Reducing Health Inequality and Health Inequity in Israel: Towards a National Policy and Action Program

Summary Report

Leon Epstein • Rachel Golowag • Shuruk Isma'il
Miriam Greenstein • Bruce Rosen

This study was funded by grants from Andrea and Michael Dubroff, Massachusetts, USA; the Israel National Institute for Health Policy and Health Services Research; and an anonymous donor.
Reducing Health Inequality and Health Inequity in Israel: Towards a National Policy and Action Program

Summary Report

Leon Epstein • Rachel Goldwag • Shuruk Isma'il
Miriam Greenstein • Bruce Rosen

This study was funded by grants from Andrea and Michael Dubroff, Massachusetts, USA; the Israel National Institute for Health Policy and Health Services Research; and an anonymous donor
Reducing Health Inequality and Health Inequity in Israel: Towards a National Policy and Action Program

Summary Report

Leon Epstein          Rachel Goldwag          Shuruk Isma'il
Miriam Greenstein    Bruce Rosen

This study was funded by grants from Andrea and Michael Dubroff, Massachusetts, USA; the Israel National Institute for Health Policy and Health Services Research; and an anonymous donor

Jerusalem             March 2006
Related Myers-JDC-Brookdale Institute Publications


To order these publications, please contact the Myers-JDC-Brookdale Institute, P.O.B. 3886, Jerusalem 91037, Tel: (02) 6557400, Fax: (02) 5612391, e-mail: brook@jdc.org.il.
Executive Summary

Background
While the existence of health inequality has been recognized for over 150 years, it is only in the past three decades that countries have given serious attention to its social and economic implications and its implications for population health. Many attempts have been made to develop policies and subsequently take action to combat it. Nonetheless, in Israel as elsewhere, extensive health inequality continues to exist in many measures of health care delivery, health status and health outcomes. Moreover, in Israel the extent of overall inequality is growing, which is also reflected in the growth in some measures of health inequalities (such as education gaps in life expectancy).

It is generally accepted that social factors, such as inequalities in income, housing, education and employment, account for the bulk of health disparities. It is also generally accepted that although inequalities in health care are not the main cause of health inequality, the health care system can contribute significantly to their reduction.

Study Objective
The overall objective of this study was to explore the significance of health inequality in the thinking and action of leaders of the Israeli health system and related social systems. It also aimed to identify policies and actions that might reduce health inequality in Israel. As such, the study sought to promote the development of policy and action in Israel's health care system.

Methodology
The study had two major components:
1. Face-to-face interviews with over 100 policymakers, managers and professionals in the health system and related social systems conducted between October 2003 and October 2004.
2. A review of the professional literature on and international experience with health inequality, with particular attention to efforts to reduce it.

Findings
A. Respondents' Perceptions of Health Inequality and How It Should Be Addressed
Awareness of the extent of health inequality, its cost and importance
• Most of the respondents were aware of the existence of health inequality, although they were surprised by its extent.
• Many of the respondents viewed health inequality as an important issue that needs to be given high priority in resource allocation (both because of its effect on individual health and well-being and because of the risks it poses to the fabric of society).
• Many of them stressed that poor health has very important economic implications for society as a whole (such as days lost from work), and for the health care system (due to the cost of care).
• Nevertheless, most of them believe that, at present, reducing health inequality is not given high priority.

The causes of health inequality and ways to address it
• In keeping with the dominant view in the professional literature, the majority of respondents indicated that both the health system and broader social factors contribute to health inequality.
• In addition, they noted that the manner in which health care is structured and delivered affects the extent of health inequality.
• Many of them also cited specific barriers to reducing health inequality that need to be addressed (such as inadequate attention to long-term planning and the difficulties involved in reallocating resources).
• They therefore called for deliberate decisions to be made at all levels of government and society to reduce inequality, in general, and health inequality, in particular.

The role of top levels of government and systems other than health
Many respondents indicated that health inequality is a national responsibility requiring the involvement and endorsement of top levels of government, including the prime minister, the Cabinet, the Ministry of Finance, the Ministry of Health, and the Knesset. They also identified actors outside the health system who might play an important role in reducing health inequality:
• **Government ministries other than the Ministry of Health** (such as the Ministry of Education and the Ministry of Environmental Protection), whose actions could have a significant impact on health.
• **Local authorities**, which tend to be aware of the specific difficulties faced by those affected by health inequality, because of their contact with the local population.
• **Religious leaders**, who have significant influence on both the Muslim and ultra-orthodox Jewish populations.
• **The academic community**, which can contribute by conducting relevant research and actively disseminating its findings among the Israeli policymakers and public.
• **Employers**, who have both an interest in and responsibility toward reducing health inequality, as they also suffer when employees are ill or absent from work.

The role the health care system
Most of the respondents who participated in this study believed that the health system could and should do more to reduce health inequality, and many felt that all components of the health system (including the health plans and hospitals) could and should work to reduce inequality, with the Ministry of Health playing a leading role. They identified the following steps, which the health system could take to reduce inequality:
• Recognize that a problem exists as a prerequisite to program and policy development.
• Engage in long-term planning and action to reduce inequality.
• Undertake interventions targeted at specific populations.
• Strengthen evidence-based preventive activities at all levels of the health system.
Increase the priority assigned to efforts to reduce health inequality and allocate resources accordingly.

- Respondents indicated the need to allocate more resources to initiatives that target the special needs of disadvantaged populations.
- They also called for increasing the resources available for health promotion, disease prevention, control of chronic disease and rehabilitation – areas in which disadvantaged populations can benefit greatly from health system interventions due to their substantial need for behavioral changes.
- Respondents suggested that some of the needed resources could be freed up by reducing duplication of services. In addition, they noted that policymakers need to confront the competing demands of high-tech curative treatment for specific sick patients and promotion and prevention activities that address the needs of the population as a whole.

Enhance the role of physicians in reducing health inequality, by defining their responsibility for reducing health inequality; improving their ability, skills and willingness to provide socially and culturally appropriate care for diverse population groups in a heterogeneous society; changing undergraduate, graduate and post-graduate medical training frameworks to prepare professionals to address the health effects of socio-economic and cultural inequality; and encouraging the Israel Medical Association and the Scientific Council to make clear statements on the responsibility of physicians, medical associations, and medical schools in reducing health inequalities.

Increase incentives to the health plans and the physicians to reduce inequality. One way to do so is to change financial elements of the National Health Insurance Law, for example by adding a socio-economic status parameter into the capitation formula, and by reducing co-payments and supplemental insurance premiums for low-income persons. An additional way to encourage providers to work toward reduction of health inequality is for governments or foundations to provide special funding for promising new initiatives.

B. The Professional Literature

While many policy analysts emphasize the need to involve the broader social system in any major effort to reduce health inequality, the dominant view in the professional literature is that the health care system can play a major role in efforts to reduce health inequality. In this way, the health care system can also contribute to reducing general social and economic inequality. The literature emphasizes that some steps to reduce health inequality can be taken by the health system alone, while others will have to be taken cooperatively with the education, environmental protection, transportation and other sectors.

The literature also suggests that different countries are at different stages of recognizing the existence of health inequality, being willing to act to reduce it, and implementing concrete policies and programs. Whitehead has developed a staged model entitled "The Action Spectrum on Inequalities in Health" (Whitehead, 1998); this model begins with awareness of a problem and proceeds through acceptance of responsibility for solving it, to focused local activities, and finally to comprehensive national policies and action plans. Many experts believe that without a
national policy that has political support, and which thereby facilitates the development of dedicated policies and programs to reduce inequality, efforts to reduce health inequality may be limited and sporadic.

C. The Experience in Other Countries

National strategies and action plans
Several countries have developed comprehensive national strategies and action plans to reduce health inequality. This report summarizes key dimensions of the approaches taken in the United Kingdom, Sweden, The Netherlands and the United States. National efforts to reduce health inequality in these countries have all involved encouragement from top government leaders. With the exception of that produced by the US Institute of Medicine, they have all been formally endorsed by the respective governments. They also share a commitment to ongoing monitoring.

These efforts differ, first and foremost, in the extent to which they focus on the health care system as the primary vehicle for reducing health inequality, and the extent to which they recommend specific actions that the health care system can and should take. They also differ in the extent to which they set quantitative objectives for reducing health inequality, and in the relative ambitiousness of their objectives. Lastly, these efforts differ in the extent to which they anchor strategies for reducing health inequality in a broader set of national health objectives.

Programmatic initiatives in other countries
Many of the programmatic initiatives taken in other countries involve promoting healthy behavior, screening for early detection of illnesses, and management of chronic diseases. These initiatives often also involve outreach efforts or programs targeted at high-risk or underserved populations.

Possible Elements of an Action Plan to Reduce Health Inequality in Israel
This section summarizes the main ideas for action that emerged from our survey of Israeli leaders, our review of the professional literature, and our analysis of international experience. Overall, there was a great deal of consistency in the ideas that emerged from these three sources, which fell into two categories: mobilizing for action; and implementing concrete policy changes or field interventions.

Mobilizing for Action
This category concerns who should be assigned responsibility for reducing inequality, and how efforts should be mobilized to translate that responsibility into action. This could include the following:

- Increasing the priority given to reducing health inequality.
- Investing heavily in the dissemination of information on the extent and nature of health inequality in Israel.
- Assembling and disseminating information on existing initiatives to reduce health inequality.
Encouraging health care providers (such as hospitals and primary care physicians) to identify and record patients' social, cultural and economic characteristics.

Assigning the health care system a major role in efforts to reduce health inequality, while insisting that related social systems (e.g., education, environment, and housing) also take steps to advance this objective.

Promoting initiatives by all players within the health system, both within and outside government, to reduce health inequality.

