

Medicine on the Internet:

Jewish Perspectives

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Abstract

The ethical principles of beneficence and non-maleficence are deeply rooted in Judaism. A physician is obligated to heal and is given Divine license to do so. A patient is also obligated to seek healing.

Judaism also emphasizes prevention over treatment. Avoidance of danger and thereby the preservation of life and health are biblical mandates. Rules of personal hygiene such as hand washing before eating are also stressed, as are diet, exercise, and general care of the body. Preventive medical services and patient responsibilities are fully in accord with Jewish thought.

Specifically with regard to the internet, Judaism views any new technology or scientific advance with favor if it is used for the betterment of mankind, such as the prevention and treatment of illness. The internet is a wonderful tool to accomplish this purpose. It can promote health education to millions of people and thereby help to prevent illness. It can be used to facilitate communication not only between physicians and patients, but between health care providers and large population groups. All these goals are consonant with traditional Jewish thought and practice.

However, potential negative consequences from the medical use of the internet must be considered and avoided. Misleading or false medical information should be weeded out. Inappropriate medical commercialism on the internet should be banned. Confidentiality of medical information must be preserved. The limitations of the internet for the practice of medicine (e.g., lack of personal patient-physician contact) should be clearly explained to patients, to help them appreciate those features of the internet which can truly benefit them and society.

Key Words: Internet, Jewish perspectives, medical practice.

Background

ACCORDING TO DR. GEORGE LUNDBERG, former Editor-in-Chief of the *Journal of the American Medical Association* and presently Editor-in-Chief of *Medscape*, "The internet is the most significant advance in human communications since the printing press. It is going to change the face of how humans interact in almost every realm, including the way medicine is practiced" (1).

Physicians are increasingly using the internet to improve the flow of information, increase transaction efficiencies, including electronic billing, enhance patient recruitment and satisfaction, provide patient education, verify patients' health care coverage and, in general, capture the attention of health care consumers online. And patients are using the internet to learn more about their health care needs, form and join health care support groups, and become more sophisticated health care consumers.

The control of online health information is being pursued by physicians, hospitals, insurance companies and other "players" in the health care field. The American Medical Association and six other medical societies have created Medem Inc. (www.medem.com), a for-profit venture which provides physicians with individual websites containing state-of-the-art, peer-reviewed consumer health information. Other well-respected health care information websites are Health Oasis, run by the Mayo Clinic (www.mayohealth.org) and IntelliHealth (www.intelihealth.com), a for-profit partnership between the Johns Hopkins Medical Center and Aetna U.S. Healthcare. Medscape Inc. (www.medscape.com) is allied with CBS News, while Healtheon/WebMD (www.webmd.com) is partnered with both CNN and News Corporation.

Unfortunately, this electronic "health commerce" is associated with many ethical and legal problems. Conflicts of interest and non-disclosure of vital commercial links were highlighted in regard to the Dr. Koop.com website (www.drkoop.com). Dr. Koop failed to disclose that he had received commissions on products sold, as well as for patients recruited for clinical trials, through his website. Hospitals listed as "innovative" paid \$40,000 each for that endorsement.

The quality of the health care information on many websites is open to serious question. Health cures are being offered that are "too

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good to be true.” The magnitude of health care fraud over the internet is difficult to measure, but is certainly in the billions of dollars. Unproven and/or ineffective treatments for a variety of ailments are widely promoted and sold over the internet (see quackwatch.com). Although the internet hosts a large number of high quality medical information sites with great potential to inform patients and physicians alike, “The problem is not too little information but too much, vast chunks of it incomplete, misleading or inaccurate” (2). Most medical information directed at the lay public on the internet is unchecked, unstructured and unregulated.

The American Medical Association (AMA) recognized the wide variations in quality of content on the Web, the potential for commercial interests to influence online content, and the risks to personal privacy. As a result, the AMA developed and promulgated principles to guide development and posting of website content, govern acquisition and posting of online advertising and sponsorship, ensure site visitors’ and patients’ rights to privacy and confidentiality, and provide effective and secure means of e-commerce (3). About the same time, Medscape established principles governing the acceptance and display of advertising on its website (4).

