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**SELF-CARE IN THREE COMMUNITIES: PATTERNS AND IMPLICATIONS  
FOR AFFORDABLE HEALTH CARE**

*Celia van Zyl-Schalekamp  
H.C.J. van Rensburg  
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HSRC Co-operative Research Programme: Affordable Social Security  
Subprogramme: Affordable Social Provision

Series editor: Ina Snyman

This is a publication of the Committee for the Subprogramme: Affordable Social Provision of the HSRC Co-operative Programme: Affordable Social Security.

It arose from one of five subprojects forming part of the research project *Community-based health care: Sociological studies in Bloemfontein* undertaken by the Department of Sociology at the University of the Orange Free State.

The objective of the overarching project was the analysis of community-based resources, health-care patterns and possible alternatives among different population and community groups in Bloemfontein and its environs, with special reference to the development or upgrading of these health-care resources within the context of affordable health care. This particular part-project focused on self-care in health and illness as a possible alternative to professional primary care, which is often alleged to be expensive, not available or accessible to all, and not always effective.

The HSRC, particularly the Committee for the Subprogramme: Affordable Social Provision, does not necessarily agree with the views and conclusions mentioned in this publication.

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Printed and distributed by the HSRC  
134 Pretorius Street, Pretoria

Obtainable from the HSRC Publishers  
Private Bag X41, Pretoria, 0001

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## **EKSERP**

In hierdie studie het die navorsers die verskillende vorms van gesondheid-selfsorg bepaal wat in drie Bloemfonteinse gemeenskappe - blank, kleurling en swart - aangetref word. Hulle beskryf die omvang van die aanwending van selfsorgaktiwiteite soos dieet, oefening, roetine mediese en tandheelkundige ondersoeke, medikasie met oor-die-toonbank-medisyne, ens. deur die drie groepe, en stel die verband vas tussen selfsorg en sekere sosiodemografiese en ander faktore.

Onder al drie groepe was self-medikasie die vernaamste komponent van selfsorg maar nie-medikasiebehandeling was ook baie belangrik, veral onder die swart respondente.

Die skrywers kom tot die gevolgtrekking dat selfsorg in die gesondheidsveld groot potensiaal het, hoewel dit nie gebruik moet word om mense te paai ten einde die behoefte aan en verwagtinge vir formele gesondheidsorg te verminder nie.

## **ABSTRACT**

In this study the researchers determined the different forms of health self-care that were found in three communities - black, coloured and white - in Bloemfontein. They describe the extent to which such self-care activities as diet, exercise, routine medical and dental examinations, medication in the form of over-the-counter medicines, etc. are used by the three groups, and establishes associations between self-care and certain sociodemographic and other factors.

Self-medication was found to be the most important component of self-care among all three groups, but non-medication self-treatment was also very important, particularly in the case of the black respondents.

The authors conclude that self-care has considerable potential as a health resource, but that it should not be used to decrease the demand for formal health care.

# SELF-CARE IN THREE COMMUNITIES: PATTERNS AND IMPLICATIONS FOR AFFORDABLE HEALTH CARE (EXECUTIVE SUMMARY)

*Celia van Zyl-Schalekamp*

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After a period of disagreement on the exact meaning of the concept "self-care", some degree of consensus on the definition of self-care was reached during the early 1980s. Broadly speaking, self-care comprises all the self-determined and self-initiated acts undertaken by individuals to protect, promote or restore their health. The interview method was used in this study to examine the different self-care behaviours observed in samples of the white, black and coloured communities of Bloemfontein.

Andersen's (1968) behavioural model was utilized in the data analysis. This model postulates that a family's use of health services is determined by (1) the predisposition of the family to use health services which is influenced by socio-demographic and attitude variables; (2) enabling factors that facilitate or inhibit the use of health services such as family income, medical insurance and the availability and accessibility of professional health care; and (3) the perceived morbidity or care needs of the family.

Extensive self-care was found in the case of all self-care modalities studied which included

- preventive behaviour: activities to protect health, routine medical, dental and cervical examinations, avoiding and including particular foods in the diet, immunization and exercise;
- doing nothing about symptoms;
- self-medication: the use of over-the-counter (OTC) medicines, self-medication with prescribed medicines (Rx) and self-initiated changes in the use of Rx, for example Rx course completion, the use of Rx by other family members, changes in prescribed Rx dosage and the later re-use of prescribed medicine;
- non-medication self-treatment, for example rest;
- consultation behaviour, for example consulting family, friends, pharmacists, etc.

The predisposing factors especially proved to be important correlates of self-care: the variables *level of education* and *health knowledge* in particular figured prominently in the explanation of self-care activities. However the three study groups showed notable differences in their self-care patterns. The white group for instance manifested the highest levels of preventive activities, doing nothing about symptoms, Rx course completion, the use of Rx by other family members, the later re-use of Rx and consulting pharmacists. The black group reported the highest levels of OTC medicine use and non-medication self-treatment, whereas both the black and coloured groups tended more towards changes in the prescribed dosage of Rx.

Among the enabling factors, *income* was the most important variable with regard to particular self-care activities, for example routine examinations. The enabling factors seem to have more significance for the use of formal health services: problematic availability and accessibility of formal care then accord greater relevance to some forms of self-care, for example doing nothing about symptoms, and non-medication self-treatment.

*Perceived morbidity* was found to be associated with the use of prescribed, and to a lesser extent, non-prescribed medicines. The black group reported the poorest perceived family health status and the white group the best. The latter group however reported a much higher level of Rx use than the other two groups.

It was concluded that self-care can be developed as a health-care resource, especially in view of the extent of existing self-care practices and the possible ensuing benefits to the formal care system. Formal self-care development programmes will however have to take cognizance of particular problems and even dangers, for example the possible medicalization of self-care.

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## 1. THE SELF-CARE PHENOMENON

*Although the popular sphere of health care is the largest part of any system, it is the least studied and most poorly understood (Arthur Kleinman 1980:50).*

Self-care is the oldest and most common form of health care but for a long time it has also been the most unappreciated. Widespread renewed interest in self-care seems to date from the second half of the twentieth century. Within these few decades views on self-care have already been modified, due to social changes, certain developments and pressures in formal health-care systems, and the epidemiological shift in the disease patterns of industrialized societies.

Initially self-care was of interest mainly to persons involved in formally recognized health care. They regarded self-care as resulting from a two-fold ignorance: ignorance of the "legitimate" alternative to self-treatment, i.e. consulting professional practitioners, and ignorance of the possible harmful side effects of self-medication. Another prevalent misconception about self-care was that it was chiefly practised among the low-income groups (Quah 1977:23).

During the early 1970s self-care attracted great popular interest and support, especially in the USA and Britain, where it was regarded as a potential weapon in the rebellion against "organized" society, science and technology. The appeal was for life in harmony with nature, by using natural products and furthering a natural health movement. This clarion call was linked to the controversies and campaigns of the era, including consumerism, the Civil Rights Movements (USA), Feminism, communal living and sentiments towards demystifying and deprofessionalizing conventional health care with its perceived limitations (Kronenfeld 1979:263; Levin 1976b:71; Pratt 1973:25, 26).

The interest in self-care was soon formalized by a number of symposia and conferences in Europe and the USA. The first was a symposium in Switzerland during March 1975, with the theme *The limits of medicine*. It was on this occasion that Illich (Levin 1976b:70) made his sweeping statement that medicine as an institution of social control needed to be demystified and deprofessionalized and that it could be replaced by self-care. A few months later an international symposium on the role of the individual in primary health care was held in Copenhagen and the idea of a partnership between self-care and professional care was first broached (Levin *et al.* 1977:3). The inadequacy of scientific knowledge

on self-care was clearly identified at this meeting and conferees were charged with assessing the research needs relating to self-care (Dean 1981:673). The first *international* conference on *Mutual aid and self-help in contemporary society* was held in Yugoslavia in 1979. The major focus was however on mutual aid programmes with less attention to individual self-care behaviour (Dean 1981:673).

The first move at a policy level was made by the Council of Europe on 30 April 1980, with a decision to stimulate self-care in all member countries. The World Health Organization (WHO) followed suit and developed international and regional programmes to stimulate and evaluate self-care and self-help groups. In addition, the WHO established an Information Centre for Research on self-care and health in Europe and voted funds for conferences and publications on self-care. In the USA two self-care information centres and a journal, *Medical Self-care*, were established (Schiller & Levin 1983:1350; Van Wanseele & Branckaerts 1982:21-24).

By this time policy makers and professional care providers had realized that self-care could no longer be discouraged and that it could even benefit formal health-care provision. The reasons for this change in sentiment were to be found in changing morbidity and mortality patterns in societies, the increasing demand for formal health care and unfavourable developments within the professional care system itself.

The most important changes in morbidity and mortality in industrialized societies were the dramatic increase in chronic degenerative diseases with an accompanying decrease in acute infectious conditions. "An immediate implication is the need to shift the goals and strategies of medical intervention from *cure* to *care*" (Levin 1977a:116). Much more than medical intervention is called for under these circumstances: greater patient participation is required during treatment and self-care is deemed necessary to increase the coping abilities and social competence of patients with chronic degenerative illnesses (Dean 1981:673; Levin 1976b:71; Levin *et al.* 1977:32; Pratt 1973:27; Segall & Goldstein 1989:154; Williamson & Danaher 1978:20).

A number of authors emphasize that the necessity of self-care was recognized because of pressures on the formal care system - these pressures being attributed to an insatiable demand for health care. Especially the workload of medical doctors justified greater support for self-care (Elliott-Binns 1973:264; Juffermans 1983:226; Levin & Idler 1981:238; Pratt 1973:21; Quah 1977:21; Williamson &

Danaher 1978:73, 173). However the single main motivation for the professional sector's interest in self-care is probably the well-known cost crisis experienced by all types of health-care systems. The cost problem has several different causes and various attempts at cost containment have been employed by all formal health-delivery systems. One line of reasoning is that costs may be curtailed by reducing both the demand and the need for formal health-care services. The *demand* for care may be scaled down by increasing the financial cost to the consumer (Abel-Smith 1980:26; Maynard 1986:1164) and by developing the self-care skills, especially that of self-medication, of patients (Levin *et al.* 1977:26; Williamson & Danaher 1978:73). The *need* for care may be pared down by establishing "healthier" populations. Self-care has a role to play in this regard, in the form of prevention, health maintenance and healthier life-styles (Levin *et al.* 1977:31; Mechanic 1975:242). Self-care could then be of financial assistance to the professional care system by reducing both the demand and need for care. This idea also gained acceptance in South Africa and on 14 May 1990 the Minister of Health and Population Development stated: "The health service should be preventive and promotive and stimulate self-care in the community, which has to take responsibility for its own health."

Outside the professional and policy sector, the interest in self-care was furthered by a number of anti-professional developments. Various accusations were brought against the professional care system which focused additional attention on self-care as a potential contributor in health care.

- The first charge is that of limited effectiveness and appropriateness of formal care especially due to its clinical/bio-medical orientation. Care furthermore tends to be fragmentary and episodic, rather than comprehensive and continuous (Dean 1986:275; Juffermans 1983:225; Katz & Levin 1980:330; Levin 1976b:70). These perceived shortcomings have led to the view that the greatest potential for improving health lies in what people do and not do, to and for themselves (Juffermans 1983:225; Rifkin 1981:377).
- A second problem identified with official care is its inadequate or differential availability, both in geographic and socio-economic terms. "Demands for increased competence in self-care may be great in situations where the population perceives the 'professional' resources as inadequate ..." (Levin *et al.* 1977:23). In Third World countries especially, self-care may at times be the only viable care option (Van der Geest 1987:294).
- Another negative aspect of professional care is the potentially harmful side-effects associated with the professional care-giving process, described by Illich (1975) as "iatrogenesis". Examples constitute unnecessary surgery, over-prescribing of drugs, maximum intervention

and in general the medicalization of society (Juffermans 1983:224; Levin 1977a:117; Pratt 1973:23). This problem generated interest in and support for alternative, more holistic, non-allopathic and "softer" care options, including self-care.

- Related points of criticism against professional care are those of depersonalization of the patient, over-specialization and technological bias (Field 1980:402; Griffiths & Bankowski 1980:61). These factors contributed to a loss of confidence in formal health care and a search for alternatives. "(T)he self-care, self-help movements work for less arcane, more humane, less technical and specialized, more decentralized and accountable approaches to medical care delivery" (Katz & Levin 1980:329).

The appeal for more self-care has furthermore been assisted by rising education levels among the general population and the increasing availability of health and self-care information (Levin *et al.* 1977:22; Pratt 1973:26; Quah 1977:23; Van Wanseele & Branckaerts 1982:19). Several self-care programmes have since been established in the USA and Europe (Levin 1976a:208; Dean 1989a:122).

Since the start of this decade much has been published on self-care - even whole editions of journals have been devoted to the phenomenon. The dominant themes in the recent work on self-care are those of personal autonomy and the role of life-styles in health. Regarding personal autonomy, individuals demand information, control over their own bodies and therapeutic processes, and the right to make their own decisions and choices in health-related matters, including death (Dean 1986:275; Katz & Levin 1980:331; Levin *et al.* 1977:20; Segall & Goldstein 1989:154). Personal autonomy is not only directed at professional medical power and the medicalization of society, but is a quest for control over the conditions which influence human wellbeing. The life-style concept is not used to blame victims for their own ill health, but is seen as only *one* of the elements which may influence a person's physical and mental health. The WHO has a similar interpretation: "Lifestyles are patterns of [behavioural] choices made from the alternatives that are available to people according to their socio-economic circumstances and to the ease with which they are able to choose certain ones over others" (Health Education Unit, WHO 1986:118).

Behavioural patterns are therefore not only a matter of individual choice, but are also determined by environmental or structural factors. The WHO regards the promotion of healthy life-styles as one method for attaining "health for all by the year 2000" and emphasizes both individual and structural factors in this regard.

The role of social support systems such as lay, self and mutual care groups, is similarly stressed (Health Education Unit, WHO 1986:117, 118, 120, 122).

The growing interest in self-care should not be regarded solely as a reaction against the *status quo* in professional health care; even less as an effort to replace professional care. Increased autonomy in health provides its own benefits - physically and psychologically.

Research on self-care paralleled the theoretical interest in and weighing of the phenomenon. The earliest studies (1970-1972) were conducted by medical people and focused on the utilization of physician and hospital services, delay in seeking care and patient compliance. The self-care actions uncovered in these studies were, with professional bias, regarded as behaviour to be avoided or changed, or even as misinformed and dangerous (Dean 1981:674). In similar vein a study on self-medication in the USA was carried out in order to encourage the "appropriate" use of medicines and reduce the costs of medicines in federal health programmes (Gagnon *et al.* 1978:433).

With the advent of concern about the functioning, methods and results of professional health care and the consequent emphasis on lay and self-care, efforts had to be made to provide relevant findings on the extent of self-care practices. Studies followed on the role of the family in health maintenance and the self-care of individuals as the first level of care (*cf.* Elliott-Binns 1973; Freer 1980; Levin 1976a; Litman 1971, 1974; Mabry 1964). The greatest mass of studies however focused on self-medication: its extent, the use of prescribed versus non-prescribed medicine, the sociobiographic correlates of medicine use (sex, age, race, etc.), and conditions treated with self-medication (*cf.* Abosede 1984; Bush & Osterweis 1978; Bush & Rabin 1976; Dunnell & Cartwright 1972; Jackson *et al.* 1982; Jefferys *et al.* 1960; Lader 1965; Pratt 1973; Price 1989; Quah 1977; Rabin & Bush 1975).

Despite the studies already published, existing knowledge on self-care is still regarded as fragmentary and unsatisfactory. Many studies were carried out in other disciplines and for other purposes than the study of self-care *per se*. Respondents often belonged to patient populations, so that comparatively little was known about the self-care behaviour of relatively healthy persons. Apart from conceptual confusion about self-care, many studies had no or a limited theoretical framework, so that the theoretical implications of findings have seldom been

spelled out. Some dimensions of self-care have apparently never been studied, e.g. decisions to do nothing about symptoms. Some studies also raised methodological questions; the obsessive search for causality in self-care behaviour has often led to factors being forced into the role of independent variables, to the inappropriate use of sophisticated statistical techniques and a tendency to ignore negative, inconsistent or small effects. The upshot of these problems was that an interconnected, growing theory of self-care could not be established (Dean 1981:684, 685; Dean 1989a:119, 120, 121; Segall & Goldstein 1989:153, 155). It is emphasized that a descriptive database on self-care is required. Such a database is above all essential when governments plan to allocate funds and establish programmes for self-care development.

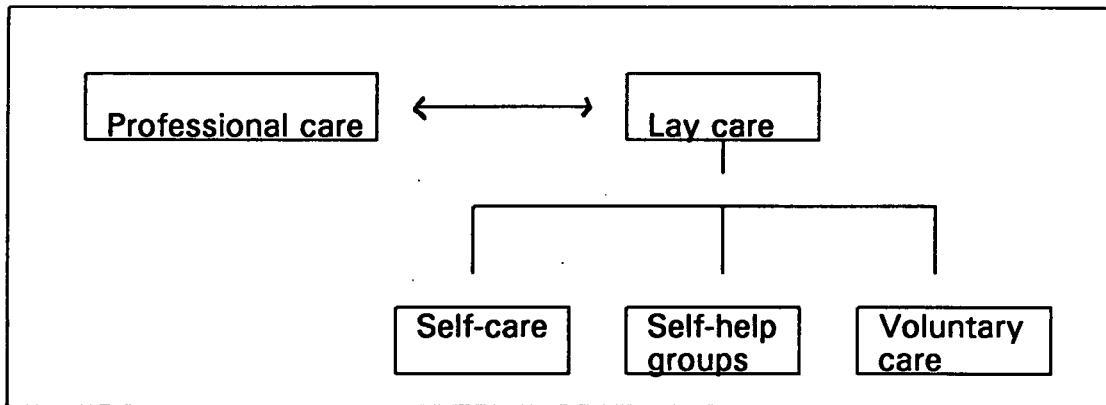
In South Africa self-care has hitherto received little popular or scientific attention. The results of a study on compliance with medication instructions among black patients were published in 1979 (Buchanan *et al.* 1979) as were those of a study on self-medication (Buchanan 1979). Self-medication was similarly the topic of a research report by Joubert *et al.* (1984). South Africa obviously has a rich tradition of self-care in all its communities, but little is known about current self-care behaviour. This study attempts to fill in some of these blanks by providing a comparative description of the nature and extent of self-care activities in a random sample of white, black and coloured respondents.

## 2. SELF-CARE: A CONCEPTUAL ANALYSIS

Until quite recently policy makers and the professional health sector tended to view health care as synonymous with professional health care. As the oldest form of care, however, lay care still constitutes the biggest part of primary health care. Rather than regarding professional care as the only legitimate form of care, it should be seen as a *supplementary* source. Indeed, one could speak of a continuum of health care, on which the remuneration of care providers is the major difference (Levin 1976a:206). Such a continuum is presented graphically in Figure 1.

