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PATTERNS OF 'BLACK ECONOMY IN MEDICINE' UTILIZATION UNDER THE NATIONAL HEALTH INSURANCE LAW

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2007

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Submitted to Professor Gyula Zeller

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2007

Acknowledgements

I would like to thank several people for their involvement and support of this study:

- Prof. Gyula Zeller, Jr., my tutor, who showed me the correct way to plan and conduct a research thesis, who contributed at every stage of his great academic experience, and, no less important, led me to the finishing line;
- Prof. Ivan Beitz, who at every possible opportunity and whenever needed offered me his academic support;
- The university staff who were involved in my doctorate studies in general and specifically in conducting the current study;
- Dr. Yehuda Schwarz in particular, who provided encouragement in every way throughout and without whom I would not have reached this point;
- Mrs. Esther Chipman-Frame, for her translation, help and calm, always in the right place at the right time;
- Mr. Kobi Lerrer, for his knowledge and help in the complex statistical analyses;
- The doctors and patients whom I interviewed, who revealed to me their beliefs and opinions, and thereby contributed their share to developing an up-to-date information base that in the future will help to create target-oriented programs to reduce the scope of the black economy in medicine phenomenon;
- And finally, my precious family for their support, love and encouragement throughout the years.

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Abstract

Introduction and the research rationale: The National Health Insurance Law that was ratified in 1995 afforded a critical turning point in health policy and in fact reshaped the character of the health system in Israel. Although the new reform was supposed to assure health insurance for all residents of the State of Israel, increase equality between the diverse sectors and create economic stability of the public health system while assimilating types of 'healthy' use, testimony shows that types of use of black economy in medicine services developed significantly.

It is customary to define black economy in medicine as anything connected to the preference for treatment not based on medical considerations, provided in a public institution, but not in the open and institutionalized framework. The definition includes financial payment or other benefits given by the patient and accepted by the doctor in his role in a public hospital.

The destructive implications of black economy in medicine create tremendous social and economic biases that raise many questions regarding the success of the reform in general and the generation of new types of behavior in the health system. Expansion of types of black economy in medicine in public hospitals globally in general and in Israel in particular justifies an in-depth examination of this complex issue, while considering the factors influencing the development and scope in order to create a reliable and up-to-date knowledge base. This latter will enable determining organizational and economic policy with cohesive targets that will supervise, control and eventually significantly reduce the dimensions of the undesirable types.

The research objective: The research objective is to explore patterns of use of black economy in medicine under the National Health Insurance Law, while analyzing variables of impact, in order to prepare a knowledge base for shaping proper social, organizational and economic public health policy. The research objectives are attained through examining the variables of influence and/or significance for the types of the phenomenon amongst suppliers of health services - the doctors- and their consumers – the patients. Similarly, the doctors and patients were compared to study the differences between the two populations.

The main research findings:

- About 66% of the doctors and the patients agree that the black economy in medicine phenomenon is frequent or very frequent.
- About 66% of the doctors and patients agree that the dimensions of black economy in medicine increased since the law was ratified.

- Most of the dimensions of the definitions of the variance in the black economy in medicine phenomenon are found to afford up to 25% of the department activity, and in certain cases up to 50% of the activity.
- Giving presents to the medical treating staff is the most common activity amongst patients and is connected to black economy in medicine, as is the issue of paying the doctor directly.
- Analysis of the findings indicates that both patients and doctors clearly differentiated between the definitions associated with doctor remuneration and those associated with department remuneration.
- Compatibility and agreement exist in the findings pertaining to both the doctors and the patients in that the dimension associated with doctor remuneration, i.e., direct payment to him for treatment in hospital and for him to personally treat the patient are black economy in medicine. Similarly, both doctors and patients state that behavior that is third in strength of connection to black economy in medicine is the use of hospital facilities for private treatment.
- The more well-established the doctors in hospital (as regards seniority, tenure, administrative position, specialist) they will include the fewer behaviors under the term black economy in medicine.
- Patients with economic means tend more than others to relate payment to the doctor for personal treatment of the patient as black economy in medicine , while patients of poor economic means tend more than patients of average economic means to giving the medical staff presents viewing this as black economy in medicine behavior.
- Doctors who are more satisfied with their salaries tend to attribute significantly fewer behaviors to the term black economy in medicine compared to doctors whose satisfaction with their salaries is average or low.
- Patients who are more satisfied with the medical service in hospital will tend to attribute more behaviors to black economy in medicine compared to patients whose satisfaction is low.
- Both doctors and patients are mostly ambivalent towards the phenomenon, and if they see it negatively they do not invalidate it in principle.
- The hospital administrations are aware of the black economy in medicine phenomenon, do not fight it directly, and to a considerable extent are partner to the vow of silence in this matter.

The research conclusions: The findings of this study leave little doubt as to the broad scope of the black economy in medicine phenomenon and even note that its dimensions increased after the ratification of the

National Health Insurance Law. These findings raise weighty concerns regarding attaining the main goals of this law, that purported to lead to equality and improved service and medical treatment. The findings cast considerable doubt as to the work performed today, if at all, by the Ministry of Health and policy makers to significantly reduce the phenomenon.

Based on the review of the literature and the research findings presented at the end of this study, several ideas are presented for activity that could lead to real change and to restraining the dimensions of the black economy in medicine phenomenon. This study does obviously not provide all the information necessary for creating the craven change and therefore at its conclusion questions and recommendations are presented for further study.

Introduction

In the last two decades reforms in the health system have become a focus of public, political and social interest in many countries around the world.

Following the health crisis that affected many of these countries and the considerable economic burden, pressure for economic and organizational change in these systems commenced.

The ongoing crisis in the health services everywhere, and the ongoing increase in real national expenditure on health, did not overlook Israel.

The National Health Insurance Law, passed in 1995, was a critical turning point in the policy of the Ministry of Health and, in fact, reshaped the character of the health system in Israel.

Although the new reform was meant to assure health insurance for all the citizens of Israel, increasing equality between the different sectors of the population and creating economic stability within the health system while implementing 'healthy' patterns of use of the public health service, there is firm evidence of the development of the use of 'black economy in medicine '.

The exact scope of the phenomenon of black economy in medicine is one of the great and most intriguing unknowns. Various hypotheses and contradictory estimates have been raised over the years whose data bases were not always clear or solid. At the same time, despite the difficulty in estimating the dimensions of black economy in medicine, the assumption was that the phenomenon is significant or has tremendous scope in many countries.

It is customary to define black economy in medicine as anything associated in any way with the preference for treatment, not for medical reasons, that is provided in a public institution not in the overt and established framework. The definition includes financial payment and monetary or other benefits given by the patient and received by the doctor in the framework of his position in a public hospital, as well as donations to the hospital or the research fund of the department in which the patient was hospitalized are also discussed.

The mixed areas between public and black economy in medicine contradict the basic principles of all the health systems around the world. The quiet penetration of black economy in medicine to the public hospital

confines brings with it on the one hand the destruction of values and distorted ethical standards and on the other, destructive implications for the economic stability necessary for the health system in particular and for the State in general.

In recent years, recognition of the need to gather empirical data on the functioning of the health systems over time has been recognized, especially after implementation of the reform (Blendon, Kim and Benson, 2001; Brownell, Roos and Roos, 2001; Murray and Frank, 2000; Ovretveit, 2001). The empirical data regarding the functioning of the health system serves several objectives: It enables exploring the degree to which the national objectives are achieved over time, affording input to planning changes in policy and the ability to identify problems or unplanned side-results of existing policy.

It is now clearer than ever that in the absence of focused government involvement, the black economy in medicine phenomenon will develop into destructive dimensions.

Expansion of the types of black economy in medicine in public hospitals around the world in general and in Israel in particular justifies an in-depth examination of this complex issue. Such an examination should refer to the factors that influence its development and scope in order to guide organizational and economic policy with cohesive objectives that will oversee, control and eventually significantly reduce the dimensions of the undesirable patterns.

The research topic is entitled "Patterns of black economy in medicine utilization under the National Health Insurance Law" .

The study will attempt to describe and define patterns of black economy in medicine in Israel since the ratification of the National Health Insurance Law – the phenomenon, its scope and attitudes towards it. It aims to examine patterns of use of black economy in medicine under the above law in public health services, analyzing the variables affecting it in order to prepare a knowledge base to plot correct health, social, organizational and economic policy.

The thesis endeavors

- To define and map the phenomenon of black economy in medicine
- To identify the factors associated with the development and scope of black economy in medicine , after the ratification of the National Health Insurance Law

- To map the perceptions and attitudes of the doctors and the patients towards black economy in medicine after the ratification of the National Health Insurance Law
- To document the implications of black economy in medicine for the health system under the National Health Insurance Law.

The study will therefore try to document and analyze patterns of black economy in medicine that have hardly been studied in the world, and to the best of the researcher's knowledge have never been studied since the implementation of the reform in the health service – the enactment of the National Health Insurance Law.

The current study has international importance for constructing an information base essential for shaping social, organizational and economic health policy that will try to cope with the phenomenon.

Chapter 1

Health System Policy Around the World

1.1 Health policy and strategy

Until recently, health was perceived as a personal issue, and health treatment as an activity occurring between doctor, nurse and patient. During the 20th century it transpired that many environmental, economic, social and educational factors affect the health of people and of communities and that these factors, in addition to traditional (ethical) factors affect the provision of medical care. Increased awareness amongst people regarding the potential effectiveness of government activity in contributing to improving their health became popular. Hence health policy became an accepted approach in the world of today no less than economic or social policy and thus did the health policy formula become a normal governmental function (Cox, 2006).

1.1.1 The attributes of health policy

Health policy is a set of decisions to take action intended to achieve defined health objectives. Such policy determines the order of priorities between the objectives and the main intentions in order to achieve them. Determining the order of priorities implies choosing between alternatives, in the health sectors and the other competing sectors, as well as from the health sectors themselves. Health policy is therefore considered part of the broader social and economic developmental policy in the framework of the resources available, in addition to those provided only in potential (Cohen, 1990).

Competition between the health and the other sectors is of course influenced by economic considerations and preferred social values. From the economic perspective, if maintaining health be considered only as the consumer of resources, its preference will be low. In contrast, if it is considered a factor that contributes to economic development is it likely to enjoy higher priority (Cox, 2006).

Health policy is an issue for the government, but not only for the government. Individuals, communities and other groups of people can cause the government to adopt a health policy and can cause their policy to be adopted if these do not contradict national policy obliged by law. Many options are open to the government regarding the type and

character of health policy. The first important policy decision is whether to define policy at all, or to adopt a non-intervention approach. This approach is sometimes applied as a default more than is accepted from a conscious decision. It is liable either to be the result of the approach that health is too personal a matter that does not enable a collective decision, or governmental involvement is liable to afford a decisive factor in health policy decisions of people in their own regard.

Policy can be linked to technical issues, such as the range of health care to be provided. This can be limited only to issues of high propriety, or it can cover all the health problems of the individual and the community. Policy can also be linked to social matters, such as accessibility of the range of treatments chosen for the entire population, to the general limitations, or to selected sectors of the population, such as mothers and children, employees, the elderly or the poor. Furthermore, policy can be associated with economic issues, such as the method of funding the health treatment or other of its aspects. Health policy can have promotional or inhibiting attributes, or may pertain only to providing information. It may adopt a form that enables taking certain steps, it may be characterized by legal limitations, or rely for its needs of application only on education and information (Cox, 2006).

1.1.2 The scope of health policy

The scale of health policy changes greatly and is dependent on the health aspirations of those defining it. It can have modest goals, be limited to assuring conventional medical care for the entire population or certain sectors in it, and at the other extremity, it is likely to expand to a general goal aimed at achieving health as described in the constitution of the World Health Organization. In other words, a situation that assures the welfare of all from the physical, mental and social perspective and not only in order to prevent illness and disease. Policy will have to deal with promoting health, protecting health and the social rehabilitation of everything pertaining to this last, regarding not only the health sector but also the economic and social sectors (Goodwin, 2006).

1.1.3 The content of health policy

The content of broad health policy is characterized by health factors. They are endogenous, occurring within the human body, as well as exogenous, occurring in environmental factors. Only recently did it become essential, from the government perspective, to take policy decisions regarding the endogenous factors, such as fertility, or

implanting human organs. Such policy is affected by weighty ethical considerations (Cohen, 1990).

Health policy regarding a broad variety of exogenous factors, such as housing and the ecological surroundings can be planned.

While defining health policy that regarding economic and social issues should be taken into consideration. For example, heavy taxation on tobacco and alcoholic beverages can reduce their consumption. An opposite example is subsiding farmers to produce food that contributes to health such as meat reduced in fat content, or other foods with a low percentage of cholesterol. This is an approach underlying which is the lack of intervention in financing health treatments and is common in certain cultures, while in others decisions are taken regarding fiscal policy for health concerns. These questions too, regarding whom to pay and how the costs will be divided between the diverse socio-economic groups or amongst those who use them and those who do not use the health services, must also be considered (Rosenblatt, Andrilla, Curtin and Hart, 2006).

Social policy that affects health is vastly connected to general policy preferences, such as the preferred attention that will be paid to certain geographical areas, to socio-economic groups, to age groups, occupation or level of social deprivation. Certain countries favor the poor when providing health treatments that are financed by the public monies, on the assumption that the other sectors of the population can care for themselves more easily.

Policy pertaining to the national administrative system also impacts on health policy. In other words, if a country has a very centralized administrative system, it will almost certainly also have centralized health systems. Responsibility is also delegated to other administrative levels such as the provinces, districts, municipal areas or small communities. Parallel policy can also be adopted whose main thrust is the decentralization of the health system. Furthermore, public pressure is an important factor in the content of health policy and in determining the order of priorities and allocating the resources. Recent years have seen a process of converting between diverse social values, manifested in terms of resources, and the division of resources accordingly affording a decisive factor as regards determining policy (Schnetzer, 2006).

1.1.4 Health strategy

Health policy does not automatically mean implementation even if the resources are allocated for this purpose. Steps must be taken to assure its application and these means are dependent on the policy attributes, such as, for example, whether it necessitates taking certain steps, or enables their taking. One of the ways of assuring application of the policy is through preparing operational strategy. If policy is usually manifested in general terms, the strategy can be more detailed operationally. The strategy details the main lines of action that should be taken in all sectors pertaining to the effectiveness of the policy, including identifying the obstacles to its application and the ways to overcome them, as well as determining the allocation of broad resources for each track and the financial master plan associated with them. These prime steps will usually include a variety of political, economic, financial, social, legal/constitutional, educational, administrative, scientific, technical and administrative means taken in view of the attributes, scope and content of health policy. Health strategy usually includes specific plans for application through the structural infrastructure, wherein a plan is an organized collection of activities intended to achieve defined goals and targets that are progressively more specific as to the main objective to which they contribute. Every health plan must have specific quantitative goals and objectives that are compatible with those of the national health policy (Rosenblatt, Andrilla and Curtin, 2006). A comprehensive, strategic health plan demands coordination between the health sector and the other sectors in order to assure the political commitment and economic support, the persuasion of professional groups that will be able to contribute to applying the strategy or at least not to oppose it, as well as creating and motivating the necessary human and financial resources. Furthermore, it is important to assure that people understand the strategy and how it can contribute to improving their health, and participating actively in monitoring the health system and its components in their country (Hezel, Steeples and Adusumilli, 2005).

1.1.5 The process of defining health strategies and policies

Health policy is usually defined the same way as policy in any field is defined. Countries with centralized economies are likely to define health policy not only in view of epidemiological information but also according to party policy regarding social-economic development.

In market economy policy the possibilities are more varied. They include both assessment on an epidemiological basis and predicting needs on the basis of the health and economic condition. They also entail a social-epidemiological analysis, assessment of current trends, reactions to political, economic and professional interests or pressure by the public and consumer groups, public debates and so on.

A formal way of defining health policy and strategy is through the administrative process that is likely to be effective in creating the information of the type that will facilitate rational decision-making. Such a process is likely to be of value in creating strategy on the basis of a defined policy. The WHO developed an administrative process for developing a national health policy (Hezel et al., 2005).

Figure no. 1 summarizes this process schematically. The administrative process for developing national health ongoing, entailing preparing methodical plans and their implementation in cooperation with the health and others sectors pertinent to health.

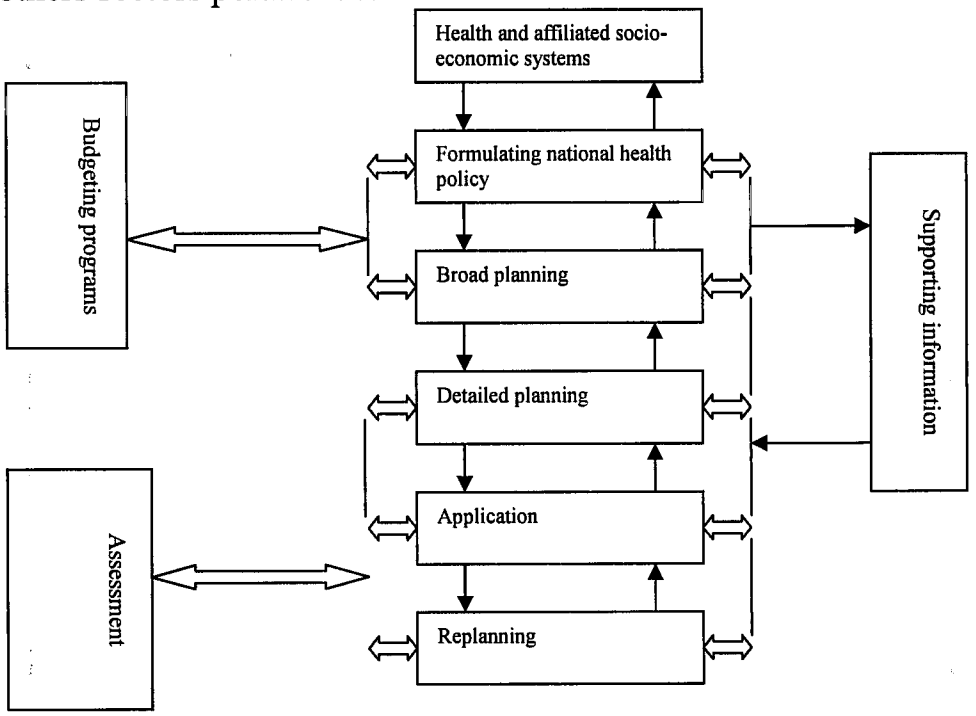


Figure no. 1: The administrative process for developing national health (Cohen, 1990)

The process of assimilating health policy to a strategy with clear and declared objectives and goals is termed broad-view planning. Allocating the resources for activities divides budgets according to priorities that

were determined according to the structure of the health infrastructure. This is different from regular budgeting in that the emphasis is on the results to be achieved, rather than on unconnected /isolated budgetary items. In order to attain the plans' goals and objectives, each plan is designed with a detailed array of activities. The health system supplies these detailed plans that include a timetable, the budgeting and allocating resources.

After implementing the planned activities, constant monitoring and tracking of the activities are conducted in order to assure the plan's achievements, control of the diverse processes and financial investments, so that if something goes wrong, immediate corrections can be made (Cohen, 1990).

An important part of the administrative processes includes the use of indicators and methods of gathering and analyzing the necessary information. These include methodical assessment of the relevance, compatibility, progress, effectiveness, efficiency and impact of the health program. The administrative process is ongoing, including planning, application, assessing the results and new and improved planning according to the findings (Bernstein, 2005).

1.1.6 International policy and health strategy

A noteworthy illustration of health policy and strategy at the international level is provided by the objective of "Health for all" by the year 2000 that was adopted by the member countries of the World Health Organization, now 166 in number. In 1977 the WHO legislative body, an organization determining supreme policy, was composed of representatives of all member countries. It decided that the main social goal of the governments and of that body in the next decades would be enjoyed by all people in the world by the year 2000, with a level of health that would enable them to lead a productive life from the social and the economic point of view. Every country would interpret the meaning of social and economic productivity in view of its socio-economic circumstances, a goal that afforded the basis of the total revolution in thought about public health.

The conference pleaded with all the governments to formulate national health policy and strategy with the approach of the development of the health system, based on basic health care through cooperation. The reaction was remarkable, beyond all expectations. Governments from around the world planned new health policy and strategy.

Governments bear the responsibility for the health of their populations, that can be fulfilled only by providing suitable health services and taking other social steps which are the political obligation of the countries as a whole, and not only of the Ministry of Health as the entity responsible (Fooks, 2005).

The policy of "Health for All" is an excellent manifestation of the initiative and assimilation of health strategy and policy.

1.2 Inequality and injustice in the health system – Approaches, strategies and international programs

The existence of inequality in the health system has been recognized and is scientifically documented throughout the last 150 years. However, only in the last 30 years have many countries seriously discussed the social and economic considerations and thus the implications for the populations' health. Many attempts have been made to develop this consistent policy, talking steps to reduce the inequality. Nevertheless, in many countries around the world significant inequality continues to exist at many and diverse dimensions

1.2.1 Introduction

Inequality and injustice are discussed in the literature from diverse aspects, including reciprocal relations between the level of income and health, the use of the services, quality of the health services, the ability to finance services and so on (see figure no. 2).

Many studies explore the disparity between the populations of the health services (Chernokovsky and Shirom, 1996). One of the accepted approaches in the literature is that every person is entitled to receive identical treatment (Halevi, 1975; Van Doorslaer and Wagstaff, 1992).

It is agreed that payment for the services should be adapted to the means, i.e., those with means should pay more than those without (Van Doorslaer and Wagstaff 1992).

Measuring equality in the health system is problematic and complex, due, amongst other reasons, to the difficulty in objectively defining the terms 'need' and 'equal access to service'. Already in the sixties considerable disparity was found in the USA between the sectors of population in the various dimensions of health and in the use of services, according to income and race (Yost, 1969). In order to improve the condition of the

weak population, special insurance plans were formulated such as Medicare and Medicaid (Gold, Sparer and Cho, 1996).

Studies conducted in England (Charlton and White, 1995), in Australia (Wiggers, Sanson-Fisher and Halpin, 1996) and in Holland (Ven der Meer, Van den Bos and Mackenbach, 1996) find a connection between the socio-economic situation and morbidity and the use of health services.

The reduction in inequality in health is a social objective in itself, but it is particularly important in cases in which the feeling exists that more suitable management would prevent or reduce the differences in health by the health system. These differences illustrate the injustice in the health system. The term 'inequality' as regards health is multi-dimensional. It refers primarily to all the differences in the health condition measured by agents of health, morbidity and death. Furthermore, it refers to the differences in the quality of services, to differences in the use of medical services and the differences in the results of the treatment.

A complicated set of interconnected factors relate to the development of inequality in the health of the population. It is agreed that the main reason for inequality is socio-economic disparity. This includes the differences in income, in education, in employment and in housing, all affected by public policy in areas beyond the health services. Cultural differences are also likely to contribute to inequality in health, if the services are not provided in a way compatible to culture.

The health services in themselves contribute to inequality in health. While improving health it can lead to the expansion or reduction in the degree of inequality. In every system those with greater access to the economic resources try to expand access to health services. This is particularly important in countries without national health insurance, but when there is such insurance economic barriers exist to receiving treatment in the national framework and to obtaining services beyond the national framework.

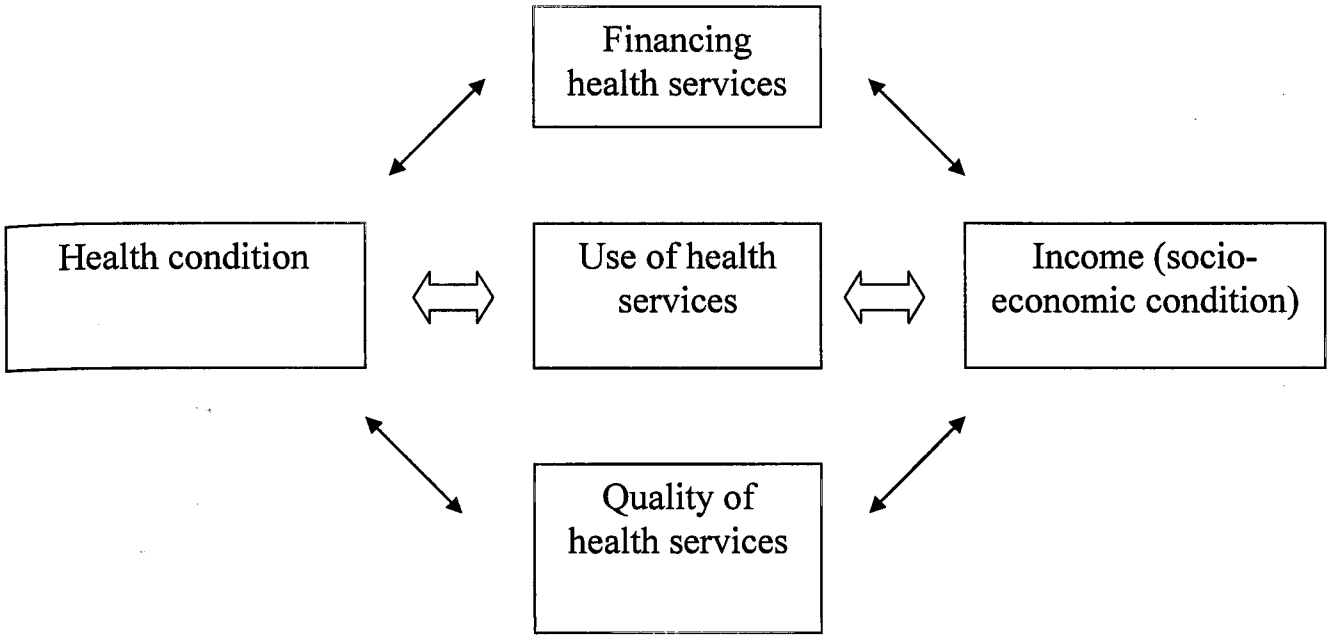


Figure no. 2: The reciprocal relations regarding equality in the health system (Berg, Rosen and Morgenstern, 2002)

The role of public intervention in the health system is partially to prevent the development of differences in the accessibility of the health services, beyond that already existing in the health condition (due to the differences in the genetic and behavioral attributes and in the socio-economic condition) and to reduce them as far as possible. An important point in the context of providing health services is the extent to which services are distributed amongst groups of the population and between areas that correctly reflect the differences in need.

Other important points are whether the sensitive populations receive services of a high quality and whether the services provided adapted to the culture, income and level of education. The main attributes of the financing system include whether the question of whether there is universal health insurance, the scope of the basket of benefits in public funding and the type of self-participation.

The international experience illustrates several ways in which the health systems can reduce the degree of inequality through intervention at several levels (Epstein, Goldwedge, Ismail, Greenstein and Rosen, 2006):

- Planning comprehensive health policy aimed at both preventing inequality in health and at reducing the existing inequality;

- Involvement in planning systems at the macro level (such as universal insurance cover and progressive funding of the health system);
- Implementing other types of government policy such as introducing monetary incentives for doctors and other suppliers for providing services in areas that suffer from bad service or minimizing the financial barriers to treatment;
- Training professionals in the realm of health to provide solutions to the unique needs of those with low incomes or to racial or cultural minorities;
- A targeted plan to provide services and preventive action to provide solutions for the special needs of vulnerable populations.

Whitehead (1998) develops a model known as the 'Diffusion of ideas on social inequalities in health' that starts with recognizing the problem, continues with acceptance of responsibility for local focal activities and concludes with a comprehensive national policy and plans of action. Many experts believe that in the absence of a national policy with political support, activities to further equality in health can be limited and random.

1.2.2 National strategy and plans of action

Although full equality in the health system is apparently unattainable (Bradshaw and Bradshaw, 1995) the issue of advancing equality does not depart the agenda of the many reforms around the world (Wagstaff and Doorslaer, 1992). Several countries have developed comprehensive national strategies for reducing inequality in health services. Below are several important aspects of the approaches that have been adopted in England, Holland, and the USA.

- England

  England apparently has the most developed and detailed strategy. "Coping with inequality in health: A plan of action" was published in 2003 by the British Ministry of Health and with the support of the Prime Minister.

  The British policy statement states clear qualitative targets for reducing inequality in order to reduce the disparity by 10%. The strategy for achieving these objectives includes a call for action by the Ministry of Health, by organizations in the realm of public health and of the broad social system. The regional government must develop plans of action according to national and regional strategy - many regions have done so. Doctors are called upon to take a key role in advancing health behaviors and in reducing the health

dangers. Furthermore, associations for primary medicine in the national health services are expected, at the local level, to lead in furthering the work in the national medical services as regards reducing inequality in health services.

- Holland

  The national Dutch plan for socio-economic inequality in health was published in 2001. Dutch policy makes extensive use of quantitative objectives. The Dutch program sets itself the goal of reducing the phenomenon of inequality by 25%.

  As in England, the health services and the broader social system in Holland are expected to play a central role in reducing inequality in health.

- USA

  American President Clinton declared in 1998 that inequality in health is inadmissible and called for new initiatives for its elimination.

  In 1999 Congress appointed the Institute of Medicine to study the subject. The report published in 2002 included specific recommendations for steps that should be taken by the health system to reduce the disparity in medical treatment (see appendix).

  Many of the recommendations were directed to those responsible for planning in the health system, such as preventing splitting the health program according to socio-economic groups, while others were addressed to the doctors themselves. Clinton's declaration also influenced the American project entitled "A healthy nation" in which the Ministry of Health sets national health targets for the next decade.

  Thus "A healthy nation 2010" calls for the total elimination of inequality in health in the context of race, income, education and other factors.

  "A healthy nation 2010" is a comprehensive document that presents more than 400 qualitative goals. Focusing on all the goals is constantly monitored and interim reports have been submitted to Congress every five years.

The patterns of black economy in medicine explored in this study are derived directly and indirectly from the many years of observing the way in which the public health system is managed, encouraging and perpetuating, in its own way, the inequality and injustice.

1.3 The global crisis in health services

"Every health system entails inbuilt economic failure", claims Boaz Lev, the former CEO of the Israeli Ministry of Health. According to Lev, the health system is not a productive system, while the population is constantly aging. There are thus more sick people and consequently heavier expenses. A lack of sources of financing is therefore an enduring problem (Cohen, 2001).

One of the dominant trends in recent years is the ongoing economic crisis that assails the health services in the western world. In the 70s, the national health burden accounted for 3-5% of the GNP in western countries. In the last 20 years, the national health budget in those countries has grown worryingly and is estimated at 10-15% of the GNP (Ginsburg, 2000).

If the costs of private health services and of black economy in medicine are added, the health burden is likely to reach something like 30% or more in coming years.

Table no. 1: Gross National Product (%) in selected countries

Country	1980	1990	1995	2000
U.S.A.	8.7	11.9	13.3	13.0
Switzerland	7.6	8.5	10.0	10.7
Germany	8.8	8.7	10.6	10.6
Canada	7.1	9.0	9.1	9.1
Israel	6.2	7.3	7.8	8.3
Holland	7.5	8.0	8.4	8.1
Japan	6.4	5.9	7.0	7.8
England	5.6	6.0	7.0	7.3
Hungary	No data	No data	7.5	6.8
Finland	6.4	7.9	7.5	6.6

Source: Bin Nun, 2003

Comparison of the national expenditure on health as a percentage of Israel's GNP (compared to that of OECD countries) finds the former close to the 8% average in industrialized countries. The proportion of expenditure in Israel is considerably lower compared to the U.S.A, Switzerland and Germany. Other countries, such as Finland and Hungary, have a lower rate than Israel. The health system in industrialized

countries varies between two extreme archetypes in an attempt to find the correct balance between providing health services of a high quality, and easily availability and maintenance of a reasonable level of expenditure. England, for example, has adopted a policy of maintaining a relatively low national expenditure and a system with a public character but whose cost is long waiting lists. At the other extreme is the U.S., with its high level of medical services at the highest cost in terms of the GNP in the western world, but with the lowest degree of social solidarity in the western world (Central Bureau of Statistics, 2001).

The crisis can be related to the development of several key factors:

1. Aging population: The ongoing rise in life expectancy is one of the main reasons for the economic crisis. The elderly are living longer, although their quality of life is not necessarily better, and they are forced to use the health and medical services intensively. The elderly are the largest consumers of health services (Bentor, Gross and Chinitz, 1999).
2. The accelerated development of medical technology: The considerable growth in medical knowledge and the many medical technological developments generate additional diagnostic tests bringing in their wake extremely costly new diagnoses.
   Advanced medical technologies usually lead to an increase in national expenditure on health rather than to medical technology efficiency. Economic assessment is an important tier in exploring all medical technologies likely to be assimilated in the health system (Efrati, 2003a; Tal, 2004). In an era of limited resources, decision-makers in the health service must face the question of including or not including modern technologies. The common approach is to focus on a single technology and assess its cost and effectiveness in order to create orders of priorities that aid the decision-making process (Kantor and Stub, 2003).
3. Increasing demand for health services: Recent years have seen increased public awareness of a healthier lifestyle, with more people consuming health services.
4. The development of health insurance: Many western countries have adopted health insurance as national policy and have even enacted a national health insurance law. The very existence of extensive insurance for health services partially releases the restraints from the tendency to save on health expenses and leads to their overuse.
   Since the third party, the insurer, pays for the services, neither the sick nor the doctors have an incentive inhibiting full exploitation of the possibilities of conducting diagnoses and treatments regardless of their cost.

Thus differences clearly exist between health organizations, the diverse models and the insurance laws and regulations applied in various countries. These directly and indirectly influence the availability of medical services, their accessibility, their quality, opportunities for choice of primary doctor, the technological standards and mainly the economic aspect.

In view of the ongoing crisis in most medical systems around the world, a global phenomenon of cost containment has become prominent in the last decade. Several countries try to curb the growth in national expenditure on health and reduce the demand for medical services. This is achieved by reducing the services provided, monitoring the prescription of medication and supervising the purchase of new technologies while introducing cost-sharing and co-payment.

These many factors affect the patterns of behavior of health consumers who are insured on the one hand, and the patterns of behavior by health producers – the doctors - on the other.

One may assume that the types of use of health services in general and the use of black economy in medicine in particular, stems from the health policy espoused in every country.

Chapter 2

A Review of the Health System in Israel

The structure of the Israeli health system following the introduction of the National Health Insurance Law is a key axis for understanding and analyzing patterns of use of the health services in general and patterns of use of black economy in medicine in particular. Accordingly, the review of the Israeli health system prior to, and following, this step is important for proper understanding of the subject researched.

2.1 The structure of the health system

A system of health services developed during the first 40 years following the establishment of the State of Israel in 1948. The Ministry of Health is the organization responsible for the nation's health and for planning, supervising and coordinating health services in the country. It is also responsible for all levels of health prevention, i.e., advancing health and preventing illness, defined as a primary level of prevention, responsible for medical treatment for all in need as the secondary level of prevention and finally responsible for rehabilitation as the third preventive level.

In fact, the factors responsible for providing medical services in Israel can be classified into State services run by the Ministry of Health, the public services (that include the four sick funds providing health services in Israel, as well as various private factors such as clinics) and several private hospitals.

Israel's four sick funds - *Maccabi, Meuchedet, Leumit* and the *Clalit* - provide ambulatory medical services and hospitalization services paid for by insurance fees. The *Clalit* fund is the largest and insures about 60% of the population.