Developing a national strategy and action plan to reduce health inequality, with top-level endorsement.

**Concrete Policy Changes and Field-level Interventions**

The following are among the concrete changes that might be made in policy or in the field:

- Encouraging and implementing interventions targeted at the particular needs of vulnerable populations.
- Training health professionals to increase their motivation to address health inequalities, and providing them with the skills to do so (including cultural responsiveness training).
- Changing resource allocation within the health system, so that more resources will be targeted at disadvantaged populations and those activities (such as health promotion) that are most likely to reduce inequality.
- Enhancing incentives to health plans and physicians to reduce health inequality.

**Concluding Remarks**

Clearly, no single activity referred to in this report will alone have a decisive impact on the overall level of health inequality in the entire population. Nevertheless, if well-planned and implemented on an ongoing basis, each and any of them may contribute to reducing health inequality.

Survey respondents and the international literature ascribe particular importance to the commitment of key actors – the government, politicians, the Ministry of Health, the health plans, health professionals, academia, community leaders and private industry – to the development of integrated policy and action to reduce health inequality, in and outside the health care system. This is the clear message arising from both our qualitative study and our understanding of international experience.
Acknowledgments

A great many people are to be thanked for their involvement in and support of this study and it is our pleasure to cite them here.

First and foremost, we wish to express our gratitude to the members of the study's steering committee in Israel, whose keen interest in health inequality and commitment to redressing it were essential to our progress: Bishara Bisharat (Clalit Health Services), Ilana Belmaker (Ministry of Health), Ilana Ben-Shachar (Ministry of Health), Gabi Bin-Nun (Ministry of Health), Haim Doron (National Institute for Health Policy and Health Services Research), Menahem Fienero (Maccabi Healthcare Services), Iris Ginzburg (Ministry of Finance), Revital Gross (Myers-JDC-Brookdale Institute), Jack Habib (Myers-JDC-Brookdale Institute), Boaz Lev (Ministry of Health), Orly Manor (The Hebrew University), Shlomo Mor Yosef (Hadassah Hospital), Rachel Nissenholz (Israel Medical Association), Ruth Ostrin (Yad Hanadiv), Aviva Ron (health policy consultant), Miki Sharf (Clalit Health Services), Raviv Sobel (Ministry of Finance), Varda Soskolni (Bar-Ilan University), and Lea Wapner (Israel Medical Association).

We are indebted to our colleagues overseas, who provided invaluable advice during the planning and execution of this study: Robert Like (Robert Wood Johnson Medical School, New Jersey), David Satcher (Morehouse School of Medicine, Atlanta, Georgia), Galit Sacajui (Montefiore Hospital, New York), Stig Wall (University of Umea, Sweden), Martin McKee (London School of Hygiene and Tropical Medicine), John Ashton (University of Liverpool), and Johan Mackenbach (Erasmus University, Rotterdam).

Without the willing help of the respondents, this study would not have been possible. We also wish to thank the many individuals whose responses to presentations of this study and whose insights informed this report. Specifically, we thank the Medical Board of the Hadassah Hospitals; the management of Maccabi Healthcare Services; managers in the Central Region of Maccabi Healthcare Services; senior staff of Clalit Health Services; students and faculty at the Hadassah-Hebrew University School of Public Health; participants in the Conference of Nursing Graduates of the Hadassah School of Nursing; members of the central and ethics committees of the Israel Medical Association; the management of the Ministry of Health; participants in the annual conferences of the Public Health Doctors Association and the Israel Neurological Association; participants in the Conference on Quality in Health Care; and participants in the Conference on Health Inequality held at Ha'Emek College.

In conducting this study and writing this report we benefited from the expertise and acumen of our colleagues at the Myers-JDC-Brookdale Institute, some of whom also served on the steering committee. We wish to convey special thanks to Jack Habib, director of the Institute, and to our colleagues Netta Bentur, Nurit Nirel and Revital Gross, for their input. We are also grateful to Dorit Ganot-Levinger, who provided administrative support.

This report was edited in English by Marsha Weinstein and in Hebrew by Mati Moyal. It was prepared for publication by Leslie Klineman, and typeset by Elana Friedman.
# Table of Contents

1. Introduction 1

2. Study Objectives 2

3. Methods 3
   3.1 The Study Population 3
   3.2 The Study Questionnaire and Data Collection 3
   3.3 The Interview Strategy 4
   3.4 Data Analysis 4
   3.5 International Experience 4

4. Findings 5
   4.1 Awareness of the Extent of Inequality, Its Cost and Importance 5
   4.2 The Causes of Health Inequality 6
   4.3 Addressing Health Inequality: The Role of the Health Care System 8
   4.4 Addressing Health Inequality: The Role of Systems Other than the Health Care System 11
   4.5 Addressing Health Inequality: The Role of the Top Levels of Government in Policy Development and Resource Mobilization 12
   4.6 International Perspectives, Strategies and Interventions 14

5. Possible Elements of an Action Plan to Reduce Health Inequality in Israel 23
   5.1 Mobilizing for Action 24
   5.2 Possible Directions for Concrete Policy Changes and Field-level Interventions in the Health Care System 26

6. Concluding Remarks 29

Selected Bibliography 30

Appendix: Figures Shown to Respondents 31
List of Figures and Tables

Figure 1: Specific Health System Actions Called for in the UK Plan "Tackling Health Inequalities: A Programme for Action" 19

Figure 2: Systemic Strategies Recommended by the US Institute of Medicine Report "Unequal Treatment" to Reduce Racial and Ethnic Disparities in Clinical Care 20

Figure 3: Spotlight: Examples of Priority Needs Identified by Respondents, which Could Be Addressed by Targeted Interventions 27

Figure 4: Spotlight: Possible Concrete Steps Related to the Training of Health Professionals 28

Table 1: Analysis of Reportedly Effective Interventions Aimed at Low Socio-economic Groups 22
1. Introduction

While the existence of health inequality has been recognized and scientifically documented for over 150 years, it is only in the past three decades that countries have given serious attention to its social and economic implications and its implications for population health. Many attempts have been made to develop policies and subsequently take action to reduce inequalities. Nonetheless, in Israel as elsewhere, extensive health inequality continues to exist in many measures of health care delivery, health status and health outcomes\(^1\). Moreover, in Israel the extent of overall inequality is growing, which is also reflected in the growth in some measures of health inequalities (such as education gaps in life expectancy).

In the literature on differences in health status and health care between population groups, a number of terms are used, including: inequalities, inequities, disparities and gaps – each with a somewhat different definition and connotation. In this report we will use the term "inequalities", which are defined as any differences in health or health care between groups, independent of the source of the inequality.

Some variation in health status is of course inevitable, in part because health has a strong genetic base. We address this variation as inequality when it is related to socially or culturally significant societal groupings, whether defined by age, gender, income class, ethnicity, geographic location, or any other characteristic of importance to a society.

The reduction of health inequality is a societal objective in itself. However, it attains special importance when a health care system could have prevented or reduced the difference in health status, and the difference is considered to be unfair, and thus a manifestation of inequity. The avoidance or reduction of preventable inequalities is a significant element of public health policy and practice around the world.

The concept of inequality in health has several dimensions. The first of these involves differences in health status, as measured by health-related risk, morbidity, disability and mortality. Another involves differences in health care, as reflected in differential access to health services, differences in the quality of services, differential utilization of services and differential results of the process of care (whether these be the outcomes of clinical care or of health promotion/disease prevention efforts).

A complex set of inter-connected factors is related to the development of health inequality in a population. There is a consensus that the major causes of health inequality are socio-economic differences (or disparities), including differences in income, education, employment, and

\(^1\) In a recent survey of health system leaders that focused on the National Health Insurance Law (Gross et al, 2005), 75% of the respondents indicated that the extent of inequality in service levels declined in the wake of NHI. At the same time, almost half the respondents indicated that they expected a worsening in inequality in service levels in the five years ahead, while only 15% indicated that they expected an improvement.
housing, all of which are influenced by public policy in areas beyond the health care system. Cultural differences may also contribute to health inequality if services are not provided in a culturally responsive manner.

Another important cause of health inequality lies in the environment. Differential exposure to the physical environment (air pollution, occupational hazards, etc.) and biological environment (infectious agents), or to a hazardous human environment (violence), all of which are often related to the social and cultural characteristics of the population, can result in inequalities in the health of the population.

The health care system is in itself a major factor affecting health inequality. In the process of acting to improve health, it can enhance or reduce the degree of health inequality. In any system, those with greater access to economic resources will also pursue greater access to health care. While this is particularly important in countries without national health insurance, even in countries with national health insurance there are financial barriers to care within the national framework and to the purchase of care beyond the national framework.

The role of public intervention in health systems is in part to prevent differential access to health care from further expanding the inequalities in health status that exist even prior to care (due to genetic, behavioral or socioeconomic status differences), and to reduce them as much as possible. This is well illustrated by the case of diabetes, in which these factors bring about differences in disease prevalence, and differences in clinical management across population groups lead to additional inequality due to subsequent complications that affect both disability and mortality. Thus, while it is generally accepted that inequalities in health care are not the main cause of health inequality, there is a consensus that the health care system can contribute significantly to their reduction.

A key issue with regard to the delivery of health services is the extent to which the distribution of services across population groups and regions adequately reflects differences in needs. Other key issues are whether vulnerable populations receive high quality services and whether those services are provided in a manner that is responsive to their culture, income and education. Key characteristics of the financing system include whether there is universal health insurance, the scope of publicly-financed benefits packages, and the prevalence and nature of co-payments.

The complexity of the causative processes highlights the need to address the totality of the issues when considering possible ways of reducing health inequality.