*Professional health care* is defined as care rendered by licensed workers for remuneration, using legitimate methods and means (Williamson & Danaher 1978:55). At the other end of the continuum, *lay care* is provided or exercised without compensation by people without or with less formal medical expertise, using available methods. Regarding the subcategories of lay care, *voluntary care* is

**Figure 1: Care providers in primary health care**



(Adapted from Van Wanseele & Branckaerts 1982:13.)

provided by community members, but these activities are organized by agencies like churches, voluntary and charitable organizations (Kickbusch & Hatch 1983:5). The most widely accepted definition of *self-help groups* is that of Katz and Bender (1976:14): Self-help groups are voluntary small group structures established for mutual aid and the attainment of a specific goal. Members ordinarily share a common defect or problem and work towards social and/or personal change. Examples are the AA, Weighless, La Leche League and single-parent societies.

There has been less agreement on the definition of *self-care*. The most important reason for this lack of conceptual clarity was that persons from different disciplines, and with varying interests, professional goals and even political orientations were involved in the self-care phenomenon. Levin's (1976a:206) early definition of self-care was adopted by a number of researchers (*cf.* Fleming *et al.* 1984; Kronenfeld 1979; Schiller & Levin 1983; Van der Geest 1987). It reads as follows: "A process whereby a layperson can function effectively on his own behalf in health promotion and prevention and in disease detection and treatment at the level of the primary health resource in the health care system." Dean (1986:276) initially narrowed down her definition of self-care to decisions and actions taken during incidents of *actual* illness and she regarded it as the range of individual behaviour involved in symptom recognition and evaluation, and in decisions regarding symptom responses, including decisions to do nothing about symptoms, to treat the symptoms by self-determined actions or to seek advice on treatment. Her definition therefore included consultation in lay, professional and alternative care networks, although this was not explicitly mentioned by Levin. On the other hand, health maintenance, its promotion and the prevention of disease were disregarded, while several authors interpret these as cardinal elements of



self-care. It seems that health maintenance consists of at least five components: *health practices* (e.g. sufficient sleep), *safety practices*, *preventive care* at the primary, secondary and tertiary level, *avoiding environmental dangers* and *avoiding harmful substances* (Fleming *et al.* 1984:951; Harris & Guten 1979:22, 23; Williamson & Danaher 1978:110).

The self-treatment practised during illness is likewise not a one-dimensional phenomenon and may take several forms: *doing nothing* about symptoms; different forms of *self-medication*, e.g. using home, folk or kitchen remedies, medicating with over-the-counter medicines<sup>1</sup>, using prescribed medicines in non-prescribed ways, e.g. changing the dosage or duration of use and use by persons for whom the medicine had not been prescribed. Finally, self-treatment may involve certain *activities* like rest, exercise, etc. (Dean 1986:277, 278; Elliott-Binns 1973:261; Williamson & Danaher 1978:92).

The concept "self-care" does not imply that the individual functions in isolation and independently. "Individual care in illness is embedded in family and extended networks" (Dean 1986:276). The concept of a "lay reference network" refers to the networks of relatives and friends consulted by the individual during episodes of illness. These networks influence members' definition of health, symptom interpretations and explanations of disease causation. In addition these networks make references, e.g. to the professional care system (Freidson 1961:146-147; Levin & Idler 1981:3, 68, 77, 80).

Theorists differ on the question whether consultations by patients, their participation in or their utilization of services in the professional care system should be regarded as a part of self-care. The crucial question in this regard is whether such participation originates from lay decision-making and is self-managed. To the extent that individuals themselves decide on professional consultation and their degree of compliance with professional instructions, these decisions should be interpreted as a part of self-care. The decisions to consult alternative or fringe practitioners (traditional healers, chiropractors, osteopaths, homeopaths, etc.) more clearly fall within the domain of personal choice.

By the 1980s a fair amount of consensus had been reached on the definition of self-care, reflecting recent thinking on the structural elements of life-styles and self-determination. Broadly speaking, self-care represents the range of behaviours undertaken by individuals to promote or restore their health (Dean 1989a:117). These practices are lay-initiated and are undertaken as the result of a self-

determined decision-making process - the essence of self-care is therefore self-control. The concept of self-care thus includes a range of potential behaviours such as: health maintenance, illness prevention, symptom evaluation and self-diagnosis, self-treatment (with or without medication), self-referral (using the lay reference network as a health resource), consultation with alternative practitioners and the use of professional health services (Segall & Goldstein 1989:154). The interaction between self-care and sociocultural influences is also stressed: "It is ... important to maintain focus on self-care behaviour as a factor among many that are essential to health protection" (Dean 1989a:118). The self-care practices of individuals are health-related elements of their life-styles, chosen from the available alternatives in their situation. To conclude: personal health behaviour is a health resource; self-care and professional care are therefore not mutually exclusive, but integrally related components in the health-care system of a society. Individuals are active creators of health, not simply passive consumers of health services.

### **3. A THEORETICAL MODEL FOR THE STUDY OF SELF-CARE**

During the past two to three decades social scientists have developed several models and theoretical frameworks in order to explain and even predict the health-related behaviour of individuals. There are two main categories of models: (1) *pathway models* which describe different steps in decision making in illness behaviour; and (2) *determinants models* where the focus is on a set of explanatory variables or determinants which are associated with the choice of different forms of health services. The two model types also differ in their methodological approach: the users of pathway models mainly follow qualitative procedures with the use of observational studies, while studies in the determinants tradition are predominantly quantitative in nature (Kroeger 1983:147, 148). Due to the strong emphasis on social-psychological variables in the pathway models, as well as the problems presented by a qualitative observational study in three culturally-different population groups, pathway models were judged as inappropriate for a sociological analysis of self-care. With closer scrutiny of the different determinants models, it appeared that Andersen's (1968) *behavioural model* contained a collection of variables which could find fruitful application in the study of self-care in different communities.

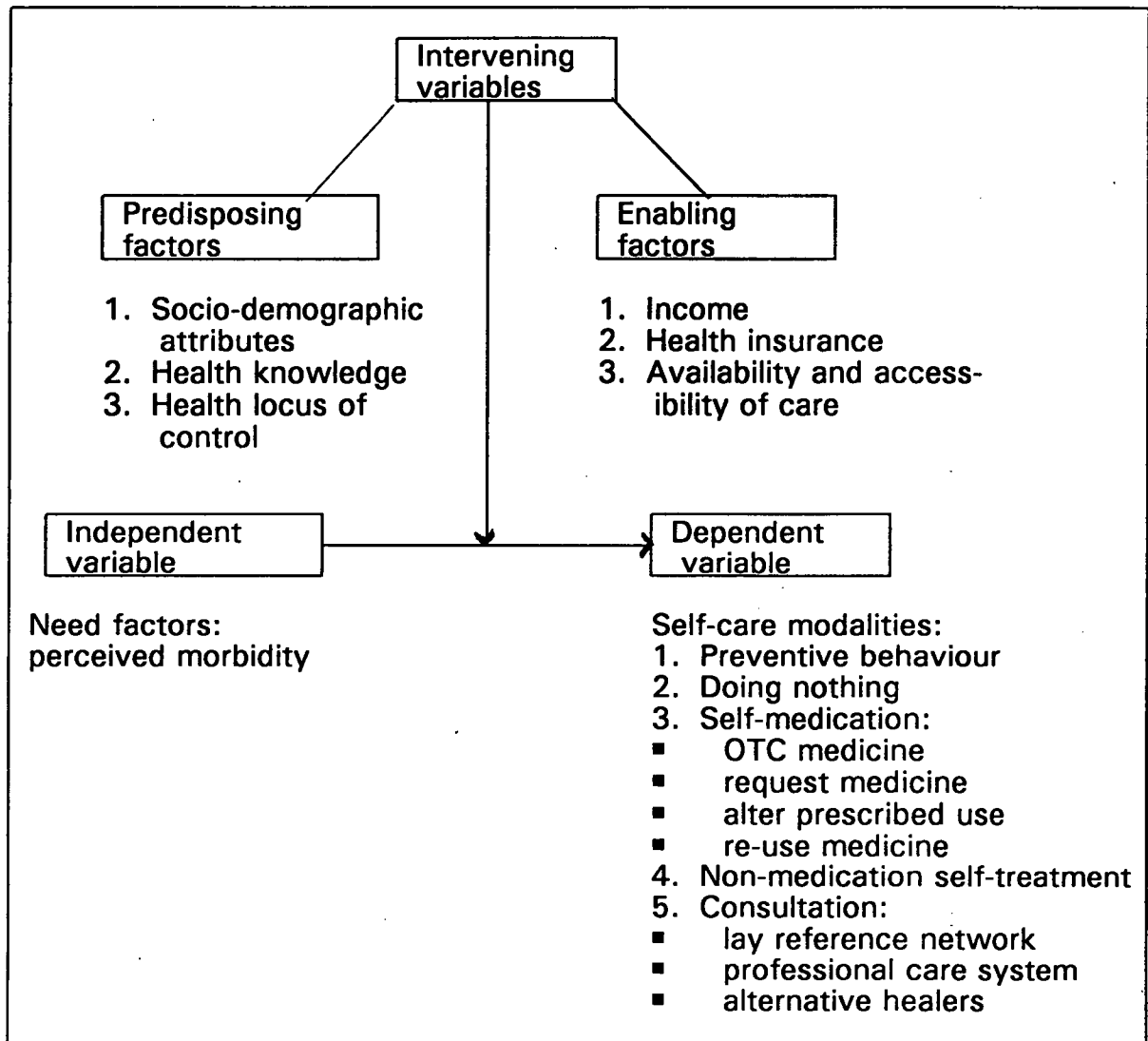
In its initial formulation Andersen's behavioural model for the use of health services consisted of a number of individual factors, determining a family's use of health

services, viz. (1) the *predisposition of the family* to utilize health services; (2) the family's *ability* to attain such services; and (3) the *need* for health services (Becker & Maiman 1983:548). The predisposing factors refer to attributes of the individual existing prior to the onset of illness and which give rise to differential propensities regarding the use of health services. Included are demographic variables (e.g. age, sex, race), social structural variables (e.g. education, occupation) and some psychological variables (e.g. health beliefs). The second component of the behavioural model refers to conditions which make the use of health services possible. These enabling factors include the income of the family, the availability of health insurance, as well as the availability and accessibility of formal health care (Becker & Maiman 1983:548; Kohn & White 1976:18-19). When appropriate predisposing and enabling factors are present, the level of self-perceived morbidity will function as the most important determinant for the use of health services. The use of health services as a reaction to illness is seen as the dependent variable in the behavioural model. Of course, predisposing and enabling factors are in themselves related, but for analytical purposes it is possible to distinguish between the three sets of determinants.

The initial studies applying the behavioural model focused almost exclusively on the use of formal health services (*cf.* Bush & Osterweis 1978; Bush & Rabin 1976; Kohn & White 1976; Sharp *et al.* 1983; Wolinsky 1978). In time, self-care also started appearing as dependent variable in studies carried out in the tradition of the behavioural model (*cf.* Fleming *et al.* 1984; Kroeger 1983; Segall & Goldstein 1989). For the purposes of this study, and with the behavioural model for the use of health services as a basis, the researcher incorporated some "neglected" variables into the model, like health knowledge and health locus of control, as well as seldom-studied forms of self-care, like doing nothing about symptoms, self-initiated changes to physician prescriptions, patient requests for specific prescribed medicines and non-medication self-treatment. The adapted model is presented in Figure 2.

Despite mention of "determinants", "independent", "intervening" and "dependent variables", the literature suggests that the behavioural model should not be causally applied and interpreted. The model is interactive in nature, providing non-linear or S-shaped relations; sophisticated multivariable and linear analyses and techniques are consequently inappropriate (Cleary 1983:778; Rundall 1981:103). One alternative to this is to approach the independent and intervening variables as correlates of self-care. This approach was followed in the present study in emulation of a number of studies on self-care (*cf.* Abosede 1984; Calnan 1989; Quah 1977, 1985; Segall & Goldstein 1989).

**Figure 2: Model for the study of self-care**



#### 4. RATIONALE, PROBLEM FORMULATION AND RESEARCH GOALS

##### 4.1 RATIONALE

The Department of Sociology at the University of the Orange Free State initiated the project *Community-based health care: Sociological studies in Bloemfontein* in September 1987 as a project of the HSRC Research Programme: Affordable Social Provision.

The main objective of this project was the analysis of community-based health resources, health-care patterns and possible alternatives among different population and community groups in Bloemfontein and its environs, with special attention to the development or upgrading of these health-care resources within the context

of affordable health care. The motivation for the project was as follows: community-based health care - i.e. health care by the community for the community - often implies a cheaper, more available and more accessible, often even a more effective form of health care. These community sources of health care are seemingly not fully utilized in South Africa due to insufficient empirical knowledge about these services, as well as resistance to these modes of care, coupled with a biased emphasis on professional health care.

This particular study<sup>2</sup> focuses on *self-care* in health and illness as a possible alternative to or supplement for professional *primary* care, in an effort to realize affordable health care for all in South Africa. Official programmes to develop community resources and responsibility for health cannot be planned and executed in a vacuum. Thorough knowledge of the existing extent and patterns of self-care in different communities is a prerequisite for the utilization of this health resource. Especially in view of South Africa's history and population composition - implying differences in morbidity patterns and the need and demand for care, as well as differential formal health-care provision - a uniform self-care development programme cannot simply be implemented. Due to the role of these factors it was decided not to try and stratify the population simply in terms of social class, but to focus on three different communities. This implied the use of the unfortunate terms "black", "white" and "coloured".

#### 4.2 PROBLEM FORMULATION

The central research problem was the self-care phenomenon as it manifests itself among individuals in the white, black and coloured communities of Bloemfontein. This research problem generated the following research questions:

- What forms of self-care are found in the different communities?
- What is the extent of the different forms of self-care in the different communities?
- What are the similarities and differences in the self-care patterns of the different communities?
- What are the correlates of self-care, with reference to the need for care, and sociodemographic and structural factors?
- To what extent can existing self-care patterns be developed as an affordable community source of health care?

### 4.3 RESEARCH GOALS

The *most important* goal of the study was to provide a comparative description of the nature, extent and correlates of self-care through the use of a social survey in random samples from the white, black and coloured population groups in Bloemfontein. A *second goal* was to determine whether self-care can be developed locally as a viable element of community-based health care.

## 5. RESEARCH DESIGN

The main procedure followed was a social survey with an interview questionnaire as data-collection technique. For a more qualitative view and in an attempt at triangulation, in-depth interviews were carried out with black (two) and coloured (one) community leaders. The main aim of these interviews was to gain feedback on some of the survey findings.

### 5.1 POPULATION AND SAMPLING

The white, black and coloured households in Bloemfontein were taken as the sampling populations. The Institute for Social and Economic Research (University of the Orange Free State) made the following estimates of the total urban population of Bloemfontein in 1989: white 107 100; black 120 462; coloured 19 693. Applying the norm of the Central Statistical Service for household size (average 3,11 members for white, 6,5 members for black and 4,53 members for coloured households), the resulting sampling frame consisted of 34 437 white, 18 532 black and 4 347 coloured households. A multiphase random cluster sample of 150 households was drawn from each population group. For the purpose of statistical comparability, it was decided to have the subsamples of an equal size, despite the unequal size of the sampling populations.

Since the 1985 census had limited variable coverage and the study sample consisted predominantly of females, only a few comparisons between the sample and census data could be made, in order to determine the representativeness of the sample. In **Table 1** a comparison of the age and educational distributions of the sample and census data is presented.

The discrepancies between the census and sample data are probably due to the selection of *households* ("the woman of the house") in residential communities. This led to the exclusion from selection of very young, as well as institutionalized females (in the white group the latter are probably those with a low level of education).

**Table 1: Age and educational distributions of the sample and census data (1985) for the female white, black and coloured populations of Bloemfontein, in percentages**

DISTRIBUTIONS	WHITE		BLACK		COLOURED	
	CENSUS	SAMPLE	CENSUS	SAMPLE	CENSUS	SAMPLE
<b>Age groups:</b>						
20-24	19,5	4,7	17,6	2,7	21,5	4,4
25-34	22,8	27,5	29,3	14,9	31,0	30,7
35-44	18,5	27,5	22,2	29,1	19,6	28,5
45-54	14,4	28,2	15,2	25,0	13,0	21,2
55-64	11,3	10,8	8,9	20,9	8,3	10,9
65 & older	13,5	1,3	6,8	7,4	6,6	4,3
	100,0		100,0		100,0	
<b>Educational level:</b>						
none	12,2	0,0	16,8	8,0	26,0	4,4
to Std 3			19,6	10,0	17,4	9,5
Stds 4-5	11,5	0,0	19,9	22,7	18,1	17,5
Stds 6-7	13,5	8,8	24,6	30,0	21,1	27,0
Stds 8-9	20,0	20,1	13,3	12,7	12,6	25,5
Std 10	26,8	26,8	4,8	6,7	4,2	8,0
Std 10 + 1-2 yrs	10,3	10,1	0,8	3,3	0,6	5,1
Std 10 + 3-4 yrs	5,7	34,2	0,2	6,6	0,0	2,2
	100,0		100,0		100,0	99,2 (1 missing)

(Source: Central Statistical Service, South Africa 1985: reports 02-85-02 and 02-85-04)

For the purposes of sampling, the Department of Geography (University of the Orange Free State) divided the black township Mangaung (formal housing) into 17 comparative geographical blocks and the coloured area of Heidedal into seven comparative geographical blocks. These block divisions were taken as clusters and in the black area five areas were randomly selected. From each of these five clusters 30 stand numbers plus ten reserves were selected from a table of random sampling numbers (Schnetler 1989: 131). For the sample from the coloured community, three areas were initially randomly selected; thereafter 50 stand numbers plus ten reserves from each area were selected from the table of random sampling numbers (Schnetler 1989:131). For the sample from the white population

the researcher divided the city of Bloemfontein into five areas with a more or less equal number of residential stands and from these, three areas were randomly selected. As with the subsample among the coloureds, 50 stand numbers plus ten reserves were randomly selected from each area. The sample sizes realized at the end of the survey were 150 questionnaires for the blacks, 137 for the coloureds and 149 for the whites.

## **5.2 THE QUESTIONNAIRE**

Following a literature study a questionnaire was developed and submitted for commentary by sociologists, an ethnologist and a few members from the different communities to be studied. The final version of the questionnaire was available in Afrikaans, English and Southern Sotho, so that all language preferences of respondents could be met. The questionnaire covered the following aspects:

- socio-demographic particulars of respondents
- other correlates of self-care, like health knowledge
- the differential availability and accessibility of professional health care
- the perceived health status of the respondent and her (nuclear) family
- the nature and extent of different self-care modalities, e.g. preventive behaviour, self-medication and consultation.

