care provision — the expenditure of 2.5 per cent of the national budget on health care and a ratio of one Western-trained

TABLE 4.3 PROFESSIONAL HIERARCHY IN PENINSULAR
MALAYSIA'S WESTERN MEDICAL SECTOR

Manpower	Average cost per day of manpower employed in direct patient and health care* US\$	Qualification levels years	Length of training in Western medicine months
<u>Professional:</u>			
Doctor	20	13	72-84
<u>Para-professional:</u>			
Radiographer	12	11	36
Public health sister	12	11	40 (basic and 23 extra health visitor and midwifery)
Hospital assistant	11	11	40
Public health nurse	8	11	40 (basic and 23 extra health visitor and midwifery)
Public health inspector	8	11	36
Laboratory assistant	7	11	36
Dispenser	6	11	36
<u>Auxiliary:</u>			
Assistant nurse	7	9	24
Midwife	7	7	24
Junior laboratory assistant	4	9	12
Public health overseer	6	7	3-6

* Estimated from graph of actual salaries.

Source: Adapted from Chen (1973).

doctor to every 10,000 population. The Malaysian government's success in meeting these targets had been due to the assignment of increasing funds to Western medicine. Health care expenditure per capita in Peninsular Malaysia rose by 153 per cent, in fiscal terms, between 1965 and 1976 (Table 4.4). Operating costs of government health services peaked in the early 1970s but development costs reached an all-time high only in 1976.

Initially, the Malaysian Government's efforts concentrated on maintaining the health infrastructure established during the late British colonial period. A World Bank (1975b) assessment team observed that the antiquated budgeting and accounting methods of the colonial regime, with its emphasis on financial stringency and accountability, had been preserved by the Malaysian Government despite its greater expansionary objectives and varying concerns.

Only in the early 1970s had stronger demand from local leaders led to health schemes aimed at expanding Western medical services to distribute Western-trained doctors and medical care infrastructure more equitably among various states. This has partly corrected the late colonial concentration of resources within west coast states and their major urban centres. Statistics in Tables 4.5a and 4.5b reflect the degree of post-colonial Western competition faced by ethnic medicine. While the provision of manpower and facilities favours the richer west coast states, the poorer states, such as Kedah, Kelantan and Trengganu, which until the beginning of the post-colonial period have been largely serviced

TABLE 4.4 MALAYSIAN HEALTH CARE EXPENDITURES
FOR SELECTED YEARS BETWEEN 1965 AND 1976

Year	Operating costs		Development costs		Health Expenditure \$M per capita
	Amount \$M	Share of national budget per cent	Amount \$M	Share of national budget per cent	
1965	115,962,329	7.1	19,547,392	3.4	15
1970	154,816,415	7.0	16,605,467	2.3	16
1971	199,710,652	8.1	16,665,149	1.5	20
1972	233,773,335	7.5	22,491,374	2.1	23
1973	254,981,120	7.5	29,387,363	2.6	25
1974	313,475,158	7.2	35,827,945	1.9	30
1975	334,000,000	6.9	71,011,000	2.9	34
1976	368,832,000	6.9	92,816,000	4.7	38

Source: Ministry of Health, Malaysia (1977)

TABLE 4.5a DISTRIBUTION OF WESTERN-TRAINED DOCTORS
IN PENINSULAR MALAYSIA 1978

State	Total number	Total per cent	Western-trained doctors ratio	Government		Private		Income per capita \$M
				number	per cent*	number	per cent*	
Perlis	32	1.3	1:4470	24	75.0	8	25.0	901
Kedah	125	5.0	1:8050	86	69.0	39	31.0	
Penang	308	10.6	1:2990	122	40.0	186	60.0	1901
Perak	361	12.4	1:5270	155	43.0	206	57.0	1414
Selangor	313	10.8	1:1632	117	37.0	196	63.0	3083
Federal Territory	911	31.4	n.a.	586	64.0	325	36.0	n.a.
Negri Sembilan	151	5.2	1:3862	99	66.0	52	34.0	1482
Malacca	110	3.6	1:4630	66	60.0	44	40.0	1218
Johore	295	10.2	1:5340	151	51.2	144	48.8	1573
Pahang	121	4.2	1:5175	72	60.0	49	40.0	1740
Trengganu	59	2.0	1:8580	43	73.0	16	27.0	1006
Kelantan	101	3.5	1:8466	74	73.0	27	27.0	630
Peninsular Malaysia	2887	100.0	1:3702	1595	55.2	1292	44.8	1676

* Percentages calculated on the basis of each state's total number of doctors as divided between government and private sectors respectively.

TABLE 4.5b DISTRIBUTION OF WESTERN-TYPE INFRASTRUCTURE
IN PENINSULAR MALAYSIA 1978

State	General	Hospitals+		Beds**		Total Hospitals	Total Beds
		District	Private++	Public	Private++		
Perlis	1	-	-	386	-	0.7	1.8
Kedah	1	4	1	1264	12	4.0	5.9
Penang	1	4	12	1657	309	11.3	9.1
Perak	1	11	22	3286	494	22.6	17.3
Selangor	2	4	33	3312	2199**	26.0	25.3
Negri Sembilan	1	4	1	1665	19	4.0	7.7
Malacca	1	1	2	900	n.a.	2.7	4.1
Johore	1	8	19	3119	100	18.7	14.8
Pahang	1	7	1	1346	8	6.0	6.2
Trengganu	1	3	-	677	-	2.7	3.1
Kelantan	1	1	-	1014	-	1.3	4.7
Peninsular Malaysia	12	47	91	18,626	3141	100.0	100.0

+ Includes University Hospital which is semi-governmental.

** Percentages of beds are calculated without including total of Malacca of which no figures were available.

++ Includes private hospitals, clinics and maternity homes with beds but excludes estate hospitals.

Source: Adapted from statistical records of Ministry of Health, Malaysia (1978); Malaysia (1979).

by travelling dispensaries, now have substantial numbers of Western-trained doctors. The population per doctor ratios are 1 to 8,050, 1 to 8,466 and 1 to 8,580 respectively. Table 4.5a further demonstrates the importance of private-sector doctors in health care provision in terms of their numbers and the establishment of private hospitals. Private sector general practitioners comprised one-third of Western-trained medical personnel in all states in 1978. This significant role of the private health care sector highlighted the 'marketing' success of government-sponsored health programmes during the late 1970s. Yet, as Figure 4.1 illustrates, the private health care sector is concentrated in the high and middle-income states, such as Selangor, Penang, Johore and Pahang. In low-income states — Trengganu, Kelantan, Perak, Kedah, Negri Sembilan and Malacca — the public medical sector is more prominent. However, the distribution of *chung-i* is closely related to the concentration of Chinese communities on the west coast of Peninsular Malaysia. Such a distribution of health care reflects the different evolution of these three sectors and the importance of resistance from ethnic medicine to encroachment by the Western sector.

Resistance From Ethnic Medicine

The momentous growth in the Western sector has prompted 'unorthodox' practitioners to re-organise themselves with the aim of consolidating their stake in health care delivery. Family-based and highly

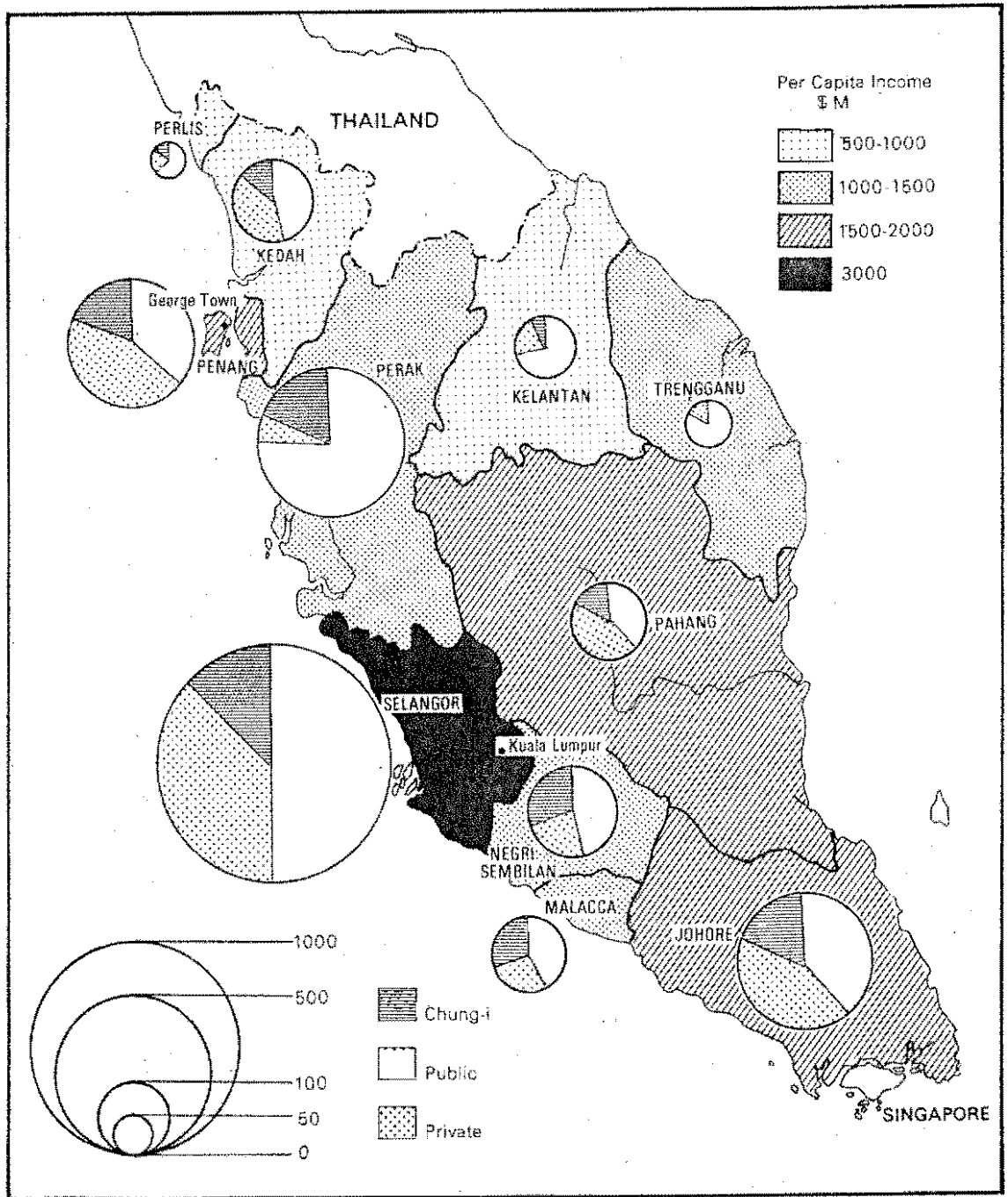


Fig. 4.1 Distribution of Western-trained doctors (public and private sectors) and *chang-i* in Peninsular Malaysia 1976

individualistic and personalised forms of health care organisation were integrated into local and then nation-wide associations — the successors to local associations of Chinese physicians emerging during the late British colonial period. Most of the associations were urban-based and it was easier for the *chung-i* to organise their resistance than rural-based Malay healers.

Chinese physicians had business interests to protect — concerns which did not apply to other ethnic variants. In fact, profitability of their practices had become more important to Chinese physicians than in other ethnic forms of health care delivery, where practitioners did not depend on their practice for a livelihood. Chinese medicine depended on the trade in herbal supplies to survive and many *chung-i* engaged in retailing and wholesaling of medicines to supplement income from their medical care activities.

A loosely-organised federation of nineteen local *chung-i* associations that had emerged during and after the late British colonial period in Peninsular Malaysia and Singapore was formed in 1960. Membership of the federation, aimed at protecting trading interests of *chung-i*, had increased to twenty-four organisations in 1976 — by then the Malaysian group had become independent of Singapore. In contrast, the first Indian association of practitioners did not emerge until 1976 and the Malay parallel was not founded until 1979. There is still no association of aboriginal *poyang*.

Resistance among ethnic healers — other than the

Chinese — has, therefore, been obscure since the beginning of the post-colonial period. Indeed, Werner (1979) has shown how the aboriginal system has undergone little change — the same apprenticeship arrangement has been retained. Malay medical healers have also been slow in adjusting to increased Western competition. Even the organisation of the *bomoh* associations was motivated not by the practitioners themselves but by the United Malay National Organisation, a branch of the ruling political party, the *Barisan Nasionalis*, with the aim of preserving the cultural heritage of the country's people. Studies of Malay medical practice by Colson (1971) and Chen (1971; 1975a; 1975b; 1978) have shown that changes initiated by individual practitioners have been rare. Apart from invocations for clement weather during football matches, the *pawang*'s responsibilities have been unchanged and restricted to mediating with the spirit world for health in the community and benevolent influence on the agricultural cycle, fishing, hunting and the climate.

Under the expansionary schemes of the Western sector, such as the Rural Health Service Scheme, a programme to coopt the *bidan kampung* into the Western medical sector was initiated. This aimed at facilitating the acceptance of Western-trained midwives and paramedical workers introduced to rural areas to aid in dissolving ethnic medical practice. During the early 1970s, the *bidan kampung* was given a six-month course equivalent to that of a dresser or medical auxiliary. However, this has been a stop-gap

measure which would soon be dispensed with after the establishment of rural clinics and their full complement of personnel and services. Nevertheless, the *bidan* has persisted but in a diminished role largely within rural areas.

The *bomoh* or medical therapist has continued to practise skills based on control over a malevolent spirit world and the application of native medicines. However, the *bomoh* has been more rigorous in countering Western competition. Indeed, the motivation to set up the 500-member association stemmed from these practitioners' recent success in treating cases of drug addiction among Malay youths. Individually, the *bomoh* have relocated in urban areas, where they operate part-time practices and specialise in particular skills. Colson (1971) has noted that specialist *bomoh* were able to draw their clientele from villages or urban bases unlike the old-style *bomoh* whose patronage was restricted to the immediate village.

Indian practitioners, like Malay healers, have taken personal and highly individualistic steps to insulate their practices against Western competition. As Meade and Wegelin (1975) have found in their study of Kuala Lumpur Indian healers, modifications have involved strategies, such as concentrating services in predominantly Indian neighbourhoods. The hundred-strong Association of Homeo, Ayurvedic and Siddha healers is dominated by urban-based members who remain separate from temple-based Indian curers and rural personnel. From studies by Dunn (1975), Meade and Wegelin

(1975) and Colley (1978), it is evident that Indian medicine has evinced none of the structural transformation of Chinese medicine — schools, medicine trade, political connections, control of medical supplies by entrepreneurs. Like ethnic Malay and aboriginal medical practice, it has persisted through the constant repetition of old skills using the same organisational framework. Indeed, the studies have also suggested that Indian *vaidyas* were being relegated to the treatment of illnesses, such as common cold, indigestion, fever and headaches, in which Western medicine was patently less effective.

Chinese medicine alone has organised the most vigorous checks to competition from Western medical practice. Through petitions and lobbies organised by associations and a national federation of *chung-i*, Chinese medicine has successfully challenged oppressive regulatory constraints imposed by the Health Ministry. By forging connections with government politicians — particularly the Minister of Health — these organisations have achieved much since Independence. For example, the lobbies have resulted in: the removal of colonial and post-colonial import taxes on medicines; a reduction in duties on ginseng (from 25 per cent of its prevailing value to a fixed \$M7.50 per pound); a revision of import formalities related to medical supplies from mainland China; and resisting the threat of the National trading agency, *PERNAS* (*Perbadanan Nasional Berhad*) to take over the import trade in Chinese medical stocks. Obstructive customs delays due to

inefficient procedures of evaluating imported medical commodities for taxation were resolved via further association lobbies. Thus, a levy system based on the weights of herbal imports rather than their prevailing value was introduced in 1979 to overcome a recurrent cause of contention.

All associations, particularly the Chinese, were aware of the need to standardise ethnic medical practice and training, introduce innovations and improve and propagate the use of Chinese medicine. These objectives were first stated in the constitutions of Chinese associations (Table 4.6). Indeed, many of the associations were designed with such goals in mind. As Table 4.6 demonstrates, member associations of the nation-wide Federation of Chinese Physicians and Druggists first formed in 1960, introduced modifications to resist unfavourable state intervention in *chung-i* activities and maintain the viability and continuity of Chinese medical practice. Lobby groups were created, medical schools initiated and 'free clinics' operated. Chinese medical associations proliferated, particularly in the western coastal states of Peninsular Malaysia where the competition posed by the most advantageous ratios of Western medical manpower and health infrastructure per capita was greatest.

In a bid to ensure the supply of *chung-i*, medical schools have centralised the transmission of medical skills and education previously dependent on the more established apprenticeship system. Malaysian *chung-i* trained in this way should have found

TABLE 4.6 ORGANISATIONS OF CHINESE PHYSICIANS AND DRUGGISTS IN
PENINSULAR MALAYSIA 1960 AND 1976

Location	Members of the Federation in 1960	Members of the Federation in 1976	Short history of activities
Johore	The Chinese Medical Guild, Kluang.	Membership renewed as Kluang, Chinese Physicians' and Druggists' Association.	Established in 1947 to propagate use of Chinese medicine.
	Batu Pahat Chinese Druggist Association.	Membership renewed.	Established in 1957 to lobby against repressive taxes. Medical school started in 1965 but closed after 3rd. batch in 1970.
	Chinese Drug Dealers' Association, Segamat District.	Membership renewed.	Established to help members meet license requirements and protest against taxes.
	-----	The Muar Chinese Native Practitioners' and Druggists' Association.	Established in 1924 to protest threat to dissolve Chinese medical practice in mainland China.
Malacca	-----	Persatuan Tabib dan Peniaga Ubat Asli Johore Selatan.	Established to lobby for tax exemption for Chinese medicines.
	Chinese Druggists' Association.	Membership renewed.	Established in 1954 to help members get trading permits and lobby for removal of taxes on medicines.
Negeri Sembilan	Negeri Sembilan Chinese Physicians' and Druggists' Association.	Membership renewed.	Established in 1958 to lobby against taxes and unite <i>chung-i</i> and traders.
Selangor	Kuala Lumpur Drug Importers' and Exporters' Association.	Membership renewed.	Established in 1959 to lobby for removal of import tax on medicines.
	Selangor Overseas Chinese Drug Dealers' Association.	Membership renewed.	Established in 1959 to lobby for reduction or removal of tariffs on medicines.
	Chinese Physicians' Association of Central Malaya.	Membership renewed.	Established in 1945 to lobby against taxes. Started first medical school and free clinics.
	Selangor Hung Lim Club.	Membership renewed.	Established in 1925 to protest dissolution of Chinese medical practice in mainland China.
	The Chinese Physicians' Improvements Association of Malaya, Kuala Lumpur.	Did not renew membership.	No records available.
Perak	-----	Klang Chinese Physicians' and Druggists' Association.	Established in 1975 to promote use of Chinese medicine and lobby against import taxes.
	Perak Chinese Physicians' Association.	Membership renewed.	Established in 1947 to lobby against tariffs on medicines. Started school and free clinic.
	Perak Chinese Physicians' and Druggists' Association.	Membership renewed.	Established in 1925 to protest dissolution of Chinese medicine in mainland China. Started medical school and free clinic.
	-----	Perak Acupuncture and Caustery Association.	Established in 1966 after breaking away from Chinese Physicians' Association to distinguish specialised skills in acupuncture.
Penang	Penang Chinese Physicians' and Druggists' Association.	Membership renewed.	Established in 1928 to lobby against dissolution of Chinese medicine in mainland China and colonial taxes. Started medical school and free clinic.
	North Malaya Chinese Physicians' Association.	Membership renewed.	Established in 1968 to unite <i>chung-i</i> as distinct from traders and propagate use of Chinese medicine.
Pahang	-----	Chinese Physicians' and Druggists' Association, Kuantan.	Established to lobby against repressive taxation.