To help ensure the ethical content of internet information, an international nonprofit organization called the Internet Healthcare Coalition (IHC) was formed, dedicated to quality health care resources on the internet. The IHC, in collaboration with the Hastings Center for Ethics, was instrumental in drafting the International e-Health Code of Ethics (5). The code aims “to ensure that all people worldwide can confidently, and without risks, realize the full benefits of the internet to improve their health.” The guiding principles involve candor and trustworthiness; quality; informed consent, privacy and confidentiality; best commercial practices; and best practices for provision of health care on the internet by health care professionals.

Physician-Patient Communication by E-Mail

Electronic mail between physicians and patients offers substantial promise as a way to improve access to health care, enable physicians to reach out to patients, and increase the involvement of patients in their own care (6). Elderly patients can consult their physicians by “electronic house call” to record their vital signs and discuss their condition (7). The in-

stallation of “telemedicine” equipment, including glucometers and blood pressure devices, in the homes of low income Medicare recipients living in medically underserved areas of New York State has been proposed. This proposal, if successfully implemented, could improve care and be cost effective, and could serve as a model for treating a wide range of conditions such as asthma, congestive heart failure, obesity, smoking addiction, and depression (8). Electronic prescribing systems might reduce prescription errors. Some state legislatures are considering bills to give consumers internet access to doctors’ malpractice and disciplinary records. The possibilities of electronic medicine doctor-patient interaction seem limitless.

In its *Code of Medical Ethics*, the AMA advises physicians about telecommunication (phone, fax or computer) contacts with patients (9). Diagnosis by telecommunication is done without the benefit of a physician examination or even a face-to-face meeting with the patient. Critical medical data may be unavailable to the physician, whose response must thereby be limited and perhaps inconclusive. The confidentiality of computerized medical records must be protected. In addition, the AMA has promulgated guidelines for the clinical use of electronic mail with patients (10). The guidelines address two interrelated aspects: effective interaction between the clinician and patient and observance of medicolegal prudence. Prescription refills, lab results, appointment scheduling and reminders, insurance questions, routine follow-up inquiries, and reporting of home health measurements such as blood pressure and glucose are all well suited to e-mail. Highly confidential information or medically urgent or emergent situations should not be communicated by e-mail.

Medicolegal and administrative guidelines are also provided in the AMA’s Task Force Report (10). Legal issues concerning electronic health information include the privacy of identifiable health information, the quality and reliability of health data, and tort-based liability (11). Recommendations for legal reform include recognizing identifiable health information as highly sensitive, providing privacy safeguards, empowering patients with rights to consent to disclosure, limiting disclosures of health data without consent, incorporating industry-wide security protections, and more (11).

The California Health Care Foundation surveyed over a thousand average American internet users and found that most users are con-

cerned about the privacy of on-line health information, suspicious of the ethics of many internet health websites, uncertain whether personal health data are protected by law, and confused about who should regulate internet health information or if it should be regulated (12).

To satisfy the needs of patients, physicians and society as a whole, the following conclusions seem to be appropriate:

policy or legislative initiatives for medical records privacy and health information security should explicitly address patient-centered communication with health care professionals and require that patient autonomy, safety and privacy be maintained when the patient-physician relationship is electronically extended or enhanced. In turn, policymakers should ensure that physicians apprise patients of the privacy implications and inherent risks of e-mail communication as part of an informed e-mail consent process, to be finalized by a signed written consent form. Further, policymakers, physicians and patients should recognize that transcripts of electronic medical communications become part of patients' medical records, and therefore deserve the privacy and confidentiality protections afforded to all medical records (13).

Jewish Issues

Is there anything Jewish or un-Jewish about the internet? Does the Torah permit, mandate or prohibit use of the internet? In January 2000, a group of Orthodox Israeli rabbis issued a ruling exhorting Jews to remove the internet from their homes, although the rabbis acknowledged its great value in the workplace. One of the major concerns of the rabbis is the problem of young people accessing pornographic sites and using chat rooms to communicate with unsavory characters. The dangers of the internet, like those of television, movies, theater and many newspapers and magazines, in the opinion of these rabbis, outweigh its value in the home.

