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Patterns of 'Black Medicine' Utilization under the National Health Insurance Law in Israel

The current study explores the patterns of black 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.

his research explores patterns of use of black medicine under the National Health Insurance Law. Although the National Health Insurance Law reform was supposed to assure health insurance for all residents of the State of Israel, increase equality among 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 medicine services developed significantly.

It is customary to define black 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 research objectives were attained through examining the variables of influence and/or significance for the types of the "black medicine" phenomenon amongst suppliers of health services – the doctorsand their consumers – the patients. Similarly, the doctors and patients were compared to study the differences between the two populations. The findings of this study leave little doubt as to the broad scope of the black 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 the National Health Insurance Law. 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.

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 (Cox, 2006; Fooks, 2005). 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 (Cohen, 2001; Ginsburg, 2000). 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 (Government of Israel, 1994). 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 medicine'.

The attributes and definitions of black medicine: "The phenomenon of black 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).

It is customary to define black 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 (Noy and Lachman, 1998).

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

- 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;
- 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;

 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. 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.

Legal decisions regarding black medicine

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

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.

The connection between black economics and black medicine

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

"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."

- 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 medicine 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 medicine.

In fact, black 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 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.

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

The cases exposed so frequently regarding black medicine are only the top 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 medicine published in recent years, a clear picture is obtained in which there are specific medical specializations wherein black 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 'crowns' 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.

The connection between black medicine and medicine practice

One of the reasons for the broad existence of the black 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). Several key reasons exist for the growth of black medicine due to the crisis in the Israeli health system:

1) 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 medicine that was available and cheaper than private medicine.

2) The ongoing crisis in work relations in the lsraeli 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 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.

3) 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. 4) The extended waiting lists obviously created a incentive amongst the patients to boost the use of black 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).

The extent of black medicine

Police investigations conducted in recent years indicate that the phenomenon of black medicine, in which framework many doctors demand and receive thousands of dollars in exchange for an operation or medical treatment, has intensified in recent years (Resnick, 2004; Resnick, 2005).

The exact extent of the phenomenon of black 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 (Resnick, 2003).

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

"Police investigations conducted in recent years indicate that the phenomenon of black medicine, in which framework many doctors demand and receive thousands of dollars in exchange for an operation or medical treatment, has intensified in recent years."

> 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 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 doc

tors in order for them to treat them and 52% of them declared that they would do thus if they had to. According to Noy and Lachman, 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. Noy and Lachman 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.

METHODS

The current study explores the patterns of black 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 research setting and population

In order to obtain a representative sample of doctors and patients in Israeli public hospitals, a statistical sample of 200 doctors and 200 patients was chosen from four public hospitals in four geographical areas in Israel (50 from each).

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.

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;
- 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. 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.

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 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 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 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 medicine focusing on three main aspects:

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

The only question added to Noy's (1997) original questionnaire is that regarding change in the scope of black medicine since the enactment of the National Health Insurance Law in 1995.

Data analysis

The statistical processing was conducted according to accepted statistical methods. The statistical methods employed were cross-tabulation, 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 medicine. The hypotheses were examined at a statistical level of confidence of 95%.

RESULTS

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

- Defining black medicine

- Assessing the extent of black medicine
- Attitudes towards black medicine

Definition of black medicine

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

The difficulty in measuring the extent of black 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 medicine by doctors and patients.

This was accomplished by questioning both groups on the degree of their agreement with several definitions of black 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 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 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 medicine.

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 medicine. Similarly, both doctors and patients state that behavior that is third in strength of connection to black 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 medicine.

Analysis of the findings also indicates that patients with economic means tend more than others to relate payment to the doctor for personal treatment of the patient as black 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 medicine behavior.

Doctors who are more satisfied with their salaries tend to attribute significantly fewer behaviors to the term black 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 medicine compared to patients whose satisfaction is low.

Estimate of the scope of black medicine

Considering the complexity of the black 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 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 deferent definitions.

The doctors were asked to assess which part of the department's work serves activities defined as black 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 medicine.

