Allocation of Scarce Resources

Avraham Steinberg, M.D.

A. Introduction

Rapid developments in medicine and medical technology during recent years have created a variety of ethical dilemmas including the allocation of limited or scarce resources such as money, instruments, medications, health-care facilities, time and manpower.

No country in the world can provide all medical needs for all its citizens. Therefore, public policy relating to priorities in allocation must be established. The issue is both economic – how to allocate the limited resources most beneficently, and ethical – how to allocate these limited resources in the most equitable and just manner.

There are two aspects to this issue: macro-allocation, involving the society as a whole; and micro-allocation, involving individual health care providers.

This section deals with macro-allocation, namely the ethics of limited public resources, general health-care policies, and the effects of budgetary and economic decisions on medical practice.¹

B. Past and Present

In the past if a particular medical treatment was considered useful, it was given. The questions at that time were whether the procedure was beneficial, safe and widely accepted. Nowadays, because of rapid advances in medicine, there are additional questions of feasibility and cost, because much of medicine is now based on technology, instrumentation and manpower, all of which are very expensive.²

The equitable and just distribution of limited medical resources has become very difficult, since in situations of poor health

^{1.} Concerning allocation decisions for individual patients, see "Priorities in Medicine" in the *Encyclopedia of Jewish Medical Ethics* by A. Steinberg.

^{2.} See McGregor, N Engl J Med 320:118, 1989.

standards a small investment may produce significant benefits, whereas in situations of high health standards large investments may produce little benefit.

Modern medicine has increased people's life expectancy,³ correspondingly increasing the corresponding number of patients with chronic and debilitating physical and mental disabilities. Modern medicine has rendered possible the survival of many defective and premature infants, requiring long and expensive therapy. Modern medicine has made available complicated and expensive new technologies and treatments such as resuscitation and ventilation, organ transplantation, and in-vitro fertilization. It is based upon complicated, prolonged and expensive basic and clinical research, and necessitates large-scale preventive measures.

All these are very expensive and obviously require a system of priorities. In addition, there are worldwide budgetary and economic restraints which have negative effects on the ability of all countries to provide adequate and universal health care for their populations. Among poor nations there are serious problems of hunger, unemployment, lack of housing and population explosion in addition to medical needs. In developed countries people aspire to a very high and expensive standard of living; hence medical expenses are only a small portion of the total societal needs.

In recent years, the fraction of gross national product (GNP) devoted to medicine has risen substantially, more than any other economic aspect, as shown in the table:

Year	Country	% of GNP for medicine
1960	USA	5.2
1991	USA	13.2
1960	Germany	4.8
1991	Germany	8.5
1960	Canada	5.5
1991	Canada	10.0
1960	France	4.3
1991	France	9.1

^{3.} Increased life expectancy in this century has aggravated the problem of allocating scarce resources because people over 65 years of age now account for 12% of the population but utilize one third of all health resources in the United States. See Jecker, N.S. and Schneiderman, L.J., Am J Med 92:189, 1992.

In 1990 in the United States an average of \$2,400 was spent for each citizen for health care,⁴ although only a small fraction of the population had government insurance, most having private insurance or none at all.

The following are some examples of expenditures for medical care in the United States: the cost of hemodialysis is two billion dollars annually; in 1980, more than 100,000 coronary bypass procedures cost two billion dollars; the cost of heart transplants is close to three billion dollars annually; the average annual cost of caring for a patient with AIDS is \$30,000-40,000 annually; for a patient in intensive care (ICU) it is about \$3,000-4,000; and the cost for caring for a child born below 1,500 grams is nearly a million dollars over a 100 day period in an ICU.

C. Possible Solutions

Undoubtedly no country in the world can afford to provide for all the medical needs of all its citizens in an equal manner. Every country must, therefore, ration health care and provide for a system of priorities of public or national health insurance.

Some authorities have suggested optimal criteria for a morally defensible health care system. They include the following characteristics: the health care system must be clear and understandable to the citizens; health insurance has to cover all citizens without discriminatory considerations which are based on income, employment, age, or social status; medical coverage should be comprehensive, to include psychiatric, geriatric, dental and preventive services; the health care system should include measures for a possible cost containment, such as incentives for cheaper treatments, and counter incentives to avoid unnecessary diagnostic and therapeutic measures; the system of payment for the health

^{4.} Jecker & Schneiderman, loc. cit. (n. 3).

