Primary Care Physicians in Israel: Self-Perception of Their Role in the Healthcare System and Policy Makers’ and Patients’ Perception of Them as Gatekeepers

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Key words: primary care, gatekeeper, coordination of care, self-referrals, health policy

Abstract

Background: The rapidly increasing costs of healthcare pose a major challenge to many governments, particularly in developed countries. Health policy makers in some Western European countries have adopted the policy of a strong primary healthcare system, partly due to their recognition of the value of primary care medicine as a means to restrain costs while maintaining the quality and equity of healthcare services. In these countries there is a growing comprehension that the role of the family physician should be central, with responsibility for assessing the overall health needs of the individual, for coordination of medical care and, as the primary caregiver, for most of the individual’s medical problems in the framework of the family and the community.

Objectives: To describe primary care physicians in Israel from their own perception, health policy makers’ opinion on the role PCPs should play, and patients’ view on their role as gatekeepers.

Methods: The study was based on three research tools: a) a questionnaire mailed to a representative sample of all PCPs employed by the four sick funds in Israel in 1997, b) in-depth semi-structured interviews with key professionals and policy makers in the healthcare system, and c) a national telephone survey of a random representative sample of patients conducted in 1997.

Results: PCPs were asked to rank the importance of 12 primary functions. A total of 95% considered coordination of all patient care to be a very important function, but only 43% thought that weighing economic considerations in patient management is important, and 30.6% thought that 24 hour responsibility for patients is important. Also, 60% of PCPs have undergone specialty training and 94% thought that this training is essential. With regard to the policy makers, most preferred highly trained PCPs (board-certified family physicians, pediatricians and internists) and believed they should play a central role in the healthcare system, acting as coordinators, highly accessible and able to weigh cost considerations. Yet, half opposed a full gatekeeper model. They also felt that the general population has lost faith in PCPs, and that most have a low status and do not have adequate training. Regarding the patients’ viewpoint, 40% preferred that the PCP function as their “personal physician” coordinating all aspects of their care and fully in charge of their referrals; 30% preferred self-referral to sub-specialists, and 19% preferred their PCP to coordinate their care but wanted to be able to refer themselves to specialists.

Conclusions: In order to maintain high quality primary care, it is important that all PCPs have board certification. In addition, PCP training systems should emphasize preventive medicine, health promotion, health economy, and cost-effectiveness issues. Efforts should be made to render PCPs a central role in the healthcare system by gradually implementing the elements of the gatekeeper model through incentives rather than regulations.

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The rapidly increasing costs of healthcare and the development of many specialties and sub-specialties pose a major challenge to many governments, particularly those of developed countries [1–3]. Health policy makers in some Western European countries have adopted the policy of a strong primary healthcare system, partly due to their recognition of the value of primary care medicine as a means to restrain costs while maintaining the quality and equity of healthcare services [4]. In countries supporting primary care medicine there is a growing comprehension that the role of the family physician should be central, with responsibility for assessing the overall health needs of the individual, for coordination of medical care and, as the primary caregiver, for most of the individual’s medical problems in the framework of the family and the community [4–6].

PCP = primary care physician
The results of previous studies have demonstrated the economic advantages of strong primary care and the importance of the role of the primary care physicians as "gatekeepers." A gatekeeper is defined as the coordinator of all aspects of patient care, as the exclusive means of access to medical services, including access to specialists, and as the primary caregiver. In countries where PCPs fulfill the role of gatekeepers, healthcare expenditures are lower and comprise a smaller percentage of the gross national product than in countries where direct access to services is practiced. However, giving PCPs the role of gatekeepers necessitates high quality training so that they can provide quality care to their patients and reach appropriate decisions regarding who to refer to specialists [5-9]. These trends around the world are reflected in the recommendations of the Israel National Inquiry Commission, which assessed the function of the healthcare system in Israel in 1990, in the development of training programs in family medicine that fostered a generation of specialists in family medicine, and in the establishment of academic and community departments.

In contrast, the competition among the four sick funds (similar to health maintenance organizations) that provide medical services in Israel weakens primary care medicine because they encourage direct access to specialists in order to attract new members. By so doing, they have weakened the position of the family physician as the coordinator of patient care.

