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HEALTH CARE IN ISRAEL

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In general, the health of Israelis compares favorably with that of residents of other developed countries. In 1996, the average infant mortality was 6.3 for every 1,000 live births, similar to the average for countries whose per capita GNP is high (World Bank, 1998: 22). Life expectancy at birth is 75.5 for men - slightly higher than the average for high-income countries, and 79.5 for women - somewhat lower than the average for high-income countries (ibid: 18). Whereas in Europe women outlive men by an average of 7 years, in Israel the difference narrows to 4 years (ICDC, 1998: 55-57). Two-thirds of all deaths in Israel are caused by heart disease, cancer, and cerebrovascular disease - the leading causes of death in the developed world.

Israel belongs to that part of the world in which people generally eat too much rather than too little: studies (based on local rather than national samples) have found about a fourth of subjects to be overweight; and 16% of 20-64 year-olds to have high cholesterol levels. Other localized studies have shown that 30% of men and 25% of women smoke. Although alcohol consumption is low compared to that in European countries (ICDC, 1997: 16-17), it appears to be increasing among the younger age groups.

In Israel, pre- and post-natal, geriatric and mental health services are provided by the Ministry of Health, while curative services are dispensed by four non-profit health funds - General (insuring about 60% of the population), Maccabi (20%), Meuhedet (10%) and Leummit (10%). The funds operate community-based curative clinics and regional specialist centers for members (General and Maccabi also have their own hospitals). They contract with hospitals and other public and private service providers on behalf of their members.

Israel has an extensive preventive care network of about 1,000 public Mother and Child clinics dispersed throughout the country that provide pre- and post-natal care for women, well-baby care, and on-time inoculations for 91 % of Israeli infants and children. However, some services considered primary in other developed countries - dental care, mental-health services, long-term nursing care for the elderly and contraceptives for women - are not an integral part of the public health care system.

In 1995, there were 259 hospitals in Israel with 5.91 beds

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per 1,000 persons, a ratio that is on the decrease (average ratio of OECD countries - 7.5 per 1,000 in 1992). The average duration of hospitalization for persons in general care has also decreased, from 7.2 days in 1976 to 4.4 in 1996 (CBS, 1997a and 1978, Table 24.8). Annual general hospitalization days per 1,000 persons have been decreasing steadily as well: in 1996, the figure was 793 (ibid). The average occupancy rate of hospital beds is 94% - indicating a high level of efficiency (ICDC, 1997: 269). In contrast, the average occupancy rate in OECD countries was 78% in 1992 (Calculated from Ben-Nun and Ben-Uri, 1996:25).

The doctor/population ratio - 461 per 100,000 persons - is among the highest in the world. Contrary to popular opinion, the latest figures indicate that Israelis do not visit the doctor more often than residents of OECD countries - Israelis make an average of 6.8 visits a year (CBS. 1997. *Health Survey*; calculation from Ben-Nun and Ben-Uri, 1996: 18).

The National Health Insurance Law

Prior to 1995, Israel had a voluntary health insurance system, under which about 96% of the Jewish population, and only 88% of the Arab population, were covered for ambulatory treatment and hospitalization as members of health funds. Among Arabs, those without health insurance tended to be poor and young (18-24). The highest uninsured rate - 36% - was among 18-19-year-old Arab youths; young Arab women who lived with their parents and were unemployed also tended to be uninsured. The benefits package differed from fund to fund and was not publicized. Financing came from four sources: membership fees, co-payments, a tax on employers (the "parallel tax"), and subsidies from the State Treasury.

In 1995, the *National Health Insurance Law* made health insurance both compulsory and universal. All formal residents were obliged to join a fund, and no fund was permitted to refuse membership on the basis of age, state of health or any other consideration. A uniform benefits package was stipulated and the list of services promulgated. In lieu of membership fees, which had differed from fund to fund, a health tax with two income gradations was imposed, to be collected by employers and transferred to the National Insurance Institute along with a health tax paid by employers (the latter was abolished in 1997). The law obligated the Treasury to cover the difference between the cost of service provision and the income collected.

Another change instituted by the *National Health Insurance Law* was the application of an age-adjusted capitation formula to the distribution of all health tax monies among the four health funds; the change increased equity among the health funds.

Patient's Rights Law

In 1996 the *Patient's Rights Law* established the following basic rights for persons in need of medical care: the right to unconditional emergency treatment, the right to information about the caregiver, the right to a second opinion, the right to continuity of care, the right to human dignity and privacy, the right to informed consent for medical treatment, the right to access to medical information, and the right to medical confidentiality (Society for Patient's Rights, 1998). Among other things, the law requires professionals and hospital emergency rooms to dispense emergency treatment regardless of whether or not the patient has medical insurance.

Disparities in Health and Health Services

A wide range of factors impact on the health status of a population, including heredity, environment, lifestyle and the health care delivery system itself. It is generally agreed that one of the most important determinants of health is socio-economic status. Social class has been shown to have a major influence on levels of health in every country in which it has been studied (Giraldes, 1991). Likewise, educational level, particularly that of mothers, is directly related to the health of the community, and especially its children. Unemployment has detrimental effects beyond the obvious financial ones, and leads to multiple psychosocial and psychosomatic ailments in the unemployed and his or her family (Westcott, 1985).

In the following pages, we will be looking primarily at the health status and services available to men and women, to Jews

and Arabs, and to Ashkenazi (whose origins are in Europe or the Americas) and Mizrahi Jews (whose origins are in North Africa or the Middle East).

The same ranking order appears regardless of which measure one takes - education, income or occupation - Ashkenazi Jews are on top, followed by Mizrahi Jews and Arab Israelis.

Some of the figures underestimate the gaps that exist; for example, income statistics are based primarily on earned income, and they fail to take into account the residents of small communities, including the 80,000 residents of unrecognized Arab villages where deprivation is greatest. Perhaps the most telling statistic in terms of official policy is the effect of social support interventions by government agencies on the percentage of poor among Jews and Arabs: in 1996, 56% of Jews who were poor on the basis of their earned income, compared to 39% of Arabs, were lifted above the poverty line due to the effects of transfer payments and direct taxes (Calculated from National Insurance Institute, 1998). The differential impact is the result of differences in the level of support provided and the depth of poverty of the recipients.

For second-generation Ashkenazi Jews - the median educational level is 13.6 years, for Mizrahi Jews, 12.1 years, and for Arabs, 10.4 years (CBS, 1997a, Table 22.1, 22.2); 27.5% of second-generation Ashkenazim, but only 8.2% of second-generation Mizrahim and 4.8% of Arabs have 16 or more years of schooling (ibid). The average income (1996) for urban households in which the head of the household is a wage earner is NIS 13,097 for second-generation Ashkenazim, NIS 8,762 for second-generation Mizrahim - and NIS 6,474 for Arabs. It is NIS 6,886 for new immigrants (who came in the 1990s) from the former Soviet Union and NIS 4,228 for those from Ethiopia (CBS, Income Survey 1996, Table 3). About 30% of Israeli-born Ashkenazim, compared with 50% of Israeli-born Mizrahim and 80% of Arabs work in blue-collar occupations or sales. (CBS, 1997a: Tables 12.15 and 12.14). Women's wages are an average of 60% of men's; their average hourly earnings come to 80% of men's (Alexander, 1997: 38). Nine percent of families with children are headed by women, and one-fourth of them live in poverty, compared with 16% of all families (ibid; National Insurance, 1997: 54).

Finally, infrastructure development impacts on health. Adequate sanitation and sewage disposal are critical to the prevention of gastroenteritis, parasites and other diseases transmitted by the fecal-oral route. In a 1996 study conducted by the Galilee Society, the National Arab Association for Health Research and Services, only 11 out of the 148 Arab communities surveyed had a functioning central sewage system (Hassan, 1996), a basic amenity enjoyed by all Jewish localities.

As the following pages will show, health profiles match the socio-economic levels of the different groups that make up Israeli society.

Infant Mortality

The most sensitive measure of the overall social and physical well-being of a population is the infant mortality rate, the number of deaths during the first year of life per 1,000 live births. In 1996, the average rate was 5.0 for Jews, and about twice as high for Arabs – 9.3 (CBS, 1997a, Table 3.1).

The graph of infant mortality shows clear disparities between Arabs and Jews. Although there are exceptions, most affluent Jewish communities are at the top, most Jewish development towns cluster around the middle and most Arab communities are near the bottom of the infant mortality graph. Whereas all but two Arab localities – Kufr Kara and Reina – exhibit infant mortality rates above the national average, only two Jewish localities – the development towns of Or Akiva and Migdal Ha-emek – have rates below the national average (which is composite figure for both Arabs and Jews).

Standardized Mortality Ratios

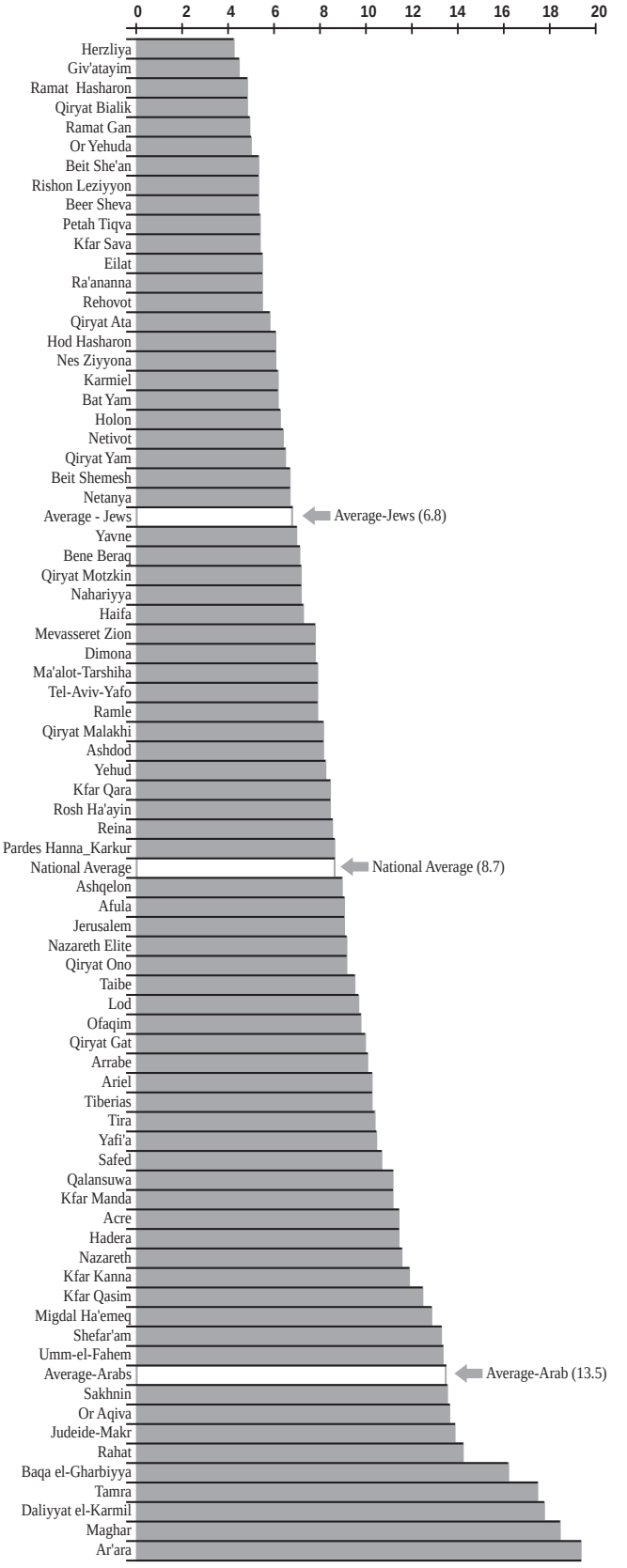
Geographic variation has also been found in the Standardized Mortality Ratios (a measure based on the actual number of deaths, standardized to account for differences in the age and gender composition of the populations). Excess (higher than average) deaths were found in the big cities and in localities with heavy industries. A comparative analysis of Standard Mortality Ratios by district for Jews in 1983 and 1986 revealed significantly higher than average rates for Haifa and Tel Aviv (Ginsberg and Tulchinsky, 1992). Another study of the Standard Mortality Ratios of eight municipalities in the central coastal area of Israel over the same time period found the highest rates (for all causes of death combined) in the development town of Or Yehudah and the lowest in Givatayim (an affluent Jewish locality) and B'nai Brak (a poor city with a large concentration of ultra-Orthodox Jews). The same study also found higher than average Standard Mortality Ratios from all causes combined among 30-44 year-old males and females, and among 45-65 year old males. Looking at causes of death, excess mortality was found in Tel Aviv among both sexes from malignancies and from external causes, and these excesses increased between 1981-84 and 1985-87. The authors are cautious about suggesting explanations; they refer to factors like ethnic origin [differences in the prevalence of diseases of the circulatory system] and socio-economic status, and point to the need for analyzing inter- and intra-community differentials (Lusky, Gurvitz and Barell, 1994).

The table opposite shows the latest published age-adjusted mortality rates by geographical area. It should be noted that these are over 10 years old and that they predate the mass immigration from the former Soviet Union; thus the situation may have changed.