^{5.} NCHCT Technology Assessment Forum, *JAMA* 246:1645, 1981.

^{6.} Centerwall, B.S., N Engl J Med 304:901, 1981.

^{7.} Hay, E.J., *J AIDS* 1:466, 1988.

^{8.} Detsky, A.S., et al., N Engl J Med 305:667, 1981. In the United States in 1988 there were 6556 intensive care units accounting for 7% of all hospital beds. The cost for the care of those patients was 140 billion dollars which was 1% of the GNP. See Bone, R.C. and Elpern, E.H., Arch Inter Med 151:1061, 1991.

Stahlman, M.T., J Pediatr 105:162, 1984. See also Hernandez, J.A., et al., Clin Perinatal 13:461, 1986.

insurance should be fair, and result in satisfaction both for the patient and the health care providers. 10

In any case, an optimal health care system should secure a standard of care for individual patients to prevent the danger of sacrificing individual patients for the common needs.¹¹

In addition to creating an optimal health care system there are ways to reduce cost even within the existing systems: educate health care providers to consider the economic impact of their actions, and use the most cost-effective strategies in diagnosis and treatment. Indeed, practical lists have been developed to help treat their patients with cheaper measures without reducing the quality of care.¹²

Further measures include avoidance of defensive medicine, coupled with awareness of the damaging effect of too many malpractice suits and high awards to litigants; reduction of administrative expenses and manpower, and elimination of duplicate medical services, careful allocation of limited resources, as well as efficacious use of manpower, location, time and medical supplies.

We must distinguish between vital medical services and other essential needs of general health, versus the aspirations for maximal medical benefits to improve convenience and quality of life.

In the first category full and complete equality is an ethical imperative, whereas the other category is no different from housing, clothing, education and the like, in which no equality exists even in any western society. Hence, one has to distinguish between pain relief medications for transient minor illnesses and medications for life threatening diseases; elective plastic surgery to improve external appearance differs from heart or cancer surgery.

Indeed, health is an important goal, and, in the eyes of the public more important than others. However, even within the health care system some needs are greater than others. Many health care needs are actually those of general well-being. Hence, society should be obligated to supply basic and vital health care needs for all its citizens equally. Although services for well-being should theoretically be equally accessible for all citizens, the actual delivery of these services is in practice the personal responsibility of individuals according to their own priorities and means.

^{10.} Angell, M., N Engl J Med 327:800, 1992; Angell, M., N Engl J Med 329:1569, 1993.

^{11.} Chassin, M.R., *JAMA* 270:377, 1993.

^{12.} See Friedman, R.B. and Katt, J.A., Arch Inter Med 151:1165, 1991.

A general public health approach must provide the following: medical intervention in situations of danger to life, serious illness, significant disability, or great suffering; preventative medical services in all its aspects including those of environmental hazards and infectious causes of disease; preferential consideration for the poor and the underprivileged; and applied practical research.

On the other hand, other health care needs (which are basically no different from housing, clothing, education, etc.) should be provided for by adequate payment or private insurance, although this would result in non-equitable distribution. Such social non-equitability results not only from the economic differences between people, but also from individual preferences and importance attributable to various different needs in life. Such inequalities exist in all spheres of life, and there is no ethical reason to exclude them from health care services, provided they are of no vital importance.

D. Current National Solutions

Many western countries have revolutionized their health care systems. Complete and equal national health care insurance for all citizens is provided by only a few countries. Such complete health coverage has lowered the death rate, but at the same time, has increased suffering and morbidity, and has increased dissatisfaction among patients because of the inherent lowering the standard of care, and lengthy waits for diagnostic and therapeutic procedures, including surgery. Hence, despite varied health care plans and attempts to design and to secure health care insurance – whether national, public or private – none has so far fulfilled the desired aspirations.¹³

Two countries, the United States and Israel, are now in heated debate over reform in their health care systems.

In the United States there is at present no national health care program for all citizens. There are only two national programs which give medical coverage to a minority of the population —

^{13.} In a series of articles in the New England Journal of Medicine J.K. Iglehart described the health care systems in the United States, Japan, Germany, England, and Canada. See *N Engl J Med* 309:1264, 1983; 310:63, 1984; 315:202, 1986; 319:807, 1988; 321:1767, 1989; 322:562, 1990; 324:503, 1991; 324:1750, 1991; 326:962, 1992; 326:1715, 1992. See also Blendon, R.J., *JAMA* 267:2509, 1992.