Source: Federation of Chinese Physicians and Druggists of Malaysia (1960; 1976).

mass teaching anathema to their practice as its success was traditionally based on access to closely-guarded family trade secrets. Yet, it was these practitioners-cum-business entrepreneurs who organised medical institutes in Kuala Lumpur, Ipoh and Batu Pahat.

The Chinese medical infrastructure has relied on community or public consumers' funding for its establishment and maintenance. Since the late British colonial period, schools and free clinics have been maintained, almost uninterrupted, by practitioner, businessmen and public donations. Table 4.7 shows the annual expenditures required to support the activities of Chinese medical associations. Such is the public appeal of Chinese medicine that funds have been derived from people in Penang, Kuala Lumpur, Ipoh and parts of Johore, such as Muar and Batu Pahat. Neither the Malay nor Indian ethnic variants have been able to amass such widespread public financial support.

Individually, the *chung-i* have tried to remain competitive by adopting Western medical technology that was relatively low-cost and not associated with heavy infrastructural investment. Chu's (1976) study in Kuala Lumpur, has reported that practitioners used white uniforms, stethoscopes, blood-pressure gauges and X-ray machines. Training in the use of this equipment has also been incorporated into the curricula of institutes in Penang and Kuala Lumpur. Patented and proprietary medicines packaged like Western medications to match the latter's convenience for consumption, have also been increasingly employed. Physicians

TABLE 4.7 HEALTH CARE EXPENDITURES AND CLIENT NUMBERS
OF SELECTED CHINESE 'FREE CLINICS' IN
PENINSULAR MALAYSIA

Location	Clinic	Date	Expenditures \$M	Date	Patients number
Selangor	Tung Shin	1977	46,324	1977	24,000 est.
Perak	Choong Wah	1975	32,116	1977	12,122
Penang	Lam Wah Ee	1978	49,776	1978	26,143
Penang	Institute of Chinese Physicians' Free Clinic	1975	24,030	1978	831

Source: Tung Shin (1977); Fieldwork data (1979).

have sought to distinguish skills, such as in acupuncture, from those employed by their Western-trained competitors and colleagues who did not use similar techniques. For example, physicians who were members of a joint practitioner and medicine retailer association in Ipoh broke away to form their own organisation. Later, this association of physicians was again divided into two, and this time the disaffected group comprised *chung-i* who were skilled in acupuncture. Hence, the Perak Chinese Physicians' and Druggists' Association formed in 1925 gave rise to two others, the Perak Chinese Physicians' Association which broke away in 1947 and the Perak Acupuncture and Cautery Association established in 1966.

Continuity in ethnic Chinese medicine is maintained because of a constant influx of trainees into the institutes established. Records of the institutes revealed that the annual student intake reached an estimated peak of 300 students per course between 1965 and 1976. Despite the slow growth in numbers, the maintenance of a supply of *chung-i* has been unparalleled in other ethnic forms of medical care. Thus, it is not surprising that Table 4.8 shows Chinese medical practitioners and distributors represented with substantial numerical strength in all the states of Peninsular Malaysia.

The formation of the Federation of Traditional Medical Practitioners of Malaysia with the encouragement of the United Malay National Organisation's Youth branch, heralds an unprecedented development in the history of health care in Peninsular Malaysia.

TABLE 4.8 DISTRIBUTION OF ETHNICALLY-TRAINED
CHINESE PRACTITIONERS AND MEDICAL DRUGGISTS

State Chief city	1960				1976			
	Chinese medicine shops		Chinese physicians		Chinese medicine shops		Chinese physicians	
	number	per cent	number	per cent	number	per cent	number	per cent
Perlis	8	0.5	3	0.5	14	0.8	3	0.5
Kangar	3		3		5		3	
Kedah	67	4.5	19	3.1	99	5.4	19	3.2
Alor Setar	12		7		23		5	
Penang	176	11.9	67	10.8	348	18.9	69	11.8
Georgetown	126		50		162		55	
Perak	358	24.3	116	18.7	367	20.0	106	18.2
Ipoh	89		58		92		71	
Selangor	391	26.5	197	31.8	435	23.7	153	26.2
Kuala Lumpur	270		128		294		117	
Negri Sembilan	69	4.7	52	8.4	81	4.4	53	9.1
Seremban	17		19		35		29	
Malacca	78	5.3	43	6.9	84	4.8	38	6.5
Malacca	46		36		39		23	
Johor	227	15.4	74	11.9	296	16.1	119	20.4
Johore Bharu	21		3		47		21	
Pahang	82	5.6	16	2.6	76	4.1	19	3.3
Kuantan	-		-		11		6	
Trengganu	10	0.7	17	2.7	12	0.7	n.a.	-
Kuala Trengganu	10		17		6		-	-
Kelantan	8	0.5	15	2.4	25	1.4	4	0.7
Kota Bharu	8		15		20		4	
Peninsular Malaysia	1474	100.0	619	100.0	1837	100.0	583	100.0

Source: Federation of Chinese Physicians and Medicine Dealers of
Malaysia (1960; 1976).

This organisation purports to integrate all ethnically-trained medical personnel and preserve the cultural integrity of ethnic medical practice. For Malay and Indian practitioners more than their Chinese counterparts the move offers the potential for consolidating resistance to the decline and dissolution of ethnic medical practice.

SUMMARY

In Peninsular Malaysia, late colonial and post-colonial programmes to dissolve ethnic medical practice induced resistance and change among its practitioners. Modifications were required to prevent declining patronage because of unfavourable legislation and mounting Western health care competition. Adjustments to the new working context were made by practitioners, either collectively or individually. Although Chinese medical personnel organised associations, it was the efforts of individual practitioners from each ethnic group that confronted state-sponsored and privately-capitalised Western medical services. Aided by legislation and aggressive programmes the state aimed to dissolve ethnic medical practice and appropriate its share of the health care market for the preferred medical sector. However, changes effected within ethnic medicine were at best 'cosmetic' because they essentially involved the acquisition of organisational trappings of the Western sector. In short, the modifications to ethnic medical practice were strategies aimed at sustaining the profitability of indigenous

medical practice and have made little difference, on the whole, to its professional standing compared with the Western sector.

The formation of associations by *chung-i* was economically motivated. Medical education and agitation for practitioner equality with Western-trained doctors became targets only after retaliatory measures were urgently required against repressive state taxation on the medicine trade. Hence, the structuring of related institutions, such as schools and free clinic services have received little priority and have, therefore, been characterised by a lack of coordination and innovative planning since their inception in the late British colonial period. Each of the institutes in Penang, Ipoh and Kuala Lumpur teach a different curriculum. Western medical courses have been incorporated without much attention towards reconciling variance in medical theories. Programmes for further research into acupuncture and the greater use of locally-available herbs have foundered from lack of financial support. Schools in Batu Pahat, for example, have closed down after three batches of students due to lack of teaching staff and trainees. The resistance effort was, therefore, directed at maintaining the profitability of Chinese medical practice.

Chinese free clinics experience chronic funding shortages. Indeed, most services are still provided in premises dating from the late colonial era. Rapid turnover of practitioners — either voluntary, or at best, lowly-paid — and inconsistent scheduling of services have a dampening effect on the propagation of

Chinese medical care.

Studies by Chen (1969), Colson (1971), Hartog (1972), Meade and Wegelin (1975), Chu (1976) and Colley (1978) have suggested that all ethnic variants suffer from declining patronage and abridgement of functions to residual roles. While a certain unknown proportion of Malays continue to use *bomoh*, two-thirds of Chen's (1969) sample sought treatment for mental illnesses. Indeed, the same study has revealed that multiple patronage was common among Malay people — 92 per cent of household heads interviewed in rural areas used a combination of Chinese medicine retailers, Western-trained personnel in government health centres and *bomoh*. Also Chu (1976) has found that a *chung-i* in Kuala Lumpur saw an average of nine patients per day — a relatively insignificant number compared to Western-trained private general practitioners who treated forty patients per day.

Nevertheless, resistance mechanisms organised by ethnic medical practitioners have succeeded in mitigating the 'dissolution' objectives of Western competition. Chinese medical associations have managed to persuade at least 50 per cent of the *chung-i* practising in Peninsular Malaysia to become members — still an unfavourable figure when compared to the total representation of Western-trained doctors in the central registry kept by the Malaysian Medical Council. In addition, changes initiated by practitioner associations have not been assimilated throughout the ethnic system and modifications have been made on a one-by-one basis.

Hence, the increased output of graduates from medical schools established by Chinese associations has not been matched by increases in employment opportunities. Well-established *chung-i* already in business have continued to take on wage-workers-cum-apprentices and students attending courses at medical schools but not partners. Meanwhile, the investment required to establish a new practice has risen phenomenally because such scant effort has been made to reduce the dependence on imported medical supplies. Thus, the survival of Chinese medicine in Peninsular Malaysia is linked to conditions in the international economy and their effects on the pricing of Chinese medications. After all, Chinese medical associations have an overwhelming majority of members whose business activities are based on international trading in Chinese medicines (cf. Table 4.8). The numbers of *chung-i* have actually declined in the associations' membership.

The uncoordinated and pragmatic changes made to the fabric of non-Western medical practice in Peninsular Malaysia have important consequences for health care consumption and the development of medical services as a whole. For clients who patronise both ethnic and Western medical practitioners there could be — as Unschuld (1976) has observed — unnecessary delays in obtaining the right kind of medicare. This is aggravated by the paucity of information available on the state of Western and particularly, non-Western medical care in Peninsular Malaysia. Indeed, the only evaluation of Western medical practice seems to be

a World Health Organisation report on the Malaysian health care system by Roemer and Manning (1969) that is valid for the quality of services up to the end of the 1960s. Their assessment of the health care delivery situation, especially the private sector general practitioners in Western medicine, has been unfavourable:

Typically [the private practitioners] ... do very little laboratory or other diagnostic work-up on patients. They have virtually no relationship to hospitals. If a patient requires specialist consultation, he may be sent to a hospital, but this is rarely done. It is estimated that the private practitioner sees an average of 50 to 75 patients a day, and the attention to each is relatively perfunctory (Roemer and Manning 1969: 15).

However, a later World Bank (1977: 27) report assessed that the Malaysian Government's goal of '... making available medical care to all Malaysians irrespective of income has been achieved.' This conclusion has been flatly contradicted by Chu's (1976) observation in his survey of Western medical services in Kuala Lumpur that the length of waiting periods required to see a hospital doctor has continued to deter potential patients.

As it is able to fill the gaps left by Western medicine in meeting health care needs, ethnic medicine has resisted and frustrated both colonial and post-colonial schemes to dissolve it. Nevertheless, neglect and repression by the state and the Western medical sector have undermined its strength. The ills of such myopic state intervention are visited, however, not only on the indigenously-trained practitioners but on their clientele and,

therefore, the overall health status of the people in Peninsular Malaysia. As Chinese medicine has been most effective in safeguarding its activities against Western competition, a micro-level survey of urban-based *chung-i* was undertaken to investigate incipient 'dissolution' and the nature of 'conservation-dissolution'.

CHAPTER FIVE
CONSERVATION-DISSOLUTION AT THE URBAN LEVEL: CHINESE
MEDICAL PRACTICE IN GEORGETOWN

The interaction between Chinese and Western medicine has been interpreted in terms of the conservation-dissolution process at a macro-level — a focus paralleling other studies. However, this study goes a step further by using the conservation-dissolution concept to interpret the operation of urban-based Chinese physicians at a micro-level. Thus, a survey of ethnic Chinese medical practice was conducted in Georgetown and subjected to interpretation in terms of conservation-dissolution.

Attention is initially focussed on the structure of Chinese medical practice in Georgetown by comparing the different character of practitioners based in shops and clinics respectively (section one). Then, the process of adjustment, which has occurred within the organisation of Chinese health care, is studied by examining the links between practitioners and the wider urban, national and international economies (section two). Finally, the outcome of the structural adjustments evinced by this ethnic health care variant is discussed (section three).

1. STRUCTURE OF URBAN CHINESE MEDICAL PRACTICE

Chung-i were interviewed in Georgetown during 1979 to gauge how they had coped with the indirect and figurative type of subordination — a result of the absence of ready-made infrastructure to help facilitate their entry into health care delivery. A random sampling of *chung-i* was planned but no list of the total number of practitioners in 1979 was available because there was no registry for unlicensed Chinese physicians. However, it was estimated that there were at least 106 *chung-i*. Eighty-one practitioners were registered with the Penang Chinese Physicians' and Druggists' Association and 'intelligence' from physicians, staff, students of Chinese medicine, patients and the general public suggested that there were about twenty-five others unaffiliated with the Association. The sampling strategy involved interviewing 50 per cent of both registered and unregistered *chung-i*. To ensure a spread of physicians and locations, registered *chung-i* were further stratified into (a) clinic and non-clinic practitioners and (b) city-based and non-city-based practices. Where a *chung-i* could not be contacted, had ceased practising, or refused to be interviewed, another was substituted.

At best, the survey could be described as 'convenience sampling'. However, interviews with fifty-one *chung-i* (forty-one registered and ten unregistered) were sufficient to provide a profile of a little-known form of medical practice. Indeed, the survey

revealed a remarkable heterogeneity among *chung-i* in terms of their personal characteristics, training and nature of their practice. This is illustrated in five detailed profiles. The first practitioner was characterised by family-based origins and a shop-based enterprise which was more profitable than his medical practice.

Ong

Ong, aged seventy-two, was a migrant from mainland China in 1925. Son of a court official, all of his brothers were engaged in medicine retailing. After three years' schooling, six years of *chung-i* tuition and two years as an apprentice, Ong set up his own shop-based business in Beach Street in 1949 with \$M1,000, derived from both family funds and timber interests in Thailand. Within two years, Ong had fifteen to twenty patients per day with a turnover averaging about \$M3,000 per month. In 1958, Ong shifted his business to Penang Road, where with the help of his wife and six shop assistants, he operates from two premises. However, patient numbers have declined and Ong has gradually shifted his attention to the wholesaling of specialised medical items, such as deer's antlers. Although Ong was uncertain about the reasons behind the falling off of patient numbers, he cited competition from full-time clinic-based colleagues and the increase in private Western general practice as the main factors. In an attempt to maintain and increase patronage, Ong attended a one-year medical course in mainland China in 1969. By this time his patient number had fallen to less than ten per day. Shop customers had, however, increased to twenty a day. Since the practice has declined further — three to five patients daily at the time of the survey — Ong has paid greater attention to his trading activities which reached a turnover value of \$M200,000 in 1979 — the market involving not only Malaysia but also the United States. However, there was the prospect of a revival in the number of Ong's patients because two sons were studying at the local institute that Ong helped to establish in 1928. Essentially

this *chung-i*'s contribution to health care delivery has been reduced to that of a medicine distributor (retailer and wholesaler). His practice was based on the repetition of the classical mainstays of Chinese medicine and he has not been innovative in the adoption of new therapeutic skills and techniques.

These personal characteristics, training and practice differed markedly from those of a younger practitioner operating a medicine shop also within the city area.

Chang

Chang, aged forty-two, was born in Kulim. The only son of a rubber estate owner, Chang was a self-taught herbal therapist, specialising in the treatment of gallstones and kidney stones, and children's illnesses. After six years of Chinese language schooling and a similar period as apprentice in a Kulim medicine shop, Chang, after spells as a soldier and clerk, established a shop in Burmah Road in 1973. This was purchased with \$M60,000 inherited from his father — an additional \$M3,000 being required for medical stocks. When Chang commenced business in 1973, he only had about five patients per day and an income of \$M600 per month. However, his striking success with patients resulted in his practice booming to the extent that he had about sixty patients per day and a monthly income of \$M7,000 (including medical sales) in 1979 — an amount sufficient for Chang to invest profits into rubber and real estate. Uncertain about Chang's qualifications and the reasons for his success, the Chinese medical fraternity rejected his application for membership of the local association. Chang has not been innovative in incorporating acupuncture into his practice and the basis for his effectiveness lies in an intelligent interpretation of old medical formulae. His highly viable practice and medicine retailing activities have capitalised on skills which other *chung-i* have not, as yet, matched. This epitomises the individualistic character of Chinese medicine. Each practitioner fosters medical knowledge as his personal property to maximise

profitability.

Further evidence of the heterogeneity of practitioners was provided by a *chung-i* in the newer suburbs.

Tan, aged thirty-two, shared a medicine shop in a new suburban area, Island Park, with her husband, also a *chung-i*. Born in Malacca, Tan trained in the Singapore medical institute for four years and worked in a medicine shop to help pay her fees and expenses. The rest of her financial support came from her father, a medicine retailer in Malacca. Her first practice in Singapore failed after three years because of poor patronage, attributed to intense competition and limited capital resources. This led to the decision to shift to Penang which was regarded as being a more favourable market than Kuala Lumpur or other Malaysian towns, mainly because there appeared to be less competition due to smaller numbers of practitioners. Husband and wife borrowed the \$M32,000 required to buy their shop and about another \$M10,000 for their medical stocks in 1977. To advertise her skills, Tan worked two nights a week in 1977 in a free clinic. Patients in her private clinic numbered two to three a day in the beginning but after two years, have increased to about five a day. Customers for medicines sold in the shop have increased to about ten a day in 1979 as more people have settled in the suburb. In 1979 the practice (including medical sales) was providing Tan with an income of about \$M700 a month compared to no profits in her first year. This accounted for her optimism that the practice-cum-business would become more lucrative.

While the above cases illustrated the strategems used by shop-based practitioners for entry into the profession and the maintenance of a viable practice, the following three showed the tactics employed by clinics.