In constructing the questionnaire, use was made of dichotomous, multiple-choice, rank-order, follow-up, memory-triggering and open-ended/unstructured questions. Some correlates of self-care, namely perceived health status/morbidity, health knowledge and health locus of control were measured by scales.

## **5.3 THE FIELDWORK**

Before commencement of the fieldwork, the project was introduced to the different communities by the local radio stations. The interviews were conducted during July and August 1989. Each fieldworker was provided with an area map, with his/her selected households and reserves marked on it. Each interviewer was responsible for some ten interviews, and instructed, where possible, to conduct the interview with the "woman of the house" as she is the person largely responsible for the health of the family (*cf.* Dean 1981; Knapp & Knapp 1972; Levin & Idler 1981; McEwan 1974). The fieldworkers were trained by a person with specialized interviewer-training knowledge.



Sixteen senior black students in the social sciences, almost all with interviewing experience, were recruited and trained. Only two female students presented themselves. The fact that the black interviewers were predominantly young males, may have given rise to invalid responses to a few questions, e.g. about female complaints and cervical smears. Almost all interviews in this subsample were conducted in Southern Sotho, but the interviewers conveyed the responses on open questions in English. The black respondents were very co-operative and no refusals were encountered. Twelve per cent of the interviews were checked by telephone to ensure that they had actually taken place.

Fourteen members of the coloured community - the majority in clerical occupations plus three students - were recruited and trained. Some negativism was encountered in the coloured community, conceivably due to the then upcoming Parliamentary elections and concomitant household canvassing. A few interviews were refused, but on the whole co-operation was fair. Most interviews were conducted and recorded in Afrikaans. Because of personal problems, one interviewer could not complete his quota of interviews. Due to the time lapse and the approaching elections, it was decided to forgo the interviews in question. Ten per cent of the interviews were checked by telephone.

The interviewers for the sample among whites consisted of 15 senior sociology students. Virtually all interviews were conducted and recorded in Afrikaans. Several interviewers complained about the rudeness of potential respondents and a 4 % refusal rate occurred. Sixteen per cent of the interviews were checked. Most of the interviews were conducted at night and took from 45 to 60 minutes.

#### **5.4 CODING**

All structured questions were precoded on the questionnaire. After completion of the data-collection, the responses to open-ended questions were analyzed and coded. Some responses dealing with numbers or amounts were later recoded to make them more manageable. The initial measurement of these variables therefore was on interval level.

#### **5.5 DATA ANALYSIS**

The data were analyzed using the SPSS-X programme. The individual was the unit of analysis, except in cases where the need for care or medicine use of the whole family was regarded as relevant. In the data analysis use was made of frequency, percentage and cross tables, as well as coefficients of association among certain variables. Depending on the level of measurement, appropriate *available asym-*

*metrical* coefficients of association/correlation were utilized.<sup>3</sup> Asymmetrical coefficients were regarded as appropriate, due to the clear distinction between independent and dependent variables in the behavioural model employed in the study. Lambda (sign a) was used on the nominal and Somers  $d_{yx}$  (sign b) on the ordinal level. On interval level and in the case of dichotomous responses on the dependent variable, Eta (sign c) was used. All these coefficients are "proportionate reduction in error" measures and may therefore be used to make predictions of the values of the dependent variable (Loether & McTavish 1974a:212). No guidance regarding the acceptance of certain degrees of association could be found in studies implementing the behavioural model, since "inappropriate" multivariable statistical analyses were mostly employed. Therefore, the highest degrees of association found in the study were considered in the data analysis.

## **6. OPERATIONALIZATION AND SAMPLE SCORES ON THE BEHAVIOURAL MODEL VARIABLES**

In Andersen's (1968) behavioural model for the use of health care, predisposing variables pose with enabling factors as intervening variables between perceived morbidity and the use of care.

### **6.1 PREDISPOSING FACTORS FOR THE USE OF HEALTH SERVICES**

The predisposing factors involve personal situational, socio-cultural and attitude variables which determine an individual's predisposition towards the use of care, independent of his health status.

The three predisposing concepts investigated in this study fall into two categories. The first group involves certain *socio-demographic attributes* of the respondent, namely race/ethnicity, age, marital status, family type and educational level. The second group comprises the *individual's knowledge of health and medicine* and the extent to which he seeks such knowledge, as well as the extent of his conviction that he can *control* his own *health condition*. This latter concept is referred to as the health locus of control, in which self-control is labelled internality and control from outside as externality. This concept featured in a number of studies on the use of health services (*cf.* Cockerham *et al.*; 1986a, 1986b; Langlie 1977; Seeman & Seeman 1983; Segall & Goldstein 1989; Wallston *et al.* 1976). The demographic attributes influence an individual's health values and health knowledge as well as his attitude towards control of health (Kohn & White 1976:43).

The predisposing concepts with their corresponding variables and indicators are presented in Table 2. Most intervening variables have not been inter-correlated, as they have been shown to be independent by, among others, Jackson *et al.* (1982: 2011) and Kohn and White (1976:56).

**Table 2: Predisposing factors: concepts, variables and indicators**

CONCEPT	VARIABLE	INDICATOR	CATEGORY
Socio-demographic attributes	Race/ethnicity	Race	White, black, coloured
	Age	Age	Below 20; 20-24; 25-34; 35-44; 45-54; 55-64; 65 or older
	Marital status	Marital status	Married; never married; widowed; divorced/separated; living together
	Family type	Number of children at home	0; 1-2; 3-4; 5 or more
	Educational level	Years of formal education	None; Std 3 or less; Stds 4-5; Stds 6-7; Stds 8-9; Std 10; Std 10 + 1-2 yrs; Std 10 + 3-4 yrs; Std 10 + 5 or more yrs
Knowledge and information seeking	Knowledge of health and medicine; seeking health information	Knowledge; if and where knowledge is sought	Can/cannot take temperature, pulse, stop bleeding, apply artificial respiration; knowledge about contagiousness of polio, bronchitis, diabetes and anaemia; sources of information about health, disease and medicine; are sources consulted (combined into knowledge index)
Attitude	Health locus of control	Index <sup>4</sup> (summated scores)	Top and bottom quartiles used as external vs. internal locus of control

With the preliminary analysis of the data it became clear that the white, black and coloured groups showed important differences on many of the variables. Therefore data for the three groups will be presented separately, where relevant. Table 3 shows the data for the predisposing factors for the white, black and coloured respondents.

**Table 3: Predisposing factors for whites, blacks and coloureds, in percentages<sup>5</sup>**

FACTORS	WHITE (N = 149)	BLACK (N = 150)	COLOURED (N = 137)
<b>AGE GROUPS</b>			
Below 20	0,7	1,3	0,0
20-24	4,7	2,7	4,4
25-34	27,5	14,7	30,7
35-44	27,5	28,7	28,5
45-54	28,2	24,7	21,2
55-64	10,1	20,7	10,9
65 or older	1,3	7,2	4,3
	100,0	100,0	100,0
Median	35-44	45-54	35-44
<b>MARITAL STATUS</b>			
Married	94,7	68,7	75,2
Never married	0,0	9,3	2,9
Widowed	1,3	15,3	12,4
Divorced	4,0	4,7	9,5
Living together	0,0	2,0	0,0
	100,0	100,0	100,0
<b>FAMILY TYPE (Children still living at home)</b>			
No children	22,1	12,0	10,2
1-2 children	51,8	52,6	48,9
3-4 children	24,8	29,4	30,6
5 and more children	1,3	6,0	10,3
	100,0	100,0	100,0
Average number of children	1,69	2,20	2,44
<b>EDUCATIONAL LEVEL</b>			
None - Std 3	0,0	18,0	13,9
Stds 4-7	8,1	52,7	45,3
Stds 8-9	20,1	12,7	25,5
Std 10	26,8	6,6	8,0
Std 10 +	45,0	10,0	7,3
	100,0	100,0	100,0
Median	Std 10	Stds 6-7	Stds 6-7

(Table continues)

Table 3 (continued)

FACTORS	WHITE (N = 149)	BLACK (N = 150)	COLOURED (N = 137)
<b>HEALTH KNOWLEDGE SCORES</b>			
0-1	0,0	18,7	9,5
2-3	6,7	42,7	38,0
4-5	22,8	20,6	27,7
6-7	42,3	10,7	17,5
8-9	28,2	7,4	7,3
	100,0	100,0	100,0
Median	7,0	3,0	4,0
<b>HEALTH LOCUS OF CONTROL</b>			
High external	18,8	21,3	24,1
Medium external	30,2	30,7	27,7
Medium internal	28,9	28,0	28,5
High internal	22,1	20,0	19,7
	100,0	100,0	100,0
Median	19,0	20,0	21,0

From Table 3 it is evident that the black respondents were generally *older* than those of the other two groups. The most important reason for this is that the sample included an older part of the black township, inhabited largely by elderly persons. Regarding *marital status*, the higher frequency of widowhood among the black and coloured respondents was notable. The number of children still living at home was taken as indicator of *family type*, and surprisingly the coloured group reported a higher average of dependent children per family than the black group. This was probably also due to the higher average age of the black respondents. Regarding *educational status*, the white respondents were in the best, the black in the worst and the coloured group in an intermediary position. The three groups differed greatly in their levels of *health knowledge*, with especially black respondents having attained low scores. However, the *health locus of control* scale produced negligible differences among the scores of the three groups. The health locus of control concept, as a Western model, may present problems when applied in a cross-cultural context. From the in-depth interviews it transpired that the black respondents probably interpreted the scale items in terms of traditional beliefs. These interpretations produced high internal scores, while the true meaning of the responses are external control. Nevertheless, this variable was correlated with the different forms of self-care, and for this purpose the top and bottom quartile scores of each group were used, rather than the median, as dividing point between internality and externality (as done e.g. by Wallston *et al.* 1976).

## 6.2 ENABLING FACTORS FOR THE USE OF HEALTH SERVICES

In the behavioural model the *enabling factors* are the intervening variables which reflect the socio-economic circumstances of the individual and his family. In the presence of perceived morbidity, decisions about the use of health services are influenced by cost factors, including money, time and inconvenience.

The three enabling concepts in the study involve the *income* of the family, the *availability of health insurance* and the *perceived availability and accessibility of professional health care* to individuals. The availability of care was measured by the attainability of a *regular source* of official care; accessibility involved two variables: the *mode of transport* and the *travel time* to the regular source of care.

In Table 4 the enabling concepts, variables and indicators are shown, while Table 5 indicates the position of the three study groups on the enabling factors.

**Table 4: Enabling factors: concepts, variables and indicators**

CONCEPT	VARIABLE	INDICATOR	CATEGORY
Income	Monthly income of family	Income	R0-R100; R101-R200; R201-R400; R401-R600; R601-R800; R801-R1000; R1001-R2000; R2001-R3000; R3001-R4000; R4001-R6000; R6000+
Perceived availability & accessibility of professional care	Regular source of medical care	Specific doctor or place	Day clinic; hospital; private practitioner; pharmacy; clinic; traditional healer
	Transport	Form of transport	Walking; taxi; bus; own car; train; taken by others
	Travel time	Travel time to care	15 min. or less; 16-29 min.; 30 min. +
Health insurance	Health insurance	How care is paid for	Self-payment of everything; medical fund; payment for consultation only; payment for medicine only

**Table 5: Enabling factors for whites, blacks and coloureds, in percentages**

ENABLING FACTORS	WHITE (N = 149)	BLACK (N = 150)	COLOURED (N = 137)
<b>MONTHLY INCOME (HOUSEHOLD)</b>			
R0-R200	0,0	9,4	10,9
R201-R400	0,0	25,3	11,7
R401-R600	0,0	24,0	12,4
R601-R800	0,7	17,3	13,9
R801-R1000	2,0	6,7	15,3
R1001-R2000	20,8	11,3	22,6
R2001-R3000	20,8	3,3	9,5
R3001-R6000	44,3	2,0	2,2
R6000 +	8,7	0,0	0,0
Unknown	2,7	0,7	1,5
	100,0	100,0	100,0
<b>Median (R)</b>	3000-4000	401-600	801-1000
<b>AVAILABILITY OF MEDICAL INSURANCE</b>			
Has medical fund	94,6	12,0	27,0
Pays only for medicine	0,0	6,7	4,4
Self-payment for everything	4,7	76,7	67,2
Other	0,7	4,6	1,4
	100,0	100,0	100,0
<b>REGULAR SOURCE OF CARE</b>			
Private practitioner	88,6	29,3	49,6
Hospital	3,4	56,7	23,4
Clinic	0,7	2,7	17,5
Traditional healer	0,0	1,3	0,0
Other (e.g. pharmacy)	7,3	10,0	9,5
	100,0	100,0	100,0
<b>TRANSPORT TO CARE</b>			
Walk	3,4	16,0	59,1
Taxi	0,0	68,7	22,6
Bus	2,0	0,7	0,0
Own car	94,0	12,0	16,8
Other	0,6	2,6	1,5
	100,0	100,0	100,0
<b>TRAVEL TIME</b>			
15 min. or less	83,9	58,0	44,5
16-29 min.	10,7	28,7	13,2
30 min. or more	5,4	13,3	42,3
	100,0	100,0	100,0

**Table 5** indicates that the reported average *monthly income* of the white respondents was considerably higher than that of the other two groups. Regarding the *availability of a medical fund*, the black and to a lesser extent the coloured respondents were in a very adverse position. Regarding the *regular source of care*, the majority of blacks and almost a quarter of the coloured respondents were dependent on a (provincial) hospital as usual source of care. Most black respondents had to resort to taxis for *transport to medical* care. The coloured group, having extended clinic facilities at their disposal, could reach many of these services on foot. The total sample did not cover a very big geographical area, so *travelling time to care* was found, on average, not to be very long. The exception was 42 % of the coloured group, who probably walked to the nearest provincial hospital. The black, and to a lesser extent the coloured respondents, clearly were faced with a great number of impediments regarding the availability and accessibility of formal medical care.

### 6.3 PERCEIVED MORBIDITY AND THE USE OF HEALTH SERVICES

In most discussions on health services the *perceived morbidity* of the population is identified as the most important determinant of the use of health services. Since sociocultural factors influence the perception and interpretation of illness, perceived morbidity plays a much more important role in this regard than the "real" or clinical need for care. In studies encompassing the morbidity or need variable, the focus was almost exclusively on perceived rather than real morbidity (*cf.* Bush & Osterweis 1978; Bush & Rabin 1976; Kohn & White 1976; Kroeger 1983; Segall & Goldstein 1989; Wolinsky 1978).

Perceived morbidity was measured with an *index* consisting of an evaluation of health in general (respondent and her family), consulting a medical practitioner and experiencing disability (days in bed) over a period of time, the presence of acute or chronic diseases or defects, and the extent of worry or anxiety experienced about health (Bush & Osterweis 1978; Kohn & White 1976). In all studies quoted, this variable was measured on family level (i.e. the perceived morbidity of the whole family) and this approach was followed in the present study. The relevant concepts, variables and indicators are specified in **Table 6**, and **Table 7** reflects the perceived morbidity in the three study groups.

The white respondents evaluated their own health and that of their families as much better than respondents in the other two groups. As with the health locus of control variable, the top and bottom quartiles of each group's morbidity scores were correlated with different self-care modalities.



**Table 6: Perceived family morbidity: concepts, variables and indicators**

CONCEPT	VARIABLE	INDICATOR	CATEGORY
Perceived morbidity (index constructed by summing values on specified questions)	Evaluation of health status (own and that of family members)	Evaluation	Excellent; good; reasonable; poor; very poor
	Consultation of medical or other practitioner (self and family members)	Consultation	Yes; no; uncertain
	Disability (self and family members)	Days in bed	0-5; 6-9; 10 or more
	Presence of physical impairment; acute or chronic disease (self and family members)	Presence	None; less serious acute disease; serious chronic condition/impairment; serious acute disease plus chronic condition/impairment  Acute: less serious; more serious
	Worry/anxiety (about self and family members)	Presence	None; hardly any; some; a great deal

**Table 7: Scores on perceived morbidity index for whites, blacks and coloureds, in percentages**

SCORES	WHITE	BLACK	COLOURED
GOOD 5-11	48,3	23,2	45,3
12-17	42,2	44,0	34,3
18-23	9,5	28,0	17,5
POOR 24-30	0,0	4,8	2,8
	100,0	100,0	100,0
Mean score	12,1	15,4	13,2
Median	12	15	12

## 6.4 SELF-CARE FORMS AS HEALTH CARE

The different *forms of self-care* studied as dependent variable consisted of different preventive actions, "doing nothing" about symptoms, different forms of self-medication, non-medication self-treatment and diverse consulting behaviours. The self-care concepts, variables and indicators are specified in **Table 8**.