A CBS-Ministry of Health profile of localities of 10,000 or more persons for 1990-94 reveals excessive mortality rates for most age groups in the Northern and Southern districts of the country (CBS, 1997d, Diagrams 25-26), areas which have large concentrations of Arab citizens and of Jewish development towns with Mizrahi majorities.

Infant Mortality Rate, by Locality 1990-1994

Localities of 10,000 or more



Source: Central Bureau of Statistics, 1997, *Health and Demographic Profile of the Settlements in Israel, 1990-1994*, Jerusalem.

Overall Utilization Rates for Israeli-born and Foreign-born Mizrahi and Ashkenazi Jews, and for Arabs, per 1,000 Persons

Born in Europe/ America	Born in Asia	Born in Africa	Israel-born: origin Europe/ America	Israel- born: origin Asia	Israel- born: origin Africa	Arab
2.3	1.6	1.6	3.3	3.0	2.2	0.5

Source: Feinson et al, 1992, *Utilization of Public Ambulatory Mental Health Services in Israel: A Focus on Age and Gender Patterns,* Brookdale Institute and Israel Ministry of Health, Tables A-9 and A-10 and p. 11.

A health profile of the Negev (southern part of the country) compiled by Tulchinsky and Ginsberg for the Israel Ministry of Health for 1990-92 reveals Standard Mortality Ratios that are 16% above the national average. The profile shows that the Negev has excess death rates from diabetes, cerebrovascular diseases and other ischemic heart diseases. The authors suggest that poor socio-economic conditions and lack of information about or compliance with medical services in Beersheba (Tulchinsky and Ginsberg, 1996: 32-33) may be contributing factors. Disaggregation of the figures reveals that compared to Jews, Negev Arabs (Bedouins) suffer from higher age-adjusted mortality rates from infectious diseases, whereas Negev Jews have higher mortality rates from chronic ischemic heart disease (ibid: 12).

Age-Adjusted Mortality Rates, per 1,000, 1983-86, by Subdistrict

Ramle	117.8
Beer Sheba	116.5
Ashkelon	115.3
Acre	114.0
Yizrael	111.5
Hadera	110.2
Safed	108.1
Kinneret	105.8
Haifa	102.8
Hasharon	98.9
Tel Aviv	97.7
Rehovot	90.7
Petah Tikva	90.6
Jerusalem	89.4

Source: Ginsberg, Gary, 1992, "Standardized Mortality Rates for Israel, 1983-86," in *Israel Journal of Medical Sciences,* 28: 868-877.

Mental Health

Mental health services in Israel are over-concentrated in hospitals, whose beds are distributed unevenly: the center of the country has much higher bed/population ratios than the North and the South (Feinson et al, 1992); this may be the reason for the finding that clinic utilization rates are highest in the Tel Aviv and Jerusalem districts (ibid: 1). Self-help organizations point out that the crowded conditions of psychiatric hospitals and the dearth of community support services cause undue suffering to persons with chronic disorders and their families (National Forum, 1996).

A recent (1996) estimate is that about 1.2% of the adult population of Israel (36,000 persons) suffer from chronic mental illnesses (Aviram et al, 1996: 4). Compared to chronic mental illness, mental distress is experienced by far more persons: a 1995 telephone survey found that 27% of Israeli adults reported experiencing "emotional distress or mental health problems which they had difficulty coping with alone" sometime during their lives, and 13% the same year (Gross et al, 1997). A multivariate analysis found that women, persons with chronic diseases, Russian speakers, divorced or widowed adults, and those with low levels of education were more likely than others to report a need for help (ibid). Some of these findings are in keeping with an earlier (1986) survey of mental health clinic utilization, which found higher use by women, especially older women, by individuals with lower educational levels, and by divorced and single persons, especially single males (but not by widowed persons). The same study also found that 97% of clinic utilizers were Jews and only 3% Arabs (Feinson et al, 1992). New immigrants from the former Soviet Union appear less likely to turn to mental health facilities than veteran Israelis (Nirel, 1998: 111).

The table on page 5 presents overall utilization rates for different population groups.

The differences in utilization can probably be attributed to the differential availability of services, especially for Arab citizens, but also for Israeli-born Jewish citizens of North African origin, who are concentrated in development towns in the socio-economic, if not the geographical periphery of the country. Another factor that renders mental health services less

accessible to Arab citizens is the language and culture of the providers, most of whom are Jewish. Soviet immigrants may also find the services culturally inappropriate.

Health Promoting Behaviors

Research indicates that socio-economic status is associated with lifestyle factors like diet, smoking and alcohol consumption (Shuval, 1992). Smoking is often considered the single most important behavioral causative factor of morbidity and mortality: A 1996 national telephone survey found that 30% of men and 25% of women smoked. These figures are similar to the average for OECD countries (ICDC, 1997: 237-242). The smoking rate is higher among Arabs than among Jews and higher among Mizrahi than among Ashkenazi Jews (ICDC, 1997: 238-240). The higher incidence of smoking among Arab males may be connected with their higher mortality rates from lung cancer. Arab women appear to smoke less - in the same survey, only 12% reported smoking.

Alcohol consumption is lower in Israel than in European countries - an average of 0.9 liters per capita per year, compared to an average of 9.4 liters in the countries of the European Union (ICDC, 1997: 251). In a 1994-95 survey of the adult population of Israel, 50% reported not drinking at all, and less than 2% taking any form of drug other than hashish. Use of hashish was reported by 5% (ibid: 249). Whereas no change was found in the habits of adults over time, the consumption of drugs and alcohol appears to be on the rise among teenagers, though it is still low by international standards.

In Israel, there is increasing awareness of the importance of physical exercise for all age groups. A 1996 survey of 3,000 adults found 24% reporting that they exercised daily and 23% at least once a week (ICDC, 1997: 255-56). These findings differ from those of an earlier (1985-87) survey of industrial workers, only 20% of whom reported engaging in physical exercise (ibid: 255).

Hospital Beds per 100,000 Persons, 1995, by District

Type of Bed	Jerusalem	Haifa	Center	Tel Aviv	North	South
General	3.19	2.97	2.64	2.60	1.68	1.55
Psychiatric	1.14	2.67	2.13	0.59	0.70	0.52
Internal	4.11	3.60	3.93	2.86	2.29	2.30
Pediatric	1.47	1.44	1.16	1.06	0.95	0.73
Long-term illnesses per 1,000	25.42	25.67	48.68	14.42	19.96	7.87
Obstetric per 1,000 women 15-44	1.77	1.15	1.03	0.79	1.13	1.01
Intensive Care, per 1,000	0.10	0.09	0.08	0.12	0.05	0.05

Source: Calculated from CBS, 1998, *Health and Health Resources 1990-1995:* 117-123 and CBS, *Statistical Abstract of Israel 1997*, Table 2.7.

Doctor/Population Ratios (per 100,000), 1993, by District

Tel Aviv	517.3
Jerusalem	485.4
Haifa	482.7
Central	430.1
South	323.9
North	266.0

Source: Ministry of Health, 1994, *Medical Professions*: 16.

A 1996 evaluation of the *National Health Insurance Law* from the standpoint of equity, microeconomic efficiency and macroeconomic cost control reported the following conclusions (Adva Center, November 1996):

1. The changes introduced by the law do not appear to have significantly increased or decreased the national expenditure on health. In 1993, the national expenditure was 8.2% of the GNP, in 1994, 8.9%, and in 1995, 8.7%.

2. Efficiency is defined as the maximization of quality of care and consumer satisfaction at minimum cost. While there are no objective measures of quality of care before and after implementation of the NHL, a consumer satisfaction survey conducted by the Brookdale Institute nine months after the law came into effect found most respondents reporting no change in the quality of the services they received (Farfel et al, 1997: 2). However, differences were found among the members of different health funds: 23% of General Health Fund members reported that services had improved, compared with 11% of Leumit Fund members , and 8% and 7% of Meuhedet and Maccabi members, respectively.

The highest level of satisfaction was found in the Arab population: 31% stated that services had improved, compared with 17% in the veteran Jewish population and only 2% among new immigrants from the former Soviet Union (ibid: 3).

Analysts of the Israeli health care system, like Professor Dan Michaeli, chair of the Board of Directors of the General Health Fund, point out that the system is still beset with inefficiencies. He cites, for example, the duplication of diagnostic and specialist services in hospital and health fund clinics (Michaeli, *Haaretz,* September 10, 1996).

3. Both the World Health Organization and the OECD consider equity the most important criterion of success in health reform. Here the law has stood the test - with the following qualifications:

A. The Israeli health care system is characterized by inequities between center and periphery, between the big cities and the development towns, and between Jewish localities and Arab ones. The National Health Insurance Law has no provisions for distributing resources among different geographical areas and social groups in a more equitable manner, and no program for closing existing gaps.

B. Prior to the *National Health Insurance Law*, inpatient nursing care for the elderly was not included in the health funds' benefit packages; the law failed to right this inequity, and senior citizens continue to suffer discrimination.

C. Likewise, dental health was not included either in the health funds' benefit packages prior to the law or after it.

On the positive side, the *National Health Insurance Law* made the system more equitable in the following ways:

A. By extending coverage to all residents of Israel (but not to foreign workers).

B. By giving consumers the right to join the fund of their choice, and by stipulating that health funds could not refuse membership due to age or health problems.

C. By imposing a uniform health tax with an element of progressivity, resulting in low-income persons paying out less than they had paid prior to the law and middle and high income persons paying more.

D. By encouraging funds to compete for new members, an incentive which resulted in funds building new clinics in peripheral areas and improving existing services.

E. By distributing all health taxes on a capitation basis, adjusted for the age composition of the health funds. The General Health Fund, which insures about 60% of the population, including most of the elderly, the chronically ill and the poor, receives a larger share of revenues under the *National Health Insurance Law* (Rosen and Nevo, 1996).

Differential Health Care Services

Despite the small size of Israel, there are considerable disparities in health service provision: cities and suburban communities have more and better services than peripheral communities, Jews have more than Arabs, and veteran communities more than development towns.

Health care services and personnel, as well as the most advanced technologies and diagnostic equipment, are concentrated in Tel Aviv, Haifa, Jerusalem, and the suburban ring of Tel- Aviv. More health care workers of every kind - with the notable exception of family doctors - reside in the big cities and the central district than in the North or South (Medical Professions, 1994: 6). However, some of them (we don't know how many) work outside of their residential district.

Regarding the distribution and supply of hospital beds, there is a large concentration of most types of beds in the big cities and in the suburban ring of Tel Aviv (Central district) and a lack of beds in the North and South. Whereas Tel Aviv has relatively few psychiatric, obstretric, long-term care and intensive care beds, residents have the option of utilizing surburban hospitals. In both the North and the South, where doctors are in smaller supply, there are large concentrations of Arab citizens and Mizrahi Jews. Moreover, the districts with the lowest doctor/population and hospital bed/population ratios - the Northern and Southern districts - exhibit relatively high infant mortality and mortalily rates from various diseases (CBS, 1998: 38).

Once again, a special word needs to be said about the Negev - the southern part of the country. The main urban center, Beersheba, has fewer beds per 1,000 persons than the national average. It also has the lowest ratio of intensive cardiac care and intensive care to general hospital beds in the country (Tulchinsky and Ginsberg, 1996: 33-34). While the level of ambulatory care in the Negev is the same as the national average, the Negev has fewer long-term care facilities. Also lacking are primary care resources for the management of diabetes, described as "a central issue in the health status of the Negev population," including diabetes centers, dietitians, podiatrists and other relevant services (ibid: 33-35). Health care expenditures lag behind national levels by 6-16%, depending on the method of calculation (ibid).

Differential Utilization of Services

Health-promoting behavior depends on socio-economic factors, on the physical availability of services, and on awareness of health issues. Often those who are at greater risk are precisely those who have fewer health care opportunities; the affluent have the alternative of purchasing private services. In general, the utilization of preventive services (with the exception of Mother and Child clinics) is correlated with socio-economic status.

The most recent Israel Central Bureau of Statistics survey *Use of Health Services* (1993) does not provide a breakdown between Jews and Arabs, Mizrahi and Ashkenazi Jews or veteran Israelis and new immigrants, so that comparative data are not readily available. One indication of the differential utilization of services is household expenditures on health (including public health insurance as well as expenditures for private services). In 1992/93 (the latest figures available), Jewish households expended an average of NIS 369 a month on health, whereas Arabs spent 24% less - NIS 279. A similar gap was found between the health expenditures of Ashkenazi and Mizrahi Jews: NIS 450 and NIS 327, respectively (CBS, 1998: 36).

As the Mizrahi Jewish population and the Arab population are both younger than the Ashkenazi one, some of the spending gap may be due to age differences.

A recent (1997) study compared service utilization among residents of different Negev localities - Jewish rural setttlements (kibbutzim and moshavim), urban settlements (Beer Sheba, Eilat, Arad and Mitzpe Ramon) and Bedouin Arab localities. It found that kibbutzim - which are relatively affluent - used ambulatory and diagnostic services more frequently than the average Negev population, while they used emergency room and hospitalization services less. In contrast, residents of Bedouin Arab localities - by far the poorest residents - used more emergency room and hospitalization services and fewer ambulatory and diagnostic services. The urban settlements and moshavim had no clear utilization patterns (Weitzman, 1997: 17). Regarding Arab residents of the Negev, whose overall mortality rate was found to be 50% higher than that of Jews, the authors conclude, "Poor quality of care and difficult access to health care facilities could, at least in part, explain this finding, although cultural and behavioral factors of the Bedouin population must be considered as well"(ibid: 18).