Pang

Pang, aged thirty-two, shared a Western-style clinic in Khoo Sian Ewe Road within the city area

with two other *chung-i* — colleagues from the same student batch in the local institute. After eleven years of Chinese-medium schooling and four years of training in the institute, Pang sat for the medical examinations in the Singapore institute and was, therefore, also a registered member there. Before establishing his clinic and while studying to become a practitioner, Pang was a clerk and a sales assistant. His father was a hawker. In 1978, the \$M1,500 contribution made to his clinic partnership came from personal savings but the practice has not provided him with a sufficient income to live on. To survive — while simultaneously advertising his services — Pang worked in the mornings at a free clinic run by Lam Wah Ee. For his work he received travelling stipends amounting to about \$M200 per month. This income was supplemented with fees from part-time, home-based consultations which he was supplying during the afternoons. Pang has faced difficulties in his new clinic-based practice. He had to re-locate after the first six months because the rent of the Burmah Road premises was raised from \$M300 to \$M600. Despite poor patronage at both clinic and home-based practices — total clientele numbers of about six per day — Pang's contribution to health care was significant. At the free clinic he treated about forty patients daily. Pang and his partners resembled many young practitioners who were confronting problems of poor patronage and small capital resources. Although the whole of Chinese medical practice has been affected, the difficulties have been experienced more by fledgling clinic-based practices.

Another clinic with an older *chung-i* with almost similar characteristics, training and practice, did not, however, face the same problems.

Wong

Wong, aged forty-three, has a Western-styled clinic in Rangoon Road. With nine years of Chinese-language schooling and four years of institute-training, he first worked in a medicine shop in Kuala Lumpur. From there he moved to Alor Setar

to become a resident physician in another medicine shop for two years. After this, he worked for higher wages in Ipoh for another year before accumulating enough funds to start his own practice in 1964 in Georgetown. This location was selected on the recommendations of associates during his period of wage-employment. As his father was a cook in Canton, the only means of financing his clinic was his personal savings and credit from these medical businessmen. Wong was forced to re-locate twice to avoid rent hikes. Wong's initial practice was at Jalan Argyll for ten years. Then he moved to Jalan Hutton where he practised for three years before he bought his own house and converted the first floor into a consultation office for a sum of \$M48,000, that is, \$M45,000 for the building and an additional \$M3,000 for extra construction. Within two years of starting his practice, Wong had a monthly income of \$M3,500 and patients numbering twenty-five to thirty a day. However, in 1979 patient numbers had dropped to about twenty a day and monthly income to \$M3,000. Fortunately, Wong had invested his profits in both a medicine shop partnership and real estate. Innovations, such as the replacement of pulse diagnosis by a stethoscope have been held responsible for the fall in patient numbers. Nevertheless, Wong has participated in the struggle to maintain Chinese medical practice in Georgetown by teaching part-time at an institute of which he was also the principal.

An older *chung-i*, who operated a free clinic from both his crockery shop and his home, had been more successful in establishing patient support, in direct contrast to the two previous practitioners.

Yeoh

Yeoh, aged sixty-three, famous for his success in treating children's illnesses and problems which Western-trained doctors find intractable, provided free consultations in his Campbell Street crockery shop during the day although the bulk of his work occurs at night in his Free School Road residence. Although his grandfather, father and uncle were full-time clinic practitioners, Yeoh, after

migrating to Malaysia thirty years ago, was unable to afford the resources needed to buy medical stocks. He rejected the idea of working for wages in preference for self-employment. However, he decided to use the six years of apprenticeship under his father to operate a part-time, home-based practice after the manner of classical medical practitioners in mainland China. When he started in 1949, Yeoh treated about ten patients per day. By 1979 the number of patients was thirty a day. This has resulted in an increase in his monthly sales of medical prescriptions from \$M50 worth to \$M800 between 1949 and 1979. Yeoh has based his practice entirely on classical herbal therapeutic techniques and did not know acupuncture. Due to his substantial clientele numbers, Yeoh was contributing significantly to health care delivery in Georgetown. Yet, he was unable to stimulate innovations within Chinese medical practice, and thereby further medical knowledge.

Despite the diversity of practitioners revealed in these vignettes, the sample population could be conveniently sub-divided into two groups — shop-based and clinic-based physicians.

The twenty-one shop-based physicians were part-time retailers using diagnostic and therapeutic skills to treat patients (Table 5.1). Assistants were employed to help in trading activities rather than the delivery of medical care. (These *chung-i* must not be confused with distributors of Chinese medicines who, though knowledgeable in the application of Chinese pharmaceutical products, abide by fixed formulae in dispensing medicines to their customers but do not advertise themselves as physicians). In contrast, the thirty clinic-based *chung-i* operated either from their residences, community centres belonging

TABLE 5.1. DISTRIBUTION OF *CHUNG-I* ACCORDING TO
TYPE OF PRACTICE IN GEORGETOWN

Type of practice	<i>Chung-i</i>	
	number	per cent
<u>Shops</u>	21	41.2
<u>Clinics:</u>		
Western-styled clinic	19	37.3
Home	6	11.8
Free clinic or other community centre	5	9.8
Sub-total	30	58.9
Total	51	100.0

Source: Field survey (1979).

to religious and clan organisations, or specially-designed premises modelled on the lines of those used by Western-trained doctors. Only Western-styled clinic-based physicians, however, hired dispensers for their practice. Differences between shop-based and clinic *chung-i* are initially analysed in terms of the nature of their respective practices — location, organisation, technology and services. Then, variations in their personal characteristics — training, employment history and family background — are examined. The latter variations provide the key to performance — income, clientele numbers and duration of the practice.

Nature of Practice

There was little difference in the location pattern of shops and clinics. As shown in Figure 5.1, the majority of both types of practitioners were concentrated in the city area, especially Chulia Street, Penang Road, Campbell Street, Datuk Kramat Road and Burmah Road. Outside this area, there were minor concentrations of both sets of physicians in Jelutong, Ayer Itam and Green Lane, demonstrating that there had been a suburbanisation of activity — a reflection of the dearth of premises for lease at low rents in the city area. Thus, the main differences between shop and clinic personnel were in terms of organisation, technology and services.

The organisation of both shop and clinic-based *chung-i* approximated the classic model of 'granulated capitalism' — the

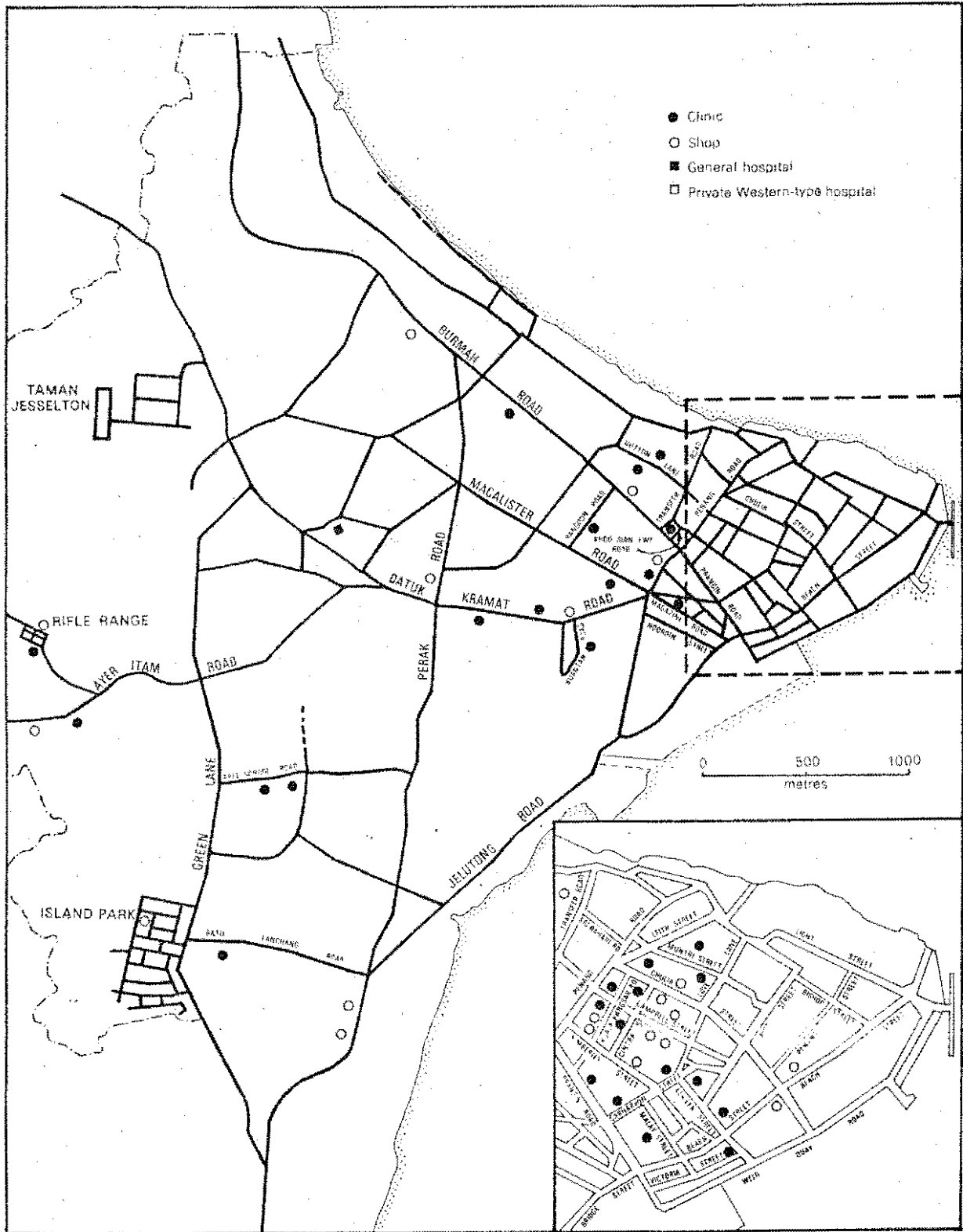


Fig. 5.1 Locations of shop and clinic-based *chung-i* in Georgetown survey

one-man or family, privately-owned business (Dick and Rimmer 1980). However, there were sharp differences in entry requirements between the two groups. Shop-based practitioners required window-display space whereas their counterparts required office space only. While a clinic cost between \$M2,000 and \$M5,000 to establish in 1979; shops cost between \$M10,000 and \$M20,000. However, these average figures belied the range of investments (Table 5.2). For example, three clinics on Datuk Kramat Road in the inner city area cost \$M40,000 each and a shop in Burmah Road \$M70,000 in 1979. However, less capital was needed to buy shops in new suburban areas. A shop was purchased in Island Park (a Green Lane suburb) for \$M32,000 in 1977. Less capital was required for operating a clinic than a medicine shop because the latter had to hold a greater inventory of medicines. Shops needed between \$M1,000 and \$M2,000 per month to maintain their trading and medical activities. More was required if they engaged in wholesaling. Clinics survived on less than \$M1,000 because they only had to supply their clients' prescriptions. Newly-established practices — less than one-year old — which would treat few patients, such as three clinic physicians on Khoo Sian Ewe Road in the inner city area, would use less than \$M200 worth of drugs per month.

Shops also employed wage-workers to assist in organising their retailing activities which included the processing of medical stocks held for trading — a large number reflecting the heavy dependence on retailing rather than health care provision.

TABLE 5.2 INITIAL INVESTMENTS MADE TO ESTABLISH
PRACTICE BY GEORGETOWN *CHUNG-I*

Amount \$M	Clinic		Shop	
	number	per cent	number	per cent
Negligible or none	5	16.7	7	33.3
1000 or less	3	10.0	1	4.8
1001 - 2000	7	23.3	1	4.8
2001 - 5000	8	26.7	1	4.8
5001 - 10,000	3	10.0	4	19.0
10,000 - 20,000	1	3.3	4	19.0
20,001 - 30,000	-	-	-	-
More than 30,000	3	10.0	3	14.3
Total	30	100.0	21	100.0

Source: Fieldwork data (1979)

Apart from six long-established and well-patronised Western-styled practitioners who had employed dispensers, clinics did not use wage-labour. Nevertheless, it was common for both shop and clinic practitioners to use family members in their practices although this was more pronounced among shop personnel as most clinicians operated single-handed.

Organisational differences were compounded because the 'technology' used in shops differed from clinics. Shops emphasised herbal therapy and the retailing of Western drugs, but their specialties were merely an advantageous adjunct to their trading activities. Acupuncture — a therapeutic technique requiring no drugs — was generally downplayed by shops and, despite its revival in mainland China and Malaysia, only one in two used it to treat patients. In contrast, all clinics used both drugs and acupuncture therapies. Also clinics had been more innovative in incorporating Western medical equipment to help diagnosis. Techniques intrinsic to Chinese medicine, such as pulse diagnosis, have been displaced by the stethoscope and other Western-derived equipment. Shops, for the most part, retained pulse-reading as the chief means of diagnosis. However, there were exceptions, because a shop in Kuala Kangsar Road opened only in 1978, was the first among the sampled *chung-i* to introduce electro-acupuncture as a therapeutic technique.

Services varied between shops and clinics because the former operated longer and more flexible hours — twelve was the

norm — whereas the latter had fixed and shorter working schedules. Extended hours were deemed necessary for the survival of shops because their trading activities hinged on easy access and availability to customers. However, shorter working hours had allowed some clinicians to engage in either medical shop partnerships or to operate at several locations — a physician based in Ayer Itam, for instance, worked in Rifle Range Flats on alternate days. Others used their shorter working hours to develop non-medical interests, such as a Datuk Kramat Road clinician who also operated a restaurant, hotel and a car-hire firm. The shorter working day was also used by clinic practitioners to pursue full-time jobs in other sectors, such as a deputy education officer who practised at a night-time clinic in Macallister Road and the crockery shop proprietor who saw patients at nights from his home in Free School Road. Indeed, all clinicians had supplementary incomes to support their practices. Differences in the nature of the practices organised by the two sets of practitioners reflected dissimilarities in their personal characteristics in terms of training, employment history and family background.

Personal Characteristics

Entry into either shops or clinics was not pre-determined by standard training or schooling qualifications. Nevertheless, clinic *chung-i* in the survey were distinguished by higher levels of school

education than their shop counterparts. Almost two-thirds of the clinic group have had more than ten years of schooling compared with one-third of the shop category — a reflection of the fact that the clinicians were also predominantly institute-trained. Institute courses lasted for a minimum of four years, and, as in the case of the operator of a Burmah Road clinic, a two-year supplementary course in Taiwan was undertaken in acupuncture. If wage-employment in medicine shops was taken into account, some clinicians had studied for over ten years. In contrast, the length of apprenticeships for shop practitioners had varied from between three and eight years. However, Table 5.3 shows that shop practitioners had undergone more varied forms of training — one-half had been to institutes, one-quarter were self-taught, one-fifth were former apprentices and the remainder were tutored. Of the nine clinicians who were not institute-trained — one-third of the clinic group — seven were self-taught.¹ There was, however, little variation in the location of training between clinic and shop practitioners — one-half had trained in Malaysia (Georgetown, Ipoh or Kuala Lumpur) and Singapore and the other half in mainland China, Taiwan and Hong Kong.

The other basic difference between shop and clinic personnel was in their employment history. Three-quarters of

¹This entailed the study of classical medical texts while working in a medicine shop.

TABLE 5.3 TYPE OF MEDICAL TRAINING OF
CHUNG-I IN GEORGETOWN

Type of training	<i>Chung-i</i>			
	Clinic number	per cent	Shop number	per cent
Self-taught	7	23.3	5	23.8
Private tutors	1	3.3	1	4.8
Apprenticeship	1	3.3	4	19.0
Medical institute	21	69.9	11	52.3
Total	30	100.0	21	100.0

Source: Fieldwork data (1979).

the former had worked in medicine shops as assistants or apprentices before establishing their own practices — the period ranging from two years for a Rifle Range Flats shop owner to twenty years for a Burmah Road colleague. The balance of shop *chung-i* had more varied employment experiences and included a seventy-five-year old ex-tin miner and ex-clerk and a former clerk, soldier and shop assistant. In contrast to these 'incipient capitalist entrepreneurs', two-thirds of clinic personnel were previously unemployed or in work unconnected with Chinese medicine, such as clerks in Chinese firms (Table 5.4a).

Differences in employment histories were reinforced by an examination of the family background of physicians. Shops were largely inherited but clinics were operated by newcomers (Table 5.4b). Practitioners owning shops in Transfer Road and Campbell Street, for example, worked for their fathers and took over from them without requiring any additional capital. In the clinic group, one physician was sponsored by his father, a medicine retailer, while another in Free School Road, was funded by his businessman father who was in insurance. Both of these practitioners had been previously unemployed.

The performance of *chung-i* was difficult to assess because they were most reluctant to provide evidence of patronage and income. Circumstantial evidence suggested that the market position and performance of practitioners were correlated with the length of the period of operation. Informants from well-

TABLE 5.4a OCCUPATIONAL BACKGROUND OF GEORGETOWN *CHUNG-I*

Past or existing* occupational background	<i>Chung-i</i>			
	Clinic number	per cent	Shop number	per cent
Medicine shop assistants, apprentices	10	33.3	16	76.2
Clerical work	6	20.0	3	14.3
Business (retailing)	2	6.7	1	4.8
Government services	1	3.3	1	4.8
Western medicine	4	10.0	-	-
No other employment prior to practice	8	26.7	-	-
Total	30	100.0	21	100.0

* Chinese medicine a part-time occupation.

TABLE 5.4b OCCUPATIONAL BACKGROUND OF *CHUNG-I*'S FATHERS

Occupational background	<i>Chung-i</i>			
	Clinic number	per cent	Shop number	per cent
<i>Chung-i</i> (shop)	1	3.3	5	23.8
<i>Chung-i</i> (clinic)	7	23.3	-	-
Medicine retailer	1	3.3	3	14.3
Labourers, farmers, hawkers, artisans like tailors, cooks	7	23.3	5	23.8
Government services	1	3.3	5	4.8
Business	13	43.3	7	33.3
Total	30	100.0	21	100.0

Source: Fieldwork data (1979).

established shops and clinics indicated that it normally took one year to build up sufficient numbers of customers (and/or patients) for the business to be profitable.

Shops were generally more profitable than clinics. Older-established businesses were also apparently more lucrative than newer enterprises. The average monthly income of shops was \$M2,000 — double that of clinics. However, this figure was misleading because long-established and well-located shops in Penang Road and Burmah Road earned almost \$M10,000 and \$M7,000 per month respectively. Clinics in Rangoon Road, Datuk Kramat Road and Malay Street earned about \$M5,000 per month. Less well-established shops, such as the two-year old Island Park practice, earned less than \$M600 per month, and some clinics, which had been in operation for less than one year, such as that in Khoo Sian Ewe Road, barely broke even.