2. Study Objectives

The overall objective of the study was to explore the significance and place of health inequalities in the thinking and action of leaders of the Israeli health system and related social systems, and to identify policies and actions that could reduce health inequality in Israel. As such, the study sought to promote the development of policy and action in Israel's health care system.
The specific objectives were:

1. To document the knowledge and attitudes currently held by leaders of institutions in Israel's health care system and other key social systems in relation to the following:
   a. The presence of health inequality and inequity in Israel today.
   b. The effect of various components of the health system on health inequality.
   c. Existing policies and programs to reduce health inequality.
   d. The health care system's responsibility for reducing health inequality.
   e. The potential of the health care system to reduce health inequality, on its own or in coordination with other systems.
   f. The possible short- and long-term economic benefits and costs to the health care system and society in general of attempts to reduce health inequality.

2. To examine the international experience and its relevance to the Israeli health care system.

The Israeli health system has several important structural features that contribute to health equality (these are detailed in Appendix III of the expanded report). In addition, considerations of equality are an ongoing part of policy development. Yet, prior to this study, there was a lack of clarity as to the extent to which policymakers, managers and other professionals (across the many organizations that comprise the health system) believed that the health care system had the capacity to reduce health inequality, relative to its current level. Moreover, it was unclear how broad a consensus existed that the health care system should prioritize the further reduction of health inequality. In addition, it was unclear to what extent health system leaders had concrete ideas about policies and programmatic interventions that could be adopted.

3. Methods

3.1 The Study Population
The study population included 103 interviewees in three groups: those responsible for health care policy, planning and delivery (61); leaders of medical and nursing schools, the professional associations of doctors and nurses, and the health services research community (26); and persons outside the health care system whose area of responsibility is relevant to the population's health and health inequality (16).

3.2 The Study Questionnaire and Data Collection
The study employed a questionnaire containing a series of open questions. Three slightly different versions of the questionnaire were prepared for each of the above target groups, which took into account the specific roles of each group. The three questionnaires were pre-tested at the start of the study. As a mechanism for promoting (and assessing) reliability of the recording and coding of interviews, a number of interviews were carried out by two members of the study team, who then coded them independently. The results were very consistent.

Face-to-face interviews were conducted between October 2003 and December 2004. All potential respondents were faxed or mailed a letter that described the study's objectives and importance,
and were then contacted by telephone in order to arrange an interview. The interview was recorded for quality assurance. Only two persons refused to be interviewed.

3.3 The Interview Strategy
At the beginning of each interview, the objectives of the project were outlined, and then respondents were shown data on health inequality among groups in Israel and asked to assess the reasons for health inequality. The data on health inequality that were presented included data on infant mortality by locality, overall mortality by level of education (including information on changes over time), and diabetes control by socio-economic status.

The presentation of these data served several functions. It introduced the topic of the interview in a non-threatening manner, before respondents were asked to address more complex issues concerning policy and responsibility for action. It clarified what we meant by health inequality, and what some of its manifestations were. It also served as a basis for exploring the extent of awareness of inequalities. For those who were less aware of it, exposure to the data also served as an opportunity to enhance their awareness. Finally, it provided a common factual base from which to explore respondents' attitudes toward inequality.

3.4 Data Analysis
The research team used the ATLAS.ti5 software package as an aid in coding and classifying the interview responses so as to facilitate the process of analysis.

In analyzing the results, the project team tried to capture and give expression to the full range of interesting and important ideas, even when these were mentioned by only a few respondents. At the same time, it is also important to know which ideas were endorsed more widely. The relative prevalence of an idea is expressed by the terms "almost all" (over 95% of respondents who related to the issue), "more than half" (50% to 95%), "almost half" (20% to 50%), and "a few" (less than 20%). However, it should be noted that if we report, for example, that "more than half" of the respondents stated a certain opinion or attitude, it does not necessarily mean that the remaining respondents either supported or opposed it, as they may not have addressed the issue because of the open nature of the interviews.

In addition to analyzing the responses of the study population as a whole, we also analyzed responses by type of organization (e.g., Ministry of Health, health plans, and academic frameworks), status in the organization, and region. Whenever sizable or important differences were found among these subgroups, this was noted.

3.5 International Experience
An in-depth review of the international literature on health inequality was performed. This included both peer-reviewed literature and the wealth of material that appears in the reports of government and other agencies.
In addition, visits were made to four countries, with a view to reviewing the issues involved in their attempts to reduce health inequality. These were the United Kingdom, Sweden, The Netherlands and the United States. In addition, the research team corresponded with leading scholars, managers and field professionals.

4. Findings

The summary of the findings is organized as follows: awareness of the extent of inequality and the importance of inequity; the causes of health inequality; addressing health inequality: the role of systems other than the health care system; addressing health inequality: the role of the health care system; and international strategies and interventions.

4.1 Awareness of the Extent of Inequality, Its Cost and Importance

While the respondents were aware of the existence of health inequality, a large number in all three groups (see 3.1 above) were surprised at the extent of health inequality, especially inequality in the provision and outcome of clinical care (e.g., control of diabetes).

More than half of all the respondents were of the opinion that health inequality is an important issue. This view was expressed by half of the respondents from health care institutions, with no difference between those from the Ministry of Health and those from the health plans. Three major implications of health inequality for society were raised repeatedly:

1. It is a serious threat to the social stability of the country.
2. Poor health has very important economic implications for society as a whole, and for the health care system, in particular. Respondents indicated that health inequality has a substantial impact on the economic status of the population – as reflected in the individual's ability to work efficiently, premature mortality (and hence potential loss to the work force), and unemployment. In particular, poor health has negative implications for the employment possibilities of people with lower education; this creates a vicious cycle of unemployment, further reduction in socio-economic status, and further impacts on their health.
3. Health inequality also incurs substantial costs for the health care system, society as a whole, and individuals and families. These include the costs of care and medications for the increased incidence and prevalence of chronic disease and complications, due to inadequate control of morbidity. Costs are also associated with the increased prevalence of negative health-related behaviors (smoking, alcohol consumption, inactivity, poor diet, etc.).

More that half of the respondents indicated that reducing health inequality should be a high priority for policymakers in the health system, in related social systems, and in top levels of government.
4.2 The Causes of Health Inequality

The explanations offered by respondents for the existence of inequality may be divided into three distinct spheres: the population itself, the health care system, and frameworks outside the health care system.

4.2.1 Variation in Population Characteristics

Respondents identified a set of related population characteristics as major influences on overall health status and the development of health inequality. Those cited as being most influential were education, income, area of residence, ethnic origin, religion and degree of religious observance. Almost all of the respondents cited at least one of these characteristics, and each of the characteristics was cited by at least half of the respondents. The latter is related to the access to and use of health care services, compliance with medical advice, awareness of the importance of life-style and behavior, and the care of children. While these may be the responsibility of the individual (whether healthy or ill), respondents also linked them to the cultural appropriateness of health care services and the cultural competence of health professionals in their delivery of care. Although each of these population characteristics has a direct impact on health and health inequality, it is their synergistic effect that is particularly important.

As noted above, respondents indicated that unemployment and poor health can constitute a self-perpetuating cycle. When unemployment is at very high levels, people are reluctant to spend time going to a physician or taking sick leave. With incomes reduced, the unemployed are also more affected by co-payments for physician visits and medications. Reluctance to visit a physician can also be compounded by a lack of reasonably-priced transportation, which can cause an individual to forgo ambulatory or hospital treatment for himself or his child. Parents (especially mothers) face the additional financial burden of obtaining child care when they themselves require medical care.

Respondents noted that population characteristics such as education and income are related to health behaviors such as smoking, diet, physical activity and alcohol consumption. They also noted that the healthier life-styles of people with higher socio-economic status contribute to the mortality and morbidity differentials. Accordingly, more than half of the respondents emphasized that inadequate attention to health promotion and disease prevention has particular implications for low socio-economic groups.

4.2.2 The Health Care System

While it was not suggested that the health care system had deliberately planned actions to increase health inequality, respondents indicated clearly that the reality of planning and delivery of health care contribute to health inequality. They cited activities within the health care system that may be responsible for increasing and broadening health inequality, and noted that the health care system had failed to adequately take action to reduce inequality. Problem areas noted by

---

2 "Almost all" refers to a statement or opinion voiced by 95% or more of the respondents (see 3.4 above).
more than half of the respondents included differential quality, availability and access to services in different regions of the country or by population group (there was no difference among the respondents in the three major groups or by health system framework; however a greater proportion of those from peripheral regions cited this issue); the absence of culturally appropriate services; a lack of outreach to and investment in prevention and promotion, especially for people with lower socio-economic status; and financial barriers to health care.

**Barriers to intervention to reduce inequality**

Respondents referred to various barriers to efforts to reduce inequality in the health system. Within the Ministry of Health, a lack of defined policy concerning health inequality and a lack of money and resources were the barriers often mentioned. A few respondents felt that it was the current form of resource allocation, and not a lack of money, that created the barrier. A lack of longer-term planning was also frequently cited as a barrier, as the effect on health status of certain actions to reduce inequality is visible only after significant time has passed. Both politicians and managers often prefer allocating resources to programs that produce results in the short term. A few respondents questioned whether the Ministry of Health had either the desire or capability to change its resource allocation so as to help reduce inequality. This point was considered especially relevant given the decisionmaking dilemma of funding costly medical treatment for a relatively small number of patients, as opposed to engaging in preventive activities for the entire population.