The objective of this paper is to summarize our studies that examined (during 1997) the attitude of the PCPs themselves to the role they should play, the policy makers' viewpoint on the PCPs' role, and the patients' viewpoint. In Israel, under the National Health Insurance Law, which came into effect in January 1995, compulsory health insurance is provided to all citizens in one of the four sick funds. The largest, Clalit Health Services, insures 60% of the population and is run as a prepaid, capitated managed care organization. The remaining 40% of the population are insured in the other three funds. Israeli citizens can choose to which sick fund they wish to belong.

Methods

In order to assess the PCPs' viewpoint, a national survey was conducted using a structured questionnaire, which included:

- Demographic and professional background (age, gender, specialization, sick fund affiliation, geographic region, academic appointment, etc.)
- Work satisfaction
- Opinion on the training required to function as a PCP
- Attitude on the appropriate roles of PCPs (scaled from "not at all" to "very much")

In 1997 there were 3,600 active PCPs in Israel. The study population consisted of a representative sample of all the PCPs working in sick funds in Israel (taken from the sick funds' lists of PCPs). PCPs were defined in this study as physicians working in general medicine in the community; general practitioners, specialists in family medicine, pediatricians, internists and other specialists.

To assess the healthcare policy makers' viewpoint, a qualitative study design was conducted using an in-depth structured interview of the major policy makers from the Ministry of Health, the central administrations of the sick funds, and the Israel Medical Association central office (20 people).

In order to assess the patients' viewpoint on the role of the PCPs as gatekeepers, a national telephone survey was carried out in which a random representative sample of 1,084 adult sick fund members were interviewed; the response rate was 81%. Detailed methodology of these studies as well as detailed results and conclusions have been described elsewhere [10-12].

Results

The PCPs' viewpoint [9]

The characteristics of PCPs are presented in Table 1. The professional training of the PCPs is presented in Table 2 and the ranking of their perceived role of themselves in Table 3.

PCPs ranked 12 primary functions that they think they should perform. There was a significant variance in the ranked importance of these roles, with 98% of all PCPs citing calming and reassuring patients as important to a very great extent and 95% of them citing coordination of all patient care as important, but only 43% cited weighing economic considerations in patient management as important and 30.6% citing 24 hour responsibility for patients as important. A total of 90.4% believed that identifying, managing and following chronically ill patients is a very important function, and 85.7% thought that dealing with prevention and health promotion is important to a great extent. Sixty percent of PCPs have undergone specialty training, mainly in pediatrics, family medicine and internal medicine, and 94% believed this training to be essential. Board-certified family physicians ranked certain tasks significantly higher than did other PCPs, such as coordinating all patient care; identifying, treating and monitoring chronic patients; conducting preventive activities; and weighing economic factors.

The data show that 40.6% of PCPs are general practitioners without board certification; 18.5% were trained in family medicine, 21.5% in pediatrics and 19.4% in internal medicine and other specialties. Of the four sick funds, Clalit Health Services have 28.6% board-certified family physicians, Maccabi 13.1%, while Meuhedet and Leumit have only 5.8% and 3.1% respectively.

Sixty percent of PCPs thought that direct access should be continued for those sub-specialities in which it is already available (dermatology, orthopedics, ear/nose/throat, ophthalmology, etc.), but only 26% thought that this privilege should be extended to additional sub-specialties, and only 14% thought that there should be direct access to all consultants. It was also found that only 14.2% of PCPs have academic appointments in the various faculties of medicine.
Table 1. Characteristics of study physicians