For years prior to the reform, the health system relied on voluntary health insurance by the population paid directly to the sick funds. Although about 96% of the population was insured prior to the introduction of the National Health Insurance Law, about 300,000 residents were not insured, including about 70,000 children (Cohen and Steiner, 1995).

Most Israeli hospitals are government-owned or owned by the *Clalit* fund. There are also several hospitals and private hospitalization installations.

Although prior to the reform good conditions existed for providing health services at a high professional level with sophisticated equipment, a relatively low rate of sickness, a low rate of infant deaths and so on, a complicated, split system of services was created at the same time that made it difficult to provide suitable services to those in need of them.

Duplicated systems and a lack of coordination between the state services provided by the Ministry of Health and the private services provided by the sick funds led to ineffective utilization of the resources. These also led to waste, a fact that emphasizes the lack of an effective regulatory and coordination mechanism (Ministry of Health, 1993).

2.2 The crisis in the Israeli health system

For years, and especially in the last two decades, the Israeli health service suffered from several problems that led to a crisis. Strikes called by organizations and those specializing in various health professions, endless waiting lists for operations to the point of endangering the patients' lives and the development of black economy in medicine were just some of the symptoms and manifestations of the deficient service offered the public.

The special problems of the health system in Israel focused on five main aspects:

- Shortcomings in the service to those insured
- The Ministry of Health did not fulfill the roles allocated to it
- Ambiguous rules and lack of uniformity in funding and budgeting the sick funds
- Faulty organization and the absence of proper tools for managing the system
- Dissatisfaction and low motivation of the health system employees

Diverse phenomena accompanied the ongoing crisis in the health system, although most of them revolved around the financial problems and the inability to continue funding the services (Friedman, 2003a). This inability created ongoing financial crises in the sick funds, and the share of the health item in the national budget grew. This crisis peaked in the second half of the 1980s and in the 1990s. The health system brought in

its wake enormous fiscal deficits, most of which were generated by the largest sick fund – the *Clalit* fund.

The debts of that fund stood at $533 million in 1987, rising to $822 million in 1994, just prior to the reform (State Comptroller, 1994). Rozen and Nevo (1996) find significant differences between the sick funds regarding the levels of economic expenditure and the use of health services. The researchers explain that these differences stem from various management styles and mainly from defective organizational administration by the service providers.

The national investigation committee, established in 1988, explored the functioning and efficiency of the Israeli health system, presenting its recommendations in 1990. It finds several major explanations for crises in the health system.

1. According to one explanation, government funding policy of welfare and health services led to the sizeable and continuing decline in funding the public health system (Doron, 1994). The insured population funded a large part of the national expenditure on health by paying insurance fees to the sick funds and direct payment to the providers of private health services. Similarly, the GLP shows an increase in national expenditure on health (Bin Nun and Katz, 2004; Kopp, 1996). In an attempt to reduce these rates of growth in the national expenditure on health, the government continued to reduce its allocation for health services from the national budget (Rozen and Nevo, 1996).
2. Another explanation for the crisis blames it on diverting medical insurance monies to purposes that were not associated with health.
3. The crisis is connected to the allocation of resources between the sick funds. The rate of insurance was determined according to the income of those insured, thereby creating an incentive for the fund to choose members who had a high income. The resources of the *Clalit* sick fund were more meager than those of other finds, whose members had relatively high incomes. However, the percentage of chronically sick, elderly and poor members amongst those insured by the *Clalit* fund was higher than amongst those insured by the other funds. In other words, the health needs of those insured by the *Clalit* fund were greater but their incomes were lower (Gross, Rozen and Shirom, 1999).

2.3 The reform in the health market – the National Health Insurance Law

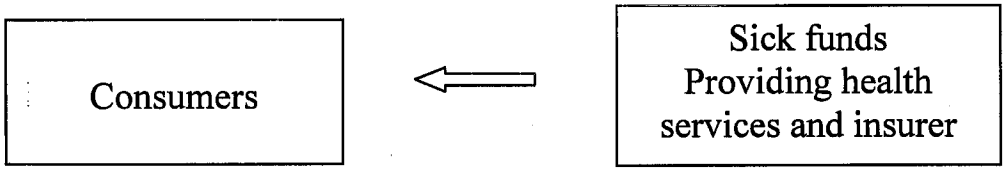
The National Health Insurance Law, enacted in January 1995, is intended to deal with the crisis in the Israeli health system. It defines the State's obligations to insure the health of all its citizens and the obligation of every citizen to register with one of the sick funds. The law is based on the egalitarian, ideological perception that affords free choice of a provider of health services and mobility between the funds. It obliges the funds to accept all who wish to register with them, denying them the possibility of choosing their members according to age, income or medical history. The law assures every citizen a basic basket of clearly detailed health services, determines the methods of its financing and defines the State's obligation to supervise the provision of health services and their quality (Government of Israel, 1994).

The reform in the health system led to great changes in the rules of its financing and providing services, and in allocating the resources between the sick funds, compared to the situation existing prior to its enactment. The researcher will discuss the significant differences between the two periods – until 1995, prior to the enactment of the law, and from January 1995, after its ratification.

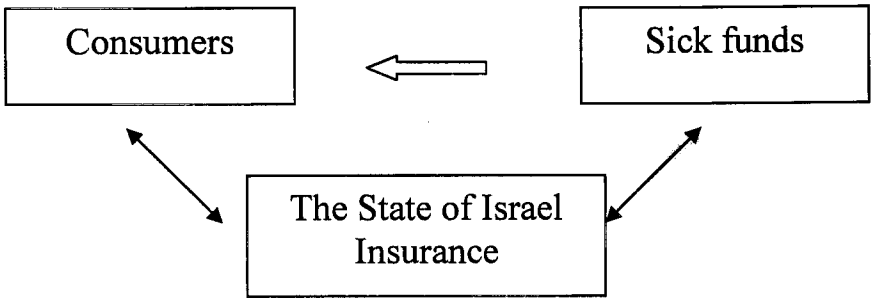
1. Financing services: Prior to enacting the law, health insurance was voluntary, with 96% of the citizens of Israel insured. Thereafter, 100% of the citizens were insured and the obligation to pay the health tax of 4.8% of the gross income was the responsibility of every citizen. A change was also introduced to the rate of taxation and after the law was passed, the degree of health tax progressiveness was altered (Achdut, 1998).
   The tax burden on the weaker groups was lower than previously but higher for those in higher income brackets. In the past, the sick funds collected the insurance money by themselves. The new law assured collection of the health tax by the State (Cohen and Steiner, 1995). Authority was removed from the sick funds to determine the rate of taxation and to determine the rates of self-participation.
2. Allocating the resources between the sick funds: Prior to enacting the law the level of income of the sick funds was dependent on the economic status of their members. The National Health Insurance Law altered the rules and determined that the sick funds would be compensated by the State according to the number of people insured by each fund and their age, according to the per capita risk arrangement.

3. Basket of health services: The law determines a uniform basket of services obligatory for all sick funds, while in the past, each fund decided this alone. The committee determining the basket of services decides annually which medication and new medical technologies are to be included in the basket of services according to the additional budget approved by the government. Regulations exist that enable monitoring the quality of the services (waiting time for medical services, the distance between the provision of services and the individual's residence and so on).
4. Another change pertains to the rules of transfer of the insured from one fund to another. The law demands of the funds to accept every person, in contrast to the past in which the funds could reject those turning to them, or to limit their rights due to a medical problem or age. The law allows the sick funds to offer those insured an additional health service for problems that are not included in the basket of services detailed by law.

Prior to the law the sick funds were both the insurers and the providers of services. They decided who to insure, the premium and which basket of services the insured would receive.



After the law was passed the sick funds now only provide health services. However, another actor entered the scene – The State (National Insurance) as the insurer. Citizens of Israel pay the health tax to the National Insurance Institute that budgets and compensates the funds for the medical services.



The condition of the health system after the enactment of the National Health Insurance Law enables all Israeli citizens to receive a monitored basket of services, regardless of their medical or financial condition. Competition between the sick funds for members began thereafter, with the focus on the quality of the basket and the conditions the funds provided (Barnea and Cohen, 1996). A significant increase was noted in the supply and demand for medical insurance policies, both for complementary insurance and for private commercial insurance (Gross and Bramley, 1996). The percentage of those insured in additional and complementary health insurance grew from 45.8% in 1999 to 66% of Israel's citizens at the end of 2002 (Bin Nun and Katz, 2004).

Complementary insurance mainly covers transplants performed abroad, second medical opinions, alternative medicine, periodic tests, medical apparatus and several drugs not included in the basket.

Findings from surveys conducted amongst those insured after introduction of the law indicate that most of them felt no change in the level of medical services compared to the service provided formerly. 4% felt the situation had deteriorated and 18% felt the level of services had improved. (Berg, Gross, Rozen and Chinitz, 1997; Gross, Greenstein, Duvni, Berg, Yovel and Rozen, 1999; Gross and Greenberg, 2000). Similarly, most of those surveyed note that the health system was in need of considerable improvement (Rozen, Gross, and Berg, 1996).

Data published by the Public Complaints Commissioner regarding the National Health Insurance Law indicate a significant increase in the number of complaints by the insured against the sick funds in the period between 1997-1999, with a drop in their number between 2000-2001 (Complaints Commissioner, 2002). The reform in health services increased and strengthened the status of the Ministry of Health *vis-a-vis* the sick funds following the introduction of the law. Government involvement was higher than in the past and led to greater supervision and monitoring of their operations (Efrati, 2003b).

The national expenditure on health as a percentage of the GNP is found to be constantly on the rise. In 1994, prior to the law, expenditure stood at 7.9% rising to 8.8% in 2002. It would thus seem that the National Health Insurance Law did not lead to a drop or stabilization in the level of national expenditure on health despite that being one of its objectives (Adva Center, 1996; Bin Nun and Katz, 2004).

National expenditure on health per person rose from $1,237 before the law to $1,447 in 2002, while the health budget per person was reduced (Friedman, 2004).

The ongoing deficit in the sick funds, which in 1997 reached $333 million, dropped significantly to $111 in 2002. This was due to the increase in income stemming from the collection of self-participatory, complementary insurance and an increase in government support. It also was a result of a decline in the various expenditure components of the funds, the main ones including reducing development, marketing and advertising expenditure (Arbel, 1999; Bin Nun, 2000; Bin Nun and Katz, 2004; Chavusha and Schiff, 2003; Vitkovsky and Nevo, 1999).

The findings indicate that, despite the introduction of the law, the system still lacks financial stability and operates with an ongoing deficit (Gross, Rozen and Shirom, 1999).

The Tal Committee, a parliamentary investigation committee established to examine the implementation and financing of the National Health Insurance Law in 2000, decided that the ongoing lack of resources in the Israeli health services rapidly eroded the system's ability to cope with the challenges facing it in the realm of the quality of the health services in general and in social disparity in particular (Friedman, 2003).

According to current assessments by Prof. Shuki Shemer, Director of the *Maccabi* Sick Fund and deputy Director General of the Ministry of Health, the ongoing deficit is liable to be devastating for the sick funds and the health services. He postulates that the National Health Insurance Law is a good and even excellent law, but the rules of activity should be redefined, working in an open and competitive market in which the funds compete for the quality of treatment of the sick. Prof. Gabi Barabash, former Director General of the Ministry of Health and now a hospital administrator, maintains that the reform did not improve the economic condition of the health system (Friedman, 2003a).

The Israeli health system, like many others around the world, tries to cope with the task of including more medication and technology in the basket of services by creating orders of priorities necessary in view of the tough budgetary limitations. The total cost of the requests to include new technologies every year is $200-$333 million, while the budget at the disposal of the health system during the years of its operation since the law was enacted is about 10-15% of this sum each year (Balashar, 2003).

	Type of change	Former situation	Situation after legislation
1	Financing the system	Health insurance – optional	Compulsory health insurance for all
2	Altering the level of taxation	The sick funds have the right to set the level of taxation and offer reductions	Set level of taxation
3	Who collects?	Collection by the sick funds	Collection through a third party – National Insurance Institute
4	Level of self-participation	The sick funds determine the level of self-participation	Determining under Ministerial authority
5	Basket of services	Each sick fund decides its own basket	Basket of services determined by law
6	Quality of treatment	The sick funds set standards and provide services themselves	Regulations regarding the quality of service: Availability, waiting period, distance, choice
7	Equality within the system	The sick funds were allowed to limit joining	Freedom to switch between the sick funds without limitations and conditions
8	Reporting and supervision	The Ministry of Health did not have the right to supervise	The sick funds must report to the Ministry of Health (on finances and services)
9	Allocating resources to the sick funds	Membership tax: the insured population pay directly to the sick funds	Based on capitation: According to the number of persons and age the government pay to the sick funds

Chart no. 1: Summary of the changes in health policy following ratification of the law

To summarize: The vision underlying the National Health Insurance Law enacted in 1995 is assuring the provision of health services to citizens of Israel on the basis of justice, equality and mutual help, all on the background of a severe and ongoing crisis in the health system. The law affords an attempt to achieve a balance between the desire to provide the insured with a proper medical service and the need to consider the country's social needs and budgetary limitations. It determines the normative basis for providing health services and their funding.

Although the reform in the Israeli health services appears to have achieved many of its objectives, the experience of other countries indicates that implementing a reform in the health system is an ongoing

and dynamic process. The fact that it is based on the principle of equality and solidarity and the ongoing fiscal deficit inspire the issue of black economy in medicine . The massive development in recent years of black economy in medicine together with public medicine results from the increasing demand of consumers for uncompromising medical services and immediate accessibility on the one hand, and the need of medical-health service generators for proper status and income on the other. Policy-makers are committed, nowadays more than ever, to researching and handling the difficult organizational-social-economic implications of the negative phenomenon defined as black economy in medicine.

2.4 The mix of medical services in Israeli government hospitals: Public medicine, private medicine and private medical service in government hospitals (PMS)

The historical ideological perception of the health system in Israel is based, as mentioned, on an egalitarian doctrine that supports the right of the insured citizen to receive complete medical services with full equality. Developing private-commercial services is likely to make the system more efficient on the one hand, but on the other, the phenomenon is liable to lead to the creation of two service systems – a high level for those with means who will turn to the private sector and a lower level, for those without means who will turn to the public sector.

2.4.1 Public medicine in Israel

The public health system, with all its achievements, today faces a watershed. Medical progress and technology raised the public's expectations of receiving high quality services.

However, in the current situation, the health system is not capable, as mentioned, of bearing the burden of the expenses entailed by the health services. Due to the chronic shortage of money, public hospitals must restrict essential services, resulting in a long wait for diagnoses and operations. To overcome the long waiting lists, many patients bypass the bottlenecks through 'preferred medicine'. The concept of 'preferred medicine' refers to receiving medical services while exploiting the social status or personal connections to receive earlier treatment. And similarly, many other patients turn to black economy in medicine, where preference is for payment or for something equal to payment, received by the doctor personally from the patient, in the framework of his work in a public hospital. Black medicine, described at length in chapter 3, is clearly

contradictory to the legal regulations, creates inequality between the patients and shakes the foundations of public medicine.

The existing disparity between the medical level and ability and the service received by the patients in the public system, results of necessity in the dissatisfaction of consumers of the health services and affords one of the main factors for the expansion of the black economy in medicine phenomenon in the health system.

2.4.2 Private medicine

The private health system functions outside the public health institutions. The private health services are run in private hospitals and institutes. Recent years have seen a continuous rise in the number of general beds in private institutions. In 2001 private hospitals performed 20% of all operations in Israel (Rosen, Ofer and Greenstein, 2006). The development of the private health system was facilitated, as mentioned, on the background of the increasing demand for advanced health services that the public medical system cannot provide.

Medical activity in private hospitals has been expanding in recent years. Sophisticated treatments, such as open heart surgery, neurosurgery and IVF treatments are now performed there. The medical equipment placed at the convenience of the doctors in medical institutions is usually the most advanced.

Obviously, private hospitals can offer the doctors better salaries.

2.4.3 PMS in government hospitals

Several hospitals in Israel have an agreement between the hospital management and senior doctors for providing private medical services (PMS) within the confines of public hospitals. According to this the hospitals place equipment and services for treating patients, who turn to them in this framework, at the disposal of the doctors. Such an agreement enables them to increase their income by receiving payment for any medical treatment they provide while the patents enjoy the free choice of their doctor and receive special medical treatment. The patient usually pays the institution directly or *via* the insurance company, and the doctors receive a defined and agreed part of that payment.

The PMS creates a situation in which equal and more equal patients are hospitalized under one roof. Those with means are able to pay for the PMS, choose senior doctors and advance the date of their operation or treatment, while those without means are forced to make do with junior doctors and with a later operation date (Swirski, Connor-Atias, Atkin and Swirsky, 2001).

Only two empirical articles have been published till now on PMS. The first by Carmel and Halevi in 1999 was based on interviews with people hospitalized in a public hospital. It focuses on the satisfaction and other aspects of the service they provide that can be identified and assessed by the patients themselves. According to the patients, the level of satisfaction of most of the dimensions of the treatment was similar for both groups of patients (those treated under the PMS and the group of patients receiving regular hospital treatment in a public hospital). They also find that PMS patients were more satisfied with diverse dimensions of the treatment (such as the time devoted to the patient, the explanations provided, the ability to ask questions and so on). The above studies further find that the main reason for patients seeking PMS are to choose the doctor.

A recent study that explores selected issues in specific hospitals in which the PMS functions in Israel (Rozen, Ofer and Greenstein, 2006) finds that:

- PMS is financially more accessible to the middle class than was previously believed;
- The most senior doctors participate in almost all the complicated operations in public hospitals in which PMS is offered – whether on the public or the private track. At the same time, the PMS track admittedly increases the chance that a tenured senior doctor will be the primary surgeon (senior and responsible in the operating theater);
- The impact of the PMS on health and equality in the health system is limited and perhaps low.

In recent years, the Ministry of Health has explored in depth the topic of PMS and its implications. The discussion of this issue has aroused stormy professional and public debate amongst advocators and detractors of PMS.

2.4.3.1 Those favoring of choosing a doctor for payment

Those in favor of PMS claim that the egalitarian ideological approach, that asserts that providing uniform universal services of a proper level for all, failed. They maintain that reality has proved this cannot be applied

and that the patients, mainly from the middle classes, find many ways to bypass any attempt to prevent them from realizing their fight for medical choice (Balashar, 2002).

Those in favor of PMS recommend answering the needs of the public that insists on its right to choose a doctor in exchange for payment even within the confines of public hospitals. This is alongside creating clear and transparent rules for institutionalizing the arrangements under close, reliable and independent supervision and for monitoring, and with the possibility of applying sanctions against those infringing them (Friedman, 2002).

The supporters' main contentions are:

- The public has the right to decide its preferences;
- Reducing motivation to use illegal means and ways for choosing a doctor and shorten the processes limits black economy in medicine ;
- More efficient exploitation of infrastructures, equipment and facilities in hospitals;
- Increasing output of both hospitals and of doctors working there;
- Preventing diverting activities from the public to the private system.

2.4.3.2 Those opposing the choice of a doctor for payment

Those opposing the choice of a doctor for payment claim that the motive for introducing the arrangement, whereby a doctor can be selected for payment, stems mainly from the policy intended to improve matters for the limited group of doctors and a slim group of wealthy patients, creating two levels of treatment and differences in accessibility in public hospitals.

The danger exists of exploiting such an arrangement in the market that lacks real competition or social equality but entails a large element of the doctor's control in determining the number of medical actions and types of treatment.

Those objecting aver that any attempt to legitimize the mechanism that enabled providing private services in a public framework will seriously harm the concept underlying the National Health Insurance law (Shedmi, 2003; Swirsky, 2003).

The detractors' main contentions are:

- The right to choose pertain to the minority, since a limited number of senior doctors will benefit from the arrangement and a limited number of consumers will be able to acquire the service;
- The arrangement contradicts the spirit of the National Health Insurance Law, that is based on principles of justice and equality;
- Two tracks for receiving service will develop – one for the rich and one for the poor;
- Public resources will be directed to a limited number of doctors and patients;
- Expenditure on health will increase;
- Medical activity will focus mainly on areas of demand stemming from the arrangement.

2.4.3.3 The global situation

A survey conducted by Roseman and Rosen (2002) indicates that many countries around the world deliberate to some extent over patients in public hospitals choosing a doctor. The findings raise diverse models: In Belgium and England those insured can freely choose a doctor, without payment. In Spain and Norway those insured are not entitled to choose the doctor. Switzerland and Germany allow only those insured and who purchased special insurance are entitled to choose the doctor who will treat them. In Finland, officially, there is no way to choose the doctor although hospitals try to allow such choice to the patients. British public hospitals have departments that treat private patients in. In Australia, salaried doctors employed in public hospitals are allowed to treat their private patients in the hospital where they are employed.

Thus the various issues raised here illustrate, but in no way cover, all the issues involved in institutionalizing the private medical service mechanism as part of the public hospital system.

An official committee appointed by the Israeli Prime Minister, Ehud Barak, in July 2000 examined public medicine and the status of the doctors therein (Government of Israel, 2002). It published its findings in 2002, among other things on the topic of PMS. The committee recommended the implementation of PMS in all public hospitals in Israel and setting clear rules with close supervision and monitoring. The recommendations have still not been applied, a fact that emphasizes the complexity of the issue and its implications.

PMS is a complex issue composed of strengths and weaknesses, as well as opportunities and dangers. Since this study focuses on patterns of black economy in medicine, it is important to stress that some claim its implementation can lead to a decline in the scope of black economy in medicine in public hospitals (Resnick, 2004). At the same time, and relying on the study by Noy and Lachman (1998) that finds that black economy in medicine exists both when there is a PMS arrangement and in its absence, proves there is no evidence that PMS actually will reduce the phenomenon of black economy in medicine (Shirom, 2001).

2.5 Inequality and injustice in the Israeli health system

Since its enactment in January 1995 the National Health Insurance Law has provided all residents of the State of Israel with many benefits. The reform in the Israeli health system was founded on the principle of egalitarianism and solidarity, with those in favor of it claiming loudly that the law will make the health system more egalitarian (Berg, Rozen and Morgenstern, 2002).

Despite these claims, the study by Gross, Nirel and Matzliach (2005) on leaders of the health system that focuses on the National Health Insurance Law, notes that 75% of the participants mentioned the decline in the degree of inequality in the level of services following the introduction of national health insurance. At the same time, almost half the interviewees expected a worsening in the inequality in the level of services in the next five years, compared to 15% who expected an improvement.

Epstein et al. (2006), in their in-depth and current study on reducing inequality and injustice in health services in Israel, explore the significance and location of inequality therein in the thoughts and deeds of its executives. The main findings of this study are presented below.

2.5.1 Awareness of the extent of inequality in price and its importance

Most of the participants in the study were aware of the existence of inequality in health services, but many of them were surprised at the scope, and especially the degree, of inequality in providing clinical treatment and its results.

More than half of the respondents believe that inequality in health is an important topic. More than half of the interviewees noted that reducing inequality should be placed high on the order of priorities of policy-makers in the health service and in the associated social services.

Three social implications of inequality in health services are raised:

- A serious threat to the country's social stability;
- Bad health has important economic implications for society in general and for the health system in particular. Respondents noted that inequality in health services has a notable affect on the population's economic condition;
- Inequality in health services can demand a high price for the health system, for society at large and for patients and their families. Inequality is liable to lead, in the long-term, to an increase in the existence and appearance of chronic illnesses, a situation that will result in an increase in the cost of medical services.

2.5.2 The reasons for inequality in the health system

The explanations given by interviewees can be divided into three different levels: That of the population itself, that of the health system and that of the frameworks outside the health system.

1. Variance in the attributes of the population itself: The interviewees identified a cluster of interconnected population attributes that, as a group, have a key impact on the health situation in general and on the development of inequality in health. The attributes cited as having the greatest impact were education, income, residential area, ethnic origin, religions and degree of religiosity. Each of these attributes has a direct impact on health and on inequality in health, but the combined effect is particularly important.
2. The health system: Although it was not stated that increased inequality is the result of intended planning by the health system, the respondents mentioned explicitly that the current way of planning and providing health services contributes to the inequality therein. They mentioned facts within the health system that may be responsible for increasing and expanding the inequality, and claim that the health system made no real effort to reduce it. More than half the respondents mentioned problems such as the difference in quality, availability and accessibility of the services in various areas of the country or in groups of the population.
3. Frameworks outside of the health system: The interviewees claimed that the main population attributes connected to health – education,

employment, income and so on – are usually the responsibility of the framework outside of the health system.

2.5.3 Barriers to intervention to reduce inequality

The interviewees referred to diverse barriers to applying an intervention program to reduce inequality in the health system. The most prominent barriers in the Ministry of Health are the lack of defined policy regarding inequality in health services and the shortage of money and resources.
The lack of longer-term planning was mentioned as a barrier since the effect of certain activities to reduce inequality in the health condition is only felt later. Politicians and administrators alike usually prefer allocating resources to programs that produce results in the short term.

Interviewees attributed the lack of awareness, skills and activities amongst the doctors partly to the insufficient training regarding inequality in health and partly to the severe constraints of time in daily practice.

2.5.4 Coping with inequality in health: The role of the health system

Almost half of the interviewees mentioned that the Ministry of Health bears legal responsibility for the population's health. As such, leading the process to reduce inequality in health services falls within its responsibility.

Almost half of the respondents expressed the perception that the Ministry of Health should fulfill an important role in reducing inequality in health - partly through services it provides directly and partly through ascertaining that the other providers will have defined responsibility, such as incentives to reduce inequality.

Furthermore, most of the interviewees rejected the concept that the organization in which they work sets policy to reduce disparity in health services.

2.5.5 Interviewees' proposals for specific changes to expand the role of the health system in reducing inequality

Interviewees for this study proposed specific changes to expand the role of the health system in reducing inequality that included:

- Recognizing the existence of the problem;
- Targeted intervention programs for certain populations;
- Reinforcing preventive programs;

- Changing policy regarding allocating resources;
- Long-term planning and activities;
- Altering financial components in the National Health Insurance Law

2.5.6 The role of professionals in the health domain

Almost all the interviewees claimed that professionals working in the health domain play an important role in reducing inequality in health services. In this context, they refer to several areas:

- The doctor's responsibility: Many of the interviewees believe that every doctor is obliged to see the reduction in inequality in health services as an inseparable part of his role;
- The doctor's ability and skills: More than half of the interviewees referred to these aspects of the functioning of professionals (mainly doctors) in the health domain. They believe that most doctors lack good tools for dealing with this phenomenon properly. Nowadays, they claim, a very small proportion of the medical training is intended to prepare doctors for the impact of inequality in health services. Doctors are not sufficiently exposed (or not exposed at all) to the etiology and to the results of inequality in the health system;
- The role of the Israeli Medical Association: The Israeli Medical Association, like the other health institutions, has no declared policy regarding inequality in health services.

2.5.7 Role holders in the government

Almost all those interviewed mentioned inequality in health services as a national responsibility that demands the involvement of the highest government echelons (including the Prime Minister, the Knesset - Israeli parliament) and the Ministry of Finance. The findings indicate the respondents' feeling that in the absence of a clear national objective, yet to be determined in Israel, very little will change in practical policy and programs.

Chapter 3

Black economy in Medicine

3.1 Black economy: The scope of the phenomenon, its definition and its impact

A factory employee earns more at night as an unlicensed taxi driver, a person receiving unemployment pay or a foreign immigrant who survives from occasional work without a pay slip, a plumber who fixes the drainage without having to provide bills and declare his income to the authorities, or than a drug seller on the street corner and the nearby brothel. All these are examples of the black (or non-overt, as it is termed by several researchers) legal and illegal economy, whose business turnover comes to some trillions of dollars annually that are not reported and are not known to the tax authorities and governmental statistical entities.

The phenomenon of black economy has been attracting great attention in recent years of researchers throughout the world. There is increasing recognition of the scale of the black economy as not only a statistical fact of part of the non-reported national product, but as a far broader phenomenon that affects the world economy. More than half of the entire product in post-communist countries (mainly those that are members of the FSU) is produced in activities that are not reported or even in criminal activity. Thus it transpires from the research by the World Bank that attempts to estimate the scope of the black economy in 84 countries. The study data pertain to the year 2000 and include developing countries, countries that are in transition as well as the 30 industrialized countries of the OECD (Organization for Economic Cooperation and Development) (Etted, 2003).

The study does not use the explicit term 'black economy' and makes do with the neutral term 'Unofficial economy', but the explanations presented in the introduction to the research findings leave no room for doubt. According to the authors, this is an entire sector whose incomes are not reported and whose illegal activities conducted there, such as smuggling and deceit, are not discussed.

3.1.1 The scope of the phenomenon of black economy

The extent of the black economy is increasing in most developing countries. In Africa, for example, the scale is so great to the point of it actually being parallel to the official economy.

The extent of the unofficial economy in Israel amounted to 21.99% of the GNP in 2000, which is about $23.2 billion. This assessment is higher than that submitted a year ago by Yoram Gabai, formerly head of the Department for National Income in the Israeli Treasury. In his position paper compiled for the government, he estimates that the scope of black wealth in Israel stands at some 15% of the total economic activity.

The research data of the World Bank positions the black economy in Israel amongst those of the OECD countries (an average of 18%) and amongst all the developing countries (an average of 41%). The scale of the black economy amongst OECD countries stands at between 8.8% of the product (Switzerland and the USA) and 27% (in Italy) and 28.6% (in Greece) (Etted, 2003).

The authors of the World Bank study are well aware of the great difficulty in assessing the scale of the unofficial economy in the various countries, due to the disinterest of those involved to volunteer data on their activities. For this reason, they note, assessing the unofficial economy can be considered the 'scientific desire to know the unknown'. According to them, the main factors that affect the scale of the unofficial economy are the high tax burden and governmental over-regulation.

3.1.2 Defining the black economy

The black economy is defined as part of the economic activity that does not appear in the data on the gross national output. This is an illegal market in which tax is evaded, and marginal benefits and diverse types of fraud exist.

Modern man lives under the supervision of the government and its regulations. When he finds government activity is unsatisfactory or damaging to him, he tries to avoid the consequences by evading the law, circumventing it or escaping to the world of the black economy that ignores government regulations and paying taxes (Molefsky, 1982; Tanzi, 1982).

Since the data regarding employment in the black market do not appear in the GNP data, the national data of the national accounting are distorted. Some indication of the scope of black economy deals is the existing and illogical difference between the national output and expenditure.

The black economy may be divided into four main types:

1. Accumulating economic profit without reporting it to the State.
2. Economic activity in contradiction to government regulations, such as licensing laws, tax brackets, supervision, merchandise marking, employment laws, agricultural regulations, export and import regulations, instructions of the supervisor for means of payment and of the banks, laws of producing energy and its sale, and many more. Not all those involved conceal taxes, but all of them run their businesses in contradiction to law while evading government supervision.
3. The economic activity of those dependent on government allocations or on public welfare, for which reason the law greatly limits the freedom of their economic activity.
4. Economic activity of illegal residents who may even pay certain taxes, but must operate in secret lest they be expelled from the country (Drummond, Éthier, Fougère and Rudin, 1994; Gervais, 1994; Spiro, 1994).

The black economy is an existing fact in many countries, most of which try to fight it in a variety of ways, starting from simple explanation through to punishment and legal steps. The need to gather the numerical data on those involved in the black economy is not questioned; the national resources must be wisely allocated in order to fight the phenomenon. However, since those involved in the black economy prefer to hide, it is extremely difficult to estimate the scope of the phenomenon.

The black economy is most controversial, but for all that one may discern several agreed assumptions in its regard. For example, even the greatest doubters of its existence, such as Drummond et al., (1994) and Gervais (1994) concede that it has greatly expanded since 1991 and makes the enforcement of tax laws very difficult. However, opinions differ over the reasons for the phenomenon and its scale. Those supporting the claims of the Canadian Central Bureau of Statistics believe that the monetary analysis of the phenomenon (the impact on the means of payment) exaggerates its extent, but even the critics of the approach admit that it succeeded in identifying changes in the black economy over time.

Varying assessments have been voiced of the part played by the black economy in Canada's Gross Local Product (GLP). Smith (1994) maintains it has reached 5.2% of the GLP while Spiro (1994) believes it is 8% of the Canada's GLP in 1993. According to Drummond et al., (1994) this is slightly more than 1% of the GLP since 1990.

Drummond et al. (1994) concede that the expansion of the black economy phenomenon may have been caused mainly by increased taxation, including the introduction of VAT. However, for example, the percentage of taxation on income from the total average income did not increase in Canada and therefore it seems that the main guilt lies in VAT. These researchers maintain that the attitude of the public towards taxation has changed. Grady's (1992) findings offer one explanation. He finds that change in taxation under the previous Canadian central government, peaking with the introduction of VAT, transferred much of the tax burden from corporations and high income citizens to those with medium incomes. Since these steps were considered unreasonable, the readiness of the public to pay real taxes may thus have weakened.

The economic recession contributed to the expansion of the black economy. Many researchers claim that those receiving welfare allowances and social security are motivated to work in contradiction to the law in order to make up their incomes. Thus when the recession ends tax evasion will decline. However, the claim refers only to employees and not to employers. During widespread unemployment many prefer to work 'black', but much of the expenditure in the black economy is on luxury services and thus they drop during a recession (Spiro 1994, 1996, 2000).

Spiro (1994) explores the impact of the recession on the black economy, presenting rates of unemployment as possible factors for change in demand for means of payment. He concludes that the impact is negligible, and that most cases prove that the recession tends to reduce both the black and the legal economy.

In his 1993 study, Spiro presents the results of four monetary equations that explore a variety of possible assessments. The purpose of the examination was not to discover the scope of the black economy, since this objective is impossible by its very nature, but reasonable trends in its development. The study concludes, based on the facts, that VAT evasion is on the rise, and that researcher proposes that the central government intensifies enforcing its collection. The government accepted his suggestion and has recently there has been a considerable rise in income from this tax. The most common monetary research method is that of

Tanzi (1982) who compiled an equation according to which the rate of income tax determines the change in demand for cash. It is not intended to prove the existence of an extensive black economy, but that tax steps have only a negligible and random impact on the demand for cash. In view of the economic data proving this, it should be taken into consideration despite the great difficulty in translating the economic facts into an exact assessment of the scope of the black economy.

3.1.3 The impact of the black economy

The black economy is a very serious economic problem for many governments around the world since it affects one of the main sources of government income. Accordingly, it is essential to try to discover the scope of the phenomenon and the changes in it.

In recent years, the black economy has enjoyed a growing place in the public debate and the governments of several countries have even taken diverse steps against the phenomenon since politicians have recently begun to feel the need to act against it.

The Israeli Minister, Amir Peretz, referred to the war against corruption. According to him,

> "Since 2001, the scale of corruption has increased. The scale of black wealth is inconceivable, between 60-100 billion NIS annually. The black economy is thriving under the noses of government authorities. The losses to the country from black money can solve its social problems. There is a black underworld that is a moral stain with which one must not come to terms. One must declare an uncompromising war against the black wealth and the black economy".
>
> (Ynet, 15.5.2006)

However, the politicians' problem is that most of the public's anger is addressed to the rich who conceal their taxes, rather than towards the poor competitors, although these latter also enjoy official condemnation and are accused of increasing unemployment and social injustice. This is true mainly of the illegal wage earners and those who fraudulently obtain allowances. But what of the illegal moonlighting (unreported evening work)? Could the perfect remedy for illegal earnings and the black economy in medicine be raised punishment, supervision, control and legislation? How can one fight unreported earnings?