Yet the pursuit of knowledge and the proper use of new technology and scientific advances are certainly not prohibited in the Torah. On the contrary, no less a person than King David supported the concept that knowledge and its pursuit and application are legitimate activities

for human beings and are not considered an encroachment upon Divine prerogatives when he wrote, "The heavens are the Lord's heavens, but the earth He has given to mankind" (Psalms 115:16).

The pursuit of knowledge in medicine is exemplified in the therapeutic possibilities offered by genetic engineering, gene therapy and cloning. The genome project is not an encroachment on the Divine plan for this world. It does not interfere with nature as God created it. It does not tamper with the Divine arrangement of creation. God blessed mankind with the phrase, "replenish the earth and subdue it" (Genesis 1:28). This phrase is interpreted by Nachmanides (Ramban) to mean that God gave man dominion over the world to use animals and insects and all creeping things for the benefit of mankind (Ramban, Genesis 1:28). To subdue the earth, according to Samson Raphael Hirsch (Hirsch, Genesis 1:28), is to master, appropriate, and transform the earth and its products for human purposes. To have "dominion over the fish and over the birds and over every living thing on earth" (Genesis 1:28) means to use them for the benefit of mankind. The pursuit of scientific knowledge does not constitute prohibited eating from the tree of knowledge (Genesis 2:17). Whatever is good for mankind must be permissible and praiseworthy.

However, good often is not pure good, but may contain potentially dangerous elements. The genome project is intended to cure diseases, but has raised many ethical, legal and social concerns (14). Similarly, the internet is a wonderful scientific and technological advance, with enormous beneficial potential for mankind. Its use must certainly be sanctioned in Jewish law. However, Jewish concerns about potential dangers of the indiscriminate use of the internet must be addressed. Pornographic and other prurient and/or defamatory material must be blocked out by Jewish users, to avoid violating the biblical and rabbinic laws concerning immorality. The placing of misleading or potentially harmful information, medical or otherwise, violates the prohibitions against deception (Chullin 94a) and (metaphorically) against placing a stumbling block before the blind (Leviticus 19:14) or leading the blind astray (Deuteronomy 27:18). The addictive qualities of the internet result in sleep deprivation for many people who spend more time online than they intended. Such addiction may take its toll on one's health, school grades, employment, marriage, Torah study, etc.

Some people advocate government supervision or regulation of the internet. Others respond that such regulation violates the U.S. Constitution. How can a website which screens out pornographic material in order to protect children at the same time retain beneficial information for discerning adults? There already exists a website, Koshernet.com, which tries to address these issues. We can benefit from the internet in terms of learning Torah, obtaining Jewish and Israeli news, conducting electronic correspondence and commerce, and carrying out other beneficial activities. However, restrictions and parental guidance are needed to avoid undesirable sites and prevent "electronic addiction." Fascination with the internet may interfere with other Jewish pursuits and necessities, so that moderation is needed. Guidelines have been suggested for the Jewish home (15), to avoid the tangled web (16) and the landmines along the information highway (17).

Medicine on the Internet

In the field of medicine, the internet could serve to provide health information to very large audiences. Judaism requires communities to not only provide for the medical and social needs of their citizens, but also alert people about drug recalls, epidemics and the dangers of substance abuse. Judaism thus encourages modern technology to be used for the benefit of mankind.

The practice of medicine over the internet is a multifaceted issue. The basic principles in Judaism governing the practice of medicine, whether in the doctor's office, over the telephone or on the internet, are based on the premise that a physician is given specific Divine license to practice medicine. The biblical verse "and heal he shall heal" (Exodus 21:19) is interpreted by the talmudic sages (Baba Kamma 85a) to mean that authorization is granted by God to the physician to heal (18, 19).

An axiom of Judaism is that human life is of infinite value. The preservation of human life takes precedence over all commandments in the Bible except those prohibiting idolatry, murder and forbidden sexual relations. Life's value is nearly absolute and supreme. In order to preserve a human life, the Sabbath and even the Day of Atonement may be violated, and all other rules and laws save the aforementioned three are suspended for the overriding consideration of saving a human life. He who saves one life is as if he saved a whole world (Sanhedrin 37a). Even a few moments of life are worthwhile.