Although respondents generally felt that health professionals do not have a deliberate role in causing inequality, they also felt that the actions taken by professionals can often contribute to inequality. Almost half of them noted that these professionals lack the awareness and skills needed to assess socio-cultural risk (unlike the skills they do have to assess biological or behavioral risk), or to address the effect on health of socio-economic and other inequalities. A slightly larger proportion of those responsible for academic programs reported this, but there was no difference between Ministry and health plan respondents. Respondents related the lack of awareness, skills and action on the part of physicians in part to inadequate training about health inequality and in part to severe time constraints in daily medical practice.

Some of the respondents indicated that the legal implications of targeted services under the National Health Insurance Law need to be clarified. Finally, several respondents cited the lack of data on health inequality as a barrier to action.

**4.2.3 Frameworks Outside the Health Care System**

The respondents noted that the major population characteristics associated with health status – education, employment, income, etc. – are largely the responsibility of frameworks outside the health care system. In addition, people with low socio-economic status often live in environments that place them at risk of contracting disease; among the factors that contribute to this are poor housing conditions, high population density, poor sanitation, and contaminated food and water. Several respondents noted that in some areas characterized by environmental risk, poverty and
geographic barriers to care exacerbate the individuals' inability to counteract environmental hazards.

**4.3 Addressing Health Inequality: The Role of the Health Care System**

**4.3.1 Health Care Institutions and Health Inequality**

Almost half of the respondents noted that the Ministry of Health has statutory responsibility for the health of the population. As such, they felt it was the Ministry's responsibility to take a lead role in reducing health inequality, and that therefore its specific responsibilities should be defined more clearly.

Almost half of the respondents expressed the view that the Ministry of Health should be playing a pivotal role in reducing health inequality – in part through the services that it provides directly and in part by ensuring that other providers have a defined responsibility, as well as incentives, to reduce inequality. A significant minority of respondents noted that in the past the Ministry has had difficulty addressing the sensitive issue of changes in the allocation of resources. This, in turn, seems to be related in part to the Ministry's difficulty confronting powerful lobbies such as those of health professionals (especially physicians), politicians and severely ill patients with specific, very expensive needs.

**Specific changes suggested by respondents**

The respondents suggested that the following could increase the health system's role in reducing inequality:

- **Recognize that a problem exists:** This recognition was cited by some respondents as a prerequisite to any decision. The point was raised that, at present, the Ministry of Health does not officially recognize the extent and significance of health inequality, and has no stated policy concerning it. Moreover, once it has been recognized that a problem exists, an understanding of the essence and causes of health inequality is necessary to determining the priority that should be assigned to its reduction. Without this appreciation of the issue, little will happen in a planned manner throughout the health care system.

- **Encourage targeted interventions for specific populations:** More than half of the respondents considered this to be a central responsibility of the health care system. They indicated that for inequality to be reduced substantially, differential planning and action would be needed for those groups most affected by inequality in health and health care; some respondents used the term "affirmative action". Targeted interventions would involve identifying high-risk groups or populations (e.g., people with low socio-economic status, the very young and very old, ultra-Orthodox Jews, Muslims, new immigrants, people living in peripheral areas) based on epidemiological data; defining the special care required by these groups and addressing those special needs; and taking steps to promote the provision of equitable access to and delivery of care that would allay risk. It should be noted that respondents expressed a belief that with regard to certain types of service (i.e., medications and transportation to medical facilities), differential supply is prohibited by the National Health Insurance Law.
Strengthen preventive activities: Almost half of the respondents cited a need to increase (evidence-based) health promotion and preventive care at all levels of the health system\(^3\). Respondents referred to health promotion in general and disease-specific preventive actions (which experts refer to as "primary prevention"); to early diagnosis and the clinical management of an established disease (which experts refer to as "secondary prevention"); and to rehabilitation and promotion of access for the disabled (which experts refer to as "tertiary prevention"). Many respondents noted that health promotion, disease prevention, control of chronic disease and rehabilitation are areas in which disadvantaged populations can benefit greatly from health system interventions due to their substantial need for behavioral changes.

Change policy regarding resource allocation: Approximately half of the respondents expressed the view that there should be a change in health system priorities and subsequently in resource allocation. Respondents indicated the need to allocate more resources to initiatives that target the special needs of disadvantaged populations and to initiatives for the entire population in the areas of health promotion, disease prevention and control of chronic disease. Some respondents suggested that some of the resources needed could be freed up by reducing duplication of services. In addition, they noted that policymakers need to confront the competing demands of high-tech curative treatment for specific sick patients and promotion and prevention activities that address the needs of the population as a whole.

In addition, most of those respondents indicated that a reduction in health inequality requires long-term planning and action. Respondents indicated that, at present, this longer-term view of health care delivery is not widely held. This may be due to the method of budgetary allocation both to and within the Ministry of Health. As a result, significant reallocation of resources will be a difficult process and may span many years.

Change financial elements of the National Health Insurance Law: More than half the respondents voiced the opinion that financial changes in the health system have the potential to reduce health inequality. These might include changing co-payments and supplemental insurance (this was cited by almost half of the respondents, most of them among those responsible for health services, especially in the health plans); changing the capitation formula (cited by a few); and introducing incentives for the health plans (cited by a few).

\(^3\) Respondents indicated that, in addition to being of great importance for vulnerable and marginal groups in society, the extension of preventive care has economic value, as it can prevent the incidence of disease, reduce its severity, and reduce or prevent later complications. The present investment in primary prevention (including health promotion) and early detection is relatively limited and has been cut in recent years.
4.3.2 Existing Policies and Programs to Reduce Inequality

When asked whether the organization for which they worked had a defined policy on the reduction of health gaps, most indicated that their organizations did not. Others, however, reported that this was one of the organization's unstated goals (family health centers, district health offices).

When asked what their organizations do to reduce inequality, respondents identified several policies and initiatives whose primary objective is the reduction of inequality. Most of the programs identified were limited in scope to a particular population group or region. These included the expansion of family health centers in the Arab sector, the training of Bedouin nurses in the Negev, the introduction of health promotion programs targeted at new immigrants, efforts to reduce infant mortality, and financial incentives to encourage physicians to practice in the periphery and small settlements.

4.3.3 The Role of Health Care Professionals

Almost all of the respondents indicated that all health care professionals had an important role to play in reducing health inequality and they placed special emphasis on the role of physicians. In this context, respondents referred to the following:

Physician responsibility: Many respondents expressed the view that every physician should see the task of reducing health inequality as an integral part of his or her role. As noted, almost half of the respondents indicated that the services provided were oriented toward meeting the clinical needs of the individual patient rather than toward raising the health status of the population as a whole and reducing inequality.

1. The ability, skills and willingness of physicians: More than half of the respondents related to these aspects of the functioning of health professionals, especially physicians. They indicated that most health care professionals are ill equipped to provide socially and culturally appropriate care for diverse population groups in a heterogeneous society. While respondents did not state that health professionals had deliberately caused inequality, they did state that professionals had contributed to it through a lack of quality in assessing the risk associated with social and cultural status, as well as a lack of skills to handle the effect of these on health – i.e., the dearth of social and cultural competence in the health care system, in general, and of health care professionals, in particular. Respondents indicated that, while it is also accepted that physicians and nurses play no direct role in addressing problems of income or education, they should be able to identify which patients face such problems, understand their relevance to health, and plan clinical actions that will counteract their (deleterious) effect on health, to the extent possible. Respondents indicated that one way to do so is to increase the involvement of physicians in health promotion and prevention.

2. Education of health professionals: More than half of the respondents cited a need for relevant training for health professionals. Respondents suggested that changes should be made in undergraduate, graduate and post-graduate training frameworks, so that they may
prepare health professionals to address the health effects of socio-economic and cultural inequality. At present, little in medical training prepares the physician for the impact he may have on socio-economic and culturally-related health inequality; physicians are not exposed sufficiently (or at all) to the etiology and consequences of socio-cultural inequalities, nor are they equipped to deal with patients from diverse cultural and social backgrounds. Physicians need to be made aware not only of problems arising from language differences, but also of the importance of cultural competency in serving patients from different cultural backgrounds.

3. Specifically, physicians need to be better trained in how to elicit from patients relevant information on their economic and social status, how to present diagnostic and treatment information in a manner which is intelligible to low-income and less-educated patients, and how to ensure that patients' resource constraints and/or lack of social supports do not prevent the implementation of the most medically appropriate treatment plans. Further, it is essential that health care workers appreciate the cultural variability in a patient's understanding of disease etiology and prognosis, and the potential effect of treatment. This will determine the manner in which the professional/patient dialogue progresses toward achieving maximum compliance.

The role of the Israel Medical Association: The Israel Medical Association (IMA), like other health institutions, has no stated policy regarding health inequality. While the IMA has accepted responsibility for setting a standard for medical practice, to date it has not set one for the health of the population as a whole.

Many respondents suggested that a clear statement by the IMA on the importance of reducing health inequality and the key role of physicians in advancing that objective would contribute significantly to the awareness and involvement of physicians. It would also be helpful if the IMA would endorse specific initiatives, such as targeted programs and enhancing the cultural and social competence of physicians. This is especially true of the IMA's Scientific Council, which is responsible for residency training, but which to date has not addressed the issue.

4.4 Addressing Health Inequality: The Role of Systems Other Than the Health Care System

Half of the respondents indicated that health inequality should be a priority for decisionmakers in spheres of influence other than health care. This includes policy regarding income distribution, education (especially of women, and particularly women in the Arab and ultra-orthodox Jewish sectors), transportation, housing standards, and others. The view was expressed that each of these has an important potential impact on health inequality and its reduction. Almost half the respondents placed special emphasis on the role of the Ministry of Education in reducing gaps in the level of health education, as well as education levels more generally.
Respondents indicated a need for a review of the international experience in inter-sectoral mobilization to reduce health inequality, and an analysis of its implications for Israel. The also called for a national inter-sectoral dialogue on the importance of reducing health inequality and strategies for doing so.