**Table 8: Self-care: concepts, variables and indicators**

CONCEPT	VARIABLE	INDICATOR	CATEGORY
Self-care	Prevention	Preventive/ health maintenance behaviour:  ■ activities to protect health  ■ routine medical check-up  ■ regular dental check-up  ■ regular Pap test (cervical smear)  ■ some foods are avoided/ included in diet  ■ immunization  ■ exercise	diet; exercise; sleep/ rest/relax; consult physician; take medicine; work; healthy way of living; nothing  yes; no; father only; mother only; children only; parents only; n/a  yes; no; father only; mother only; children only; parents only; n/a  semi-annually/annually; every 2-5 years; seldom; never; no knowledge of it; respondent male - does not know; woman too young; n/a  yes; no; uncertain  polio; diphtheria; whooping cough; TB  most important form of exercise

(Table continues)

Table 8 (continued)

CONCEPT	VARIABLE	INDICATOR	CATEGORY
	Doing nothing	Doing nothing about symptoms	yes; no; uncertain
	Self-medication	<ul style="list-style-type: none"> <li>■ Medicating with OTC medicine</li> <li>■ requesting specific type of medicine from doctor</li> <li>■ changes in use of prescribed medicine:               <ul style="list-style-type: none"> <li>- complete course</li> <li>- other family members also use medicine</li> <li>- use more/less than prescribed</li> <li>- re-use medicine later</li> <li>- check on expiry date of medicine</li> </ul> </li> </ul>	<p>number of types taken</p> <p>always; often; sometimes; never</p> <p>always; often; sometimes; never</p> <p>always; often; sometimes; never</p> <p>always; often; sometimes; never</p> <p>always; often; sometimes; never</p>
	Non-medication self-treatment	Other activities	yes; no; uncertain; specifying if yes
	Consultation	<p>Consulting in lay reference network</p> <p>Consulting pharmacist</p> <p>Consulting alternative healers</p>	<p>no one; spouse; relatives; friends/ neighbours; colleagues/ acquaintances; medical persons; books/magazines; other</p> <p>always; often; sometimes; never</p> <p>yes; no; uncertain; for which conditions</p>

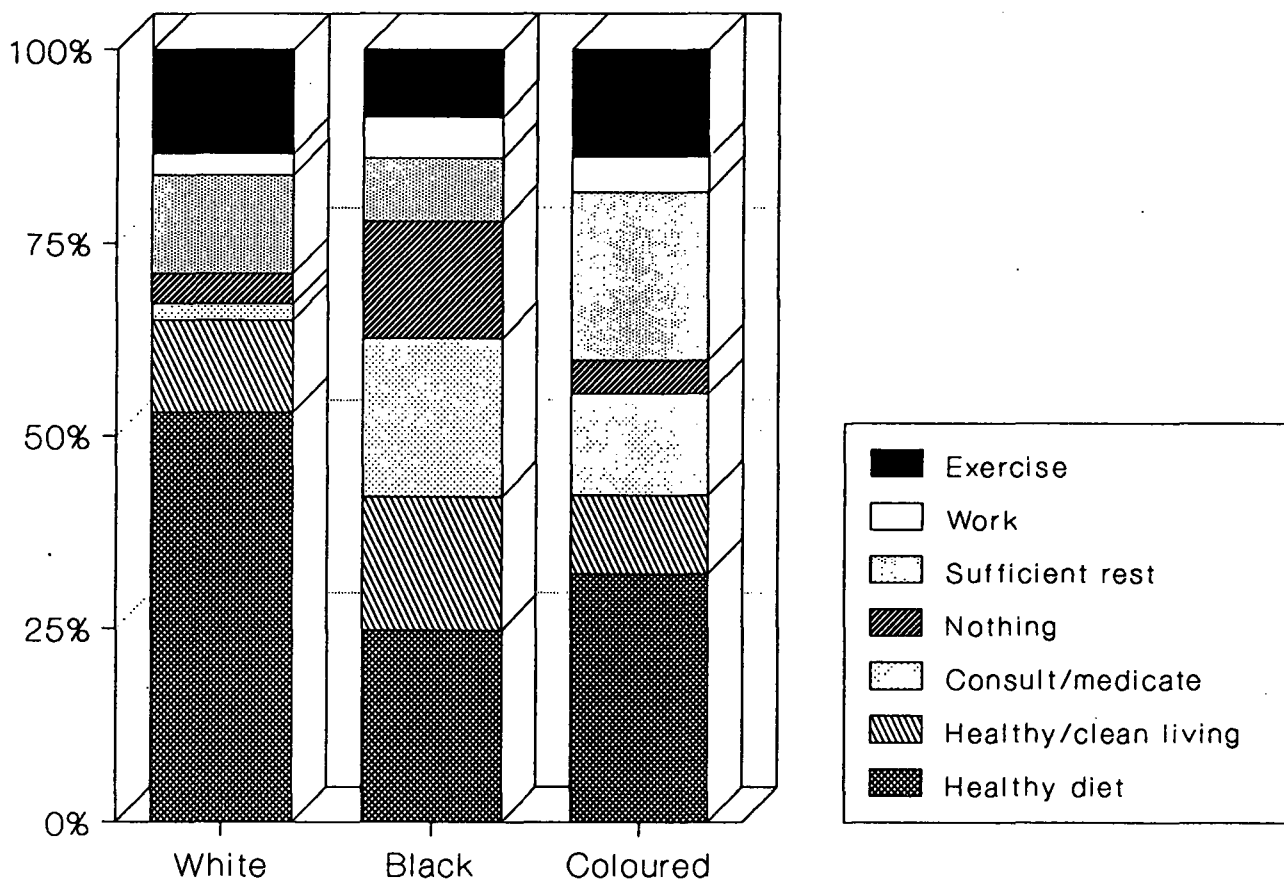
## 7. FINDINGS ON SELF-CARE

Due to the importance of the race/ethnicity variable, the data for the three study groups will be presented separately for each form of self-care studied.

### 7.1 PREVENTION

In response to the question on what action respondents take to *protect their health*, a healthy diet was emphasized by all three groups, while sufficient rest was stressed especially by the coloured respondents (*cf.* Figure 3).

**Figure 3: Most important protective health activities for whites, blacks and coloureds, in percentages**



The responses of the three groups regarding *routine physical, dental and Pap examinations* are presented in Table 9.

**Table 9: Routine physical, dental and Papanicolaou examinations for whites, blacks and coloureds, in percentages**

EXAMINATIONS	WHITE	BLACK	COLOURED
<i>Regular physical examination:</i> All members Some members	23,5 20,8  N = 148	15,3 18,0  N = 149 (Lambda = 0,024)	42,3 14,6  N = 136
<i>Regular dental examination:</i> All members Some members	67,8 11,4  N = 144	7,3 3,9  N = 149 (Lambda = 0,330)	32,8 29,9  N = 134
<i>Pap examination:</i> Semi-/annually Every 2-5 years Seldom Never Ignorant	59,7 12,8 12,8 10,1 0,0  N = 126 <sup>6</sup>	6,7 0,0 8,0 6,7 67,3  N = 129 <sup>6</sup> (Lambda = 0,320)	38,7 2,9 8,8 33,6 10,9  N = 117 <sup>6</sup>

These figures are self-evident and a similar picture emerged regarding *immunization* as reflected in Table 10.

**Table 10: Reported immunization against polio, diphtheria, whooping cough and tuberculosis for whites, blacks and coloureds, in percentages**

DISEASE	WHITE (N = 149)	BLACK (N = 150)	COLOURED (N = 137)
<i>Polio:</i> All members Does not know	94,0 2,7	37,3 15,3  (Eta = 0,394)	84,7 5,1

(Table continues)

**Table 10 (continued)**

DISEASE	WHITE (N = 149)	BLACK (N = 150)	COLOURED (N = 137)
<i>Diphtheria:</i> All members Does not know	91,3 2,7	21,3 25,3  (Eta = 0,459)	81,8 7,3
<i>Whooping cough:</i> All members Does not know	88,6 4,0	24,0 16,0  (Eta = 0,374)	80,3 8,0
<i>Tuberculosis:</i> All members Does not know	85,9 2,7	41,3 2,7  (Eta = 0,219)	83,9 5,8

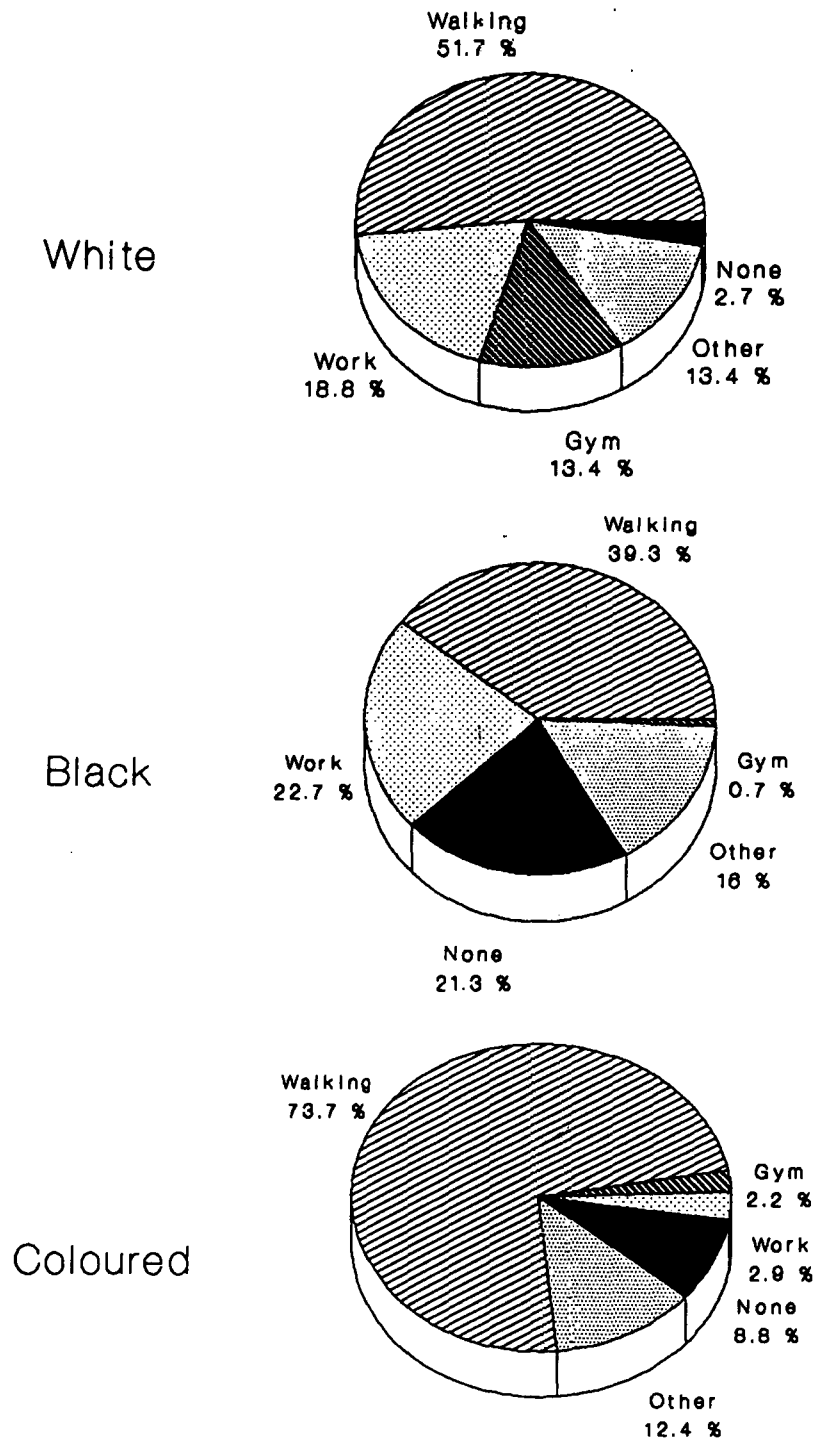
The three groups also differed regarding the most important form of *exercise* reported, and the whites clearly had more exercise options open to them (*cf.* Figure 4).

Referring to efforts to *include* or *avoid* certain *foods* in the diet, the white respondents were the most and the coloured respondents least concerned with the contents of the family's diet (*cf.* Table 11).

**Table 11: Inclusion or avoidance of food for whites, blacks and coloureds, in percentages**

DIET	WHITE	BLACK	COLOURED
Try to include certain foods	75,8	60,0	44,5
Try to avoid certain foods	43,6	32,0	20,4

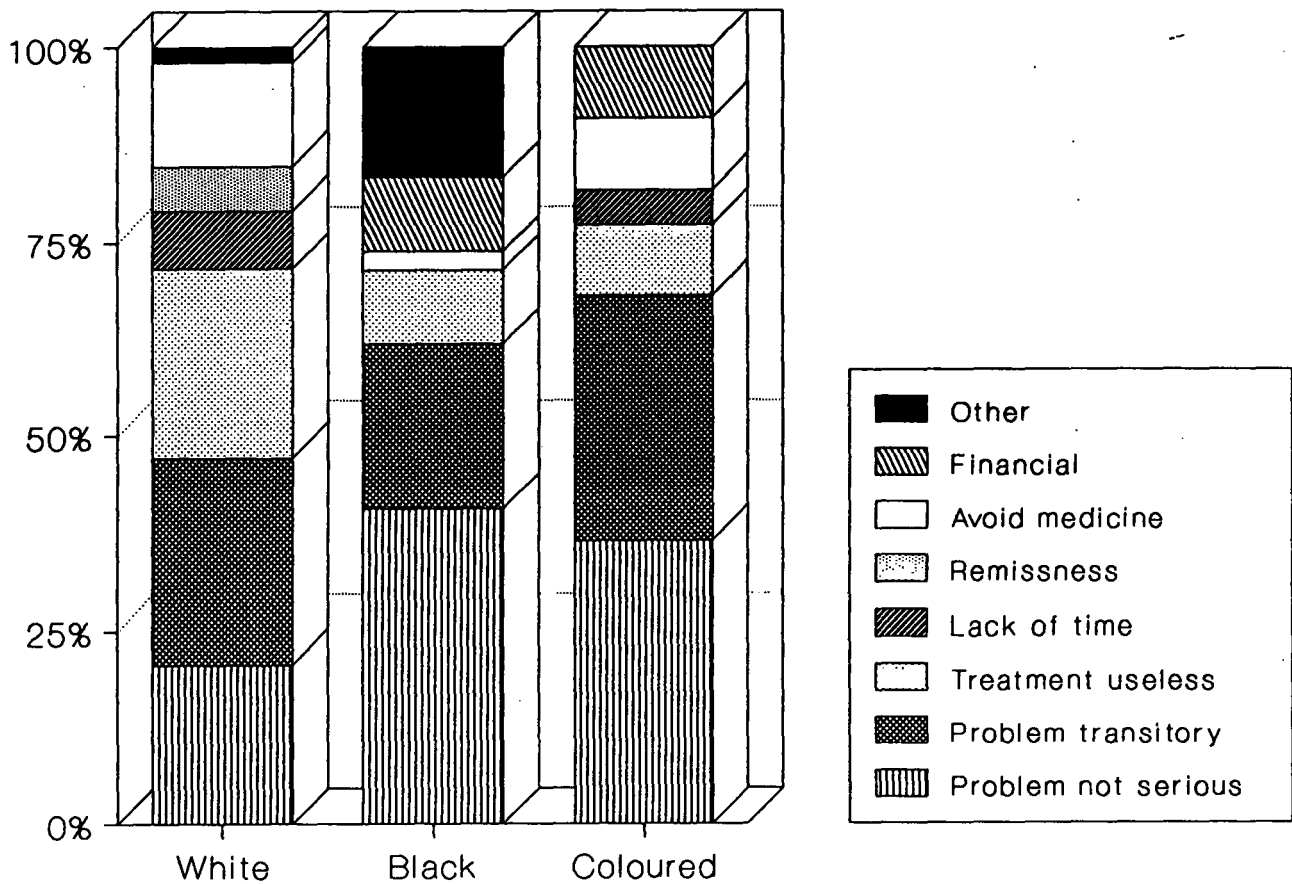
**Figure 4: Most important form of exercise for white, black and coloured respondents, in percentages**



## 7.2 DOING NOTHING ABOUT SYMPTOMS

In the white group 35,6 % of the respondents reported that they sometimes left symptoms untreated, compared to 28 % of the black and only 16,1 % of the coloured respondents. Among the reasons given for doing nothing about symptoms, it seemed that a problem regarded as not serious or transitory was most often left untreated (*cf.* Figure 5).

**Figure 5: Reasons cited for doing nothing about symptoms for whites, blacks and coloureds, in percentages**



### 7.3 SELF-MEDICATION

In several studies it has been found that blacks use less prescribed<sup>7</sup> as well as less non-prescribed (OTC) medicine than white groups (*cf.* Bush & Osterweis 1978: 187; Bush & Rabin 1976:1017, 1022; Gagnon *et al.* 1978:435; Osterweis *et al.* 1979:289; Rabin & Bush 1975:112). In this study the black group however reported the highest medicine use, both prescribed and non-prescribed. Regarding total medicine use (prescribed and OTC) over two weeks, the black group reported an average of 9,3 types, the white group 8,1 and the coloured 3,2. Table 12 shows the family use of OTC medicine during a two-week period for the three study groups.



**Table 12: Family use of non-prescribed medicine for whites, blacks and coloureds, in percentages**

NUMBER OF TYPES USED	WHITE (N = 149)	BLACK (N = 150)	COLOURED (N = 137)
None	18,8	10,6	45,3
1-3 types	47,7	28,0	41,6
4-6 types	15,4	30,0	7,3
7-11 types	12,8	16,7	2,9
12 or more types	5,4	14,7	2,9
	100,0	100,0	100,0
Average number of types used	3,8	6,5	1,9
		(Eta = 0,409)	

Not only did almost 90 % of the blacks use non-prescribed medicine, but larger proportions of them used more than three types of non-prescribed medicine. When family size was controlled, race/ethnicity remained the primary explanatory variable for prescribed and non-prescribed medicine use. The extent of medicine use in the black community is congruent with their relatively poorer perceived health status. More importantly, the rather high median age of the black sample implies more chronic and degenerative illness which in turn has implications for perceived health status and medicine use.

The use of prescribed medicine is associated with the consultation of physicians. In this study, 70,5 % of the white, 67,3 % of the black and 56,9 % of the coloured respondents reported a physician consultation during the year preceding the study. Although the consultation figures of the black and white respondents did not show much difference, a much bigger proportion of the white respondents' medicine was prescribed (*cf.* Table 13). The *types of medicine* taken by respondents over a two-week period are also presented in Table 13.

The use of especially painkillers and remedies for colds, coughs and flu was found to be common in all three groups and these findings show great similarities with studies on medicine use in other countries (*cf.* Buchanan 1979; Dunnell & Cartwright 1972; Jefferys *et al.* 1960; Knapp & Knapp 1972; Kohn & White 1976; Lader 1965; Matte & McLean 1978; Quah 1977; Rabin & Bush 1975; Segall & Goldstein 1989; Wadsworth *et al.* 1971).

**Table 13: Respondent's medicine use over two weeks for whites, blacks and coloureds, in percentages**

TYPES OF MEDICINE	WHITE (N = 149)		BLACK (N = 150)		COLOURED (N = 137)	
	USED	HOW MUCH* PRE-SCRIBED?	USED	HOW MUCH* PRE-SCRIBED?	USED	HOW MUCH* PRE-SCRIBED?
Painkillers	49,7	43,2	51,3	23,4	42,3	44,8
Remedies for fever	6,0	66,7	16,7	56,0	4,4	50,0
Remedies for indigestion	12,1	38,9	6,7	20,0	2,9	0,0
Laxatives	10,7	18,7	33,3	0,0	19,0	11,5
Remedies for sore throat and coughs	18,8	53,6	16,7	24,0	10,9	40,0
Remedies for colds	15,4	39,1	42,0	25,4	19,0	23,1
Remedies for flu	7,4	54,5	34,0	27,4	6,6	11,1
Remedies for sinus(itis)	11,4	58,8	0,0	0,0	0,0	0,0
Sedatives or sleeping tablets	12,8	94,7	6,0	83,3	2,9	75,0
Remedies for nerves	8,7	92,3	9,3	78,6	2,9	75,0
Remedies for skin conditions	6,7	100,0	9,3	50,0	0,7	0,0
Eye-drops/-ointments	9,4	42,8	8,7	46,1	2,9	50,0
Ear-drops	2,0	33,3	3,3	80,0	0,7	100,0
Nose-drops/-spray	8,1	50,0	2,0	33,3	0,7	100,0
Remedies for diarrhoea	0,7	0,0	5,3	62,5	0,0	0,0
Tonics	8,7	38,5	6,0	22,2	5,1	42,8
Remedies for rectal problems	1,3	50,0	0,7	0,0	1,4	0,0
Vitamins & minerals	22,1	24,2	10,7	31,2	5,1	28,6
Slimming aids	2,0	33,3	8,0	25,0	0,0	0,0
Antiseptics	12,1	11,1	12,0	16,7	3,6	0,0
Ointments/embrocations	14,8	40,9	10,7	43,7	13,9	47,4
Remedies for genital/urinary problems	1,3	100,0	0,0	0,0	2,2	33,3
Remedies for the heart/blood pressure	15,4	100,0	19,3	96,5	10,9	100,0
Patent medicine	5,4	12,5	12,7	0,0	8,0	0,0
Homeopathic medicine	0,7	100,0	0,0	0,0	0,0	0,0
Traditional black medicine	0,0	0,0	5,3	0,0	0,0	0,0
Herbs/kitchen remedies	6,7	0,0	6,0	0,0	2,9	0,0

\* "How much prescribed" refers to the averaged percentage of the particular medicine used, that had been on prescription. For example if 20 painkillers had been used, while only one a day (14 for the two weeks) had been prescribed, the percentage would be 70 (%). The percentages for the individual respondents were then averaged for all those that had used the particular medicine.