Differences in the respective performance of shops and clinics in terms of their monthly income must be attributed to variations in the number of clients. From personal observation outside the premises, the average shop had about twelve patients per day whereas the average clinic had about seven. However, about eighty customers and patients were treated daily at a shop in Burmah Road and about twenty-five visited another shop in Ayer Itam but only five came to a newly-established shop in Kuala Kangsar Road. Clinics in Rangoon Road, Free School Road, Datuk Kramat Road and Malay Street had about thirty patients per day compared with less

than five patients at a new clinic in Free School Road.

The survival capability of shops and clinics was reflected in the length of the period of operation (Table 5.5). Shops had generally been in operation for over twenty years, whereas a great range was evident among clinics. This variation indicated that shops were more profitable than clinics. Long term changes in income and patronage were difficult to determine but an examination of accounts of selected shops and clinics in Rangoon Road, Datuk Kramat Road and Jelutong Road showed that incomes had stagnated since 1975. Older clinicians treated fewer than five patients daily. This experience was paralleled by well-established shops but an increase in customers for Chinese medications had offset the decline in patient numbers.

From evidence about the two groups of Georgetown *chung-i* it is difficult to generalise about adjustments in Chinese medical practice prompted by pressures within the urban economy which are generated by Western competition. However, the numbers of registered shops and clinics in Georgetown have increased from fifty in 1960 to eighty-one in 1979. Nevertheless, both shops and clinics were involved in a struggle to maintain their positions in the urban economy and health care delivery.

2. THE PROCESS OF ADJUSTMENT

The two forms of Chinese medical practice surveyed in Georgetown were end-products of adjustments by individual shop and clinic

TABLE 5.5 LENGTH AND TYPE OF PRACTICE OF
GEORGETOWN *CHUNG-I*

Length of practice years	<i>Chung-i</i>			
	Clinic		Shop	
	number	per cent	number	per cent
1 - 5	9	30.0	5	23.8
6 - 10	6	20.0	5	23.8
11 - 15	4	13.3	1	4.8
16 - 20	3	10.0	1	4.8
More than 20	8	26.7	9	42.8
Total	30	100.0	21	100.0

Source: Fieldwork data (1979)

chung-i to establish and maintain their practice in an environment of escalating establishment and operating costs and falling patronage. These coping strategies were readily identified in a comparative analysis of shops and clinics in terms of the practitioners' personal characteristics, training and practice. However, a further sub-division of shop and clinic groups into recent and older practices devolved on the nature of adjustments in response to changing political and economic conditions. Twenty years has been used as the dividing line in the group of *chung-i* interviewed, because it demarcated well-established shop-based practitioners and older clinic personnel (Group One) from less-established practitioners (Group Two) — a division reinforced by patronage as the former were losing patronage and the latter gaining it. Among physicians who had been established for less than twenty years, a further distinction could be made between those who had started more than five years ago, (Group Two A) and those who had been in practice for less than five years (Group Two B). These categories — Groups One, Two A and Two B — will be employed in discussing practitioner adjustments to changing conditions in the wider urban, national and international contexts.

Attention in the analysis is focussed on variations in practices — organisation, technical skills and services — and professional characteristics, such as education and training. Both in obtaining their necessary training to establish a practice and the actual creation and maintenance of

a practice, the *chung-i* were brought into interrelationship with instructors, landlords, medicine suppliers (international, national and local), the government, as represented by health inspectors from the Georgetown and Federal Health Ministries, and competing practitioners from both Western and Chinese medical sectors.

Practices

Increasing competition from Western-trained doctors and other Chinese physicians — reflected in a decline in the number of patients — had prompted shops to concentrate on specific items, such as herbal therapy and retailing of Chinese medicines. In the process, retailing had taken precedence over the medical aspect of the practice. Indeed, trading had supplanted medicine among almost half the shop personnel with more than twenty years of experience (Group One).

Shops less than twenty years' old (Group Two) comprising almost half of the practitioners surveyed, had not diversified into wholesaling. However, all had an inventory which had a greater proportion of non-medical items compared with their more established counterparts. For example, a six-year old shop practice at Rifle Range Flats and a two-year old shop in Island Park, in addition to medicines, both stocked toiletries and dry grocery goods in addition to medicines. In contrast, the oldest shop practice — established for more than forty years in Campbell Street — retailed only Chinese medicines and Western drugs.

Clinics had adjusted to changes in the urban, national and international economies in different ways from shop-based practitioners — the nature of the adjustment being closely related to the type of clinic premises. Where operators had insufficient capital to start a clinic (or shop), it would have been anticipated that home-based practices were the answer. Although some fledgling clinics had started in home-based operations, such as the well-established clinic in Datuk Kramat Road (which was in Group Two A), there were many draw-backs. It was difficult to advertise practices and attract patients. Thus, the small number of home-based practices was the resort of part-time *chung-i* and new entries (Group Two B) who had limited starting capital.

A more favoured way of entering the profession was to undertake wage-employment in either shops, free clinics or community clinics. Free clinics not only provided transport allowances (\$M250 per month for two years) but an opportunity for gaining practical experience and obtaining patients. They also provided opportunities for starting partnerships in clinics and part-time practices at home without major investments. Part-time and increasingly full-time work in community clinics in Magazine Road and Kuantan Road also provided a minimal capital entry into the profession. However, token payments from satisfied patients — about \$M250 per month — were a poor basis for establishing a clinic (or shop); and they were even insufficient to provide

a living without other employment.

Partnerships also offered an alternative means of entry into the profession. Although there were several examples of both clinic and shop partnerships, the arrangement was a recent phenomenon involving only *chung-i* in Group Two B. Another alternative for those wishing to operate as 'solo' practitioners, was to develop specialist skills, such as those offered at the Datuk Kramat Road Acupuncture Clinic and the Piles Treatment Centre in Carnarvon Street. However, it was not an easy method of entry as it generally took up to five years to get established. For instance, the Datuk Kramat Road acupuncturist initially treated general illnesses. Only through popular acclaim of patients did the Datuk Kramat clinic develop the acupuncture side of the business after successful treatment of several cases of paralysis from heart seizure.

It took time for recent clinicians — they had less than five patients a day — to attain recognition compared to established practitioners. Differences between the older (Group One) and younger (Group Two) clinicians in their response to pressures had been essentially the latter's decision to sell medicines prescribed to their patients. (The older *chung-i* kept only a small inventory for simple prescriptions and for complex ones referred their patients to medicine retailers). The need to engage in retailing prescriptions suggested that income from examining patients alone was insufficient.

Even clinics established more than twenty years ago had experienced a drastic decline in clientele numbers and income. In one instance, numbers had dwindled to less than three patients a month, and the main income of the eighty-year old clinician came from renting part of his premises. Old establishments (Group One) had the advantage of lower rents ranging from \$M30 in one Carnarvon Street clinic to \$M80 in the Acheen Street practices. Newly-established clinics (Group Two A), such as the Khoo Sian Ewe practice, rented premises for \$M200 per month. Only those who purchased their premises before the boom in real estate values in Georgetown since 1975, have been insulated from the escalation in the cost of renting (or buying) premises. Rents are an important component in the budgets of practitioners from both categories but particularly in Group Two. 88 per cent (twenty-six *chung-i*) of clinic and 12 per cent (three practitioners) of shop personnel surveyed rented their premises.

Training

The changing cost structure of the industry was also reflected in adjustments in training methods. Long apprenticeships, such as the ten-year old period served by a Datuk Kramat Road physician, were being superseded. Although no positive conclusions could be made, apprenticeships, which provided trainees with board and lodging and a small allowance, could no longer support students of Chinese medicine. Wage-employment — part-time or full-

time — was necessary for survival as specified by thirteen students interviewed at the Penang Chinese Physicians' Medical Institute. If the strict definition of apprenticeship is adopted, only practitioners in Group One would have actually been trained in this way or by hiring established *chung-i* as their tutors. Physicians in Group Two have been trained through a combination of wage-work in medicine retailing or via the latter alone. With the predominance of medical school training, trainee practitioner-instructor relationships were conducted upon an entirely fee-based arrangement. Trainees were paying \$M15 per month for about forty-eight hours of lessons (two night sessions weekly). Despite protests against its adequacy, the institute course was arbitrarily fixed at four years.

Family inheritance, however, was an exception but this involved only a small proportion of the *chung-i* in the survey, and as observed, it had become the practice of Group One physicians to send their heirs-apparent to medical schools, presumably to gain greater respectability. As there were no set qualifications for entry into the profession, this shift in emphasis from apprenticeships was likely to have less impact as a barrier to entry than the capital to start a practice and sufficient clientele support and income to keep it going.

3. CONSEQUENCES OF ADJUSTMENTS

Adjustments and modifications to shops and clinics have been highly individualistic and focussed on increasing their profitability. Indeed, there was a lack of common identification between shops and clinics and even among practitioners within each group because of contrasts in employment status, training backgrounds and institutional affiliation. Not surprisingly, none of the *chung-i* interviewed had referred patients to their counterparts but preferred to send them to hospitals and Western-trained specialists for X-rays or other tests.

The local medical association had not been able to mobilise the physicians into organising industry-wide changes especially as recent entries had coped without affiliation with this institution. Among a few established practitioners (Group Two A), two were actively engaged in association activities, such as teaching in the institute, serving on committees, or attending meetings on the problems of Chinese medical practice. Interest in innovative techniques was confined to specific inducements among clinic and shop personnel, such as those in the Kuala Kangsar Road shop and Burmah Road clinic, who were sent journals and research materials by relatives in Hong Kong and Taiwan respectively. There was no provision to enable practitioners with such interests in research to obtain their information.

This vacuum in research facilities was being partly filled by the distributors of Chinese medicines — particularly the sixteen

wholesaler firms in Georgetown. These comprised the main channel through which new medical products were introduced to shops and clinics. Indeed, clinics relied solely on manufacturers — local and overseas — for custom-made medical products. In contrast, shops bought raw herbal materials from wholesalers but controlled the actual content and formulae of their prescribed medications. In this way, the Burmah Road shop — highly reputed for successfully treating kidney and gallstones without surgery — was able to capitalise on his own patent herbal prescriptions.

Distributors (wholesalers and wholesalers-cum-retailers) exploited the practice among clinic and shop personnel of using primarily herbal medicines or their extracts from original sources in mainland China, on the premise that only then would the medicines have their ascribed historical effects in treating various specific illnesses.¹ Thus medicine distribution initially involved middleman agents who transferred materials from mainland China to Georgetown physicians. Subsequently, these businessmen had expanded into large-scale distributing firms by supplying both medicines and credit facilities to clinics and shops. However, the number of wholesale firms had not increased in the last ten years, because though all except two were family enterprises, the initial and operating costs were prohibitive even if the interpersonal and

¹For instance, one *tahil* of the medicine, *tang kuei*, from mainland China, was believed to be four times as strong or effective as one *tahil* from Taiwan.

intergroup contacts required had been available.

Four of the sixteen distributor firms — two family-based and two public — were examined. Their origins, nature of organisation and influence on Chinese medicine were basically similar. This is illustrated by the following detailed accounts of two companies.

The Chup Sang Medical Hall in Penang Street was a sole proprietorship which was first established China Street in 1948 using rented premises. Its owner, Ho, had been an apprentice-cum-employee in an Ipoh medicine shop for ten years before saving enough funds to enter into a partnership in retailing and wholesaling of Chinese medicines. Ho was never trained in Chinese medical care but had an in-depth knowledge of the Chinese medical inventory. In 1970, Ho and his partner re-located in larger premises in Penang Street but diversified investment risks by dealing in the retailing of sundry goods and joss-sticks, these comprising half of the commodities sold. It was also in 1970 that Ho began dealing directly with producers of raw herbal materials in mainland China, thus reducing his reliance on Hong Kong wholesalers. This also allowed Ho to contract for distributor rights to particular medical items. Access to the supply of such medical goods earned Ho almost 100 per cent profit on each item. In 1978, Ho was able to buy his partner's share of the business, and established a sole proprietorship but this led to the termination of retailing activities and the reduction of clientele numbers in other cities. The main reason was the small size of his family which limited the managerial labour available to market medicines outside Georgetown and to keep track of debtors. Wage-employees whom Ho had trained to assist in the management of the company had left to establish companies of their own. Ho employed twelve workers apart from his wife and son, who will inherit the enterprise. Premises had expanded to include two shops, both owned by Ho. These contained a processing unit for bulk medicines which were

re-packaged for re-sale to medicine retailers and practitioners. Ho had been more concerned with containing his clientele numbers and only gave credit — two to three months — for buyers of amounts of medicines over one *tahil* (approximately 1.3 ounces). His trade turnover per month was about \$M400,000. The company had agents in Ipoh and Alor Setar but links with Johore Bharu and Kuala Lumpur had been discontinued with the termination of the partnership. Ho had been the chairman of the local medical association for the last ten years. Due to his business interests, he had been active in lobbying for the removal of unfavourable taxes on imported Chinese medicines. Apart from a few well-established *chung-i* in Georgetown, Ho did not deal directly with practitioners since these would not buy in bulk. Thus, his clients were chiefly medicine shop proprietors and other wholesalers-cum-retailers who did not have distributor rights to items that Ho specialised in. Ho was dealing entirely in raw herbal materials and, coupled with his trading practices, indirectly controlled the types of medicines available to Georgetown *chung-i*.

This influence is as profound as that of a public firm.

The Eu Yang Sang company in Chulia Street was established in 1959 by a Singapore-based wholesaling company which had originally been a sole-proprietorship, started by Eu Tong Sen in Peninsular Malaysia in 1879 and Singapore in 1910. This firm formed one of a chain of six trading establishments which marketed both products processed by the company under its own trade name and medicines from mainland China. In Georgetown, the establishment was managed by 54-year old Ho with a labour force of twenty workers, chiefly sales assistants. Ho had been with the firm for forty years firstly as a sales assistant and in the last fifteen years as its manager. His customers were generally regular patrons for medications to treat themselves. A small proportion — the dimensions of which he refused to disclose — comprised medicine retailers and practitioners in Georgetown and Butterworth. Indicative of the size of the clientele numbers was the annual trade turnover which approximated \$M1,500,000. However,

the firm fostered reliance on old techniques by selling herbal materials, albeit thirty per cent of them were sold in Western-style packaging. Common Western drugs comprised twenty per cent of the inventory.

Owners and managers of the four wholesaling firms covered in the interviews, professed that the number of *chung-i* among their clientele increased very slowly because credit was extended only to practitioners with good financial records. At best, credit for medicines of each firm was being given to an additional two or three practitioners and medicine retailers per year. Thus, wholesalers and retailers indirectly controlled the number of new entries into the medical profession.

In controlling the supply of medicines, wholesalers and retailers have also fostered the constant repetition of old therapeutic techniques, usually employing their specialties. While research and development of new drugs and therapies in the Western health care sector are funded and conducted by Western pharmaceutical companies, Chinese medicine distributors, especially wholesalers, contribute little to research in Chinese health care and hence, do little to upgrade work by practitioners. Table 5.6, for example, lists investible profits of a firm that had been operating in Chulia Street for thirty-six years. Such an intermediary, therefore, makes the greatest profit from the continuation of Chinese medical practice but paradoxically, allocates nothing towards change in ethnic medicine. Movements to reduce a reliance on overseas supplies of medical stocks would militate

TABLE 5.6 DEPLOYMENT OF INVESTIBLE PROFITS OF A MEDICINE
WHOLESALE AND RETAILING FIRM WITH A
BRANCH IN GEORGETOWN 1974-1977

Investments	1974 \$M thousands	1977 \$M thousands	Increase per cent
Real estate: freehold land and buildings	1,903	2,111	10.9
Long-term leasehold land and buildings	1,385	1,385	-
Real estate brokerage or realty activities including tin realty	8,135	8,867	9.0
Inventory of Chinese and Western medicines for re-sale	2,419	3,72	53.9

Source: Based on data provided by one firm, Eu Yan Sang,
Georgetown during fieldwork (1979).

against the business interests of this segment of the Chinese medical sector where financial resources are concentrated.

Many of the new products being used by Georgetown *chung-i* have been introduced by a public wholesaling company which was solely distributing custom-made medical items termed as *yu biao*.

The Chung Kuo Refined Medicine Dealers in Sri Bahari Road was established by a Singapore-based wholesaling firm jointly owned by 200 physicians. Started in 1963, the establishment had an annual trade turnover valued at \$M4,135,000 in 1978 — an increase of \$M125,300 over the previous year. Managed by 40-year old Fong, who has had no training in Chinese medical care, the firm had a work-force of five sales assistants and two canvassing salesmen. Only ten per cent of the clientele comprised *chung-i*, the remainder being medicine shop proprietors. Apart from the 1,000 types of items transacted, the firm introduced twenty varieties of new medicines annually — ten per cent of operating costs were being spent each year on advertising new products. These were imported through direct contract with mainland China.

This method of introducing new medical products has resulted in uneven assimilation because the wholesaler did not deal directly with the *chung-i* to any appreciable extent, but rather relied on a battery of retailers.

The new medical products have intensified reliance on manufactured drugs from mainland China or Taiwan. Nevertheless, firms have been established to produce such medicines in Georgetown, Ipoh and Kuala Lumpur. Although they were far more stable in prices than herbal materials, there was no guarantee that the *chung-i* would receive cheaper medications or easier credit terms.

Essentially the introduction of proprietary drugs was designed to maintain competition and, therefore, the profitability of the Chinese medical trade against Western medicines. However, it also transferred the private possession of medical formulae from individual practitioners and family-based practices to pharmaceutical firms.

As practitioners interviewed in the city preferred to invest in real estate rather than the promotion of Chinese medical care, they have undermined the whole effort behind staving off dissolution. Increased specialisation in the treatment of specific illnesses in clinics, such as those in Hutton Lane, Carnarvon Street and Acheen Street, had resulted in a decline in patronage, and the clinicians involved saw less than five patients per month.

Shop and clinic physicians using several sites or engaged in part-time work to boost their earnings limited their accessibility and availability. Unlike commodities provided by other itinerant small-scale producers, the service demanded from *chung-i* cannot be regulated. Patients could require attention at times when the physician sought was in another area. Clinic personnel (Group Two B only) were very mobile and could operate at different locations during a single working day. Although the objective of these 'periodic' clinics was to generate sufficient patronage, the impermanence, compared with Western medical counterparts, did little to enhance the profession's image.

This 'periodic practice' was favoured only by less-established clinicians anxious to generate patronage. Nevertheless, the strategy had been successful for the Kuala Kangsar Road clinic physician who generated sufficient patronage and capital at three different locations to buy — with the addition of family funds — a shop at a fixed location.