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
</tr>
<tr>
<td>≤40</td>
<td>197 (25.2)</td>
</tr>
<tr>
<td>40–45</td>
<td>179 (23.0)</td>
</tr>
<tr>
<td>46–55</td>
<td>268 (34.4)</td>
</tr>
<tr>
<td>56+</td>
<td>136 (17.4)</td>
</tr>
<tr>
<td>Total</td>
<td>780 (100.0)</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>474 (60.0)</td>
</tr>
<tr>
<td>Female</td>
<td>316 (40.0)</td>
</tr>
<tr>
<td>Total</td>
<td>790 (100.0)</td>
</tr>
<tr>
<td>Place of work*</td>
<td></td>
</tr>
<tr>
<td>Only in community</td>
<td>655 (81.9)</td>
</tr>
<tr>
<td>Community and hospital</td>
<td>144 (18.1)</td>
</tr>
<tr>
<td>Total</td>
<td>799 (100.0)</td>
</tr>
<tr>
<td>Sick fund</td>
<td></td>
</tr>
<tr>
<td>Clalit</td>
<td>414 (52.5)</td>
</tr>
<tr>
<td>Maccabi</td>
<td>144 (18.3)</td>
</tr>
<tr>
<td>Leumit</td>
<td>104 (13.2)</td>
</tr>
<tr>
<td>Meuhedet</td>
<td>126 (16.0)</td>
</tr>
<tr>
<td>Total</td>
<td>788 (100.0)</td>
</tr>
<tr>
<td>Area of residence</td>
<td></td>
</tr>
<tr>
<td>Jerusalem region</td>
<td>84 (10.8)</td>
</tr>
<tr>
<td>Tel Aviv and central region</td>
<td>380 (48.6)</td>
</tr>
<tr>
<td>Haifa and northern region</td>
<td>242 (30.9)</td>
</tr>
<tr>
<td>Beer Sheva and southern region</td>
<td>76 (9.7)</td>
</tr>
<tr>
<td>Total</td>
<td>782 (100.0)</td>
</tr>
<tr>
<td>Practice type (n=785)</td>
<td></td>
</tr>
<tr>
<td>Large urban</td>
<td>431 (54.8)</td>
</tr>
<tr>
<td>Small urban</td>
<td>170 (21.6)</td>
</tr>
<tr>
<td>Mixed (urban and rural)</td>
<td>82 (10.4)</td>
</tr>
<tr>
<td>Rural</td>
<td>103 (13.2)</td>
</tr>
<tr>
<td>Total</td>
<td>786 (100.0)</td>
</tr>
<tr>
<td>Years working in the community</td>
<td></td>
</tr>
<tr>
<td>1–6 yr</td>
<td>150 (19.1)</td>
</tr>
<tr>
<td>7–16 yr</td>
<td>316 (40.5)</td>
</tr>
<tr>
<td>17–26 yr</td>
<td>198 (25.2)</td>
</tr>
<tr>
<td>27+ yr</td>
<td>121 (15.4)</td>
</tr>
<tr>
<td>Total</td>
<td>785 (100.0)</td>
</tr>
<tr>
<td>Work satisfaction</td>
<td></td>
</tr>
<tr>
<td>Very high</td>
<td>138 (17.6)</td>
</tr>
<tr>
<td>High</td>
<td>439 (56.0)</td>
</tr>
<tr>
<td>Moderate</td>
<td>190 (24.2)</td>
</tr>
<tr>
<td>Low or none</td>
<td>17 (2.2)</td>
</tr>
<tr>
<td>Total</td>
<td>784 (100.0)</td>
</tr>
</tbody>
</table>

* A combined variable was created from the type of employment in the primary place of work and in the secondary place of work (if applicable).

The policy makers’ viewpoint [10]

The majority of respondents claimed that they want highly trained PCPs (family physicians, pediatricians and internists) to play a central role in the healthcare system. They should be coordinators, highly accessible and should be able to weigh cost considerations. Some supported a system in which each patient has a personal physician. However, only about half of the respondents support a full gatekeeper model, while most think that the gatekeeper concept has a negative connotation. They also believe that it would be difficult to implement regulations regarding primary care. The barriers to implementation of the gatekeeper model, as cited by the respondents, include loss of faith in PCPs by the general population, the dearth of PCPs with adequate training, low status, lack of availability on a 24 hour basis, resistance by specialists, strong competition among the sick funds including promises of direct access to specialists, the medical care habits of the general population – many of whom do not settle for only one opinion – and a declared anti-gatekeeper policy by one of the sick funds. Ways to overcome these obstacles, as suggested by the policy makers, include implementation of fund-holding clinics, patient education on the importance of having a personal physician, appropriate marketing by family medicine and primary care advocates, and continued training in primary care.

The patients’ viewpoint [11]

The representative sample of patients (n=1,084) was asked: “Would you like your family physician to become your personal physician, to coordinate all your care and to be exclusively responsible for referring you to a specialist?” 40 percent of all respondents preferred this model of care, which was defined as the gatekeeper model, a third preferred self-referral to a specialist, and 19% preferred the physician to coordinate care but to refer themselves to a specialist. Independent variables predicting preference for the gatekeeper model are: living in the periphery, membership in the Clalit sick fund, being male, having fair or poor health status, having a permanent family physician, and being satisfied with the professional level of the family physician. A significant correlation was found between practicing self-referral and preference for self-referral.