Medicaid, which covers patients below the poverty level, and Medicare, which covers people over the age of 65.14

A system that has become popular in the United States is the health maintenance organization plan (HMO), in which families or individuals pay a fixed amount for which they receive medical services according to their needs. Another approach advanced in the United States is to make employers responsible for providing partial or full health insurance coverage for their workers and their dependents, and the government responsible for the poor and the unemployed.¹⁵

An attempt in America to control unjustified costs related to hospitalized patients is the system known as diagnostic related groups (DRG). A list of diagnoses was developed and a price tag for the diagnostic and therapeutic expenses as well as for length of stay in the hospital for each diagnosis was developed. A hospital is reimbursed at a predetermined figure as cited in the list of diagnoses for each individual patient, regardless of the actual cost to the hospital for the care of that patient. Hospitals and doctors are thereby forced to reduce the length of stay in the hospital for many patients, to limit diagnostic tests and therapeutic interventions to those absolutely essential, so as to keep hospital costs down to the level of reimbursement for that DRG. Only in exceptional circumstances do insurance carriers pay more for a specific DRG than the listed reimbursement. Another way to limit costs is to require a second opinion before an insurance carrier allows payment for a surgical or expensive medical procedure.

In the United States malpractice litigation is common, and courts not uncommonly award large sums to patients. As a result, physicians of necessity insure themselves, and these high costs are added to patients' medical bills. In addition, physicians protect themselves by practicing defensive medicine, performing more tests than necessary from a purely objective medical point of view, thereby further raising the cost of health care.

In general, American physicians have developed a tendency to perform many and expensive diagnostic tests which do not contribute to better medical results. Attempts are being made to reduce overutilization of expensive medical technology, and to

^{14.} The various health systems in the United States are described by Dukakis, M.S., N Engl J Med 327:1090, 1992; Igelhart, J.K., N Engl J Med 328:896, 1993.

^{15.} See Blendon, R.J. and Edwards, J.N., JAMA 265:2563, 1991.

relieve pain and suffering resulting from some invasive tests without reducing the quality of care. 16

A novel approach to controlling health costs and to resolve the problem of limited medical resources is that of the state of Oregon in the United States.¹⁷ The goal of the Oregon Plan is to provide the basic medical needs of all Oregon's poor by restricting the amount and the type of medical services rendered by the government to the general population. This was achieved by encoding a list of priorities for all medical services based on their medical importance, their cost and/or the resultant quality of life.

The list was prepared after in-depth discussions and consultations with medical experts, as well as public input through an opinion poll and numerous public meetings. In 1991 a priority list of 709 specific medical services was published by the State of Oregon. The State agreed to cover the medical expenses for the poor for the top 587 items. The Oregon Plan, however, has been strongly criticized from practical and ethical viewpoints. It was found that there are insufficient data for setting priorities in medical services based on cost/benefit considerations. Indeed, distortions in the priority listing were enumerated by many investigators.¹⁸

In Israel the health system is primarily operated and administered by two major providers:

- (a) The Ministry of Health is responsible for general health policies, for the control of other health care delivery systems, and for subsidizing shortfalls in budgets by various health agencies. The Ministry is directly responsible for half of the acute hospitalized cases in Israel, one-fifth of the chronic care patients and half of the psychiatric inpatients.
- (b) The main health care provider of medical services is the *Kuppat Cholim* (Sick Fund) of the Labor Union (Histadruth). About 75% of all Israelis are insured through the *Kuppat Cholim*. In addition to its role as medical insurer for most Israeli citizens, *Kuppat Cholim* also provides basic medical and preventive medical services to all people in rural areas, irrespective of their member-

^{16.} Schoenbaum, S.S., JAMA 269:794, 1993.

^{17.} See Klevit, H.D., et al., Arch Inter Med 151:912, 1991; Eddy, D.M., JAMA 266:417, 1991; Callahan, D., JAm Geriat Soc 39:622, 1991; Dixon, J. and Welch, H.G., Lancet 337:891, 1991; Steinbrook, R. and Lo, B., N Engl J Med 326:340, 1992.

See Hadron, D.C., JAMA 265:2218, 1991; Daniels, N., JAMA 265:2232, 1991; Stason,
W.B., JAMA 265:2237, 1991; Klein. R., BMJ 304:1457, 1992.

ship in *Kuppat Cholim*. This Sick Fund is also directly responsible for about one-third of the acute care beds in Israel.