4.5 Addressing Health Inequality: The Role of the Top Levels of Government in Policy Development and Resource Mobilization

Almost all of the respondents indicated that health inequality is a national responsibility requiring the involvement of top levels of government (including the prime minister, the Knesset and the Ministry of Finance) and other key actors. More than half of the respondents called for a deliberate top-level decision to reduce inequality, in general, and health inequality, in particular. A few respondents also raised the need to define a quantitative national goal in relation to health inequality. They felt that without a clear national goal – which to date has not been set in Israel – little would change in concrete policies and programs.

The need for top-level involvement was frequently cited with respect to resource allocation to the health sector at the national level. Respondents also related to policy on the funding of health care, such as that concerning the extent of co-payments.

Almost half of the respondents indicated that, in practice, top policymakers give low priority to reducing health inequality (even though, as indicated in section 4.1, more than half of the respondents felt it should be given high priority). They offered a range of explanations for this, including:

- In general, inequality is given very low priority by politicians and others
- Policymakers sometimes refrain from recognizing the existence of significant inequality, as this would require action that is not part of their “agenda”.
- Health is given low priority relative to other important issues; the societal and political agenda does not include health.
- Fatigue has reduced willingness to continue struggling to overcome the many problems that plague the country.
- To date, the responsibility of particular government agencies to address health inequality (and social inequality, more generally) have not been clearly defined.
- Since politicians (including the Minister of Health) remain in office for a relatively short time, they plan primarily for the short term.
- Many decisionmakers do not themselves experience the reality of inequality
- It is those who shout the loudest – not necessarily those who are most needy – who get attention, and resources.

While respondents cited a wide range of actors and institutions that bear some responsibility for reducing health inequalities (ranging from the prime minister to the ordinary citizen), most of these could be grouped into the seven categories listed below. All of the respondents referred to at least one, and usually more, of these categories.
**The Knesset:** Many respondents indicated that the legislative branch of government has a responsibility to reduce health inequality (pursuant to the Knesset enactment of the National Health Insurance Law). Some of them indicated that it is unlikely the Knesset will make this a major focus in the coming years due to competing priorities and other factors.

**The government and government ministries:** More than half of the respondents indicated that the government and the different ministries (i.e. not just the Ministry of Health) have central responsibility for addressing health inequality. Less than half of the respondents defined a crucial role for the prime minister and his office. Similarly, respondents frequently cited the crucial role played by the Ministry of Finance, and the need to develop social policy to determine the allocation of national resources in light of a fundamental reconsideration of national priorities. Respondents also indicated that integrative planning that considers the overall development goals of the country will require collaboration and coordination among various government frameworks if it is to achieve equity in health; respondents indicated that such collaboration would make more of a contribution than could be made by any one ministry working alone.

**Local authorities:** A few respondents defined an important role for local authorities, who are close to those who are affected by health inequality and hence are also aware of the specific difficulties with which they contend. In many key areas (such as education, environment, social welfare, and the use of public spaces), the local authority plays an important role in planning and service delivery, in partnership with the national government.

**Religious leaders:** Respondents also stressed the potential role of religious leaders of both the Muslim and ultra-orthodox Jewish populations, whose esteemed status and influence could be used in the promotion of health-related activities, and hence could help to reduce health inequality.

**The academic community:** Less than half of the respondents cited the academic community as having an important role to play in conducting relevant research and "marketing" its findings so as to influence those responsible for action. Its role in the appropriate training of health care professionals is also crucial.

**Employers:** Employers in both the public and private sectors have both an interest in and responsibility toward reducing health inequality, as they are directly affected by the negative effects of morbidity on absenteeism and performance.

**A national council or framework:** According to a few respondents, a new national council or other such framework should be established and made responsible for addressing health inequality. They indicated that the framework should be external to individual ministries and independent in its recommendations. This council should be permanent rather than ad hoc, and should have the use of independent resources to promote its agenda.
4.6 International Perspectives, Strategies and Interventions

One of the objectives of this study was to summarize the professional literature and international experience in addressing health inequality.

4.6.1 The Professional Literature on the Role of Health Systems in Addressing Health Inequality

The international literature emphasizes the important role of health systems and other social systems in reducing health inequalities. Moreover, in recent decades, many countries have realized that health inequality has important social, economic and employment implications. As a result, a variety of interventions have been carried out internationally – from comprehensive government policy and national programs addressing health inequality to isolated, one-time interventions.

Indeed, international experience demonstrates a number of ways that health care systems can reduce the extent of health inequality by intervening at several levels:

1. Designing comprehensive health policy that aims both to prevent health inequality and reduce existing inequality.
2. Engaging in macro-level system design (such as universal health insurance coverage and progressive financing of the health care system).
3. Implementing other types of government policy, such as introducing financial incentives to physicians and other providers to provide services in underserved areas or reducing financial barriers to care to a minimum.
4. Training health professionals to address the unique needs of low-income persons and cultural and racial minorities.
5. Targeting service delivery programs and prevention efforts to address the special needs of vulnerable populations.

Different countries are at different stages of recognizing the existence of health inequality, being willing to act to reduce it, and undergoing a process of change. As indicated in the full report, Whitehead has developed a staged model entitled "The Action Spectrum on Inequalities in Health" (Whitehead, 1998), which begins with an awareness of a problem and proceeds through acceptance of responsibility to focused local activities and finally to comprehensive national policies and action plans. Many experts believe that without the existence of a national policy that has political support, and which thereby facilitates the development of dedicated policies and programs to reduce inequality, efforts to reduce health inequality may be limited and sporadic.

In the sections that follow, we first summarize the national strategies and action plans adopted by several major countries, and then discuss several types of field-level intervention.
4.6.2 National Strategies and Action Plans
Several countries have developed comprehensive national strategies and action plans to reduce health inequality. In this section, we summarize key dimensions of the approaches undertaken in the United Kingdom, Sweden, The Netherlands and the United States.

The United Kingdom
The UK appears to have the most developed and detailed strategy. A key policy document, "Tackling Health Inequalities: A Plan for Action", was issued in 2003 by the UK Department of Health and endorsed by the prime minister, who had in fact initiated the planning process that produced this document. The policy presented in the document grew out of decades of public discussion of health equality in the UK, beginning with the publication in 1980 of the landmark Black Report, which documented the extent of health inequality in the UK. However, more than 20 years passed after the publication of the Black Report before political and social conditions had ripened for a major initiative regarding health inequality.

The UK policy document sets clear quantitative targets for reducing health inequality as reflected in two key measures – life expectancy and infant mortality – with a goal of reducing gaps by 10%. The strategy for achieving these targets includes a call for action – in some cases specified in detail – on the part of the health care system, public health agencies, and the broader social system. The Department of Health is assigned the lead role in many areas (e.g., smoking, physical activity, access to care), while in other areas the lead role is assigned to another department, such as social security, education, employment or housing (e.g., child poverty and adequate housing).

An extensive list of challenges (e.g., to encourage tooth brushing in low-income areas) and specific actions (e.g., to upgrade primary care facilities in low-income areas) have been assigned to the Department of Health (see Figure 1). In some cases, specific budgetary allocations have been made (e.g., £150 million have been allocated to establish mental health centers in low-income areas).

Regional government has been required to develop an action plan in keeping with the national strategy, and many regions have done so. The regional plans tend to be quite specific with regard to the actions to be undertaken and the local partners to be involved.

The UK strategy calls for monitoring progress on 12 leading indicators, with reports submitted by the Department of Health to a top-level cabinet subcommittee. The first comprehensive status report was published in 2005, two years after the adoption of the action plan.

General practitioners are called upon to play a major role in promoting healthy behavior and reducing health risks. Moreover, the primary care trusts of the National Health Service (NHS) (which bring together many general practitioners who practice in the same area) are expected to take the lead locally in the NHS's efforts to reduce health inequality. They are also expected to work closely with NHS trusts, local authorities and other partners in public health and prevention,
and with agencies responsible for wider determinants of health, such as housing, transportation and education.

**Sweden**

A key document, "National Public Health Objectives for Sweden", was issued in 2003 by the Swedish National Institute of Public Health and approved by the Swedish Parliament (which had initiated the planning process). As its name implies (and in contrast to the UK policy document), the Swedish policy document did not relate only to the reduction of health inequality, but rather treated it as a major component of a broader effort to advance public health. As in the UK, the Swedish effort to reduce health inequality had top-level political endorsement, with leading politicians overseeing the development of the plan.

The document defines 11 key public health objectives in qualitative terms. It focuses on the aims of the broader social system – improved education, reduction of poverty – as a step on the way to achieving these objectives. For example, the document calls for economic and social security, a healthy work life, and healthy and safe environments and products. The Swedish plan does call for a variety of public health initiatives, but it gives much less emphasis to what the curative health care system should be doing to reduce inequality (only one of the 11 objectives specifically concerns the curative health care system). The report contains few concrete recommendations for action to be taken by the health care system. County Councils are expected to take action to advance the objectives, and periodic progress reports are to be made to the Swedish Parliament regarding activities and achievements at both the national and local levels.

**The Netherlands**

"The National Dutch Program on Socio-economic Inequalities in Health" was published in 2001 by the Steering Committee of the Second National Research Program (on health inequality). Like the UK document, this document propounded "stand-alone" health equality policy. It grew out of two major research efforts initiated by the government, the first of which examined the extent of health inequality and its sources and the second of which examined the effectiveness of various interventions. Like the documents published in the UK and Sweden, the Dutch document outlines major objectives regarding health inequality, which have been endorsed by top levels of government.