Conclusions

The National Health Insurance Law was legislated with the aim of dealing with the economic crisis in the health system and
promoting a fair allocation of health resources, an improvement in the standard of service, and a promise of greater freedom of choice by the insured population [13]. It is well accepted around the world that strong primary care is likely to help achieve these aims. The model of the primary care physician as gatekeeper also promotes these goals [14]. Several conclusions can be drawn from our studies described above:

**Board certification**

At least in theory, the policy makers are interested in strong, board-certified high quality primary care. Ninety-four percent of all the primary care physicians themselves believe that specialty training is important for PCPs, as did even the majority of the general practitioners without specialization. Therefore we conclude that board certification for all PCPs will improve the quality of primary care practice and that it can be achieved. However, unlike Britain, The Netherlands or Denmark where only family physicians are PCPs, we found that in Israel PCP training includes family medicine, internal medicine and pediatrics. Nonetheless, we believe that board-certified pediatricians and internists should have special training in order to work in the community as PCPs.

**Role of PCPs**

With regard to PCPs’ functions we found that some – such as coordination of care, reassurance and supporting patients, managing chronically ill patients and dealing with preventive activities – are considered to be extremely important by most PCPs. We believe that these will continue to be central roles of PCPs in the future. The majority of PCPs in Israel consider the function of preventive medicine and health promotion to be highly important. However, not enough attention is paid to these issues in medical schools and in specialty training, and we recommend that these subjects be emphasized as part of the training of PCPs.

Some issues such as economic and organizational functions were not perceived as important by the majority of PCPs, despite the expectation on the part of policy makers that PCPs weigh economic considerations in a patient’s management. Clearly, therefore, there is a need to train PCPs in health economy, in evidence-based medicine and in cost-effectiveness and cost-benefit issues, while preserving the quality of medical care. Despite the growing weight given to these issues, it is important to guarantee that PCPs will continue to serve as personal caregivers who centralize and coordinate care for their patients and remain trusted personal physicians.

**Central role of primary care and different models of care**

Forty percent of the patients were interested in the gatekeeper model (where the PCP coordinates care and refers to specialists), whereas 60% preferred the option of direct access to specialists for consultation. Even 60% of the PCPs themselves thought that direct access to several specialties should be continued. Yet, a similar percentage of patients (59%) preferred their family physician to coordinate their care. Based on our studies conducted among physicians, policy makers and patients, we suggest construction of a number of models for primary medical services that will be offered to different subgroups of patients according to their needs and preferences. For example, the gatekeeper model was found to be most suitable for men, for those who live in the periphery, have a low level of education and fair to poor health status. Similarly, we found that poor sick people need a competent PCP who will guide them in the healthcare system. Although the well-educated population does not support the gatekeeper model, they as well as healthy individuals should value the advantages of having a personal physician to take care of them in the complicated healthcare system (when necessary) and to provide them with the opportunity to choose a PCP who will meet their expectations. Thus, the system may be gradually reformed to

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Table 3. Ranking of primary care physicians’ roles