These Judaic principles, therefore, require that physicians place the interests of their patients first and advocate for any care they believe will materially benefit their patients. Physicians must practice good medicine, eliminate that which is unnecessary, and be aware of the need to contain costs. Physicians must also practice within the areas that they are credentialed, and do so in the best interests of their patients.

A physician is entitled to reasonable fees and compensation for his services (20). Indigent patients, however, should be treated for reduced fees or no fees at all.

With the ever-expanding use of the internet for medically related issues, there are concerns regarding the extent to which physicians should use it to provide care for individual patients. For example, certain neurological and dermatological conditions might be evaluated by a consulting physician via telemedicine. The consultant could suggest further diagnostic and therapeutic strategies by e-mail. Patients, their families and their health care providers in remote locations might be able to communicate with a physician via the internet whenever an actual meeting is not possible or feasible. However, physicians should always strive to establish a direct patient relationship before providing medical care via the internet or e-mail. Furthermore, the internet should not be used for urgent or emergency medical conditions, except in the most unusual circumstances. Direct communication with the physician or ambulance service (#911) should then be used. Particular attention needs to be devoted to the confidentiality of medical information and direct patient-doctor communication via e-mail.

Physicians should be concerned about the use of e-mail communication with their patients because physicians are legally responsible for any advice or management provided via e-mail. Malpractice issues have not yet been fully explored regarding medicine practiced on the internet. For non-established patients, physicians usually avoid diagnosing and/or treating without first seeing the patient. As patient enthusiasm increases, however, more and more physicians will be called upon to render advice and provide medical information via electronic means, with appropriate attention to safeguarding confidentiality.

Preventive Medicine and the Internet

Government agencies, foundations, societies and universities are disseminating more

information regarding healthcare concerns via the internet. The internet has the potential to inform people about healthy living and how to prevent illness, thus reducing the incidence of diseases and adverse events. For example, encouraging the cessation of smoking has been shown to reduce the risk of lung cancer. A variety of prevention strategies (e.g., aspirin, exercise, weight reduction, blood pressure and lipid control, etc.) can reduce the risk of a heart attack.

The prevention of illness and the avoidance of potential hazards are mandated in Jewish law. Preventive medicine has been the centerpiece of the Jewish system for more than two thousand years. The Jewish view emphasizes prevention over treatment.

An entire chapter in Moses Maimonides' famous *Mishneh Torah* (Code of Jewish Law) (21) is devoted to hygienic and medical prescriptions for healthy living and for the prevention of illness. Among the many subjects discussed are normal bodily excretory functions, recommended times for eating, amounts and types of food to be consumed, beverage consumption, exercise, sleep habits, cathartics, climatic and weather effects on eating habits, detrimental and beneficial foods, fruits, meats, vegetables, bathing, bloodletting, sexual intercourse, and household conditions.

He also discusses ecological and environmental factors that may impact on one's health, such as clean air and sunshine. Maimonides concludes his exposition as follows:

I assure anyone who conducts himself according to the directions we have laid down that he will not be afflicted with illness all the days of his life, until he ages greatly and expires. He will not require a physician, and his body will be complete and remain healthy all his life unless his body was defective from the beginning of his creation, or unless he became accustomed to one of the bad habits from the onset of his youth, or unless the plague of pestilence or the plague of drought comes onto the world (21).

Maimonides cites exceptions to the goal of preventing rather than treating illness. Genetic diseases and certain epidemics of diseases cannot be prevented. For this reason, the final paragraph in Maimonides' chapter on the regimen of health states that a person should not reside in a city that does not have a physician. A

similar pronouncement is found in the Talmud (Sanhedrin 17b). Maimonides supports the adage "An ounce of prevention is worth a pound of cure." Much more evidence for this thesis is found in his medical writings (22).

The internet is a technological device perfectly suited to provide preventive medicine information to huge numbers of people, to indoctrinate them in the benefits of healthy living, to teach them about the health risks of smoking and substance abuse, to encourage them to follow sensible and logical lifestyles, including proper diet, exercise, periodic health screenings, and to convince them of the benefits of preventing illness. Judaism views all these goals and objectives as laudatory. Possible liability issues, however, may require the physician and the internet service to be extremely cautious about providing medical information which might lead to unwanted or undesirable effects in some individuals.