Each shop and clinic was responsible for actively propagating its practice. Although the association had helped to obtain concessions from the government, no assistance was available to advance the cause of individual practitioners. Indeed, the institutions — association and medical school — had managed to create greater differentiation among practitioners. The medical school had been gradually displacing older methods of training, such as apprenticeships, but, as Table 5.7 illustrates, this had not guaranteed jobs or sufficient practical experience for students to ensure the continuity of Chinese medical practice. As only sixty per cent of the total student body graduating from the medical institute have established practices, there is no guarantee Chinese medicine will survive — it still teeters on the brink of dissolution.

4. SUMMARY

Diversity among Georgetown *shong-i* must be attributed to the uneven assimilation and highly individualistic process of adjusting to variable economic conditions not only at the urban but also at the

TABLE 5.7 RECORD OF THE SUPPLY OF *CHUNG-I* BY
THE PENANG CHINESE PHYSICIANS' MEDICAL
INSTITUTE IN GEORGETOWN

Year	Students enrolled number	Graduate <i>chung-i</i> who established:			
		Clinic		Shops	
		number	per cent	number	per cent
1st. batch 1964-1968	18	4	22.2	3	16.7
2nd. batch 1966-1970	13	-	-	3	23.1
3rd. batch 1968-1972	22	3	13.6	3	13.6
4th. batch 1972-1976	41	9	22.0	15	36.6

Source: Based on data provided by the Penang Chinese Physicians' and Druggists' Association collected during fieldwork in 1979

national and international levels. Adjustments have been made necessary by both increasing competition from the Western health care sector and the prices of inputs for practices. Survival of Chinese medicine in Georgetown had focussed on shops and clinics. In essence, each type represented a set of strategies for promoting conservation and resisting dissolution. As highlighted by this micro-level survey, preservation and persistence had been accompanied by emphasis on the profitability of supplying medical services. Thus, trading in Chinese medicines had become more lucrative but this had been accentuated at the expense of the significance of patient care.

Analyses of Chinese medical practice in Georgetown showed that *chung-i* were involved in a continuous process of adjusting their financial resources to match rising rents (or real estate prices). Rents determined the availability of premises. However, prices of medical supplies, credit which wholesalers and retailers were willing to extend for necessary medical stocks, and the number of patients (or, in the case of shops, customers) which the practice was able to attract were all crucial to the survival of the practice. Evidence showed that patient numbers had declined particularly among full-time and longer established *chung-i* in both clinics and shops. Nevertheless, performance seemed unrelated to the personal and professional backgrounds of the practitioners. Indeed, regardless of professional qualifications, inheritors of family shops were more

likely to maintain a profitable enterprise than clinic practitioners. The latter had been under greater pressure to reduce costs by shifting to cheaper premises — almost all rented their establishments.

Adjustments to Chinese medical practice had involved the transformation of shop-based practitioners into medicine retailers not unlike Western-style pharmacists. In striving to make their practices profitable, shops have neglected and undermined their medical care activities. The switch to different methods of training, particularly through local medical institutes, was calculated to enhance the respectability of shops as a sales gimmick rather than as a strategy designed to upgrade the standard of the Chinese medical services supplied.

Among the wide range of clinics, the Western-style practices were the most profitable as, like shops, they had developed a greater range of commercial interests. The outcome was that Chinese physicians in shops and clinics did not necessarily promise cheaper or more accessible services than Western practice. While changes in shops and clinics had helped both to survive, they had also brought about higher costs of Chinese medical care. At the behest of patients, clinics had become more specialised. This prompted an examination of the degree to which pressure from patients had been active in re-shaping Chinese medical practice in Georgetown.

CHAPTER SIX

CONSUMER RESISTANCE: A FORCE IN CONSERVATION-DISSOLUTION

A consumer analysis is required to investigate the assertion that small-scale, indigenous producers survive alongside large-scale, foreign-controlled entrepreneurs because they supply goods and services which the latter need for profitable operation. Besides their links with large-scale entrepreneurs, small-scale producers also make cheap commodities accessible to low-income consumers and depend on this type of 'market support' to maintain their activities. This 'market support' argument is bolstered by McGee's (1979) study of sub-contracting in the construction industry and Gerry's (1978; 1979) investigation of subordinate producers in the shoemaking industry. The latter demonstrates that small-scale entrepreneurs are important at an intermediate stage in the production process. Research into petty commodity production in Indonesia by Forbes (1980) also shows that peddlers provide goods to middle-income households more conveniently than large-scale enterprises. These 'market support' studies have established that small-scale production is either functionally integrated with the production process of large-scale enterprises or supplies cheap and, therefore, competitive goods and services directly to consumers. Evidence from the *chung-i* survey suggests that ethnic medical practice does not owe its

persistence to 'market support' as rationalised by the above studies.

The problem with 'market support' research is that it has not examined the clientele served by small-scale activities. Analyses have not specified the factors accounting for conservation-dissolution and the way in which they are related to the nature of small-scale enterprises. Admittedly, 'market support' is an aggregate term adopted for convenience to denote the multifarious reasons which explain the viability of small-scale activities. While these reasons have been transposed into a conservation-dissolution framework by LeBrun and Gerry (1975), Foster-Carter (1978), McGee (1979) and Gerry (1978; 1979) and Forbes (1980) the analyses have only explained the economic viability of small-scale entrepreneurs in general terms. Thus, the consumer survey contributes to a further understanding of the functions of the small-scale or petty commodity sector.

Isolated case-studies of competition for health care consumers have shown that patrons of Chinese medicine are not a specific group which is more 'traditional' than those who resort only to Western medicine. A study of patronage of Chinese medical practitioners in Taiwan by Unschuld (1976), a medical scientist, revealed a decline in the use of Chinese medicine among rural, agricultural communities but an increase among university students. Such findings highlight the need to investigate the rationale originating in 'informal sector' research — the argument that the survival of small-scale producers depends on the patronage of low-income consumers.

This analysis of the consumption of Chinese medical care is aimed at demonstrating that *chung-i* supply medical services to a varied clientele. Chinese medicine does not cater only to special social groups because most urban consumers use it in combination with Western medical services. This 'dual patronage' is a key component of the urban health care delivery system. Thus, two surveys of the patronage of Chinese medicine were conducted in Georgetown to obtain information on 'users' and 'non-users' and the reasons for patronage of Chinese and Western medicine. After a brief review of the methods used, the results of surveying five patients of eleven *chung-i* are analysed (section one). Then a consumer survey of Chinese medicine in 100 households from five related residential areas is considered (section two). The characteristics of patronage are then related to the kind of Chinese health care delivery organised in Georgetown (section three).

1. CHUNG-I CLIENT SURVEY: USERS

Ideally, a random survey of the clients of all *chung-i* should have been undertaken but this was precluded by the unwillingness of most physicians to participate in such an exercise and allow their patients to be interviewed. Reliance, therefore, had to be placed on practitioners willing to cooperate in the study. From these, eleven physicians were selected to cover the two main categories — clinic and shop-based *chung-i*. The selection of clinic

practitioners was varied to include representatives of *chung-i* in both free clinic and fee-for-service practices, operating from both inner and outer city locations. Thus, five free clinic *chung-i* were chosen (three city and two in the periphery), and six private-sector physicians (four in the city centre and two in the outskirts). Nine *chung-i* were clinic-based and two shop-based practitioners.

Fifty-five clients of these eleven physicians were interviewed, five each from the clientele who came to consult with the practitioners during the course of a working day. Every other client was interviewed until a total of five was reached. If patient numbers during the day of interview did not reach the total required, the survey was carried over to the next day. The questionnaire detailed in Appendix Two focussed on the socioeconomic background of patients, frequency and reasons for patronage of Chinese medical care (including the nature of consumption of services in relation to those offered by the Western sector).

In analysing the *chung-i* client survey, users of Chinese medicine were defined as those who had directly consulted with a *chung-i* in either a private or free clinic. These users could be sub-divided into two further categories: exclusive users who had not availed themselves of Western medical facilities or seen a Western-trained doctor for the past five years; and non-exclusive users who patronised both Chinese and Western medicine. Those who had exclusively practised self-treatment using Chinese medicines purchased in a medical hall were considered (with exclusive patrons

of Western services) to be non-users.

Exclusive Users

There were sixteen exclusive users of Chinese medicine in the group of fifty-five patients interviewed in the *chung-i* clientele survey, being present in the clinics of all but one of the practitioners. Primarily, these predominantly Chinese users were either low-income workers in the private firm sector, housewives, children or those of pensionable age. Half of these exclusive users were interviewed in private clinics. Generally, they were better educated, younger, better paid and had more regular forms of employment (blue-collar workers, petty trades and services and retailing) than their counterparts visiting free clinics.¹ The group included individuals earning about \$2,500 per month and factory workers who were entitled to subsidised medical care but only used the factory doctor for obtaining sick-leave certification (Table 6.1).

In contrast, free clinic exclusive users included individuals earning less than \$500 per month who generally lived in the immediate vicinity of the clinic. Patrons of private clinics were less concerned about distances of physicians from their

¹At 'free clinics', patients paid charges from \$0.30 to \$1.00. These fees did not necessarily include medical prescriptions. Waiting periods for a consultation may be as long as one hour.

TABLE 6.1 SOCIOECONOMIC BACKGROUND OF *CHUNG-I* CLIENTELE:
EXCLUSIVE USERS

	Free clinic		Paying		Total	
	number	per cent*	number	per cent*	number	per cent*
<u>Sex</u>						
Male	4	50	3	38	7	44
Female	4	50	5	62	9	56
<u>Age in years</u>						
Less than fifteen	-	-	-	-	-	-
15 - 25	-	-	2	25	2	13
26 - 35	1	13	3	38	4	25
36 - 45	2	25	1	13	3	19
46 - 55	2	25	-	-	2	13
More than 55	3	37	2	25	5	31
<u>Education (language)</u>						
Chinese	4	50	7	87	11	68
English	1	13	1	13	2	13
No schooling	3	37	-	-	3	19
<u>Education (level)</u>						
None	3	37	-	-	3	19
1 - 5	1	13	1	13	2	13
6 - 10	3	37	6	74	9	56
11 - 15	1	13	1	13	2	13
More than 15	-	-	-	-	-	-
<u>Employment</u>						
Government sector	-	-	-	-	-	-
Private firm (white collar with medical benefits)	-	-	2	25	2	13
Private firm (white collar without medical benefits)	1	13	-	-	1	6
Private firm (blue collar with medical benefits)	-	-	-	-	-	-
Private firm (blue collar without medical benefits)	-	-	3	37	3	19
Business (retailing, insurance, housing developer)	-	-	-	-	-	-
Petty trading and services	3	37	-	-	3	19
Non-working such as:						
housewives	4	50	3	37	7	43
students and children	-	-	-	-	-	-
elderly over 55 years	-	-	-	-	-	-
<u>Income per month (\$M)</u>						
Less than 200	2	25	-	-	2	13
201 - 500	2	25	3	37	5	31
501 - 1000	-	-	1	13	1	6
1001 - 1500	-	-	-	-	-	-
1501 - 2000	-	-	-	-	-	-
2001 - 2500	-	-	1	13	1	6
2501 - 3000	-	-	-	-	-	-
More than 3000	-	-	-	-	-	-
Non-working	4	50	3	37	7	44

* Figures rounded.

Source: Fieldwork survey (1979).

residential areas presumably because they only averaged three to four visits per year compared with the typical six to ten visits paid by free clinic patients who were exclusive users. Although exclusive users were small in number among the *chung-i* clientele surveyed, they were health care consumers who had found Western medical treatment inappropriate for their problems. This had usually been because the drugs administered were too potent or sometimes ineffectual. These exclusive users, however, represented the strongest element in the market support received by Chinese physicians in Georgetown. Since they have come from non-working, small-scale business or low-income groups, these types of patrons have been in no position to act as a strong resistance force against the undermining of Chinese medical practice. This is further illustrated by detailed case-studies of three exclusive users.

Case One

One of the three exclusive users interviewed at the Batu Lanchang free clinic in the older suburb of Jelutong, was a Chinese-educated, 60-year old school-bus driver. His main complaint was rheumatism for which the free clinic practitioners provided effective treatment and easily accessible services since his home was close by in East Jelutong. This exclusive user found it unnecessary to use Western-type medical facilities as the free services and medications offered at the clinic were adequate. Despite an income of \$M400 per month, this patron found private Chinese and Western medical services too expensive. He paid six visits in two months to the free clinic at little expense.

Case Two

The only exclusive user among the clients of a Free School Road free clinic-based *chung-i* was a 26-year old surveyor working in a private firm. Although educated at an English language school for twelve years, he had been consulting with the Chinese physician for asthma, at relatively low costs, \$M1.50 per visit for medications. His income was \$M450 per month but this did not cover health care benefits. Hence, Chinese medical practice furnished effective and free services for this exclusive user.

Case Three

Finally, one of two exclusive users found in the private clinic of one Malay Street *chung-i* was a 36-year old housewife whose husband was a housing developer with a monthly income of \$M1,000. She had six years of Chinese language schooling but was unemployed. Originally, she (and her family) consulted both Chinese physicians and Western-trained doctors but since treatment by the current *chung-i*, they had resorted to him exclusively for the past ten years. While she saw the physician three to four times annually, she brought her child more often, six to eight visits a year. Charges varied from \$M5 to \$M7 per consultation but their residence in Foreshore Bridge Street was within easy access of the clinic. For this exclusive user and her family, Chinese medical practice did not provide cheaper services than the Western sector but supplied more effective treatment.

Non-exclusive Use

Thirty-nine clients in the survey mixed Chinese and Western medicine. Most had come to the *chung-i* as a second resort after consulting with Western-trained doctors. Others were seeing the Chinese physicians first and not discounting the possibility of having to consult with Western-trained doctors should the treatment prove ineffective for

their complaint. In such cases, health care consumers were relying on the Chinese physicians to provide services in which the Western sector was reputedly inadequate, such as treatment for insomnia.

Non-exclusive users patronised both private and free clinics. However, there were no pronounced differences in the socioeconomic background of the two groups (Table 6.2). There was a predominance of patients who were female, Chinese, Chinese-educated, young (under thirty-five), outside the workforce — housewives, students and young children. Nevertheless, there were individuals who were more than fifty-five years old and workers — businessmen, petty tradesmen and blue-collar workers in firms and shops.

The non-exclusive users found at free clinics comprised more than 50 per cent of this group of 'dual patrons'. These included individuals in low-income work (generally earning less than \$M500 per month) or outside the workforce and were generally older than fifty-five. There were a few individuals with access to subsidised private Western medical services. In comparison, patrons of private clinics were engaged in retailing and petty trades and services, including patients with a monthly income in excess of \$M3,000.

In general, non-exclusive users treat Chinese medicine as a complementary form of health care delivery to Western services. Chinese medical practice supplements the Western-based sector as a second resort when the latter provides inadequate treatment. Despite the availability of free Western medical services,

TABLE 6.2 SOCIOECONOMIC BACKGROUND OF *CHUNG-I* CLIENTELE:
NON-EXCLUSIVE USERS

	Free clinic		Paying		Total	
	number	per cent*	number	per cent*	number	per cent*
<u>Sex</u>						
Male	2	13	8	35	10	26
Female	14	87	15	65	29	74
<u>Age in years</u>						
Less than fifteen	-	-	1	4	1	3
15 - 25	2	12	4	17	6	15
26 - 35	2	12	7	31	9	23
36 - 45	3	19	5	22	8	20
46 - 55	2	12	1	4	3	8
More than 55	7	44	5	22	12	31
<u>Education⁺ (language)</u>						
Chinese	10	62	14	61	24	62
English	3	19	1	4	4	10
No schooling	3	19	8	35	11	28
<u>Education⁺ (level)</u>						
None	3	19	8	35	11	28
1 - 5	4	25	4	17	8	21
6 - 10	7	44	9	39	16	41
11 - 15	2	12	2	9	4	10
More than 15	-	-	-	-	-	-
<u>Employment</u>						
Government sector	1	6	-	-	1	3
Private firm (white collar with medical benefits)	1	6	-	-	1	3
Private firm (white collar without medical benefits)	-	-	-	-	-	-
Private firm (blue collar with medical benefits)	1	6	-	-	1	3
Private firm (blue collar without medical benefits)	3	19	3	13	6	15
Business (retailing, insurance, housing developer)	1	6	5	22	6	15
Petty trading and services	2	13	3	13	5	13
Non-working such as:						
housewives	2	13	8	35	10	26
students and children	-	-	3	13	3	3
elderly over 55 years	5	31	1	4	6	15
<u>Income per month (\$M)</u>						
Less than 200	1	6	1	4	2	6
201 - 500	7	44	2	9	9	23
501 - 1000	1	6	3	13	4	10
1001 - 1500	-	-	-	-	-	-
1501 - 2000	-	-	4	17	4	10
2001 - 2500	-	-	-	-	-	-
2501 - 3000	-	-	-	-	-	-
More than 3000	-	-	1	4	1	3
Non-working	7	44	12	52	19	49

* Figures rounded.

+ Excludes all clients aged under fifteen years old.

Source: Fieldwork survey (1979).

many patrons of private clinics were willing to pay for Chinese medical care. The large proportion of those surveyed who had consulted with the practitioners near to their homes, was due to the large numbers of housewives and non-working patients (the young and those of pensionable age) in the group.

Reasons for the persistence of use of Chinese medicine despite its relegation to a supplementary position are elucidated further in two case-studies.

Case One

One client of a Kuala Kangsar Road *chung-i* was a 58-year old shoe retailer paying his first visit to a Chinese physician. This user had been educated for six years in the Chinese language. His income was more than \$M2,000 per month. However, he had never consulted with *chung-i* before because their services were more expensive than those of private, Western-trained general practitioners. His visit had been prompted by the failure of these personnel to provide a cure for his insomnia. The Chinese physician was, therefore, a second resort.

Case Two

One of four non-exclusive users in the Rangoon Road clinic was a 15-year student brought for treatment of a cold by his mother. He was from a middle-income family in Rifle Range Flats in which household earnings were over \$M800 per month. Despite the distance from his home, the student had consulted with the *chung-i* three times in the last two months at an average charge of \$M8 per visit and had seen the physician periodically during the last ten years. This non-exclusive user always saw the Chinese physician first and then resorted to a Western-trained practitioner only when Chinese medicine was ineffective.

Exclusive and Non-Exclusive Users

The *chung-i* clientele survey highlighted the varying socioeconomic backgrounds of health care consumers consulting both free clinic and private Chinese physicians. Although the non-exclusive group had more aged and female patients, both categories comprised large numbers without access to specially subsidised health care benefits. There were fewer first-time patrons among non-exclusive clients than those who had periodically or intermittently consulted with the *chung-i*. However, their patronage was insufficient to guarantee a consistent supply of clientele for Chinese medical practitioners. Although free clinics usually had more patients than they could handle, it took two days to obtain five patients to interview at three private clinics selected for the survey. It is, however, difficult to draw definitive conclusions about consumer use of Chinese medicine and its relationship to the changes made to Chinese medical practice. Nevertheless, the *chung-i*, who were surveyed in Georgetown, had not only to emphasise goods and services which were not replicable by the Western sector to remain competitive, but also to provide effective treatment for cases which the Western-trained personnel had failed to cure. This finding is further supported in the household survey of users and non-users. The main purpose of the household interviews was to obtain information about the patronage of Chinese medicine in the wider urban context and the prime factors behind the penetration of the health care market by the Western sector.