The Dutch policy document makes extensive use of quantitative targets. These are defined for 26 key objectives, and cover issues such as infant mortality, life expectancy, smoking, and physical activity. The document calls for reducing health inequality by 25%, and as such is more ambitious than the UK document. As was the case in the UK, both the health system and the broader social system in The Netherlands are expected to play a major role in reducing health inequality. However, the Dutch document is less specific than the UK document in stating the

---

4 In 2000, the Swedish National Public Health Council issued 19 quantitative public health objectives; these concerned population averages and the percentage of the population satisfying various conditions, rather than differences among population groups.
particular actions to be advanced and who is responsible for advancing them. The Dutch document also highlighted the need for more research on the effectiveness of interventions to reduce health inequality. The document relates to the need to adapt health promotion efforts regarding nutrition and smoking to the needs of lower socio-economic groups and the need to improve physical working conditions.

The United States
In 1998, the president of the United States declared that racial and ethnic inequality in health was unacceptable, and called for a major new initiative to eliminate them. This declaration spawned two major efforts, one of which was new, initiated by the government and carried out by an independent body, and the other of which involved a major addition to an existing government effort.

In 1999, the US Congress commissioned the Institute of Medicine to prepare a report on racial and ethnic disparities in health care. Note that the mandate was unique in two senses: Its focus on disparities related to race and ethnicity (rather than to income, education, insurance status, etc.), and it focused almost exclusively on clinical health care (as opposed to the role of public health interventions and broader social change that could reduce differences in health status). The Institute of Medicine responded by making specific recommendations about the action the health care system should take to reduce disparities in clinical care (see Figure 2). These were published in 2002 in a report entitled "Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care".

Many of the recommendations were aimed at those responsible for designing the health system (e.g., to avoid fragmentation of health plans along socio-economic lines), while others were aimed at physicians (e.g., to implement culturally appropriate patient education programs). These recommendations have not been formally adopted by the US government, but Congress has mandated the Department of Health and Human Services to report periodically on progress. While no explicit quantitative targets were set, the implicit target emanating from the president's declaration was to completely eliminate disparities in care.

President Clinton's declaration also influenced the US's "healthy people" project, according to which the Department of Health and Human Services is to set health targets for the nation every ten years. Whereas "Healthy People 2000" called for reducing health inequality, "Healthy People 2010" (published in 2000) called for eliminating them completely. Note that, like the Swedish document, this document did not address equality alone, but rather set public health objectives, among which equality objectives played an important role. The US document thus had only two overall objectives: (1) to increase quality and years of life; and (2) to eliminate health disparities.

"Healthy People 2010" is an extensive and detailed document, which sets over 400 quantitative objectives (which relate either to health status, health behavior, health risks, or health care interventions) and 10 leading indicators. With regard to each of these, the document calls for
completely eliminating inequalities related to race, income, education and other key parameters – an extremely ambitious, and probably unattainable, objective.

In discussing how these objectives are to be achieved, "Healthy People 2010" pays substantial attention to both clinical health care and public health measures, and relatively little attention to the broader social system. The document refers to many specific actions that the health system could undertake to reduce inequality. Some of these actions are presented as quantitative objectives in their own right (for example, increasing the proportion of low-income children and adolescents who receive any preventive dental service from 20% to 57%). In other cases, quantitative objectives are set for health status measures, with the actions to be taken being presented as possible mechanisms for achieving those objectives.

Individual states have been encouraged to develop their own "Healthy People 2010" plans; to date, approximately half of them have done so.

Progress on all objectives is being monitored on an ongoing basis, and full interim reports are presented to the Congress every five years. Although this monitoring effort focuses on the national level, data on many of the objectives are available at the state level, as well.

**Key similarities and differences**

National efforts to reduce health inequality in the UK, Sweden, The Netherlands, and the US have all involved encouragement from top government leaders; except for that produced by the US Institute of Medicine, they have all been formally endorsed by the respective governments. They also share a commitment to ongoing monitoring.

The efforts differ, first and foremost, in the extent to which they focus on the health care system and the extent to which they provide specific recommendations on the actions the health care system can and should undertake. Effort in the US (particularly the Institute of Medicine report) is most focused on the health system, while that in Sweden is most focused on the broader social system.

The efforts also differ in the extent to which they set quantitative objectives for reducing health inequality, and the extent to which their objectives are ambitious. Sweden, which does not include quantitative objectives in its list of 11 public health objectives, is at one extreme, while the US is at the other, calling as it does for the elimination of all disparities in a large number of quantitative measures.
**Figure 1: Specific Health System Actions Called for in the UK Plan'**
"Tackling Health Inequalities: A Programme for Action"

1. Improve ante-natal bookings for low-income women  
2. Increase breastfeeding rates for low-income women  
3. Take lead on reformed welfare food scheme  
4. Promote tooth brushing in low-income areas  
5. Take part in multi-sector teams to empower parents and enhance their skills  
6. Improve school-based health education  
7. Contribute to efforts to improve prison health, health care of the homeless  
8. Improve health care of the disabled, etc.  
9. Work with the Department of Education on teen pregnancy issues: prevention and assistance  
10. Invest in smoking cessation, improved nutrition, physical activity and accident prevention in low socio-economic areas  
11. Upgrade primary care facilities in low socio-economic areas  
12. Improve access to substance abuse treatment/prevention programs in low socio-economic areas  
13. Take action to reduce stigma in seeking mental health care in allocating resources among primary care trusts - match resources with needs  
14. Focus resources on those with greatest need within primary care trusts  
15. Place more emphasis on prevention, especially of chronic heart disease and cancer, which account for most of the inequality in health  
16. Set clear targets for equity improvement at all levels and in all units of the NHS

**Examples with budget allocations**

Address mental health needs of children by establishing comprehensive child and adolescent mental health services in all areas by 2006. - Action: DH (Department of Health), with an extra £250m over the next three years  
1. Reduce the duration of untreated psychosis to three months by 2004 by establishing early intervention teams and provide support for the first three years for all young people who develop an episode of psychosis. - Action: DH  
2. Meet the language needs of asylum seekers and refugees by developing an online resource of health information in key languages and a national scoping study on models of providing interpreting services for NHS Direct by 2003 – Action: DH  
3. Improve the social and health context of school life by targeting the healthy schools programme in the most deprived communities – Action: Department for Educational and Skills and Department of Health; Spend £ 4.7m in 2003/4  
4. Improve primary care facilities, especially in inner cities and urban areas by £1 b programme to refurbish or replace 3,000 family doctors' premises and establish 500 one-stop centres by 2004 - Action: DH  
5. Improve access to cancer services by treating all cancer patients within a month of diagnosis and within two months of urgent referral by 2005, Action: DH, Spend: an extra £ 570m.
Finally, the efforts differ in the extent to which the strategies for reducing health inequalities are embedded in broader health objectives. Here, the official U.S. document (Healthy People) and Sweden share a common "embedded" approach, while Holland, the UK, and the US Institute of medicine reports are "stand-alone" equality strategies.

**Figure 2: Systemic Strategies Recommended by the US Institute of Medicine Report "Unequal Treatment" to Reduce Racial and Ethnic Disparities in Clinical Care**

1. Legal, regulatory and policy interventions
   a. Avoid fragmentation of health plans along socioeconomic lines
   b. Strengthen stability of patient-provider relations in publicly funded health plans
   c. Increase the proportion of underrepresented minorities in health professions
   d. Apply managed care protections (legislation) to publicly funded health plans
   e. Enforce civil rights in health care

2. Health system interventions
   a. Promote consistency and equity through evidence-based guidelines
   b. Structure payment systems to enhance availability of services to minorities
   c. Enhance patient-provider communication and trust by providing financial incentives for practices that reduce barriers and encourage evidence-based practice
   d. Support the use of interpretation services where community need exists
   e. Support the use of community health workers
   f. Implement multi-disciplinary treatment and preventive care teams
   g. Implement culturally appropriate patient education programs (including use of new technologies)

3. Cross-cultural education in the health professions

4. Data collection and monitoring

**4.6.3 Programmatic Initiatives**

Many of the programmatic initiatives in countries around the world involve promoting healthy behaviors, screening for early detection of illnesses, and chronic disease management. These initiatives often involve special outreach efforts and/or special programs targeted at high-risk or underserved populations. Table 1 presents a list of field-level interventions to reduce health inequality that have been demonstrated to be effective; these were taken from a recent systematic review of the literature (Mackenbach et al., 2002). Many of the problems they address exist in Israel, such that the potential for adapting them to Israel is substantial. The interventions developed in other countries have targeted a variety of sources of inequality:

- The allocation of insufficient resources for the care of vulnerable populations.
- A lack of universal health insurance coverage.
- Financial barriers to care within a national health insurance system.
- Geographic barriers to care.
- A lack of cultural sensitivity in health care provision.
- Health problems that are found predominantly among the poor.
- Differential clinical quality.
Resource allocation
Some interventions have aimed to channel more resources to vulnerable populations. Several countries, most notably the UK, have taken dramatic steps to shift resources to low-income areas, in some cases by concentrating public health and other services provided directly by the government to those areas in which need is greatest. Other countries with national health insurance systems, such as Belgium and Germany, have taken the individual's socio-economic status into account when allocating resources to health insurers or regions.

Targeted programs
Many experts and policymakers have noted a need for policies and actions that address the special needs of the very young and the elderly, women, minority ethnic and racial groups, and people with disabilities. There is consensus that each country must identify both the groups in its population that are at greatest risk and the greatest health problems facing those groups. Examples of programs to address health inequality targeted at specific groups are those implemented in the US for African-American, Asian and Latino populations.