The findings show that the assessment of black 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 medicine is frequent, and more than 35% believe that it is somewhat frequent. 6% of the doctors and patients believe that black 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.

Analysis of the findings indicates that legislators of the National Health Insurance Law that hoped its enactment would reduce the dimensions of the black medicine phenomenon, and the reform in the health system would lead to greater equality were wrong. 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 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.

Analysis of the findings also indicates that most of the dimensions of the definitions of the variance in the black 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 medicine, as is the issue of paying the doctor directly.

Attitudes towards black medicine

To this point, the definitions and scope of black 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.

Doctors and patients were asked two questions intended to characterize the perception of black medicine. One asked the interviewees whether they believe there are more positive or negative aspects to black medicine and the other, asked directly whether the interviewees believe there is an ethical flaw in black medicine. The findings show that 65% of the doctors see mainly negative aspects of black medicine, 18% see positive aspects as well and the last 17% refer to black medicine as something extremely negative. Only 53% of the doctors agree that there is an ethical flaw in black medicine, compared to 39% who somewhat agree to this and 8% who do not think there is any ethical flaw in black medicine.

The patients' perception of black medicine is more positive than that of the doctors. 30% of the patients believe that black medicine has positive aspects compared to 18% of the doctors.

The ambivalent perception of black 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%).

Another aspect of the black 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

medicine activities, and the degree of danger to which they are likely to be exposed. Analysis of the findings indicates that most of the doctors are convinced that, although the hospital administration does not actively support black medicine, it is aware of the phenomenon and is partner to the vow of silence pertaining to deal-

ing 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 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 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.

Definition of black 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 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 over the definition of black medicine. Personal payments to the doctor are defined as black medicine, while payments to the department in money or something equal to money, are not defined as black 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.

"The starting point of the current study is the clear agreement amongst doctors over the definition of black medicine. Personal payments to the doctor are defined as black medicine, while payments to the department in money or something equal to money, are not defined as black medicine."

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 medicine, and 95% of the doctors agreed that the definition considerably or very considerably expresses black 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 medicine, while 'department remuneration' is considered an expression of gratitude. It is important to note the considerable disparity 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 medicine.

The other definitions of black 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 medicine. One may therefore conclude that all the phenomena explored are perceived by the doctors as pertaining to the concept of black 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 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 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.

Comparison of the dimensions of the definitions of black 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 medicine. Similarly, both doctors and patients maintain that behavior that is third as far as the intensity of the connection to black 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 medicine presented to them, and that they agree more than the doctors that the five following definitions of black 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 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 medicine (with the economic means to pay the doctor) do not hide behind narrower definitions of black 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 medicine is liable to be far greater than to the patient and his family.

The scope of black medicine

The second main issue in the current research discussion is the estimate of the exact scope of the phenomenon of black 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 medicine, it has been considered a significant and very extensive phenomenon.

Prior to reviewing and discussing the scope of the black 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.

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 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.

The research findings hone the fact that patients and doctors, differ also in assessing the scope of the phenomenon, between two main dimensions of the diverse definitions of the black 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 medicine through department remuneration.

One of the key goals of the study was to explore whether there is change in the scope of the phenomenon of black 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 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 medicine that was common prior to the introduction of the law, remained common and its scope even increased.

The findings of this study prove without a shadow of doubt that most doctors believe that black 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.

Attitudes towards black medicine

One of the main research goals was to try to understand the attitudes of doctors and patients toward the phenomenon of black 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 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 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 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 medicine phenomenon

The last and important finding in this study relates to the attitudes of the hospital administrations towards black medicine. Based on the research findings, the hospital administrations are apparently aware of the phenomenon of black 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 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 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.

SUMMARY

The vision underlying the National Health Insurance Law is assuring the provision of health services to citizens 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.

The fact that it is based on the principle of equality and solidarity inspire the issue of black medicine. The current study indicates that the phenomenon of black 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.

The destructive implications of black medicine create tremendous social and economic biases that raise many questions regarding the success of the reform. Expansion of types of black medicine in public hospitals 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 to plot correct health, social, organizational and economic policy.

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