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

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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.

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 create economic stability within the health system while implementing 'healthy' patterns of use of the public health service. However, 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 (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, affords 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 attempts 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 thus tries 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.

**The theoretical literature**

**Health system policy around the world**

The first part of the literature review provides relevant information regarding health system policy and strategy around the world, and their attributes, scope and content.

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).

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).
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 (Goodwin, 2006).

The literature review also discusses Approaches, strategies and international programs to inequality and injustice in the health system, that are directly and indirectly connected to the phenomenon of black economy in medicine. The global crisis in health services is also analyzed.

The reader can thus enjoy a broader and more comprehensive understanding of the health systems around the world, health policy, strategic processes and the social and economic situation. He can therefore better understand the phenomenon of black economy in medicine discussed in the thesis

A review of the health system in Israel

The second chapter of the thesis deals with the structure of the Israeli health system following the introduction of the National Health Insurance Law which 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.

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.

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, 2003). 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 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 vision underlying the National Health Insurance Law enacted in 1995 is to assure 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 inspires 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.
The main differences between the two periods – until 1995, prior to the enactment of the law, and from January 1995, after its ratification – are presented below.

Summary of the changes in health policy following ratification of the law

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

The phenomenon of black economy has attracted 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. Its extent 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).

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.

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).
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)

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.

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).

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.

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 patient;
• Giving gifts or other benefits and services to the medical staff prior to, or following, the treatment.

The connection between black economy and black economy in medicine

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 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 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. He 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 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 Lachman (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.

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.
Manufacturer (doctors) and consumer (patient) behavior in the health market

Understanding the patterns of behavior by consumers (patients) and manufacturers (doctors) regarding the health services is likely to be significant to understanding the factors underlying the creation of the black medicine phenomenon and the increase in its scope in recent years around the world.

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. 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.

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.

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.
The research methodology

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 National Health Insurance Law. 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 limitations of the research method

The black economy in medicine phenomenon 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 prejudice 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).
• 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). 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.
The research population

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

- 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.
  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 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 patients and the doctors were of course assured confidentiality and anonymity.
The research tools

The research tool for both patients and doctors was a closed questionnaire for self-completion. 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.

Data analysis

The statistical processing was conducted according to accepted statistical methods. The hypotheses were examined at a statistical level of confidence of 95%.

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
The definition of black economy in medicine

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

The doctor's definition

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.

The findings indicate that considerable differences exist in the perception of black economy in medicine according to background variables. 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. 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.

**The patient's definition**

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.
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. 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.

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.

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.

Assessing the extent of black economy in medicine

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 deferred definitions of the black economy in medicine.

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.

The findings 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.

The findings also 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.

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.

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 is not much higher than other activities associated with black economy in medicine.

Patients - 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.

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.

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

**Attitudes towards black economy in medicine**

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.

Beyond the definitions and scope of black economy in medicine activities that 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 weakening 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.

**Doctors** - The findings show that 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 they 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 showed that 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.

Patients - The patients' 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 noticeable amongst patients compared to doctors, 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%).

The attitudes of the hospital administrations towards the black economy in medicine phenomenon

The findings 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.

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.

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.

The starting point of the current study is the clear agreement amongst doctors and patients 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.

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.

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.

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

Although the research findings support Noy's (1997) 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.
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 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 (1997) research.

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 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 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.

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 of high quality. The current study explores the doctors' satisfaction from the extrinsic perspective as pertaining to the satisfaction with their hospital salary.

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. 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.
The research findings indicate that 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 give the medical staff presents viewing this 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.

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. 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.

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.

In-depth statistical analysis of the 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.

**Assessing the extent 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. The research findings indicate that about 66% of the doctors and the patients agree that the black economy in medicine phenomenon is frequent or very frequent.

The findings of this study also prove without a shadow of doubt that most doctors and patients believe that black economy in medicine phenomena 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.

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.

Last but no least, the research findings indicate also that 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.

**Attitudes towards black economy in medicine**

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.

The research findings indicate that both doctors and patients are mostly ambivalent towards the phenomenon, and if they see it negatively, they do not invalidate it in principle.

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.

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.

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.

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.

Summary and recommendations

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.

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. In this section the researcher is offering 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.

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. 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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