While there are no systematic data on health service utilization by the Arab population or by residents of working-class Jewish neighborhoods and Jewish development towns, such data are available for new immigrants. An evaluation of the findings of four national surveys (Nirel, et al, 1998) found that new immigrants from the former Soviet Union reported less utilization of health services than veteran Israelis: they visited family physicians less frequently, took less care of their teeth, and ordered fewer ambulances than veterans. Immigrant women had fewer mammograms. The authors point out that service utilization appears to increase with time; they state

that the limited use of health services may be the result of "obstacles in the accessibility of the services, like, for example, the costs of treatment, as is the case with dental care and ambulances" (ibid: 112).

The Hazards of Israel's Road Transportation System

Due to emissions from cars and other transport modes, the air in Israel's central region is moderately to severely polluted by US Environmental Protection Agency standards. Carbon monoxide emissions may aggravate cardiovascular disease; nitrogen oxides increase susceptibility to viral infections, bronchitis and pneumonia; particulates and hydrocarbons are potentially carcinogenic; ozone aggravates asthmas and bronchitis and worsens heart disease; and benzene is associated with leukemia and other cancers (Fletcher et al, 1998). It is possible that the excess mortality rates found in Tel Aviv are connected with some or all of these emissions. Indeed, research conducted in the US has found correlations between increases in particulate pollution and death rates (*Haaretz*, 1997). The health of children and older persons are especially affected (Fletcher).

As can be seen from the table below, Israel is catching up with American cities on air pollution. Moreover, readings taken in Tel Aviv in January 1997 revealed that the pollution level of nitrogen oxides was at dangerous levels for nearly 5% of the month (*Haaretz*, February 18, 1997).

Other health hazards connected with road transportation are road crashes and collisions. In 1996, 25,000 such "accidents" resulted in reported injuries; 515 persons died. While the rate of road deaths has been stable since the 1980s - 9-10 per 100,000 persons (ICDC, 1997: 163), the number of crashes, collisions and injuries has been rising steadily. It should be noted that in most developed countries, the number of road deaths has been *decreasing.* The persons most at risk are the young, the old, new immigrants, and Arab citizens (Fletcher et al, 1998). See the graph on p. 10.

Technion expert Noam Gavriely estimates that a reduction of 20 cubic micrograms of particulate pollution per cubic meter would result in the saving of 192 lives per million (*Haaretz*, February 18, 1997). Ecologist Zeev Nave contends that Israeli anti-pollution standards, where they exist at all, are too low, and that the combined effect of different pollutants at "safe" levels in urban centers and on major highways are liable to be extremely harmful to health. He warns against the effects of the constantly growing number of cars in Israel.

Hospitals vs Neighborhood Clinics

Hospitals

In Israel, as in other developed countries, most of the national expenditure on health goes to hospitals. In 1995, this accounted for an average of 51% of health fund outlays (Rosen et al, 1998:16). The same year, expenditures on hospitals and research constituted 42% of the national expenditure on health (public clinics and preventive medicine accounted for 36%, and household expenditures for most of the remainder) (CBS, 1998: Table 31). It should be noted that the Central Bureau of Statistics does not include hospital-based ambulatory clinics in the hospital expenditure, but rather in the category of public clinics and preventive medicine; thus the hospital expenditure is actually higher than the figures indicate.

The more expended on hospitals, the greater the pressure to cut health costs not only on hospitalization but also on other services. The first services to be cut are generally preventive ones. This is due to the fact that, in contrast to hospitals, they have no effective lobby to look after their interests. A prime example is Israel's network of Mother and Child clinics; although it constitutes no more than 2% of the national expenditure on health, it nevertheless is a popular target for cutback proposals.

Particulate Pollution: Selected Cities in Israel and the United States

City	Annual average, micrograms per cubic meter of air	Year of measurement
Tel Aviv – Center	56	1996
Jerusalem – Center	47	1991
Los Angeles	48	1992
Newark, New Jersey	37	1991

Source: Gary Ginsberg and Mordecai Peleg; The Ministry of Environment, U.S.; EPA and the South Coast Air Quality Management District, California.

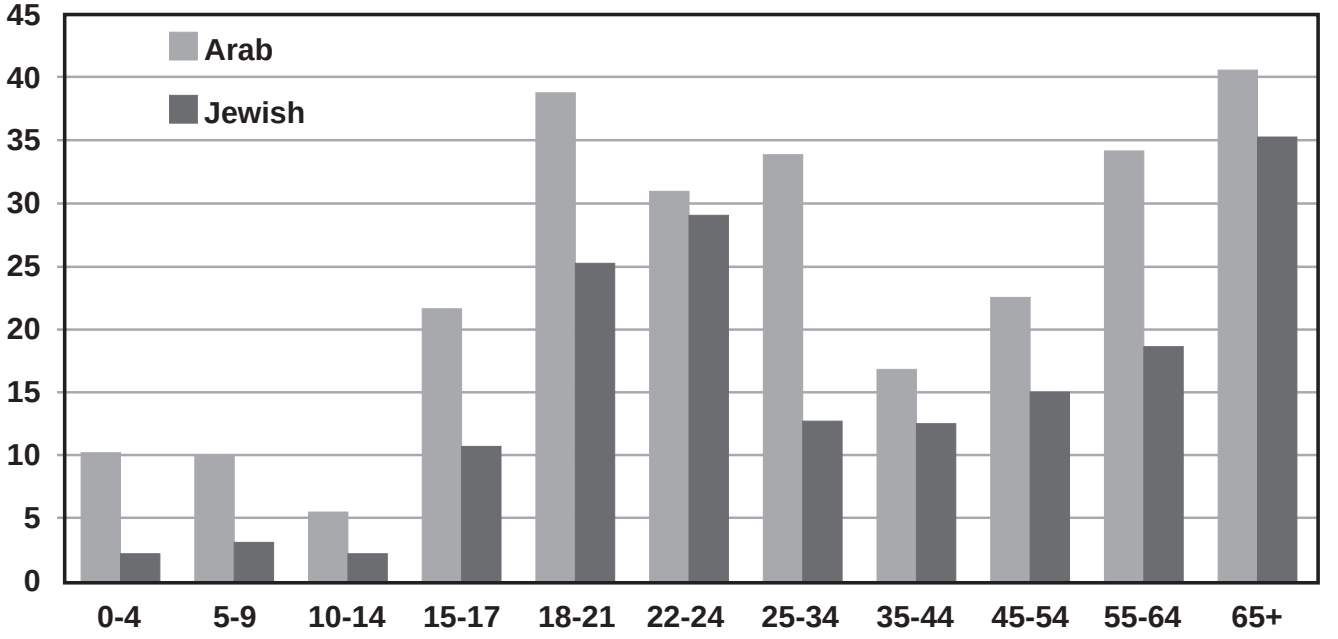
Specialist Services

Since 1994, hospitalization expenditures have been constrained through capping (placing a limit on the per annum sum health funds can expend on hospitalization). However, hospitals have found a new source of revenue: hospital-based ambulatory clinics. Between 1990 and 1995, the financial volume of such clinics located in government general hospitals increased by an estimated 150% (Shalmon et al, 1996:116). Hospital-based ambulatory services compete with neighborhood clinics, and they have come to constitute an increasing financial burden for the health funds.

The expansion of hospital-based ambulatory services has also resulted in (1) increased costs for the health care system, as hospital-based ambulatory care is nearly always more expensive than neighborhood clinics, (2) a possible induced demand, and (3) a conflict of interests for the Ministry of Health, as both setter of health policy and owner and operator of government hospitals (Shalmon et al, 1996: 121-123). From a systems point of view, these services are being developed at the expense of local specialist services, which are lacking in Arab localities, and, according to studies conducted in the 1980s, in Jewish development towns as well (no recent data are available as to the accessibility of specialist services in different types of Jewish localities).

Mortality Rates from Car Crashes and Collisions for Jewish and Arab Males, by Age Group, 1993-1995

per 100,000



Source: Ayala Lusky, 1998, Center for the Study of Health Services, Chaim Sheba Medical Center.

MAJOR ISSUES IN WOMEN'S HEALTH

The issue of equity in health care for women is complex and needs to be examined on many different and interrelated levels. At the most basic level is the question of gender disparities in scientific knowledge. Recent evidence suggests that modern medicine has amassed less information about the epidemiology of disease and its treatment in women than in men (National Institute of Health, 1991: 7). Gaps in scientific knowledge and data on women, in turn, limit our understanding of their unique health needs, leading to gender bias in public policy, in medical education and training and ultimately in clinical practice and service delivery (Laurance and Weinhouse, 1994: 60-82). The question, therefore, is not whether women in Israel receive equivalent care, compared to men, but rather whether they get the kind of care they require given their gender-specific needs.

Health and Illness The Gender Gap

Life Expectancy

The gender gap in life expectancy in Israel is 4 years: 79.5 for women and 75.5 for men (CBS, 1997a, Table 3.19). This difference is significantly smaller than the average of seven years difference in the life expectancies of men and women in most of the developed world. In fact, while Israel ranks among the top five countries in the world in terms of life expectancy for men, women are not even in the top ten (ICDC, 1997: 55-57). These trends alone suggest an untapped potential of the health care system with respect to women. The challenge for epidemiologists, health policy analysts and planners is to attempt to explain these differences and respond appropriately.

The longer life expectancies of women relative to men means not only that women are dependent on the medical care system for longer periods in their lives, but also that they are more likely to be alone as they get older, with no one to care for them when they are ill. Women constitute 57% of the population over 65 (CBS, 1997: Table 2.10). By age 75-79, only 27% of them live with a partner, compared to 82% of the men in the same age group (Modan et al, 1996). These differences, too, need to be taken into account in health policy and planning.

Gender Differences in Mortality

The leading causes of death for both men and women in Israel, across the life span, are heart disease, cancer and stroke, in that order. In 1994, 5,560 women died of heart disease compared to 5,837 men. There were 3,773 deaths from cancer among women and some 4,200 among men (CBS, 1997b). For every Israeli woman who died of breast cancer, more than 6 died of heart disease.

Age standardized mortality rates for most of the leading causes of death are higher among men than among women throughout the developed world. In Israel, however, women are at greater risk of dying of cancer than are men for much of the life cycle. In 1994, cancer accounted for 44% of all deaths in women ages 55-64 and heart disease for 25%. By ages 75-79, the situation is reversed: heart disease accounts for over 40 % of female mortality and cancer for about one-fourth. Among men, the risk of dying of heart disease or cancer is roughly equivalent throughout most of the life cycle, with the largest relative increase after age 65.

While Israeli men have one of the lowest mortality rates for cancer among men in some 20 countries where registries are kept, Israeli women have among the highest in the world - higher than the mortality rates from cancer in European countries, but lower than that in America (Zadka, 1993). This is accounted for primarily by breast cancer, which in 1994 claimed over 800 lives, nearly twice as many as colon cancer—the next leading cause of death in Israeli women. In men, lung cancer heads the list of causes of mortality with some 706 deaths annually, followed by colon cancer (CBS, 1997: Table 3.22).

Gender Differences in Morbidity

Women are known to suffer more than men from many chronic conditions such as hypertension, diabetes, osteoporosis, depression, incontinence and other bladder problems, chronic fatigue and migraine headaches - the so called "cripplers" as opposed to the "killers" (Paltiel, 1988: 189-211).

Gender differences are consistently found in reported physical and emotional well-being, as well as in actual disability, particularly among the elderly and the poor in Israel. Salzberger, for example, studied 360 married Israeli couples over a ten year period. In families classified as moderately or severely deprived, she found that functional impairment due to illness increased 350% for women, compared to 58% for men. Women were more likely than men to report multiple

health problems, which they attributed to pregnancy and childbirth, persistent side effects of previous illness and family stress. Among the most frequently cited ailments were emotional disorders and depression (Salzberger, 1990, 1991: 41-50).

Studies of elderly persons also reveal more illness and disability in women. The rate of disability among those over the age of 75 is 50% higher in women than in men, and since women are more likely to be living without a spouse, they are also more likely to be placed in institutional care (Stessman et al, 1996). Relative to men, elderly women report higher rates of hypertension and abdominal problems, as well as muscle or joint pain, chronic fatigue, digestive problems, respiratory problems and a host of other chronic conditions (ibid; CBS, 1994).

A survey of 450 Jerusalemites over the age of 70 revealed gender differences in morbidity for every condition measured: women suffered more from heart conditions, respiratory problems, joint and muscle pain, chronic fatigue, psychological disorders, problems with the digestive system, malignancies and other manifestations of chronic illness. The most significant gender difference was related to joint and muscular conditions. These, of course, may seriously limit mobility and independence in women and reduce their ability to remain in noninstitutionalized settings, if there is no spouse to provide assistance (Stessman et al, 1996).