About 20% of the Israeli population have other health insurance, while about 5% are uninsured.

In 1989 Israel spent 7.6% of its gross national income on health care, yet the annual expenditure per capita was only \$472.19

The health care system in Israel has been colored by a socialistic approach, and represents a public, almost complete population health insurance. The system nearly went bankrupt because of increasing costs of medical care, and poor policy and administrative adjustments.

In 1988 the Israeli government appointed a National Inquiry Committee to investigate the Israeli health care delivery system.²⁰ This Committee discovered a variety of substantial deficiencies in the existing operational systems, to include poor health care services to individual patients, inappropriate and inefficient allocation of existing resources, poor doctor-patient relationship, malfunction of the Ministry of Health, unsatisfactory distribution of health care personnel, inappropriate health and financial policies, poor administrative procedures, and poor overall functioning of the health care system. They also found low morale and poor motivation among public health care workers.

According to the Committee, all this contributed to an infant mortality rate higher than in Europe, a higher than expected mortality from cardiac diseases, greater frequency of infectious diseases, and significant problems in the area of dentistry.

The main recommendations of the Committee were to pass a national health care law to provide universal medical coverage for widely specified medical services. These services should include preventive medicine, ambulatory care, hospitalization, rehabilitation services, medications, medical appliances, geriatric and dental services to the elderly, preventive dentistry for children, and provide for such medical treatment as is not available in Israel. Additional insurance could be purchased voluntarily.

^{19.} Ginsberg, G., et al., Isr J Med Sci 26:625, 1990. In the United States during that year the expenditure on health care was \$2,400 per capita.

^{20.} The five member commission consisted of Supreme Court Judge Shoshana Netanyahu (Chairperson), Prof. Mordechai Shani (Sheba medical Center), Prof. Shmuel Pinchas (Hadassah Medical Center), Prof. Arye Shiram (Tel-Aviv University), and Dr. Dov Chernichowski (Ben-Gurion University). In 1990 it rendered majority and minority reports after hearing testimony from 148 experts.

Such a law should enable individuals to choose freely between the various medical insurance providers, increase competition among medical insurance providers, define the minimal level of universal medical coverage, define the maximal waiting period for medical services, set the budget for the health care system, and allow governmental inspection of service providers.

The Committee also proposed establishing a National Health Authority to reorganize the Ministry of Health, so that it can properly function to improve general health policies, to privatize all hospitals, to introduce private practice into public hospitals, to use financial incentives for increasing productivity and efficiency, to award professionals for high standards of performance, and to invest in scientific research.

These recommendations as well as other political forces have brought about heated debate in Israel. The proposal for a National Health Care Insurance Law has been enacted by the Knesset.

E. Jewish Approach

Issues of scarce medical resources have not been directly dealt with in Jewish sources.²¹

From a philosophical viewpoint, one of the fundamental questions concerning the allocation of scarce medical resources is whether society is an entity and as such has its own interests, or whether it is but the sum of all the individuals that comprise it. If the latter is true, each individual has the right to demand that all its needs be met, even if society must therefore make large expenditures while abandoning other goals. If, however, society is a separate entity, it may ethically have the right to allocate resources for the public good, including highways, parks, museums etc., even though many individuals may thereby suffer from insufficient medical services.

In halacha, society is indeed considered to be a separate entity, and has its own set of ethical and legal standards.²²

^{21.} Only issues of scarcity concerning individuals were dealt with. This is discussed in the section "Priorities in Medicine" in the *Encyclopedia of Jewish Medical Ethics* by A. Steinberg.

^{22.} See Rabbi U. Kalcheim, *Aderet Emunah*, p. 189. See also *Kuzari* 3:19. See further Rabbi M.D. Tendler, cited by Rosner F., *NY State J Med*, 83:353, 1983.

E. 1. Primary Halachic Sources

The main talmudic source concerning the allocation of limited resources is the law that captives should not be redeemed for more than their worth "mippnei tikkun ha'olam" (for the good of society).²³

The Talmud justifies this ruling for two reasons: a) so that society should not become impoverished by paying expensive ransom demands and thereby not leaving adequate funds for other needs; b) so as not to encourage kidnappers to take more captives and demand ransom from society.²⁴

In applying this talmudic ruling to the question of allocation of scarce public medical resources it is important to answer two questions: (1) Which of the two reasons is the decisive one? (2) What are the conditions and the characteristics of the captives?