2. HOUSEHOLD SURVEY: USERS AND NON-USERS

As established, the household survey covered twenty households in each of the five selected residential areas in Georgetown (Fig. 6.1). Ideally, a random sample survey of Georgetown households would have been conducted for an analysis of the socioeconomic backgrounds of users and non-users of Chinese medicine and the character of their patronage but this was beyond the scope and resources of the study. Hence, the interviews were aimed at investigating patronage by households in five different socioeconomic situations.

The Survey

Access to housing types was assumed to be closely related to differences in household income, occupation and educational level of each household member (McTaggart 1966; Chia 1967).¹ Thus, households in five housing types were surveyed in different areas of Georgetown to gauge the patronage of Chinese medical care. The five areas comprised:

(a) squatter and temporary occupation license households in the Weld

¹In critical reviews of earlier Chicago School models of urban residential structure and social area analysis, Bassett and Short (1980) have outlined their concern with the failure of the models to investigate the social processes responsible for the structure but were not contentious about their validity.

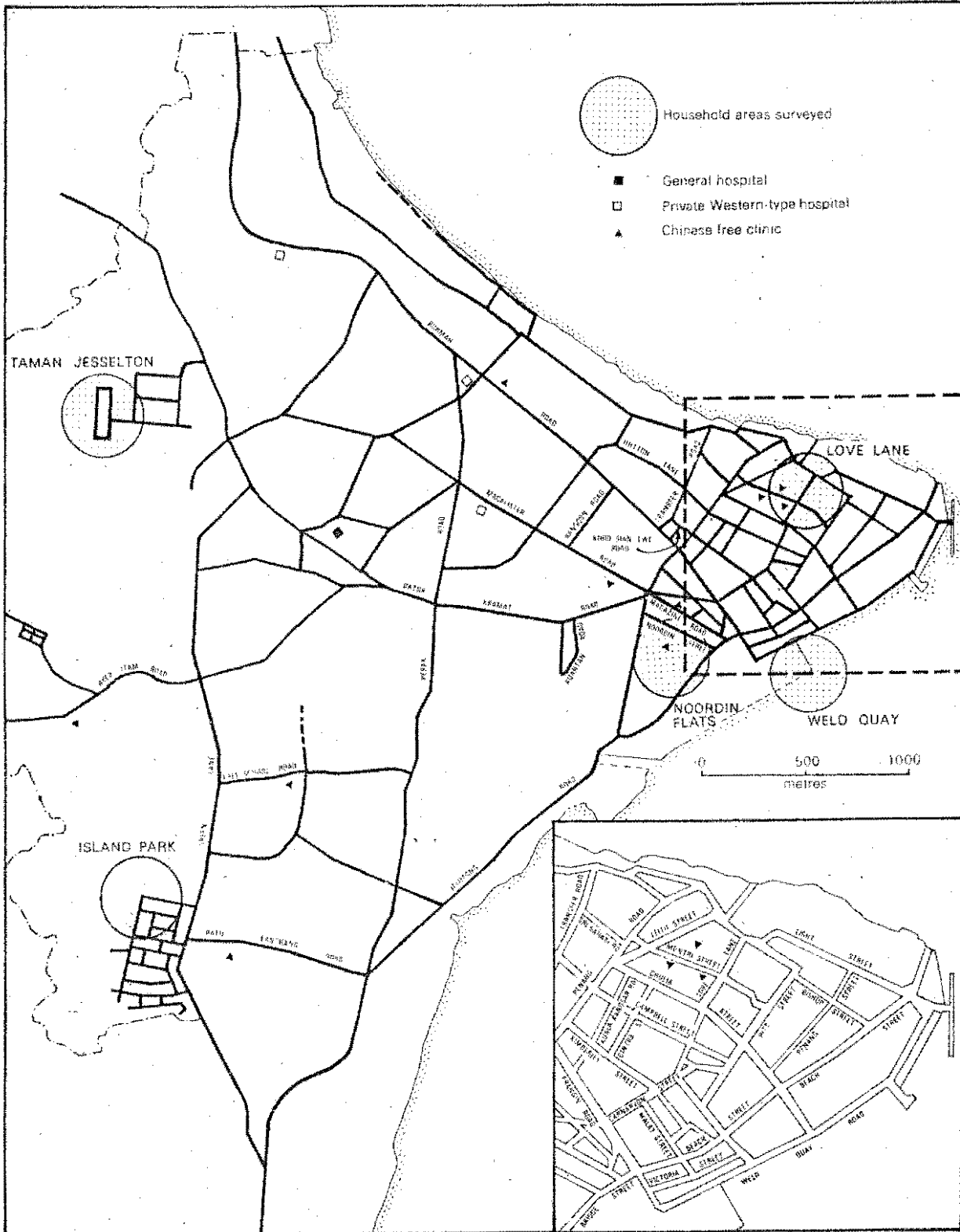


Fig. 6.1 Locations of households in consumer survey

Quay area;

- (b) tenement slum households at Love Lane;
- (c) low-cost flats households at Noordin Flats;
- (d) middle-income households at the Island Park housing estate; and
- (e) high-income households at Taman Jesselton.

Before discussing the results, relevant features of the five areas are discussed.

The Weld Quay households were located close to the city. Families lived in self-constructed houses without sewerage and occasionally without piped water or electricity. Mean household income of the families interviewed was less than \$M300. Families were large, averaging eight members. The nearest Western medical facilities were two and a half kilometres away within the city or Jelutong township. Chinese free clinic services were periodically supplied in the vicinity but visits had to be paid to the city for regular services. Chinese medicine distributors were also located 160 metres away, along main road axes leading into the city.

Households in Love Lane were located in one of the oldest parts of the city. Families usually resided in rented, single-room units within tenement buildings that were partitioned and divided between five to as many as twenty households. Only one of the twenty families had exclusive use of an entire building. The mean household income bracket was between \$M300 and \$M500 per month. However, larger family sizes, ranging between five and fourteen, nullified any advantage of larger incomes. Nevertheless, households were within walking distance of free clinics supplying both Chinese and Western medical care; and Chinese plus Western medicine retailers and wholesalers were also easily accessible in terms of distance to the households in the survey.

Noordin Flats comprised low-cost, high-rise units built to re-house squatter and other low-income families from the adjoining Weld Quay area. Three

hundred and eighty-four families lived in the flats, 90 per cent Chinese, 9 per cent Indian and 1 per cent Malay. All paid monthly rents to the City Council although approximately one quarter of the families surveyed had exercised the option of buying the flats they were occupying. Mean monthly household incomes ranged between \$250 and \$500 per month and average family size was about seven. Thus, this area was similar in household characteristics to Weld Quay. Apart from Chinese medicine retailers, there were no health care facilities — Western or Chinese — within two and a half kilometres of the residential area. However, *chung-i* operated a weekly clinic in the Flats.

Middle-income families in the Island Park housing estate were located outside the city along a major lateral road, Green Lane, leading to the outer suburbs. There were both single and double-storeyed housing units with full provision of utilities, sanitation and sewage facilities. Family size averaged about five members and mean monthly incomes ranged from \$1,500 to \$2,000. Compared to the low-income residential groups surveyed in Weld Quay and the Noordin Flats, these households were located even further from health care facilities. The General Hospital and private hospitals were more than three kilometres away. Nevertheless, residents lived within walking distance (325 metres) of a Chinese free clinic and medicine retailers located in the suburban shopping centre. Private Western-trained general practitioners were also established in the vicinity.

Taman Jesselton households were located within 250 metres of the General Hospital and private hospitals. Families were housed in single-storeyed and double-storeyed bungalows and semi-detached buildings. The average family size was about four and mean household income was approximately \$3,000 per month. As all families surveyed owned at least one car, distances to medical facilities were obviously less a constraint than for lower-income households.

Background information on the socioeconomic situation of the five

types of residential areas surveyed is important because the inquiry is directed at the following questions. Was there a progressive decline in patronage of Chinese medicine from low to high-income residential areas? Within each residential type, was the use of Chinese medicine confined to members without subsidised private Western health care benefits? These queries are bound up with earlier macro-level arguments that there is consumer support for Chinese medical practice chiefly because it serves (a) low-income groups and (b) unsubsidised clientele unprofitable to Western-trained medical practitioners. Hence, Chinese medicine subsidises the expansion of Western medicine and the welfare provision responsibility of the state. Before analysing consumer use of Chinese medicine in Georgetown, the main features of Western health care delivery are re-iterated.

Both low and high-income groups could resort to a comprehensive range of facilities offering orthodox Western medicine. However, specialist (private and public) and private general practitioners' services were available only to wage-employees in the government and firm sectors where employers subsidised health care costs. Generally, such Western health services were unavailable to the non-working urban residents or most of the self-employed and blue-collar workers. They were restricted to either fee payers or members of the workforce entitled to these services on the recommendation of public sector doctors.

Like Chinese physicians surveyed in Chapter Five, Western-trained private general practitioners showed a predilection

to locate their practices either within the city (50 per cent) or outer middle-income suburbs, such as the Green Lane housing estates (33 per cent). One hundred and twenty-four of these private general practitioners supplemented the services supplied by forty-eight practitioners working at Western public health institutions.¹ By comparison, Chinese medical practice represented a smaller-scale form of health care organisation in terms of numbers of practitioners and outlets.

The Results: Exclusive Users

Despite the obvious disparities in incomes among the residential groups surveyed, there was only token representation of exclusive users in three of the five areas. This pattern bore little relationship to the socioeconomic background of individual users.² No exclusive users were found in the Taman Jesselton and Noordin Flats household groups. However, there were two exclusive users in two different families among Weld Quay households — a three-year old child of a thirty-one-year old hawker and a fifty-two-year old housewife whose husband worked as a *sampan* tourist guide. The parents of

¹These are government hospitals and health clinics. The private sector total included doctors in private clinics and hospitals.

²As all but three households (within Taman Jesselton group) in the survey were Chinese, it was impractical to include race as a determinant socioeconomic characteristic.

the first consulted with a Weld Quay Road *chung-i* once or twice a year if self-treatment had failed to provide relief. In the second case, a private clinic-based practitioner was consulted about four times a year for rheumatism.

The only exclusive user found among household members interviewed in the Love Lane area was an eleven-year old student whose father was a trishaw puller and hawker and whose mother did odd jobs. Finally, there was one household in the Island Park group where the parents of a two-year old and a four-month old child took them exclusively to consult with a free clinic practitioner in the neighbouring Free School Road area. Approximately three visits were made each year.

Such isolated cases of the exclusive use of Chinese medicine among the young and those of pensionable age had found Western medicine too potent. For these consumers patronage was unrelated to income levels or social backgrounds. Indeed, the middle-income family which consulted with the Chinese physician for their two children, restricted such exclusive use to these members of the household while the remainder combined Chinese and Western medicine. The cases of exclusive users in low-income areas in Weld Quay and Love Lane, involved only one household each. Thus, even among the small number of households in the survey, the minimal exclusive use of Chinese medicine showed that the Western health care sector had been effective in establishing and maintaining its dominant hold on household consumption of medical services.

Even the exclusive use of Chinese medicine supplemented services provided by the Western sector and was confined to only certain members of the household. The degree of non-exclusive use found in the survey compared to exclusive patronage emphasised the extent to which households had relegated Chinese medical practice to a complementary position.

Non-Exclusive Use

Highlighting the personal characteristics of non-exclusive users established that they were people in households from widely differing socioeconomic conditions and not confined to any specific social group. In the survey, non-exclusive use was found among fourteen members of nine households in the Weld Quay area. As seen in Table 6.3, they were chiefly Chinese-educated and female, although no specific age group predominated. There were equal numbers of non-working and working household members who combined the use of Chinese and Western medicine. The working, non-exclusive users found in the households surveyed were employees in private firms and shops and self-employed in petty trading and services, earning less than \$M500 per month.

Households in the low-income area of Love Lane included proportionately more non-exclusive users than other areas as there were thirty-seven 'dual patrons' among fourteen households. These consumers were also Chinese-educated but largely under fifteen years old. The household members demonstrating dual patronage

TABLE 6.3 SOCIOECONOMIC BACKGROUND OF NON-EXCLUSIVE
USERS IN HOUSEHOLD SURVEY

	Taman Jesselton		Island Park		Noordin Flats		Love Lane		Weld Quay	
	no.	per cent*	no.	per cent*	no.	per cent*	no.	per cent*	no.	per cent*
<u>Sex</u>										
Male	7	50	14	64	12	46	17	46	5	36
Female	7	50	8	36	14	54	20	54	9	64
<u>Age in years</u>										
Less than fifteen	4	29	6	27	11	42	12	33	1	7
15 - 25	-	-	2	9	1	4	7	19	1	7
26 - 35	1	7	1	5	1	4	4	11	3	21
36 - 45	1	7	3	14	5	19	3	8	3	21
46 - 55	3	21	2	9	1	4	5	13	2	15
More than 55	5	36	8	36	7	27	6	16	4	29
<u>Education⁺ (language)</u>										
Chinese	6	60	5	31	6	40	14	56	6	46
English	4	40	8	50	2	13	5	20	-	-
No schooling	-	-	3	19	7	47	6	24	7	54
<u>Education⁺ (level)</u>										
None	-	-	3	19	7	47	6	24	7	54
1 - 5	-	-	3	19	3	20	9	36	2	15
6 - 10	4	40	6	38	5	33	7	28	4	31
11 - 15	4	40	4	25	-	-	3	12	-	-
More than 15	2	20	-	-	-	-	-	-	-	-
<u>Employment</u>										
Government sector	1	7	4	18	-	-	1	3	-	-
Private firm (white collar with medical benefits)	3	21	3	14	-	-	-	-	-	-
Private firm (white collar without medical benefits)	1	7	-	-	-	-	-	-	-	-
Private firm (blue collar with medical benefits)	-	-	-	-	1	4	-	-	3	21
Private firm (blue collar without medical benefits)	-	-	1	5	1	3	8	21	2	14
Business (retailing, insurance, housing developer)	2	14	-	-	-	-	1	3	-	-
Petty trading and services	-	-	-	-	8	31	7	19	2	14
Non-working such as:										
housewives	3	21	4	18	-	-	3	8	4	29
students and children	4	29	7	32	12	46	14	38	1	7
elderly over 55 years	-	-	3	13	4	15	3	8	2	14
unemployed	-	-	-	-	-	-	-	-	-	-
<u>Income per month (\$M)</u>										
Less than 200	-	-	-	-	6	23	9	24	3	21
201 - 500	1	7	-	-	4	15	6	16	4	29
501 - 1000	-	-	6	27	-	-	1	3	-	-
1001 - 1500	-	-	1	4	-	-	1	3	-	-
1501 - 2000	1	7	1	4	-	-	-	-	-	-
2001 - 2500	1	7	-	-	-	-	-	-	-	-
2501 - 3000	-	-	-	-	-	-	-	-	-	-
More than 3000	4	29	-	-	-	-	-	-	-	-
Non-working	7	50	14	65	16	62	20	54	7	50

* Figures rounded.

+ Excludes all household members aged under fifteen years old.

Source: Fieldwork survey (1979).

were predominantly outside the workforce while working non-exclusive users earned typically less than \$M500 per month.

In the Noordin Flats, twenty-six household members from eight different households used both Chinese and Western medical services. They were chiefly either under fifteen or over fifty-five years old, Chinese-educated or uneducated and dependent household members. The smaller number of working household members was employed in blue-collar jobs in the private firm sector or self-employed in petty trading and services.

By comparison, the twenty-two non-exclusive users from twelve households interviewed in the middle-income residential area of Island Park were either young (under fifteen) or old (over fifty-five). Since a number of housewives was among the members who patronised both Chinese and Western medicine, there were more non-working than working users who were chiefly in government or white-collar private firm employment.

In Taman Jesselton, there were fourteen such users from eight households who were mainly either under fifteen or over fifty-five years old. Though there were more Chinese-educated than English-educated residents, the working members were chiefly white-collar professionals and businessmen earning more than \$M2,500 per month.

The main distinction between users of Chinese medicine in the five selected areas was that low-income groups — Weld Quay, Noordin Flats and Love Lane — selected practitioners

close to their homes. In Island Park and Taman Jesselton, the middle and high-income households respectively, the use of Chinese medicine was selective as patrons consulted only with physicians known by long-standing reputation rather than by their location. In low-income areas, *chung-i* were consulted about three times annually compared with an average of once in every two years in the Taman Jesselton and Island Park groups. 'Dual patronage' was motivated amongst all these clients by the effectiveness of Chinese medicine and few actually had access to subsidised medical services. This meant that quick relief from illness was the foremost concern because of the costs of consultations. Conversely, the small number of those with subsidised health care benefits testified to the success that pre-paid medical care schemes had had in discouraging the patronage of Chinese medicine. Further testimony of this mode of undermining the market support of ethnic medical practice was found among the non-user group.