The number of different *types of medicine kept at home* by the respondents, as found by the interviewers, is shown in Table 14.

**Table 14: Prescribed and non-prescribed medicine kept at home for whites, blacks and coloureds, in percentages**

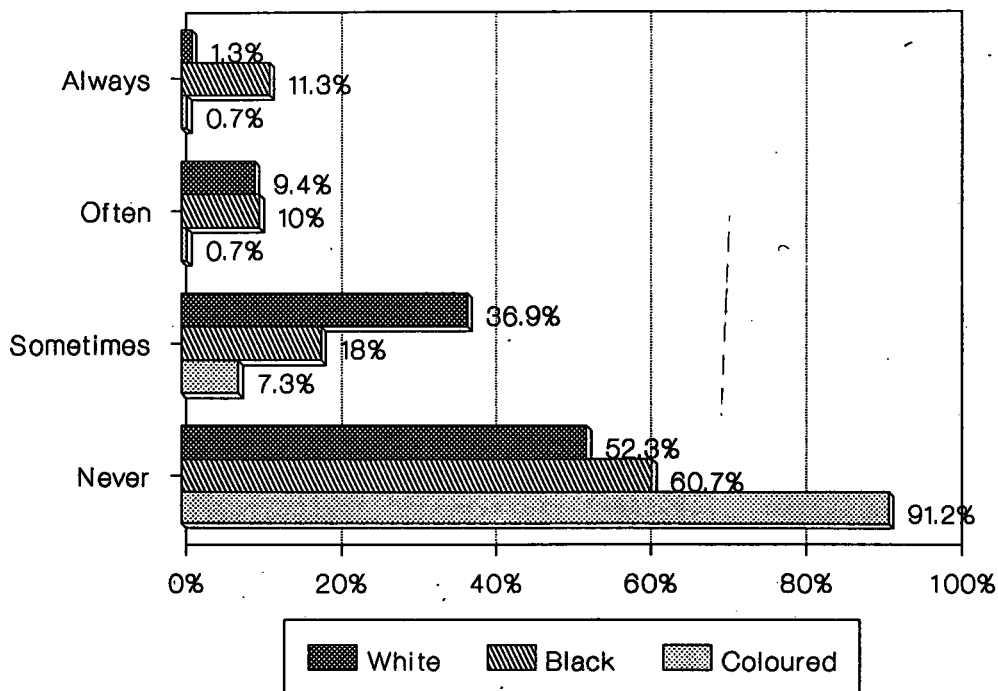
NUMBER OF TYPES OF MEDICINES	WHITE (N = 149)		BLACK (N = 150)		COLOURED (N = 137)	
	Rx	OTC	Rx	OTC	Rx	OTC
None	11,4	11,4	30,7	31,3	37,2	47,4
1-3 types	32,3	40,9	42,7	41,4	33,6	35,8
4-6 types	23,5	26,9	16,0	14,6	19,7	9,5
7-11 types	18,1	10,7	7,4	8,7	7,3	2,9
12 and more	14,7	10,1	3,2	4,0	2,2	4,4
Average number of types	7,09	5,15	2,89	2,83	3,21	2,0

It is clear that the white respondents stored considerably more types of medicine at home, both prescribed and OTC medicines. The maximum reported different types of prescribed medicine at home was 70 and the maximum for OTC medicine, 46 (both by the white respondents).

Various *alterations in the use or manipulation of prescribed medicines* are regarded by the medical establishment as non-compliance. In the self-care literature, however, these are interpreted as forms of self-medication and include requests to doctors to prescribe a particular type of medicine (i.e. self-medication with Rx), not completing a course of prescribed medicine, the use of prescribed medicine by other family members for whom it was not prescribed, alterations in the prescribed dosage, and the later re-use of prescribed medicine.

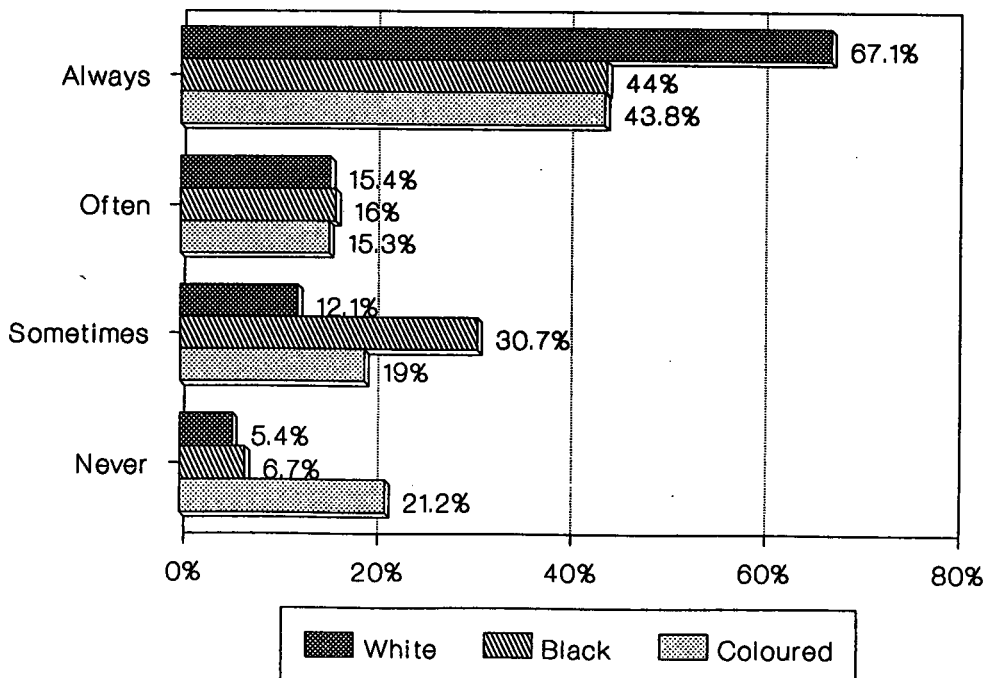
Regarding *specific medicine requests*, 47,6% of the white, 39,3 % of the black and only 8,7 % of the coloured respondents reported specific Rx requests. The frequency of this activity is presented in Figure 6.

**Figure 6: Frequency of specific medicine requests for whites, blacks and coloureds, in percentages**



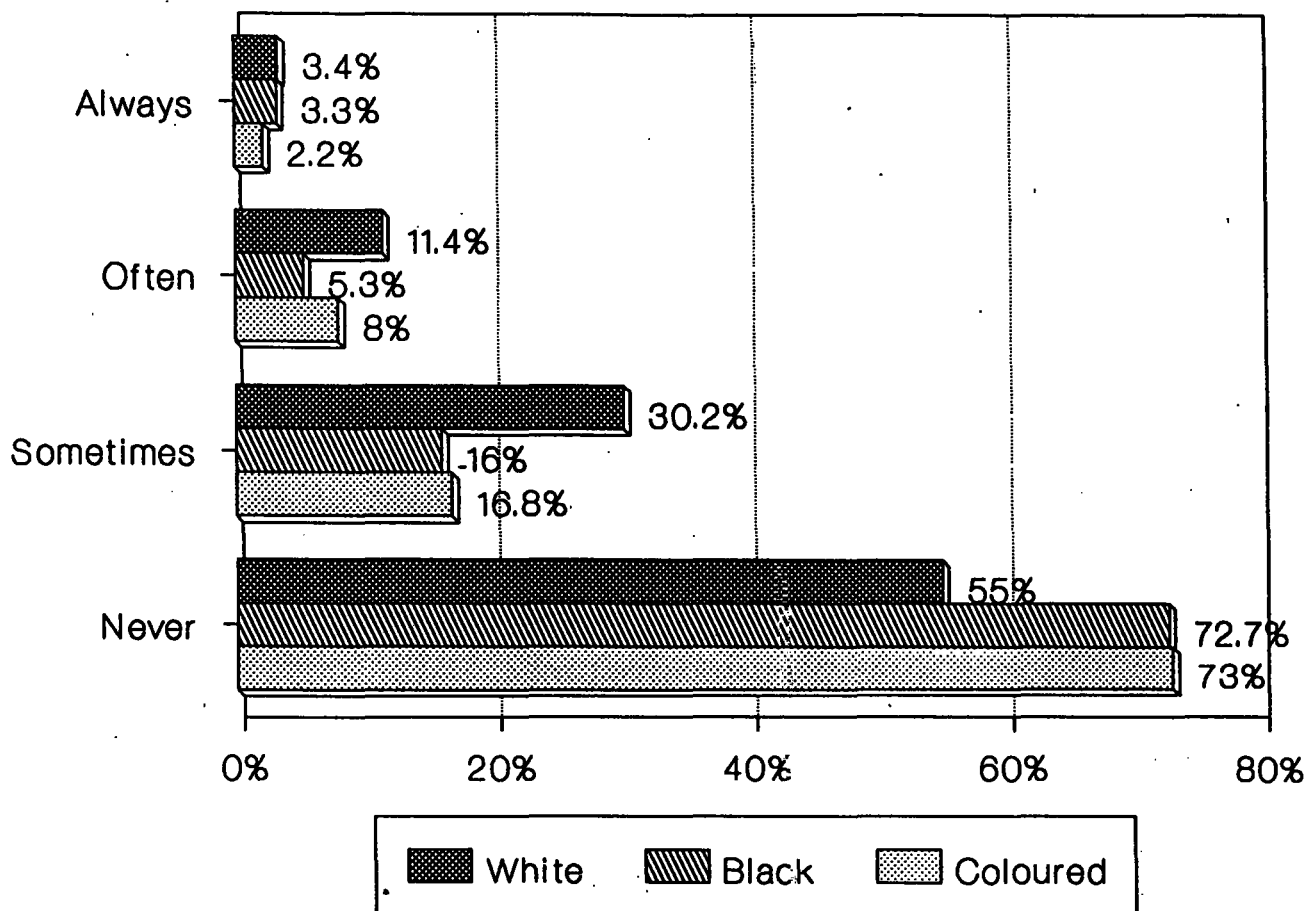
The most important reason given for *not completing a course of prescribed medicine*, was that the disease cleared up before the medicine was used up. The extent of Rx-course completion is indicated in Figure 7.

**Figure 7: Completion of a course of prescribed medicine for whites, blacks and coloureds, in percentages**



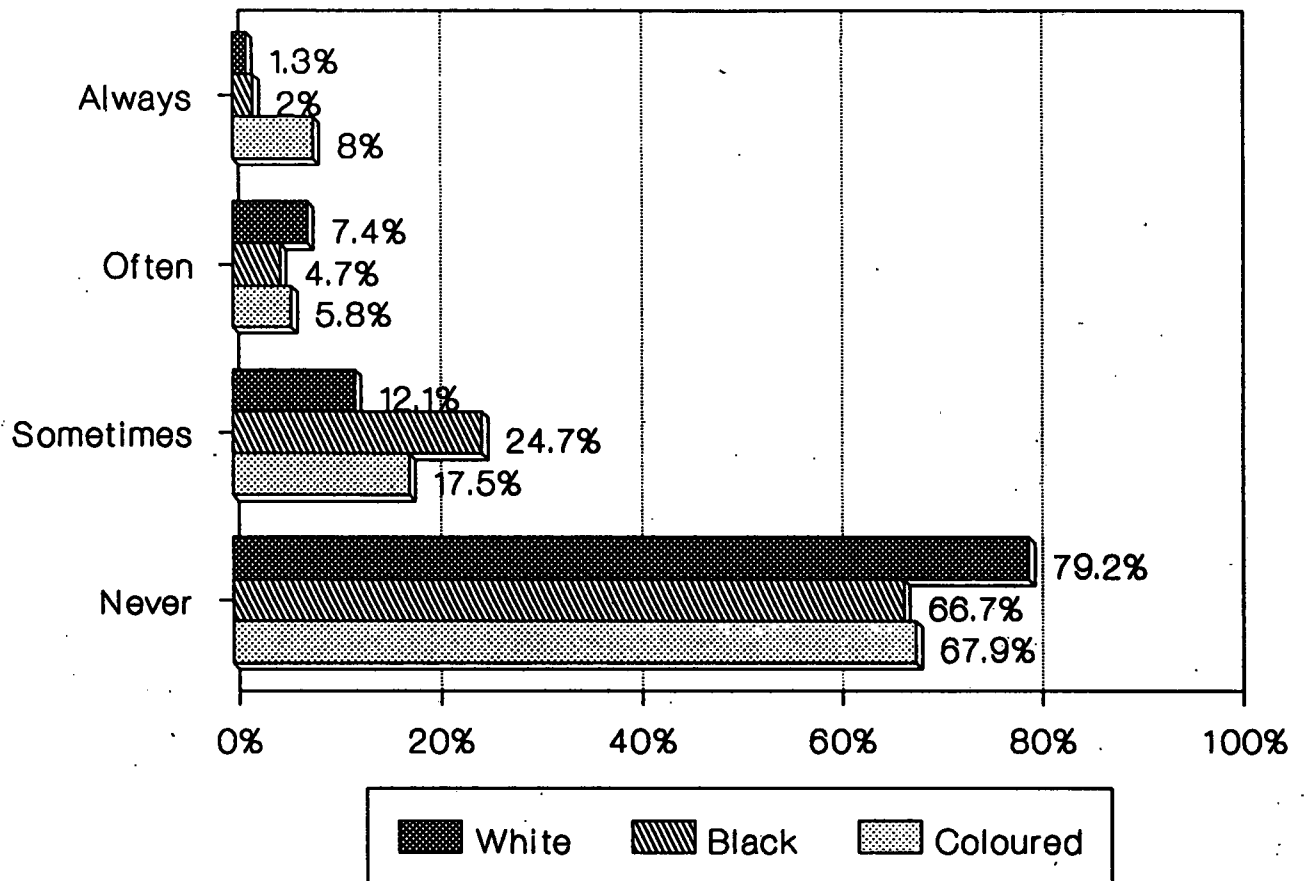
The use of prescribed medicine by other family members was found to occur most frequently among the white respondents. Figure 8 illustrates the frequency of Rx use by other family members for the three groups.

**Figure 8: Use of prescribed medicine by other family members for whites, blacks and coloureds, in percentages**



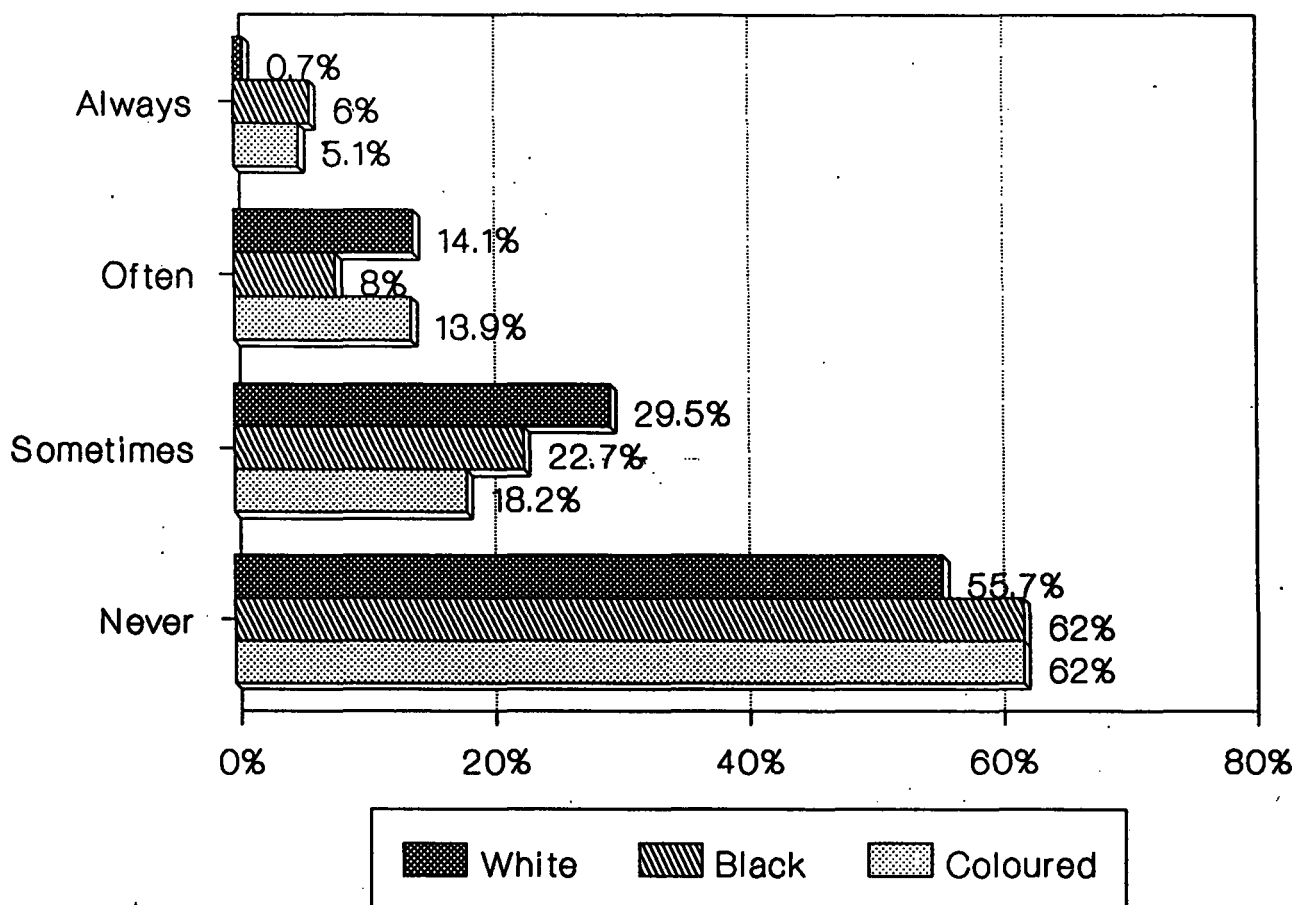
*Changes in the prescribed dosage of Rx* imply that patients take more or less (in this study mainly more) than the prescribed dosage. Especially the black and coloured groups reported this practice (*cf.* Figure 9). The most important explanations for dosage alterations were taking less because the disease cleared up, or taking more for faster recovery or relief.