- 1. Some authorities hold that the Talmud left unanswered the question as to which of the two reasons is decisive²⁵ and, therefore, both are operative.²⁶ Others adduce talmudic sources to prove that the main reason is to discourage kidnappers;²⁷ there are those who hold that the main concern is to avoid impoverishment of society.²⁸
- 2. Concerning the condition and the characteristics of the captives, some authorities distinguish between the individual and society in that the former is obligated to expend all possible resources in order to ransom a relative but society can not be so obligated because impoverishment of society would be a form of danger to the lives of the public versus that of an individual.²⁹

^{23.} Gittin 45a.

^{24.} The difference in practical terms concerns the question whether an individual would be allowed to pay a large ransom to redeem a relative or friend. If the concern is impoverishment of society, he would be allowed to do so, But if the concern is to discourage kidnapping in general, one would not allowed to do so, because one would thereby encourage more kidnappings. See *Rif* and *Rosh*, *Ketubbot* 52b; *Tosafot*, *Ketubbot* 52a, s.v. vehayu; *Tosafot*, *Gittin* 45a, s.v. delo; Maimonides, *Ishuth* 14:19; *Tur*, *Even haEzer* 78:2 and *Ramah* there. See also *Gittin* 58a, s.v. kol. See further *Yadot Nedarim*, *Yore De'ah* 252:4.

^{25.} Rosh, Ran, and Pnei Yehoshuah, Gittin 58a.

^{26.} Ran, loc. cit. (n. 23); Shach, Yore De'ah 252:4, in the name of Bach.

^{27.} Ramban, Milchamot Hashem, Berachot, Ch. 3, concerning women and Grace after meals; Novellae Ramban and Rashba, Gittin 58a; Maimonides, Mattnoth Aniyyim 8:12; Tur-Shulchan Aruch, Yore De'ah 252:4. See also Rif, Gittin 58a.

^{28.} Yam Shel Shlomo, Gittin 4:66, according to Ran's view.

^{29.} Responsa Chatam Sofer, Choshen Mishpat, end of #177. However, see Imrei Binah, Kelalei ha-Torah #4. Maimonides, Mishna Commentary, Pe'ah 1:1 writes that even an individual should dispose of no more than one-fifth of his possessions for the

Some halachists hold that where the life of a captive is in danger, society has an obligation to pay ransom beyond the consideration of "worth." However, other authorities disagree, on the basis of the biblical injunction 'Do not stand idly by the blood of thy fellow man' which applies only to the individual but not to society as a whole. 32

Another talmudic source of reference is the case of two towns with a single water supply. According to one opinion, the closer town is allowed to use the water, not only for drinking but also for washing laundry in order to prevent sickness of its inhabitants, even if it, thereby, deprives the other town of its drinking water supply.³³

Thus, society (i.e., whole town) must take into account its own possible future needs even if it thereby may harm or interfere with present needs of others,³⁴ since societal needs can involve situations of danger to life in a much broader sense than with individuals.³⁵

E. 2. Current Halachic Opinions

A recent rabbinic opinion states that society should give priority to basic needs of all its citizens, particularly needs that relate to danger to life. Such immediate needs take priority over medical research and development. Accordingly, society is allowed to set new policies for allocation of its resources even if it changes current policies, and even if citizens may in the future not receive certain benefits currently being provided. However, society may not take away or terminate benefits and services already being supplied to patients, such as closing wards or hospital beds currently occupied by patients who need those services. It may establish policies that might affect future patients, but it may not ignore present and immediate danger to patients in need of medical care.

Society must first be concerned with its own preservation before that of the individual. Society should also allocate resources for preventive medicine, including education about smoking and

redemption of captives in order not to become a burden on society. See also Rabbi S.A. Rapaport, *ASSIA* 49-50, 5750 (1990), pp. 5ff.

^{30.} Tosafot Gittin 8a, s.v. kol, in the first answer; Resp. Nachala le-Yehoshuah, cited in Pitchei Teshuva, Yore De'ah 252:4.

^{31.} Novellae Ramban, Gittin 58a; Resp. Maharam of Lublin #15; Resp. Yad Eliyahu #43. See also Pitchei Teshuva loc. cit (n. 28); Resp. Kneset Yechezkel #38.