<table>
<thead>
<tr>
<th>Role</th>
<th>Total (100.0)</th>
<th>Very great extent</th>
<th>Great extent</th>
<th>Moderate extent</th>
<th>Minor extent</th>
<th>Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>To calm and reassure patients</td>
<td>787</td>
<td>552 (70.1)</td>
<td>222 (28.2)</td>
<td>11 (1.4)</td>
<td>2 (0.3)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>To coordinate all patient care</td>
<td>786</td>
<td>421 (53.5)</td>
<td>326 (41.5)</td>
<td>34 (4.4)</td>
<td>3 (0.4)</td>
<td>2 (0.2)</td>
</tr>
<tr>
<td>To identify, manage and follow chronically ill patients</td>
<td>779</td>
<td>327 (42.0)</td>
<td>377 (48.4)</td>
<td>59 (7.6)</td>
<td>13 (1.7)</td>
<td>3 (0.3)</td>
</tr>
<tr>
<td>To be active in preventive medicine and health promotion</td>
<td>787</td>
<td>316 (40.1)</td>
<td>360 (45.7)</td>
<td>90 (11.4)</td>
<td>13 (1.7)</td>
<td>9 (1.1)</td>
</tr>
<tr>
<td>To manage patient affairs vis-a-vis other medical agents (hospitals, consultants)</td>
<td>785</td>
<td>305 (38.8)</td>
<td>383 (48.8)</td>
<td>77 (9.8)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To counsel patients on all health-related matters</td>
<td>792</td>
<td>288 (36.3)</td>
<td>385 (48.6)</td>
<td>98 (12.4)</td>
<td>11 (1.4)</td>
<td>10 (1.3)</td>
</tr>
<tr>
<td>To have exclusive referral rights for laboratory tests, imaging</td>
<td>788</td>
<td>217 (27.5)</td>
<td>404 (51.3)</td>
<td>121 (15.4)</td>
<td>24 (3.1)</td>
<td>21 (2.7)</td>
</tr>
<tr>
<td>To have exclusive referral rights to consultants</td>
<td>780</td>
<td>181 (23.2)</td>
<td>384 (49.2)</td>
<td>158 (20.3)</td>
<td>34 (4.4)</td>
<td>23 (2.9)</td>
</tr>
<tr>
<td>To conduct house calls as required</td>
<td>783</td>
<td>151 (19.3)</td>
<td>269 (34.3)</td>
<td>205 (26.1)</td>
<td>105 (13.3)</td>
<td>54 (7.0)</td>
</tr>
<tr>
<td>To handle patients' affairs vis-a-vis administration (appointments, reimbursement)</td>
<td>787</td>
<td>68 (8.7)</td>
<td>144 (18.3)</td>
<td>197 (25.1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To weigh economic considerations in patient management</td>
<td>787</td>
<td>65 (8.2)</td>
<td>276 (35.1)</td>
<td>294 (37.3)</td>
<td>110 (14.0)</td>
<td>43 (5.4)</td>
</tr>
<tr>
<td>To be responsible for patients over the entire 24 hour period</td>
<td>781</td>
<td>57 (7.3)</td>
<td>182 (23.3)</td>
<td>228 (29.1)</td>
<td>153 (19.6)</td>
<td>161 (20.7)</td>
</tr>
</tbody>
</table>
one based more on PCPs who provide high quality care at low
cost, making prudent use of specialty care.

In spite of the ambivalent attitude of the policy makers to
strengthening the role of primary care, all of them would like to
see highly trained primary care physicians, and some defined
them as personal physicians. Most supported a model in which
PCPs play a central coordinating role in patient management,
are highly accessible, and take cost factors into consideration.

This model was also supported by the PCPs themselves and
by the patients, the majority of whom (59%) want their family
physicians to coordinate their care as mentioned above. Yet in
practical terms, the policy makers, the patients and even the
majority of PCPs do not agree to PCPs having the exclusive right
to refer patients for specialist care. Therefore, it seems that even
if some gatekeeper model is adopted, it should be designated
by a name that is better suited to the health culture of Israel.
It will also be difficult to implement regulations regarding primary
care medicine, and it is likely that any changes will be gradual
and will be introduced as incentives rather than regulations.
Clearly we should use a flexible model, while at the same time
make every effort to render primary care physicians a central
role in the healthcare system.

Given the existing opposition by policy makers to the
exclusiveness of the gatekeeper model and patients’ prefer-
ences, the current policy of direct access to a limited number
of specialties should be continued but not extended to other
specialties. The position of the PCPs in the healthcare system
can be strengthened by introducing fund-holding, and increasing
education and research in the community by improving the
conditions whereby PCPs will have more academic appoint-
ments and will be more involved in teaching medical students
and residents. It is also important to examine the possibility of
developing direct channels of communication between the
national policy makers and the primary care physicians, as well
as institutional mechanisms to involve the physicians directly in
the processes of national policy-making in the area of
healthcare.

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**Capsule**

**Extending the T cell connection**

The supramolecular activation cluster (SMAC) forms at the
point of contact between a T cell and an antigen-presenting
cell (APC). The term 'immune synapse' has provided a useful
analogy by which to describe the SMAC in CD4 T cells, although
it has not been clear whether this terminology could
reasonably be extended to other types of T cells.

Using three-dimensional digital microscopy, Potter et al.
observed that SMAC formation also occurs in CD8 T cells and
that, as with their CD4 counterparts, this requires a sufficient
concentration of specific antigen displayed by the APC. In
CD8 and CD4 T cells, SMACs were organized similarly,
exhibiting central and peripheral domains containing signaling
and adhesion proteins, such as protein kinase C and the
integrin LFA-1, respectively. However, CD8 T cells appeared to
differ from CD4 T cells in that engagement of the CD8 co-
receptor presented an obligatory step in SMAC formation.
Extension of the immune synapse model to CD8 T cells may
help to unravel the programs of activation followed by these
cells.

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