The scientific and general newspapers bother little to deal with such questions, and most of the discussion of the black economy swings between two poles: Blaming it for every national sickness, such as the increase in unemployment and the pubic debt or seeing it as the spoils of over-taxation and supervision of the economy.

The main reasons for the fear of the economic leaders of the expansion of the black economy phenomenon are:

1. It can be interpreted as an attempt by citizens to escape the choking grasp of the State rather than to protest. If the black economy expands due to the increase in the scope of taxation and welfare levies, in addition to the atrophying of the institutions, then the 'escape' will even further wear out the taxation mechanisms and the National Insurance. It will then be even harder for the public sector to function, and the rates of taxation and deficit will increase even further following the expansion of the black economy.
2. The expansion of the black economy makes it hard for the national leaders to rely on official economic data, such as the rate of unemployment/employment or data on income and growth, and therefore the policy to be determined based on these data is also doomed to failure.
3. The black economy also greatly affects legal economic activity. On the one hand, a flourishing black economy attracts manpower taken from the legal economy. On the other hand, a large part (some two-thirds) of the profits of the black economy is immediately spent on legal consumption and thereby contributes greatly to the legal economic activity (Isachsen and Steiner, 1989; Mirus, Smith and Karoleff, 1994).

The black economy is a means for those active in economic life to avoid the supervision of the government and its laws. It is also liable to create an economic mess, to the extent that endangers the government authority, rule of law and the economic institutions, and makes it hard for them to help in the economic development. Every analysis of the black economy must include discussion of its impact on legal economic activity. For regardless of the reason that encourages people into the black economy, the broad phenomenon is liable to have considerable impact, and therefore its influence must be recognized in order to find ways to limit the phenomenon.

A decline in income from taxes is the key issue manifested in the extent of the lost sums of taxes. When activity in the black economy expands, the loss of income from taxation makes it hard for the government to

continue providing services to the public. The government is committed to expenditure and to diverse public promises but following the drop in income it is liable to cut expenditure, increase taxation, or to increase the deficit for covering expenses. It will thereby just lead honest citizens to black economy activity, or motivate those who are already involved in it to expand it. The result is liable to be the worsening of the situation: Raising taxation reduces investment and saving, and slows the growth of legal economic activity. The Canadian government, for example, according to cautious evaluation, loses an annual average of $76 billion in income from taxes because of the black economy (Berger, 1986). There are also estimates that New Zealand loses between 6.4 – 10.2% annually of the sum that should be taxed because of the black economy.

Employees and business owners participating in black economy activity do not only reduce the State income from taxes but also distort the economic and social data, according to which State leaders act. If there are assessments that the black economy is too expansive in many countries then the official data are largely distorted downwards. Hence the data regarding economic growth, the business turnover, rate of unemployment and work productivity (including assets and activities that can be taxed) are also distorted.

Faulty social-economic policy is liable to be derived from the distorted economic data. Those involved in black economic activity may not be entitled at all or only partially entitled to make use of the government services, such as the police, education, health, roads, transportation and emergency services.

Those involved in black economic activity, who avoid paying taxes continue at the same time to enjoy the public services, and in fact, deposit the entire cost on the tax payers. In a situation in which the black economy is expanding, the money moves from the regular to the black economic activity, i.e., a loss of considerable welfare budgets.

The phenomenon of black economy in medicine

> "The professor told me, I am prepared to operate on you if you so want. But you must contribute $2,500 to the hospital.."
>
> (Resnick, 2005)

Police investigations conducted in recent years indicate that the phenomenon of black economy in medicine, in which framework many doctors demand and receive thousands of dollars (in cash or through

research funds and societies) in exchange for an operation or medical treatment, has intensified in recent years (Resnick, 2004).

The regulations of the Israeli Ministry of Health state that in no case may payment be demanded from a patient while he is in a government hospital or when he comes for treatment, and treatment may not be conditional on payment or contribution. Support for these regulations was provided in 1998 when the High Court ruled against the head of a department who performed a private birth in exchange for payment to a research fund of the government hospital. The judges decided that, "In such a situation this is not a contribution but the donation of money in exchange for a service that should have been provided in any case" (Resnick, 2003).

However, despite all this, the phenomenon of senior doctors (mainly surgeons and gynecologists) in public hospitals, who ask for payment from their patients or a contribution to their private pocket or to the hospital research fund for an operation or treatment they give, is very common.

3.2.1 The connection between black economy and black economy in medicine

Arrow (1963, in Noy, 1997) maintains that the health market is unique in that it is a combination of all the components. An analogy may be found for each component, but together they create a market that is also totally different from the perspective of consumers' attitudes towards their health. At this point, there are ramifications for Israel, as discussed by Condor (1985, 1986, in Noy, 1997). Israel, according to Condor (1986) suffers from a problem of a lack of solidarity: Each individual cares for increasing his/her personal wellbeing, even if at the expense of the society in which he/she lives. He emphasizes that recent years have seen a general decline in morals and identification with the establishment and the lack of identification with collective values of the general public is noticeable.

When the connection between the black economy and black economy in medicine is examined, several clear attributes are revealed:

- The 'deal' is worthwhile for both patient and doctor – for both parties it is worth doing black deals since the patient enjoys economic participation from the health system (Israel's sick funds – *Kupat Cholim*) and the doctors prefer black economy due to the very high tax rates that encourage non-reporting of income.

- The bureaucratic burden in the tax and licensing authorities – i.e., the problems in obtaining permission for running private hospitals and unclear lines of separation that create ambiguity as regards committing a felony.

Berglass and Zedaka (1988) maintain, in connection to economic theory, that the medical services market is now unbalanced. The government sets arbitrary prices for these services that are considerably lower than the break-even prices. The market tends to reach a balance by turning to private and black economy in medicine.

Noy (1997) explains that in the current health market situation one can consider government involvement as setting maximum prices. It sets a price for each day of hospitalization regardless of the number and types of operations. Hospitals therefore have an incentive 'to fill their beds' with patients in order to maximize the payment and conduct as few operations as possible in order to reduce expenses. Consequently, the rates of hospitalization are high but less compatible with providing the necessary services. In fact, black economy in medicine that bypasses government involvement brings the medical market closer to a balance. Under these conditions, the sick pay more, the doctors provide more health services and the total profit and benefit to the economy increase.

Noy (1997) asserts that black economy in medicine, through its very functioning nowadays, is defined as a product that complements public medicine for which demand increases as long as the price of the product that it complements drops. In the absence of intervention, cost and quantity will tend to return to a situation of imbalance. If, in the black economy in medicine market, the price of medicine rises so drastically, the quantity offered will increase and the quantity demanded will decrease. Then, according to the definition of a complementary product, the demand for black economy in medicine will drop.

The phenomenon can be analyzed according to:

1. The functional approach – a function of the balance between the patient's needs, the doctor and the health system;
2. The pluralistic approach – a conflict exists between the Treasury and the Ministry of Health over budgets, thus there are strikes, patients are hurt and they turn to black economy in medicine ;
3. The symbolic interaction approach – patients interpret the situation in such a way that only if they pay money to the doctors will they receive good service and the doctors, on their part, thus complement their income.

The attributes and definitions of black economy in medicine

> "The phenomenon of black economy in medicine is similar to a cancerous growth that destroys the whole body. The phenomenon questions and shakes the foundations of public medicine and its implications are prohibited from the moral, ethical and public perspectives...the medical association in Israel determinedly denies this phenomenon and defends it in an extreme manner".
>
> (Balashar, 1995: 3)

Confusing the areas between public and black economy in medicine contradicts the principles of the Ministry of Health administration. This serious problem can no longer be ignored in view of the spread of black economy in medicine in the public medical system. The quiet penetration of black economy in medicine in government and public hospitals brings with it the destruction of values and distortion of moral standards.

The health system around the world is in distress, one of its distinct markers being black economy in medicine. Under existing circumstances it is impossible to overcome the phenomenon of the spread of black economy in medicine without coping with the difficult problems facing the health system (Ziegler, 1999).

It is customary to define black economy in medicine as everything linked in any way to the preference for treatment, not based on medical considerations, that is provided in a public institution and not in the overt and institutionalized framework. By definition, this includes monetary payment or other benefits from the patient and received by the doctor in his position in a public hospital. It also includes a contribution to the hospital's research fund or a non-profit fund of the department in which the patient was hospitalized.
The attributes of black economy in medicine are:

- Payment by the patient in need of medical services provided regularly at hospital and in the clinics, using the medical facilities and equipment that belong to the institution running the place;
- Private payment in return for receiving a doctor's letter or treatment to be given using the public medical facilities, although the person in need of treatment is entitled to this without payment in view of his membership of the sick fund;
- An appointment or letter from the patients entitled to receive services at the public medical facilities without payment, at private clinics at which they pay for the service;

- Advancing the appointments for treatment and planned operations at public institutions in exchange for a special payment.

The Ministry of Health negates any confusion of domains between private practice and the work in public hospitals. Exploiting manpower, facilities and equipment of the public system for private profit destroys every good quality and prevents equal medical treatment for all the sick (Levin, 1998).

The procedure laid down in the Israeli regulations for hospitalization in public hospitals defines several safeguards, notably:

- The prohibition against receiving payment for any operation, consultation or any other activity by a patient in a public hospital, whether this is the department in which the doctor works or another department;
- The prohibition against receiving payment from a patient who is to be hospitalized in a department or from a patient coming for a checkup in a hospital clinic;
- The prohibition for doctor to invite patients being released from hospital to their homes.

3.2.3 Historical background

As early as in the mid-70s the administration of the Ministry of Health was aware of the scale of the phenomenon of black economy in medicine in government hospitals. Consequently, the CEO of that Ministry appointed a committee in October 1977 to explore the possibilities of providing private medical services in hospitals.

The committee recommended that the private medical service be included in public hospitals, but monitored. Since the phenomenon exists covertly in several departments it should be institutionalized and made it more respectable.

- It will facilitate a second shift in the operating rooms, clinics and laboratories.
- The expensive hospital equipment will be used efficiently and the waiting list for operations will be shortened.
- The wishes of the patients to freely choose a doctor will be respected.
- The private medical service will transfer a larger part of the time of senior doctors in the hospital working after regular work hours.

Thanks to sharp public reactions to the establishment of the committee, it did not reach practical suggestions.

Already in 1985 the legal advisor to the government of Israel warned of the widespread phenomenon in public hospitals in which doctors offer patients private treatment. In his letter, the legal advisor noted:

> "It would seem that a doctor in a public hospital who receives private payment from a patient, when this payment is associated with his role in hospital, commits a serious crime, even if there is no personal and declared connection but an indirect and covert connection. Furthermore, such a practice is liable to shake the foundations of public medicine, harm the patients who cannot or do not wish to give such payment and has improper implications from the public and moral perspectives."
>
> (Noy and Lachman, 1998:45)

The legal advisor to the government at that time, Prof. Yitzhak Zamir, conveyed a document to the then Minister of Health, Mordechai Gur, entitled "Private medical care given by doctors in public hospitals". In other words, a document dealing with what the legal advisor also called black economy in medicine. He related to this issue as, "Everything connected in any way to the preference for treatment not based on medical considerations, provided at a public institution" (Noy and Lachman, 1998:46).

This definition includes the financial payment or benefits given by the patient and received by the doctor due to his position in a public hospital. In referring to black economy in medicine, the legal advisor also related to the doctor who receives financial remuneration personally from the patient, as payment for private medical treatment outside hospital, as a contribution to the hospital or to a research fund in this institution. These actions will be considered black economy in medicine, even if the payment is only indirectly connected to the doctor. In any case, as Prof Zamir states, these things are a serious felony of taking bribes and breach of trust (Noy and Lachman 1998).

The above authors find that doctors clearly agree to the definition of black economy in medicine. Personal payments to a doctor are defined as black economy in medicine, while payments to the department in money or as a gift are not defined as such.

The 1988 report of the State Comptroller discusses the problem of black economy in medicine at length and in detail, and describes a phenomenon that the authors believe is significant. It attempts to define four areas of black economy in medicine:

1. Payment by the patient for medical services provided while working in hospital or clinics, using the medical equipment or instruments belonging to the institutions running the place, such as a person coming for an operation in a public hospital and paying the surgeon from his own pocket in order to receive more devoted care;
2. Payment in a private framework in return for a referral to public medical facilities, or medical treatment provided there, although as a member of the sick fund the patient is entitled to receive the treatment without payment;
3. Referring patients, who are entitled to receive services at public medical facilities without payment, to private clinics where payment is necessary. Use is made here of the system for advancing private business. We believe, states the report, that this is in the 'greyer' area.
4. Advancing the waiting list for treatments and planned operations at public institutions for special payment.

These definitions are divided into sub-domains:

- A private visit to the doctor in order to shorten the waiting list at a public hospital;
- Use of resources and public facilities for private treatment without the employer's (hospital's) permission;
- Partial introduction of private medicine to public hospitals;
- Giving contributions in money or equipment directly to the department for the treatment the patient received there;
- Personal payment to the doctor for the treatment the patient was supposed to receive in any case in the hospital;
- A contribution to the research and in-service training fund of the department for the treatment the patient would anyway have received there;
- Personal payment to the doctor so that he, and not another doctor, will treat the patent;
- Giving gifts or other benefits and services to the medical staff prior to, or following, the treatment.

One of the important committees established on this subject was the national investigation committee to explore the functioning and efficiency of the health service system in Israel, headed by the High Court judge,

Shoshana Natanyahu. The committee adopted her definition of black economy in medicine:

> "Anything connected in any way to the preference for treatment, not based on medical considerations, provided at a public institution that is not in the overt and institutionalized framework, such as private medical services. This includes monetary payment or other benefits that the patients give and the doctors receive in their positions in a public hospital".
>
> (Noy and Lachman, 1998:45)

3.2.4 Israeli legal decisions regarding black economy in medicine

Israeli rulings do not refer directly to black economy in medicine but term it improper behavior of accepting bribery, or, receiving something under false pretenses, or, improper behavior, unsuitable behavior and so on.

Thus, for example, in the decision of the State of Israel v. Dr. Ayalon ben Rafael Lachman, case no. 2567/97 (Ministry of Justice, 1997). The background to the accusations is the demand for payment from a pregnant woman for the doctor's personal presence during the birth at a government hospital in which he was head of the maternity department, and where his services at the hospital could not be taken privately. His punishment was 15 months of imprisonment. In her decision, the judge, Strassberg-Cohen, refers to several key issues in black economy in medicine common in Israel: Private medicine, bribery, the request for a donation, conditioning medical treatment on receiving a contribution and criminal behavior, as detailed below.

- Private medicine in a public hospital - Judge Strassberg-Cohen notes that there is no argument over the fact of black economy in medicine does not exist in other government hospitals in Israel, and that hospital doctors are forbidden to receive payment privately for medical services offered to a patient within a public hospital. Hence, states Strassberg-Cohen, a doctor who demands payment for his personal presence at a birth committed a crime of bribery.
- A request for a donation – the judge decided that the Israeli law leaves no room for doubt that every stipulation by a public employee regarding the provision of service in the framework of his/her employment as a public servant regarding giving a donation to the institution in which he/she works, is bribery and there is no difference if the service is provided during work hours or thereafter,

or if the payment is made directly to the person requesting such or to the institution in which he/she works.

> "The fact is that this is a donation...In order to benefit from treatment and does not offer the donor or the factor collecting the donation, any immunity from being accused of crimes of accepting and giving bribery".
>
> (Banai, 2002)

In a similar case, Judge Dan Arbel made statements that correctly express the proper norm and the proper legal situation.

> "It is clear that when the family of someone undergoing an operation is distressed and interested in the department head personally operating on their dear one, a demand initiated by the latter for a donation of 10,000 NIS is extremely stressful for the family and it responds and donates the money. In such a situation this is not a donation but giving money in exchange for a service that should be provided anyway by the accused, who is a public employee, in the framework of his regular employment, and therefore it is bribery."
>
> (Banai, 2002)

- Criminal intent – the criminal intent needed in the case of bribery is actual awareness of the factual components of the crime.

High Court President Barak states of this:

> "For him to be convicted of bribery the prosecution must prove that when he asked for payment, his request was accompanied by criminal intent, for this payment will be in exchange for his work as a public employee...In other words, only if the person requesting the benefit intended to repay the giver in the framework of his pubic position, can this be considered as having criminal knowledge necessary for the crime of bribery". (Banai, 2002).

3.3 Black medicine and (the doctor) medicine as a 'for profit' economic unit

The cases exposed so frequently regarding black economy in medicine are only the tip of the iceberg. The problem starts from the moment that the doctor becomes an economic unit 'for profit'.

Doctors quickly reach a situation in which there is a conflict between their economic interest and the patient's health interest.

When exploring in depth the cases of black economy in medicine published in recent years, a clear picture is obtained in which there are specific medical specializations wherein black economy in medicine enjoys renewed success. Thus, for example, everything concerned with heart surgery which is considered most prestigious. The reason for this is apparently the combination of prestige, the specific area of knowledge and the condition of the patient dependent on the specialist doctor.

A system has been created around these procedures that 'crown' those dealing with them, such as those performing angiograms, as 'super-doctors', who of course dictate market demand.

These are doctors to whom the public is prepared to pay enormous sums of money for them to invest ten minutes of their time to perform an often simple, routine medical procedure. There are, for example, senior gynecologists who work in public hospitals and whose official salary is about $5,000 a month, but charge about $5,000 for performing such a routine D&C abortion. This sum is equal to their monthly salary.

3.3.1 Hospitals as economic conglomerates

Twenty years ago, black economy in medicine in Israel was repugnant and extremely rare in public hospitals. Now the hospitals have become economic conglomerations, profit centers that include hotels, shopping centers and other attractions. The hospital management finds itself ever more involved in business development and tends to sometimes forget the traditional roles of hospitals.

Even more so, the medical system considers internal medicine to be inferior and the heart surgeon a gold mine who is supposed to bring in millions of dollars to the research fund. Hence, there is a passive and active push by the system itself in that it tests and positions doctors from diverse fields according to economic rather than medical criteria – the sum of money they bring into the hospitals. Some surgeons thus receive huge salaries in government hospitals and internists earn considerably less (Ravid, 2003).

The patient and doctor who are supposed to be on the same side frequently encounter a situation in which the hospital forces its doctors to be agents of the system – in other words, to serve the interests of the system and not of the patient.

3.3.2 The connection between the doctors, the medical industry and black economy in medicine

There are few topics in medicine that arouse stormy discussion as the connection between the pharmaceutical industry and the medical field. Pharmaceutical companies spend more than $11 billion annually for promoting sales, with $5 billion of that sum invested in sales representatives. The annual expenditure for each doctor varies between $8,000-$13,000 (Wazana, 2000). The opinions of these expensive relationships are divided and contradictory. One study finds that 85% of the medical students believe receiving a gift from a politician is improper, while only 46% of them thought receiving a gift of similar value from a pharmaceutical company is improper. Most of the medical organizations advertise guidelines on this problem. Since this topic is so loaded it may be connected to the potential implications should it transpire that gifts influence proscribing medical prescriptions and the treatment proposed to the patient, so that the result is a rise in cost or negative health implications (Gibbons, Landry and Blouch, 1998; Resnick, 2005; Shedmi, 2003a).

The connection between the medical industries and doctors can be manifested in:

- Gifts
- Free samples of medicines
- Subsidized meals
- Financing trips and stays at medical conferences
- Financing research
- Financial grants

In her study Wazana (2000) explores this issue through critical investigating of the existing evidence. The study finds that the interaction with the industry starts already in medical school and continues thereafter (Andaleeb and Tallman, 1995).

Most of the doctors met sales representatives about four times a month and the frequency stabilized during their specialization. The specialist residents are not significantly different from doctors in the frequency of these interactions.

The frequency with which the doctors are compensated by meals and pharmaceutical samples financed by the industry decreases as they work more in their fields, while the frequency of receiving special grants, trips to conferences and financing of research increases (Gibbons, Landry and Blouch, 1998). Lexchin's (1993) study finds that residents receive six gifts a year.

The many studies reviewed by Wazana (2000) indicate that most specialists deny that the gifts are likely to influence their behavior, while residents agree that their interaction with sales representatives would lessen without the gifts. Such interaction between the doctors and the industry raise difficult ethical problems, of which financing trips abroad was the most worrying (Shedmi, 2003b). At the same time, most of the doctors confirm that the propaganda of the representatives of the pharmaceutical industries should be forbidden (Caudill, Johnson, Rich and McKinney, 1986).

3.3.2.1 The results of the interaction and the implications for policy and black economy in medicine

Although several positive results were identified (the improved ability to adapt treatment to severe illnesses), most of the studies find that the interaction between the doctors and the industries lead to negative results. These include

- The impact of knowledge (the lack of ability to identify false claims regarding the medication)
- Approach (a positive approach towards representatives of pharmaceutical companies)
- Awareness
- Preference and prescribing prescriptions for the new drug
- Behavior (submitting requests to add a drug to the list of drugs despite it not necessarily having advantages to other existing drugs, writing illogical prescriptions, an increase in the frequency of writing prescriptions, writing prescriptions for fewer genetic drugs and for new and expensive medication that has no proven advantages.

The social-economic-business connection between the rich medical industry and the doctors diverts many doctors from the straight and narrow path and leads to conflict of interest between the patient's real needs and the good of the medical companies that support the doctors. A doctor's recommendation for unnecessary treatment and/or preference for one treatment over another because of pressure from industrial factors is definitely defined as an inseparable part of the black economy in medicine phenomenon. This study will not focus on the connection between the medical industry and the world of the doctors.

3.3.2.2 The connection between black economy in medicine and the medicine practiced in Israel

One of the reasons for the broad existence of the black economy in medicine phenomenon in Israel is the structure of the health system, the ongoing crisis that surrounds the nation, and, consequently, the accessibility of medical treatment in hospital. Since the health system in Israel is predominantly a public rather than a private system, the potential is generated for the creation of a black market in medical services. In contrast, when the health system is private and all patients pay for the treatment in which they are interested and at the level they want, no black market is created in these services (Noy and Lachman, 1998).

Noy (1997) asserts that the ongoing crisis in the Israeli health system is characterized by several prominent interconnected attributes:

1. The limited resources for comprehensive medical cover for all at zero cost;
2. An ongoing crisis in the work relations in the health system;
3. Lack of efficiency in the functioning of the Israeli hospital system;
4. The absence of incentives for increasing hospital output at both the doctor and the departmental level, and consequently low output;
5. Creating long waiting lists for diagnostic examinations and elective operations.

Several key reasons exist for the growth of black economy in medicine due to the crisis in the Israeli health system:

- The limitation in the scope of the resources necessary for comprehensive medical coverage for everyone in need and at low process of medical insurance.
  This policy in fact produced a system of comprehensive and relatively cheap health services, while also generating, amongst other things, the increased use of medical services by the consumers. Pressure resulted to increase the resources allocated to the health

system; increasing demand and the overuse of the limited resources created a shortage of services, especially in those services considered critical and life-saving, such as heart operations, angiograms and so on. These services were not properly budgeted for many years, as a result of which the low price resulted in a surfeit of demand and long waiting lists for treatment, a surfeit that was directed to expensive private medicine. Thus paradoxically, exactly the attribute of cheap prices and great accessibility are some of the factors that caused the increased requests for private treatment in these domains, and at the same time, aroused and increased the demand for black economy in medicine that was available and cheaper than private medicine.

- The ongoing crisis in work relations in the Israeli health system. Relatively low salaries, frequent labor disputes, low satisfaction of employees and other factors resulting in repeated crises for many years. The service offered patients often lacks the personal touch, attention and caring that are so important in medical care. The patients feel that in order to enjoy personal attention that they lack in public hospitals, they must turn to black economy in medicine in order to attain this. The inefficiency of the system created frustration amongst many patients, who felt they are not properly cared for: Operations, exploratory tests and laboratory work are not performed with the proper efficiency, believe the patients. Their perception was that money and payment in other forms will encourage efficiency in their care.
- The absence of incentives to increase the hospital output at the individual doctor level and at the departmental level, as a result of which the hospital output is low. The result is, of course, lengthening the waiting list for operations, especially for life-saving operations.
- The extended waiting lists obviously created a incentive amongst the patients to boost the use of black economy in medicine , and not only at the dimensions of choosing the doctor and the payment for the more preferred and personal treatment, but also at the dimension of shortening the waiting list for operations (Noy and Lachman, 1998).

3.3.2.3 The extent of black economy in medicine in Israel

The exact extent of the phenomenon of black economy in medicine is one of the greatest and most intriguing unknowns. Conflicting assumptions and estimates, whose data base was not always clear or solid, have been raised for years. Nevertheless, the phenomenon is assumed to be significant and of a tremendous scale.

Noy and Lachman's (1998) research findings, based on data gathered between 1990-1991, prior to the great reform in the Israeli health system, in 1995 and the introduction of the National Health Insurance Law, find that the decisive majority of patients and of doctors considered the phenomenon to be extremely common or most significant.

Most of the doctors estimated the scope of activity to be about 25% of all hospital activity. It is important to note that although they believe black economy in medicine to be extremely widespread, they significantly reduced its extent as regards payment directly to doctors (compared to the high estimate of payment to the department) when coming to assess its scope in their departments. Noy and Lachman (1998) also find that the phenomenon is more frequent in the surgery department than in the department of internal medicine and others.

27% of the patients reported that they paid doctors in order for them to treat them and 52% of them declared that they would do thus if they had to.

According to Prof. Ran Lachman (www.msn.co.il, 2006), 27% of doctors receive black payment. He notes that if the country were to establish an authority to fight corruption in the Israeli health system it would be possible to save about $12 million annually. Lachman (2006) further mentions the Counter-Fraud Service founded in England whose purpose is to reduce corruption in the health service. This service reported success in saving £675 million over six years, i.e. £84 million annually, accounting for 0.12% of the British health budget.

As mentioned, the phenomenon of black economy in medicine is not marginal and negligible but a thriving market, in which many patients in public hospitals take money out of their pockets, in one way or another, for treatment that was supposed to be free or, more exactly, in exchange for the medical insurance they pay the state.

Chapter 4

Marketing and Consumer Behavior in the Health Market

Consumer marketing and behavior in the health market is a relatively young area of research. One of the main reasons for increasing interest in this domain stems from the fact that the marketing of human services domain in general, and services in particular, developed greatly in recent decades. Many factors that compete over the purchaser's pocket resulted in the consumer becoming the authority, and only the consumer who best adapted his knowledge to the consumer's special desires and needs can survive in the competitive market.

4.1 Marketing in the health services: The need, the cost and the value

More than two decades ago, in an attempt to break through and expand the explanation of the marketing approach in the business sector, was exchange as the essence of the marketing approach emphasized (Kotler and Levy, 1969). It is also described thus nowadays (Kotler, 1991; Kotler and Armstrong, 1989). According to this approach, marketing is a social and administrative process with whose help individuals and groups achieve what they want and need through creating products and services of value and exchanging them with others. The concept of exchange also exists in adopting the definition of human services. One of the claims for example, is that marketing focuses directly on deals between the organizations and the diverse publics (Lauffer, 1984). Others define marketing in similar manner – as a set of activities intended to help and to expand the exchange between the organization and its target communities (Dearling, George and Raymond, 1995).

Three terms – need, value and cost – contribute to clarifying the exchange process.

- Need: The history of mankind in general and the health services in particular is a story of the recognition of the social and health needs and the connection to the organizations that deal with them. But what is actually the health need?
  What makes an individual or a group of people unique when the claim of a need is raised? On which definition of need do we base ourselves? Economists see need as an 'effective demand' – a demand that people are prepared to pay in order to attain it. In this spirit, a demand is not effective if people are not prepared to pay to obtain it.

This definition does not contribute to understanding the concept of need in health services, since many organizations do not necessarily bind providing service to payment (Bradshaw, 1977). Maslow (1964) proposes a comprehensive and widely-accepted model according to which people have a five-stage order of priorities in their needs. The basic needs are the material demands of the body and as long as these are not met, people's main motives will be directed towards their achievement. If we accept Maslow's (1964) model as is, people whose health is shaky will work primarily to find a doctor and/or treatment that will make them better, and only when this need is attained will they be available to work for their other needs.

Studies conducted thereafter find there is no one ranking of needs, and that differences exist between those examined such as differences between cultures, between social status, diverse personal psychological and demographic factors such as age, gender and occupation (Wild, 1970). It is nevertheless agreed that health is a basic need for human existence and it is hence customary to define medical and health services as a rigid need.

- Cost: Cost is all the expenses involved in creating a product or service and its provision. Although in most cases cost is measured in terms of units of money, there are, in fact, different types of cost – financial cost, psychological cost, cost in terms of time, cost in terms of effort and so on. Different groups of stakeholders are likely to bear the brunt of the diverse costs with the health organizations, and usually the consumers of health services themselves, frequently bearing the cost.
- Value: Economic theory assumes that the value of a product or a service increases as the quality increases and as the cost decreases (Rust and Oliver, 1994). Somewhat differently, Holbrook (1994) notes that value expresses the client's preference for reciprocal activity with an object, whether through practical experimentation or through anticipation of the experience.

Holbrook's (1994) definition is suitable for the health services for four reasons:

1. The value of the service is linked to the preference for the service and judging the service as good in general for its positive (or negative) impact.
2. The value is determined through subjective assessment by the individual of the products and the activities that the service objectively provides. In other words, assessment is not totally objective or totally subjective but is the interaction of both. This

situation is derived from the fact that the level of the consumer's knowledge and information regarding health services is limited compared to the considerable knowledge of the producers of the medical service (such as the doctor). Thus, in fact, the consumer finds it difficult to assess the service provided and in most cases the power remains in the hands of the providers of the medical service – a situation that often leads to market failure.

3. Value is relative: Value is determined according to the level of the one object *versus* another and is perceived differently by different people in different situations.
4. Value is determined by experience and therefore expresses need and use more than the act of purchase.

4.2 The marketing attributes in the health market

The marketing approach in the human services in general and in the health services in particular developed, as mentioned, from the marketing approach in business management. Differences exist between the approaches derived from the unique attributes of the health service market.

- Exchange: One of the basic differences between businesses and health services is the declared ambition to profit. Businesses strive to serve the market segment that produces the greatest profits. Since, in many cases, health services in public hospitals are intended to serve populations of a low economic status, the profitability of public hospitals is examined from another aspect. The hospital 'profits' stem from the consumers providing legitimacy for its existence and control of the resources. Furthermore, it is relatively easy in business to prevent a person who does not pay from receiving a service or good. This is not the case as regards public health service. Medical ethics demand of a doctor to provide health services even *gratis* to people whose medical condition is dangerous.
- The complexity of the cost of the service: The cost of service to the customer in the business sector is mainly fiscal. In addition to the monetary cost of the health services, additional cost components should be considered that sometimes are more burdensome than the financial payment.

  The cost of the caring for consumers in the health market are a combination of types of diverse costs that include financial costs alongside psychological and many other costs. The psychological approach of most people is 'Health is a supreme value and one does not save on health'. This makes the health services a rigid product, i.e., sensitivity to financial and other costs is lower and the health

consumers are more ready to spend their money and diverse resources in order to return to full health or to a balance.

- Political impact and market influence: Many business decisions are based on price, quality, distribution and so on, i.e., on the mechanisms of the economic market. In the health service market many decisions are influenced by social and political processes.
  Although politics influence the business sector, and even health services impact the economic market, the order of priorities is usually different.
- The lack of tangibility of the product: In business, a product is chiefly perceived in the connection to goods. Services in the health system are mainly perceived in connection with ideas and practical actions. These services cannot usually be tasted, smelled or felt.
- The method of dissemination: An additional attribute of the health services, in contrast to tangible products, is that they cannot be stored on a shelf. The medical service must be active and accessible at any time. This attribute demands more intensively directing resources to the constant dissemination of the service.
- High variance: Medical services are characterized by a higher level of variance than that which characterizes tangible products. Medical services are context-dependent: Their character is determined by the customer, by whoever provides them and by the timing at which they are provided. Two doctors in the same hospital will emphasize different aspects of the service.
- Blurred identity of the concept of 'customer': Customers are relatively easily identified in business. They are the ones who pay for the product or service. The main exchange in the public medical sector is conducted between hospitals that generate the medical service and the sick funds that insure the sick. In other words, the customers of the medical services (the patients) do not always pay directly for the service.
  The question arises in the health services of who is the customer? Are the customers the patients who use the service? Are they the sick funds or insurance companies that pay for the service? Or are they those who benefit from the service?
- Lack of customer control: It is customary to assume in business that the customers or consumers who use the service have decisive competitive power. The customer who pays directly for the service is likely to demand a higher quality for his money. Since in the public medical service the customer is not always the one bearing the direct cost, his power is less. Similarly, despite the increasing competition between hospitals that supply medical and health services, the sick

funds (*Kupat Holim*) and the insurance companies have a monopolistic character and the customer is often not entitled to choose the hospital or specific specialist.

Furthermore, there is a lack of symmetry in the power of manufacturers and consumers in the health market. Medical institutions in general and doctors in particular, have great knowledge and information regarding the medical domain, while the consumer suffers from having little information in the domain. This result in the manufacturers having full control of the medical service offered the actions necessary and so on. Such uni-directional control greatly weakens the basic power of the health consumer and questions the ability of the health market to operate as a free market, a market in which market forces lead to the break-even point.

Lack of full exploitation of human resources: In public hospitals, more than in economic businesses, the timing of the demand for service often changes and is not expected. It is also hard to plan in advance what human resources are necessary. Hospitals are characterized often by covert unemployment. One of the ways hospitals cope with this latter problem is having standby personnel.

- The organization and the salesman as an integral part of the service: When buying a tangible product it is very easy to distinguish between the seller and his organization and the product. There is a clear distinction between productive society and the product itself. The distinction in the health services is not unequivocal. For example, hospitals are part of the service itself, and in most cases they are its main component. When the patient makes contact with the hospital, the organization continues to be an inseparable part of the service the patient receives. If a doctor persuades a customer to be in contact with the hospital it includes the physical structure, the administrative staff and the professional medical staff. It is, for the customer, the total service offered. The attributes of the medical staff, the reliability, the accessibility and the additional attributes are also the attributes of the product itself.

The limitations of the marketing approach in the health services

Critics of the marketing approach in the health services raise fears of the lack of compatibility between the approach of the business world and that of the health services from the perspective of the hospitals' ethical, the administrative and organizational culture.

- The lack of compatibility of the administrative/economic approach: Critics believe that adopting the administrative approaches from the business world and adapting them to the world of public health

services is overly based on the economic approaches that are not suitable for the complexity necessary in the health services. Brawley (1994) maintains that the human services in many countries in the 1970s reacted to political pressure and to cutbacks in the budgeting of public services by combining economic tools and techniques. Organizations, he maintains, exploited the ethos of efficiency in order 'to do more with less', without sufficient awareness of the limitations of this approach and its implications. Marketing theory, according to this critical approach, is suitable, in economic terms, to exchange. Attempts to apply the principles of exchange in the public health service are connected to the trend towards privatization and their operation according to business standards.