Health promotion and disease prevention
In addition to targeted programs, universal programs for an entire population, which address health problems that are particularly acute in vulnerable populations, can also be effective in reducing health inequality. Consequently, experts have noted that health inequality might be reduced by giving greater priority and resources to health promotion and disease prevention. The rationale for this is clear. Primary prevention, which includes activities that affect the healthy individual, is very frequently not an integral part of accepted behavior in socially and culturally high-risk populations. Whether related to risk-taking behavior such as smoking, or preventive activities such as physical activity or healthy eating habits, these population groups frequently do not receive health promotion messages in a manner appropriate to them. It should be noted, however, that programs directed equally to the entire population may increase inequality if they are adopted more readily by higher socio-economic groups. Furthermore, the potential acceptance of tests for early diagnosis should be considered in the framework of the overall concept of disease causation prevalent in different population groups. The Netherlands, Sweden, Canada, New Zealand and other countries have taken significant steps in this direction.
Table 1: Analysis of Reportedly Effective Interventions Aimed at Low Socio-economic Groups

<table>
<thead>
<tr>
<th>Health Topic</th>
<th>Goal</th>
<th>Target Population</th>
<th>Outreach</th>
<th>Outgo</th>
<th>Education to Modify Behavior</th>
<th>Counseling on Self-care</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuberculosis</td>
<td>Prevent infection</td>
<td>Low socio-economic groups</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Regulation</td>
</tr>
<tr>
<td>Breast screening</td>
<td>Screening</td>
<td>Low socio-economic women</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cancer</td>
<td>Screening</td>
<td>Low socio-economic Vietnamese</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asthma</td>
<td>Control</td>
<td>Low socio-economic groups</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Breastfeeding</td>
<td>Health promotion</td>
<td>Low socio-economic women</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Cervical cancer</td>
<td>Screening</td>
<td>Low socio-economic women</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Passive smoking</td>
<td>Promote cessation</td>
<td>Low socio-economic women with children</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Breastfeeding</td>
<td>Health promotion</td>
<td>Low socio-economic prenatal women</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>MCH outcomes</td>
<td>Health promotion</td>
<td>Low socio-economic prenatal women</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Breast and cervical cancer</td>
<td>Screening</td>
<td>Abnormal PAP smear</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Access to care</td>
<td>Prevention - UNK</td>
<td>Low socio-economic groups</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Access to care</td>
<td>In emergency room</td>
<td>Homeless</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hypertension</td>
<td>Control</td>
<td>Inner city African-Americans</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Intent to get pregnant</td>
<td>Health promotion</td>
<td>Low socio-economic women in family planning clinics</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-term birth</td>
<td>Tertiary prevention</td>
<td>Low socio-economic and high risk women</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Antisocial behavior</td>
<td>Health promotion</td>
<td>Adolescents and their parents</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Access to care</td>
<td>Health promotion and screening</td>
<td>Older adults</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Substance abuse</td>
<td>Promote cessation</td>
<td>Pregnant cocaine addicts</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Cultural responsiveness**
The ability of universal programs to reduce health inequality seems to depend on their differential attention to differing levels of need and understanding; otherwise, their result can be a widening of health inequality. Such programs should include making health care culturally appropriate and health care professionals more culturally competent.

Awareness is increasing of the relevance of differential clinical quality in care delivery to population groups. The US Institute of Medicine publication on "Unequal Treatment" has highlighted the differential quality of care provided to cultural and racial groups with access to health care services and the responsibilities of health care services and professionals to ensure equitable quality of care, irrespective of the patient's social or cultural background.

Increasing the cultural sensitivity of health care is a relatively new emphasis in international efforts to reduce health inequality. As recently as 10 years ago, this issue was receiving little attention. Today, efforts in this regard focus on both populations with low socio-economic status, and immigrant and ethnic groups in the US (Asians, Latinos), the UK (Asians, Africans and West Indians), Germany (Turks), New Zealand (the Maori population) and Australia (the Aborigines).

Training health professionals in cultural competency includes more than just imparting an appreciation of the differing needs of diverse populations or of the need for translation services. It requires imparting an understanding of the manner in which cultural and/or religious background affects the way in which people conceive health and disease, as well as their appreciation of the potential for changing the course of disease – whether through prevention or treatment. This can be acquired by planned training at all levels (undergraduate, graduate and post-graduate), as has been implemented in several countries, which provides professionals with the skills they require to address the needs of vulnerable populations. However, there is also a need for health care institutions to adopt policies and programs that are conducive to their becoming culturally competent providers of health services.

**5. Possible Elements of an Action Plan to Reduce Health Inequality in Israel**

This section presents the main ideas for action that have emerged from our survey of Israeli leaders, our review of the professional literature, and our analysis of international experience. Overall, there was a great deal of consistency in the sets of ideas that emerged from these three sources.

Moreover, the sources are complementary. Survey respondents identified a wide range of areas in which action has the potential to reduce health inequality, as well as general directions that are likely to be endorsed by Israeli leaders. However, they usually did not identify specific interventions. International experience provides concrete examples of how the general directions
identified by respondents can be put into practice, and many of these examples are relevant to
Israel. These directions and examples relate to the three different modalities of action: those
undertaken by the health system alone, those undertaken by related systems (such as the
education system or the environment), and those to be undertaken jointly by the health system
and related systems.

The directions that emerge from the study fall into two major categories: (1) mobilizing for
action, and (2) concrete policy changes and field-level interventions. These are presented for the
consideration of Israeli policymakers, planners and those with responsibility for the health of the
population, both within the health care system and outside it.

Before reviewing these directions, it is important to briefly recapitulate how survey respondents
and the international literature addressed two key, related, issues: (1) Why should Israel, or
indeed any country, place a high priority on reducing health inequality? (2) How should this
priority be considered in comparison to other important issues facing Israeli society?

Answers to these questions were provided by both our respondents and the international
literature. The respondents were of the view that health inequity is a threat to solidarity, and
indicated that it is an important requirement for maintaining the fabric of society. The
respondents and the literature indicated that, in addition to the human cost of mortality and
morbidity, health inequality has a very significant economic cost for the entire population, due to
health care costs that could have been avoided, the loss of work days, and losses to the economy
and society from premature mortality. These place health inequality high on the agenda of
societies everywhere, and particularly that of Israel.

5.1 Mobilizing for Action
This section addresses the issues of who should be assigned responsibility for reducing
inequality, and how to mobilize efforts to translate those responsibilities into action.

Increasing the priority given to reducing health inequality
Most survey respondents – both those inside the health system and those outside it – expressed
the view that the reduction of health inequality should be assigned a high priority both within and
outside the health care system. They also indicated that this is not so today. They expressed the
concern that health inequality has costs in terms of population health (morbidity and mortality),
the economy (health care expenditures and lost work days) and the social fabric (the sense of
solidarity). The experience of other countries, particularly that of the UK, demonstrates that it is
possible for countries to change the priority assigned to reducing health inequality; it also
provides insight into how such change can be brought about. For example, international
experience underscores the crucial role of top-level political initiative in raising the issue, as well
as in supporting and promoting action to address it.
Assigning the health care system a major role in efforts to reduce health inequality while insisting that related social systems (e.g., education, housing, employment, welfare and transportation) also take steps to advance this objective

Almost all of the survey respondents expressed the view that the health system has the capacity to reduce health inequality and the responsibility to do so. At the same time, the respondents frequently noted that many key interventions lie within the jurisdiction of other social systems. Respondents indicated that this is of special importance, as some of the major factors that cause health inequality are in their field of responsibility. This dual approach has been endorsed by the professional literature and adopted by many of the countries that have made a serious effort to reduce inequality. Concrete ideas about what other social systems can contribute can be gleaned from the UK and Swedish strategies, and documents published in the UK and US elaborate many useful and concrete ideas about what health systems can contribute. International experience, survey respondents and the professional literature also emphasized a need for collaborative effort between the health system and related social systems to reduce risky health behaviors and environmental and occupational risks.

Expecting that, within the health system, both government and non-government actors will take initiative to reduce health inequality

Almost all of the respondents indicated that the Ministry of Health has an important leadership role to play. At the same time, many expressed the view that non-government entities (e.g., hospitals, health plans, and physicians) also have an independent responsibility to take action. This combination of government leadership and action by various providers is a prominent feature of international strategies.

Developing a national strategy and action plan to reduce health inequality, with top-level endorsement

Almost all of the respondents indicated that health inequality is a national responsibility requiring the involvement of top levels of government. Some of them highlighted the need to develop a comprehensive national strategy for reducing health inequality in Israel. Experience in the UK, The Netherlands, Sweden and the US indicates that countries can develop such strategies and mobilize top-level government to endorse them. In at least some of these countries, there are encouraging signs that the adoption of such strategies may be mobilizing real change in the field. The variety that characterizes international experience highlights key design options, which Israeli policymakers ought to consider, including (1) how ambitious to be in choosing targets for inequality reduction; (2) whether to link efforts to reduce inequality to broader efforts to set public health targets; and (3) the extent to which to focus on actions to be taken by the health care system and by related social systems. In light of international experience, an important fact needs to be stressed: The reduction of health inequality for an entire population takes a long time. This should be considered both when determining policy and when detailing a plan of action.
Investing heavily in dissemination of information on the extent and nature of health inequality in Israel
The survey revealed that most health system leaders were not aware of the scope of health inequality in Israel, particularly that related to clinical care. Moreover, the survey itself (in which respondents were presented with data at the start of the interviews) illustrated how sharing such information could be an important tool for encouraging health system leaders to assume responsibility for reducing health inequality and join in the search for solutions. This is consistent with international experience; in several of the countries we reviewed (e.g., The Netherlands and the UK), dissemination of information on inequality was an important early step in efforts to mobilize support for reducing health inequality.