The above findings are in line with a fairly universal phenomenon in modern societies: while women have longer life expectancies than men, they report more ill health and suffer more from long-term disability. The nature and severity of women's health problems vary according to age, economic status, and ethnic or racial background, but this overall gender difference remains remarkably constant (Apfel, 1982; Verbrugge, 1976; Doyal, 1990; Hoffman, 1996).

Hypertension and Diabetes

Diseases that reduce the quality of life for women and often lead to more serious conditions in women are hypertension and diabetes. Hypertension plays a more important role in the development of congestive heart failure and other coronary problems in women than it does in men; it also places women at significantly higher risk of stroke (Strokes et al, 1987; Hoffman, 1995).

Often women with hypertension are unaware of their condition, and thus it goes untreated. For example, in a General Health Fund survey in which 1000 women ages 20-60 were examined (Eshed, 1991), some 30% of those over the age of 45 were found to be suffering from hypertension, but only a third of these women were aware of their condition.

Diabetes is another illness that sets up secondary risks for women (Kannel, 1985). Diabetic women have higher risks than diabetic men of complications from coronary artery disease, the leading cause of death for those with diabetes; women have more severe circulation problems that can lead to limb amputation; and a greater tendency toward auto-immune and reproductive disorders (Hoffman, 1995: 133-134).

In Israel, it is estimated that approximately 3% of the female population (compared to 2.7% of males) suffers from diabetes. The disease affects North African Jews and Arabs more than Ashkenazi Jews, and mortality rates are higher for Arab and Mizrahi women than for Ashkenazi ones (ICDC, 1997: 123-129).

Women's Hidden Health Problems

Reproduction itself predisposes women to additional health problems and alters the probability of developing certain conditions and diseases (Salzberger, 1991; Hoffman, 1995). Pregnancy increases the risk of diabetes, hypertension, heart disease, gallbladder disease and, of course, post-partum depression, about which very little is known in Israel. Popular myth has it that Jewish women feel nothing but elated at childbirth. When The Association for the Advancement of Women's Health in Israel conducted a survey of services for women with post-partum depression, field workers were told more than once that there was no such problem (Horowitz, 1996).

There are many other chronic conditions that affect women exclusively, at a higher rate or simply differently than men, which are often under- or misdiagnosed by doctors and rarely discussed by women with their physicians or among themselves. Eating disorders, incontinence, lupus and other auto-immune disorders, thyroid disorders, domestic abuse, substance abuse, hot flashes and other symptoms of menopause are just a few of the hidden health problems with which women often live because physicians and emergency room attendants have been poorly trained to detect and diagnose them.

Gender Bias in Medical Practice

Heart Disease

Heart disease is perhaps the most striking example of how gender bias can permeate every phase of the medical process, from research through training, prevention, diagnosis and, finally, treatment. It is an illustration of what women's health specialist, Dr. Eileen Hoffman, refers to as androcentrism in medicine - "the assumption that men and women have similar profiles when non-gynecological problems emerge" (Hoffman, 1995).

Because heart disease has long been considered a "men-only" condition, it has been understudied in women; results from research on men are simply extrapolated to women. Doctors know very little about the diagnosis and treatment of coronary artery disease in women and the medical profession has yet to design diagnostic tests and instruments that are gender-specific. Women who do seek help for chest pain or other symptoms often report that such signs are attributed by doctors to psychosomatic conditions, problems at home or something they have eaten (Ra'anan, 1998: 27-30).

The result: Israeli women fare worse than men during and after acute myocardial infarctions and by-pass surgery (Ra'anan, 1998; Tzivoni, 1991; Greenland et al, 1991). They have greater impairment of functional status when admitted for surgery; they are slower to recover and more likely to die both during hospitalization and in the year following discharge.

Mental Health

Another women's health issue that is under-researched and under- or misdiagnosed is mental illness. As in the case of heart disease, psychological standards for mental health have been traditionally based on an androcentric model that takes men as the operative norm and fails to consider the ways in which women's unique experiences contribute to their psychological state (Broverman, et al, 1970; Chessler, 1972; Gilligan, 1982). Consequently, in Israel, as elsewhere, little is known about the etiology or treatment of depression, post-traumatic stress disorders, addiction and substance abuse or eating disorders in women and the relationship of these problems to other health conditions (Feinson, 1997).

Increasingly, however, it appears that gender differences exist in the profiles of men and women who use and abuse substances such as tobacco, alcohol or drugs and in the health consequences of substance abuse. In women, for example, substance abuse is often secondary to depression or post-traumatic stress, such as that triggered by violence or sexual abuse; alcohol is more intoxicating in lower amounts in women compared to men; women tend to keep their drinking problem a secret while in men it is usually manifested in anti-social behavior, including violence (Hoffman, 1995: 365).

Israel ranks high in the Western world with respect to violence in general, with a rate of 2.6 murders per 100,000. Among the 157 victims of murder in 1997, 26 were women; 60 % of them were killed by husbands and about one-fourth by another family member (Israel Women's Network, Resource Center).

In 1992, there were 868 attempted suicides among women in Israel, representing 63% of the total number of attempts. The highest number was among 15-24 year olds, and the most frequently reported reasons for the attempts were related to family or social difficulties (ICDC, 1997: 175-177). In contrast, men are three times more likely than women to succeed in committing suicide; they are older on the whole and their attempts are more often associated with mental illness and depression (ibid).

Reproductive Health

Fertility rates in Israel have been decreasing steadily over the last twenty years: for Jewish women, from 3.3 children per family in 1975 to 2.5 in 1996. Among Moslems, the decrease was from 8.5 to 4.7. Within the Jewish population, those born in Asia or Africa have the highest fertility rates (3.2) and European or Russian-born the lowest (2.2 and 1.7, respectively). Israeli-born women have an average fertility rate of 2.6, which is higher than that in European or North American countries. Maternal mortality, on the other hand, which in 1994 stood at 5.2 per 100,000 live births, is significantly lower in Israel than in many other countries including the U.S. (7.2) (CBS, 1997a; ICDC, 1997: 29-36).

The rate of legal abortions has decreased from around 18,000 in 1980s to around 16,000 in the mid 1990s. Live births to teenage mothers have shown a parallel drop; more never-married women are bearing children (4 per 1000 in 1995 compared to 3.2 in 1978) , presumably by choice (CBS, 1997, Table 3.15).

It is possible that the decrease in abortion rates is due to an increase in the use of effective contraception. In the first national survey of health and risk-taking behaviors among high school students, conducted in 1994, 87% of the girls (and 83% of the boys) reported using "safe" methods of birth control (Harel et al, 1997).

Nonetheless, neither medically mediated contraception nor contraceptive counseling are included in the benefits package under the *National Health Insurance Law*. This stands in sharp contrast to the fact that methods of increasing rather than controlling fertility are well covered - including unlimited in vitro fertilization treatments up to the live birth of two children.

In fact, Israel can boast of what is probably the highest number of IVF center/population ratio in the world (22 centers in 1997).

Utilization of Services

Women in Israel use the health care system more frequently than men. They visit doctors more often (CBS, 1994, Table 3) and undergo more laboratory tests, x-rays and other examinations (ibid). However, it is in no way apparent that more care means better care.

US studies suggest that while women undergo more laboratory tests and examinations, receive more prescription drugs and have more return appointments than men for the same type of complaint or illness, they have less access than men to major therapeutic interventions (Verbugge et al, 1981; JAMA, 1991; Hibbard and Pope, 1986). Actual differences in morbidity and mortality between the sexes do not fully account for these disparities.

Although little is known about the medical "helpseeking behaviors" of women in Israel, Ben Sira offered insights into the relationship between "overutilization" of the health care system and client satisfaction with primary care (Ben Sira, 1987). He attributed recurrent complaints and visits to the doctor, which in themselves can be "hazardous" due to exposure to unnecessary medical interventions, to client judgments regarding the poor quality and efficacy of the treatment. Such assessments, he argued, are strongly influenced by the affective behaviors of the providers.

Comparing different health funds, Ben Sira found lower satisfaction with the affective behaviors of doctors and lower satisfaction with treatment - which he attributed to the high recurrence of doctors' visits - in the General Health Fund. He emphasized the importance of a holistic and a bio-psycho-social model of care in promoting effective service utilization and client well-being.

A 1996 survey conducted by the Association for the Advancement of Women's Health in Israel among readers of the popular women's magazine *At*, support those reported above: doctors in the General Health Fund were reportedly less likely than others to provide unsolicited information on health promoting behaviors, and their clients were less satisfied and paid more return visits than members of other health funds (Avgar and Gordon, 1996).

The *At* survey points to a number of trends in the health perceptions and behaviors of women in Israel that are worthy of further investigation. For example, while women rated themselves as relatively healthy, the majority reported multiple symptoms of distress, such as headaches, backaches, chronic fatigue, depression and anxiety; they were satisfied overall with their doctors, but held low expectations from the health care system; some made very frequent use of the health care system, but contrary to popular stereotypes, most were more likely to ignore symptoms than seek medical treatment. The lowest reported "well-being" was observed among women aged 36-45 - those carrying the heaviest burden of home and work responsibilities. In contrast, women over 45 reported fewer symptoms of distress and a higher level of self-care (ibid).

While women as a whole perceive themselves in poorer health than men do, there are also important differences between Ashkenazi and Mizrahi women and between Arab and Jewish women. Among women over 60, Ashkenazi women are the most likely to report being in good health, and Arab women the least likely. Utilization of health services, including doctors' visits, lab tests, x-rays, physiotherapy and various screening tests, is lowest among those sectors reporting the poorest health - Arab citizens and Mizrahi Jews (CBS, 1994).

Life Styles and Preventive Care

Approximately 25% of women over 20 (compared to 30% of men) report that they smoke (Israel Ministry of Health, 1996). A survey of Israeli youth revealed an almost equal number of boys and girls who reported smoking at least once a week (Harel, 1997).

Women who smoke increase their already higher risk of osteoporosis; they may experience early menopause; if they are over the age of thirty-five and taking oral contraceptives, they significantly increase their risks of heart attack and stroke (Horton, 1995). Research also shows that women are more sensitive than men to the chemical effects of nicotine and their withdrawal symptoms are more severe (Hoffman, 1995: 365).

On the whole, women reportedly engage in less physical activity than men, except between the ages of 35 and 54 (ICDC, 1997: 253). This is consistent with a trend observed in the *At* survey, which found that women over 45 were taking better care of themselves than younger women.

The effectiveness of mammography screening in reducing breast cancer mortality is widely accepted: the results of randomized and controlled studies in different parts of the world demonstrate a uniform reduction in mortality of between 30 and 40% in women aged 50-69 who underwent screening every two or three years. Studies show more modest results in women under 50 (Rennert 1996; Fletcher et al, 1993). Yet, health funds have been slow to comply with the Israel Ministry of Health's requirement that all women over 50 be personally invited for screening, and family doctors do not always follow accepted guidelines for referring clients for mammography. Nonetheless, as a result of the National Mammography program, screening rates are on the rise - from approximately 30% of those eligible (women aged 50-70) in 1997 to 50% in the first quarter of 1998 (Miri Ziv, Israel Cancer Society).

Licenses Granted to Medical Practitioners in Israel,1948 - 1993

Years	Men	Women	Total
1948-1989	12,409 (70%)	5,421 (30%)	17,830
1990-1991*	2,701 (62%)	1,622(38%)	4,323
1992-1993	3,308 (51%)	3,162(49%)	6,470
Total: 1948-1993	**18,418 (64%)**	**10,205(36%)**	**28,623(100%)**

Source: Notzer, Neta. and Brown, Suzanne, 1995, "The Feminization of the Medical Profession in Israel," in *Medical Education*, 29 (5).
* January 1990 marked the beginning of the issue of licenses to immigrants from the former USSR.

Hormone Therapy

Israeli doctors tend to be enthusiastic advocates of hormone therapy for women during menopause. At one of the first conferences on Women's Health in Israel, in 1991, a leading gynecologist defined this treatment as the most burning women's health issue for the medical professions: "Many women suffer from hot flashes and depression during menopause," he stated. "But it is difficult to convince them to take hormones over an extended period of time . . . Part of our job is related to educating women and changing behavior patterns and we must convince doctors as well of the need for such treatment" (Palgi, 1991: 104).

At the first Israeli conference on the subject of Women and Heart Disease, held in May 1998, Professor Nanette Wenger, a leading US expert, stated, "The final word is not yet in on hormone replacement therapy. In addition to concerns about the increased risk of breast and endometrial cancer, it should be noted that clinical trials [for hormone treatment] have been conducted among healthy women. Thus, anticipated benefits may be overrated."

Women in Medicine

Over the last two decades, there has been a dramatic increase in the number of women accepted to Israeli medical schools. While in 1975, less than 30% of those studying medicine were women, by 1995 the number had risen to 48%. This level is higher than the level of female medical students in the US (Notzer and Brown, 1995).