- Exploitation and manipulation: The world of marketing is often exploitational and manipulative. Adopting accepted marketing approaches can lead doctors in public hospitals to tell their patients what they are interested in hearing or offering them medical services that are worthwhile to the system and/or doctor himself (McIver, 1987).
- Danger of discrimination and escape from the target populations: Focusing on the marketing processes is liable to lead public hospitals and doctors working in the organization to focus on niches that produce high profit and avoid hardship sectors (Kronenfeld, Baker and Amidon 1989).

Public health service centers that focus on marketing strategies are liable to be greatly influenced by the ambition for profitability typical of the commercial sector. They are then in the most inferior position to object to opportunism.

4.4 Consumer behavior in the health market

Consumer behavior in general and the behavior of consumers in the health market in particular, are inter-disciplinary in essence. Consumer behavior can therefore be explained using theories from diverse spheres - economics, psychology, sociology and anthropology. Health service consumers are the objective of the organizational and marketing activity and it is therefore understood that the key to successful services lies in understanding the customer's needs.

Similarly, better understanding of consumer behavior in the health market can also explain, to some extent, the patterns of use of black economy in medicine and the part consumers play in perpetuating the phenomenon.

4.4.1 Introduction to approaches to consumer behavior

Many view the consumer as a rational being who takes considered, well-thought out decisions. According to this approach, every purchase is based on a systematic decision-making process. This is true mainly in regard to situations in which the consumer relates great importance to the purchase and its results. The theory of balanced actions holds a focal place in the realm of consumer behavior and, accordingly, people are usually totally rational beings who make systematic use of the information available to them.

In recent years, there have admittedly been many voices who question such a behavioral approach, even claiming that they sometimes perform these consumer actions out of routine, automatically and from unplanned urges. However, there is no doubt that when the consumer relates great importance to the process of purchasing and to its results, as in taking decisions regarding the essential medical services, people generally act rationally and methodically in order to reach the solution optimal for them.

As a result of this basic assumption, the first formal model of consumer behavior was developed from the economic domain and the *homo deconomicus* was placed at its center. According to this approach, there was no difference between purchasing an expensive car and buying toothpaste.

In both cases man surveys the entire existing supply, explores qualities, calculates prices and chooses the one most worthwhile. The rational principle according to which the cheapest alternative should be chosen when all the other conditions are equal, is true of every purchase due to humans being economic creatures.

The belief that additional stimuli apart from the rational-economic ones pass through the consumer's 'black box' has come to hold a central place in recent decades. The decision-making process is considerably affected by cultural, social, personal and psychological factors pertaining to the psychological and to the sociological approach (Geva, 1994).

<u>The economic approach</u>

The basic assumption of the economic approach is that consumers are economic persons, with rational behaviors and considerations and complete knowledge of all the products or services offered in the market.

They are aware of the degree of benefit they can derive from each product, functioning out of free choice and whose resources are limited. As a result of all these, the consumers try, in the framework of their budgetary limitations, to increase its usefulness as far as possible. In fact, within their budgetary limitations and in the framework of the given set of priorities, consumers assess the alternatives available in the market and allocate their resources in a way that will provide the maximum benefit (Kotler and Armstrong, 1989).

Considerable criticism was voiced regarding the use of the economic model as a tool for predicting consumer behavior as well as of some of its basic assumptions. The main one cast into doubt the fact that consumers have complete knowledge of the market. They do not always know which products they are offered, where they can be found and their price. This is particularly prominent in the health market in which the level of the consumer's knowledge is limited because of its complexity and the professional-medical information necessary to make educated decisions. Similarly, the medical market is often characterized by rapid changes regarding product supply, the technologies, the services and the prices, making it hard for consumer behavior. Additional criticism of the economic approach and its assumptions, and perhaps the most practical in the realm of consumer behavior in the health market, is the asymmetry in the considerable knowledge of manufacturers of medical (i.e. doctors') services and the consumers' (i.e. patients') low level of knowledge. This fact leads to almost absolute control by the doctors of requests for the services offered. In other words, the supply determines the demand and hence the real power of the health consumers is limited to deed. A further disadvantage of the micro-economic model lies in the difficulty in measuring the degree of benefit of the medical service and quantifying it, and this is in addition to ignoring the psychological aspects and dimensions in consumer behavior.

The psychological approach

The concept of benefit is not unequivocal. Since this can also be connected to personal or social values that have an emotional or value merit, is hard to quantify or qualify these qualities. The psychological approach deals with understanding the behavior of the consumer as a person: His soul, his desires, his thoughts, his reactions to the surroundings.

The psychological approach, in contrast to the economic approach, is totally free of any prior assumption and makes a direct link between stimuli that can be controlled by the firm or, in the case before us, the medical institution or the doctor himself and the reactions required by the consumer-patient. Its aim is to reveal empirical connections between diverse types of market and environmental stimuli and the consumer's diverse reactions.

According to the psychological approach, consumers of the health service will operate and make their decisions based on many subjective motives that include, amongst other things, personality, life experience, needs and the social and cultural influences.

The sociological approach

The sociological approach explores human consumer behavior in its social contexts, such as the relationships between people and the reciprocal impact between them as they are manifested in their feelings, beliefs and deeds. People are assumed to be social creatures who adapt to norms and patterns that characterize the general culture and the specific social frameworks in which they function.

Underlying the sociological approach is the assumption that the culture is the determining and most basic factor of human desires. This behavior is supposedly defined in a basic set of values, desires and behaviors that members of the human society learn from their families and from other important institutions.

According to this approach, one can perhaps explain the behavior of the health consumer in general and its integration in patterns of black economy in medicine in particular as a consumer able to adapt to norms and patterns typical of the general culture and the specific social frameworks in which he/she operates and familiarity with the accepted set of norms accepted by doctors in public hospitals.

The sociological approach can explain why the black economy in medicine phenomenon developed and became rooted over the many years in many countries.

4.4.2 Consumer involvement in the health market

The consumption of medical services is one of the most basic needs of modern man. According to Maslow's (1964) scale of needs, that classified needs according to the degree of urgency, one can classify people's caring for their health needs as one of the most basic needs, ranking only below their physiological needs and need for personal and protective safety.

One of the meaningful variables that differentiate between the processes of purchasing diverse products or services is the consumer's involvement. The consumer's involvement is expected to be greater while choosing and financing the medical services due to the considerable importance they relate to the anticipated goals and results. It is worth noting that when the consumers' involvement is high, including during the decision-making process, a series of steps is performed such as seeking information, comparing alternatives, crystallizing attitudes and assessment after the deed. The concept of involvement manifests the intensity of the issue and the personal importance the consumer relates to the acquisition process, to the acquisition situation as the result of the extent of the importance of the product or the service, as well as the price. When involvement is low, the consumers tend to reduce the degree of rationality in the purchase process. When involvement is high, the extent of consumer rationality and the emotional, psychological and social impacts diminish in importance (Geva, 1994).

Consumer behavior in the health market becomes more complex when the patients and their families face critical medical decisions whose results are liable to sometimes be fatal. In such a situation, despite the consumers manifesting deep involvement, they will conduct a market survey and obtain several medical opinions, but will still face a very tough dilemma when making the decision.

4.4.3 The health service consumer's decision-making process

Boehm (1998) cites a multi-variable model developed by Angel, Kolet and Blackwell (of Ohio University) in the 70s, according to which while making the purchase decision and thereafter, consumers experience five main stages that emphasize the fact that the acquisition process starts long before the actual purchase and continues thereafter. These stages are typical of the calculated and considered acquisition process and entail:

1. Identifying the problem (recognizing the need)
2. Seeking information
3. Assessing alternatives

4. The acquisition decision
5. Behavior following the acquisition (reactions)

The consumers, however, do not necessarily experience all of them when performing the purchase. In regular acquisitions, they omit some of the stages or experience them in a different order. This model can also explain well the health consumers' considerations when facing the decision to adopt medical services, and particularly a medical intervention of critical significance.

- Recognizing the need: The first stage in any acquisition decision is recognizing the need for satisfaction. It occurs when the consumer feels disparity is created between the existing situation and the desired situation, and this disparity necessitates an action that will lead to its elimination or reduction. It would seem, as regards the topic of this thesis, that most of the health service consumers whose health is unsteady are aware of the need. The manufacturers-doctors, on their part, are interested sometimes in guiding consumers towards medical solutions that serve their personal needs and/or those of the hospital in which they work.
  Recognition of the medical need can also be aroused amongst health service consumers who are disappointed with a particular doctor and would like to find another.
- Seeking information: When seeking information about products or services, the potential consumers employ two methods: Information stored in their memories and information from outside sources. When the information is personal and the knowledge insufficient, the consumers turn to the external environment to gather more information. In the health market, since a significant issue is at stake, potential consumers will devote a relatively considerable amount of time to obtaining the information.
  One of the main fears in the process of search pertains to the perception of the danger and this is due to the uncertainty and the negative results that are liable to emanate from an incorrect decision. The main danger lies in fulfilling the health needs and not necessarily as regards the cost, in contrast to many other areas. The potential consumers' sources of information regarding the health services divide generally into commercial and non-commercial sources. Some of the consumers' efforts are devoted to seeking medical information from commercial sources and the mass media such as TV, newspapers, radio and Internet. The non-commercial sources of information include consultation with specialist doctors and personal sources that mainly convey information by word of mouth. Research shows that after the consumers' personal

experience, family advice, friends and acquaintances are the main source of information on which consumers rely in their decisions; their influence is also far greater. The private sources confirm or assess the information from the commercial sources (Geva, 1994).

- Recognizing alternatives: this is the stage that combines seeking information and that of seeking a solution to the problem. The information gathered at the search stage from internal and external sources regarding the diverse alternatives is weighed at this stage in terms of profit and loss expected from the choice in each of them. In the weighed acquisition process, the search for information leads to crystallizing an attitude and determines the acquisition behavior. Three main approaches deal with the process of crystallizing attitudes:
  1. The behaviorist approach, that explains the process of creating preferences through trial and error, determining the connection between behavior and results;
  2. The mediated approach that links the crystallization of an approach to the processes of people's adaptation to the social-cultural environment;
  3. The cognitive approach that refers to the essential activities of processing information. It emphasizes the mental processes as an approach, processing information, recall, formulation, assessment and preference (Geva, 1994).

  Despite the great significance consumers of health services relate to exploring the alternatives, one may, in many cases, observe that exploring the alternatives is not supported by rational considerations but by emotional considerations, such as the choice of doctor who treats the whole family over the years, or the decision taken according to 'gut feeling'. Hence examination of the alternatives is not totally rational, and in addition to the cognitive aspect exists the emotional aspect that together lead to the final choice.
- The acquisition decision: The acquisition process affords the peak of the weighed decision-making process. Till now it was characterized by rational consumer behavior – to depart in order to assure themselves the choice of an alternative that will provide the greatest benefit. Preferences and directing the acquisition do not predict absolutely the actual acquisition; they direct acquisition behavior but do not totally determine the result. The final stage is sometimes accompanied by anxiety due to the danger perceived by the consumers. They are not sure of the acquisition result and this creates anxiety.

  The manufacturer-doctor plays an important role at this stage in reducing the feeling of danger amongst consumers. Their role is to

provide information and support that will reduce the perceived danger.

One can appreciate, in general, that at this stage the irrational factors that influence the health consumer expand. Changing the framework of choice, i.e., changing the decision-maker's perception of the relationship between the alternatives available and the possible results of any choice, depends on the presentation of the possibilities available to the consumers and their personal values and habits.

The health consumers sometimes relate greater importance to loss than to gain that is identical in size, and will thus usually prefer maintaining the *status quo*. Reticence to make faulty decisions pushes the health consumer to maintain the existing and avoid change.

The loss involved, for example, in objection to doctors who adopt the black economy in medicine pattern can be perceived by the consumers of health services – the patients – as a wrong decision that will affect the goals.

- Behavior following acquisition: The level of the consumer's satisfaction or dissatisfaction will result in certain behaviors. The relationship between consumer expectations and the implementation as seen by the doctor determine the degree of customer satisfaction with the medical service. The greater the disparity between the expectations and product performance the greater will be the consumer's dissatisfaction. When satisfaction is high, the health consumer is likely to act as the doctor's emissary.

  The consumers' level of satisfaction apparently has an impact on this perception of the patterns of black economy in medicine. Thus if operated on with great success, the consumers will apparently feel doctor remuneration 'under the table' is worthwhile.

4.4.4 Consumer satisfaction with the level of service and functioning of the health service

The National Health Insurance Law enacted in 1995 was supposed to affect the level of medical service and the health service consumers' satisfaction.

Findings of the surveys of health consumer satisfaction in 1995-1997 indicate that some 40% of the interviewees noted they felt an improvement in the health services compared to previous years and only 9% reported deterioration.

Although the research findings show that there was generally an improvement in the level of service and satisfaction following the introduction of the National Health Insurance Law, no unequivocal causal connection can be determined for its application (Gross, Rozen and Shirom, 1999).

Findings from the survey conducted by Gross, Bramely-Greenberg and Mazliach (2005) indicate that 2003 saw a higher level of satisfaction with the sick funds (providers of health services in the community rather than hospitals). 89% of the consumers interviewed were satisfied or very satisfied compared to 86% in 2001.

In contrast, satisfaction with the functioning of the health system in general was lower, with only 9% stating they were very satisfied and 50% stating they were satisfied (59% were satisfied or very satisfied). A multi-variable analysis indicates that satisfaction with the health system is higher amongst the elderly (aged 65 or older) and amongst Arabic speakers. Women were less satisfied than males.

There was no change in the level of satisfaction between 2001-2003 with most of the components examined with regard to access to services. In parallel, and compared to 2001, the percentage of those reporting an improvement in medical services dropped (26% compared to 31% in 2001) and the percentage of those reporting a deterioration rose (13% compared to 9% in 2001). The percentage of those in need reporting difficulty in obtaining medical treatment rose from 13% in 2001 to 20% in 2003 (Gross and Bramely-Greenberg, 2003).

The percentage of those reporting difficulty in obtaining medical treatment rose particularly amongst the chronically ill, the elderly and Arabs. Furthermore, 31% of the interviewees reported considerable rise in the cost of medical payments.

Additional indices explored pertained to the services provided outside the public health system. The percentage of those with complementary medical insurance rose amongst the general population (from 64% to 72% in 2003). Similarly, a considerable rise is noted (from 26% in 2001 to 34% in 2003) in the percentage of those with private commercial health insurance amongst the general population.

Interviewees with complementary medical insurance were asked whether there is a service that is not included in the complementary medical insurance that they would like to receive for additional monthly payment.

An interesting and important finding of this current study demonstrates that the second most frequent service in which the interviewees are interested in receiving, following dental treatment, is the broader choice of a doctor.

Some 20% reported personal expenditure to receive medical services from a private doctor, in the three months prior to the survey.

A multi-variable analysis finds that people in the upper 20% income bracket and the chronically sick spend more of their own money than others to receive medical treatment by private doctors.

To summarize: Data on satisfaction with the level of treatment and functioning in the health services are important for policy makers in the health system, since they reflect primarily the perspective of the consumers in the system. These findings enable tracking the level of service and quality of treatment in the public health system over time.

In–depth consideration of the opinion and satisfaction of consumers of health services can certainly provide a significant explanation of the patterns of black economy in medicine and the reasons for the existence and development of the phenomenon. Examination of the data regarding satisfaction with the health services in general and the specific parameters in particular, is one of the ways of arousing awareness of the black economy in medicine phenomenon in the public debate and furthering a suitable response by policy makers.

4.5 Manufacturer behavior in the health market – the doctors

There is no question that the doctors are the heart and brain of each medical system. They motivate all the professional and organizational processes that shape the entire health system: Making appointments, laboratory tests, imaging, medication, hospitalization, running medical teams and so on.

Their professional implications and training determine the quality of the medicine. The doctors are also those who are supposed to contribute – more than any other medical manufacturer – to the level of medical service, at least from the patient's point of view. Many doctors have yet to internalize the developments that occurred in recent years. Many of them still hold the opinion that correct diagnosis and prescribing the right medication are enough to satisfy the patients without considering their psychological and social distress, including creating human

communications with them and with members of their families. In other words, the perception of the relationship between the doctor and patient is one of a manufacturer–consumer relationship with all the relevant implications.

Many doctors are forced to cope with the fact that medicine has lost much of its freedom, and find it hard to adapt to pressures brought to bear on them by the employees, to relate to patients as to customers and to increase output and to reduce input (Complaints Commissioner, 2002).

4.5.1 Burnout in the doctors' status

Burnout in the status of doctors is not only a function of the level of income but also occurs due to additional factors.

- Doctor - a new reality: The developing medical environment is renewing and changing rapidly both in basic science and in diagnostic and treatment technologies. There is an explosion of information and a need for constant updating.
- Doctor - patient: The collapse of the paternalistic approach, according to which the doctor is the sole authority in determining medical treatment. Nowadays doctors must cope with the plethora of medical information available to the public *via* the internet and the media. Similarly, patients today do not always make do with the answers they receive and want to hear other opinions.
- Doctor - employers: Due to the continuing growth in expenditure on health, the employees were forced to dictate economic policy from which rules of the game were derived that were not always compatible with the doctors' opinions. The control of service providers and the Ministry of Health, at the level of medical expenditure, led to the ongoing erosion of the doctors' autonomy.
- Doctors - specialists: Harm at the specialization level due to constraints of the system. A considerable part of the medical specializations can nowadays be performed by medical technicians and nurses.
- Doctor – protective medicine: Damage to the system of mutual trust and respect between the doctors and patients that leads to the use of protective medicine not in order to benefit the patients but as protection from legal suits.
- Doctors - media: Presenting the dark sides and creating a negative image from the reports of medical negligence, salary demands and through to criminal crimes – black economy in medicine.

4.5.2 The attributes of doctors' employment in Israel

Examination of the employment attributes at the main place of work (where doctors work for most of the day) indicates that almost all the doctors (998%) are employed by a public employer. The main place of employment of more than half the specialist doctors is hospital (55%). The others work professionally in community frameworks.

As is to be expected, there are differences in the percentage of doctors working mainly in hospitals according to their areas of specialization. Most cardiologists and surgeons (80%), about 50% of the gynecologists and ENT doctors, and less than 40% of the eye doctors and skin doctors work in hospitals (Nirel, Shirom and Isamail, 2003).

4.5.3 Overwork

Studies find that the burden of work is the most important predictor of burnout at work (Brantely, 1993). Other studies that explore burnout at work amongst doctors note the importance of the organization's attitude towards the burden of work and the doctors' burnout in order to assure the quality of the doctors' work life and the quality of their treatment of patients (Deckard, Meterko and Field, 1994).

Nirel et al. (2003) explore two facets of the depth of the burden in the doctors' work:

1. Quantitative overwork: The feeling of many hours of work, of too many patients, and of too hard work and difficulty in dividing the time between the patients and family;
2. Qualitative overwork: The feeling of a shortage of time to give good quality treatment.

30% of the doctors they are overburdened or greatly overburdened. 46% report they are overburdened quantitatively and 20% report qualitative overburdening.

Furthermore, a high percentage of salaried doctors in hospitals, of those who have an academic appointment and amongst surgeons, report a great quantitative burden compared to the independent doctors in the community, to those who do not have an academic appointment and to other specialists.

The demographic background variables also show differences in the percentage of those reporting overburden at work. A higher percentage of young male doctors (up to the age of 44) and graduates of medical schools in Israel report over-burdening, compared to women, doctors aged 55 and older and graduates of Russian medical schools.

4.5.4 Satisfaction with work

Studies that explore satisfaction at work amongst doctors find that factors that have the strongest connection to satisfaction amongst them are linked to the intrinsic aspect of their work: The degree of their autonomy, the ability to cope with the daily contact with the patient and the ability to provide medical service of a good quality. However, the degree of satisfaction with the work is found to be also connected to extrinsic factors, such as, work conditions, the number of hours of work, opportunities for improving salary and so on (Landon, Reschovsky and Blumenthal, 2003).

Nirel et al. (2003) explore satisfaction with work from the intrinsic and the extrinsic aspects, and *via* an index that includes these two differences. About 46% of all the specialist doctors expressed general satisfaction with their work. 79% of them expressed intrinsic satisfaction, and about 38% expressed extrinsic satisfaction with their primary place of work. Independent doctors in the community, doctors with an academic appointment, women and older doctors (aged 55 and older) express greater satisfaction with their work compared to salaried employees in hospitals, male doctors without an academic appointment and young doctors.

4.5.5 The level of burnout at work

Nirel et al. (2003) find in their study that close to 23% of all the doctors reported feeling burned out in their work. A particularly high percentage of them reported physical tiredness (43%), compared to lower percentages of doctors who reported emotional burnout (15%). They further find that more hospital employees reported a high level of burnout at the physical tiredness perspective compared to independent doctors working in the community.

Differences were also found in the degree of burnout according to the doctors background attributes: Young male doctors lacking an academic appointment (up to age 44) reported a high level of burnout compared to

those with an academic appointment, older doctors (aged 55 or older) and women.

To summarize: Clearly, key manufacturers of health services – the doctors – suffer from an ongoing process of burnout in their professional and social status. Furthermore, the findings described regarding over-burden at work, low satisfaction with their work and burnout, mainly in hospitals, support some of the hypotheses and even the fears regarding factors and patterns of black economy in medicine.

4.6 Specific features of health economics

The vast amount of money and resources devoted to health care has given health economists an increasingly important role in examining individual behavior, influencing policy, and evaluating policy implications. Yet, many other characteristics of health care markets have contributed towards making health economics particularly fascinating. The nature of health care, when compared to 'normal supply and demand markets', restricts the extent to which we can apply what we have learned about other economic system and markets to the study of health care. Does anybody behave like a 'rational economic actor' in the health care market? Although the following exceptions to the rule are common throughout the economy, they are particularly relevant to health care market analysis.

1. Extent of government intervention
   The state provides insurance for health expenditure for the whole population (in most western European countries) or for specific groups of persons (USA Medicare for elderly people, and Medicaid for poor people). The government, or other large organizations providing health services, often has a non-profit status, i.e. they do not abide by the rules of profit-maximizing firms.
   The government often controls the direct economic behavior (prices) of health care providers, such as hospitals, doctors, and other health service providers far more then in other sectors of the economy. All health professionals need government licensing.
2. Multi-level uncertainty
   A consumer's demand for health care in any future period is uncertain. Many decisions to use health care are due to random events such as a broken arm, a car accident, or a heart attack. Consumers are even uncertain of their current health status, given that out breaks of illnesses can follow after a certain incubation period.
   Uncertainty is also prevalent on the supply side. There are several cases of product uncertainty in the health field. Consumers are even

uncertain of their physician's advice. Moreover, physicians themselves can often not predict the outcome of the treatments with certainty.

3. Prominence of insurance

   Uncertainty and risk in health indicate a role for insurance. Consumers purchase insurance in order to guard against this uncertainty. Hence, health insurance in many economies leads to the fact that most people will not pay directly for the full costs of their health care.

4. Asymmetric doctor/patient knowledge

   The issues of asymmetric information arise when two people bargain in an economic exchange, and one holds far more relevant information than the other. One party (the doctor) generally has a considerably greater level of knowledge then the other about the issues at hand, i.e. the diagnosis and treatment of disease. In addition, the incentives to reveal information differ. The patient clearly wishes to reveal information to the doctor, but the doctor may be in a different position. Professional obligations, ethics and personal responsibility encourage the doctor to be open and honest. Conflicting with this desire, however, is the simple profit motive, which is liable to lead the doctor to different choices. In the fee-for-service system, in which the doctor is paid per visit or treatment, the latter might succumb to deceiving the patients, and, in so doing make more money. In addition, the patient would likely have no means of detecting this. In health maintenance organization (HMO), on the other hand, this incentive is neutralized since doctors or health care providers are paid a fixed sum per patient listed with them.

   In Israel the basic health insurance is based on a HMO system, and consequently this incentive does not exist, except for so-called supplementary insurance offered in addition to the basic health insurance.

5. Externalities

   External benefits and costs arise when one person's actions create benefits for, or impose costs on, others. An example of a medical event with externalities is a contagious disease. When people catch such a disease, they not only suffer their own illness, but also increase the risk that their relatives, friends and neighbors will contract the same illness. When they take steps towards avoiding such disease, they confer a benefit not only on themselves, but on those around them as well.

Chapter 5

The Research Hypotheses

The research hypotheses are divided according to the three main topics explored in this study, in addition to a hypothesis regarding attitudes of the hospital administration towards the phenomenon.

5.1 Hypotheses regarding the definition of black economy in medicine

Hypothesis no. 1: Doctors believe that direct payments to doctors are defined as black economy in medicine (as regards the doctor-patient relationship), while the broader definitions that pertain to the relationship between the departmental organization and the patient (use of hospital facilities and resources and mainly payments to the department in money or its equal) are not defined as black economy in medicine.
Hypothesis no. 2: Better-established doctors in hospital, as regards seniority, tenure, administrative position and specialization, will tend to include fewer behaviors under the term black economy in medicine.
Hypothesis no. 3: Differences exist between specialists such as surgeons, internists and so on, in their definition of black economy in medicine.
Hypothesis no. 4: Doctors who are more satisfied with their hospital salaries will tend to include fewer behaviors in the term black economy in medicine than doctors whose satisfaction with their salaries is average and less.
Hypothesis no. 5: Patients believe that direct payments to doctors are defined as black economy in medicine ('doctor remuneration') while the definitions connected to department remuneration, such as giving gifts to the medical staff, contributions to departmental funds and donations for the treatment ('department remuneration') are not defined as black economy in medicine .
Hypothesis no. 6: Patients with financial means will tend less than patients of an average or poor economic status to view payment to doctors, so that they will personally treat them, as black economy in medicine .
Hypothesis no. 7: Patients who are dissatisfied with the hospital treatment will tend to include more behaviors under the term black economy in medicine than patients who are more satisfied.
Hypothesis no. 8: A significant difference exists between doctors and patients in the way these two populations define black economy in medicine.

5.2 Hypotheses connected to the estimated scope of black economy in medicine

Hypothesis no. 9: More than 50% of the doctors believe that the black economy in medicine phenomenon is quite or very common.
Hypothesis no. 10: More than 50% of the patients believe that the black economy in medicine phenomenon is quite or very common.
Hypothesis no. 11: Doctors believe that the scope of the black economy in medicine phenomenon increased after the National Health Insurance Law was enacted.
Hypothesis no. 12: Patients believe that the scope of the black economy in medicine phenomenon increased after the National Health Insurance Law was enacted.
Hypothesis no. 13: The scope of the dimensions of black economy in medicine reported by doctors and patients in the hospital in central Israel is higher than that reported in other hospitals on the periphery.
Hypothesis no. 14: The scope of black economy in medicine reported by doctors and patients in surgical departments is higher than that reported in departments of internal medicine and others.
Hypothesis no. 15: Patients who are dissatisfied with the medical service in hospital will tend to assess the scope of black economy in medicine as higher compared to more satisfied patients.
Hypothesis no. 16: A connection exists between patients' socio-demographic attributes and the scope of the phenomenon.

5.3 Hypothesis connected to the perceptions and attitudes towards black economy in medicine

Hypothesis no. 17: Disparity exists between doctors and patients in their attitudes and perceptions of black economy in medicine.

5.4 Hypothesis connected to the attitudes of the hospital administration towards the black economy in medicine

Hypothesis no. 18: Doctors believe that although the hospital administration does not actively support the existence of black economy in medicine, it is certainly partner to the vow of silence in everything pertaining to handling the phenomenon.

Chapter 6

The Research Methodology

6.1 Introduction

The current study explores the patterns of black economy in medicine in Israel, following the enactment of the National Health Insurance Law in 1995. The data and the findings reflect the perception, attitude and assessment of the two key factors of the existence of the phenomenon: Doctors in public hospitals on the one hand and patients on the other.

The study is based on questionnaires completed by patients and doctors, as well as on a comparison of some of the data from Noy's (1997) research, prior to the enactment of the above law.

The study of such a unique phenomenon can be approached using one of two research approaches: The model approach and by mapping the existing phenomenon.

The model approach: A review of the world literature that deals with black economy in medicine offered no model associated with the phenomenon. In the absence of a definition and of exact, reliable attributes, and mainly due to the complexity of the phenomenon and its many aspects, it is not possible, at this current stage of knowledge and agreement, to construct a full (economic or other) model to explain the phenomenon. The dimensions of the definitions of black economy in medicine must be explored and studied in depth, together with the variance in definitions, the degree of agreement over the dimensions of these definitions amongst doctors and patients, and of the correlations and possible connections between attitudes and perceptions of doctors and patients, and their differing dimensions of the definitions of the phenomenon and their scope.

The mapping approach: This approach pertains to the condition of current knowledge, mainly after implementing the great reform in the Israeli health system and the enactment of the National Health Insurance Law. This generated significant change in the model of the health system in Israel and the perceptions and behaviors of health manufacturers (doctors) and consumers (patients). In addition to the inability described above for modeling the phenomenon, this led to the choice of this research approach as more reasonable and realistic. In other words, the

current study performs in-depth mapping of the phenomenon for the first time after implementing the reform in the health system.

6.2 The limitations of the research method

Black medicine is an existing fact in many countries, several of which even try to fight it with a variety of means, starting from publicity through to punishment and legal steps. The need to gather data regarding factors of the phenomenon and its numerical assessment are not in doubt and is necessary to intelligently allocate national resources to the fight against the phenomenon. However, since those dealing with black economy in medicine prefer to hide, it is very hard to assess its scope.

The exact scope of the phenomenon of black economy in medicine is one of the great and curious unknowns. Over the years diverse hypotheses and contradictory estimates have been raised whose factual basis was not always clear and founded.

The phenomenon under discussion is perceived as unofficial by doctors and by the patients, due to the disinterest of those involved to volunteer data about their activities. Hence, when exploring the diverse patterns, we must recognize the fact that we have a need and scientific desire to know the unknown.

One may assume that despite the sensitivity to the subject and the choice of a research method and suitable research array that are supposed to significantly restrict the possible research bias, there is still a certain bent in the findings, mainly for the following reasons:

- Black economy in medicine is not legal and one should expect difficulty in collecting the data and/or receiving false data.
- The doctor-patient connection is discrete, with both parties, doctor and patient, liable to hide behind the Patients Rights and Confidentiality Law (Yossipon and Kafe, 1999).
  Similarly, the connection between the parties has a dependent component of the patient on the doctor, and therefore one may expect difficulty in breaking through the connection and obtaining reliable information.
- Rigidity of demand: One of the unique attributes of the health sector is the rigid demand for health services. When a person's life is endangered, he will be ready to do anything and, of course, to pay almost any price to try to improve his condition. Furthermore, the patients will not be in a hurry to endanger their medical chances due

to exposing information regarding illegal payments or performed while recovering from his illness.

- Asymmetrical information and the impact of supply on demand: A large disparity in information exists between the service providers (doctors) and consumers (patients and their families). The disparity in knowledge in the health domain is significantly larger than in any other domain providing goods or services. The consumer usually lacks the tools to consider or to assess the doctors' role, the benefit of the treatment and/or the treatment proposed to improve health. On the background of the stiff demand and the asymmetrical information, the doctors' ability to influence the essence of the health service needed by the patient and their scope increases.
  In other words, we are witness to the phenomenon unique to the health market in which the rules of supply and demand behave differently to other markets in that market supply affects demand. This fact can lead to several biases in understanding black economy in medicine.
- The study is cross-sectional, enabling 'photographing' a current scenario that cannot point to, or teach about, cause and effect.
- The current study does not rely on a structured research model due to the reasons described at the start of the chapter.

6.3 The research population

The current study reviews two different populations: Doctors in public hospitals and patients.

6.3.1 The doctors

Since a list of names of all the doctors employed in public hospitals in Israel was unattainable as a basis for sampling, lists of doctors working in representative public hospitals were selected, and sampled using a sample of convenience.

In order to obtain a representative sample of doctors in Israeli public hospitals, a statistical sample of 200 doctors was chosen from four public hospitals in four geographical areas in Israel (50 from each): Rambam hospital in northern Israel; Ichilov hospital in central Israel; Assaf Harofe hospital on the periphery and Hadassah Ein Karem hospital in Jerusalem. Two departments were chosen at random from each area of medicine defined in the study (a total of six departments in each hospital):

1. The surgical department – including general surgery, orthopedics, urology, heart and so on;

2. Internal medicine – including internal medicine, hematology, gastroenterology, rheumatology and so on;
3. Other – radiology, pathology, psychiatry, laboratories and so on.

A random systematic sample was taken from a list of department doctors in each department mentioned above. The first name was chosen at random and thereafter every third name was selected. All the doctors in the sample were then approached and were asked to complete the research questionnaires.

The rate of response was high at the first inquiry stage– 85% of the doctors completed the questionnaire. (Those who did not complete it were abroad at the time.) Doctors whose names were included in the sample and were abroad were replaced by the name following theirs. The second stage had a 100% response rate.

It is important to note that there were no cases in which doctors refused to complete the questionnaire. This fact reduces the chance of selection bias in the research results and avoids research questions regarding motives for not completing the questionnaire associated with the study itself and/or the participant's attitudes.

Needless to say, the doctors were assured confidentiality and anonymity.

Representation and sample validity: The distribution of the variables obtained in the doctors' sample (see table no. 2), compatible with the statistical data common in Israel, facilitates the claim that the sample faithfully represents the doctors in Israeli public hospitals and reflect the position of this group.

Table no. 2: Demographic attributes of the doctors' sample (N=200)

		Number	Percentage
Gender	Male	94	47.0%
	Female	106	53.0%
	Total	200	100.0%
Family status	Married	116	58.3%
	Not married	83	41.7%
	Total	199	100.0%
		Number	Percentage
Parents (of children)	Yes	94	51.4%
	No	89	48.6%
	Total	183	100.0%

		No.	Percentage		No.	Percentage
Medical experience	1	4	2.3%	14	6	3.4%
	2	5	2.8%	15	3	1.7%
	3	19	10.7%	16	10	5.6%
	4	17	9.6%	17	2	1.1%
	5	11	6.2%	18	3	1.7%
	6	18	10.2%	19	3	1.7%
	7	11	6.2%	20	2	1.1%
	8	13	7.3%	22	2	1.1%
	9	6	3.4%	26	2	1.1%
	10	13	7.3%			
	11	10	5.6%			
	12	11	6.2%			
	13	6	3.4%			
	Total	177	100.0%			

		No.	Percentage		No.	Percentage
Hospital seniority	1	4	2.0%	13	6	3.1%
	2	9	4.6%	14	7	3.6%
	3	19	9.7%	15	3	1.5%
	4	21	10.7%	16	11	5.6%
	5	12	6.1%	17	4	2.0%
	6	21	10.7%	18	4	2.0%
	7	10	5.1%	19	4	2.0%
	8	10	5.1%	20	2	1.0%
	9	7	3.6%	23	1	.5%
	10	13	6.6%	24	1	.5%
	11	11	5.6%	25	1	.5%
	12	15	7.7%			
	Total	196	100.0%			

		No.	Percentage
Hospital experience	Specialist	124	62.9%
	Intern	73	37.1%
	Total	197	100.0%

		No.	Percentage
Tenure	Tenured	140	70.7%
	Untenured	58	29.3%
	Total	198	100.0%

		No.	Percentage
Administrative position	Administrator	59	29.6%
	Not administrator	140	70.4%
	Total	199	100.0%

		No.	Percentage
Type of department	Surgical	63	31.7%
	Internal medicine	70	35.2%
	Other	66	33.2%
	Total	199	100.0%

6.3.2 The patients

In contrast to the doctors' sample, which could be sampled randomly according to the organized lists of doctors, this was not feasible amongst the patients. The Law prohibits conveying information regarding the patient for reasons of the right to privacy and there is therefore no way of

obtaining lists of patients according to department (Yossipon and Kafe, 1999). Thus they were approached randomly and directly and asked to participate in the study while they were at the out-patients' clinics of those hospitals whose department doctors were sampled.