Patient Responsibility

The Bible also tells us to "take heed to thyself, and take care of thy life" (Deuteronomy 4:9) and "take good care of your lives" (ibid. 4:15). These biblical mandates make it clear that patients are obligated to care for their health and life. Human beings do not have full title over their lives and bodies. They must eat and drink to sustain themselves and must seek healing when sick.

In the Western world, citizens are endowed with a variety of legal rights. People have the right to die, the right to refuse treatment, the right not to be resuscitated, the right to an abortion, and many others. Rarely does one hear about citizens' responsibilities and obligations. Judaism requires everyone to do what is proper in order to be healthy. It is an obligation in Judaism to be healthy. Hence one should accept appropriate medical advice, whether given in person, over the telephone, by fax, e-mail or over the internet. One should not smoke, one should eat properly and not excessively, one should exercise regularly, sleep adequately, only engage in proper and legitimate sexual activities, and lead an overall healthy lifestyle. These are moral obligations and legal imperatives in Judaism.

Thus, while much of the modern secular ethical system is based on rights, Judaism is an ethical system based on duties and responsibilities. Rabbi Lord Immanuel Jakobovits eloquently articulates the Jewish view as follows:

Now in Judaism we know of no intrinsic rights. Indeed there is no word for rights in the very language of the Hebrew Bible and of the classic sources of Jewish law. In the moral vocabulary of the Jewish discipline of life we speak of human duties, not of human rights, of obligations, not entitlement. The Decalogue is a list of Ten Commandments, not a Bill of Human Rights (23).

Therefore, Jewish internet users may be obligated to use it to prevent and to treat illnesses. For some patients, the internet may be an absolute necessity. Patients with very rare conditions or diseases can communicate with physicians and experts and other patients, about their cases. Laypersons who need sources of help such as support groups, medical care and specialists can obtain such assistance and information on the internet.

Confidentiality and the Internet

Confidentiality of medical information is one of the major concerns relating to the internet. There are no major ethical difficulties if physicians provide general medical information on the internet. However, patients' private medical information transmitted by e-mail from patient to physician and vice-versa is accessible to many people with computer expertise, and therefore requires special and careful consideration. Patients must be told that the internet is not a secure means of communication, since internet messages can potentially be intercepted, viewed, and altered by unauthorized individuals. Items "deleted" may still be recoverable. Therefore, confidential information should not be sent over the internet.

Even clerical and administrative communications, such as billing, appointments and insurance matters, and all e-mail communications related to patient care should be considered sensitive and confidential. Patients must also consider the security of their own home or office computers in regard to the confidentiality of their medical information. The challenge to preserve confidentiality must be pursued and met by the adoption of secure means of data transmission.

The obligation to maintain confidentiality is one of the cornerstones of medical ethical practice and is clearly stated in the Oath of Hippocrates and subsequent professional oaths and declarations. It is based on the general ethical

principles of doing good for others (beneficence), not to harm others (non-maleficence), patient autonomy, and the right to privacy. It is also based on the trusting relationship between patient and physician and the need to protect and preserve that relationship by not disclosing to others private and personal information about the patient.

Maintaining professional confidentiality is a subject which Jewish thought and literature have dealt with extensively over the centuries (24). In Judaism, the right of privacy must be balanced against the needs of society as a whole (25). Jewish law regards as inviolate the privacy of personal information that a person does not wish to disclose to others. It demands that confidences be respected, not only by professionals with whom one has entered into a fiduciary relationship, but also by friends and acquaintances and even strangers to whom such information has been imparted (26). The obligation of confidentiality in Judaism is far broader than that of any other legal, religious, or moral system, but "is neither all-encompassing in scope nor, when it does exist, is it absolute in nature" (27).