Assembling and disseminating information on existing initiatives to reduce health inequality
Most survey respondents were unable to pinpoint more than a few Israeli initiatives to reduce health inequality, either within their own organization and or in other organizations. Respondents' familiarity with specific initiatives in other countries was also limited. The international experience suggests that providing more information about such initiatives could be an important prod to action. Compendia of promising programs have been assembled in other countries, with some focusing on specific countries and others reviewing programs from a range of countries. These could be made more widely available in Israel. In addition, policymakers and senior managers in Israel might consider developing similar compendia based on either national experience or that of a particular organization. Dissemination of any available information on the impact of these programs could also be useful.

Encouraging health providers to collect data on patients' social, cultural and economic characteristics
Although this was not cited by many survey respondents, the professional literature has recently begun to emphasize the importance of such data in facilitating responsive clinical care for individuals, analyzing the causes of health inequality, and providing an information base for planning and monitoring at the aggregate level. This refers to the collection of such data both at a national level and by various constituents of the health care system (health plans, hospitals). Countries in western Europe, North America and elsewhere have begun moving in this direction.

5.2 Possible Directions for Concrete Policy Changes and Field-level Interventions in the Health Care System
This section reviews four major types of intervention, which emerge from our survey and international experience: targeted programs, training health professionals, changes in resource allocation, and changes in incentives.

5 A key issue in Israel is whether the national health insurance quality indicators project, and whether proposed national computerized medical records will collect and publish information by region, nationality, and/or socio-economic status.
Targeted interventions
More than half of the respondents cited a need for targeted interventions, which would address the special needs of vulnerable populations. Respondents also identified key target populations, as well as specific diseases and health behaviors that should be given priority by these special interventions (see Figure 3). A wide range of targeted interventions have been implemented in developed countries, many of which emphasize outreach, clinical preventive services, changing health behavior and/or controlling chronic disease. The professional literature endorses targeted interventions as an efficient and cost-effective tool for reducing health inequality. It underscores the need to focus on the major health problems facing vulnerable populations, and to design interventions that take into account the target populations' economic, social, religious and cultural characteristics. Many such initiatives have been evaluated; review articles have summarized which of them have been proven effective. Targeted interventions include both field-level programmatic interventions as well as special financial arrangements. For example, in Israel, many respondents called for reducing the burden of co-payments on low-income persons, either by eliminating them completely or by making them progressive, relative to income. This was felt to be particularly important in the case of preventive services.

Figure 3: Spotlight: Examples of Priority Needs Identified by Respondents, which Could Be Addressed by Targeted Interventions

- Geographic inequality in provision and quality of services in the country as a whole (center and periphery) as well as in the large cities
- Low socio-economic population groups, with clear identification of priority health challenges (infant mortality, control of diabetes)
- Specific communities with widely differing cultural backgrounds – the ultra-orthodox Jewish community, and Arab communities with different religious affiliations. This includes culturally competent health care, involving providing independent translators (i.e. not family members) and training health professionals
- Unequal distribution of services and inequitable access to health care services
- Specific health and disease conditions in which inequality exists in incidence, prevalence or outcome (e.g., diabetes, mental health)
- The very old and the very young, whose health is particularly vulnerable to widening socio-economic differentials

Training health professionals
Almost all of the respondents expressed the view that health care professionals and their professional associations can – and should – play a major role in reducing health inequality in Israel. However, they also indicated that – to date – most health professionals have not been adequately trained for this responsibility. They also expressed a need for health professionals to recognize the existence of the problem and their role in its reduction.
Here, Israel may be able to learn a great deal from other countries, including the US, various European countries, and Australia, which began several years ago to train health care professionals on how to respond to the consequences of needs arising from the socio-economic status and cultural background of vulnerable populations. This effort has been integrated into undergraduate and residency training, as well as into subsequent in-service training (see Figure 4).

### Figure 4: Spotlight: Possible Concrete Steps Related to the Training of Health Care Professionals

- Bring those responsible for the academic training of health professionals to accept their role in reducing health inequality and in developing the necessary curricula
- Interact with the Scientific Council of the IMA to include health inequality as a subject in residency training
- Recommend the inclusion of health inequality in in-service training in hospitals and community frameworks for all health professionals
- Engage hospitals, health plans and the Ministry of Health in a multifaceted action program, planned and funded over time (and not only for one fiscal year)

**Changes in resource allocation**

Approximately half of the survey respondents expressed the view that more resources should be dedicated to the reduction of health inequality in Israel. Some felt that at least some new funds would need to be allocated to the health system, while many others felt that the required resources could be found within the health system – i.e. through a process by which there would be a reassessment of priorities, especially by the Ministry of Health, and subsequent reallocation of the available resources, in part by reducing duplication of services. However, it was stressed that this might require potentially difficult interaction between powerful health lobbies and politicians. Respondents indicated that, in the past, this was not a simple matter. International experience, particularly that in the UK, suggests that it is possible for health systems to mobilize substantial resources – from both within the health system (e.g., the RAWP formula for allocating NHS resources among regions) and from outside it – to reduce health inequality.

Many respondents called for greater funding of health promotion and disease prevention as a way to reduce health inequality. This was considered to be very important, as much of the existence of health inequality in lower socio-economic population groups might be avoided by preventive activities in primary care. Such activities are endorsed by the professional literature; examples of them can be found in all the national programs reviewed in this report.

---

6 A key issue in Israel is whether to expand the mandate of the committee that decides on additions to the national health insurance benefits package to include consideration of health promotion programs.
**Changing incentives**

Few survey respondents spoke of the need to enhance incentives to health plans and physicians to reduce health inequality. However, the literature on health economics suggests that policymakers should consider this carefully, as the dissemination of information and the government's calls for action may not be sufficient to lead non-government actors to increase their investment in reducing health inequality. Several countries have adopted policies that give providers an incentive to invest in vulnerable populations, for example by including socio-economic status in health plan capitation formulas\(^7\) and offering higher compensation to physicians who care for patients from vulnerable populations. An additional way to encourage providers to work toward reduction of health inequality is for governments or foundations to provide special funding for promising new initiatives.

**6. Concluding Remarks**

The research team has initiated intensive dissemination of its findings, presenting them and possible directions for action to professionals at various levels of the Ministry of Health, the health plans, and the hospitals (the latter are a major academic and professional power base in Israeli medicine). Dissemination aims to both raise awareness of this issue and begin a process that will lead to the planning of interventions to reduce health inequality.

Clearly, no single activity referred to in this report will alone have a decisive impact on the overall level of health inequality for the entire population. Nevertheless, each of them may make a contribution if well planned and implemented on an ongoing basis over time.

Survey respondents and the international literature ascribe particular importance to the commitment of key actors – the government, politicians, the Ministry of Health, the health plans, health professionals, academia, community leaders and private industry – to the development of integrated policy and action to reduce health inequality, in and outside the health care system.

This is the clear message arising from both our qualitative study and our understanding of international experience.

---

\(^{7}\) This issue is clearly relevant to Israel, where approximately NIS 30 billion of national health insurance money is distributed each year to the health plans on the basis of a capitation formula which, at present, takes into account age only. A possible change in this formula would be to include parameters reflecting the socio-economic status of individuals or localities (however, there are still technical challenges to estimating their effect). This might help reduce health inequality by increasing incentives to the health plans to improve services for low-income individuals and localities. Alternatively, funds could be earmarked for targeted interventions.
Selected Bibliography


Appendix: Figures Shown to Respondents

After the topic of health inequality was introduced to the respondents, they were shown a series of figures, which illustrated aspects of health inequality. This was done to ensure that all of the respondents had the same basic information about health inequality before we asked more substantive questions.

The figures were presented to respondents in the following order:

1. Figure 1: Age-adjusted Mortality Rate, by Socio-economic Index of Localities. In this index, the measure of socio-economic status includes income, education, and employment.

2. Figure 2: Age-adjusted Odds Ratios of Women's Mortality, by Years of Education and Cohort. The researchers chose two cohorts of women at two points in time, and followed those cohorts for a period of years. A cohort of women age 45-69 and a cohort of women age 70-89, each, were chosen from the 1983 and 1995 censuses, and followed until 1992 and 2001, respectively. The mortality of each cohort is presented by the women's years of education at the time of the respective censuses (1983 and 1995). The findings were similar for both cohorts – that is, that mortality increases as years of education decrease. The gap between mortality rate and years of education was found to increase over time.

3. Figure 3: Infant Mortality, by Town. This figure highlights a sevenfold overall difference in infant mortality rates among towns, and a fivefold difference within Jewish and Arab towns.

The respondents were then asked to assess the causes of the relationship between mortality or infant mortality and social and cultural characteristics.

4. Figure 4: HgbA1c and Socio-economic Status, by Town. HgbA1c is a measure of the level of control of diabetes, and this figure indicates the relationship between diabetes and the socio-economic status of the town in which the treating clinic is situated.

5. Figure 5: Women Who Underwent a Mammography, 1999-2000. These data show substantial differences in the percentages of women who underwent a mammography, by town.

The respondents were asked to assess the reasons for differences in treatment outcomes and responses to invitations to screening tests that could lead to early diagnosis, by socio-economic status.
Figure No. 4

ADR by SOCIOECONOMIC INDEX of LOCALITIES

Figure 2: Age-adjusted Odds Ratio of Women's Mortality, by Years of Education and Time Period

Source: Manor et al. (unpublished)

Infant Mortality Rates, Mean for 1993-1997

Figure 4: HgbA1c and Socio-economic Status of Town/Village

Source: Clalit Health Services
Figure 5: Women Who Underwent a Mammography, 1999-2000

Source: National Breast Cancer Detection Program