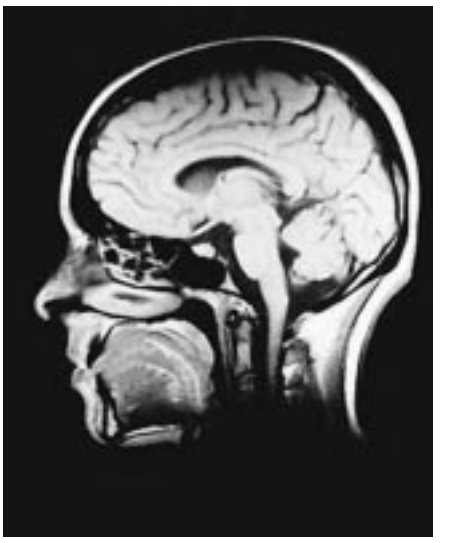
The wave of immigrant doctors from the former Soviet Union resulted in an increase in the number licenses granted to women in Israel - from only 30% in 1989 to 49% in 1993 (ibid).

Nonetheless, gender differences persist in the choice of medical specialties, with women still concentrated in the lower paying and less prestigious fields of family medicine and pediatrics while men dominate in surgery, gynecology and internal medicine (Notzer and Brown, 1995). One result of this traditional division of labor is that many more male doctors are found in in-patient settings, while female doctors are concentrated in out-patient clinics. In 1991, only 12% of hospital-based doctors were women (Shuval, 1992). In addition, women still face obstacles to promotion within

Medical Education in Israel, 1995

Specialty	% of women residents	% of men residents	% of all residents	significance
Boards of Medicine*	35	37	36	NS
Surgery**	7	19	16	P<0.01
Psychiatry	17	9	11	P<0.01
Gynecology	7	13	11	P<0.01
Pediatrics	19	14	16	P<0.05
Family Medicine	15	8	10	P<0.01
Total *n*	738	1728	2466	
Total %	(100%)	(100%)	(100%)	

Source: Notzer and Brown, op. cit.
* Includes: internal medicine, cardiology, nephology, neurology, gastroenerology, diagnostic radiology, and oncology
** Includes: general, thoracic and cardiac, plastic, orthopaedic and pediatric surgery, ophthalmology, neurosurgery and anesthesiology



academic medicine where, despite increasing numbers, the majority of women remain concentrated in lower level, clinical instruction positions rather than in senior research and teaching positions (Notzer and Brown, 1995).

Medical Training and Research

Given the fact that women represent the majority of the users of health care services, about 70% of the health care workers, and about half of the medical students, it is surprising that Israel's medical schools still do not offer a single course on Women's Health.

Equally surprising is the absence of research on women's health issues. A Medline search, using the terms "women," "health" and "Israel," for the years 1990-97 revealed only 55 articles. The majority of entries related to traditional female caregiving or support roles, such as nursing, teaching, and caring for ill spouses, along with pregnancy, childbirth, feeding, etc. Many of the articles had to do with the emotional reactions of women to stressful situations, such as marriage to military men, armed conflict, abortion and other medical procedures.

Few studies focused on factors contributing to illness and the response to it in women, on the delivery and outcomes of primary care or on conditions common or specific to women.

The persistent gender gap in medical research has been well documented (Laurence and Weinhouse, 1994). Insufficient research on women is not only discriminatory but dangerous, since medical care, drug treatments and even diagnostic tools that prove effective in men may not be generalizable to women. Therefore, using men as the medical standard in a paradigm in which women are at best a deviation may influence clinical decision-making and put women at serious risk.

Women are an invisible majority in a system that functions as if they were a minority. If public health policies are to truly promote women's health, women need to become part of the picture in medical research and practice, within a model that takes women as the operative norm. The nature and underlying causes of gender differences in illness need to be investigated more fully. Additionally, investigations of women's biological functions need to be replaced with an examination of their social statuses as wives, mothers, daughters, and workers, and studies on the impact of gender inequalities on physical and psycho-social well-being.

Righting inequities and redefining women's health in women's terms will take time, since women, as well as doctors, have been socialized into a male-centered, bio-medical system. But defining women in women's terms is not a problem unique to medicine. It is an essentially feminist issue and as such deserves to be addressed in the context of general efforts to improve the status of women and remove barriers to women's full participation in society.

A CLOSER LOOK AT THE HEALTH OF ARAB CITIZENS OF ISRAEL

The Arab citizens of the state of Israel make up nearly a fifth of the total population of the country, and 90% of them were born, raised and educated in Israel. Despite the large size of the Arab minority and their long presence in the country, Arab localities still suffer from underdevelopment: their infrastructures are inferior to those in Jewish localities and they have been systematically discriminated against in national development plans and thus lack employment opportunities. Whatever the measure of socio-economic status, be it education achievements, income or level of occupation, Arab citizens are at the bottom of the ladder. As health status is inseparable from socioeconomic status, it is perhaps not surprising that the health of Arabs in Israel has lagged behind that of the Jewish population. On the other hand, the fact that planned national support systems have achieved a comparatively high health status level for large groups of Jewish immigrants arrriving in Israel with limited means illustrates the potential effectiveness of a government policy designed to improve the health of specific communities, if it is implemented with commitment and backed up with adequate budgets.

The brief interval in the early 1990s, when the incumbent government recognized the unequal treatment of the Arab minority in Israel and adopted a social support ideology accompanied by policies aimed at narrowing the gaps, has since given way to the current (1998) government's firm commitment to free market policies and privatization practices that reproduce and exacerbate inequities.

Health Status Indicators

Despite extensive statistics on all aspects of life in Israel, specific data on the Arab minority are often lacking, and one is forced to draw conclusions based on footnotes, explanatory notes or extrapolations. In light of this neglect, The Israel Center for Disease Control deserves mention for incorporating and systematically analyzing most available morbidity and mortality data on Arabs as compared to Jews in its 1997 report (ICDC, 1997).

Infant Mortality Rates

Infant Mortality Rates by Population Group (per 1,000 live births)

Year	Arabs	Jews
1955-59*	60.6	32.1
1965-69*	43.8	20.8
1975-79*	32.6	15.0
1979-80	23.5	12.5
1983-84	20.0	10.6
1987-88	16.9	8.3
1991-92	14.5	7.2
1996	9.3	5.0

*Moslems vs. Jews

Sources: Central Bureau of Statistics, 1997, *Socio-demographic Characteristics of Infant Mortality Based on Data for 1990-1993*, Table 25; *Statistical Abstract of 1997,* Table 3.1.

The table above offers a close look at Infant Mortality Rates over time. It reveals a persistent Relative Risk Ratio of Arabs to Jews amounting to twofold throughout the last four decades. As rates for both groups follow a downward trend, specific levels of infant mortality are reached by Arabs 10-20 years later than by Jews. If the Infant Mortality Rate is considered by the age of the infant's death, we find the Arab to Jewish Relative Risk Ratio to be higher in the post-neonatal period (3.4 in 1990-93), where the effects of the physical and economic home and community environment play a more decisive role. This ratio has been on the rise, whereas the Relative Risk Ratio in the neonatal period has remained stable at a lower level (1.5 in 1990-93) (CBS, 1997d, Table B). In the neonatal period, causes of infant mortality related to the birth process as well as those resulting from congenital malformations have a greater effect. Again, a closer look at Relative Risk Ratios by specific causes of death reveals that the discrepancy resulting from environmental and external factors is greater than that associated with genetic and obstetric ones. For example, in 1990-93, the Relative Risk Ratio of Infant Mortality Rates of Arabs to Jews from infections was 4 (the infant mortality rate from infectious diseases was low for both groups: 0.8 for Arabs and 0.2 for Jews), while that from

congenital malformations was 2 (4.3 for Arabs and 1.8 for Jews) (CBS, 1997c, Tables 17 and 18). The comparisons are more striking when put in relative terms than in absolute ones. Moreover, throughout the past two decades, the Relative Risk Ratio of Arabs to Jews was higher for females than for males, possibly reflecting the traditional preferential treatment of males in Arab society.

Politically motivated statements by some government officials attribute the excess Infant Mortality Rate among Arab citizens of Israel to their high rate of consanguineous marriage. This seems to follow the discredited colonial tradition of "blaming the victim." While it is true that congenital malformation is higher among Arabs than Jews (accounting for 31% compared with 26% of infant deaths), as the above figures show, causes related to the environment and the health care system have resulted in greater disparities. Obviously, not all congenital malformations can be blamed on consanguineous marriages, as this is the second highest cause of infant mortality among Jews, for whom consanguineous marriages are not the rule. From clinical observations, as well as occasional reports in the Israeli medical literature, it is clear that various disabilities, including congenital deaf mutism and blindness and thalassemia, occur in various Arab clans due to consanguinity, but the case is not convincing when this is offered as the sole or even main cause of excess mortality, as only 10-25% of congenital malformations are reported to be inherited in the standard obstetric literature. If we extend the consideration to higher age groups, we find that the Relative Risk Ratio of Arab to Jewish mortality is even greater for the 1-4 year age group, 2.5 for boys and 3 for girls in 1990-93. At this age, congenital malformations contribute less to mortality: 85% of such deaths occur in the first year of life (ICDC, 1997: 157).

Standardized Mortality Rates

To compare mortality rates, The Israel Disease Control Center (1997) uses the age distribution control of the total population of Israel in the 1983 census. The results: age-standardized rates for deaths from all causes combined are higher for Arabs than for Jews, among men as well as women (See table below). This is true for two out of the three leading causes of death (heart disease and cerebrovascular events) as well as for deaths from external causes (mainly accidents), birth defects, hypertension, diabetes mellitus and infectious diseases. Two causes of death are of particular importance since they contribute more than others to the potential years of life lost up to age of 65. Cancer has a higher Age-Standardized Mortality Rate among Jews than Arabs in all sites except for lung cancer. However, time trends show a faster increase in such rates among Arabs than Jews in most sites (breast, lung, prostate, uterus, ovaries and central nervous system).

Age-Standardized Mortality Rates for all external causes of death are 30% higher among Arabs than Jews; the ratio for mortality resulting from auto crashes and collisions is 2:1. No detailed information is available for work-related fatalities by population group. However, indirect evidence attests to a much higher ratio among Arab workers: 80% of such deaths occur among building and industrial workers, two sectors in which Arabs are over-represented. The Labor Ministry found the incidence of work-related deaths and injuries among Arabs sufficiently alarming to call a special news conference in Nazareth in February 1998, to issue a press release in Arabic and to initiate a special Arabic language program for awareness raising.

Selected Health Status Indicators of Arab and Jewish Citizens of Israel - 1995

	Arabs	Jews	RRR*	
Stillbirths per 1000 live births	6.8	3.2	2.3	
Infant Mortality Rates per 1000 live births (1996)	9.3	5.0	1.9	
Under 5 Mortality Rates per 1000 live Births	13.0	6.6	2.0	
Age Standardized Mortality Rates per 100,000 population				
	Men	740	640	1.2
	Women	560	460	1.2

*Relative Risk Ratio of Arabs to Jews
Source: Calculated from Central Bureau of Statistics, *Statistical Abstract of Israel 1997*, Tables 3.1 and 3.21).

Potential Years of Life Lost up to Age 65
Among Arab Citizens of Israel from Selected Causes

	Excess Potential Years of Life Lost	Arabs' Share of Total
Stillbirths 1995	7,900	49%
Infant Mortality 1996	11,600	46%
Under 5 Mortality 1995	14,300	46%

Source: Calculated from Central Bureau of Statistics, *Statistical Abstract of Israel 1997a*, Tables 3.1 and 3.21.

Morbidity

Compared to mortality, morbidity statistics are more difficult to obtain in Israel, except for some specific diagnoses such as cancer and injuries sustained from auto crashes and collisions and other accidents. Differences in hospitalization rates are not necessarily a reflection of differences in morbidity rates but could be the outcome of data collection methods, accessibility of care, site of treatment, budget considerations and other factors. Reporting on mortality is more complete and more reliable than reporting on morbidity, though it is not always accurate in terms of cause. Discrepancy between hospitalization and mortality rates can be found with regard to infectious disease statistics. Hospitalization rates for infectious diseases are still significantly higher for Arabs than for Jews, except for pneumonia, but the gap in mortality rates closed by 1992-4. Cancer data reveal a similar pattern for most sites. While cancer mortality is lower for Arabs than for Jews, age-adjusted rates for cancer incidence show that the Relative Risk Ratio of Jews as compared to Arabs is much higher than the Relative Risk Ratio for cancer mortality. This means that on the whole relatively fewer cancer cases are diagnosed among Arabs than their deaths from cancer would suggest (ICDC, 1997: 82).

Life expectancy at birth reflects the overall mortality experience of the current population. In 1995, life expectancy for Arabs in Israel was 2.3 years shorter than for Jews (CBS, 1997a, Table 3.19). This difference is due mainly to the contribution of excess deaths in infancy and early life. The above table further illustrates the significance of infant and child mortality. Though they constitute less than a fifth of the total population and account for 30% of the total births, Arabs suffer nearly half of the total stillbirths and infant and early child deaths in Israel. Excess infant mortality among Arabs - above what would be expected based on the infant mortality rate of Jews, accounts for nearly 12,000 potential years of life lost to age 65. To appreciate the significance of this statistic, it should be compared to the figure of 13, 190, the potential years of life lost up to age 65 for the entire population of Israel caused by heart disease, the leading cause of death. Time trends show no closing of the gap in life expectancy since the mid-eighties and a slight widening during the previous decade. Put differently, the following table indicates a ten-year chronological lag in the level of life expectancy at birth for Arabs, compared with that for Jews, during the last twenty-year period. A further fact, relevant to the health of the elderly, is that over the last two decades, there has been a 2-year gain in the life expectancy at age 65 among Jews, while Arab 65-year-olds gained only 0.7 years (ICDC, 1997: 54).