Non-users

Non-users formed the largest groups in each of the areas surveyed, comprising 80 per cent of the people interviewed in Weld Quay. Surprisingly, there was little to distinguish this group of consumers from the exclusive and non-exclusive users (Table 6.4). However, most were under twenty-five years old, with incomes under \$M500 as family members were chiefly employed in clerical, 'firm' blue-collar jobs or self-employed in small-scale retailing and petty

TABLE 6.4 SOCIOECONOMIC BACKGROUND OF NON-USERS
IN HOUSEHOLD SURVEY

	Taman Jesseiton		Island Park		Noordin Flats		Love Lane		Weld Quay	
	no.	per cent*	no.	per cent*	no.	per cent*	no.	per cent*	no.	per cent*
<u>Sex</u>										
Male	34	52	32	46	42	50	41	60	67	59
Female	32	48	39	54	42	50	27	40	47	41
<u>Age in years</u>										
less than fifteen	9	20	22	31	24	29	17	25	38	33
15 - 25	20	24	17	24	28	33	20	29	34	30
26 - 35	10	15	12	17	11	13	14	21	17	15
36 - 45	8	12	7	10	9	11	7	10	13	11
46 - 55	8	12	7	10	6	7	8	12	8	7
More than 55	11	17	6	8	6	7	2	3	4	4
<u>Education⁺ (language)</u>										
Chinese	10	77	23	47	36	20	30	59	51	67
English	44	18	23	47	12	60	16	31	11	14
No schooling	3	5	3	6	12	20	5	10	14	19
<u>Education⁺ (level)</u>										
None	3	5	3	6	12	20	5	10	14	19
1 - 5	1	2	7	14	9	15	10	19	6	8
6 - 10	11	19	10	21	29	48	25	49	49	64
11 - 15	34	59	28	57	10	17	10	19	7	9
More than 15	8	14	1	2	-	-	1	2	-	-
<u>Employment</u>										
Government sector	11	17	11	16	-	-	-	-	1	1
Private firm (white collar with medical benefits)	12	18	5	7	3	4	1	2	2	2
Private firm (white collar without medical benefits)	1	1	3	4	1	1	4	6	-	-
Private firm (blue collar with medical benefits)	-	-	3	4	6	6	2	3	10	9
Private firm (blue collar without medical benefits)	-	-	4	6	11	13	15	22	7	6
Business (retailing, insurance, housing developer)	7	11	3	4	2	2	4	6	1	1
Petty trading and services	1	1	-	-	18	21	9	13	31	27
Non-working such as:										
housewives	6	9	6	8	8	10	7	10	12	10
students and children	26	40	31	44	28	33	23	34	43	38
elderly over 55 years	2	3	2	3	3	4	3	4	4	4
unemployed	-	-	3	4	4	5	-	-	3	3
<u>Income per month (\$M)</u>										
Less than 200	-	-	3	4	22	26	12	18	26	23
201 - 500	3	5	7	11	17	20	19	28	23	20
501 - 1000	2	3	8	11	2	2	-	-	3	3
1001 - 1500	4	6	6	8	-	-	4	6	-	-
1501 - 2000	4	6	5	7	-	-	-	-	-	-
2001 - 2500	6	9	-	-	-	-	-	-	-	-
2501 - 3000	3	5	-	-	-	-	-	-	-	-
More than 3000	10	15	-	-	-	-	-	-	-	-
Non-working	34	51	42	59	43	52	33	48	62	54

* Figures rounded.

+ Excludes all household members aged under fifteen years old.

Source: Fieldwork survey (1979).

trades and services. Characteristically, they were Chinese-educated although many had no formal schooling.

Two-thirds of 106 people interviewed in Love Lane had never consulted with *chung-i*. They were typically less than thirty-five years old, Chinese-educated, employed in blue-collar jobs, craftsmen and those in petty trading and services, again earning less than \$M500 per month. Among those non-users who were not working, students and children of pre-school age formed the largest component.

In Noordin Flats, three-quarters of the 110 consumers interviewed were non-users. These were mostly individuals aged less than twenty-five and Chinese-educated. There were more or less equal numbers of working and non-working members in the group. The working non-users comprised mostly the self-employed in petty trading and services such as hawking. Among the non-working the largest group again comprised students and pre-school age children. There were few housewives and consumers of pensionable age.

Among Island Park consumers, three-quarters of the ninety-five people interviewed had never visited a *chung-i*. A majority of these were again under thirty-five, Chinese-educated and not in the urban labour force. Those employed were largely white-collar workers earning up to \$M1,500 per month. However, students and young children under fifteen again formed the largest group.

82 per cent of the eighty consumers interviewed in Taman Jesselton were non-users. These included members of

one Indian and two Malay households. Most of the non-users were under thirty-five years old, English-educated with incomes averaging \$2,500. Household heads were employed primarily in white-collar jobs or were owners of large-scale businesses, for example, in rice distribution or real estate.

The chief aim of the household survey was to provide more support for the argument that users and non-users of Chinese medicine comprised a highly heterogenous group of individuals. The findings of this exploratory survey suggested that there was no conclusive evidence that non-users were associated with a specific social — occupational or income — group. Both users and non-users in all the five selected residential groups comprised young and old, Chinese and English-educated, working and non-working, and low, middle and high-income groups. The only significant difference between the users and non-users was that the latter included a greater number of workers who had access to subsidised special Western health care benefits.

Non-users, however, indirectly subscribed to the continuity of Chinese medical practice because of two conditions highlighted by the household survey. First, there was universal resort to Chinese medicine retailers for medications which non-users required for self-treatment. All non-users in the survey had bought both Chinese and Western drugs for self-medication from Chinese medicine retailers. These medications involved those which the consumers had prescribed for themselves or else were recommended by the Chinese medicine dealers, including shop-based

chung-i. While the non-users interviewed showed no concern as to whether the medicine retailers consulted were qualified *chung-i* or merely businessmen and their sales assistants, they were selective in relying only on well-established and reputable retailers.

The non-users' consumption of Chinese drugs did not benefit clinic-based practitioners. Shop-based personnel were in a better position to exploit this market. Chinese medicine retailers, in this sense, were the initial source of medical care resorted to by non-users in the household interviews. In fact, Western-trained doctors were consulted only after self-treatment had failed for these consumers.

Moreover, the same household could comprise both exclusive patrons of Chinese and Western medicine and 'dual patrons'. Thus, working household members using Western medicine exclusively could, through members of their family, indirectly maintain Chinese medical practice. Indeed, less than three-fifths of the households in any residential group were comprised entirely of non-users.

Hence, there were contradictions in health care consumption among non-users. They were people who consulted Chinese medicine retailers prior to all other sources of health care for both preventive and curative drugs, such as Chinese cooling herbs and aspirin, for self-treatment. Yet, if this treatment was unsuccessful, resort was made to Western-trained personnel because

of lack of faith in Chinese medicine, distrust of its personnel or the availability of subsidised Western medical services. Thus, non-users helped undermine clinics but promoted medicine retailing.

In essence, while non-users would not patronise qualified *chung-i*, their first resort for relief from medical problems was to sales assistants and proprietors of medicine shops normally untrained in medical care and whose sole interest was in the buying and selling of Chinese and Western drugs.

Users and Non-users in the Household Survey

The survey of the variable use of Chinese medicine among one hundred households in Georgetown highlighted the overwhelming majority of those who had never visited a *chung-i* in every one of the five residential groups. However, there was no definitive pattern in the personal characteristics of consumers and their patronage of Chinese medicine, except that more non-users had access to special subsidised private Western health care.¹ Also 'dual patrons' were predominantly old, housewives or workers without subsidised medical care benefits.

¹In Meerman's (1979) study of public expenditure in Malaysia and its chief beneficiaries, it was seen that of five income groups, the highest was subsidised in health care to a greater extent than the lowest, \$M167 and \$M135 per capita respectively. Other groups received \$M202, \$M114 and \$M170 per capita respectively.

Among households in the survey, Chinese medicine occupied a supplementary position in the provision of health care, but paradoxically it supplied medication to all consumers interviewed, for self-treatment. Also it was relied on by a small number for medical care to the exclusion of Western medicine and by substantial numbers of consumers who practised dual patronage of Chinese and Western services. Both directly and indirectly Chinese medical practice subsidised state-sponsored Western medicine for these urban residents, as illustrated by case-studies of health care consumption in representative low, middle and high-income households.

Low-income Household

The first household in Love Lane, comprised five members living in a rented room which housed eighteen other families. There were one exclusive, two dual patrons and two non-users in the family. Total household income was less than \$M450 per month so the share which could be allocated to health care must be minimal — averaging less than \$M30 monthly (approximately 5 per cent). The household head worked as a trishaw pedaler and also operated a hawker's stall in the front of the building with the aid of his wife (who also did odd jobs, such as house-cleaning and laundry). While the 48-year old household head with one year of Chinese schooling, occasionally used Chinese medicine, his 48-year old wife had never patronised it. However, she took one daughter to consult with the *chung-i* at the Lam Wah Ee Chinese free clinic, 500 metres away. Yet, another nine-year old daughter was taken to both Western-trained doctors in the hospital and health clinics and a shop-based Chinese physician in Chulia Street. The remaining member — a 23-year old son — only used Western medicine. The varying consumption of health care services by specific household members was attributed to the relative effectiveness of the services supplied by clinic and shop-based practitioners and Western-trained doctors.

A usual course of action was self-medication with Chinese and Western drugs from the Chinese medicine shop patronised by the family for the last twenty years which was in Chulia Street. Resort to physicians and Western-trained doctors was made only after self-treatment had failed.

Middle-income Household

The second household in Island Park comprised five members with four 'dual patrons' and one non-user of Chinese medicine. Total household income was less than \$M1,500 per month — the earnings of the only working member. This 35-year old household head — a non-user — was a small-scale sundry goods businessman in the city. While the household head used only Western medicine his wife consulted both a private Western-trained doctor and a Free School Road *chung-i* located about five kilometres away for minor complaints, such as colds and coughs, two to three times a year. Her three children, 13-year old, 9-year old and 7-year old daughters were also taken to consult with the *chung-i* whenever the Western-trained doctor sought could not provide effective treatment. Five years ago, this pattern was reversed, as the children and the housewife would see the Free School Road free clinic *chung-i* first, and only when this proved ineffective was a Western-trained private general practitioner sought. The chief reason for this change was the increasingly long waiting periods required to get a consultation with the Chinese physician compared to a visit to the Western-trained doctor. Although the housewife also consulted a different private clinic-based *chung-i* in Free School Road, such visits had to be limited because of the comparatively high costs involved. The whole family, however, used self-medication with Chinese and Western medicines purchased from a city-based medicine retailer.

High-income Household

The third household in Taman Jesselton comprised four members, of whom three used Western medicine and

only one resorted to Chinese medicine. This 'dual patron' was the 32-year old housewife. While her husband — a 35-year old engineer working in a factory in the Bayan Lepas industrial estate — relied entirely on the firm's panel of private Western-trained doctors, she consulted with a shop-based *chung-i* for minor ailments and took her two children to see the Free School Road free clinic physician. Essentially, the reason for non-exclusive patronage was a preference for Chinese medications over Western drugs although common ones, such as aspirin, were kept at home for self-treatment. Total household income was derived from the household head's salary of \$M2,500 per month and the wife's nursing income of \$M350 to \$M400 per month. This high income accounted for the use of expensive Chinese herbal medicines for preventive and curative purposes which the low and middle-income households in the survey rarely consumed. Despite the wife's access to special subsidised Western health care benefits, she preferred Chinese medicine.

These case-studies and the surveys highlight the danger of generalising about health care consumption without detailed empirical investigation.

3. IMPLICATIONS FOR CHINESE MEDICINE

Assuming trends in the use of Chinese medicine revealed in the *chung-i* clientele and household surveys continue, several forecasts can be made. Firstly, the universal resort of all consumers to Chinese medicine retailers for medications used in self-treatment perpetuate the shop-based medical practice at the expense of the clinics. Secondly, the small extent of exclusive patronage of Chinese medicine compared with 'dual patronage' and non-use suggests that continuity of Chinese medical practice hinges on either accentuating the trading aspects or specialising in treating problems

related to particular social groups, such as the young and those of pensionable age. Thirdly, the surveys confirm the overwhelming success of Western medical competition and the tenuous market position of *chung-i*. Fourthly, the surveys show Chinese medical care supplements Western services and fills in where these latter are perceived to be ineffective. Fifthly, the most consistent form of use of Chinese medicines — herbal remedies for self-medication — is no longer controlled by nor the prerogative of full-time *chung-i*. Indeed, it is dominated by part-time shop-based practitioners, entrepreneurs with the knowledge and capital to establish a medicine shop and traders without any training in Chinese medical care. Finally, non-users, who reject Chinese medicine because they lack information about its personnel and the nature of its services reflect the absence of institutional mediation — education and mass media — which the *chung-i* can employ to propagate their practice and form of health care.

Surveys of consumer use of Chinese medical care highlight Aglietta's argument (1979: 156-157) that consumption is a process located in space with a specific geography and object-network that is only partially determined by the position of individuals in social relations because:

... consumption [is] a socially conditioned activity, subject to contrary forces of homogenization and differentiation that modify it in a manner favourable to the generalization of wage-labour [However, it is also] a predominantly private process; its

concrete practices take place principally within the household, a site where individuality is protected. They are not directly under the sway of the relations of production. This is why they can give rise to varying ideologies and are susceptible to differentiation.

It is beyond the scope of this study and the surveys conducted to explore all the facets of consumption practices proposed by Aglietta but it is argued that a host of factors attend these consumer trends. Rather than modelling consumer patronage of Chinese medicine as a function of a constant set of factors, the aim is to demonstrate that it is subject to a variable set of factors. These stem from reciprocal interaction between the life-situation of the individual consumer and household, and conditions not only in health care delivery but also the wider urban context.

The implications of these trends are that the subordinate level in health care delivery at which Chinese medicine operates *vis-à-vis* Western health care will be reinforced. This conflicts with evidence from the consumer surveys that Chinese medical practice subsidises government-sponsored provision for non-working and working consumers who lack special benefits for private Western services and clients who find the public and private Western sectors inadequate. Nevertheless, patronage could be increased if Chinese medicine could be organised to provide services that are comparable in costs and availability to the Western sector. However, as market support is dependent on minor groups — such as the Chinese-educated or those without special medical benefits —

CHAPTER SEVEN

THE PERSISTENCE OF CHINESE MEDICINE:
REFLECTING ON THE CONSERVATION-DISSOLUTION METHODOLOGY

The conservation-dissolution methodology developed by Bettelheim (1972) has been critical in analysing the consumption and delivery of health care in Malaysia. It has carried us beyond modernisation, the informal sector and marginalised groups (including domination-subordination). In this new sphere, we perceive how the dominant group manoeuvres — actively and passively — to ensure particular (petty capitalist) activities are restructured and conserved. By retaining this restructured entity (neither capitalist nor petty capitalist) we can begin to see how the dominant group derives benefits from the subordinated. Having applied these concepts to a wide variety of situations (Chapters Two to Six) we have seen how the process of conservation-dissolution has facilitated the 'expansion of dominant [Western] enterprises' (p. 36). In particular, attention is focussed on the way in which the dominant sector has been expanded through: direct linkages where value is transferred between production units; and indirect linkages where labour-intensive, subordinate activities produce national goods and services cheaply so that costs are subsidised in the dominant sector (i.e. by artificially lowering factory wages and minimising unemployment benefits by the state). The remaining task, therefore, is to draw out the main

conclusions in the thesis and in so doing to comment on the conservation-dissolution methodology.

Three questions are raised: how can the conservation-dissolution methodology be 'accommodated' to apply to the specific matter of Western versus Chinese (ethnic) medicine in the hybrid Malaysian health care system; how is the conceptual framework made relevant when no obvious, direct transfer of value or benefits to other units occurs; how have subordinate activities resisted the takeover by dominant enterprises? Answers to these questions highlight the power and reach of the conservation-dissolution methodology that may have been either obscured or underplayed in the preceding chapters. It is now pinpointed.

1. MEDICAL CARE AND THE CONSERVATION-DISSOLUTION CONCEPT

The conservation-dissolution methodology has to be 'accommodated' before it can be applied to the Chinese versus Western conflict in the consumption and delivery of medical services within Malaysia's hybrid medical system. As we have seen, the use of this methodology requires the consideration of both (a) dominant, large-scale and highly organised activities and (b) subordinate, small-scale, heterogenous and non-capitalist (or more correctly, petty capitalist) activities. Key ideas concerning the 'linkages' that exist between dominant and subordinate activities have been discussed in Chapter One (pp. 36-40). They need to be re-iterated here in order to comment

on their pertinence in studying medical care.

Direct transfer linkages (i.e. literal subordination) have been identified by Gerry (1978) in shoe-making and McGee (1979) in sub-contracting within the construction industry. These linkages imply the functional integration of subordinate activities into dominant enterprises to meet production targets. A 'figurative' form of subordination was also recognised which involved indirect linkages or the derivation of 'subsidiaries' and benefits by the dominant enterprises from the operations of subordinate forms of production. Both sets of linkages entail a re-shaping of the subordinate forms and hence, a process of conservation-dissolution.

A host of different types of indirect subsidies derived from the continued survival of subordinate forms have been discussed. For example, petty commodity production supplies a majority of the urban population in the Third World with most of their basic requirements of food and clothing. Such a cheap source of commodities, in turn, is a force that keeps wages low and assists in the expansion of dominant enterprises through the continuous supply of low-cost labour. These indirect linkages have been the focus of studies by LeBrun and Gerry (1975) and Mkwandwire (1977). Further, McGee (1979) has argued that small-scale enterprises, which have been conserved, save the administration the necessity of providing welfare supplements by deploying labour and thus, solving the problems of supporting dependents. Direct linkages were highlighted by Stretton (1978) in sub-contracting and 'putting-out' operations that have allowed large contracting firms to reduce production expenditures. Subordinate contracting

enterprises manage to operate with lower-cost labour and are often illegal (Gerry 1978; McGee 1979).

Thus, in summary, two key types of 'linkages' have been observed between dominant and subordinate activities. These linkages take varied forms depending on the enterprises under review. In medical care there are no significant direct linkages between Western and Chinese medicine. The linkages that exist are exercised through indirect subsidies. Hence, the retention of Chinese medicine 'subsidises' the expansion of the Western sector. In short, the indirect benefits noted by Meillassoux (1972), Godelier (1977) and others in accounting for the preservation of pre-capitalist forms are more relevant to this study of conflicts in Malaysian medical care. These conflicts have been generated by the persistence of Chinese medicine within a context of Western dominance. It must be stressed, therefore, that direct linkages are neither the only nor the most important component in accounting for the process of conservation-dissolution. As has been argued in this thesis, indirect linkages are fundamental.

The conceptual framework devolves on the proposition that dominant enterprises have to maintain their expansion to accelerate profitability. As only part of this required growth can be derived from new markets, many of their gains have to be at the expense of competitive organisations. A resultant exercise of domination-subordination relationships and the conservation of organisations that are neither capitalist nor pre-capitalist can only be adequately interpreted using the conservation-dissolution methodology.

This study does not attempt to advance conservation-dissolution theory. Nevertheless, the mere fact of fitting the discussion of the Malaysian health care system into the conservation-dissolution framework takes more account than normally happens in modernisation, informal sector and marginalisation studies of changes and adjustments of social groups in action. Empirical application of the conservation-dissolution concept has been largely couched in economic terms that highlight direct financial and trading connections between dominant and subordinate activities. As this study of conflict within the Malaysian health care system shows, the real value of the methodology lies not in the recognition of direct domination-subordination relations but in the identification of indirect linkages and benefits enabling the subordinate enterprise to adapt and persist. Thus, the concept of conservation-dissolution can be 'accommodated' to apply to the conflicts engendered in the *chong-i*'s continuing contributions to Malaysian health services.