**Figure 9: Changes in prescribed Rx dosage for whites, blacks and coloureds, in percentages**



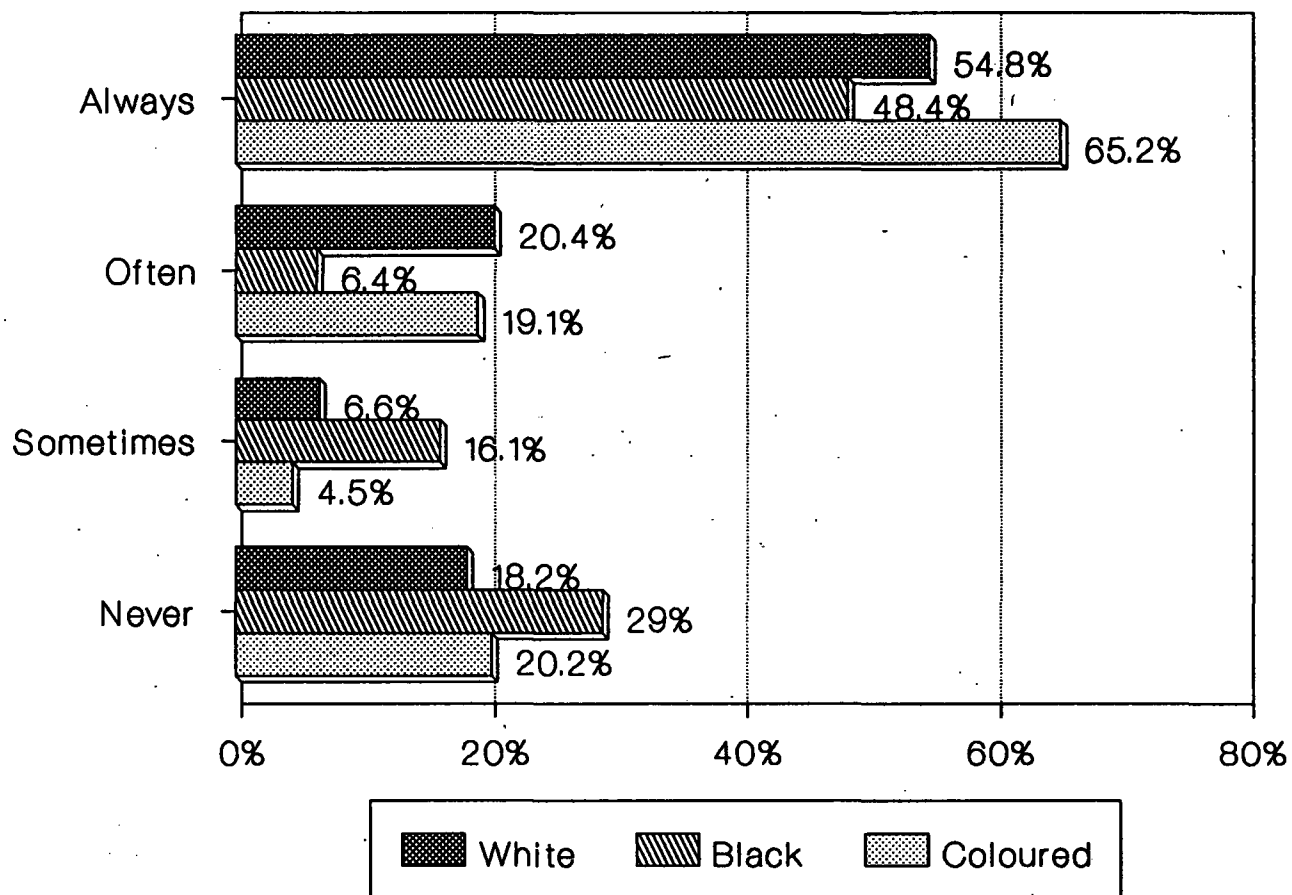
The white respondents showed a stronger tendency toward the *later re-use of Rx* (44,3 % as against 38 % in the other two groups) (*cf.* Figure 10). The most important motivation for this behaviour given by the respondents was that medicine *can* be used again - it will have the same effect for the same condition.

**Figure 10: Later re-use of prescribed medicine by whites, blacks and coloureds, in percentages**



Due to a sequential question in the questionnaire, a low response rate was received (137 whites, 93 blacks, 89 coloureds) regarding *checking the expiry date of medicine*. The in-depth interviews revealed however that there is little knowledge or even awareness of an expiry date, in both the black and coloured groups. Dispensing private practitioners in the coloured area allegedly avoid indicating expiry dates on medicines, since many patients interpret this as an effort to "make money" by selling more medicine. The findings of the study regarding checking on the expiry date of medicines are presented in Figure 11.

**Figure 11: Frequency of the checking of expiry dates of medicines by whites, blacks and coloureds, in percentages**



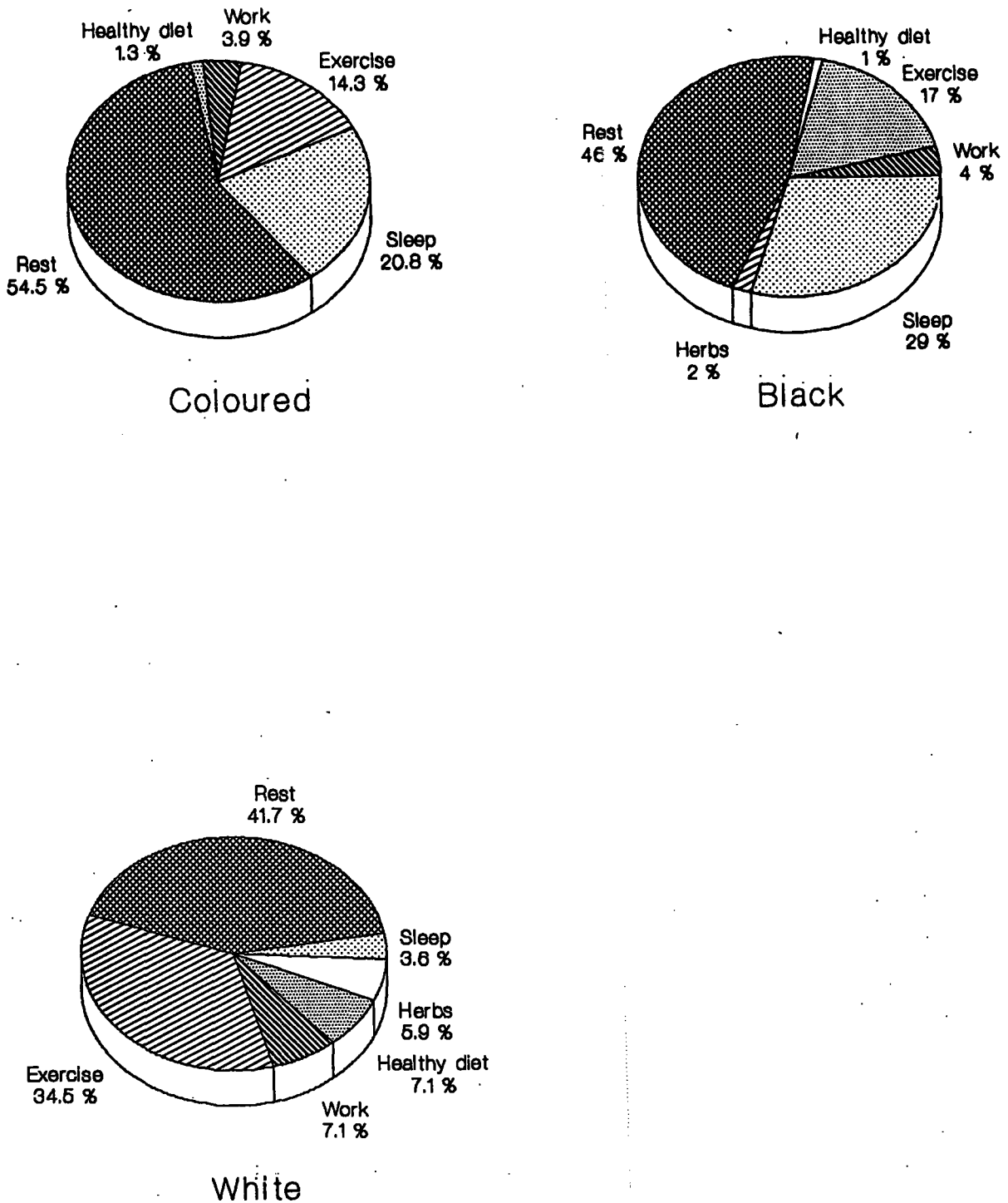
It is clear that self-medication in its different manifestations is widely practised by all groups, which confirms the view that self-medication is the most important component of self-care.

#### 7.4 NON-MEDICATION SELF-TREATMENT

More black respondents reported *non-medication self-treatment* than respondents in the other two groups (66,7 % as against 56 % in each of the other two groups). Rest was emphasized by all three groups, and sleep especially by the black and coloured groups. The data on non-medication self-treatment are depicted in Figure 12.



**Figure 12: Non-medication forms of treatment for whites, blacks and coloureds, in percentages**



**7.5 CONSULTATION BEHAVIOUR**

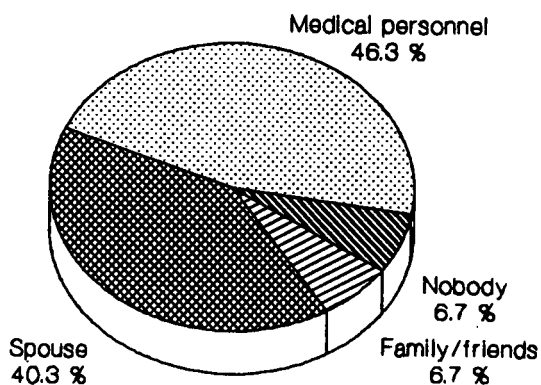
Regarding *consultation in the lay reference system*: For blacks and coloureds the spouse and, in addition, the family/friends of the individual seemed to be the most important persons for first consultation during symptom experience. These findings correspond with those of Booth and Babchuk (1972:94), Elliott-Binns (1973:256),

Fleming *et al.* (1984:956), Freer (1980:858), Matte and McLean (1978:611) and Quah (1977:26). According to the white respondents, medical personnel are consulted first as frequently as family/friends are. These differences among the study groups may be ascribed to the fact that the lay reference system varies among different cultures and subcultures; it is characterized by different norms regarding the sick role and the conception of disease as well as its causes and treatment (Freidson 1961:147). The interpersonal resources at an individual's disposal also play a role. The black and coloured groups have a more extended family system and less geographic mobility than the whites; they therefore use a greater number of kin in their immediate environment. In the black sample, problems of access to professional care, as well as a particular disease profile, have to be considered as variables that influence consultation behaviour. The responses to the question "With whom do you talk first or what do you consult with the first signs of a possible illness?" are summarized in **Figure 13**.

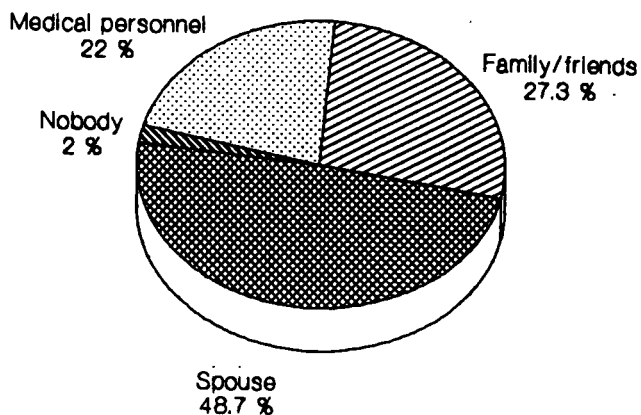
*Consulting a pharmacist* to recommend medicine seems to occur relatively infrequently in the coloured and black communities; 56,2 % of the coloured, 43,3 % of the black and only 27,5 % of the white respondents indicated that they "never" consult a pharmacist. In the coloured community this is probably due to the fact that all private practitioners are self-dispensing. Very few respondents reported consultation of alternative healers. **Consultation of traditional healers and the use of traditional medicine by the black community were allegedly under-reported (in-depth interview), because respondents did not want to be regarded as "backward".**

From the foregoing it is clear that there are certain similarities in the self-care patterns of the three groups, but also clear differences regarding the extent and forms of their self-care activities.

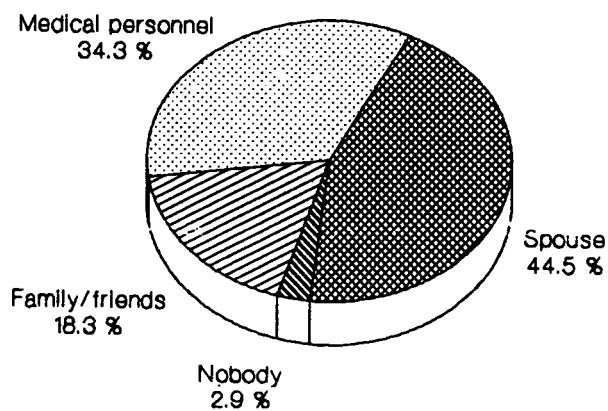
**Figure 13: Person(s) first consulted while experiencing symptoms for whites, blacks and coloureds, in percentages**



White



Black



Coloured

**8. FINDINGS REGARDING THE BEHAVIOURAL MODEL OF THE USE OF HEALTH-CARE SERVICES**

The findings on the influence of the predisposing, enabling and morbidity variables on the different forms of self-care will be discussed consecutively.

## 8.1 PREDISPOSING FACTORS AND SELF-CARE

According to a number of authors (e.g. Sharp *et al.* 1983:256; Wadsworth *et al.* 1971:81), the predisposing factors have little influence on the use of health care. In this study, however, a number of quite large association/correlation coefficients were found between race/ethnicity and different forms of self-care. This obviously cannot be taken at face value, because in South Africa the race/ethnicity variable is loaded with additional meanings and implications, like socio-economic status, the availability/accessibility of health care, and morbidity patterns. Table 15 nevertheless presents the relevant association or correlation coefficients between every predisposing factor and every form of self-care studied.

**Table 15: Association/correlation coefficients between the predisposing factors and forms of self-care for the total sample**

FORM OF SELF-CARE	RACE/ETHNICITY	AGE	MARITAL STATUS	FAMILY TYPE	EDUCATION	KNOWLEDGE	LOCUS OF CONTROL
Health protection	0,00 <sup>a*</sup>	0,004 <sup>a</sup>	0,00 <sup>a</sup>	0,004 <sup>a</sup>	0,011 <sup>a</sup>	0,007 <sup>a</sup>	0,006 <sup>a</sup>
Routine check-up	0,024 <sup>a</sup>	0,009 <sup>a</sup>	0,00 <sup>a</sup>	0,005 <sup>a</sup>	0,00 <sup>a</sup>	0,019 <sup>a</sup>	0,00 <sup>a</sup>
Dental check-up	0,330 <sup>a</sup>	0,057 <sup>a</sup>	0,013 <sup>a</sup>	0,022 <sup>a</sup>	0,264 <sup>a</sup>	0,286 <sup>a</sup>	0,00 <sup>a</sup>
Pap test	0,320 <sup>a</sup>	0,149 <sup>a</sup>	0,098 <sup>a</sup>	0,010 <sup>a</sup>	0,222 <sup>a</sup>	0,201 <sup>a</sup>	0,041 <sup>a</sup>
Inclusion of foods	0,280 <sup>c</sup>	0,231 <sup>c</sup>	0,213 <sup>c</sup>	0,094 <sup>c</sup>	0,400 <sup>c</sup>	0,487 <sup>c</sup>	0,071 <sup>c</sup>
Avoidance of foods	0,240 <sup>c</sup>	0,151 <sup>c</sup>	0,085 <sup>c</sup>	0,115 <sup>c</sup>	0,285 <sup>c</sup>	0,254 <sup>c</sup>	0,119 <sup>c</sup>
Immunization:							
Polio	0,394 <sup>c</sup>	0,00 <sup>c</sup>	0,008 <sup>c</sup>	0,155 <sup>c</sup>	0,00 <sup>c</sup>	0,349 <sup>c</sup>	0,064 <sup>c</sup>
Diphtheria	0,459 <sup>c</sup>	0,006 <sup>c</sup>	0,038 <sup>c</sup>	0,122 <sup>c</sup>	0,013 <sup>c</sup>	0,341 <sup>c</sup>	0,075 <sup>c</sup>
Whooping cough	0,374 <sup>c</sup>	0,00 <sup>c</sup>	0,025 <sup>c</sup>	0,172 <sup>c</sup>	0,006 <sup>c</sup>	0,271 <sup>c</sup>	0,132 <sup>c</sup>
Tuberculosis	0,219 <sup>c</sup>	0,008 <sup>c</sup>	0,023 <sup>c</sup>	0,097 <sup>c</sup>	0,00 <sup>c</sup>	0,223 <sup>c</sup>	0,094 <sup>c</sup>
Exercise	0,00 <sup>a</sup>	0,00 <sup>a</sup>	0,00 <sup>a</sup>	0,00 <sup>a</sup>	0,025 <sup>a</sup>	0,015 <sup>a</sup>	0,017 <sup>a</sup>
Doing nothing about symptoms	0,189 <sup>c</sup>	0,153 <sup>c</sup>	0,051 <sup>c</sup>	0,116 <sup>c</sup>	0,227 <sup>c</sup>	0,226 <sup>c</sup>	0,155 <sup>c</sup>
Total medicine use	0,429 <sup>c</sup>	0,203 <sup>c</sup>	0,061 <sup>c</sup>	0,096 <sup>c</sup>	0,207 <sup>c</sup>	0,142 <sup>c</sup>	0,018 <sup>c</sup>
OTC use	0,409 <sup>c</sup>	0,164 <sup>c</sup>	0,070 <sup>c</sup>	0,056 <sup>c</sup>	0,182 <sup>c</sup>	0,145 <sup>c</sup>	0,059 <sup>c</sup>
Request specific Rx	0,000 <sup>a</sup>	0,065 <sup>b</sup>	0,023 <sup>a</sup>	0,029 <sup>b</sup>	-0,147 <sup>b</sup>	-0,150 <sup>b</sup>	0,093 <sup>b</sup>
Complete course Rx	0,000 <sup>a</sup>	-0,066 <sup>b</sup>	0,016 <sup>a</sup>	0,150 <sup>b</sup>	-0,107 <sup>b</sup>	-0,105 <sup>b</sup>	0,077 <sup>b</sup>
Others use Rx	0,000 <sup>a</sup>	0,048 <sup>b</sup>	0,029 <sup>a</sup>	-0,044 <sup>b</sup>	-0,070 <sup>b</sup>	-0,076 <sup>b</sup>	-0,059 <sup>b</sup>
Use more/less Rx	0,000 <sup>a</sup>	-0,021 <sup>b</sup>	0,060 <sup>a</sup>	-0,033 <sup>b</sup>	0,054 <sup>b</sup>	0,072 <sup>b</sup>	-0,093 <sup>b</sup>
Re-use Rx later	0,000 <sup>a</sup>	0,062 <sup>b</sup>	0,086 <sup>a</sup>	-0,039 <sup>b</sup>	-0,089 <sup>b</sup>	-0,054 <sup>b</sup>	-0,103 <sup>b</sup>
Check on expiry date	0,045 <sup>a</sup>	0,005 <sup>b</sup>	0,079 <sup>a</sup>	-0,095 <sup>b</sup>	0,088 <sup>b</sup>	0,047 <sup>b</sup>	-0,025 <sup>b</sup>
Non-medication self-treatment	0,079 <sup>c</sup>	0,124 <sup>c</sup>	0,084 <sup>c</sup>	0,111 <sup>c</sup>	0,185 <sup>c</sup>	0,225 <sup>c</sup>	0,008 <sup>c</sup>
Whom first consulted	0,010 <sup>a</sup>	0,025 <sup>a</sup>	0,169 <sup>a</sup>	0,004 <sup>a</sup>	0,012 <sup>a</sup>	0,008 <sup>a</sup>	0,00 <sup>a</sup>
From whom most learnt	0,008 <sup>a</sup>	0,038 <sup>a</sup>	0,011 <sup>a</sup>	0,004 <sup>a</sup>	0,004 <sup>a</sup>	0,023 <sup>a</sup>	0,006 <sup>a</sup>
Pharmacist consulted	0,116 <sup>a</sup>	0,165 <sup>b</sup>	0,119 <sup>a</sup>	0,031 <sup>b</sup>	0,218 <sup>b</sup>	0,191 <sup>b</sup>	0,052 <sup>b</sup>

\* For interpretation of a, b and c, see NOTES at end of text.