Life Expectancy by Population Group

Year	Arab Male	Jewish Male	Male Gap	Arab Female	Jewish Female	Female Gap	General Gap
at birth							
1970-74	68.5	70.6	2.1	71.9	73.8	1.9	2.0
1980-84	70.8	73.1	2.3	74.0	76.5	2.5	2.4
1990-94	73.5	75.5	2.0	76.3	79.2	2.9	2.5
at age 65							
1970-74	15.3	13.7	-1.6	15.7	14.8	-0.9	-1.3
1980-84	14.7	14.6	-0.1	15.4	16.0	0.6	0.3
1990-94	16.0	15.8	-0.2	16.4	17.9	1.5	0.7

Source: CBS, *Statistical Abstract of Israel 1997,* Table 3.19; ICDC, 1997: 56).

Arab Women's Health

As Arab society in Israel is more patriarchal in its structure and orientation than most sectors of Jewish society, gender differences to the disadvantage of women are still evident in health status and health opportunity statistics. The table below offers a few comparative figures. Infant Mortality Rates by gender show a greater disadvantage for Arab female infants. This is true for the overall Infant Mortality Rates as well as for Infant Mortality Rates in the neonatal and post neonatal periods and the under-five period. Data on life expectancy at birth also show a greater disadvantage for Arab women vis-a-vis Arab men, compared to that of Jewish counterparts. Although female life expectancy is greater for both Arabs and Jews at all ages, at age 65 and above, the advantage of Arab women in terms of longevity is much smaller (0.4 years) than that of Jewish women (2.1 years). In terms of death from specific causes, Arab women have higher age-standardized rates of mortality from such causes of death as CVA, hypertension, diabetes mellitus and asthma, compared both to Arab men and Jewish women. In comparison to Jewish women, Arab women have higher standardized rates of heart disease, the leading cause of death in Israel. Although Arab women exhibit lower cancer morbidity and mortality than Jewish woman, the incidence of breast cancer (the leading cause of cancer mortality in Israeli women) is increasing at a faster rate among Arab than among Jewish women. The same is true for cervical and ovarian cancer. In light of this finding, the limited participation of Arab women in breast cancer detection programs, especially mammography, deserves mention. This is reflected in the much higher Relative Risk Ratio of Arab to Jewish women in cases of mortality from breast cancer, compared to its incidence, implying later detection among Arab women and possibly earlier incidence among Jewish women. A similar discrepancy in the hospitalization versus mortality rates for hypertension implies under- utilization of health services by Arab women (ICDC, 1997: 61, 79-80).

A major statistic in favor of Arab women's health is their reported low rate of smoking (ICDC, 1997: 238).

The Unrecognized Villages

The most highly disadvantaged segment of the Arab minority in Israel are residents of the unrecognized villages, so called as a result of the 1965 *Planning and Zoning Law,* which excludes over a hundred small Arab localities, in which over 80,000 persons reside, from residential zoning. On-site educational, health and other government seervices have been withheld from the residents of these communities.

Housing conditions in the unrecognized villages are severely inadequate due to the tight controls exercised by building and planning inspectors and the threat of demolition of new houses. Crowding is excessive and most houses lack water and electricity. Sewage is a major problem. The absence of any modern system of waste water disposal in such locations is the lesser problem; a greater threat to health are the streams of raw sewage from Jewish towns like Dimona which inundate stream beds through which residents of several Bedouin localities have to cross to reach their work places, markets, schools and even health services. Tractor-drawn tankers bringing in water for drinking and household purposes cross through raw sewage streams, a sure setup for fecal-oral disease transmission and outbreaks of gastroenteritis, hepatitis, and parasitic diseases (Kanaaneh, 1995: 197; Kanaaneh, 1997: 7).

The practice of withholding basic services, including health services, constitutes a type of collective punishment and has been condemned by the international community (Kanaaneh, 1995: 202). Currently it is being taken up at the Israel Supreme Court by *Adala* - the Legal Center for Arab Minority Rights in Israel and The Galilee Society - The National Arab Association for Health Research and Services. The harsh living conditions and socioeconomic deprivation of residents of unrecognized villages and the effects of substandard or nonexistent basic services result in a health status that is lower than that of any other group in Israel. In the Negev, for example, the Infant Mortality Rate of the Bedouin residents of unrecognized villages in 1995 was 13 per thousand live births, compared to 8 for other Negev Bedouins and 5 for Negev Jewish residents (Ministry of Health, 1997: 1). This Relative

Comparison of Health Status Indicators by Gender

	Male	Female
Relative Risk Ratio* of Infant Mortality Rates 1990-93	1.8	2.3
Relatave Risk Ratio* of Under 5 Mortality Rate 1990-93	2.5	3.0
Difference in Years Between Jews and Arabs in Life Expectancy at Birth 1990-94	2.0	2.9

*Relative Risk Ratio of Arab to Jewish

Source: Calculated from CBS, 1997, *Socio-demographic Characteristics of Infant Mortality Based on Data for 1990-1993:* XIX; and from CBS, *Statistical Abstract of Israel 1997*, Table 3.21.

Risk Ratio of 3:2:1 has remained constant over time. A greater disparity is seen in terms of congenital anomalies: the Relative Risk Ratio of giving birth to an infant with congenital malformation for Bedouin mothers is four-fold that for Jewish mothers. This is due in part to the high prevalence of consanguineous marriages among the Bedouins, but it is also related to other factors: infant mortality from congenital malformations has a Relative Risk Ratio of 7.5, reflecting the differences in living conditions and in accessibility and utilization of health services (Ministry of Health, 1994a: 2) between the Jewish and Bedouin sectors. A survey conducted jointly by the London School of Hygiene, the Southern District Health Office of the Israel Ministry of Health, and Ben Gurion University in 1996 found that a third of Bedouin mothers living outside the recognized localities did not visit the Mother and Child clinics (Hundt, 1996: 3). Similarly, a survey carried out for The Galilee Sociely - The National Arab Association for Health Research and Services in 1997 covering 19 remote Bedouin localities in the Negev found that only half of pregnant mothers had visited Mother and Child clinics, and that those who did made an average of less than half the recommended number of visits. Only about one-third of the infants and half of the toddlers were fully immunized in accordance with the recommendations for their ages (Kanaaneh, 1997: 4). The Israel Ministry of Health reports that 16 % of infants and 19 % of pregnant mothers from the unrecognized Bedouin villages in the Negev have no contact at all with the preventive health services (Ministry of Health, 1997, unpublished). Competition by the various health funds to enlist members of the Bedouin community has contributed to some improvement of the accessibility of curative primary health services, but the situation is still far from satisfactory.

National Health Insurance Law

The *National Health Insurance Law* has had two major positive effects on the Arab population in Israel. First and foremost, the delinking of payment of fees (taxes) from the right to health care has meant the bridging of the gap in health insurance coverage: all Arab citizens now have health insurance - by law.

The second positive development was a direct outcome of the competition for membership among the four health funds. Residents of peripheral communities in Israel, including Arab communities, were actively recruited, and new clinics and specialist services were established in such areas. In the Negev, for example, special transportation began to be provided by competing health funds at pick-up points far into desert dirt roads to and from the primary health care facilities. The competition resulted in greater accessibility and in improvement in the quality of primary health care for Arab citizens.

Availability of Services

There is very little recent data comparing the availability of health services in Jewish and Arab localities.

One survey of 148 Arab towns and villages carried out in 1996 (Hassan) found that 28 lacked primary curative health care facilities, so that residents had to travel elsewhere to seek care for their sick. The only health care service available in most of the other localities was Mother and Child clinics. Pediatricians were available in 50 of these communities and gynecologists in 35 of them, mostly on a part-time basis, and other specialists were to be found mainly in the few cities included in the survey.

Mortality Rates from Accidents, 1994

	Arabs	Jews	Relative Risk Ratio of Arab to Jewish
0-4 years			
Auto crashes and collisions	9.6	1.0	10
Other accidents	10.1	3.0	3
5-14 years			
Auto crashes and collisions	6.9	2.0	3
Other accidents	3.2	0.6	5
15-19 years			
Auto crashes and collisions	11.4	12.0	1
Other accidents	7.0	3.6	2

Source: National Council for the Child, 1997, *Children in Israel. Annual Yearbook*, Table 9C.

School health services are far from adequate in Arab schools, and Mother and Child clinics in Arab villages are below the national average in terms of staffing and availability in peripheral localities. The planned construction of some 80 such centers, fewer than half of which were completed by 1998, has improved primary health care delivery, but accessibility still lags behind that for Jewish localities.

Prevention and Life Styles

A family with a member suffering pain, discomfort, or a direct threat to his her life will actively seek help within the health care system regardless of obstacles. However, compliance with health promoting advice from experts will be very limited if even minimal social, economic or cultural hindrances intervene. Action by individuals may appear to be reckless from a professional point of view but may well reflect the inner logic of the particular circumstances of the individuals involved.

Starting with birth defects in Israel, there is a marked difference in the compliance of pregnant Arab and Jewish women with recommendations for amniocentesis (ICDC, 1997: 160). In 1992, 16% of pregnant Arab women and 68% of pregnant Jewish women aged 37 years or more carried out the recommended procedure. For those under age 37 the difference is even greater: 0.6 and 19 percent, respectively. As a result, though only 57 out of a total of 220 Downs fetuses were to Arab mothers (26%), they had 48 out of 88 Downs births and only 9 out of 123 aborted fetuses. Issues of religious belief, social pressure, level of awareness, and program outreach are involved here.

Accidents are preventable to a large degree, particularly among children. The mortality rates for children from auto crashes and collisions and other accidents are shown in the tables on p.21. The significance of these statistics is not only in their amenity to prevention, which depends mainly on behavior change, but also in the general economic effects and the potential years of life lost. There is a marked discrepancy between mortality and morbidity rates: whereas the overall childhood mortality rate from accidents among Arabs is more than twice that among Jews, the rate of children's emergency room visits due to accidents is actually lower among Arabs than Jews by about one third (National Council for the Child, 1997: 183), indicating differences in accessibility and utilization of health services.

Immunization coverage is over 90% among both Arabs and Jews. However, this statistic is based on reports from Mother and Child clinics. Under-reporting is found mainly in two groups: the well-to-do Jewish residents of Central district suburbs who chose to immunize their children at private

pediatric clinics, and the Bedouin children in remote Negev localities. The latters' reported coverage was 72% in 1994; out of those reported, only 84% were immunized fully at the end of their first year of life, i.e., 60% of all infants (Ministry of Health, 1997).

Cancer statistics provide an insight into another aspect of prevention, namely early detection. Over the years, cancer mortality has been lower among Arabs than Jews. This is true for the total mortality from cancer and for all cancers individually, with the exception of deaths from lung cancer among males. The age-adjusted rates for cancer incidence, on the other hand, show that the Relative Risk Ratio of Jews to Arabs is higher than the Relative Risk Ratio for cancer mortality, indicating less early detection among Arabs than Jews (ICDC, 1997: 82). Two additional figures illustrate the lack of early detection and health-promoting behavior among Arabs. Mammography is recommended and available at no cost once every two years for women over the age of 50. An annual breast exam by a physician is recommended as well. Here the disparities are striking: 81% of Arab women and 58% of Jewish women over 50 reported never having had a mammogram, with 84% (Arab) and 36% (Jewish) never having had a manual breast exam (ICDC, 1997: 122). More Arab women had a mammogram than a manual breast exam by a physician. This may be the result of the automated mammography scheduling, whereby women between the ages of 50 and 70 receive invitations in the mail to schedule a mammogram. It also could mean that some physicians refer women patients for mammography without first performing a physical exam, a negligent practice.

Groups With Special Needs

The Elderly

In 1996, there were 543,300 persons over the age of 65 in Israel, constituting 9.6% of the total population, and 219,300 persons over the age of 75 (3.85% of the total population) (CBS, 1997a: Table 2.10). In OECD countries, the average proportion of the 65+ cohort is 13%; in Sweden it is 17.6%, in the United Kingdom, 15.7% and in Switzerland, 14.2% (Ben-Nun and Ben-Ori, 1996: 3). It is well known that health problems increase with age, and that the average per capita outlay for persons over the age of 65 is about 4 times the average expenditure.

What is less well known is the fact that 58% of persons aged 75 + and 70% of elderly inpatients are women. Although Israel's population is young compared to that of most OECD countries, the 75+ cohort is growing, and, with it, the need for community services for the elderly and long-term geriatric beds.

Among immigrants from the former Soviet Union, the proportion of the elderly is higher than in the general population (14%, compared with 9.6%). Elderly immigrants report suffering more than veteran Israelis from hypertension, chest pains, shortness of breath and arthritis (Neon et al, 1993). However, a 1998 analysis of data from four national surveys found no difference between veteran and new Israelis in either the incidence or types of chronic diseases for which they reported actually receiving treatment (Niral et al, 1998: 104). Thus, either the difference is a subjective one, or elderly immigrants are not receiving (or not reporting on receiving) the treatment they need.