2. LINKAGES AND BENEFITS

Chinese medicine does not directly transfer value to Western medicine in any literal sense. Yet, linkages exist through which the continuance of Chinese health care delivery indirectly benefits the Western sector. Hence, the dominant system gains from tolerating the preservation of the subordinate although the linkages between them may be insidious and disguised. Domination-subordination cannot describe change. In other words, it is

essentially descriptive of *status quo*. Taken in isolation, the concept of domination-subordination cannot explain its own origins and maintenance. The conservation-dissolution methodology is able to transcend such limitations and thus, account for the adaptation and persistence of Chinese medicine within the context of Western medical dominance. In this conflict between Chinese and Western medicine we are not dealing with direct linkages between subcontractors and contractors. We are grappling with 'figurative' or indirect linkages as subordinate activities are producing a narrowed range of services in a 'cheap' and labour-intensive way so that the dominant sector can concentrate on the more lucrative aspects of medical care. The very presence of indirect linkages highlights that the conservation-dissolution methodology is relevant. Attention is, therefore, concentrated on its key components — transfer linkage through indirect benefits and subsidy — before going on to detail adaptation strategies that are underplayed in Bettelheim's (1972) discussion.

Studies of Chinese medical practice in Peninsular Malaysia and other East and Southeast Asian countries have demonstrated that the trend has been to permit its operation but to isolate it from being identified with Western practice. In other words, Chinese physicians have survived by supplying services not available in the Western sector. This continued utility of Chinese medicine has ensured its survival as each major phase in the encroachment of Western medicine would have threatened its continuity.

The initial linkage in Malaysia between Chinese and Western medicine was direct — it involved physical force on behalf of the latter. Once the breakthrough was made overt state support, protectionist legislation and technological advances were used by Western medicine to establish and assert its dominance. Educational institutions and subsidised medical benefits for wage earners supplied the necessary political, economic and ideological conditions for the further expansion of Western medicine.

These conditions have not been sufficiently strong to effect a total takeover. Chinese medicine has been conserved because it has performed a supplementary and supportive role — in Meillassoux's (1972) terms it has 'subsidised' the expansion of Western medicine.

The indirect subsidy of Western medicine can be traced to the early colonial period. Chinese medical care was the only form of health provision available and known to migrant communities settled in ports and on agricultural plantations in Peninsular Malaysia. By confining colonial penetration to the extractive, infrastructure and plantation sectors the administration unwittingly preserved workers' links with ethnic social practices (Taylor 1979). These practices would include health care. As each new development in Western medicine made its impact upon Peninsular Malaysia and threatened to destroy Chinese medical practices, compromises had to be made during colonial and Japanese administrations.

These adjustments are continuing under the contemporary government. Subsidised Western health services offer the cheapest form of medical care available (especially where they are supported by medical benefits schemes). Their Chinese competitors are handicapped because they have to depend for their livelihood on unsubsidised patients; pay higher duties on their drug supplies which are categorised as food items and not medicines; and do not have access to state-sponsored facilities (less wealthy Chinese practitioners have to rely on premises in temples and free clinics provided by the Chinese community).

Contemporary Chinese medical practitioners are able to survive these handicaps by supplementing Western-type health care and facilitating its acceptance. Western medical practitioners have been able to concentrate on the lucrative 'commodities' — a real and tangible benefit. In contrast, the Chinese practitioners have been left to make health care accessible (i.e. in terms of price) to so-called 'low-income consumers' — the self-employed, housewives, young, and aged. 'Market support' from clients looking for cheap medical care alone does not, however, guarantee their survival. Chinese practitioners have also become the resort of patients who have either not received effective treatment in the Western sector or been deemed 'incurable' or 'intractable' cases. Thus, as long as health care remains an individual or family responsibility Chinese medicine will be preserved to plug gaps in the system for a varied and variable clientele.

As health care has increasingly become a collective or government function, ethnic medical personnel have been recast in a new role. Their function has been to increase acceptance of Western medicine and its products. In other words, the new enterprises are taking on the guise of the pre-existing ones to gain acceptance (Godelier 1977). Chinese physicians with medical shops have reinforced the process by dispensing common Western medicines. Western-trained doctors have compounded this process even further by contributing to courses in Chinese medical schools. *Chung-i* have made the process complete by referring patients to the Western sector for specific types of treatment.

The Chinese practitioners have acquiesced in this subordinate role. They have never threatened the twin prerogatives of Western-trained doctors — the monopoly of contracts in medical benefit schemes and their license as fully-recognised medical professionals. For the most part Chinese practitioners have been preoccupied with the lowering of duties on imported medical supplies and securing their licensed rights to practise — though not on the same professional footing as Western-trained doctors.

Chinese medicine has, therefore, preserved its niche. By supplying the poorest sector of the market it has indirectly maintained the profitability of the Western sector. Without its ethnic supplement, Western medicine would have to develop facilities to provide services for consumers not covered by medical

insurance schemes. Although it has been claimed that Malaysia has a comprehensively developed Western medical system (Ch.4: 150-152, 168), Chinese medical services have not been made redundant. By a judicious admixture of adaptive strategies the *chung-i* and medicine dealers have been able to withstand the threat of regulation and dissolution.

3. INTERNAL RESISTANCE: ADAPTATION AND PERSISTENCE

The discussion of conservation-dissolution by Bettelheim (1972) has little to offer about the resistance of subordinate activities. As endorsed by Foster-Carter (1978) the impression is that these activities are manipulated at will by the dominant enterprises. Yet, this study has demonstrated that contemporary social groups with vested interests in subordinate activities, such as Chinese medicine, have not remained passive with the encroachment of Western medicine but have reacted with remarkable energy and demonstrated long-standing resilience by using five adaptive strategies.

(a) Specialised services

The *chung-i* have sought to capitalise on the services not provided by the Western sector or where they have built up a superior reputation such as in curing rheumatism and haemorrhoids. In particular, non-toxic medicine has been developed. As we have seen in Georgetown this has attracted a disproportionate number of

children and the aged among the clientele for whom Western medical prescriptions are considered too potent (Ch 6: 216-220).

(b) Fee for service

As a means of keeping their fees competitive with Western-trained doctors *chwy-i* have introduced fee for service arrangements. This is a radical compromise of classical Chinese medicine. At that time practitioners were usually full-time scholars or civil servants who supplied free medical advice. Only one of these old-style practitioners survives in Georgetown. Even part-time practitioners still offering free consultations charge a small fee for medical powders dispensed to patients.

(c) New organisations

As a means of overcoming the costs of increasing investments to establish practices new working arrangements have been devised. Partnerships have been developed and group practices have been instituted. Cheaper substitutes, including patent or refined manufactured drugs are being used in place of herbal prescriptions to make these new organisations viable. In other words, they have to compete with Western medical organisations that thrive on the provision of fast, convenient and relatively cheap forms of relief from illnesses.

(d) New outlets

Chinese physicians have sought to combat the proliferation of private clinics in the Western sector by establishing their own counterparts. Rather than relying on medicine dealers to fill

their medical prescriptions these new 'clinicians' have become retailers in their own right. This shift in their activities has enabled them to retain profits from the sale of medications. The profits are so lucrative that a group of 'clinicians' in Singapore have established their own company for the import and distribution of Chinese medicines. Such trading firms are very profitable (Ch 5: 200-204) because self-treatment is widely practised. Generally, treatment is based on Chinese prescriptions made up at medicine shops. Even non-users of Chinese medicine resorted to herbal medicines in Georgetown before doctors were consulted (Ch 6: 235-237). The lucrativeness of the trading aspects of Chinese medical practice compared with direct curative care accounts for the development of the new clinic-style outlets.

(e) Training

In a bid to enhance public acceptability of Chinese medicine, *chung-i* associations and medical schools have also revolutionised training methods. A standardised medical course has been introduced to supplant the combination of different types of medical apprenticeships that characterised classical Chinese medicine. The focus of training, therefore, has shifted to highly visible medical institutes where classes are conducted by established *chung-i*. Even former apprentices are sending their children to these new institutes.

The variety of 'active' adaptive techniques has enabled a craft that developed in a production system pre-dating the evolution of Western medicine to survive. This remarkable

resilience does not carry us beyond the conservation-dissolution methodology. Instead it highlights the need to put greater stress on the resistance of subordinate activities. Indeed, this conclusion warns against mechanistic and narrow interpretations of the conservation-dissolution framework and the pressing need to accommodate social and cultural factors in the methodology. This avowedly empirical study has, therefore, provided an additional insight into the application of the conservation-dissolution methodology.

The study has also exposed an underlying contradiction. Chinese medicine has survived by being different from Western health care. Once the Chinese medical sector assumes a form identical to Western medicine it will be superfluous. The dilemma facing the *chung-i* is not merely one of its subordination. In essence, it involves the process of accommodating change forced by political and economic conditions in such a way that would not compromise its continued profitability and survival. Clinic-based *chung-i* have assumed an appearance indistinguishable from their Western-trained counterparts to increase their competitiveness. Yet, the *chung-i* have to deliver goods and services that the Western sector cannot provide. It is only by drawing on the conservation-dissolution methodology that this apparent paradox can be resolved.

RÉSUMÉ

This thesis has been concerned with the delivery and consumption of health care in Malaysia. Specifically, it has focussed on the ability of Chinese medicine to persist in the face of continuous encroachment by the dominant Western sector. In interpreting this clash and its international context this study has drawn on the conservation-dissolution methodology.

Conservation-dissolution has proven to be a powerful methodology for systematically exploring the roles played by the state, private firms and dominant professional organisations in the regulation of the delivery and consumption of health services. As discussed, the instruments used to regulate the delivery of health care have included licensing, legislation and extensive market organisation. Similar use of these instruments in advanced capitalist countries helped re-organise the medical system and establish the dominance of orthodox Western medicine. Conservation-dissolution rationalises the persistence of Chinese medicine in contexts where it should have been rendered redundant and disappeared. The successful resistance of the *chung-i* to efforts made to dissolve their right to contribute to health care are due largely to their continued utility. Chinese physicians complement Western health care, specialising in neglected areas of the market — the young, aged, housewives and unemployed — that realise few profits or exercise little political clout. Hence, Western-trained practitioners have been able to concentrate on the more lucrative

aspects of health care, particularly the contracts to look after wage-earners.

At least, *shung-i* have avoided the discontinuation of their practices by accepting their subordinate status, giving support to the extension of Western health services through their endorsement of health programmes and generally not obstructing the expansion of the Western sector. . . . New types of professional and trading linkages have evolved between Chinese physicians and Western-trained doctors, such as referrals of patients by the former to the latter and the distribution of Western medications by ethnic-style practitioners.

This analysis of the persistence of Chinese medicine has given additional insight into the nature of conservation-dissolution. . . . While Chinese medicine has not literally increased the profitability of Western health care delivery and indeed remains competitive, the persistent Chinese medical sector has provided health services during periods when Western services were not available or unacceptable to consumers. . . . Hence, the surviving Chinese system has kept state outlay on health care to a minimum. At present, Chinese health care continues to supply treatment that the Western side is unable to deliver. . . . Thus, its dissolution has been postponed.

In comprehending the persistence of Chinese medicine within the context of dominance of Western medicine, it has been necessary to delve beyond comparisons of their surface appearances. Chinese medical practice has had to be treated as an enterprise that has adapted and survived more or less in isolation from the

Western health care system. By using conservation-dissolution as a framework, this study has linked up the political and economic conditions which have, on the one hand, required the Chinese medical system to adjust to new norms in order to persist and, on the other, encouraged the rapid expansion of Western medicine. In the course of its confrontation with the Western medical establishment, Chinese medical practice has been able to fend off destruction only because it benefitted the agents fostering Western medical dominance. Thus, the dominance of Western medicine has been established indirectly with the help of *chung-i* and their enterprises.

A more dogmatic interpretation of conservation-dissolution has been avoided. The conservation-dissolution methodology has not been applied with the aim of resolving all the deficiencies highlighted in the discussion on explanatory approaches. Indeed, it has only been possible to discuss aspects of the methodology on underdevelopment pertinent to the national and Western case-study of Chinese medicine. Hence, to echo Castell's view regarding theory, (1977:ix) the conservation-dissolution framework has:

...not solved all the theoretical problems that are constantly being posed: it is not a schema, but a perspective. This means that one is committed to developing it unceasingly, proposing new concepts, rectifying laws that prove to be incorrect, using it as a tool instead of repeating it as a dogma

Within the context of domination of Western medicine marking its confrontation with Chinese enterprises in Malaysia, the *chung-i*,

individually and collectively, have manoeuvred to conserve their practice by adapting to new political and economic changes.

Thus, the compromises and uncertainty implicit in the persistence of Chinese medicine are characteristically problems related to and interpretable using a conservation-dissolution methodology.

APPENDIX ONE

PRACTITIONER SURVEY

- I. Personal Characteristics of the *Chung-i*
 1. Age:
 2. Birthplace:
 3. Sex:
 4. Residential address:
 5. Previous addresses:
 6. Duration of residence in Penang:
 7. Social/economic links with China:
 - a. Letters/aid to family/relatives/friends?
 - b. Professional ties/business contacts?
 - c. Other?
 8. Do parents/kin stay with *chung-i*?
 9. Does he support them financially?
 10. Do they help in the practice?
How?
 11. Any family member connected with Chinese medicine?
Physician/medical hall owner/scholar/worker?
 12. Father's occupation?
 13. Length of formal schooling?
 14. Medium of schooling?
 15. Where educated?
 16. Religion?
 17. Are *chung-i*'s children educated in Chinese or English
language?
 18. How was *chung-i* trained?
 - a. self-taught/family heritage?
 - b. apprenticeship?
 - c. tutors?
 - d. medical institute?

- e. combined (self-teaching and apprenticeship)?
 - f. combined (apprenticeship and school)?
 - g. other?
18. Where was *chung-i* trained?
 19. Why were the particular course of training and location selected?
 20. How long was *chung-i* trained?
 21. Costs incurred?
 22. How were these met?
 23. What did *chung-i* do before and during the course of training?
 24. Did *chung-i* establish practice immediately after training?
If not, why?
 25. Was some more specialised training undertaken?
 26. Why?
 27. How were the costs of these met?
 28. Is acupuncture practised/stressed by *chung-i* ?
If not, why?
If so, why?

II. Organisation and Services Delivered by Present Practice

1. Where does *chung-i* practise?
 - a. medicine shop
 - b. clinic (Western-styled)?
 - c. free clinic/other community centre?
 - d. other
2. How long has *chung-i* been practising?
3. Length at present location? and scale of practice?
4. Does *chung-i* practise at other locations?
5. Is *chung-i* full-time or part-time?
If part-time, what are other occupations?
6. How much capital was required to start practice?
7. How was this obtained?
8. Source of medical supplies?
9. Turnover (annual/monthly)?

10. Value of stocks held?
 - Western?
 - Chinese?
11. Are premises owned/rented?
12. Income?
13. Number of workers employed?
 - Are these apprentices/family members?
 - How are they paid?
 - Do they know anything about Chinese medicine?
14. License requirements?
15. Government harassment?
16. Participation in association?
 - a. member
 - b. attends meetings
 - c. committee member
 - d. teaches at institute
 - e. help at free clinic
 - f. other

III. Adjustments and Consequences

1. Has *chung-i* changed location of practice?
 - Why?
 - type of practice?
 - Why?
 - size of practice?
 - why?
2. How long ago since the change was made?
3. Has *chung-i* switched from part-time to full-time or the reverse? If so, why?
4. Explain nature of change, that is, previous activities or current part-time pursuits.
5. What are the most common cases treated?
6. Any change since 2, 5 or 10 years ago?
7. How many patients does the *chung-i* see?
8. Any change since 2, 5 or 10 years ago?

9. Has *chung-i* developed a specialty because of patient demand?
10. What is the extent of use of herbal medicines compared to custom-made, patent-type medicines?
What has the change been like since 2, 5 and 10 years ago?
How does the change measure in terms of value of medicines used in prescriptions?
11. Has any Western medical equipment, techniques or medicines been incorporated into the practice?
Since when?
Why?
12. Has there been any income change compared to 2, 5 and 10 years ago?
13. Any children taking over the practice?
14. If apprentices are not being used in the practice, were they in the past?
15. Why has there been a change in working relationships with assistants employed in the practice, if any?
16. Is the practice likely to remain viable?
17. Will the *chung-i* seek new innovations to maintain competitiveness?
How?

23. Frequency of visits to *chung-i* in the last two months?
last year?
last five years?
last ten years?
24. Brief summary of reasons for consulting with *chung-i*.
25. Has the patient seen other *chung-i*?
26. Which one/ones?
27. Why has there been a change from other *chung-i*?
28. If there has been a switch from Western-trained doctors,
what are the major reasons?
29. Does patient resort to self-medication?
30. What kind of medications and from what source?
31. Frequency of such a practice.
32. Why resort to such a practice?
33. Are other ethnic sources of medical care consulted?
What?
34. Do other family members consult with the *chung-i* or
other sources of ethnic medicine?
35. What do consultations with the *chung-i* cost?
36. Are these prices different from charges by Western-trained
doctors presently? in the past?
37. Is cost the most important factor in the patient's
consideration as to the type of practitioner to consult?
If not, is it effectiveness?
Why, (is it because of working time lost or consideration
of long-term costs because of prolonged illness)?
38. What importance is the *chung-i* to health care delivery
in Georgetown?

APPENDIX THREE

HOUSEHOLD SURVEY

I. Aggregate Household Information

1. Address:
2. Household size:
3. Extended/nuclear:
4. Household income:
5. Residence owned/rented:
6. Length of time in residential area:
7. Previous residential addresses:
8. Is there a family doctor (Western-trained/Chinese physician)?
9. What kinds of medicines are kept in the house?
 - Western?
 - Chinese?
 - Other?
 - Why?
10. Where are they purchased from?
11. How frequently purchased?
12. What reasons are they purchased for?
13. Who purchases them?
14. Has there been a change from one type to another in the
 - last year?
 - last five years?
 - last ten years?
15. Why?
16. Typical monthly or annual expenditures on medicines?
 - consultations with practitioners?
 - consultations with *chung-i*?

Information on Individual Members of the Household

Personal Characteristics								
1. Household status	2. Birthplace	3. Previous places of residence	4. Length of stay in Penang	5. Age	6. Level and language of education	7. Occupation	8. Medical benefits	9. Income

Characteristics of Patronage of Chinese Medicine					
10. <i>Chung-i</i> consulted? 11. Last year? Last 5 years? Last 10 years? 12. Which <i>chung-i</i> ? 13. Why? 14. Frequency of consultations?	15. Western-trained doctor consulted? 16. Last year? Last 5 years? Last 10 years? 17. Which doctor? 18. Why? 19. Frequency of consultations?	20. Has there been a change from Chinese to Western medicine or the reverse? 21. In the last year? Last 5 years? Last 10 years? 22. Why?	23. Is <i>chung-i</i> used with Western-trained doctor? 24. Last year? Last 5 years? Last 10 years? 25. Reasons for 'dual patronage'? 26. Frequency of visits to each type?	27. <i>Chung-i</i> visited before or after Western-trained doctor if both used? 28. Has this changed? Why?	29. Self-medication with Chinese medicines? Western medicines? 30. Where obtained? 31. Frequency? 32. Reasons?

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