^{32.} Rabbi M. Hershler, *Halacha u'Refuah*, Vol. 3, 5743 (1983), pp. 48ff.

^{33.} Nedarim 80b.

^{34.} Rabbi M.D. Tendler, *loc. cit.* (n. 20).

^{35.} Rabbi S. Deichowski, *Torah she-Be'al pe*, 31, 5750 (1990), pp. 40ff.

good eating habits. Also, screening programs for the early detection of serious illnesses take precedence even if, thereby, funds for future medical and surgical therapies may not become available, because preventive measures may save many more lives than the treatment of individual future patients.³⁶

F. General Ethical Considerations³⁷

The ethical foundation of distributive justice can be characterized either by the principle of equity or by various modes of utilitarian approach.³⁸

The Principle of Equity

There is no doubt that humanistic nature tends to favor absolute equality among individuals. In a society where equality is the guiding ethical principle in all spheres of life, every citizen should have the right to any required medical therapy. However, no modern society can afford to provide every medical need for every citizen.

There are two ways to solve the problem. Either society must equally reduce the level of medical care for all its citizens, or it must reduce some level of equality in order to provide high-tech medicine to some "more chosen" citizens.

Several proposals have been put forth to accomplish a certain level of equality in health care:

(a) Providing equal access to all possible medical needs in order to achieve a reasonable level of health care while requiring every individual to purchase his needs according to his economic ability.³⁹

Justification for this system is provided by the fact that society has no obligation to provide free health care services to all its citizens; rather, its obligation is to provide full and equal access to all available medical means. The problem with this system is the practical definition of the philosophical concepts: What is just distribution? What is an appropriate level of care, and who determines it?

^{36.} Rabbi S.A. Rapaport, ASSIA 51-52, 5752 (1992), pp. 46ff.

^{37.} Concerning religious views on this issue see Lustig, B.A., et al. (eds.), Bioethics Yearbook, Vol. 1993.

^{38.} See Rosner, F., NY State J Med 90:552, 1990.

^{39.} President's Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research: Summing Up, p. 72, 1983.

(b) Provision by society of appropriate medical care to each individual in order to achieve a level of medical care equal to others.

The problem with this system is that the sicker the patient, the greater is the benefit received in order to achieve health equal to others. The result is that a small group of patients with serious chronic illnesses may consume the bulk of the societal resources. Therefore, some limitations must be applied, depending on the resources available.⁴⁰ This approach also has similar difficulties of practical definitions.

(c) Provision of the same level of care for all patients with the same illness.⁴¹

This approach emphasizes illnesses rather than patients. Here, too, the problem is that a small number of patients use up a disproportionate share of the resources.

(d) The approach which deviates the most from principles of equality is the provision of equal health care only for limited and well-defined health-care areas, in which strict equality must be kept.

This method attempts to conserve the idea of equality with a practical view on societal limitations. A minimum package of health care benefits is to be provided equally to all citizens, and every individual can purchase additional care depending on his economic means and other personal priorities.⁴² It is, however, very difficult to determine what this minimal package of medical benefits should be.⁴³

The Principle of Utilitarianism

The basis of the utilitarian approach is to insure the greatest benefit and greatest happiness for the largest possible number of people. This approach avoids equality and approves of any system which accomplishes utilitarian goals.

There are several significant ethical and practical problems with this approach: Are benefit and happiness the only standards of ethics? Does the goal justify the means? How does one measure

^{40.} Veatch, R.M. in Beauchamp, T.L. and Walters, L. (eds.), *Contemporary Issues in Bioethics*, 2nd ed., p. 410, 1982.

^{41.} Outka, G., Perspect Biol Med 18:197, 1975.

^{42.} Fried, C., N Engl J Med 293:241, 1975.

^{43.} See Eddy, D.M., JAMA 265:782, 1991.

happiness and benefit in complicated situations? This approach gives priority to the young and healthy over the elderly or disabled, to the educated and politically well placed over the poor and underprivileged, and to patients with acute illness over the chronically ill.

Economic concepts of cost/benefit ratios are based upon the principles of utilitarianism. These economic theories convert all benefits and costs into monetary values.⁴⁴

The cost/benefit or utilitarian approach has a number of marked disadvantages: It is a purely economic system which is difficult to apply in medicine where one has to take into account human values that cannot be measured in financial terms; many variables in health cannot be precisely calculated in economic terms; the absolute cost itself is not always the main problem but how much money and resources are diverted from other basic needs, or whether the savings in economically less important plans is indeed diverted most efficiently to alternative, more important plans.