It is important to note that sampling patients in out-patients' clinics limits the research bias. The assumption that led to the choice of patients in the out-patients clinics rather than in the hospital departments themselves was that in the departmental framework the patient feels directly dependent for his treatment on the doctor. One may thus assume that the rate of response to the question would be lower with a higher rate of bias in the results. Patients coming for consultation at out-patients clinics are not hospitalized and are not dependent on the doctor who treated them. The rate of response is thus expected to be higher, as well as the lower rate of bias in the reporting.

The random sample included 200 patients, 50 for each hospital in which the study was conducted. The first rate of response was 76%, the reasons for refusal being disinterest and/or time to complete the questionnaire all without knowing the subject of the study.

Patients who refused to complete the questionnaire were replaced by others from the same out-patients clinic so that the rate of response at the second stage was 100%.

The patients were of course assured confidentiality and anonymity.

Sample representation and validity: In view of the sample limitations described above, it is important to stress that the patients sampled do not necessarily represent the entire patient population in Israel. Nevertheless, the fact that the patients were sampled at random, in the same hospitals and in the same out-patients clinics of the departments in which the doctors were sampled, allows us to assume that the sample is representative of the patients.

Table no. 3: Demographic attributes of the patient sample (N=200)

		No.	Percentage
Gender	Male	91	45.5%
	Female	109	54.5%
	Total	200	100.0%
		No.	Percentage
Family status	Married	124	62.3%
	Not married	75	37.7%
	Total	199	100.0%

		No.	Percentage
Parents (of children)	Yes	97	53.0%
	No	86	47.0%
	Total	183	100.0%

		No.	Percentage
Age	18-24	35	17.6%
	25-30	50	25.1%
	31-35	43	21.6%
	36-40	33	16.6%
	41-45	13	6.5%
	46-49	12	6.0%
	50+	13	6.5%
	Total	199	100.0%

		No.	Percentage
Economic situation	Very good	16	8.0%
	Good	73	36.7%
	Average	81	40.7%
	Not good	27	13.6%
	Poor	2	1.0%
	Total	199	100.0%

6.3.3 Determining the sample size

Since the main research question and one of the main goals of the study was to explore whether the scope of the black economy in medicine phenomenon rose after the enactment of the National Health Insurance Law in January 1995. The sample size was determined by classifying the two groups studied (patients and doctors) separately, according to the perception of the change in scope of the dimensions of the phenomenon of black economy in medicine following the enactment of that law.

The dichotomous division:

1. Those who are sure that the dimensions of the phenomenon increased after the law was enacted;
2. Those who are sure that the dimensions of the phenomenon decreased after the law was enacted.

The following question was asked of doctors: 1995 saw an extensive reform in the Israeli health system, in which framework the national health insurance law was enacted. Do you think the scope of the black economy in medicine phenomenon has changed since that law was passed?

1. The dimensions of black economy in medicine did not change after the law was enacted.
2. The scope of the phenomenon decreased after the reform and the law were enacted.
3. The dimensions of the phenomenon increased after the reform and the law were enacted.

The research hypothesis to determine the sample size amongst doctors: More than 50% of the doctors believe that the dimensions of the phenomenon increased after the enactment of the National Health Insurance Law.

The research hypothesis to determine the sample size amongst patients: More than 50% of the patients believe that the dimensions of the phenomenon increased after the enactment of the National Health Insurance Law.

Sample size estimation

Sample size estimation was performed in order to create a 95% confidence interval for the percentage of interviewees who claimed that black economy in medicine increased in public hospitals in Israel after the ratification of the National Health Insurance Law.
Assuming that 50% of the interviewees will claim that the above phenomenon increased, a sample size of 170 interviewees would be sufficient to create a 95% confidence interval which is 15% wide (42.5%-57.5%). In order to compensate for the non-response rate the sample will be increased by 20%.

Thus the sample size for both doctors and for patients was 200 participants.

6.4 The research tools

The research tool for both patients and doctors was a closed questionnaire for self-completion (see appendices).
The current study employs the questionnaire used by Noy (1997) that gathered data during the years 1990-1991 on the patterns of black economy in medicine in Israel prior to the enactment of the 1995 major reform in the Israeli health service.

It is important to note that those questionnaires (for both doctors and patients) underwent full validation that included in-depth interviews with doctors and senior administrators in the health service on the issue of black economy in medicine , as well as a pretest intended to explore the research questionnaire. The questionnaires were found to valid and reliable.

The research questionnaire examines diverse aspects of black economy in medicine focusing on three main aspects:

- The definition of black economy in medicine – according to the patients' and doctors' perceptions
- An estimate of the scope of black economy in medicine – as assessed by patients and doctors
- Attitudes towards black economy in medicine – as perceived by doctors and patients

Noy (1997) studies the value and validity of the range of dimensions of the variables selected including:

1. The dimensions that examine the definitions of black economy in medicine. A dimension that includes seven items relating to diverse activities defined as black economy in medicine including:
    - A private visit to a private doctor in order to shorten the waiting list
    - Use of the facilities and resources of a public hospital for private treatment
    - Giving donations in money or equipment directly to the department for treatment received by the patient in the department
    - Receipt of direct payment to the doctor for treatment the patient was supposed to receive in hospital
    - Receipt of contributions to the departmental research fund and the in-service training fund for treatment the patient should have received in the department

- Direct payment to the doctor for him personally, and not another doctor, to treat the patient
- Giving gifts or other benefits directly to the attending medical staff

Doctors and patients were asked to note whether each situation above describes and manifests the medical phenomenon and to what extent.

2. The dimensions that explore the estimate of the scope of black economy in medicine and its frequency employ an index that includes seven items referring to diverse activities defined as black economy in medicine including:
   - Advancing private patients in the waiting list for treatment
   - The use of hospital facilities for private treatment
   - Receipt of payment for service included in the treatment
   - Receipt of payment for treatment by a particular doctor
   - Receipt of donations to departmental research funds and in-service training courses
   - Donations of money or equipment directly to the department
   - Gifts or benefits to the medical staff

   Doctors and patients were asked to estimate the scope of activities for each of these dimensions. Presentation of the question and the possible answers were phrased differently for the two populations – patients and doctors.
   Furthermore, the frequency of the black economy in medicine phenomenon was explored. In general, the doctors and patients consider it to be insignificant, fairly frequent, very frequent or extremely frequent.
3. The dimensions that explore the perceptions and attitudes towards the phenomenon: The perceptions and attitudes were explored in the questionnaires for doctors and for patients with two identical questions:
   - Do you think black economy in medicine is positive or negative?
   - Is there an ethical flaw in involvement in black economy in medicine?

   This question in fact examines the degree of ethicality of the phenomenon as seen by doctors and patients.
4. Personal (socio-demographic) variables: The questionnaires included socio-demographic variables in order to explore and find a statistical connection between the main aspects of the phenomenon of black

economy in medicine and the specific attributes of the doctor and patient populations.

The patients' background attributes included gender, family status, age group, area of domicile, nationality, level of religiosity, education, country of birth, profession and assessment of economic status.

The doctors' background attributes included gender, family status, medical experience, hospital experience, tenure at work, seniority at work (specialist/intern) administrative position, area of medical specialization, assessment of economic status and satisfaction with salary as a doctor.

5. Organizational variables: The questionnaires included the following organizational attributes:
   - Hospital policy regarding black economy in medicine
   - Type of department in which the doctor works (surgical internal medicine, orthopedics)
   - Location of the hospital in Israel
6. The impact of the National Health Insurance Law on the scope of the phenomenon: The only question added to Noy's (1997) original questionnaire is that regarding change in the scope of black economy in medicine since the enactment of the National Health Insurance Law in 1995.

   1995 saw an extensive reform in the Israeli health system, in which framework the national health insurance law was enacted. Do you think the scope of the black economy in medicine phenomenon has changed since that law was passed?

   1. The dimensions of black economy in medicine did not change after the reform and law were enacted.
   2. The dimensions of the phenomenon declined after the reform and law were enacted.
   3. The dimensions of the phenomenon increased after the reform and the law were enacted.

6.5 The research process

The survey was conducted during March-May 2006. The patients and doctors were approached after consultation with the hospital administration and the administration of the specific departments in which the surveys were conducted, and the receipt of permission to conduct the study.

Outside interviewers distributed the questionnaires to the patients and doctors who were included in the sample. They guided the participants in general regarding the research questions and the way of noting the answers. The questionnaires were completed independently by the patients and the doctors, who placed them in a sealed envelope at the end of the process. The interviewer was available to answer any question raised by the participant as needed. The sealed envelopes with the questionnaires were given to the interviewers immediately after they were completed. The respondents were asked to answer the questionnaire anonymously in order to assure their honest answers.

Finally, all the sealed envelopes and questionnaires were transferred to the researcher.

6.6 Data analysis and processing

The statistical processing was conducted according to accepted statistical methods, registered and processed at two levels:

1. The distribution of the doctors' and patients' answers to the various questions and the degree to which the distribution of the findings supports or refutes the research hypotheses as formulated earlier were analyzed (frequency).
2. The findings were processed *vis-à-vis* the background variables. At this stage, accepted statistical procedures were employed to determine if differences exist in the distribution of the findings for the various questions according to the background variables. The statistical methods employed are cross-tabulation, the use of the Chi square procedure and the t-test in order to examine hypotheses regarding the existence of differences in the research variables according to background variables. Similarly, use was made of multiple regression in order to explore which background variables affect attitudes towards black economy in medicine.

The hypotheses were examined at a statistical level of confidence of 95%.

Chapter 7

The Research Findings

The research findings regarding the patterns of black economy in medicine in Israel under the National Health Insurance Law are presented in this chapter. Their statistical analysis will facilitate in-depth exploration of diverse indices associated with the phenomenon in order to map the influential and/or significant variables of the patterns of phenomenon amongst suppliers of medical services – doctors – on the one hand and the needs of the consumers of health services – patients – on the other. Similarly, the doctors and patients will be compared to discover the differences between the two populations.

The research findings will be presented according to the order of the main topics and categories mapped in this study:

- Defining black economy in medicine
- Assessing the extent of black economy in medicine
- Attitudes towards black economy in medicine

7.1 The findings of the definition of black economy in medicine

7.1.1 Introduction

The first main topic explored in this study is the way in which doctors and patients tend to define the phenomenon of black economy in medicine.

The difficulty in measuring the extent of black economy in medicine stems, amongst other things from the lack of a clear definition of the term. People relate different patterns of behavior to the term occurring within the hospital confines. Since they will only report behaviors they themselves include in the definition of the phenomenon, the perception of the meaning of the term will directly influence measuring its extent. Hence the primary intention of this study is to characterize the definition of the phenomenon of black economy in medicine by doctors and patients. This was accomplished by questioning both groups on the degree of their agreement with several definitions of black economy in medicine that were gathered in a previous study by Noy (1997) and were validated in the framework of this study.

Some of the definitions of black economy in medicine that were explored refer to the relationship between doctor and patient:

- A private visit to the doctor in order to shorten the wait for an appointment at a public hospital
- Private payment to the doctor for treatment that the patient is supposed to receive free at hospital
- Direct payment to the doctor so that he, personally, will treat the patient rather than another doctor

Other definitions explored are broader and pertain to the relationship between the entire departmental organization and the patient:

- The use of facilities and resources in a public hospital for private treatment
- Giving donations in the form of money or equipment directly to the department for treatment received by the patient in the department
- Giving gifts or other benefits directly to the attending medical staff

For each of each of the above statements, the interviewee (doctor or patient) was asked to note the extent to which the situation describes and expresses the phenomenon of black economy in medicine. The scale on which the results were accepted included four rankings:

a. Does not express at all
b. Expresses to some extent
c. Expresses to a considerable extent
d. Fully expresses

Below are the details of the degree of agreement of doctors and patients with the various definitions of black economy in medicine. An attempt was made to explore whether there are background variables (professional, demographic and perceptional) that affect the definition of black economy in medicine for each group. A different definition of black economy in medicine by diverse target populations is likely to provide an indication of the need for different approaches to them if we wish to understand the phenomenon of black economy in medicine or to deal with it.

Finally, the hypothesis that differences exist between doctors and patients in everything pertaining to the definition of black economy in medicine will be explored.

7.1.2 The doctors' definition of black economy in medicine

The degree to which doctors agree with the diverse definitions of black economy in medicine

Table no. 4 details the doctors' definitions of the term black economy in medicine.

Table no. 4: Definition of black economy in medicine by doctors

"Please note, according to your personal opinion, if the situations presented below describe and express the phenomenon of black economy in medicine and to what extent."

	Not at all	To some extent	Greatly	Very greatly	Total	N
Direct payment to the doctor for personal treatment of the patient	2.5%	2.5%	18.0%	77.0%	100%	200
Direct payment to the doctor for hospital treatment	0.5%	4.5%	23.0%	72.0%	100%	200
Use of hospital facilities for private treatment	1.0%	17.6%	55.3%	26.1%	100%	199
Donation for receiving treatment	8.5%	28.0%	47.5%	16.0%	100%	200
Gifts for the medical staff	10.0%	21.0%	56.0%	13.0%	100%	200
Contributions to research fund	4.0%	29.5%	54.0%	12.5%	100%	200
Private visit to doctor	8.0%	29.5%	56.0%	6.5%	100%	200

The findings indicate that doctors describe on average 5.3 of the seven phenomena explored as greatly or very greatly describing black economy in medicine. Only 0.5% of the doctors think that none of the phenomena described reflects black economy in medicine at all. The doctors noted, on average, 2.3 phenomena that very greatly describe black economy in medicine.

Two definitions of black economy in medicine of the seven examined are definitions that are fully accepted by the doctors. The two definitions deal with the doctor-patient relationship, and not the patient-department relationship:

- Doctor remuneration for personal treatment of the patient: 77% of the doctors agreed that this definition very greatly expresses black economy in medicine and 95% of the doctors agreed that the definition greatly or very greatly expresses black economy in medicine ;
- Doctor remuneration for treatment at hospital (72% and 95% respectively).

Another definition of black economy in medicine - the use of hospital facilities for private treatment - enjoyed considerable agreement by the doctors. 26% of the doctors greatly agreed that this definition expresses the essence of black economy in medicine and 81% of the doctors greatly or very greatly agreed that this phenomenon is part of black economy in medicine.

The other definitions of black economy in medicine are less accepted by the doctors, although it should be noted that more than 60% of them greatly or very greatly agreed that they define black economy in medicine One may thus conclude that all the phenomena explored are perceived by the doctors as pertaining to the concept of black economy in medicine.

<u>The degree to which doctors agreed with the definitions of black economy in medicine according to background variables</u>

In parallel to the general data that describe the doctors' definitions of black economy in medicine , data regarding the doctors' professional background, and demographic and perceptional variables were gathered, in order to explore whether their differing background variables impact on their definition of the black economy in medicine phenomenon. (Details of the distribution of the doctors' background variables are presented in table no. 2 in the research methodology).

The doctors' professional variables for which data were gathered include their seniority as doctors, seniority in hospital, their personal experience (specialist or intern), tenure at hospital, administrative attitude (whether they are a member of the hospital administrative staff), the area of specialization, department and the hospital in which they work.

The doctors' demographic variables gathered are gender and family status (married/unmarried/children) while the perceptional variables are self-assessment of their economic status and satisfaction with their salary.

Differences exist in the degree of agreement with the various definitions of black economy in medicine according to background variables. The Chi square test was employed to explore whether there are differences between the levels of one variable according to the levels of another variable, when at least one of the variables in the analysis is a variable with an interval measurement scale.

The null hypothesis of the Chi square test assumes that there are no differences in agreement with the diverse definitions of black economy in medicine according to background variables. This hypothesis can be rejected and one may conclude that differences exist in the degree of agreement, should the significance of the test fall from the critical value of $p=0.05$.

Table no. 5 details the level of significance of the Chi square test for the different combinations of agreement with definitions of black economy in medicine *versus* the background variables. Thereafter, the combinations in which the test value that is smaller than the critical value will be described, in whose regard one may conclude that differences exist in agreement with the description of black economy in medicine according to background variables.

Since a very high correlation is found between medical experience as a doctor and seniority at hospital ($r=0.949$) including the two variables in the analysis is superfluous, and therefore hospital seniority only is included in the analysis. In order to enable more significant analysis of the findings, the variables of hospital seniority were assembled into a variable that includes three ranks only according to thirds of the distribution. The variables perceived were also gathered into variables with three categories, since there were very few respondents in the end categories (low economic status for example) preventing their analysis as a separate category. Thus the variable that examines the economic

situation was combined for those whose reporting a good, average and poor economic situation.

Differences in the perception of black economy in medicine according to professional background variables

The findings indicate that considerable differences exist in the perception of black economy in medicine according to professional background variables (table no. 2).

The variance according to professional background variables is relatively low in the two definitions of black economy in medicine over which there is broad consensus among doctors that they pertain to black economy in medicine (both deal with direct payment to the doctor). Many differences were found regarding additional definitions of black economy in medicine, pertaining to each of the professional background variables.

Analysis according to doctor's seniority (table no. 2) indicates that the greater the doctors' seniority at hospital, the less they tend to agree that a private visit to the doctor, as well as receiving donations to the research fund or giving gifts to the medical staff, is something that should be included in the definition of black economy in medicine .

Analysis according to medical seniority (table no. 7) indicates that internists tend more than specialists to relate behaviors such as direct payment to the doctor for treatment, the use of hospital facilities for private treatment and giving donations for treatment to the term black economy in medicine.

Analysis according to the doctor's tenure at hospital (table no. 8) finds that doctors with tenure at hospitals tend to agree less than doctors without tenure with some of the definitions of black economy in medicine.

Table no. 9 finds that doctors who have administrative positions in hospital tend to relate diverse behaviors to the term black economy in medicine significantly less than doctors without administrative positions. Particularly prominent is the difference between doctors who have administrative positions and those without such positions as regards the use of hospital facilities for private treatments. Thus 90.6% of the doctors who do not have administrative positions are convinced that the use of hospital facilities for private treatments to a considerable extent or fully expresses the definition of the phenomenon, while only 59.4% of the

doctors with administrative positions in hospitals believe that this factor considerably or fully expresses the definition of the phenomenon of black economy in medicine.

Table no. 10 indicates that considerable differences exist in the perception of black economy in medicine according to area of specialization. Doctors in departments of internal medicine see the use of hospital facilities for private treatments as belonging to black economy in medicine more than do surgeons and other doctors, and consider private visits to the doctor as pertaining to this definition less than other doctors and surgeons. Doctors from other fields of medicine view giving donations for treatment as belonging to black economy in medicine more than do surgeons and internists.

Surgeons tend less than internists and other doctors to consider the use of hospital facilities for private treatment as behavior that to a considerable extent or fully manifests black economy in medicine (77% compared to 85% and to 84.9% respectively).

Finally, inconsistent differences were found between doctors in the various hospitals as regards relating diverse behaviors to the concept of black economy in medicine (see table no. 11)

Thus, in general, the more established the doctors are in the hospital (as regards seniority, tenure, administrative position, being a specialist) they will tend to include fewer behaviors under the term black economy in medicine. Similarly, differences were found in attitude toward the term black economy in medicine according to the doctors' areas specialization.

Table no. 5: Values for the Chi square test for diverse combinations of descriptions of black economy in medicine compared to variables of the professional background amongst doctors

(Combinations that crossed the critical value of p=0.05 are marked with an asterisk.)

	Hospital seniority	Seniority	Tenure	Administrative position	Area of specialization	Hospital in which doctor works
Direct payment to the doctor so that he treats the patient personally	.032*	.041*	.277	.441	.359	.432
Direct payment to the doctor for treatment in hospital	.835	.883	.682	.195	.298	.021*
Use of hospital facilities for private treatment	.135	.023*	.009*	.001*	.005*	.017*
Giving donations for treatment	.140	.048*	.136	.003*	.021*	.053
Giving gifts to the medical staff	.033*	.057	.255	.026*	.142	.027*
Contributions to research fund	.000*	.114	.005*	.000*	.277	.029*
Private visit to the doctor	.016*	.001*	.000*	.001*	.015*	.162
N	199	199	199	199	199	199

Table no. 6: The perception of the definitions of black economy in medicine according to hospital seniority

(Combinations for which significant differences were found in the definitions according to hospital seniority)

	Degree of agreement with the definition	Hospital seniority		
		1-5 years	6-10 years	11 years
Direct payment to the doctor so that he treats the patient personally	Not at all	4.6%	1.6%	1.4%
	To some extent		4.9%	2.9%
	To a considerable extent	7.7%	27.9%	20.0%
	Fully expresses	87.7%	65.6%	75.7%
	Total	100.0%	100.0%	100.0%
Giving gifts to the medical staff	Not at all	13.8%	6.6%	10.0%
	To some extent	12.3%	19.7%	31.4%
	To a considerable extent	56.9%	55.7%	54.3%
	Fully expresses	16.9%	18.0%	4.3%
	Total	100.0%	100.0%	100.0%
Contributions to a research fund	Not at all	6.2%	1.6%	4.3%
	To some extent	18.5%	19.7%	50.0%
	To a considerable extent	64.6%	55.7%	41.4%
	Fully expresses	10.8%	23.0%	4.3%
	Total	100.0%	100.0%	100.0%
Private visit to the doctor	Not at all	13.8%	6.6%	4.3%
	To some extent	15.4%	31.1%	41.4%
	To a considerable extent	66.2%	52.5%	50.0%
	Fully expresses	4.6%	9.8%	4.3%
	Total	100.0%	100.0%	100.0%

Table no. 7: Perception of the definitions of black economy in medicine according to doctors' medical seniority

(Combinations for which significant differences were found in the definitions according to medical seniority)

	Agreement with the definition	Seniority	
		Specialist	Intern
Direct payment to the doctor so that he treats the patient personally	Not at all	2.4%	1.4%
	To some extent	4.0%	--
	To a considerable extent	22.6%	11.0%
	Fully expresses	71.0%	87.7%
	Total	100.0%	100.0%
Use of hospital facilities for private treatment	Not at all	1.6%	
	To some extent	21.1%	11.0%
	To a considerable extent	57.7%	52.1%
	Fully expresses	19.5%	37.0%
	Total	100.0%	100.0%
Contribution for treatment	Not at all	7.3%	9.6%
	To some extent	34.7%	16.4%
	To a considerable extent	44.4%	53.4%
	Fully expresses	13.7%	20.5%
	Total	100.0%	100.0%
Private visit to doctor	Not at all	4.8%	13.7%
	To some extent	37.9%	15.1%
	To a considerable extent	50.0%	67.1%
	Fully expresses	7.3%	4.1%
	Total	100.0%	100.0%

Table no. 8: The perception of the definition of black economy in medicine according to tenure

(Combinations for which significant differences in definitions were found according to tenure at hospital)

	Degree of agreement with definition	Tenure	
		Permanent employee	Non-permanent employee
Use of hospital facilities for private treatment	Not at all	--	3.4%
	To some extent	20.9%	8.6%
	To a considerable extent	56.8%	51.7%
	Fully expresses	22.3%	36.2%
	Total	100.0%	100.0%
Donations to research fund	Not at all	1.4%	10.3%
	To some extent	34.3%	17.2%
	To a considerable extent	51.4%	60.3%
	Fully expresses	12.9%	12.1%
	Total	100.0%	100.0%
Private visit to doctor	Not at all	3.6%	19.0%
	To some extent	34.3%	19.0%
	To a considerable extent	53.6%	60.3%
	Fully expresses	8.6%	1.7%
	Total	100.0%	100.0%

Table no. 9: The perception of black economy in medicine according to administrative position

(Combinations for which significant differences in definitions were found according to administrative position)

	Degree of agreement with the definition	Administrative position	
		Administrator	Not administrator
Use of hospital facilities for private treatment	Not at all	1.7%	.7%0
	To some extent	39.0%	8.6%
	To a considerable extent	44.1%	59.7%
	Fully expresses	15.3%	30.9%
	Total	100.0%	100.0%
Donations for treatment	Not at all	8.5%	8.6%
	To some extent	45.8%	20.7%
	To a considerable extent	37.3%	51.4%
	Fully expresses	8.5%	19.3%
	Total	100.0%	100.0%
Gifts to medical staff	Not at all	8.5%	10.7%
	To some extent	32.2%	16.4%
	To a considerable extent	54.2%	56.4%
	Fully expresses	5.1%	16.4%
	Total	100.0%	100.0%
Donations to a research fund	Not at all	1.7%	5.0%
	To some extent	55.9%	18.6%
	To a considerable extent	35.6%	61.4%
	Fully expresses	6.8%	15.0%
	Total	100.0%	100.0%
Private visit to doctor	Not at all	1.7%	10.7%
	To some extent	50.8%	20.7%
	To a considerable extent	42.4%	61.4%
	Fully expresses	5.1%	7.1%
	Total	100.0%	100.0%

Table no. 10: The perception of the definitions of black economy in medicine according to department

(Combinations for which significant differences in definitions were found according to department)

	Degree of agreement over definition	Hospital seniority		
		Surgical	Internist	Other
Use of hospital facilities for private treatment	Not at all	--	2.9%	--
	To some extent	27.0%	11.6%	15.2%
	To a considerable extent	50.8%	46.4%	68.2%
	Fully expresses	22.2%	39.1%	16.7%
	Total	100.0%	100.0%	100.0%
Donations for treatment	Not at all	4.8%	10.0%	10.6%
	To some extent	36.5%	25.7%	22.7%
	To a considerable extent	50.8%	37.1%	54.5%
	Fully expresses	7.9%	27.1%	12.1%
	Total	100.0%	100.0%	100.0%
Private visit to doctor	Not at all		15.7%	7.6%
	To some extent	39.7%	25.7%	24.2%
	To a considerable extent	50.8%	52.9%	63.6%
	Fully expresses	9.5%	5.7%	4.5%
	Total	100.0%	100.0%	100.0%

Table no. 11: The perception of the definitions of black economy in medicine according to hospital

(Combinations for which significant differences in definitions were found according to hospital)

	Degree of agreement over definition	Seniority			
		Rambam	Ichilov	Assaf Harofe	Hadassah Ein Karem
Direct payment to doctor for treatment in hospital	Not at all	--	--	2.0%	--
	To some extent	4.1%	--	12.0%	2.0%
	To a considerable extent	34.7%	19.6%	12.0%	26.0%
	Fully expresses	61.2%	80.4%	74.0%	72.0%
	Total	100.0%	100.0%	100.0%	100.0%
Use of hospital facilities for private treatment	Not at all			4.0%	
	To some extent	12.5%	21.6%	16.0%	20.0%
	To a considerable extent	56.3%	43.1%	50.0%	72.0%
	Fully expresses	31.3%	35.3%	30.0%	8.0%
	Total	100.0%	100.0%	100.0%	100.0%
Giving presents to hospital staff	Not at all	16.3%	11.8%	10.0%	2.0%
	To some extent	18.4%	19.6%	30.0%	16.0%
	To a considerable extent	44.9%	58.8%	44.0%	76.0%
	Fully expresses	20.4%	9.8%	16.0%	6.0%
	Total	100.0%	100.0%	100.0%	100.0%
Private visit to doctor	Not at all	8.2%	2.0%	6.0%	
	To some extent	24.5%	45.1%	28.0%	20.0%
	To a considerable extent	51.0%	49.0%	48.0%	68.0%
	Fully expresses	16.3%	3.9%	18.0%	12.0%
	Total	100.0%	100.0%	100.0%	100.0%

Differences in the perception of black economy in medicine according to the demographic background variables

In general, no differences were found in the perception of black economy in medicine according to demographic background variables (table no. 12)

Table no. 12: Values of the Chi square test for diverse combinations of descriptions of black economy in medicine compared to variables of the demographic background amongst doctors
(Combinations that crossed the critical value of p=0.05 are marked with an asterisk.)

	Gender	Family status	Parent
Direct payment to the doctor for him to personally treat the patient	.497	.114	.002*
Direct payment to the doctor for treatment in hospital	.519	.125	.082
Use of hospital facilities for private treatment	.388	.458	.311
Contributions for treatment	.162	.037*	.092
Gifts to medical staff	.276	.502	.839
Receiving donations for research fund	.780	.177	.080
Private visit to doctor	.731	.030*	.073*
N	199	199	199

Differences in the perception of black economy in medicine according to perceptional background variables

The findings indicate the existence of differences in the perception of several definitions of black economy in medicine according to the doctors' economic situation and satisfaction with their salary.

Table no. 14 indicates that doctors whose economic situation is not good tend more than others to agree with certain definitions of black economy in medicine.

Table no. 15 illustrates that doctors who are very satisfied with their salaries tend to relate significantly fewer behaviors to the term black economy in medicine compared to doctors whose satisfaction with their salaries is average and lower.
These differences, between doctors who are very satisfied and those who are not satisfied, are manifested in the use of hospital facilities for private treatments, in giving gifts to the medical staff, in receiving contributions to the research fund and in private visits to the doctor.

Thus, for example, as regards the issue of the use of hospital facilities for private treatment 71.8% of the very satisfied doctors are convinced that the use of hospital facilities for private treatment considerably or fully expresses the definition of the phenomenon. 83.3%, whose satisfaction is average, and 92% of those with low satisfaction with their salaries think that this factor considerably or fully expresses the definition of the phenomenon of black economy in medicine.

To conclude, one may claim that, from the perspective of the impact of the perceptional background variables, doctors whose economic situation is not good or who are not satisfied with their salaries tend more than others to agree with certain definitions of black economy in medicine.

Table no. 13: Values for Chi square test for diverse combinations of descriptions of black economy in medicine relative to the doctors' perceptional background variables

	Economic situation	**Satisfaction with salary**
Direct payment to the doctor for him to personally treat the patient	.058	.564
Direct payment to the doctor for treatment in hospital	.799	.608
Use of hospital facilities for private treatment	.041*	.009*
Contributions for treatment	.305	.249
Gifts to medical staff	.000*	.001*
Receiving donations for a research fund	.051	.021*
Private visit to doctor	.001*	.003*
N	199	199

Combinations that crossed the critical value of p=0.05 are marked with an asterisk

Table no. 14: The perception of the definitions of black economy in medicine according to the economic situation

(Combinations for which significant differences in definitions were found according to perceived economic status.)

	Degree of agreement over definition	Perceived economic condition		
		Good	Average	Bad
Use of hospital facilities for private treatment	Not at all	--	2.9%	--
	To some extent	24.3%	8.8%	12.5%
	To a considerable extent	55.1%	57.4%	50.0%
	Fully expresses	20.6%	30.9%	37.5%
	Total	100.0%	100.0%	100.0%
Giving gifts to the medical staff	Not at all	7.5%	8.7%	25.0%
	To some extent	29.9%	11.6%	8.3%
	To a considerable extent	57.0%	55.1%	54.2%
	Fully expresses	5.6%	24.6%	12.5%
	Total	100.0%	100.0%	100.0%
Private visit to doctor	Not at all	1.9%	18.8%	4.2%
	To some extent	38.3%	18.8%	20.8%
	To a considerable extent	54.2%	55.1%	66.7%
	Fully expresses	5.6%	7.2%	8.3%
	Total	100.0%	100.0%	100.0%

Table no. 15: Perceptions of the definitions of black economy in medicine according to satisfaction with the salary
(Combinations for which significant differences in definitions were found according to satisfaction with salary)

	Degree of agreement over definition	Satisfaction with salary		
		High	Average	Low
Use of hospital facilities for private treatment	Not at all	--	2.6%	--
	To some extent	28.2%	14.1%	8.0%
	To a considerable extent	54.9%	57.7%	52.0%
	Fully expresses	16.9%	25.6%	40.0%
	Total	100.0%	100.0%	100.0%
Giving gifts to the medical staff	Not at all	8.5%	5.1%	20.0%
	To some extent	29.6%	21.5%	8.0%
	To a considerable extent	56.3%	60.8%	48.0%
	Fully expresses	5.6%	12.7%	24.0%
	Total	100.0%	100.0%	100.0%
Contributions to research fund	Not at all	1.4%	6.3%	4.0%
	To some extent	45.1%	20.3%	22.0%
	To a considerable extent	42.3%	62.0%	58.0%
	Fully expresses	11.3%	11.4%	16.0%
	Total	100.0%	100.0%	100.0%
Private visit to doctor	Not at all	2.8%	6.3%	18.0%
	To some extent	42.3%	26.6%	16.0%
	To a considerable extent	47.9%	63.3%	56.0%
	Fully expresses	7.0%	3.8%	10.0%
	Total	100.0%	100.0%	100.0%

7.1.3 Patients' definition of black economy in medicine

<u>The degree of patients' agreement with the diverse descriptions of black economy in medicine</u>

The findings indicate that, on average, the patients described 5.1 of the seven phenomena explored as expressing black economy in medicine to a considerable extent or fully.

Only 2% of the patients are convinced that none of the phenomena discussed reflects black economy in medicine at all. The patients noted an average of 3.1 phenomena that fully express black economy in medicine.

Similarly to the findings from the doctor population, it is clear that patients also attribute two main descriptions to the term black economy in medicine: Doctor remuneration for treatment in hospital and payment to the doctor so that he will personally treat the patient.

As amongst doctors, the use of hospital facilities for private treatment ranks third as regards the strength of the connection to black economy in medicine.

Table no. 16: Patient definitions of black economy in medicine

Please note your personal opinion as to whether the situations presented below describe and express the phenomenon of black economy in medicine and to what extent.

	Not at all	To some extent	To a considerable extent	Fully expresses	Total	N
Direct payment to the doctor for treatment in hospital	3.0%	3.0%	9.5%	84.4%	100%	199
Direct payment to the doctor for him to personally treat the patient	3.0%	5.0%	16.6%	75.4%	100%	199
Use of hospital facilities for private treatment	6.0%	13.1%	42.7%	38.2%	100%	199
Giving gifts to the medical staff	3.5%	32.3%	30.3%	33.8%	100%	198
Contributions to research fund	17.1%	20.1%	33.2%	29.6%	100%	199
Contributions for treatment	17.1%	19.6%	40.2%	23.1%	100%	199
Private visit to doctor	9.5%	38.7%	28.6%	23.1%	100%	199

The degree of agreement amongst patients with the descriptions of black economy in medicine according to background variables.

The patients' background variables, according to which the attitudes of black economy in medicine are explored, are divided into three parts:

1. Demographic variables – gender and age;
2. The economic situation perceived by the patients;
3. Variables connected to the attributes of the patients' connection to the hospital, including the identity of the hospital in which the patients were interviewed, satisfaction with the hospital treatment, whether the patients were hospitalized, and the perception of waiting time for an operation if they underwent an operation while hospitalized.

The age variable was again divided into three groups (18-20, 31-40, 41+) to enable significance analysis of the findings that relate to the patients' age. The economic situation variable was also grouped into three levels (good, average and poor) for the same reason.