A 1990-91 study of 70-year olds in Jerusalem identified another group with special health care needs: women of African-Asian origin, whose rate of hypertension was found to be 63%, compared with 43% for women of European origin. Bursztyn et al suggest that this may be due to the higher body mass index in women of African-Asian origin (Bursztn et al, 1996: 632). While high levels of awareness and treatment were found, according to the authors, this awareness was not translated into adequate control of hypertension levels (ibid: 633).

In Israel - as elsewhere - services for the elderly suffer from fragmentation: The National Insurance Institute (Social Security) is responsible for home care, the Ministry of Labor and Social Affairs for placing physically frail elderly persons in homes for the aged or sheltered housing, and the Ministry of Health for care of mentally frail seniors or those in need of nursing homes.

Most geriatric care is provided by female family members. The proportion of elderly who obtain assistance solely from family members is higher among Asian- and African-born Israelis than among the American and European born Israelis (Walter-Ginzberg et al, 1997:11), among immigrants from the Soviet Union than among nonimmigrants, and among Arabs than among Jews (Be'er, 1996). An estimated 70-75% of the aged who need assistance in carrying out daily functions from agents outside the family obtain it within the community (Swirski, 1997: 16).

The *Long Term Insurance Benefits Law*, which came into effect in 1988, greatly improved home care for elderly citizens. It provides a maximum of 10-16 hours of home care a week on a nearly universal basis for persons over the age of 65 who have difficulty carrying out daily functions. In June 1998, 80,500 persons were receiving benefits under this law, 73% of them women (National Insurance Institute, 1998b: 63).

The proportion of senior citizens receiving home care in Israel is high relative to that in other countries - 10.7%. In contrast, the proportion of senior citizens receiving long term institutional care is relatively low. Assuming that in 1994 all existing beds were occupied (which they were not), 4.5% of Israeli elders were receiving institutional care - compared to the average rate of 5.5% in twenty OECD countries (Swirski, 1997: 18).

This finding may be connected to the fact that the benefits package under the *National Health Insurance Law* does not include long-term nursing care for the elderly. The Ministry of Health has a special budget to assist those who require but cannot afford this care. Pursuant to functional and financial screening, the Ministry provides a monthly payment (based on the patients' income and that of their spouses and children) to cover the difference between the actual cost of care and a co-payment determined on the basis of patients' financial resources.

In 1990, 68% of long term care and mentally frail patients in geriatric institutions were receiving government assistance. Although the Health Ministry assistance budget is sizable, it falls short of need. In June 1997, 2,300 patients - about 25% of those identified as requiring institutionalization in nursing homes - were waiting for government assistance. Thus senior citizens who require inpatient care because of an acute but transitory problem such as a fracture, pneumonia or a cerebral

event, obtain it from their health fund. In contrast, senior citizens who need long term care because they have become bedridden or have lost their memory or sense of orientation may find themselves footing the hospital bill themselves, because this service is excluded from the benefits package.

New Immigrants from Ethiopia and the former Soviet Union

Between 1989 and 1996, some 600,000 immigrants came to Israel from the former Soviet Union and about 35,700 from Ethiopia (CBS, 1997: Table 2.22). As Soviet immigrants comprise about 10% of the population, any special health needs they may have are likely to impact on the health care delivery system. And while Ethiopian immigrants constitute a much smaller minority, they come from an area of the world in which diseases relatively rare in Israel, like malaria, AIDS and tuberculosis, are endemic (tuberculosis is also found in higher proportions among Soviet immigrants), and thus their health needs require special attention. Additionnally, the distress of immigration has had negative health effects on both groups, necessitating awareness and outreach on the part of mental health professionals, as well as culturally appropriate care.

With regard to Soviet immigrants, a study of national survey data found that immigrants up to the age of 64 appeared to suffer significantly more than veteran Israelis from heart disease. A higher proportion of immigrants also reported mental distress, though a lower proportion reported utilizing mental health facilities. Immigrants over the age of 50 also reported suffering from more handicaps than veterans. Some of the differences between immigrants and veteran Israelis may be connected with the stresses of immigration (Nirel, 1998), but others clearly require attention.

To date, no systematic study has been made of the health needs of new immigrants from Ethiopia. Their relatively high rate of infectious diseases has been pointed out by a number of researchers (for example, Epstein, 1996: 70). A higher rate of suicide has been noted among Ethiopian immigrants than among the general population (Arieli et al, 1994; Arieli and Ayche, 1993), as well as a high level of mental distress (in a local study of immigrants in Netanya), attributed to the trauma of immigration and the conflicts and stress caused by the immigrants' experiences as newcomers in an entirely different culture (Arieli and Ayche, 1993). No data are available on the comparative utilization of services by Ethiopian immigrants and other immigrants or veteran Israelis.

Palestinian Residents of East Jerusalem

In 1996, the Israel Ministry of the Interior changed its policy with regard to Palestinians living in East Jerusalem (annexed by Israel following the 1967 war), the purpose of which was to rescind the residence rights of as many Palestinians as possible. The new policy has had an adverse effect on rights to health care. In cases in which a Palestinian resident of East Jerusalem married to a non-resident gives birth, the infant is not automatically covered; the mother must file a special request - despite her membership in one of the health funds. The ensuing "investigation" may take a year or more, and in the interim, the infant is uninsured.

Likewise, residents of East Jerusalem who register for birthing hospitals are not accepted automatically like other residents of Israel; rather, they must first obtain confirmation from the National Insurance Institute of its willingness to cover the expense.

The spouse of a Palestinian resident of East Jerusalem whose former dwelling was outside of East Jerusalem does not automatically receive health insurance either. Again, an investigation needs to be conducted by the National Insurance Institute, leaving persons in need of care without it until the procedure is completed (Physicians for Human Rights, 1997).

Foreign Workers

In the summer of 1997, a quarter of a million foreign workers were employed in Israel, about 100,000 with permits and the remainder without permits (Kondor, 1997: 52). Foreign workers are not covered by the *National Health Insurance Law*. Their visas are contingent upon the workers being covered by private health insurance. The cost is $1-1.5 a day, more than the amount paid by Israelis earning the minimum wage (foreign workers earn less) for coverage that is less extensive.

Human rights organizations in Israel have identified several problems with the health insurance arrangements for foreign workers: at the end of the insurance period, usually a year, the insurance companies do not renew the policies but rather obligate the employer to take out new ones. Since none of the policies cover treatment for illnesses incurred prior to the beginning date of the policy, any worker coming down with an illness is not insured for that same illness in the next insurance period. Other exclusions include chronic illnesses, self-inflicted injuries, AIDS, physiotherapy, and routine checkups.

Before a hospital will accept a foreign worker as an inpatient, it requires confirmation from the insurance company that it will finance the hospitalization. Whereas hospitals cannot

refuse a foreign worker emergency treatment for an acute problem, due to, among other things, the *Patient's Rights Law*, they can refrain from hospitalization if there is doubt about who will cover the costs.

An estimated 150,000 illegal foreign workers and their families, who live in Israel on a temporary or permanent basis, have no health insurance. The Association of Physicians for Human Rights estimates the number of children of illegal foreign workers in Israel at between 2,000 and 3,000 (Physicians for Human Rights, 1998). These children receive well-baby care in Mother and Child clinics and in schools and cannot be refused treatment in hospital emergency rooms. However, they and their parents have no access to specialist care or hospitalization. Theoretically, parents can purchase private policies for themselves and their children, but this is unlikely because of the cost. Moreover, companies refuse to insure children under the age of three, and none will insure children born with medical problems. In Holland, in contrast, all children of foreign workers receive medical care under the national insurance program after three months sojourn in the country, regardless of their legal status.

The Privatization of Health Care

"Privatization" refers to two distinct areas: (1) the increasing ***provision*** of services by private businesses and non-profit organizations rather than by the government, and (2) direct ***payments*** imposed on consumers for health services formerly financed by the government through taxation.

The privatization of health care provision involves both *the creation of new for-profit medical services* - nursing homes, hospitals, specialized clinics for menopause, pain, cosmetic surgery, child development, diagnostic services and a plethora of alternative health services like homeopathy, naturology, and reflexology, and *the conversion of public health care facilities into private ones.*

Health economists agree that health services are not like other commodities sold on the marketplace; rather they are a prime example of "market failure." As most of the information concerning the "product" is in the hands of the seller-physician, the buyer-patient has limited knowledge and thus bears little resemblance to the classical model of the rational consumer. As a result, there is a "moral hazard" of the physician selling the patient a service or product that he or she does not need - or, much worse, one that may be dangerous to their health.

Who Provides Health Services

Regardless of whether health services are financed directly by the consumers' fees for services or by the state, they are paid for by citizens. However, the difference is significant. To illustrate, the table below compares the total payments by households for social services and taxes in two very different societies: the United States and Sweden.

The average household expenditure for social services is about the same in the US and Sweden, 39.6% and 41.2%, respectively. The difference is that in Sweden the expenditure is utilized to provide health care for all, as revenues go to the government in the form of taxes, while in the United States, the figure represents an average between higher income families that purchase health care on a private basis and low-income families that go without (unless they are eligible for Medicare or Medicaid). The health outcomes: in Sweden, income disparities are much smaller than in the US, and the health of Swedes, as measured by indicators like infant mortality (4 per 1,000 live births in 1996) and life

Social Services and Taxes as Percentage of Household Expenditure

	Sweden	United States
Health, education and private pensions	2.7%	18.8%
Daycare	1.7%	10.4%
TOTAL	**4.4%**	**29.2%**
Taxes	36.8%	10.4%
TOTAL OUTLAY	**41.2%**	**39.6%**

Source: Gosta Esping-Andersen, 1998, "The Inequality-Employment Trade-Off in Postindustrial Economies: Towards a Pareto-Optimal Welfare Regime,"paper presented at "The Welfare State at Century's End: Current Dilemmas and Possible Futures," Tel Aviv University, May.

expectancy at birth (82 for women and 76 for men) is better than that of US citizens (infant mortality: 8 infant deaths per 1,000 live births - twice as high as that in Sweden; life expectancy at birth: 80 for women and 74 for men). In Sweden, the national expenditure on health is 7.3 % of the GNP, whereas in the US it is nearly twice as high - 14.2% (World Bank, 1998: 18, 22, 90).

In a similar vein, one can compare the expenditures and health outcomes of two health services in Israel, one provided by the state on a universal basis and the other dominated by the private market. Preventive care for pregnant women and newborns is provided by a network of public Mother and Child clinics. The service is financed by the Ministry of Health and by a low user's fee. The total cost: 2% of the national expenditure on health. More than 95% of Israeli parents visit one of the clinics at least once during the first year of life of a newborn (Palti, 1996: 86). Looking at health results - nationwide, over 90% of babies receive the necessary inoculations on time. Maternal mortality is negligible, and infant mortality is low.

The picture for dental medicine is entirely different: 90% is private. Expenditures for dental care constitute 12% of the national expenditure on health. Care is far from universal: the most recent national commission on health care (1990) found that 75% of Israelis did not have regular dental check-ups. As a result, in 1992, the proportion of children aged 5-6 with no cavities was 41% in Israel, compared with 60% in Denmark, 58% in Norway and 49% in Great Britain, countries in which dental medicine is included in public health programs (Horev, 1996: 108). The number of adults aged 35-44 with serious gum problems (periodontal pockets) was 17% in Israel, compared with 8% in Norway, 11 % in Denmark and 12% in Great Britain (ibid: 109). And the proportion of persons 65 and older with no teeth of their own was 60% in Israel, compared with 31% in Norway and 50% in Denmark (ibid: 109). The fact that in Israel dental medicine is left to the private market leads to inequity in the provision of services: low-income persons who cannot afford dental care have bad teeth.

Cost and Utilization Rates of a Public and a Private Health Care Service: Dental Health and Well-Baby Care

	Utilization Rates	Cost as Proportion of National Expenditure on Health
Preventive Care for Infants - Public Service	95%	2%
Preventive Dental Care - Private Service	25%	12%

Privatization: Private Services Instead of Public Services

The privatization of health services involves a number of processes: the retrenchment of government, the development of private services alongside public ones, and the conversion of government services into non-profit and for-profit companies. It also means the increase of co-payments for public services and the proliferation of private medical services.

Government Stops Paying

A year after the *National Health Insurance Law* was implemented, the Israel Ministry of Finance began to retrench. In 1995, it paid out NIS 1.5 billion to cover the difference between revenues and expenditures under the *National Health Insurance Law* - more than it had anticipated. Finance officials accused the health funds of inefficiency and waste, while the latter pointed out that the law was underfinanced, as the budget failed to take into account (1) population growth and aging, (2) technological advances, and (3) the full increase in the cost of health services. The General Health Fund contended that it was not being properly compensated for its larger-than-average share of persons aged 75+ (79%) and chronically ill persons (75%). An objective observer - The Brookdale Institute - examined the balance sheets of the four health funds for 1995 and found instead of waste an average *decrease* in per capita expenditures.

At the end of 1996, the employers' health tax was abolished; in its stead, a sum of about NIS 7 billion formerly earmarked for the health care delivery system was put at the discretion of the Ministry of Finance. The same year, attempts were also made to impose co-payments on health services, but the Knesset refused to pass the budget bill as long as co-payment strings were attached.