Some of the largest correlation coefficients were found between race/ethnicity and preventive care, where the black study group consistently reported the lowest and the white study group the highest levels of routine physical and dental check-ups and Pap tests, as well as immunization levels against polio, diphtheria, whooping cough and tuberculosis. Race/ethnicity also showed the strongest association with OTC medicine use and requesting particular types of prescribed medicine. The black group reported the highest and the white group the lowest frequencies of OTC medicine use, while the white group indicated the most and the coloured group the least specific medicine requests. Even in the case of high association/correlation coefficients among the *other* predisposing factors and the different self-care forms, the three study groups differed in their responses. These findings are in keeping with the findings of several other researchers (*cf.* Bush & Osterweis 1978:187; Dean 1989b:151; Kroeger 1983:150; Quah 1985:357).

Despite the confounding of the *race/ethnicity* variable in this study, a few remarks should be made on the role of ethnicity in health and illness. Different ethnic groups are often characterized by distinctive cultural values and beliefs, which also find expression in their health and illness behaviour. In this vein the perception and definition of health and illness, disease explanations and acceptable forms of care are influenced by a group's traditions, religious beliefs, family organization, child-rearing practices, etc. (Litman 1974:504; Quah 1985:353; Suchman 1964:319). Until now little research on the relation between ethnicity and *self-care* has been done.

Compared with the whites and urbanized coloureds in South Africa, who have a biomedical approach to illness and health, the black population has to some extent a distinctive view of health which is seen as the expression of a cosmic equilibrium; and serious illness may be ascribed to an imbalance of the cosmic powers (Manganyi 1974:922). In theories of disease causation, black South Africans distinguish between diseases with a natural or clear cause and diseases which can only be explained by magic (Murdock 1980:8; Pretorius 1990:104; Read 1966:24). The particular theory of disease causation determines its treatment and by implication also self-care activities, both preventive and therapeutic.<sup>8</sup> The differences in the self-care behaviour of different race/ethnic groups in this study is therefore partly a political artifact, but may also be associated with some real ethnic/cultural differences in health behaviour.

*Education* as a predisposing factor was strongly associated with the inclusion of specific foods in the diet, doing nothing about symptoms, storing medicines at

home and consulting pharmacists. Within each study group, education was found to be associated with different forms of self-care. There is little literature available on the relationship between education and self-care, which inhibits meaningful comparisons with other studies.

*Health knowledge* is closely related to educational level, but these two variables were not found to be associated with identical (or in an identical manner with different) self-care forms. It is therefore important to separate them in a study of self-care. Health knowledge was the variable which produced the largest coefficients with the inclusion of specific foods in the diet, non-medication self-treatment, immunization against TB and the use of prescribed medicines by other family members. Apart from educational level, it also had the highest association with doing nothing about symptoms. As in the case of education, health knowledge was co-associated with several other forms of self-care within each group.

The remaining predisposing factors, namely *age, marital status, family type* and *health locus of control* played a less important role in explaining self-care behaviour.

## 8.2 ENABLING FACTORS AND SELF-CARE

Previous surveys found that the enabling variables had only a small effect on health behaviour (Mechanic 1979:392). In this study some enabling factors, however, produced quite large association/correlation coefficients with some forms of self-care. **Table 16** presents the association/correlation coefficients between the two sets of variables.

**Table 16** clearly indicates that among the enabling factors, *income* was the most important variable regarding particular self-care activities. Strong associations were found between income and routine physical and dental check-ups, the inclusion of specific foods in the diet, doing nothing about symptoms and the use of OTC medicines. Some of these associations are however probably due to other intervening or antecedent variables, like health knowledge, level of education and race/ethnicity. The income variable seems to be of more relevance in the use of formal health-care services.

**Table 16: Association/correlation coefficients between the enabling variables and forms of self-care for the total sample**

FORM OF SELF-CARE	INCOME	SOURCE OF CARE	TRAVEL TO CARE	TIME TO CARE	PAYMENT FOR CARE
Health protection	0,00 <sup>a</sup>	0,011 <sup>a</sup>	0,004 <sup>a</sup>	0,00 <sup>a</sup>	0,025 <sup>a</sup>
Routine check-up	0,00 <sup>a</sup>	0,019 <sup>a</sup>	0,00 <sup>a</sup>	0,00 <sup>a</sup>	0,00 <sup>a</sup>
Dental check-up	0,333 <sup>a</sup>	0,189 <sup>a</sup>	0,308 <sup>a</sup>	0,008 <sup>a</sup>	0,304 <sup>a</sup>
Pap test	0,277 <sup>a</sup>	0,187 <sup>a</sup>	0,211 <sup>a</sup>	0,067 <sup>a</sup>	0,250 <sup>a</sup>
Inclusion of foods	0,372 <sup>c</sup>	0,342 <sup>c</sup>	0,316 <sup>c</sup>	0,214 <sup>c</sup>	0,314 <sup>c</sup>
Avoidance of foods	0,202 <sup>c</sup>	0,305 <sup>c</sup>	0,215 <sup>c</sup>	0,064 <sup>c</sup>	0,184 <sup>c</sup>
Immunization:					
Polio	0,00 <sup>a</sup>	0,00 <sup>a</sup>	0,00 <sup>a</sup>	0,00 <sup>a</sup>	0,032 <sup>a</sup>
Diphtheria	0,013 <sup>a</sup>	0,006 <sup>a</sup>	0,013 <sup>a</sup>	0,00 <sup>a</sup>	0,032 <sup>a</sup>
Whooping cough	0,013 <sup>a</sup>	0,032 <sup>a</sup>	0,038 <sup>a</sup>	0,00 <sup>a</sup>	0,013 <sup>a</sup>
Tuberculosis	0,00 <sup>a</sup>	0,00 <sup>a</sup>	0,00 <sup>a</sup>	0,00 <sup>a</sup>	0,038 <sup>a</sup>
Exercise	0,00 <sup>a</sup>	0,00 <sup>a</sup>	0,005 <sup>a</sup>	0,00 <sup>a</sup>	0,005 <sup>a</sup>
Doing nothing about symptoms	0,245 <sup>c</sup>	0,196 <sup>c</sup>	0,224 <sup>c</sup>	0,107 <sup>c</sup>	0,167 <sup>c</sup>
Total medicine use	0,162 <sup>c</sup>	0,152 <sup>c</sup>	0,194 <sup>c</sup>	0,149 <sup>c</sup>	0,111 <sup>c</sup>
OTC use	0,180 <sup>c</sup>	0,019 <sup>c</sup>	0,015 <sup>c</sup>	0,00 <sup>c</sup>	0,004 <sup>c</sup>
Request specific Rx	0,092 <sup>b</sup>	0,00 <sup>a</sup>	0,00 <sup>a</sup>	0,146 <sup>b</sup>	0,00 <sup>a</sup>
Complete course Rx	-0,072 <sup>b</sup>	0,014 <sup>a</sup>	0,00 <sup>a</sup>	0,120 <sup>b</sup>	0,005 <sup>a</sup>
Others use Rx	-0,090 <sup>b</sup>	0,00 <sup>a</sup>	0,007 <sup>a</sup>	0,072 <sup>b</sup>	0,00 <sup>a</sup>
Use more/less Rx	0,059 <sup>b</sup>	0,00 <sup>a</sup>	0,016 <sup>a</sup>	-0,112 <sup>b</sup>	0,00 <sup>a</sup>
Re-use Rx later	-0,060 <sup>b</sup>	0,006 <sup>a</sup>	0,00 <sup>a</sup>	-0,008 <sup>b</sup>	0,00 <sup>a</sup>
Check on expiry date	0,129 <sup>b</sup>	0,079 <sup>a</sup>	0,175 <sup>a</sup>	-0,099 <sup>b</sup>	0,090 <sup>a</sup>
Non-medication self-treatment	0,108 <sup>c</sup>	0,092 <sup>c</sup>	0,160 <sup>c</sup>	0,168 <sup>c</sup>	0,076 <sup>c</sup>
Whom first consulted	0,033 <sup>a</sup>	0,00 <sup>a</sup>	0,004 <sup>a</sup>	0,00 <sup>a</sup>	0,012 <sup>a</sup>
From whom most learnt	0,035 <sup>a</sup>	0,00 <sup>a</sup>	0,00 <sup>a</sup>	0,004 <sup>a</sup>	0,011 <sup>a</sup>
Pharmacist consulted	-0,192 <sup>b</sup>	0,155 <sup>a</sup>	0,155 <sup>a</sup>	0,227 <sup>b</sup>	0,155 <sup>a</sup>

The remaining enabling factors, namely the *availability of a usual source of formal care, the medium of transport* and the *travelling time* to formal health care, generally did not produce large associations with the different forms of self-care studied. Some associations were found between these variables and doing nothing about symptoms, the use of OTC medicine, specific Rx requests, completing an Rx course, alterations in Rx doses, non-medication self-treatment and consultations with pharmacists. It was found that self-care was not used as a substitute for formal health care, but that problematic availability and accessibility of formal health care rendered more prominence to some forms of self-care as treatment options. It also became clear that the subjective experience of the affordability, availability and accessibility of formal health care is an important variable, which may even eclipse the objective facts of health-care provision.

### 8.3 PERCEIVED MORBIDITY AND SELF-CARE

In Andersen's behavioural model of health-care use, perceived morbidity or the need for care is the independent variable or most important determinant of the use of health care. The importance of the perceived morbidity variable was initially established by studies focusing mainly on the use of formal health care (*cf.* Bush & Osterweis 1978; Dean 1986; 1989b; Dunnell & Cartwright 1972; Gagnon *et al.* 1978; Jackson *et al.* 1982; Rabin & Bush 1975; Rundall & Wheeler 1979; Sharp *et al.* 1983). It also seemed to be the deciding factor regarding the threshold between self-care and the use of professional care. In this study too respondents reported treating less serious conditions with self-care. None the less, little research so far seems to focus on the relationship between perceived morbidity and different forms of self-care.

As perceived morbidity was measured on family level, it could only be related to those self-care variables measured at family level. The association/correlation coefficients between perceived family morbidity and these family level variables are set out in Table 17.

**Table 17: Association/correlation coefficients between perceived family morbidity and selected forms of self-care for the total sample and the three subgroups separately**

FORM OF SELF-CARE	TOTAL	WHITE	BLACK	COLOURED
Routine check-up <sup>c</sup>	0,030	0,270	0,281	0,112
Inclusion of foods <sup>c</sup>	0,077	0,105	0,153	0,106
Avoidance of foods <sup>c</sup>	0,154	0,272	0,291	0,087
Immunization:				
Polio <sup>c</sup>	0,164	0,010	0,048	0,169
Diphtheria <sup>c</sup>	0,149	0,013	0,190	0,192
Whooping cough <sup>c</sup>	0,171	0,217	0,234	0,142
Tuberculosis <sup>c</sup>	0,126	0,234	0,106	0,012
Rx use <sup>c</sup>	0,321	0,677	0,678	0,714
OTC use <sup>c</sup>	0,330	0,144	0,378	0,283
Complete course Rx <sup>b</sup>	0,079	0,088	0,044	-0,061
Others use Rx <sup>b</sup>	-0,001	-0,035	-0,160	-0,055
Re-use Rx later <sup>b</sup>	0,022	0,016	0,046	-0,129

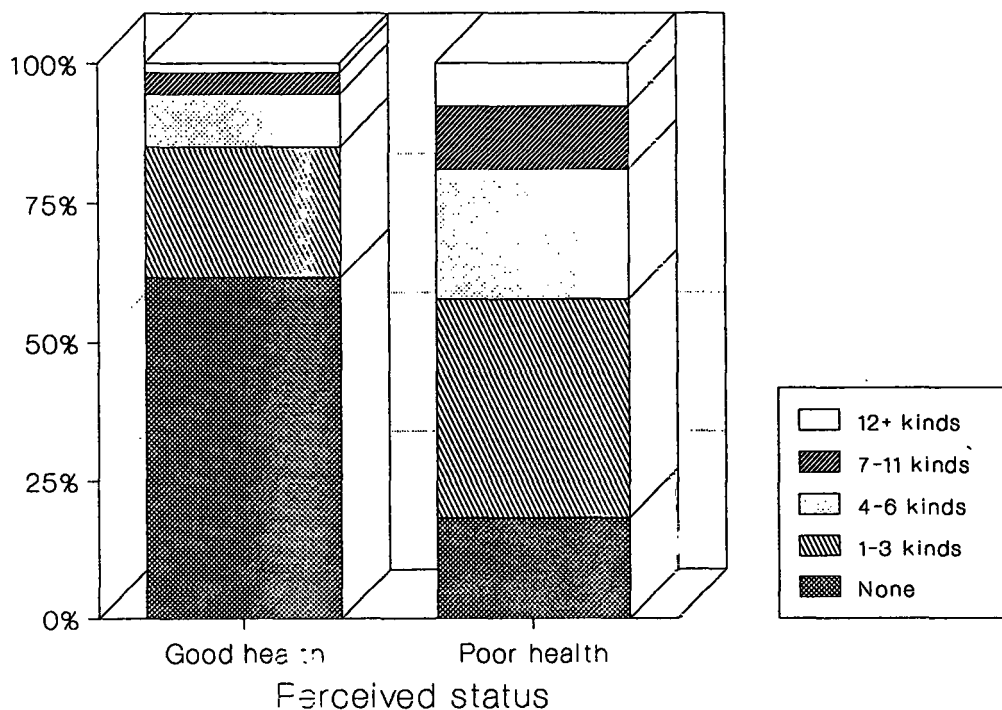
It seemed that perceived *high* family morbidity was associated with routine physical check-ups, the avoidance of particular foods and OTC medicine use in the white and black study groups, and with OTC medicine use in the black and the



coloured groups. In the black group perceived low family morbidity was associated with the use of Rx by other family members and in the coloured group with the later re-use of prescribed medicines. Some of the individual components of the family morbidity index were also associated with particular forms of self-care, notably the evaluation of own and family health as poor, and worry/anxiety about own and family health. Different individual index components were often found to be associated with different self-care activities in the three groups.

The perceived family morbidity variable really came into its own in explaining prescribed medicine use - an aspect of formal health care. A comparison between the Rx use of families with good and poor perceived health status is provided in Figure 14.

**Figure 14: Rx use according to perceived family health status for the total sample, in percentages**

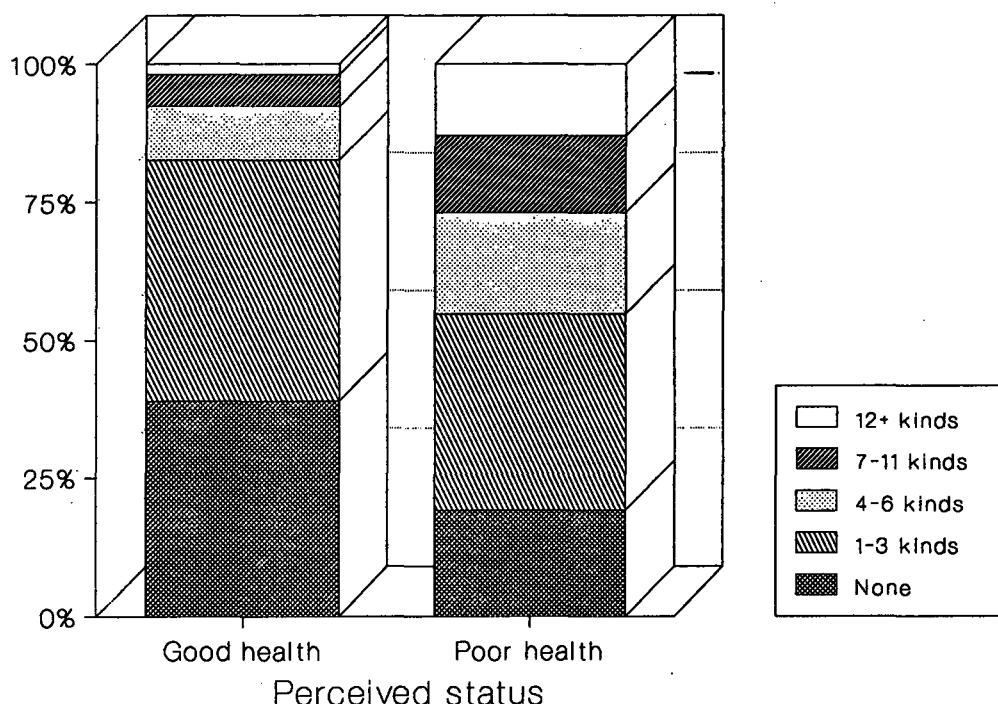


It is clear that the families with poor perceived health status not only tended to use prescribed medicine, but also used greater volumes of these substances. It is also noticeable that almost 40 % of the families with a good perceived health status

had used prescribed medicines during the preceding year. In controlling for race/ethnicity it appeared that despite the black group's general perceived poor health status, they used considerably fewer kinds of prescribed medicine than the white group, who reported the best perceived family health status. The coloured group with an intermediate health status reported the smallest extent of prescribed medicine use.

The perceived family morbidity variable showed quite large correlation coefficients with OTC medicine use, but as in the case with prescribed medicines, families in all three samples with a good perceived health status likewise reported OTC medicine use. Figure 15 provides a comparison between OTC medicine use of families with good and poor reported health status.