There is no specific term in Jewish law for professional confidentiality, since this topic is subsumed under the general prohibition against talebearing and evil gossip (Leviticus 19:16; Proverbs 25:9; Psalms 34:14). The prohibition against divulging confidential information is discussed in the Talmud (Yoma 4b), which states that if a man says something to his neighbor, the latter is not allowed to repeat it without the man's specific consent. This conclusion is based on a biblical verse (Leviticus 1:1). Another talmudic discussion of confidentiality (Sanhedrin 31a) states that judges may not reveal confidential discussions that take place behind closed doors. The prohibition against talebearing (Leviticus 19:16; Proverbs 11:13) is here interpreted to include revealing secrets even if the information is true and no harm is meant. The Talmud also indicates that this prohibition has no statute of limitations. A scholar was rebuked for having revealed a secret after twenty-two years (Sanhedrin 31a). The biblical prohibitions against talebearing and gossip are codified by Maimonides in his *Mishneh Torah* (*Deot* 7:2).

According to these laws, a physician may not share privileged information with his colleagues, his family, or anyone else if no benefit to the patient would result therefrom (28). However, if the maintenance of confidence

might cause harm to another person, the latter may be informed. If the individual's right to privacy conflicts with the need of society to prevent harm to others, the prohibitions against talebearing and evil gossip are waived and the information must be disclosed to protect other people. The disclosure must be factual, accurate and not exaggerated.

Specific medical situations where disclosure is required include the possible transmission of disease to another person, the presence of a serious medical condition in a potential spouse, and the reporting of certain infectious diseases to public health authorities. The overriding obligation to protect the lives of others requires that confidential information be disclosed if the withholding of that information might lead to serious harm to someone else. Judaism thus balances the obligation and duty to maintain confidentiality with the obligation and duty to protect others. Detailed discussions of this topic are available elsewhere (21–25).

Summary and Conclusion

The attitude toward healing in Judaism has always been a positive one. A physician is obligated to heal and is given Divine license to do so. A physician must be well trained and licensed in his discipline. A physician must apply his skills for the benefit of the patient and be careful not to do harm. Thus, the ethical principles of beneficence and non-maleficence are deeply rooted in Judaism. A patient is also obligated to seek healing, since one must be healthy in order to serve the Lord by doing His will in the service of mankind.

A second cardinal principle of Judaism is the infinite value of human life. The preservation of life takes precedence over all biblical and rabbinic commandments except those prohibiting murder, idolatry and forbidden sexual relations such as incest or adultery. The Talmud states that all lives are equal, since one person's blood is not redder than that of another (Pesachim 25b).

Preventive medicine is a centerpiece of the Jewish system. The Jewish view of medicine emphasizes prevention over treatment. Prevention of danger and thereby the preservation of life and health are biblical mandates. One must observe rules of personal hygiene such as hand-washing before eating. Diet, exercise, sex and bodily functions must all be properly tended to. Preventive medical services and patient respon-

sibilities are fully consonant with Judaism. Thus, emphasis on prevention of illness, as well as personal responsibility, are deeply rooted in Judaic teaching and tradition.

Specifically with regard to the internet, Judaism views any new technology or scientific advance with favor if it is used for the betterment of mankind, such as the prevention and treatment of illness. Such harnessing of the natural sciences is not considered an encroachment upon Divine prerogatives. On the contrary, God gave us dominion over the world to use nature to subdue the earth (Genesis 1:28); this includes transforming its secrets into products and technology to benefit mankind.

The internet is a wonderful tool to accomplish this purpose. It can educate millions of people about preventing illness. It can be used to facilitate communication between physician and patient. It can be used to reduce prescription and other errors caused by physicians' illegible handwriting. It can contribute to the good health not only of individual patients but of whole societies and large population groups. All these goals are consonant with traditional Judaic thought and practice.

However, potential adverse aspects of the use of the internet for medical purposes must be considered and avoided. Misleading or false medical information must be weeded out. Inappropriate medical commercialism on the internet must be banned. Confidentiality of medical information, even with the informed consent of the individual patient, must be preserved unless there is an overriding lifesaving reason to do otherwise. The limitations of the internet in the practice of medicine by e-mail (e.g., lack of personal patient-physician contact) must be clearly explained to patients, to allow them to maximize the use of the internet for their personal and medical benefit.

Finally, the internet should serve to foster continuing professional medical education of physicians and health care providers, and to enhance information exchange among professional colleagues.

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