The Cabinet's *1998 Budget Reconciliation Bill* included far-reaching changes in the *National Health Insurance Law*. Following intensive lobbying efforts by a coalition of NGOs, compromise legislation was passed, under which responsibility for financing the services provided under the *National Health Insurance Law* devolved from the Finance Ministry to the health funds. The funds were instructed to prevent future deficits by imposing co-payments and by selling more policies for supplemental insurance. They were also encouraged to add, but not subtract, services from the uniform benefits package, provided they could finance the additions (subject to approval by the Minister of Health and the Knesset Finance Committee). This change

delivered a blow to equity in health care: henceforth, there would be a connection between the ability to pay and the services rendered, and health funds would be able to redesign their benefit packages so as to attract the healthy and affluent and thus "improve their patient mix."

Among the other changes instituted: a fiat that no more than one health fund serve localities of under 5,000 residents and no more than two localities of under 10,000. This will mean a decrease in the variety of public services offered to Arab communities - the main beneficiaries of the competition between health funds stimulated by the *National Health Insurance Law.*

Public Services Go Private

Sharap

A prominent example of the use of public institutions created by taxpayers' money for private profit is the Private Medical Services (*Sharap*) arrangement, under which senior physicians employed by the hospitals may see private patients in separate rooms and utilize other hospital facilities for their treatment. Hospitals regulate and collect *Sharap* fees, from which they deduct taxes and their own charges. This arrangement has been instituted in two public hospitals in Jerusalem, Hadassah and Shaa're Zedek. The physicians' unions would like to see it extended to all public hospitals in Israel.

Sharap can be viewed as an attempt to control "black market" medicine, in which patients paid hospital departments and physicians under the table in order to be operated on by the surgeon of their choice or to advance to the head of the waiting list (Lackman and Noy, 1991, 1998), by institutionalizing the practice. In 1995, 10% of surgical procedures and 18% of outpatient clinic services in the Hadassah and Shaa're Zedek hospitals were done under the *Sharap*; between 30% and 40% of the permanently employed physicians dispensed private care under the program (Shuval and Anson, 1999).

There is no empirical evidence that the *Sharap* arrangement contributes to the improvement of hospital services (Shirom and Amit, 1996: 64). What it does is to channel public resources to a thin stratum of senior physicians and affluent patients. While hospital overhead in the operation of the *Sharap* is supposed to be limited to 35%, an estimate of the overhead involved in scanning, pathology, and clinical lab services performed at the Sha'are Zedek hospital under the *Sharap* came to nearly 47%. This prompted Amit and Shirom to conclude that *Sharap* activities "in effect involve transferring resources from the general public to a group of doctors," (ibid: 64), for the charges the doctors pay the hospital come nowhere near reimbursing them for the real value of the use of the premises, equipment and services. Nobably, Lackman and Noy found that "black market" medicine was no less prevalent in Hadassah and Shar'are Zedek than in public hospitals without *Sharap* arrangements (1991).

The institutionalization of the *Sharap* in public hospitals leads to the creation of two levels of treatment within the same institution and to differences in access, depending on the pocketbook of the patient. Thus, it is expected that the expansion of the *Sharap* will contribute to class polarization and that it will have an adverse effect on whatever social solidarity exists in Israeli society (Amit and Shirom: 68).

The question is: what are the alternatives? A series of articles published in *HaIr*, a local Tel Aviv weekly (Shadmi, 1998a,b,c) in the summer of 1998 revealed that in three large public hospitals, Ichilov, Assaf Harofe and Rambam, private services are being offered by senior physicians alongside the public ones under a different arrangement. Unlike the situation under the *Sharap*, in the above hospitals doctors set their own fees, and payment is made through a commercial insurance company, which charges 10% of the doctor's fee for its services. Whereas one of the justifications for permitting private services in public hospitals was to prevent doctors from engaging in private practice outside the public hospitals, in the one hospital investigated, most of the physicians did not reduce their private practice outside the confines of the public hospital after institution of private services under its roof (Shadmi, 1998a).

Yet a third model is to be found at the Haim Sheba government hospital, where patients with supplemental medical insurance from health funds or commercial firms receive private medical services in the public facility. Doctors' fees are set by the health funds or insurance companies, not by the physicians themselves. Here, too, domesticating "black market" medicine by institutionalizing it within the confines of a public hospital does not prevent doctors from practising private medicine outside as well inside the public facility employing them (Shadmi, 1998b). The result is that many of the best doctors in some of the public hospitals devote most of their time to treating persons with means; those without are treated by the less experienced (ibid).

The Sale of Supplemental Insurance

A second example of the development of private services alongside public ones is the health funds' sale of supplemental insurance for health benefits not included in their regular package. Supplemental insurance received further boosts in 1995, with the implementation of the *National Health Insurance Law*, when the funds with a more generous benefits package than that stipulated by the law transferred the extra services to their supplemental plans, and in 1998, with passage

of a budget reconciliation bill that expressly encouraged health funds to develop private insurance to help them balance their budgets. It has been noted that the proximity of public and private insurance involves a danger of "slippage" from public to private and is threatening to equality, especially if the private services offered - like jumping ahead in the waiting line for surgery, are closely tied to those in the public benefits package (Ofer, 1997: 746: Chernichovsky, 1996).

Conversion of Government Hospitals to Public Trusts

In 1992, a process was initiated whereby 6 government hospitals were to be reorganized as self-sustaining public trusts. These new entities were to be not-for-profit, but they were to be run more like companies than previously, that is, management was to take into account not only the quality of services provided but also the costs. The major purposes of the reform: to free the Ministry of Health from the running of hospitals so that it could concentrate on planning and policy, and to increase the efficiency of the hospitals by creating competition among them. What was not considered by policy-makers was "what ought a public firm to do?" - that is, what other objectives were the hospitals to pursue - as "public" bodies - beyond their own financial interests, like, for example, increasing equity and access (Saltman, 1995:175).

Actually, the process of privatization had begun as early as 1987, when government hospitals were first permitted to sell - for profit - services not included in the benefit packages of the health funds. At the same time, they were allowed to hire staff on a temporary basis and to make some acquisitions on their own (Shirom et al, 1997: 140). The hospitals set up separate accounts for revenues from for-profit services; these services also provided additional employment opportunities for hospital staff. In other words, even before the reform had begun, "de facto trusts [had] been created within the big public hospitals in the form of a subsidiary budget, uncontrolled and unmonitored" (Adar, 1995:171).

Hospitals slated for independence were to lease real estate and other property from the government and to cover all payments - salaries, maintenance, acquisitions and research - from their own income. Sources of income were to include payments from health funds for hospitalizations, revenues from sales of for-profit services and contributions. Hospital employees were to be transferred from the public service to the hospital trust: they would cease to be government employees protected by collective bargaining agreements. In 1992, the six hospitals were duly registered as public trusts and Boards of Directors were appointed.

The reorganization was arrested by the Nurses and the Auxilliary Workers Unions, whose members feared - with good reason - a worsening of their terms of employment.

In the meantime, directors of the hospitals slated for conversion have become more independent (Ofer, 1997), and some of the government hospitals have begun to operate like profit-making institutions (ibid and Shirom et al: 149). The development of for-profit ambulatory services has already been mentioned. The Ministry of Health's introduction of differential payments for certain medical procedures - following the international fashion - resulted in large increases in some expensive procedures, like by-pass operations, the rates of which have risen to a level double that in European countries (Shirom et al: 150). Another example: in 1995, some government hospitals announced they would limit low-compensation procedures like hip replacements due to financial constraints (ibid).

The process of privatization of government hospitals in Israel has resulted in the coexistence of public non-profit and private for-profit services under one and the same roof. This may well prove detrimental to equity, for it creates an incentive to transfer some of the services meant to be provided under the public framework to the private one. Another problem is that institutions with a public service image are now marketing new, expensive technologies whose effectiveness may be unknown or questionable (ibid: 151).

If Israeli hospitals follow the example of American government hospitals that became public trusts, there is danger of their shifting revenues from patient care to "exorbitant salaries" for administrators (Saltman, 1995:175).

The privatization experience of the United Kingdom is also instructive. Once they were on their own financially, the English hospital trusts found they had to "make redundancies in order to remain viable and survive" (Hunter, 1995:162). Some job losses were justified because there was over-staffing, but others were the result of tight financial constraints (ibid). Whatever the case, the privatization process involves making labor relations "more flexible"; that is, making health care workers, especially those on the lower end of the occupation ladder, easier to fire.

It is now recognized that hospital employees are stakeholders, and that as such, they need to be involved in the process of privatization (Ofer, 1997: 734). However, the bottom line is still the same: lower-level health care workers will lost their bargaining position - and their jobs. Unless a search for the answer to the question, "greater efficiency for what social aim" becomes an integral part of the privatization process, Israelis are liable to find former government hospitals giving preference to income-producing services and clients at the expense of unprofitable services and poor clients.

Privatization: The Increase of Co-Payments for Public Services and the Growth of Private Services

Co-payments

As government financing of public health services decreases, consumers' co-payments increase, and the result is a lessening of equality. The latest available figures - for 1995 - show that the share of total household outlays for medications, co-payments and private physicians and dentists in the national expenditure on health has remained stable at between 25% and 29%. However, there have been increases in payments for specific services. In 1995, co-payments for services provided by the health funds in the framework of the uniform benefits package constituted 6% of the total cost of those services (Ben-Nun, 1996: 26). This figure is expected to increase with the implementation of additional co-payments in 1998.

Consumer co-payments constitute 10% of the cost of the services provided by the Israel Ministry of Health. These include payments for hospitalization in psychiatric and geriatric institutions, for treatment for drug or alcohol addiction, and for visits to outpatient clinics, as well as payments at Mother and Child clinics for childbirth preparation, for inoculations, and for IUDs (Ben-Nun, 1996: 13-14). They have increased in recent years, in the face of budget cuts (ibid: 12). The greatest proportional increase has been in the total co-payments for nursing homes, which rose by 340% between 1975 and 1992 (ibid: 9), due to the needs created by population aging (More recent figures are not yet available).

Private Health Services

Private services include dental clinics, private health insurance plans that supplement the public services, alternative health services, private doctors and private hospitals.

Data on these health services is spotty. Regarding private health insurance plans, a study conducted by the Brookdale Institute reported an increase in private premiums between 1991,when these constituted 2% of the national expenditure on health, and 1993, when their share increased to 3.4 % . Likewise, the percent of the population of Hebrew speakers aged 22 or above purchasing commercial insurance increased from 13% in 1990 to 16.7% in 1995 (Gross and Bramli, 1996: 38); 54% of policies included dental insurance, and 25% surgery and/or consultations with private physicians (ibid, abstract). This item is expected to increase following the *Budget Reconciliation Bill of 1998*, which stipulates that insurance for geriatric services be sold only by private companies, effectively ruling out the possibility of including long-term care under the *National Health Insurance Law* - the original intention of the lawmakers. It is also increasing due to the fact that foreign workers are not covered by the *National Health Insurance Law*: their employers are required to purchase private health insurance policies for them.

In 1995, dental care, most of which is private, constituted 12% of the national expenditure on health and about half of the household expenditure for medical services and medications. This expenditure has remained stable over time and is expected to remain high, as there are no plans to integrate dental medicine into the *National Health Insurance Law*, aside from special services for school children and senior citizens.

No quantitative data on private, alternative medicine is available; we do know that public hospitals have been developing private, ambulatory care, and that this care includes an expanding range of alternative services. As for private hospitals, the available evidence seems to contradict the "common knowledge" concerning the large increase in the share of private facilities. Between 1950 and 1996, the proportion of private institutions remained more or less stable, accounting for about 38% of total hospitals; during the entire same period, the percentage of private beds increased from 19% to 24% of the total beds. Breakdowns for psychiatric and long-term care beds actually showed a slight decline: in 1984 private beds constituted 41.5% of the total psychiatric beds in Israel, whereas in 1996 they accounted for 36%; the picture for long-term care beds is similar: in 1984 they constituted 41.7% of the total beds, and in 1996, 39.5% (CBS, *Statistical Abstract of Israel*, various years). In 1996, there were 104 private for-profit hospitals in Israel (CBS, 1997a: Table 24.5); most private beds were concentrated in nursing homes and psychiatric hospitals.

The question is how different types of privatization and cost increases for households affect equity in health care. In most democratic states, social services, including health care, are financed by a combination of the government (through taxes, of course) and the consumers, though Israeli consumers pay comparatively more than those in OECD countries (Ben-Nun, 1996: 6). Whereas government financing reflects a commitment to meeting the health needs of citizens which would not be met if health care was sold on the open market like any other commodity - a commitment affirmed in the passage of the *National Health Insurance Law* - decreasing government financing and increasing privatization reflect a retreat from that commitment. While public health services increase the income of those in the lower income brackets and therefore increase social equity, privatization has the opposite effect. The present trends of (1) decreasing government financing of the *National Health Insurance Law*, (2) transfer of public goods and services to private non-profit or profit-making bodies, and (3) increasing co-payments for public services do not augur well for equity in health care. Moreover, they have no potential for closing the gaps in health care delivery between rich and poor; neither are they targeted at the specific needs of women or of Arab citizens of Israel.

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