The findings do not indicate differences in the perception of black economy in medicine amongst patients according to age or hospital in which they were interviewed (table no. 17).

In contrast, males tended more than females to see payments to the doctor for the use of hospital facilities for private purposes as black economy in medicine behaviors (table no. 18). Those with a high income tended more than others to remunerate the doctors with personal payment and patients of low economic means tend more to give presents to the medical staff rather than financial reward to the doctors (table no. 19). Patients who were hospitalized or those who felt they waited too long a time for an operation see giving contributions for treatment as part of black economy in medicine more than others (tables' nos. 20-21).

The findings do not support the hypothesis that patients who are not satisfied with the medical treatment they received in hospital will tend more to note dimensions that are suitable to the description of black economy in medicine (table no. 22). Three dimensions were found in which differences exist in the percentage of those who relate diverse behaviors to black economy in medicine.

Table no. 17: Values for the Chi square test for diverse combinations of doctors' descriptions of black economy in medicine compared to background variables amongst patients

(Combinations that crossed the critical value of p=0.05 are marked with an asterisk.)

	Gender	Age	Economic situation	Hospital	Hospitalization	Waiting time for operation	Satisfaction with treatment
Direct payment to the doctor for him to personally treat the patient	.011*	.325	.017*	.593	.132	.672	0.05*
Direct payment to the doctor for treatment in hospital	.430	.400	.000*	.749	.082	.983	0.11
Use of hospital facilities for private treatment	.015*	.976	.189	.350	.121	.946	0.02*
Contributions for treatment	.990	.383	.757	.901	.046*	.178	0.25
Giving gifts to the medical staff	.830	.101	.027*	.265	.417	.327	0.89
Contributions to research fund	.714	.627	.233	.954	.252	.328	0.05*
Private visit to doctor	.255	.165	.585	.968	.817	.017*	0.09
N	199	198	198	199	199	78	173

Table no. 18: Perception of the definitions of black economy in medicine according to patient gender

(Combinations for which significant differences in definitions were found according to gender)

	Degree of agreement over definition	Gender	
		Male	Female
Direct payment to the doctor for him to personally treat the patient	Not at all	1.1%	4.6%
	To some extent	--	9.2%
	To a considerable extent	17.8%	15.6%
	Fully expresses	81.1%	70.6%
	Total	100.0%	100.0%
Use of hospital facilities for private treatment	Not at all	1.1%	10.1%
	To some extent	8.9%	16.5%
	To a considerable extent	47.8%	38.5%
	Fully expresses	42.2%	34.9%
	Total	100.0%	100.0%

Table no. 19: Perception of the definitions of black economy in medicine according to patients' economic situation

(Combinations for which significant differences in definitions were found according to economic status)

	Degree of agreement over definition	Economic condition		
		Good	Average	Poor
Direct payment to the doctor for him to personally treat the patient	Not at all	1.1%	2.5%	10.3%
	To some extent	2.2%	6.3%	10.3%
	To a considerable extent	11.2%	20.0%	24.1%
	Fully expresses	85.4%	71.3%	55.2%
	Total	100.0%	100.0%	100.0%
Direct payment to the doctor for personal treatment in hospital	Not at all	3.4%	--	10.3%
	To some extent	--	2.5%	13.8%
	To a considerable extent	7.9%	10.0%	13.8%
	Fully expresses	88.8%	87.5%	62.1%
	Total	100.0%	100.0%	100.0%
Giving gifts to the medical staff	Not at all	--	7.5%	3.6%
	To some extent	38.2%	31.3%	17.9%
	To a considerable extent	25.8%	27.5%	50.0%
	Fully expresses	36.0%	33.8%	28.6%
	Total	100.0%	100.0%	100.0%

Table no. 20: Perception of the definitions of black economy in medicine according to patient hospitalization

(Combinations for which significant differences in definitions were found according to hospitalization)

	Degree of agreement over definition	Was the patient hospitalized?	
		No	Yes
Donations for treatment	Not at all	15.0%	19.8%
	To some extent	23.9%	14.0%
	To a considerable extent	33.6%	48.8%
	Fully expresses	27.4%	17.4%
	Total	100.0%	100.0%

Table no. 21: Perception of the definitions of black economy in medicine according to the perception of the waiting time for an operation

(Combinations for which significant differences in definitions were found according to the perception of the waiting time for an operation.)

	Degree of agreement over definition	Perception of waiting time for operation	
		Reasonable	Unreasonable
Donations for treatment	Not at all	15.9%	--
	To some extent	29.5%	44.1%
	To a considerable extent	38.6%	23.5%
	Fully expresses	15.9%	32.4%
	Total	100.0%	100.0%

Table no. 22: The perception of the definitions of black economy in medicine according to satisfaction with the medical treatment
(Combinations for which significant differences in definitions were found in definitions according to patient satisfaction)

	Degree of agreement over definition	Satisfaction with medical treatment		
		Poor	Average	Good
Direct payment to the doctor for him to personally treat the patient	Not at all	8.7%	0.9%	3.0%
	To some extent	4.3%	2.6%	3.0%
	To a considerable extent	34.8%	15.4%	12.1%
	Fully expresses	52.2%	81.2%	81.8%
	Total	100.0%	100.0%	100.0%
Use of hospital facilities for private treatment	Not at all	13.0%	2.6%	9.1%
	To some extent	21.7%	8.5%	24.2%
	To a considerable extent	30.4%	46.2%	39.4%
	Fully expresses	34.8%	42.7%	27.3%
	Total	100.0%	100.0%	100.0%
Contributions to research fund	Not at all	4.3%	16.2%	18.2%
	To some extent	43.5%	14.5%	21.2%
	To a considerable extent	21.7%	39.3%	27.3%
	Fully expresses	30.4%	29.9%	33.3%
	Total	100.0%	100.0%	100.0%

7.1.4 Differences between patients and doctors in the perception of black economy in medicine

As mentioned previously, doctors and patients ranked the diverse definitions of black economy in medicine in the same order of frequency. However, the intensity of the connection of each definition was not explored comparatively. To explore intensity, significance tests were conducted amongst doctors and patients regarding the percentage of those noting that certain definitions fully express the black economy in medicine phenomenon (through the Chi square test for differences between proportions), as well as amongst several definitions of black economy in medicine that patients and doctors noted express black economy in medicine very well (using a t-test).

The findings indicate that patients tend to agree more than doctors with the definitions of black economy in medicine presented to them, and they agreed more than doctors that five definitions of black economy in medicine indeed pertain to the phenomenon.

Table no. 23: The percentage of doctors reporting that the diverse definitions express very well the phenomenon of black economy in medicine as compared to patients

	Doctors	Patients	p
Direct payment to the doctor for him to personally treat the patient	77%	75%	NS
Direct payment to the doctor for treatment in hospital	72%	84%	>0.01
Use of hospital facilities for private treatment	26%	38%	>0.01
Contributions for treatment	16%	23%	NS
Giving gifts to the medical staff	13%	34%	>0.01
Contributions to research fund	12%	30%	>0.01
Private visit to doctor	6%	23%	>0.01
N	199	199	

Table no. 24: The number of definitions that express black economy in medicine very well amongst doctors compared to patients

	Doctors	Patients	p
Average	2.23	3.06	>0.01
Standard deviation	1.46	2.22	
N	199	199	

7.2 Estimate of the scope of black economy in medicine

7.2.1 Introduction

Considering the complexity of the black economy in medicine phenomenon, an attempt was made to assess its scope in two ways. One way was to obtain the doctors' and patients' assessment of the frequency of the phenomenon by asking them to note how common they felt it was and what they thought was the change that occurred in the scope of black economy in medicine after the National Health Insurance Law was ratified in 1995. The other way to attempt to assess its scope was by questioning doctors and patients on this issue according to the definitions presented in section 7.1
The doctors were asked to assess which part of the department's work serves activities defined as black economy in medicine, while the patients were asked to note the degree to which they encountered these aspects, and the extent to which they themselves performed deeds that could be attributed to black economy in medicine.

This section details the findings arising from the two methods of inquiry. The hypothesis is explored that differences exist in the degree of reporting the prevalence of the phenomenon according to relevant background variables.

Another aspect of the black economy in medicine issue is the degree to which the hospital administration cooperates with the phenomenon, that can characterize the degree of support or environmental censure experienced by doctors and patients involved with black economy in medicine activities, and the degree of danger to which they are likely to be exposed.
The doctors who participated in the study were asked a direct question regarding the degree of the cooperation of the establishment with black economy in medicine. The findings are detailed in the last section of this chapter.

7.2.2 Estimate of the frequency of black economy in medicine

The findings detailed in table no. 25, show that the assessment of black economy in medicine is very similar amongst those providing (doctors) and those receiving (patients) services. More than half the respondents are convinced that the phenomenon of black economy in medicine is frequent, and more than 35% believe that it is somewhat frequent. 6% of the doctors and patients believe that black economy in medicine is very frequent. 58% of the doctors and 65% of the patients believe that the phenomenon is frequent or very frequent. The frequency of the phenomenon is apparent from the very low percentage of doctors and patients who believe the phenomenon does not exist at all.

Table no. 25: Doctors' and patients' assessment of the frequency of black economy in medicine

Some people claim that the extent of the black economy in medicine phenomenon in Israel is insignificant and others claim it is very common. How common do you think the phenomenon is?

	Doctors	Patients
Insignificant	1.5%	--
Somewhat frequent	40.0%	35.2%
Frequent	52.5%	59.3%
Very frequent	6.0%	5.5%
Total	100%	100%
N	200	200

Table no. 26 indicates that legislators of the National Health Insurance Law hoped that its enactment would reduce the dimensions of the black economy in medicine phenomenon, and the reform in the health system would lead to greater equality. However, doctors and patients alike agree that the scope of the phenomenon did not decrease but even exacerbated in the years since its ratification.

About 66% of the doctors and patients agree that the extent of black economy in medicine only increased since the law was enacted, while slightly more than 25% of the patients and doctors believe that it did not change. A negligible number of respondents from both groups believe that the extent of the phenomenon decreased.

Table no. 26: Doctors' and patients' assessment of the change in the scope of black economy in medicine after the ratification of the National Health Service Law

1995 saw an extensive reform in the Israeli health system, in which framework the national health insurance law was enacted. Do you think the scope of the black economy in medicine phenomenon has changed since that law was passed?

	Doctors	Patients
The extent of black economy in medicine has not changed since the law and the reform were enacted.	28.9%	27.6%
The extent of black economy in medicine has decreased since the law and the reform were enacted.	6.1%	8.7%
The extent of the phenomenon increased after the law and reform were enacted.	65.0%	63.8%
Total	100%	100%
N	200	200

One can summarize that doctors and patients alike perceive the phenomenon of black economy in medicine as quite common and believe that its prevalence increased since the National Health Insurance Law was ratified.

7.2.3 Doctors' assessment of the scope of black economy in medicine

The doctors were asked to note which of the departmental activities is addressed to the need for activities defined as pertaining to black economy in medicine. The doctors could note that the black economy in medicine phenomena, according to its diverse definitions, does not generally exist in their departments, or that black economy in medicine occurs to a different extent in each department (up to 25%, 50%, 75% and 75%+ of the scope of the departmental activities).

Details of the doctors' assessment of the scope of black economy in medicine are detailed in table no. 27. An absolute majority of the doctors note that there are some black economies in medicine activities at all the dimensions explored.

Doctors believe that up to 25% of the departmental activities fall into the black economy in medicine definition. Dimensions of black economy in medicine associated with giving the attending medical staff or the department gifts were noted by many of the doctors as relevant to up to 50% of the departmental activity.
A few doctors noted that activities defined as black economy in medicine occur within more than 50% of the volume of the departmental activities. One may thus assume that black economy in medicine phenomena occur in up to 25% of the departmental activities in hospital and in certain cases, in up to 50% of the activities.

The issue of direct payment to the doctor, the aspect considered by the doctors to be the most relevant to black economy in medicine
(See section 7.1) is not much higher than other activities associated with black economy in medicine. According to reports of some of the doctors, the percentage of departments in which the black economy in medicine phenomena do not exist at all is high.

Table no. 27: Doctors' assessment of the scope of black economy in medicine

Do you know of any patients who donated medical equipment to the department in which they were treated in order to improve the quality of their care?

	Not at all	Up to 25% of the departmental activities	25-50% of the departmental activities	50-75% of the departmental activities	75% + of the departmental activities	Total	N
Advancing the appointment for treatment of people who visited the treating doctor privately	14.0 %	53.0%	20.0%	7.0%	6.0%	100%	200
Use of the hospital facilities for private treatment	11.5 %	53.5%	33.0%	1.5%	0.5%	100%	200
Donations to the department providing the treatment	4.5%	46.5%	42.0%	5.5%	1.5%	100%	200
Patients pay the doctor privately	18.6 %	62.8%	11.6%	6.0%	1.0%	100%	200
Donations to the research fund	6.0%	48.0%	30.5%	14.5%	1.0%	100%	200
Pay the doctor for personal treatment	20.0 %	56.0%	13.5%	5.0%	5.5%	100%	200
Gifts to the medical staff	5.0%	38.7%	42.2%	10.1%	4.0%	100%	200

Hypothesis no. 13 asserts that the scope of the dimensions of black economy in medicine reported by doctors and patients in the hospital in central Israel is higher than that reported in other hospitals on the periphery.

Hypothesis no. 14 asserts that the scope of black economy in medicine reported by doctors and patients in surgical departments is higher than that reported in departments of internal medicine and others.

To examine these hypotheses, the doctors' reports were recoded to a scale that includes three ranks only (up to 25% of the departmental activities are directed to the type of medicine investigated, 50% of the activities are directed to this end, and more than 50% of the activities are directed to this end) to enable significant analysis of the data.

The findings detailed in table no. 28 indicate that the two hypotheses regarding the connection between the scope of medicine and the background variables were refuted. Both the analysis according to the hospital location and the analysis according to the type of departmental specialization find significant statistical differences between the groups in only one activity attribute out of the seven explored.

Table no. 28: Values of the Chi square test for the doctors' assessment of the scope of black economy in medicine according to hospital and department specialty

(Combinations that crossed the critical value of p=0.05 are marked with an asterisk.)

	Hospital	Department
Advancing the appointment for treatment of people who visited the treating doctor privately	.457	.022*
Use of the hospital facilities for private treatment	.232	.798
Donations to the department providing the treatment	.005*	.334
Patients pay the doctor privately	.052	.510
Donations to the research fund	.219	.302
Pay the doctor for personal treatment	.142	.366
Gifts to the medical staff	.541	.316
N	199	199

7.2.4 Patients' assessment of the scope of black economy in medicine

Examination of the scope of black economy in medicine amongst doctors was conducted at two levels with respect to the patients' knowledge and opinion regarding other patients who were partner to the diverse phenomena defined as black economy in medicine (according to their impressions during hospitalization) and with respect to their own behavior.

The patients were asked to note how many patients, they believed, gave different types of compensation for activities defined as part of black economy in medicine; regarding their own behavior they were asked to note whether they themselves gave, or did not give, such compensation.

Table no. 29 details the patients' answers regarding the existence and scope of activities defined as black economy in medicine. An insignificant percentage of the patients testify that the phenomena attributed to black economy in medicine do not exist at all in their surroundings.

Most of the patients testified to seeing a few isolated patients in their surroundings who performed one of the acts associated with black economy in medicine. Giving the medical staff gifts is the most common activity amongst patients and 44% of them noted that quite a lot of patients in their surroundings gave such gifts. Similarly, the findings illustrate that a fair percentage of patients noted that quite a few of them performed a variety of deeds associated with the phenomenon explored.

In order to investigate whether there is a link between the reported scope of black economy in medicine activities and background variables, the patients' reported variables regarding black economy in medicine in their surroundings were recoded as follows: Those replying 'Don't know' were struck from the investigation, and the variable values were grouped to include two ranks only. The variables 'no one' and 'a few' were grouped together and the variables 'quite a few' and 'almost all' were grouped together.

One may observe that the findings detailed in table no. 29 show no link between the location of the hospital where the patients received treatment or were hospitalized in a specific department and reports regarding black economy in medicine activities.

Table no. 29: Activities associated with black economy in medicine in the patient's surroundings

There has recently been discussion of patients who try to improve the treatment they receive in hospital in various ways. As far as you know, were there patients in your department who did the following:

	None	A few	Quite a lot	Almost all	Don't know	Total	N
Were there patients who paid the attending doctor?	5.1%	63.1%	17.2%	--	14.9%	100%	198
Were there patients who turned to a private doctor?	2.5%	60.8%	28.6%	--	8.0%	100%	199
Were there patients who paid the doctor to treat them himself?	5.5%	58.0%	21.0%	2.5%	13.0%	100%	200
Were there patients who donated money to the department?	16.5%	61.5%	14.0%	--	8.0%	100%	200
Were there patients who donated medical equipment to the department?	33.0%	52.5%	8.0%	--	6.5%	100%	200
Were there patients who gave gifts to the attending staff	3.0%	36.7%	43.7%	13.1%	3.5%	100%	199

Table no. 30: Chi square test values for reporting on black economy in medicine activities in the patients' environment
(Combinations that crossed the critical value of p=0.05 are marked with an asterisk)

	Hospital	Hospitalization
Were there patients who paid the attending doctor?	.752	.534
Were there patients who turned to a private doctor?	.169	.504
Were there patients who paid the doctor to treat them himself?	.314	.424
Were there patients who donated money to the department?	.208	.245
Were there patients who donated medical equipment to the department?	.441	.432
Were there patients who gave gifts to the attending medical staff	.221	.271
N	192	192

Table no. 31 details activities associated with black economy in medicine performed by the patients themselves. The findings indicate that 50% of the patients admit to giving gifts to the attending medical staff. According to the patients' testimony this is the most common activity associated with black economy in medicine.

The issue of payment to the doctors is also extremely common. 31% of the patients noted that they paid the doctor for shortening the waiting list for treatment, and about 20% of the patients paid the doctor for him to personally treat them in a public hospital.

The most prominent finding in the analysis of the report on black economy in medicine activities according to the background variables (tables' nos. 32-35) is that the percentage of those paying the doctor for better medical service is considerably higher amongst patients whose economic status is good, compared to patients whose situation is less good. The most prominent example is turning to a private doctor in order to shorten the waiting list: 49% of the patients whose economic situation is good did so, compared to 17% of those whose situation is average and 10% of those whose situation is poor.

Another interesting finding is that patients who were not satisfied with their treatment contributed money more than other patients, a fact that is also likely to indicate a connection between black economy in medicine and the quality of medical treatment

Analysis according to hospital finds that fewer patients at the Assaf Harofe hospital (a small hospital on the periphery) reported less cooperation with black economy in medicine while more patients at the Ichilov hospital (a large hospital in the center of Israel) reported cooperation on the issue of black economy in medicine. Finally, people aged 31-40 paid more than others for treatment.

Table no. 31: Activities connected with black economy in medicine in the patients' environment

Have you personally done the following:

	Yes	No	Total	N
Have you given gifts to the attending medical staff?	49.5%	50.5%	100%	200
Have you gone to a private doctor to shorten the waiting list?	31.0%	69.0%	100%	200
Have you paid a doctor privately so that he personally will treat you?	19.5%	80.5%	100%	200
Have you paid a doctor for treatment?	6.5%	93.5%	100%	200
Have you donated money to the department?	1.5%	98.5%	100%	200
Have you donated medical equipment to the department?	1.0%	99.0%	100%	200

Table no. 32: Values for the Chi square test for performing various actions linked to black economy in medicine compared to patients' background variables

(Combinations that crossed the critical value of p=0.05 are marked with an asterisk)

	Gender	Age	Economic situation	Hospital	Hospitalization	Waiting time for operation	Satisfaction with the treatment
Have you given gifts to the attending medical staff?	.163	.216	.122	.035*	.341	.551	0.07
ave you gone to a private doctor o shorten the waiting list?	.156	.068	.000*	.014*	.081	.112	0.51
Have you paid a doctor privately so hat he personally will treat you?	.162	.412	.001*	.985	.422	.417	0.32
Have you paid a doctor for reatment?	.591	.012*	.005*	.198	.255	.420	0.35
Have you donated money to the department?	.160	.817	.287	.028*	.403	.570	0.01*
Have you donated medical equipment to the department?	.704	.378	.840	.576	.318	1	0.61
	200	199	200	200	200	79	174

Table no. 33: Report on performance of black economy in medicine activities according to age

(Combinations for which significant differences in definitions were found according to age)

		Age		
		18-30	31-40	+41
Have you paid a doctor for treatment?	Yes	2.4%	13.2%	2.6%
	No	97.6%	86.8%	97.6%
	Total	100.0%	100.0%	100.0%

Table no. 34: Report on performing black economy in medicine activities according to economic situation

(Combinations for which significant differences in definitions were found according to the economic situation)

		Economic situation		
		Good	Average	Poor
Have you turned to a private doctor to shorten the waiting list for treatment?	Yes	49.4%	17.3%	10.3%
	No	50.6%	82.7%	89.7%
	Total	100.0%	100.0%	100.0%
Have you paid a doctor privately so that he personally will treat you?	Yes	31.5%	8.6%	13.8%
	No	68.5%	91.4%	86.2%
	Total	100.0%	100.0%	100.0%
Have you paid a doctor for treatment?	Yes	12.4%	0%	6.9%
	No	87.6%	100.0%	93.1%
	Total	100.0%	100.0%	100.0%

Table no. 35: Report on black economy in medicine activities according to hospital
(Combinations for which significant differences in definitions were found according to hospital)

		Hospital			
		Rambam	Ichilov	Assaf Harofe	Hadassah Ein Karem
Have you given gifts to the attending medical staff?	Yes	62.0%	52.0%	33.3%	51.0%
	No	38.0%	48.0%	66.7%	49.0%
	Total	100.0%	100.0%	100.0%	100.0%
Have you gone to a private doctor to shorten the waiting list?	Yes	32.0%	48.0%	23.5%	20.4%
	No	68.0%	52.0%	76.5%	79.6%
	Total	100.0%	100.0%	100.0%	100.0%
Have you donated money to the department?	Yes	--	6.0%	--	--
	No	100.0%	94.0%	100.0%	100.0%
	Total	100.0%	100.0%	100.0%	100.0%

Table no. 36: Reporting on black economy in medicine activities according to age
(Combinations for which significant differences in definitions were found according to age)

		Satisfaction with the treatment		
		Poor	Average	Good
Did you contribute money to the department	Yes	0%	0%	8.8%
	No	100.0%	100.0%	91.2%
	Total	100.0%	100.0%	100.0%

7.2.5 The doctors' perception of the degree of awareness and cooperation of the hospital administration with the phenomenon of black economy in medicine

Table no. 37 details the doctors' perception of the hospital administration's awareness of the black economy in medicine phenomenon and its reactions. It reveals that most of the doctors are convinced that, although the hospital administration does not actively support black economy in medicine, it is aware of the phenomenon and is partner to the vow of silence pertaining to dealing with it. Only 2% of the doctors noted that the hospital administration takes active steps to fight the phenomenon.
Analysis of the answers to this question according to background variables were not conducted in view of the low level of variance of the doctors' answers to this questions, that do not enable such a significant analysis of this type.

Table no. 37: The doctors' perception of the attitude of the hospital administration to the phenomenon of black economy in medicine

What do you think of the attitude of the hospital administration to the black economy in medicine phenomenon?

Unaware of the phenomenon	5.5%
Support the phenomenon	11.5%
Partner to the vow of silence	81.0%
Fight the phenomenon	2.0%
Total	100.0%
N	200

7.3 Attitudes towards black economy in medicine

7.3.1 Introduction

Black economy in medicine exists primarily because doctors and patients choose to cooperate, when there is, as it were, a mutual meeting of desires between the two parties.

To this point, the definitions and scope of black economy in medicine activities have been explored. Deeper understanding and mapping of the phenomenon force us to also explore the perceptions and attitudes of doctors and patients regarding the phenomenon, i.e., examination of the degree of legitimacy the partners relate to the existence of such activity. The legitimacy of black economy in medicine as seen by the patients means the weakening of the barriers to its existence. The lack of legitimacy of the phenomenon is likely to reduce its scope and raise barriers to its existence, due to the reduction in the percentage of those prepared to take part in this phenomenon, who are, in fact, those who do not consider this phenomenon to be legitimate.

We have, till now, dealt with the description of the phenomenon of black economy in medicine and its physical extent. This section details findings that pertain to the degree of legitimacy of the phenomenon amongst those partner to it, whether patients or doctors.

Doctors and patients were asked two questions intended to characterize the perception of black economy in medicine. One asked the interviewees whether they believe there are more positive or negative aspects to black economy in medicine and the other, asked directly whether the

interviewees believe there is an ethical flaw in black economy in medicine.

An experiment was conducted regarding the second question to construct regression models that will predict the degree of legitimacy attributed by doctors and patients to the phenomenon of black economy in medicine. The second question was selected as the dependent variable in the regression model since the degree of variance in the answers was greater than the degree of variance in the answers to the first question above.

The question is designed as a Lickert scale that explores agreement with the statement that there is no ethical flaw in black economy in medicine. It is customary to view such a scale as an interval scale for which statistical acts such as regression can be performed.

The independent variables differ for each of the regressions (for doctors and patients) and include all the variables examined as background variables in the previous sections, some of which were converted to dichotomous variables in order to enable their inclusion in the regression model.

7.3.2 The perception of the phenomenon of black economy in medicine amongst doctors

As can be observed in detail in table no. 38, 65% of the doctors see mainly negative aspects of black economy in medicine, 18% see positive aspects as well and the last 17% refer to black economy in medicine as something extremely negative.

Hence doctors are mostly ambivalent towards the phenomenon, and although they see it in a negative light they do not reject it out of hand. In this context, it should be noted that the dimensions of support for the phenomenon may be higher than reported due to the sub-reporting on support for the phenomenon stemming from the doctor's social volition.

A similar pattern can be seen in table no. 39 detailing the doctors' response to the direct question that explores their opinion of the ethics of black economy in medicine. Only 53% of the doctors agree that there is an ethical flaw in black economy in medicine , compared to 39% who somewhat agree to this and 8% who do not think there is any ethical flaw in black economy in medicine .

Table no. 38: The doctors' perception of the positive and negative aspects of black economy in medicine

Do you think black economy in medicine is a positive or negative phenomenon?

There are both positive and negative aspects	18.0%
Mainly negative aspects	65.0%
Extremely negative	17.0%
Total	100.0%
N	200

Table no. 39: The doctors' perception of black economy in medicine ethics

Involvement in black economy in medicine does not entail any ethical flaw.

Totally disagree	20.5%
Disagree	32.0%
Somewhat disagree	39.5%
Agree	4.5%
Totally agree	3.5%
Total	100.0%
N	200
Average	2.38
Standard deviation	0.97

Regression to predict the doctors' perception of the ethics of black economy in medicine

As mentioned, multiple regression was conducted to characterize the variables that predict the attitude towards the degree of ethics of black economy in medicine.
The dependent variable: The doctors' perception of the ethics of black economy in medicine.
The independent variables: Seniority at hospital, (a sequential variable), experience (dichotomous variable), tenure (dichotomous variable) administrative position (dichotomous variable), economic situation (sequential variable) satisfaction with salary (sequential variable).

The regression model is found to be insignificant (p=.131, r square = 0.05) and therefore one may conclude that the degree of explanation for the variance in the perception of black economy in medicine , generated by the independent variables, is extremely low. Furthermore, no differences were found in the perception of the ethics of black economy in medicine according to the hospital in which the doctor works or the specialization of the department in which he works.

7.3.3 Patients' perception of black economy in medicine

The patients' perception of black economy in medicine is more positive than that of the doctors (table no. 40). 30% of the patients believe that black economy in medicine has positive aspects compared to 18% of the doctors.

The ambivalent perception of black economy in medicine is even more noticeable amongst patients compared to doctors (table no. 41), since despite expressing more positive opinions than the doctors towards the very phenomenon, more patients than doctors noted that the phenomenon is not ethical (71% versus 53%).

Table no. 40: The patients' perception of the positive and negative aspects of black economy in medicine

Do you think black economy in medicine is a negative or positive phenomenon? (Patients)

It has positive aspects	4.5%
It has both positive and negative aspects	25.3%
It has mainly negative aspects	48.0%
It is extremely negative	22.2%
Total	100.0%
N	200

Table no. 41: The patients' perception of the ethics of black economy in medicine

To what extent do you agree that black economy in medicine does not entail any ethical flaw (Patients)

Totally disagree	23.7%
Disagree	47.0%
Somewhat disagree	24.7%
Agree	4.0%
Totally agree	0.5%
Total	100.0%
N	200
Average **Standard deviation**	2.38 0.97

Regression to predict the patients' perception regarding the ethics of black economy in medicine

The dependent variable: The patients' perception of the ethics of black economy in medicine.
The independent variable: Age (sequential variable), economic situation (sequential variable), patient hospitalization (dichotomous variable), perception of waiting time for an operation (dichotomous variable).

The level of the explanation of this regression is also very low (r square = 0.09) although the regression model is significant (p=0.001). The only variable found to significantly influence the perception of the ethics of black economy in medicine is the interviewee's hospitalization: Those hospitalized had a more negative opinion of black economy in medicine than those who were not hospitalized.

Chapter 8

Discussion

Recognition of the inequality in health in general, and of the black economy in medicine phenomenon in particular, existed for many years in most health systems around the world. However, only in the last two decades have countries started to consider the social and economic implications and the implications on the population's health.

This study aims to explore the patterns of use of black economy in medicine under the National Health Insurance Law. It analyzes variables affecting the thought and activity of both groups of players - the doctors on the one hand and the patients on the other - in order to prepare an information basis for shaping proper social, organizational, economic health policy.

The discussion of this study will follow the order of the main topics and categories mapped in this thesis:

- Defining black economy in medicine
- Assessing the scope of black economy in medicine
- Attitudes towards black economy in medicine
- The attitude of the hospital administration to the black economy in medicine phenomenon

8.1 Discussion of the definition of black economy in medicine

One of the main topics in the discussion of the research is the way in which doctors and patients tend to define the phenomenon of black economy in medicine. The absence of a clear and uniform definition of this issue leads of necessity to bending the assessment of the scope of the phenomenon, attitudes towards it and of course, the difficulty in preparing an information base for shaping policy.

8.1.1 The degree of agreement of the doctors with the dimensions of the definitions of black economy in medicine

The starting point of the current study is the clear agreement amongst doctors over the definition of black economy in medicine. Personal payments to the doctor are defined as black economy in medicine, while payments to the department in money or something equal to money, are

not defined as black economy in medicine. This first hypothesis is based on Noy's (1998) research findings, with the data gathered from 1990-1991, in other words, prior to the great reform in the health system in Israel (the introduction of the National Health Insurance Law).
The current study finds there are two definitions that were very largely accepted by the doctors, both of which deal with the relationship between the doctor and the patient rather than between the department and the patient.

The two definitions to which agreement was very considerable are:

- Personal payment to the doctors for them to personally treat the patient: 77% of the doctors agreed that this definition greatly expresses the concept of black economy in medicine, and 95% of the doctors agreed that the definition considerably or very considerably expresses black economy in medicine.
- Personal payment to the doctors for treatment in hospital (72% and 95% respectively).

These findings indeed illustrate the doctors' differentiation between the benefits given doctors personally (doctor remuneration) and giving to the department (department remuneration). In other words, doctors agree that they consider 'doctor remuneration' to be black economy in medicine, while 'department remuneration' is considered an expression of gratitude.

Although the research these findings support Noy's (1998) conclusions, a further definition is found of black economy in medicine that enjoys broad agreement amongst doctors (and on which there was no agreement in Noy's work): The use of hospital facilities for private treatment. 81% of the doctors greatly or very greatly agreed that this phenomenon is part of black economy in medicine. This definition that deals with the relationships between the patient and the department ('department remuneration') emphasizes the variance in the findings prior to and after the ratification of the National Health Insurance Law. The current study is cross-sectional, and the findings can only be noted without locating the causes. Hence one may assume that after its ratification, intended mainly to attain equality (Government of Israel, 1994), the doctors may today be more aware of the broader variety of attributes and definitions of black economy in medicine compared to the perception of the definitions of the phenomenon prior to it.

Furthermore, the rigidity of the law and its enforcement (Complaints Commissioner, 2002) and the many cases exposing doctors involved in black economy in medicine and bringing them to trial, as well as broad

media exposure, led to variance in the findings between the current study and Noy's (1998) research 16 years earlier (Banai, 2002).

It is important to note the considerable disparity still existing between the doctors' narrow definition of the phenomenon and the report of the State Comptroller of 1988 that gave a broad and clear description of the four areas that define black economy in medicine.
The other definitions of black economy in medicine were less accepted by the doctors, although it should be noted that for each definition more than 60% of the doctors greatly or very greatly agreed it describes black economy in medicine. One may therefore conclude that all the phenomena explored are perceived by the doctors as pertaining to the concept of black economy in medicine.

The findings amongst the medical population enjoy greater significance since in Israel, as in many other countries, 98% of the doctors are public employees and more than half the doctors work mainly in hospital (Nirel et al., 2003).

8.1.2 The degree of agreement of the doctor population with the dimensions of black economy in medicine according to professional background variables

The research findings of the current study generally indicate that the more 'established' the doctor is in hospital (as regards seniority, tenure, administrative position, specialist appointment), the less behaviors they will include under the term black economy in medicine .

- The greater the doctors' seniority in hospital, the less they will tend to agree that a private visit to the doctor, as well as receiving a contribution to the research fund or giving gifts to the medical staff, are acts that should be included in the definition of black economy in medicine .
- The more senior the doctors, the fewer behaviors they will tend, in general, to include under the heading of black economy in medicine.
- Doctors with seniority in hospital tend to agree less than doctors without tenure with several of the definitions of black economy in medicine.

Particularly prominent is the difference between doctors with and without an administrative role. 90.6% of the doctors without an administrative role are convinced that use of the hospital equipment for private treatment greatly or very greatly expresses the definition of the phenomenon, while only 59.4% of the doctors with administrative roles in hospital thought

that this factor greatly or very greatly expresses the definition of the phenomenon of black economy in medicine.

The logical and main explanation for all these findings is that more established doctors in hospitals are apparently more accessible to activities defined as black economy in medicine as leading doctors in their field, who are famous and sometimes even powerful in hospitals.

More 'established' doctors in hospitals have greater access to hospital equipment due to their authority and status in the organization and they may make greater use of the hospital equipment for their private needs.

Less 'established' doctors feel themselves less exposed to the phenomenon and similarly, usually do not bear legal responsibility. They will thus tend to include more dimensions of the definitions compared to established doctors, who fear legal suits and negative publicity.

Furthermore, considerable differences were found in the perception of black economy in medicine according to area of specialization: Doctors in departments of internal medicine see more than surgeons and other specialists the use of hospital facilities for private treatment as belonging to black economy in medicine, and see less than other doctors and surgeons a private visit to the doctor as belonging to the definition.

A possible explanation of the differences described is apparently that specialists have different access to black economy in medicine. Surgeons usually treat patients suffering from more acute problems compared to internists, who in many cases need an operation and therefore, the more serious and acute the patients' condition, needing immediate and focused treatment, the more convenient conditions are created for the existence of the black economy in medicine phenomenon. This assumption that can explain the tendency of surgeons to include fewer dimensions of the definitions compared to internists and other doctors.