Ethically, the utilitarian system significantly interferes with equality and primarily undermines those who are in greatest need of health care services.

Additional ethical problems regarding the just allocation of scarce medical resources are whether an individual has an absolute right to health care and whether society has an obligation to provide it.

The recognition of some kind of individual rights within a society was already recognized in the Magna Charta in 1215. The Declaration of Independence of the United States in 1776 recognized human rights, stating that all men are created equal and are endowed by their Creator with certain inalienable rights which include life, liberty, and the pursuit of happiness. The National French Assembly in 1789 adopted a declaration of human and citizen rights.

None of these declarations, however, specifically mentions the right to health care. Only in 1948, in the Declaration of the United

^{44.} See Weinstein, W.C. and Stason, W.B., N Engl J Med 296:716, 1977; Baram, M.S. in Contemporary Issues in Bioethics, loc. cit. (n. 36); Emery, D. and Schneidermanm, L.J., Hastings Cen Rep 19:8, 1989; Eisenberg, J.M. JAMA 262:2879, 1989; Udverhelyi, I.S., et al., Ann Inter Med 116:238, 1992.

^{45.} Although some authors attempt to calculate costs relating to increases in the quality or length of life, such calculations are very imprecise.

Nations, do we find a specific human right for adequate standard of living amongst thirty other human rights. This statement is rather general but it specifically recognizes the individual's right for basic health.

Two rights relate to the issue of allocation of limited resources: the right to health, and the right to health care.

The right to health is a sweeping and all-encompassing right. However, from a practical viewpoint it has major problems because the implementation of this right places an unbearable and impossible obligation on society. Thus, for instance, society should forbid smoking, alcohol consumption, overeating and their like because these are all harmful to health. Such rules, however, would severely interfere with the principle of individual privacy and liberties. Furthermore, the definition of health is difficult. The World Health Organization defines health as the complete physical, psychological, and social well-being of an individual. If the right to health would include all that, society's resources would never suffice to provide it all.

The right to health care is also not a universally-accepted doctrine and is also hard to define. Some investigators postulate that society is not obligated to provide all requested medical therapies for all its citizens.

Rather an appropriate minimum standard should be met and each individual should decide when to supplement individual services and needs through private means.⁴⁶

Another ethical principle weighing on the issue of scarce resources is autonomy⁴⁷ whereby the individual has the right to decide what shall be done with himself.

What happens if the patient or his family demand certain treatments which the physicians believe are futile or too costly? On the one hand, if the patient refuses life sustaining measures, the principle of autonomy requires that his wish must be respected. On the other hand, if he requests to prolong his life, society occa-

See Lee, P.R. and Jonsen, A.R., Am Rev Rep Dis 109:591, 1974; Siegler, M., J Med Philo 4:148, 1979; Sade, R.M., N Engl J Med 285:1288, 1971; Engelhardt, H.T., J Med Philo 4:113, 1979.

^{47.} See "Free Choice" and "Ethical Theories and Principles" in my *Encyclopedia of Jewish Medical Ethics*.

sionally does not respect his autonomous wishes.⁴⁸ Is it ethical to use the principle of autonomy only in the direction which suites the interests of society?

The issue of the allocation of scarce resources has significant impact on the provision of specialized medical services, intensive care units, life-prolonging measures, organ transplants, application of new reproductive technologies, and expensive diagnostic stings, among others.

Source: ASSIA - Jewish Medical Ethics, Vol. II, No. 2, May 1995, pp. 14-21

^{48.} See Perkins, H. S., *J Gen Inter Med* 1:170, 1986; Ruark, J.E. and Raffin, T.A., *N Engl J Med* 318:25, 1988; Veatch, R.M., Hastings Cen Rep 18:34, 1988; Brett, A.S. and McCullough, L.B., *N Engl J Med* 315:1347, 1986; Tomilson, T. and Brody, H., JAMA 264:1276, 1990; Hackler, C. and Hiller, F.C., *JAMA* 264:1281, 1990; Schneiderman, L.J. *et al.*, Ann Inter Med 114:169, 1991; Jecker, N.S., Hastings Cen Rep 21:5, 1991; Paris, J.J., *et al.*, *N Engl J Med* 322:1012, 1990; Brennan, T.A., JAMA 260:803, 1988.