**Figure 15: Use of OTC medicine according to perceived family health status for the total sample, in percentages**



There may be several reasons for the reported medicine use by families in "good health": (1) Less acute symptoms may be so common that people do not regard themselves as "ill"; (2) chronic-degenerative conditions may be controlled by medication, so that sufferers see themselves as relatively healthy; (3) people may define themselves as healthy within the context of their age and general living conditions; (4) some medicines may be taken for preventive purposes; and (5) medicine use was measured for the two weeks preceding the interview; at the time of the interview their health status may have improved.

A new index for perceived personal morbidity was developed using only those components of the family morbidity index that had relevance to the respondent. In the black and coloured groups a good perceived personal health status was associated with doing nothing about symptoms and a poor perceived personal health status with non-medication self-treatment. In the white group low perceived personal morbidity was related to the consultation of pharmacists.

It seems then that perceived morbidity is especially relevant in explaining the use of formal health care services. In view of the findings of this study this is not hard to explain. People with perceived serious conditions turn to the professional care system, while less serious conditions and some types of preventive and health maintenance behaviour (even prolonged, chronic degenerative conditions) are treated with self-care activities.

## **9. THE POTENTIAL OF SELF-CARE AS A HEALTH-CARE RESOURCE**

The motivation for self-care development within the context of affordable health care rests on two arguments: (1) The universality, extent and effectiveness of self-care; and (2) the potential benefits of self-care for the professional care system. Regarding the first argument, Dean (1981:673-674) refers to self-care as the basic health behaviour in all societies. South Africa with its rich indigenous flora has a strong tradition of self-care, as well as of folk medicine. The historical documentation of self-care in South Africa however concerns mostly the white population (*cf.* Botha 1926; Burrows 1958; Grobbelaar *et al.* 1977; Laidler March 1937; July 1937; Laidler 1938; Laidler & Gelfand 1971; Suid-Afrikaanse Uitsaaikorporasie 1962; Searle 1965). It was only during the nineteenth century that professional health care here attained the status of the officially recognized and approved form of health care. In this study a high incidence in each of several forms of self-care was found, although the self-care patterns of the three study

groups showed considerable differences. If self-care has such a strong manifestation, it seems only logical to develop its possibilities. Concerning the effectiveness of self-care, several studies demonstrated that self-care is largely rational, responsible and relevant (Bradshaw 1977:161; Dean 1986:281; Fleming *et al.* 1984:951; Levin 1977a:116; 1977b:51). It may even be less dangerous and invasive than, and as effective as, professional care with regard to preventive care, controlling symptomatic episodes, less serious conditions and injuries, and even continuing care for chronic-degenerative diseases.

Regarding the cost benefits of self-care, most authors agree that self-care may bring about direct or indirect savings in health-care provision. Levin *et al.* (1977:26) argue that there is an inherent economy in the concept of consumer as self-provider: the majority of health skills are immediately available and may be communicated to others through a socialization process. The self-care skills may thus have a multiplier effect. Self-care development should also lead to a more limited, but a more precise and appropriate use of formal health care (Fleming *et al.* 1984:951; Levin 1977a:119). More specifically, greater self-care may reduce the demand for professional primary care - cost savings can then be brought about through a decrease in the inappropriate use of professional sources. Also due to the labour-intensive nature of the health industry, costs may be reduced by more self-care skills (Fuchs 1974:208). In addition, self-care may be the only resource that can provide for the increasing demand for care for chronic degenerative patients. Finally, the need for formal health care may be reduced by establishing a healthier population through extensive self-care skills. However, it should be pointed out that these arguments have been developed in industrialized countries, with extensive formal-care provision. Countries with inadequate professional care and different disease profiles may not experience such cost benefits in health-care provision.

It should be stressed that some warnings have also been sounded about the supposed cost-saving effects of self-care. A comprehensive self-care development programme will require great financial inputs and the costs involved in self-treatment and lay people's time must be taken into account. Moreover, there is, according to Dean (1986:282), no guarantee that self-care development will reduce the size of health budgets. It can also not be predicted how the economic benefits, which may issue from greater self-care, will be redistributed among consumers and the medical complex (Levin *et al.* 1977:46).

## 9.1 EDUCATION FOR SELF-CARE

There is considerable consensus in the self-care literature that self-care skills may be developed through *educational programmes*. The obvious strategy is based on knowledge of the extent, patterns, usefulness and value of *existing* self-care actions, to determine where additional education is necessary. In this regard it is extremely important to take lay preference for additional skills, as well as the sociocultural context of self-care behaviour into account (Kickbusch 1989:126; Levin 1977b:53). Especially in view of South Africa's varied population composition, any self-care development strategy will have to take cultural and educational differences into consideration. The focus should furthermore be on long-term and continued programmes, as well as the periodic evaluation, revision and improvement of such programmes (Levin 1976b:75; Levin *et al.* 1977:61). On the other hand the evaluation of professional skills is equally important in order to determine which of those can be transferred to the lay domain.

Regarding the contents of self-care development programmes, the necessity of lay participation is emphasized continuously (Levin *et al.* 1977:41). Apart from this, certain themes which "should" be addressed in self-care education are commonly found in the literature. The most important of these are (Bush & Rabin 1976:1022; Lafaille 1983:171; Levin 1976b:75; Quah 1977:28; Van der Geest 1987:298; Williamson & Danaher 1978:91, 98, 99, 101, 155-156):

- knowledge of disease causation;
- preventive care, especially exercise, hygiene, a healthy diet and stress management;
- education for self-diagnosing and decision making regarding consultation and treatment;
- knowledge about recommended self-treatment for specific conditions;
- information about alternative care interventions;
- education about the correct application of treatment and the length of time that self-treatment must be maintained;
- information about the possible interaction effects of different types of medicines taken together, as well as the direct toxic effects of medicines;
- conditions under which medicines should be stored, with special reference to heat, light and humidity;
- knowledge about self-monitoring in the case of certain chronic degenerative conditions.

Regarding the current system of medicine information provision, several authors (*cf.* Abosedo 1984:703; Pratt 1973:24; Van der Geest 1987:298) sharply criticize the inadequate information on medicine leaflets. According to these authors it should be specified what the medicine "does", how it should be taken and stored, possible side-effects and problems and how these should be handled, how long-term treatment should be managed, and what actions should be taken in case of an overdose. In South Africa the problem of inadequate medicine information is exacerbated by (1) the removal of leaflets from packaged prescribed medicines; (2) the inaccessibility of the medical-technical jargon of available leaflets; (3) the low level of literacy of a sizable part of South Africa's population; and (4) the workload and language differences of doctors and nurses in provincial hospitals and clinics which hamper detailed and repeated oral medication instructions.

A one-sided education process directed at self-care practitioners is not an adequate guarantee for the development of this health resource; the education of professional care providers regarding self-care is equally important. The syllabi of medical schools will have to incorporate new goals and methods, in order to implement the new "partnership" in health care and enable practitioners to transfer diagnostic and treatment skills to the public (Levin *et al.* 1977:43). "Physicians and other providers must learn to accept more self-confident and knowledgeable patients ... professionals will need to rethink their role *vis-à-vis* consumers. They will have to be prepared for greater communication and greater explanation of treatments and drugs ... It is not in the training of current medical students" (Kronenfeld 1979:266).

Considering the *contexts* for self-care education, it is generally agreed that the largest potential for self-care development lies in the education of children at schools (Levin 1977b:53; Matte & McLean 1978:611; Quah 1977:28). It is during the childhood years that a person's self-perception as a competent decision maker in health may be established, as well as the conviction that self-care skills can be extended. Self-care education programmes in schools will need the support and approval of families, communities, educational authorities and the professional care system. South Africa does not yet have compulsory education for blacks and in view of the current situation in black education, self-care education will initially only have viability in the white community, and then only if the idea of self-care has wide sanctioning.

Self-care education for adults may be conveyed by health workers, co-workers in the work situation, church organizations, unions, women's groups, libraries and the

mass media (Abosedo 1984:703; Levin 1977b:49; Williamson & Danaher 1978: 166, 167). The goal should be general access to information about disease, its prevention and treatment. Apart from knowledge transfer, professional care providers can perform the following functions in aid of self-care development:

- the evaluation of existing self-care practices in terms of their worth
- the creation of technical criteria for the selection of clinical skills which could be transferred to the lay sector
- the design or redesign of new monitoring, diagnostic and treatment technology appropriate to self-care (Levin 1976a:209; Levin *et al.* 1977: 55).

Any effort towards self-care education will have to take cognizance of particular *problems* which may hinder progress. The first problem is that existing health education and health maintenance programmes cannot simply be expanded to include self-care skills. Current programmes are physiologically based and mainly oriented towards the prevention of specific conditions (especially cardio-vascular diseases and cancer) and medical-scientific intervention (Dean 1989b:151; Williamson & Danaher 1978:140, 161). A totally new approach will be needed regarding the contents of self-care development programmes, and health maintenance will have to be addressed on a much wider front.

Of concern to any education or information programme is the question whether information alone is sufficient for behaviour modification. It seems that information provision is effective regarding preventive care, but less successful in convincing people to give up harmful habits (Bradshaw 1977:162; Williamson & Danaher 1978:140). According to Wikler (1978:238-239) the process often takes place in reverse and information seeking comes after changes in attitudes and behaviour. The implication of this is that the initial goal of a self-care education programme should be to cultivate positive attitudes towards self-care and that different education strategies will have to be developed for different forms of self-care. Personal health behaviour is furthermore not only dependent on informed choices, but also on *opportunities* to choose certain life-styles. Dean (1989b:151) therefore strongly emphasizes the importance of the socio-economic situation (specifically income) of families for their health behaviour. In South Africa opportunities for effective self-care decision-making are not evenly distributed, neither are existing levels of health knowledge. This has clear negative implications for the widespread success of self-care education programmes. If self-care development is decided upon, policy makers and administrators will have to implement profound shifts in the existing theory and practice of health-care provision.

## 9.2 IMPLICATIONS OF SELF-CARE DEVELOPMENT FOR HEALTH PLANNING AND ADMINISTRATION

The deliberate development of self-care as a recognized component of the health-care system will require alteration of some of the basic assumptions on which health care currently rests. These basic assumptions all stem from what Cockerham *et al.* (1986b:11) call the "culture of medicine". "The culture of medicine does not promote consumerism among lay persons ... nor provide a context within which such an orientation can grow ... Instead, the culture of medicine portrays doctors as all-powerful individuals with the training and intellect to make life-or-death judgments and assumes patients to be completely dependent on those judgments." According to Levin (1977b:50) this orientation is reflected by the fact that health care is widely equated with *professional* health care, e.g. in planning, cost accounting and the distinction between health-care providers and consumers.

Some of the assumptions or myths which have their origin in the culture of medicine and which are irreconcilable with self-care development are the following (Levin 1976a:207; Levin 1977b:49, 50, 52; Levin *et al.* 1977:36):

1. The assumption that good health is one of life's highest goals or values, both for the individual and for society.
2. The assumption that the use of professional health services can produce or ensure health.
3. Current assumptions within the professional care system that self-care is harmful and even destructive.

It is clear that a coherent self-care policy will require a fundamental re-evaluation of existing health care and its supporting pillars. Planning for self-care should rest on the assumption and conviction that *lay care* is the primary health resource, and that professional care is most relevant for secondary and tertiary care.

If policy makers and planners decide on self-care development, they will face some specific tasks (Andrews & Levin 1979:45, 48, 49; Levin 1976b:75; Levin 1977b: 52, 53; Levin *et al.* 1977:41; Williamson & Danaher 1978:183):

- gauging community needs for self-care education
- decisions about the forms of self-care education to be provided
- the allocation of resources for training programmes
- establishing criteria for self-care education and the suitability of candidates for training



- decisions on incentives to encourage self-care in the general public, as well as optimal methods to effect changes in and transfers of skills from the professional care system
- overcoming resistance from professional care givers
- developing strategies to establish a lay-professional partnership in health care and negotiating compromises between the two sectors, where necessary
- decisions about the precise and appropriate allocation of formal health services
- defining self-care limits
- alterations in existing health legislation, in which self-care or lay care scarcely figures
- the initiation of research on specific self-care interventions and on the design, implementation, evaluation and cost-effectiveness of long-term self-care development programmes.

### 9.3 POTENTIAL PROBLEMS REGARDING SELF-CARE DEVELOPMENT

Apart from the current value system and resulting assumptions by which health care is presently directed, self-care development may encounter additional problems, obstacles and even dangers. The most important of these centre on professional resistance to self-care, the enforceability of self-care, and South Africa's varied population composition.

There are a number of different reasons for *professional resistance* to self-care:

1. Self-care development is regarded as a violation of professional care givers' jurisdiction/monopoly of expertise and exclusivity (Dean 1986: 275; Levin *et al.* 1977:37; Quah 1977:28).
2. There is concern in the professional sector that increasing self-care will disrupt the doctor-patient relationship; more specifically the roles of practitioner as active healer and the patient as passive recipient of care will be threatened (Levin *et al.* 1977:37, 38).
3. Self-care is a threat to the privileged economic position of the medical profession, even more so in a free-market health-care system (Levin *et al.* 1977:38; Williamson & Danaher 1978:107, 150).
4. Misgivings about self-care also arise from the training and values of professional care providers where the concept of a passive patient receiving professional and technical services has priority. In addition, the general and holistic nature of self-care is at variance with the narrower biomedical focus of professional care and current medical-technological tendencies (Levin *et al.* 1977:39).

Regarding the *enforceability* of self-care, the question arises to which extent governments have the right to change human behaviour, even if the goal is improving the health status of the population. It may constitute a threat to personal freedom and individuality, especially if disincentives to or prohibitions against certain types of behaviour are introduced, like taxes on alcohol and tobacco (Wikler 1978:223, 224). A related matter is whether self-care can be enforced on society as a whole - some persons or groups may prefer dependency on the formal care system (Levin 1976b:73). There are even charges that the propagation of self-care is a white middle-class movement (Juffermans 1983:226; Kickbusch 1989:127; Kronenfeld 1979:266). The lower socio-economic classes have the lowest levels of education, the least time to spend on self-care education, as well as the lowest extent of (health) information seeking. These persons have the greatest dependency on formal health care (Cockerham *et al.* 1986b:11; Dean 1986: 282). Forcing self-care on such groups may lead, according to Juffermans (1983:226), to a Darwinian struggle and the survival of the fittest.

*South Africa's population composition* poses problems to self-care development in that the different population groups have to some extent different views on health, illness and appropriate symptom responses. Furthermore, there are differences regarding educational, income, health knowledge and morbidity levels, morbidity patterns, important sources of information regarding health, disease and medicines and consequently different self-care patterns. Very important too are the inequalities in the availability and accessibility of formal health care to the different population groups.

For these reasons a uniform self-care development programme for all groups will not be viable. Not only the contents of such programmes will have to be group-specific, but also the methods of education. The results of this study showed that the mass media would be very effective for the black community, interpersonal sources of information in the coloured community, while medical sources and the mass media are most relevant for the white community. Care should, however, be taken that differential self-care development programmes do not perpetuate or even enhance current structural inequalities in health-care provision.

#### **9.4 POTENTIAL DANGERS ASSOCIATED WITH SELF-CARE DEVELOPMENT**

Interested parties should note that self-care development could entail the possible dangers of victim blaming, the negation of the influence of environmental/structural factors on health, the medicalization of self-care, and the curtailment of professional health care.

Self-care may become a more sophisticated form of *blaming the victim*, of accusing people who cannot participate in self-care development programmes, due to low education and low income, of "causing" their own ill health. Self-care may be a luxury that poor people can ill afford (Kronenfeld 1979:256, 266). Victim blaming also tends to focus attention on the victims of problems rather than on the problems themselves. Efforts are therefore made to change the behaviour of the victims of poor health, rather than those structural and environmental factors which cause poor health.

A crusade in favour of self-care may draw attention away from the *environmental* and *structural causes* of disease and lead to the individualization of social problems. This could happen when self-care is used to make people responsible for circumstances which cannot be controlled on a personal level, like environmentally or occupationally caused diseases (Segall & Goldstein 1989:160). These types of diseases are unlikely to be dramatically affected by self-care. The conditions which do require urgent attention are social inequality and poverty, air and water pollution, unsafe working conditions, stress and boredom in the occupational sphere (Juffermans 1983:226; Levin 1977b:53; Wikler 1978:224; Williamson & Danaher 1978:130).

Regarding the *medicalization of self-care*: The knowledge and help of the professional health-care sector will be required for self-care development, but this will involve the danger of a monopolistic professional direction in the contents and process of self-care development. It could even come to a professional co-optation of self-care and the conversion of the lay resource into a new professional category. Routine tasks with few economic benefits could be shifted to self-care practitioners with an associated undermining of self-determination (Levin 1976b: 72; Levin 1977a:118; Levin *et al.* 1977:40).

Referring to the final danger of the *curtailment of professional care*, it is emphasized that self-care can be used as a pacifier to decrease the demand for formal care, to justify decreasing the level of formal services provided, to inhibit the struggle for fair and high quality professional care, and to delay the provision of curative services (Kronenfeld 1979:226; Levin 1977a:119; Segall & Goldstein 1989:160; Wikler 1978:224). The real danger in this context is the creation of a "second-class health service" if authorities relinquish some of their responsibilities for health-care provision. Specifically in South Africa, self-care development is a very sensitive issue, as it may be interpreted as another effort by the authorities to relinquish responsibility for health-care provision.

However, self-care should not only be regarded as a phenomenon benefiting health care; it may have intrinsic benefits for people in the sense of increased autonomy and control. "... [D]emocratization of health care is a major goal in its own right, quite apart from improving the health care system ... lay dependency on the health care system ... [is] destructive of human integrity, dignity, and autonomy" (Levin *et al.* 1977:27).

## NOTES

- 1 Over-the-counter medicines (OTC medicines) refer to remedies which can be bought at pharmacies and stores without a prescription.
- 2 The present report is a synopsis of a more comprehensive study on the topic: Van Zyl-Schalekamp, C.J., 1990. *Selfsorg in siekte en gesondheid: 'n Medies-sosiologiese studie in drie gemeenskappe*. Unpublished D.Phil. dissertation. Bloemfontein: University of the Orange Free State.
- 3 In this report measurements of relationships between nominal and ordinal variables are referred to as coefficients of association, and those involving interval variables as correlation coefficients.
- 4 The index used was that of Seeman and Seeman (1983) for health-care research.
- 5 Numbers in percentage tables may not add up to 100 due to the approximation of decimals or to missing data.
- 6 Only the responses of females under 55 years of age were taken into consideration.
- 7 At times prescribed medicine will be referred to as Rx, corresponding to the practice in the formal health-care system.
  - a Lambda
  - b Somers  $d_{yx}$
  - c Eta
- 8 In this study the focus is only on "Western self-care modalities".

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