8.1.3 The degree of agreement of the doctor population with the dimensions of the definitions of the black economy in medicine according to the degree of doctors' satisfaction with their work and salaries

Work satisfaction is a very important component for an employee. The attributes of the doctors' work are likely to have implications on the satisfaction with their work and their ability to provide medical service off high quality.

The current study explores the doctors' satisfaction from the extrinsic perspective as pertaining to the satisfaction with their hospital salary. This has many additional aspects, some of which are intrinsic pertaining to the content of their position such as variation in work, the opportunity to use their individual skills, autonomy etc. (Landon, Reschovsky and Blumenthal, 2003). But because of their progress as regards remuneration, underlying the black economy in medicine phenomenon (compensating the doctor with money or something equal to money), the researcher has chosen to focus only on the aspect of economic satisfaction with the salary received for hospital work.

The research findings indicate that doctors who are more satisfied with their salaries tend to relate significantly fewer behaviors to the concept of black economy in medicine compared to doctors with average and lower satisfaction with their salaries.

The differences between the two groups are found to be significant as regards the use of hospital facilities for private treatments, giving gifts to the medical staff, receiving contributions to the research find and a private visit to the doctor.

The committee established to examine public medicine and the status of doctors finds that many are forced to cope with the loss of considerable freedom in the medical profession. Doctors have difficulty adapting to the pressures brought to bear on them by their employers, to relate to the patients as customers, to increase output and to reduce input.

Brantley (1993) finds that pressure at work is the most important predictor of burnout there. Other studies that explore this issue amongst doctors note the importance of an organization's consideration of the work burden and the doctor's burnout (Deckard, 1994). Although there are several reasons for erosion of the doctors' status in recent years one of the main ones is clearly the level of salary in hospital that has a direct impact on satisfaction with the place of work. Nirel et al. (2003) also find that salaried doctors in hospitals report a higher level of burnout as regards physical tiredness compared to independent doctors working in the community.

Differences are also found in the degree of burnout according to the doctors' background attributes: Doctors without an academic appointment, young doctors (up to age 44) and males reported a high level of burnout compared to those with an academic appointment, older doctors (aged 55 or older) and women.

Obviously, these data indirectly support the findings of this study in that it is possible to assume that the doctors with the highest level of burnout, i.e., doctors without an academic appointment and young doctors, are less satisfied with their hospital salaries compared to doctors with an academic appointment and older doctors, who apparently are more satisfied.

Another fact arising from the analysis of the research findings is that doctors who define their economic situation as not good tend more than others to agree with certain definitions of black economy in medicine.
In other words, and as regards the influence of perceptual background variables, doctors whose economic situation is not good and/or who are dissatisfied with their salary tend more than others to agree with certain definitions of black economy in medicine.

The logical explanation for this is that doctors who are very satisfied with their salaries and economic situation are apparently more accessible to black economy in medicine. These doctors also seem liable to lose more when exposing the activities of black economy in medicine. They therefore clearly tend to relate significantly fewer behaviors to the concept of black economy in medicine compared to doctors whose satisfaction with their salaries is average and lower and those whose economic situation is less good.

This fact hones the previous discussion on the differences in perceptions and definitions of black economy in medicine by 'established' doctors compared to 'non-established' doctors. These two additional dimensions - doctors' satisfaction with their salary and their perception of their economic situation - further complete another tier in the general picture. They illustrate the fact that doctors with a higher professional and economic status tend to relate less significance to many dimensions that characterize the definition of black economy in medicine, while doctors with a lower professional and economic status tend to relate greater significance to those same dimensions.

8.1.4 The extent of agreement by patients with the dimensions of the definitions of black economy in medicine

The starting point of this study on patients is similar to that of the doctors. The research hypothesis underlying Noy's (1998) research findings is that the patients' perceive personal payment to a doctor as black economy in medicine, while the definitions that are connected to giving presents to the medical staff, receiving contributions to the departmental research

fund and giving donations for the treatment, are not defined as black economy in medicine . In other words, patients also differentiate between doctor remuneration and department remuneration.

Similar to the findings pertaining to the doctors, it is clear that the patients also attribute two main descriptions to the concept of black economy in medicine: Personal payment to the doctor for treatment at hospital and payment to the doctor for him to personally treat the patient.

As amongst the doctors, this study finds that behavior that is third as regards the strength of the connection to black economy in medicine (i.e. the use of hospital facilities for private treatment) is also true of the patients. However, the definitions that pertain to department remuneration are found to be less acceptable to the patients compared to categories that describe doctor remuneration. More than 60% of the patients agreed greatly or very greatly that the definitions that describe department remuneration describe black economy in medicine, and one can therefore conclude that all the phenomena explored are perceived by the patients as pertaining to the concept of black economy in medicine.

One may assume that the level of consumer awareness of health services in general and of black economy in medicine in particular increased following the ratification of the National Health Insurance Law. Patients nowadays tend to attribute more variables as belonging to black economy in medicine.

Clearly, better understanding of consumer behavior in the health market can explain, to some extent, the patterns of usage of black economy in medicine, and the consumers' share in perpetuating the phenomenon.

Each theoretical approach to consumer behavior can, in its own way, explain the rationale underlying active participation in black economy in medicine phenomena. According to the economic approach, consumers are economic persons, with rational behaviors and considerations, with full knowledge of the products or services offered in the market; they know the degree of benefit they can derive from each product, act out of free choice and have limited resources. As a result of all these, consumers try, within their budgetary limitations, to increase the benefit as far as possible.

This researcher believes the economic model, as a tool for predicting consumer behavior in the health market, is deficient, mainly due to the incorrect assumption that the health service consumers have full knowledge of the market. The level of the consumers' knowledge is limited due to the complexity of knowledge and the professional–medical information needed in order to make educated decisions. Similarly, the medical market is often characterized by rapid changes as regards the supply of products, technologies, services and prices, making consumer behavior difficult. Another fact that is typical of consumer behavior in the health market is the asymmetry in the extensive knowledge of medical service manufacturers (the doctors) and the consumers' (the patients') low level of knowledge. This fact leads to the almost absolute control by doctors of the demand for the services offered, i.e., supply determines demand. Thus the real power of the health services consumers is in fact limited.

This unique attribute of asymmetry in doctors' and patients' knowledge can more than hint that the real power motivating black economy in medicine originates with the doctors and not the patients.

The psychological model, being abstract, can certainly explain part of the consumer behavior in the health market in general and in black economy in medicine in particular. Accordingly, consumers of health services will operate and make their decisions regarding involvement in black economy in medicine based on many subjective motives that include, amongst other things, personality, life experiences, needs and social and cultural influences.

The sociological model can perhaps explain the integration of consumers of health services in patterns of black economy in medicine by the patients adapting, in fact, to the norms and patterns that characterize the general culture, the specific social frameworks in which they function and recognition of the norms accepted by public hospital doctors.

Similarly, this approach can explain the great similarity in findings that arose in the patients' and doctors' perception of the definition of the phenomenon. As mentioned, characterizing the dimensions of the definitions of the phenomenon by both doctors and patients differentiated between department remuneration and doctor remuneration.

8.1.5 The degree of the patients' agreement with the dimensions of the definitions of black economy in medicine according to background variables

The patients' background variables, according to which the attitudes towards black economy in medicine were explored, are divided into three parts:

1. Demographic variables: Gender and age
2. Economic situation perceived by the patient
3. Variables connected to the attributes of the patient's connection with the hospital, including the hospital in which the patient was interviewed, satisfaction with treatment received there, whether the patient was hospitalized in that hospital, and the waiting time for an operation if that had been found necessary during hospitalization.

The research findings do not indicate differences in the perception of black economy in medicine amongst patients according to age or hospital in which they were interviewed. However, men tended more than women to see paying the doctor or the use of hospital facilities for private purposes as behaviors pertaining to black economy in medicine.

The research hypothesis, that economically well-off patients will tend more than patients of average or low economic means to relate doctor remuneration for him to personally treat the patient as belonging to black economy in medicine, was refuted.

The research findings indicate that those who are better off tend more than others to relate doctor remuneration for him to personally treat the patient as black economy in medicine, while others of a poor economic situation tend more than those of an average or better economic situation, to see giving presents to the medical staff as black economy in medicine behavior.

The variance described between the patients of high economic means and those of poor economic means can manifest the ways of thought and even of action of the patients with diverse economic means. Thus patients of good economic means will tend to remunerate the doctor through direct payment and patients of a poor economic situation will tend more to remunerate the medical staff rather than pay the doctor.

Another finding reveals that patients who were hospitalized or those who believed they waited too long a time for an operation see more than others giving a contribution for treatment as part of black economy in medicine

Findings regarding the patients' satisfaction with the medical treatment and the connection to the dimensions of the definitions of black economy in medicine

Data regarding the patients' satisfaction with the level of service and functioning of the health services are very important for understanding the black economy in medicine phenomenon, since they primarily reflect the point of view of the consumers of the system.

The current study explores the patients' satisfaction with the medical service they received in hospital in general and the connection between satisfaction and the dimensions of the definitions of black economy in medicine in particular. The research findings indicate that 58% of the research population expressed moderate satisfaction with the medical treatment in hospital and only 17% were very satisfied with it.

Findings of the survey conducted by Gross, Bramley-Greenberg and Mazliach (2005) are compatible and support the findings of this current study. Their findings indicate that in 2003, satisfaction with the functioning of the health system in general was low: Only 9% answered that they were very satisfied and 50% were satisfied.

Although this study does not compare patient satisfaction prior to and following ratification of the National Health Insurance Law, the research findings confirm the moderate and even low satisfaction of patients with the health services. The findings further hint at the fact that there was apparently no significant change in patient satisfaction after ratification of the law, despite the surveys conducted of the health system in the following years that generally found improvement in the level of service and satisfaction following its enactment (Gross, Rozen and Shirom, 1999).

The research hypothesis that patients with a low level of satisfaction with the health service in hospital will tend to include more behaviors under the term of black economy in medicine, compared to those who were more satisfied was refuted.

In contrast, three dimensions were found wherein those satisfied with the treatment relate greater significance to black economy in medicine:

1. Direct doctor remuneration for him to personally treat the patient
2. The use of hospital facilities for private treatment
3. Receiving contributions to the department fund

The research hypothesis that was refuted relied on the concept that patients who are not satisfied or whose level of satisfaction is low would tend to assess that only through patterns of black economy in medicine, i.e., doctor and/or department remuneration, could the quality of medical service given in hospital be improved.

From the above and in contrast to the research hypothesis, the research findings can be explained by patients who expressed high satisfaction with the medical treatment and related more significance to black economy in medicine, themselves experience black economy in medicine services and therefore their level of satisfaction is higher, while patients who are not satisfied did not use black economy in medicine and therefore their satisfaction with the treatment is not high.

As noted, in depth consideration of their opinion and satisfaction of health service consumers can certainly offer an meaningful explanation of the patterns of black economy in medicine, the reasons for this existence and the development of the phenomenon.

8.1.6 The degree of agreement of the patient and the doctor population with the dimensions of the definitions of black economy in medicine

Comparison of the dimensions of the definitions of black economy in medicine according to the findings pertaining to patients and doctors illustrates to a considerable degree the compatibility between the two populations.

Analysis of the findings shows that both doctors and patients clearly differentiated between definitions connected to doctor remuneration and those connected to department remuneration. Both populations agree to a considerable extent that the dimensions connected to doctor remuneration, i.e., direct payment to the doctor for treatment in hospital and paying the doctor for him to personally treat the patient are to be considered black economy in medicine. Similarly, both doctors and patients maintain that behavior that is third as far as the intensity of the connection to black economy in medicine is the use of hospital facilities for private treatment.

It is important to note that a thorough statistical analysis finds that patients tended to agree more than doctors with the definitions of black economy in medicine presented to them, and that they agree more than

the doctors that the five following definitions of black economy in medicine actually pertain to the phenomenon:

1. Direct payment to the doctor for treatment in hospital
2. Use of hospital facilities for private treatment
3. Giving presents to the medical staff
4. Receiving donations to the research fund
5. Private visit to the doctor

Furthermore, the in-depth statistical analysis of the secondary findings emphasizes somewhat, the variance in the perception of the dimensions of the definition of black economy in medicine by the patients and the doctors. In contrast to the attitude of the doctors who are 'accessible' to the phenomenon (the 'well-established' doctors) patients with greater 'access' to black economy in medicine (with the economic means to pay the doctor) do not hide behind narrower definitions of black economy in medicine. Patients with economic means do not worry about the need to 'justify' the definition and existence of the phenomenon. The source of the differences in perception between doctors and patients lies in the cost of 'exposure' of the phenomenon. In other words, the damage to the doctors who are involved in black economy in medicine is liable to be far greater than to the patient and his family.

8.2 Discussion of the estimate of the scope of black economy in medicine

The second main issue in the current research discussion is the estimate of the exact scope of the phenomenon of black economy in medicine - one of the greatest and most curious unknowns. Various hypotheses and contradictory estimates were raised over the years whose data base was not always clear or solid. At the same time, and despite the difficulty in estimating the scope of black economy in medicine, it has been considered a significant and very extensive phenomenon.

Prior to reviewing and discussing the scope of the black economy in medicine phenomenon as found in the current study, it is extremely important to note the considerable difficulty in assessing it, due to the lack of desire by those involved to volunteer information about their activities. Black medicine is prohibited by law, and occurs mainly behind closed doors. For this reason, it is worth remembering that assessments about the scope reported by doctors and patients will be biased.

In view of the complexity of the phenomenon of black economy in medicine and the difficulty in quantifying its scope, the current study

attempts to assess its frequency and the change occurring in its scope after the ratification of the National Health Insurance Law in 1995, by receiving feedback and assessment from the two main players in the phenomenon - the doctors and the patients - and of course the degree of compatibility between them. The findings arising from the two research populations will be discussed in detail, as will an exploration of whether the relevant research hypotheses are confirmed or refuted.

8.2.1 Evaluation of the doctors' perception of the scope of black economy in medicine

As mentioned, cautious consideration of the doctors' findings regarding assessing the scope of the phenomenon is unavoidable, but, nevertheless, surprising. Despite the fact that many doctors did not testify of themselves as dealing with black economy in medicine, and in fact incriminate themselves, 58% of the doctors are convinced that the phenomenon is frequent or very frequent.
Similarly, one can also learn of the frequency of the phenomenon from the very low percentage of doctors (1.5%) who are convinced that the phenomenon does not exist at all.

Considering the limitation of assessing the scope of the phenomenon, one may assume that many more doctors actually are convinced that the phenomenon is significantly more frequent. Similarly, some of the doctors who reported that the phenomenon is quite frequent are convinced it is very frequent. These data are thus surprising; they moreover illustrate the importance of presenting the data and raising the subject to the top of the national order of priorities.
One of the key goals of the study was to explore whether there is change in the scope of the phenomenon of black economy in medicine after the ratification of the National Health Insurance Law, an issue not explored in an organized study.
The findings show that 65% of the doctors estimated an increase in the dimensions of black economy in medicine since the law was introduced, while a little more than 25% of the doctors were convinced that its dimensions have not changed. A negligible number of the doctors were convinced that its dimensions decreased.

It is also important to note that Noy and Lachman (1998, who gathered data during 1990-1991 prior to the great reform in the health system in Israel in 1995 and the introduction of the National Health Insurance Law) find that the decisive majority of doctors estimated the phenomenon to be very common or extremely significant.

Obviously, the comparison between the findings of the current study and that above does not enable quantitatively assessing the variance in the scope of the phenomenon prior to and following the ratification of the law but accepting the general feeling, that black economy in medicine that was common prior to the introduction of the law, remained common and its scope even increased.

It transpires from the above that the research hypotheses that explored the dimensions of the frequency of the phenomenon in general and the extent of the frequency after the reform, as seen by the doctors, are confirmed. The findings of this study prove without a shadow of doubt that most doctors believe that black economy in medicine phenomena are quite or very frequent, and are similarly convinced that the frequency of the phenomenon increased since the National Health Insurance Law was ratified in January 1995, affording the greatest reform in the Israeli health system.
This finding is important, since it raises deep questions as regards the success of the reform in the health system.

The law defines the obligation of the State to provide all its citizens with health insurance. It is based on the perception of an egalitarian ideology that enables free choice of the health service provider, and thereby forces the suppliers of health services to accept all those addressing them regardless of their age, income and medical history. It assures all citizens a basic basket of services equal to all, and determines the ways of financing the basket of health services. The law even defines the State's obligation to supervise the provision of health services and their quality.
Those in favor of the law claim that it would make the health service system more egalitarian (Berg, Rozen and Morgenstern, 2002).

The general picture received from the research findings does not leave room for doubt. About 66% of the doctors agree that the dimensions of the phenomenon of black economy in medicine increased since the law was introduced. Thus if the leaders of the reform hoped that enacting the law would increase equality in the health market in general and would reduce the dimensions of black economy in medicine in particular, they were not only wrong, but the dimensions of the black economy in medicine phenomenon even increased since the law was enacted.

The data of the current study enforce the findings of the study by Gross et al., (2005) conducted amongst leaders of the health system and focusing on the National Health Insurance Law. 75% of the participants in their study reported that the degree of inequality in the level of services

dropped following the ratification of the National Health Insurance Law; almost half of the participants expected a worsening in the inequality in the level of services in the following five years. In parallel, it is important to remember that despite the black economy in medicine phenomenon directly and indirectly affecting equality in the health system, there are many other factors connected to equality or inequality in the health market.

8.2.2 Evaluation of the doctors' perception of the scope of black economy in medicine according to dimensions of the diverse definitions of black economy in medicine

Another way of assessing the scope of the phenomenon was asking doctors about the scope of black economy in medicine according to the dimensions of the various definitions. The doctors were asked to assess which part of the department's activities serve for activities that are defined as black economy in medicine.

The researcher will try, in this section, to detail and discuss the various findings obtained according to the dimensions of the various definitions and to explore the hypothesis that differences exist in the extent of reporting on the frequency of the phenomenon according to the relevant background variables.

The doctors were asked to note which part of their departmental work was directed to activities defined as pertaining to black economy in medicine. The doctors could note that the black economy in medicine phenomenon, according to the diverse definitions, did not exist at all in their department, or that black economy in medicine occurs to differing degrees (to 25%, to 50%, to 75% and 75%+) in the department activities.

The absolute majority of the doctors noted that such activities existed in their departments at some level for all dimensions explored. They assessed, for most of the phenomena that up to 25% of the department activities are directed to black economy in medicine. In parallel, dimensions of black economy in medicine connected to giving presents to the medical treating staff or to the department were noted by many of the doctors as accounting for up to 50% of the department activities. A few doctors from the group noted the existence of activities defined as black economy in medicine occurring in more than half of the volume of departmental activities. One may therefore assume that the black economy in medicine phenomenon occurs in up to 25% of the department activities in hospital and in certain cases up to 50% of the activity.

The research findings note a contradiction between the doctors' assessment of the scope of the phenomenon in Israel and their assessment of it according to indices of the various definitions that relate to activity in their department.

As noted, most doctors mentioned that the phenomenon is quite or very frequent, but when asked about the activity in their department, most assessed that only up to 25% of the departmental activity is directed towards black economy in medicine.

The logical explanation of the contradiction between the findings is the simple fact that when the doctors were asked in general about the scope of the dimensions of the phenomenon, they cited their real or close to real assessment of their private truth, since they did not feel they were asked personally about their involvement in the phenomenon. In contrast, when the doctors were asked about the scope of the secondary activities connected to black economy in medicine in the department in which they work, they may have felt that they are testifying to themselves or to their colleagues in the department as dealing with black economy in medicine, and thus incriminating both groups.

This study, like that by Noy and Lachman (1998, conducted prior to the reform in the health system) finds that most of the doctors estimated the scope of black economy in medicine activities as up to an average of 25% of all the hospital activity. In contrast to the findings of this study, the above authors find that doctors are consistent in their perception of the dimensions of the phenomenon. In other words, in that study the doctors differentiated between the two dimensions – doctor remuneration and department remuneration. They further note that the doctors significantly reduced the dimensions of the phenomenon as far as paying doctors directly was concerned (doctor remuneration) compared to a high estimate of payment to the department (department remuneration).

Direct payment to the doctor, most identified by this group as black economy in medicine, is not found in the current study to be significantly less frequent than the other activities pertaining to black economy in medicine. At the same time, and according to reporting by some of the doctors, the percentage of the departments in which there is no issue of doctor remuneration compared to department remuneration is higher.

On the one hand, the data from departments in which the phenomenon does not exist at all indicate that doctors today still differentiate between doctor remuneration and department remuneration when estimating the

scope of the phenomenon, exactly as they differentiated between the dimensions of the diverse definitions and according to the findings regarding the doctors' prior to the reform in the health system. On the other hand, the variance between the two studies in departments in which black economy in medicine activities were reported to be up to 25% of the department activities can note the beginning of perceptional change by doctors that reflects on the estimated scope of the phenomenon, change that may have started after the law was enacted.

8.2.3 Estimate of the doctors' perception of the scope of black economy in medicine according to background variables

The research findings indicate that the two hypotheses regarding the connection between the scope of black economy in medicine and the background variables are refuted.

The hypothesis of differences existing in the scope of black economy in medicine and the location of the hospital in central Israel compared to the periphery is unfounded. The hypothesis regarding differences in the scope of black economy in medicine according to type of department specialization (surgical, internal medicine or other) is also unfounded.

Analysis of the hospital location and of the types of departmental specialization finds only one attribute of activity of the seven explored in which there are significant statistical differences between the groups.

8.2.4 Estimate of the patients' perception of the scope of black economy in medicine

It is first and foremost important to note again that one should carefully consider the findings regarding the patient population due to expected research bias.

It is reasonable to assume that bias in the findings regarding patients will be almost certainly less significant compared to the doctor population, since while doctors working in public hospitals are forbidden by law to accept remuneration or benefits from patients, the issue of black economy in medicine is an ethical one mainly for patients. They have no problem infringing the regulations of the health system and its procedure.

Admittedly, one can take patients to court for bribing a public employee, but this has not been done till now and there is no reason to think it will occur in the future. Thus the researcher assumes that there is a greater chance of patients reporting honestly on this matter.

The starting point of this study regarding the patients is similar to that regarding the doctors, and the research hypothesis is that more than 50% of the patients believe that black economy in medicine is quite or very common.

Similar to the findings arising amongst doctors, the hypothesis is confirmed.

The research findings show that more than half the patients (59%) believe that black economy in medicine is very common and more than 33% believe that the phenomenon is somewhat common. 5.5% of the patients believe black economy in medicine is very common and a total of 65% of the patients believe it is common or very common. This finding is exactly the same as that regarding the doctors. But beyond that, one can also learn of the frequency of the phenomenon from the fact that no patient who participated in the study thought or reported that the phenomenon was non-existent.

As noted, one of the main purposes of the study was to explore whether change occurred in the scope of the dimensions of the phenomenon of black economy in medicine after the ratification of the National Health Insurance Law. Similar to the research hypothesis regarding the doctors, that regarding the patients was that they believed the scope of the dimensions of the black economy in medicine phenomenon rose after the enactment of the National Health Insurance Law. Similar to the findings regarding the doctors, about 65% of the patients agree that the dimensions of the phenomenon increased since then, while a little above 25% of the patients believed that the dimensions did not change, and a few thought they had decreased. The research hypothesis regarding the growth in the scope of the phenomenon after enactment of the law is confirmed.

Despite the absence of exact numerical data regarding the scope of the black economy in medicine phenomenon prior to and following the ratification of the National Health Insurance Law, one can assess that the identical and findings and the agreement of the two populations (doctors and patients) regarding the remarkable frequency of the phenomenon and the rise in the dimensions of the phenomenon following the reform in the health system leave little doubt as regards the broad scope of the

phenomenon as well as the direction of growth in this negative phenomenon.

This research insight reveals and emphasizes, as noted, the weakness of the reform in the health market. One can even state the dangers inherent in the heart of the reform whose main aim was to attain the opposite goal – solidarity and equality.

8.2.5 Estimate of the patients' perception of the scope of black economy in medicine according to the dimensions of the diverse definitions of black economy in medicine

A further examination to assess the scope of black economy in medicine amongst patients was conducted at two levels. It referred to the patients' knowledge and opinion of other patients who were partner to the diverse phenomena defined as black economy in medicine as perceived by them during their hospitalization and as regards their own behavior.

The patients were asked to note how many patients they thought were involved in diverse types of remuneration for activities defined as part of black economy in medicine, and as regards their own behavior they were asked to note whether they themselves gave such remuneration (yes or no).

The findings clearly indicate that a low percentage of patients testified that phenomena associated with black economy in medicine do not exist at all in their environment and that a not inconsiderable percentage of patients noted that quite a lot of patients performed a variety of activities associated with the phenomena studied. Furthermore, most patients testified that they saw a few patients performing each of the activities connected to black economy in medicine. Giving presents to the medical staff is an activity described as most common amongst patients, with 44% of the patients noting that quite a lot of patients gave such presents.

In parallel, the research findings indicate that when the patients referred to their own behavior, i.e., whether they themselves performed any of a variety of activities defined as black economy in medicine, about 33% of them noted they paid the doctor for shortening the waiting list for treatment, and about 20% of the patients paid the doctors for personal treatment in a public hospital. Moreover, half of the patients (49.5%) admitted giving presents to the medical staff that treated them.

Cross-checking the findings of the patients' reports at two levels of examination – the patients' knowledge and opinion regarding other patients who participated in the diverse phenomena defined as black economy in medicine and as regards their own behavior - finds compatibility between the findings. This fact enables us to state that giving presents to the medical staff is apparently the most common activity connected to black economy in medicine and the issue of doctor remuneration is also common.

These research findings similarly hone the previous discussion on differentiation by patients regarding the dimensions of the diverse definitions of the black economy in medicine phenomenon. The fact that giving presents to the medical treatment staff is described as the most common amongst patients supports the differentiation made by patients themselves between the two main dimensions: Doctor remuneration and department remuneration. This fact apparently influences their decision regarding the type of remuneration, and thereafter their decision as to whether to reveal the deed.

Relying on the data found, one may assume that most patients will feel better and more confident with the method of department remuneration compared to the method of doctor remuneration, and therefore, will, in fact, tend to do more things connected to black economy in medicine through department remuneration. One may further discern that patients will tend to report giving presents to the medical staff as remuneration more freely than of their direct payment to the doctor, i.e., doctor remuneration lest this be interpreted as unethical or even harm them or the doctor treating them.

8.2.6 Estimate of the patients' perception of the scope of black economy in medicine according to background variables

The research hypothesis regarding the existence of a connection between certain socio-demographic attributes of the patients and the scope of the phenomenon is confirmed.
The most prominent finding in the analysis of the report on black economy in medicine activities according to background variables is that the percentage of those paying the doctor for improved medical service given them is considerably higher amongst patients of a good economic situation, compared to patients whose situation is less good. The most prominent example is turning to a private doctor to shorten the waiting list for treatment: 49% of the patients of a good economic situation did this, compared to 17% whose situation was average and 10% whose

economic situation was poor. The general picture obtained from the findings regarding the patients' perception of the dimensions of the definition of black economy in medicine and from their assessment of the scope of the phenomenon leaves little room for doubt.

Patients who are economically well–established tend more than patients of a less strong economic situation to relate doctor remuneration for personal treatment as behavior defined as black economy in medicine. Patients with greater financial means will tend to do more activities connected to black economy in medicine through doctor remuneration.

As has already been noted, the variance between economically well–established patients and those from a bad economic situation apparently manifests the way of thought and even of activity of patients of diverse financial means. Thus the former will tend to remunerate via direct payment to the doctor and the latter will tend more to give presents to the medical staff than pay the doctor directly.

Another personal variable found to be significant is the patient's age. People aged 31-40 tended more than others to pay for medical treatment as part of the black economy in medicine services. A possible explanation for this finding is that this specific age group is characterized by an expanding family unit. In other words, most people in this age bracket in the western world nowadays marry and bring children into the world. Hence the individual feels family responsibility that leads him, when necessary, to care for his family at any cost and to turn to black economy in medicine services.

Furthermore, one may conclude from the research findings that the hypothesis stating the scope of the dimensions of the black economy in medicine phenomenon reported by the patients in the surgical departments is higher than those reported in internal medicine and other departments is refuted. In other words, no connection was found between the type of specialization of the departmental in which the patient was hospitalized and the scope of black economy in medicine behavior.

This fact, also supported in doctors' reports, contradicts the findings of Noy and Lachman's (1998) study asserting the phenomenon to be more common in surgical departments than in departments of internal medicine and others. Therefore the findings of this study do not support the possible explanation that doctors with diverse specializations have different access to black economy in medicine and that surgeons enjoy

more comfortable conditions for the existence of the black economy in medicine phenomenon.
Cross-matching the findings of the connection between the scope of the phenomenon and the hospital location at two levels of examination - consideration of the patients' knowledge and opinion of other patients who participated in the diverse phenomena defined as black economy in medicine, and with respect to their own behavior - indicates a contradiction between the findings.

According to the patients' findings, that related to the activities of other patients, no connection was found between the location of the hospital where the patient received service and the scope of black economy in medicine.

In contrast, analysis of the data according to the patient's own behavior finds that more patients at the small Assaf Harofe hospital, located on Israel's periphery, reported cooperating in the black economy in medicine phenomenon.

Since one cannot know definitely the reason for the contradiction in the findings, one may assume that the scope of the dimensions of the black economy in medicine phenomena were higher in large hospitals located in central Israel compared to small hospitals on the periphery for two main reasons:

1. The most-established doctors and specialist professors work in the large hospitals in central Israel. One may therefore expect the demand there for their personal services in the black economy in medicine framework to be very high.
2. The better socio-economic situation of residents of central Israel compared to that of residents on the national periphery: As noted, the researcher finds a connection between the economic situation of the patients with the dimensions of the scope of black economy in medicine.

8.2.7 Satisfaction of the patients with the medical treatment and the connection to the scope of the black economy in medicine phenomenon

Surprisingly, the findings of the statistical analysis regarding the connection between patient satisfaction with the treatment received in hospital and the scope of the phenomenon finds only one attribute of activity from all those explored, in which there are significant statistical differences between the groups.

The interesting and sole finding is that patients who expressed high satisfaction with the treatment they received were the only ones who contributed money to the department.

This finding itself refutes the hypothesis that patients with a low level of satisfaction with the medical service in hospital will tend to assess the scope of the phenomena of black economy in medicine as higher compared to patients with greater level of satisfaction.

The above, and in contrast to the research hypothesis, can explain the research findings in that patients who expressed greater satisfaction with the medical treatment and contributed money to the department themselves experienced black economy in medicine and therefore their satisfaction is greater. On the other hand, dissatisfied patients did not use black economy in medicine, and therefore their satisfaction with the treatment given them is not high.

Nevertheless, it is important to remember that the current study only reflects and perpetuates the existing scenario and it is not possible to conclude cause and effect connections.

Thus one possible situation is that at the end of medical treatment in hospital the patients were very satisfied with the treatment and then decided to contribute money to the department. On the other hand a situation is possible that, as part of the patterns of black economy in medicine, the patients contributed money to the department prior to the medical treatment and thereafter felt satisfied. The second situation can even indicate a connection between black economy in medicine and the quality of medical treatment.

8.3 Discussion of the attitudes towards black economy in medicine

The discussion till this point has been of black economy in medicine and its physical scope. This section will discuss the findings pertaining to attitudes towards the black economy in medicine phenomenon from the perspective of health service manufacturers, i.e., the doctors and of the consumers, i.e., the patients.

When analyzing and discussing the causes of the phenomenon, its definition, its attributes, its scope as well as the attitudes towards it, it is important to always remember that the phenomenon of black economy in medicine exists primarily because the doctors and patients choose to cooperate when there is a meeting of interests between the two parties.

Clearly, better understanding of the attitudes towards the black economy in medicine phenomenon by the manufacturers and consumers in the health market is likely to explain to a considerable extent the patterns of use of black economy in medicine, and the role of the main players in perpetuating the phenomenon.

Black medicine is an infringement of the law, an infringement of the ethical-social code and an infringement of the ethical professional code. Despite all these this study finds that black economy in medicine exists and is expanding in scope.

Examination of the degree of legitimacy related by doctors and patients to the existence of such activity is essential. The legitimacy of the black economy in medicine phenomenon as seen by patients and doctors means the weakening of the barriers to its existence. The lack of legitimacy of the phenomenon is likely to diminish its scope and to raise obstacles to its existence.

In the current study doctors and patients alike were asked two questions intended to characterize the attitudes towards black economy in medicine. One asked the participants to characterize whether they thought there were more positive aspects to black economy in medicine or not, and the second asked directly whether the interviewees thought there was an ethical flaw in black economy in medicine .

1. Doctors' attitudes
   The research findings indicate that 66% of the doctors view black economy in medicine mainly as having negative aspects, about 15% also sees positive aspects and 15% view it extremely negatively.

   These findings indicate that the doctors are mostly ambivalent towards the phenomenon, and if they view it negatively they do not invalidate it in principle. A similar pattern is prominent in the findings of the direct question that explored the doctors' opinion of the ethicality of black economy in medicine. Only 53% of the doctors agree that black economy in medicine entails an ethical flaw, compared to 39% who agree with this to a moderate extent and 8% who do not think there is any ethical flaw in black economy in medicine.
   It is worth noting in this connection that it is most reasonable for the dimensions of support for this phenomenon to be higher than reported due to the secondary reporting of support for the phenomenon, stemming from the doctors' social desirability.

Similarly, despite many doctors viewing the phenomenon as negative, they still do not invalidate it totally. This finding is compatible with their estimates of the scope of the phenomenon found in the current study.

Advanced statistical analyses (multiple regression) does not find a significant statistical connection between the specific attributes such as hospital seniority, experience, tenure, administrative position, economic situation and satisfaction with the salary and doctors' attitudes towards black economy in medicine . Furthermore, differences were not found in the perception of the ethicality of black economy in medicine according to the hospital in which the doctor works or according the type of specialization of the department in which he works.

The doctors' ambivalence towards the black economy in medicine phenomenon can be explained as the result of the internal conflict in which the doctors find themselves. On the one hand one may assume that many doctors perceive the phenomenon as unethical and even contradictory to the principles of the medical oath to which they are committed. On the other hand, they now live in a materialistic society that 'forces' them to think as an economic 'for profit' unit. Thus they find themselves in a situation in which there is a conflict between the economic interests and the moral and ethical perceptions.

Since the discussion is of weighty economic pressures and forces operating on the doctors by most social circles surrounding them, the delicate balance in the inner conflict is shattered in many cases and doctors start to deal in black economy in medicine , when sometimes the considerable wealth they realize compensates for the feeling of damaged morals.

2. The patients' attitudes

The asymmetry existing in the health market is well known due to the power of the consumers and the manufacturers. The doctors hold the knowledge and considerable information while the consumers suffer from little knowledge in the domain, a fact that often results in full control by the health service manufacturers of all stages of the medical process.

Although this uni-directional control greatly weakens the basic strength of the consumer of health services and casts doubt on the patient's ability to control patterns of black economy in medicine, the personal interest of the patient is clear in his choice to be partner to the patterns of black economy in medicine. The research findings indicate that the patient's perception of black economy in medicine is more positive than that of the doctors. 30% of the patients believe that black economy in medicine has positive aspects, compared to 18% of the doctors. The ambivalent perception of black economy in medicine is even more prominent amongst the patients compared to the doctors, since despite their expressing more positive attitudes than the doctors towards the very phenomenon, more patients than doctors noted that the phenomenon is not ethical (71% compared to 53%).

Advanced statistical analyses (multiple regression) does not find a significant statistical connection between most of the specific attributes such as age, perceived economic situation and the perception of waiting time for an operation and the patients' attitudes towards black economy in medicine . The only variable found to significantly influence the perception of the ethicality of black economy in medicine is the hospitalization of the interviewee: Patients hospitalized had more negative attitudes towards black economy in medicine than those not hospitalized.

Clearly, the source of the patients' ambivalence towards black economy in medicine phenomena is also the result of the inner conflict in which patients find themselves. The patients' conflict is different from that of the doctors, in that the deliberations are not connected to the financial aspect but to medical need, sometimes originating in the patient's physical and mental distress. On the one hand one may assume that some of the patients perceive the phenomenon as unethical and conflicting with the principles on which they were educated and on the other hand their unsteady medical condition leads them to do almost anything to achieve the same full health. Thus the patients find themselves in a conflict between their health interests, and sometimes even survival, and their moral and ethical perceptions and principles. From there the path to integrating in patterns of black economy in medicine is short.

It is important to note that although doctors and patients have different motives, the basis of the conflict is completely identical. The two populations compete with the inner forces that on the one hand manifest their inner attitudes and on the other hand the forces of their personal interests and needs.

8.4 Discussion of the attitudes of the hospital administrations towards the black economy in medicine phenomenon

Clearly, the negative attitude of the hospital administration towards the phenomenon accompanied by enforcement and supervision is likely to considerably reduce its dimensions. But ignoring the phenomenon and even a positive attitude on the part of the hospital administration is liable to lead, at the best, to perpetuating it and at the worst to encouraging and amplifying its scope.
As noted, the issue of the hospital administration attitudes towards black economy in medicine directly and indirectly manifest the degree of cooperation of the hospital administration with the phenomenon. The degree of cooperation of the hospital administration with it can characterize the degree of environmental support or censure enjoyed by doctors involved in activities connected to black economy in medicine, and the degree of danger to which those participating in such activity are liable to be exposed.

Doctors in this study were asked a direct question pertaining to the degree of cooperation of the black economy in medicine establishment. This, in fact, explores their perception of the degree of awareness of the hospital administration of the black economy in medicine phenomenon and its reactions.

The starting point of this study was that the doctors perceive the hospital administration as not actively supporting the existence of black economy in medicine, but definitely being partner to the vow of silence in everything pertaining to dealing with the phenomenon. The research findings indicate that most of the doctors (81%) support these claims. A very small group of doctors (2%) noted that the hospital administration takes active steps to fight the phenomenon. It should also be noted that findings were not obtained according to the background variables in view of the low level of variance of the doctors' answers, preventing statistical analysis.

This study and that by Noy and Lachman (1998) that gathered data prior to the ratification of the National Health Insurance Law, find that the attitudes of the hospital administration towards black economy in medicine did not change after introducing the reform in the health system. Based on the findings of the two studies, one may state that the hospital administration is aware of the phenomenon of black economy in medicine but does not fight it directly and to a considerable degree is partner to the vow of silence.

Discussions are currently being held in the Ministry of Health regarding giving official permission to operating the PMS mechanism in public hospitals in Israel. Most Israeli hospital administrations have in recent years been pushing to approve operating PMS services in public hospitals. The principle on which the PMS is founded is that senior doctors in public hospitals will receive permission from the hospital administrations to treat patients in the hospital confines using its facilities, and will receive permission from the hospital administration to treat private patients. These latter will pay the public hospital for the treatment and hospitalization as if it were a private hospital, and will pay the senior doctor (as a private doctor) for the preferred and improved personal treatment relative to that received by other public patients in the department. Patients' interest in using the PMS mechanism is clear: They will receive improved personal and speedy treatment. The administration's interest is also clear: The service affords an additional source of income for the hospital and of course, the doctors themselves will enjoy an additional income. There are many claims for and against, mostly biased according to the parties' interests. As regards the key issue of this study, many of those in favor, including the hospital administration, claim that the PMS arrangement will considerably reduce the scope of the black economy in medicine phenomenon. They claim that instead of prohibiting black economy in medicine, it is preferable to institutionalize it and thereby to supervise and control legally and openly the activity that in any case occurs within the hospital confines (Balashar, 2002; Gur, 2002; Friedman, 2002).

Those opposing PMS claim that instead of institutionalizing black economy in medicine it is preferable to maintain a high level of equality in the public health system, through paying doctors employed in public hospitals a proper salary (Shedmi, 2001; Svirsky, 2002).

It is important to note that there is no clear evidence of PMS actually reducing black economy in medicine. This might occur when there is a PMS or in its absence.

Chapter 9

Summary and Recommendations

> "The phenomenon of black economy in medicine is similar to a cancerous growth that destroys the whole body. The phenomenon shakes the foundations of public medicine and its implications are ethically, morally and publicly invalid".
>
> (Balashar, 1995)

When this researcher came to explore the patterns of the black economy in medicine phenomenon under the National Health Insurance Law, he knew in advance that the phenomenon is not marginal and negligible. As he continued to explore in greater depth the patterns, scope and implications, he was amazed to discover that a flourishing market exists quietly around it, in which many patients in public hospitals spend their own money, one way or another, for treatment that is supposed to be free or more exactly in return for medical insurance paid to the State. He further found that many doctors exploit the patients' distress and low level of knowledge and accept tremendous sums of money with the awareness of the administrations of public hospitals. They do not fight the black economy in medicine phenomenon directly, and to a considerable extent are party to the vow of silence.

Similarly, delving in depth into the subject demonstrates the broad implications of the phenomenon, that start with damage to equality in providing health services to the entire population and continues with the destruction of the economic stability of the State in general and of the health system in particular.

Expanding the scope of the black economy in medicine phenomenon in public hospitals around the world on the one hand and on the other the paucity of studies that explore the patterns of the phenomenon in general and under the National Health Insurance Law in particular indeed justify an in-depth examination of the complex issue, while considering the dimensions of its definitions, attitudes towards it and the factors affecting its development and scope. The super-objective of this study was to provide an information base for the development of social, organizational and economic health policy with cohesive goals that would monitor, control and eventually reduce significantly the dimensions of the phenomenon of black economy in medicine.

The research objectives were realized through exploration of the variables of influence and/or of significance for the patterns of the phenomenon from the perspective of suppliers of health services – the doctors – and of the consumers – the patients.

Similarly, the doctor and patient populations were compared in order to learn of the differences between them. The research findings were based on a survey conducted in Israel after the National Health Insurance Law was enacted.

9.1 Summary of the main research findings

The research findings indicate, in general, a not inconsiderable degree of compatibility between the reports of the doctor and the patient populations regarding the definitions of the phenomenon, its scope and attitudes towards it.

Definition of black economy in medicine: The first findings of this study deal with the way in which doctors and patients tend to define the black economy in medicine phenomenon. The lack of a clear and uniform definition of the concept will of necessity lead to a bias in the estimate of the scope of the phenomenon and even to variance in the attitudes towards it.

Comparison of the dimensions of the phenomenon of black economy in medicine according to the patients' and doctors' findings notably illustrates the compatibility between the two populations.

Analysis of the findings shows that both groups clearly differentiated between the definitions connected to doctor remuneration and those associated with department remuneration. Both groups agree that the dimensions associated with doctor remuneration, i.e., direct payment to the doctor for treatment in hospital and payment to the doctor for him to personally treat the patient are considered black economy in medicine. Similarly, both doctors and patients determine that behavior that is third as regards the strength of the connection to black economy in medicine is the use of hospital facilities for private treatment.

It is important to note that patients tend to agree more than the doctors with the definition of black economy in medicine presented to them.

The research findings enable stating generally that the more 'established' the doctors are in hospital (as regards seniority, tenure, administrative

position and specialist) the more they will tend to include fewer behaviors under the concept of black economy in medicine.
These findings can be explained in the greater accessibility of more 'established ' doctors in hospital to activities defined as black economy in medicine, as they are leaders in their fields, famous and sometimes even with power in hospital. They have greater access to hospital facilities due to their authority and status in the organization, and they may therefore make greater use of the hospital facilities for their private needs. In contrast, the less 'established' doctors feel themselves less exposed to the phenomenon, generally do not bear legal responsibility and will therefore tend to include more dimensions of the definitions compared to 'established' doctors who fear legal suits and negative publicity.

The research findings indicate patients with good economic means tend more than others to relate paying doctors to treat them personally as behavior defined as black economy in medicine , while those with poor economic means tend to relate more than those of good or average economic means to giving the medical staff presents as such.

Analysis of the secondary findings emphasizes to some extent the variance in the perception of the dimensions of the definition of black economy in medicine by the patients and the doctors. In contrast to the attitudes of doctors 'accessible' to the phenomenon (the 'well-established' doctors), patients with greater accessibility to black economy in medicine (with the economic means to pay the doctor) do not hide behind narrower definitions of black economy in medicine . Patients with economic means do not fear the need to 'justify' the definition and existence of the phenomenon. The source of the differences in perception between the doctors and the patients may lie in the price of 'exposure' of the phenomenon, i.e., the damage to doctors involved in black economy in medicine is liable to be far greater than to the patients and their families. Furthermore, the research findings indicate that doctors who are more satisfied with their salaries tend to relate considerably fewer behaviors to the concept of black economy in medicine compared to doctors whose satisfaction with the salaries is average or lower.

This fact adds another tier to the general picture that reveals significant differences between the well-established doctors and those who are not well-established in the way their definition of the phenomenon of black economy in medicine. In other words, doctors with a higher professional and economic status tend to attribute less meaning to many dimensions that typify the phenomenon, while doctors of low professional and economic status tend to attribute greater meaning to these dimensions.

In contrast, patients who are very satisfied with the medical service in hospital will tend to attribute more behaviors to the term black economy in medicine compared to patients whose satisfaction is lower.

One may assume that patients and doctors who expressed high satisfaction, doctors with their salaries and patients with the medical treatment they received, are those who in fact were apparently involved in black economy in medicine.

Estimate of the scope of black economy in medicine: Compatibility in the reports of both populations regarding the considerable frequency of the phenomenon and its increased dimensions after the reform in the health system leaves little doubt as regards its broad scope and the trend towards growth of the negative phenomenon.

The findings of this study show that 66% of the doctors and the patients agree that the phenomenon of black economy in medicine is frequent or very frequent. The frequency of the phenomenon amongst both populations also arises from the fact that very few doctors and not a single patient believed that the phenomenon does not exist at all. Similarly, the findings show that 66% of the doctors and the patients agree that the dimensions of the black economy in medicine phenomenon increased since the law was ratified.

These findings raise serious concern regarding achieving the main goal of the National Health Insurance Law that purported to lead to equality and improvement in the medical service and treatment. Thus if the leaders of the reform hoped that the enactment of the National Health Insurance Law would increase equality in the health market in general and would reduce the dimensions of black economy in medicine in particular, then not only were they wrong, but the dimensions of the black economy in medicine even increased since its enactment.

A deeper analysis of the scope of the phenomenon according to the various dimensions finds that doctors assessed, for all the definitions that up to 25% of the department activities are directed towards black economy in medicine. At the same time, dimensions of black economy in medicine that are associated with giving presents to the medical staff or to the department were mentioned by many doctors as encompassing up to 50% of the departmental activities. One may therefore assume that black economy in medicine occurs in up to 25%, and in certain cases in up to 50%, of the departmental activity of hospitals.

Cross-matching reports by patients at two levels of examination – referring to their knowledge regarding other patients who participated in the diverse phenomena defined as black economy in medicine and their own behavior – notes the compatibility between the findings. The findings show that half the patients admitted to giving the medical staff presents for their treatment. Similarly, 33% of the patients noted that they paid the doctor for shortening the waiting list for treatment, and about 20% of the patients paid the doctor for him to personally treat them in the public hospital. This fact supports the findings regarding the doctors and enables us to state that, apparently, giving presents to the medical staff treating the patient is an extremely common activity associated with black economy in medicine. The issue of paying the doctor is also common.

These research findings hone the fact that mainly patients, but also the doctors, differ also in assessing the scope of the phenomenon, between two main dimensions of the diverse definitions of the black economy in medicine phenomenon: Doctor remuneration the department remuneration. The fact that giving presents to the medical staff is an activity defined as very common amongst doctors and patients alike supports the differentiation between the two populations. This fact apparently influences the decision of half the patients to choose department remuneration. Consequently, one may assume that most patients feel better and more confident with the department remuneration method compared to that of doctor remuneration, and thus in practice will tend to perform more activities connected to black economy in medicine through department remuneration.

The most prominent finding in analysis of the report on black economy in medicine activity according to background variables is that patients who enjoy a good economic situation tend more than others to perform more activities associated with black economy in medicine through doctor remuneration.

This variance between patients with a good economic means and those without apparently manifests the way of thought, and even of activity, of patients with diverse economic means. Thus patients who are better off will tend to remunerate doctors through direct payment to them, and patients of poor economic means will tend to remunerate the medical staff through presents rather than paying the doctor. Another personal variable found to be significant is the patient's age. Those aged 31-40 tend more than others to pay for medical treatment as part of the black economy in medicine services.

Furthermore, and quiet surprisingly, no connection was found between the type of departmental specialization in which the patients were hospitalized, and the scope of black economy in medicine activity. This is in contrast with the Noy and Lachman's (1998) findings that the phenomenon is more common in surgical departments than in departments of internal medicine and others. Similarly, no connection was found between the location of the hospital where the patients received treatment and the scope of black economy in medicine phenomena. But in contrast, analysis of the findings according to the patients' own behavior, finds a connection between the variables, somewhat strengthening the fact that in a small peripheral hospital fewer patients participated in black economy in medicine than patients in a large hospital located in central Israel.

This researcher believes the scope of the dimensions of the black economy in medicine phenomenon are higher in large hospitals located in central Israel compared to a small hospital on the periphery for two main reasons:

1. The foremost doctors work in the large hospitals in central Israel.
2. The socio-economic condition of residents of central Israel compared to the less good situation of residents of the periphery.

This study finds a connection between the economic situation of patients and the scope of the phenomenon.
The only significant connection found between the patients' satisfaction with the medical treatment and the scope of the black economy in medicine phenomenon is that patients who expressed greater satisfaction with the treatment they received were the only ones to contribute money to the department.

From the above, and in contrast to the research hypothesis, the finding can be explained in the patients who expressed greater satisfaction with the medical treatment and contributed money to the department having themselves experienced black economy in medicine and therefore their satisfaction was greater.

Attitudes towards black economy in medicine: One of the main research goals was to try to understand the attitudes of doctors and patients toward the phenomenon of black economy in medicine. Examination of the degree of legitimacy related by both groups to the existence of the phenomenon is likely to largely explain the patterns of use of black economy in medicine, and the part played by the main actors in perpetuating it.

According to the research findings, one may state that both doctors and patients are mainly ambivalent towards the phenomenon; although they view it negatively they do not negate it totally. The ambivalent attitude of black economy in medicine is even more prominent amongst patients compared to doctors, since despite expressing more positive opinions than doctors of the very phenomenon, more patients than doctors noted it is not ethical.

The ambivalence of the doctors and patients towards black economy in medicine is a result of an inner conflict. The doctors find themselves in conflict between the economic interests and their moral and ethical perceptions and principles. Patients find themselves in a contradiction between their health interests and their ethical and moral perceptions and principles.

The attitudes of hospital administrations towards the black economy in medicine phenomenon

The last and important finding in this study relates to the attitudes of the hospital administrations towards black economy in medicine. Based on the research findings, the hospital administrations are apparently aware of the phenomenon of black economy in medicine, but do not fight it directly, and to a remarkable degree, are partner to the vow of silence.

This researcher believes that in the absence of a clear negative position, accompanied by supervision and enforcement, this attitude of the hospital administration is liable to lead at best to perpetuating the phenomenon and at worst to encouraging and amplifying its scope.

Thus recognition of the existence of the black economy in medicine phenomenon in many countries around the world has increased in the last two decades, but few countries have expressed their opinion seriously of its social and economic implications or of the implications on the populations' health. This study finds that in Israel, as in many other places, the phenomenon continues at a broad scope that has even increased since the enactment of the National Health Insurance Law.

Despite the fact that reduction in the scope of the black economy in medicine phenomenon should be a national goal, the current study finds that hospital administrations do not make an effort to prevent or to reduce its scope. They largely participate in the vow of silence in its regard, and thereby contribute their share to perpetuating it.

The researcher is convinced that the findings of this study will facilitate better understanding of the patterns of the black economy in medicine phenomenon, the variables impacting on it, the perception and attitudes of doctors and patients of it, and of course, assessing its scope. The current study seems to have achieved its main goal – creating a reliable, up-to-date information base through which it will be possible to shape social, organizational and economic health policy that will deal with and reduce the scope of this 'sick' phenomenon.

9.2 Recommendations for future directions of activity for reducing the dimensions of the black economy in medicine phenomenon

The findings of this study regarding the extensive and growing scope of the black economy in medicine phenomenon cast great doubt on activity today (if at all) by the Ministry of Health and policy-makers to significantly reduce its patterns. This section will offer several suggestions as to the modes of action that are likely to generate real change and to restrain the dimensions of the black economy in medicine phenomenon.

The proposed directions of action are based partially on the review of the literature, and partially on the research findings that indicate a broad range of issues with the potential for reducing the scope of the phenomenon. The modes of action are connected to three attributes of activity: Those taken by the health system alone, those taken by the system that are connected to the subject, and activities shared by the health system and the other systems. They may be classified into two categories:

1. Recruitment to the activity
2. Specific intervention programs

These modes of action are submitted as ideas for consideration by policy makers both within and outside the health system.

9.2.1 Recruitment for action

This section deals with the question of on whom to place responsibility for reducing the scope of the phenomenon and the question of how to recruit and harness the relevant factors to the good of the issue.

1. Giving higher preference to reducing the scope of the phenomenon of black economy in medicine
   The preliminary condition for every action plan is the official recognition by policy makers, the Ministry of Health and the hospital administrations of the existence of the phenomenon, and of the absence of declared policy for handling it. Furthermore, with the recognition of the existence of the phenomenon, fuller understanding of the essence and reasons for determining suitable priorities is essential. The international experience in other areas emphasizes the crucial role of political initiatives at the senior echelons in raising a specific issue, as well as their support and involvement in working to restrict it.
   The State and the policy makers in the health field enjoy a real possibility to change the location for reducing the scope of black economy in medicine in its order of priorities.

2. Providing the health system with a central role in the efforts to reduce the scope of the phenomenon
   Clearly, the health system has the ability to reduce the scope of the black economy in medicine phenomenon and has the responsibility to so do. It is very important to clarify (at the national level) that the general responsibility for dealing with the phenomenon is held by the Ministry of Health.
   It is also important to remember that many of the main intervention programs come under the auspices of other systems. This fact is important since the origins of some of the factors for the phenomenon lie in these systems, hence the need for cooperation between the Ministry of Health and the Ministry of Finance, Ministry of Justice and perhaps even the Ministry of Education.

3. The expectation that government and non-governmental entities in the health system will take the initiative for reducing the black economy in medicine phenomenon
   There is no question that the Ministry of Health has a leading and critical role. However, other non-governmental entities (the hospital administrations, sick funds, other doctors) have independent responsibility to the hospital administration, must take responsibility

for events in its confines and act accordingly, freeing themselves from their passive attitude.
Similarly, the medical association today has no declared policy regarding the phenomenon. A clear declaration of an organization responsible for its doctors is likely to contribute significantly to reducing the dimensions of the phenomenon. The doctors are committed to seeing the good of all patients as an inseparable part of their role, and to understand all the meanings and implications of the black economy in medicine phenomenon. This combination of leadership by the Ministry of Health alongside the activity of other organizations is afforded great importance in the action plan strategy.

4. Developing a national strategy and plan of action to reduce the dimensions of the black economy in medicine phenomenon in supporting the highest echelons
Black medicine comes under the national responsibility that demands the involvement of senior government officials. Their involvement in developing a strategic plan on this subject can bring real change in the field.
An important fact should be stressed – that reducing the scope of the black economy in medicine phenomenon is lengthy, and this should be taken into consideration when determining policy and during detailed planning for action. In other words, a long-term rather than a short-term approach is needed. This fact is important since many government entities, including the Ministry of Health, tend to allocate resources derived from the current budget from short-term considerations.

5. Considerable investment in disseminating information about patterns of black economy in medicine phenomena
A basic need exists to expand the realm of advancing awareness and level of knowledge of the public as regards black economy in medicine, whose current knowledge of its rights, and the limitations of the health service according to the National Health Insurance Law, is poor. The consumers' lack of knowledge regarding their rights inflates the disparity in power between doctors and patients, and then affects the scope of the use of black economy in medicine services. Disseminating information regarding the phenomenon can be an important tool for encouraging leaders of the health system to take responsibility for reducing it and to join the search for solutions.

9.3 Possible directions for concrete change in health system policy and intervention programs in the field

The researcher will review here four main types of proposal for intervention programs: Target-oriented programs, training professionals in the health field, change in allocating resources and change in incentives.

1. Specific intervention programs
   A basic need exists for target-oriented intervention programs that can offer a solution to the unique needs of the medical population on the one hand and to the patients on the other.
   To reduce the scope of the phenomenon, differential planning and operating for the diverse medical populations will be necessary while focusing on the well-established doctors, who, as mentioned, are more accessible to black economy in medicine. In parallel it is important to develop target-oriented programs for the sick with differing levels of need, understanding and access to black economy in medicine. It is worth noting that a focused intervention program will almost certainly be more effective and more economical.

2. Training professionals for the health field
   It is most important, when appointing and training professionals in the health field, for them to take responsibility for assimilating specific intervention programs, for supervision and for monitoring the patterns of this phenomenon. These efforts may even be combined in the framework of professional medical and para-medical studies.

3. Change in allocating resources
   Allocating economic resources to target-oriented programs to reduce the phenomenon are essential. It is reasonable to assume that the target-oriented budgetary resources will come from an additional budget from the Ministry of Finance for the health system, and from change in the order of priorities in the Ministry of Health and re-allocating available resources.
   It is important to note that such a process is liable to entail conflict with strong interest groups within the health domain and amongst politicians.

4 Change in incentive
Financial change in the health system can reduce significantly the scope of the phenomenon. The changes can be made by the doctors or by allocating resources to doctors that will increase their salaries and reduce the attraction of adding to their income through black economy in medicine and from the patients, when change in medical insurance cover and so on can be included.

Thus the main objective of the modes of action described is to increase awareness of the phenomenon and to realize the start of a process that will result in planning intervention programs to reduce the dimensions of the phenomenon. Clearly, one of the activities of those described cannot alone decisively influence the scope of the black economy in medicine phenomenon. Nevertheless, each activity can contribute as long as it is well planned and applied on the basis of long-term cooperation.

Commitment of key role holders is extremely important – the government, the politicians, the Ministry of Health, the sick funds, professionals in the health domain, the academia, and even community leaders - for developing policy and action combined to reduce the scope of the black economy in medicine phenomenon.

9.4 Questions and recommendations for further study

- The current study explores the patient and the doctor populations. It is important to explore the opinions of policy makers in the health system, i.e., the Minister of Health, the CEO of that Ministry, the sick fund administrations, the hospital administrations and so on, and to see which scenario best reflects them.
- It is important to conduct further comprehensive research that will try to understand and to analyze the real awareness of the hospital administrations of the black economy in medicine phenomenon, the reasons for not directly fighting it and the extent to which they really choose to be partners to the vow of silence over the issue.
- Furthermore, should a target–oriented intervention program be applied to reduce the scope of the black economy in medicine phenomenon, it will be important to track the application and impact through research.
- It will be important to examine whether turning to black economy in medicine actually assures better treatment.

- Since the current study is cross-sectional, and one cannot learn of the cause-effect connection, it is important to conduct perspective or retrospective research (knowing that black economy in medicine entails significant research limitations) and to explore and confirm connections that explore causes and effects.
- To reveal the deeper causes of the problem it is necessary to thoroughly analyze the health system itself (comparing the various healthcare supply systems).
- On the assumption that it will be decided to operate the PMS on the conclusion of the discussions currently being held in the Ministry of Health, it will be important to track and examine whether running the PMS reduces the scope of the black economy in medicine phenomenon as claimed by those favoring it.
- Another important issue is examining the connection between the level of the patients' knowledge regarding their rights and limitations according to the National Health Insurance Law and the scope of the black economy in medicine phenomenon.

Thus the current study reveals many findings that shed light on one of the most important phenomena. They afford a reliable and up-to-date basis of knowledge for planning target-oriented intervention programs to restrict the phenomenon.

The fact that the research literature on the black economy in medicine phenomenon is extremely poor empowers the importance of this study.

Clearly, the current study does not provide all the necessary information to create the desired change, but nevertheless, the research findings can have a considerable contribution in the short- and the long-term to better and more thoroughly understanding the patterns of the phenomenon and creating future directions of action.

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Appendices

Appendix A: Research questionnaire – Patients

Dear Sir/Madam,

I am a PhD student in business management, in which framework I am conducting a study on the types and frequency of the black economy in medicine phenomenon in Israel after the introduction of the National Health Insurance Law.

The questionnaire is anonymous and for research purposes only. It is intended for males and females alike.

Please circle the answer that seems to you the most appropriate (one answer per question)

Thank you for your cooperation

Questions on your personal background

1. Gender: Male/female
2. Family status: Married Not married
   With children/ without children
3. Age group: 18-24 / 25-30 / 31-35 / 36-40 / 41-45 / 46-49 / 50+
4. Domicile: Haifa / Tel Aviv / Jerusalem / Other small town / *kibbutz* / *moshav* / Other
5. Nationality: Christian / Jewish / Arab
6. How would you define yourself religiously?
   Secular / Traditional / Religious / Ultra-orthodox
7. County of birth: .....
8. Education: Elementary / High school / Vocational / Academic / Other
9. Profession: Self-employed / Salaried / Pensioner / Housewife Other
10. How would you rate your economic status?
    Very good / Good / Moderate / Not good / Bad
11. Hospital location in Israel
    a. Rambam Hospital - Northern Israel
    b. Ichilov Hospital - central Israel
    c. Asasf Harofe - periphery
    d. Hadassah Ein Karem - Jerusalem

12. In which department were you hospitalized or treated?.....
13. For how long were you hospitalized or treated.....
14. If you underwent an operation or other surgical procedure, how long did you wait from the referral for the operation or procedure?
    a. Less than a month
    b. 1-3 months
    c. 3-6 months
    d. 6-12 months
    e. More than a year
15. Do you think the time you had to wait was reasonable for such an operation? Yes / No
16. Generally speaking, how satisfied were you with the medical service in hospital?
    a. Not at all satisfied
    b. Fairly satisfied
    c. Quite satisfied
    d. Very satisfied

Definition of black economy in medicine

17. Please note, according to your personal opinion, if the situations presented below describe and express the phenomenon of black economy in medicine and to what extent.
    Before you is sequence that expresses levels of agreement/disagreement. Please assign a number to each statement.
    e. Does not express at all
    f. Expresses in some way
    g. Considerably expresses/Expresses to a considerable extent
    h. Fully expresses

    The situations are as follows:
    i. A private visit to a private doctor in order to shorten the waiting list.....
    ii. Use of the equipment and facilities in a public hospital for private treatment.....
    iii. Giving a donation in money or equipment directly to the department for treatment the patient received in the department.....
    iv. Personal payment to the doctor for treatment the patient should have anyway received in hospital.....

v. Donations to the departmental research and training fund for treatment the patient should have anyway received in the department.....
vi. Personal payment to the doctor for him, rather than another doctor, to treat the patient.....
vii. Giving gifts or other benefits directly to the medical staff who provided the treatment.....
viii. Other. Detail.....

Estimate of the extent of black economy in medicine

18. There has recently been much talk of patients who try to improve the treatment hospital patients receive in a variety of ways.
Do you know of any patients in your department who paid the attending doctor for treatment they could have received without payment?
    a. None
    b. Some
    c. Quite a few
    d. Almost all
    e. Don't know
19. Do you know of any patients who first saw a doctor privately to make an appointment for their treatment?
    a. None
    b. Some
    c. Quite a few
    d. Almost all
    e. Don't know
20. Do you know of any patients who paid the doctor privately so that he personally, and not another doctor, would treat or operate on them?
    a. None
    b. Some
    c. Quite a few
    d. Almost all
    e. Don't know
21. Do you know of any patients who donated money to the department in order to improve the medical care they received?
    a. None
    b. Some
    c. Quite a few
    d. Almost all
    e. Don't know

22. Do you know of any patients who donated medical equipment to the department in which they were treated in order to improve the quality of their care?
    a. None
    b. Some
    c. Quite a few
    d. Almost all
    e. Don't know
23. Do you know any patients who distributed gifts or other benefits to the medical staff treating them?
    a. None
    b. Some
    c. Quite a few
    d. Almost all
    e. Don't know
24. Have you gone to a private doctor to shorten the waiting list for your treatment?
    Yes / No
25. Have you personally paid a doctor privately so that he, rather than another doctor, treat or operate on you?
    Yes / No
26. Have you personally contributed money to the department in order to improve the medical care you received?
    Yes /No
27. Have you donated medical equipment to the department in which you were treated to improve the quality if the care you received?
    Yes /No
28. Have you personally given presents of other benefits to the medical staff treating you?
    Yes / No
29. Have you paid a doctor privately for the treatment?
    Yes /No
30. Some people claim that the extent of the black economy in medicine phenomenon in Israel is insignificant and others claim it is very common. How common do you think the phenomenon is?
    a. Insignificant
    b. Somewhat frequent
    c. Frequent
    d. Very frequent
31. 1995 saw an extensive reform in the Israeli health system, in which framework the national health insurance law was enacted. Do you think the scope of the black economy in medicine phenomenon has changed since that law was passed?

a. The extent of black economy in medicine has not changed since the law was enacted.
b. The extent of black economy in medicine has decreased since the law and the reform were enacted.
c. The extent of the phenomenon increased after the law and reform were enacted.

Attitudes towards the phenomenon

32. Do you think black economy in medicine is a negative or positive phenomenon?
    b. It has positive aspects
    c. It has both positive and negative aspects
    d. It has mainly negative aspects
    e. It is extremely negative
33. Involvement in black economy in medicine does not entail any ethical flaw. Before you is series of answers that express levels of agreement/disagreement.
    a. Absolutely disagree
    b. Disagree
    c. Somewhat disagree
    d. Agree
    e. Somewhat agree
    f. Absolutely agree

Appendix B: Research questionnaire – Doctors

Regarding the questionnaire

Dear Sir/Madam,

I am a PhD student in business management, in which framework I am conducting a study on the types and frequency of the black economy in medicine phenomenon in Israel after the introduction of the National Health Insurance Law.

The questionnaire is anonymous and for research purposes only. It is intended for males and females alike.
Please circle the answer that seems to you the most appropriate (one answer per question)

Thank you for your cooperation

Questions on your personal background

1. Gender: Male/female
2. Family status: Married Not married
   With children/ without children
3. Experience as a doctor: Year of completing studies.....
4. Years of hospital experience:.....
5. Seniority: Are you a specialist / Resident
6. Tenure: Do you have tenure at your hospital?
   Yes /No
7. Administrative status: Do you have an administrative role in hospital?
   Yes /No
8. Area of specialization of the department in which you work:
   a. Surgical – including general surgery, orthopedics, urology, heart etc
   b. Internal – including hematology, gastroenterology, rheumatology etc
   c. Other – including radiology, pathology, psychiatry, laboratories etc
9. Hospital location in Israel
   a. Rambam Hospital - Northern Israel
   b. Ichilov Hospital - central Israel
   c. Asasf Harofe - periphery
   d. Hadassah Ein Karem - Jerusalem

10. How would you rate your economic status?
    Very good / Good / Moderate / Not good / Bad
11. How satisfied are you with your salary as a doctor?
    a. Totally dissatisfied
    b. Somewhat dissatisfied
    c. Dissatisfied
    d. Fairly satisfied
    e. Very satisfied

Definition of black economy in medicine

12. Please note, according to your personal opinion, if the situations presented below describe and express the phenomenon of black economy in medicine and to what extent.
    Before you, is sequence that expresses levels of agreement/disagreement. Please assign a number to each statement.
    a. Does not express at all
    b. Expresses in some way
    c. Considerably expresses/Expresses to a considerable extent
    d. Fully expresses

    The situations are as follows:
    i. A private visit to a private doctor in order to shorten the waiting list.....
    ii. Use of the equipment and facilities in a public hospital for private treatment.....
    iii. Giving a donation in money or equipment directly to the department for treatment the patient received in the department.....
    iv. Personal payment to the doctor for treatment the patient should have anyway received in hospital.....
    v. Donations to the departmental research and training fund for treatment the patient should have anyway received in the department.....
    vi. Personal payment to the doctor for him, rather than another doctor, to treat the patient.....
    vii. Giving gifts or other benefits directly to the medical staff that provided the treatment.....
    viii. Other. Detail.....

Estimate of the extent of black economy in medicine

13. Please note, to the best of your knowledge, the degree to which the following exist in the department in which you work. Below is a list that manifests the extent of the phenomenon from the basket of the departmental activities, which varies between:
    a. Not at all
    b. Up to 25% of the departmental activities
    c. 50% of the departmental activities
    d. Up to 75% of the departmental activities
    e. 75% + of the departmental activities

    The situations are as follows:
    i. Advancing the appointment for treatment of people who visited the treating doctor privately.....
    ii. Use of the hospital facilities for private treatment without receiving permission from the hospital.....
    iii. Receiving donations in money or equipment directly to the department providing the treatment .....
    iv. Patients pay privately for treatment they would have received from the hospital.....
    v. Donations to the departmental research and training fund .....
    vi. Patients pay the doctor so that he will treat them in hospital.....
    vii. Gifts or other benefits are received by the treating medical staff.....
14. Some people claim that the extent of the black economy in medicine phenomenon in Israel is insignificant and others claim it is very common. How common do you think the phenomenon is?
    a. Insignificant
    b. Somewhat frequent
    c. Frequent
    d. Very frequent
15. 1995 saw an extensive reform in the Israeli health system, in which framework the national health insurance law was enacted. Do you think the scope of the black economy in medicine phenomenon has changed since that law was passed?
    a. The extent of black economy in medicine has not changed since the law was enacted.
    b. The extent of black economy in medicine has decreased since the law and the reform were enacted.
    c. The extent of the phenomenon increased after the law and reform were enacted.

Attitudes towards the phenomenon

16. Do you think black economy in medicine is a positive or negative phenomenon?
    a. It has positive aspects
    b. It has both positive and negative aspects
    c. It has mainly negative aspects
    d. It is extremely negative
17. Involvement in black economy in medicine does not entail any ethical flaw. Before you is a series of answers that express levels of agreement/disagreement.
    a. Absolutely disagree
    b. Disagree
    c. Somewhat disagree
    d. Agree
    e. Somewhat agree
    f. Absolutely agree
18. Do you think the hospital administration
    a. Is unaware of the phenomenon
    b. Supports the phenomenon
    c. Is partner to the vow of silence
    d. Fights the phenomenon