



## Maimonides (1138-1204): Rabbi, Physician and Philosopher\*

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**Key words:** Maimonides, Jewish medical ethics, rabbi, philosopher; history of Medicine

IMAJ 2005;7:547-553

In memory of **Rabbi Dr. David Applebaum** Rabbi, Physician, Teacher and Friend, murdered together with his daughter Naavah in a terrorist attack, Jerusalem, 9 September 2003 on the eve of her wedding.

Also known as the Rambam (from the acronym **R**abbi **M**oses **b**en **M**aimon), Moses Maimonides (1138-1204) occupies a seminal place in Jewish history. More than his role as rabbinic authority and community leader, Maimonides became one of the most illustrious figures in medicine and philosophy. His monumental medical writings systematically summarize contemporary medical knowledge and at the same time offer new insights. Most of these writings were translated from Arabic into Hebrew and Latin and were studied widely during the medieval period. In this paper we review Maimonides' life and manifold contributions. The synthesis that he achieved reflects his unique *Weltanschauung* as rabbi, physician and philosopher. Today, more than 800 years after his death, physicians can learn much from this remarkable 12th century scholar.



Traditional portrait of Moses Maimonides with autograph

daigned exiles, on journeys by land and tossed on the tempests of the sea" (end of commentary on the Mishnah). In Fez, Maimonides studied under Rabbi Judah Ha-Kohen ibn Susan and acquired medical training from prominent Muslim physicians. But the continuing persecution forced the family to flee Fez (1165) and they made their way to the Holy Land, arriving at the port of Acre. Finding that the local Jewish community was living in a state of desperate poverty and political oppression at the hands of the Christian Crusaders, the family moved on to Egypt, finally settling in Fostat, the Old City of Cairo. Maimonides' father Maimon died soon after their arrival (1166). Supported by his younger brother David, a merchant who dealt in precious stones, Maimonides was able to pursue his studies free of financial care. His brother drowned several years later (1178) in the Indian Ocean while on a

business trip; Maimonides was shattered by this tragedy and remained depressed for a long time, as seen in his letter to Rabbi Yephet. For reasons of principle Maimonides refused to take money for his rabbinic services [2], turning to the medical profession for his livelihood.

Maimonides was appointed official leader (*naggid*) of Egyptian Jewry (1177) and court physician to Vizir Al-Fadhil, Regent of Egypt during the absence of Sultan Saladin the Great, who was off fighting the Crusaders (1185). These were fruitful and busy years, as Maimonides himself described in a letter to his student Samuel ibn Tibbon (1199):

My duties to the sultan are very heavy. I am obliged to visit him every day, early in the morning; and when he or any of his children, or concubines are indisposed, I dare not leave Cairo, but must stay during the greater part of the day in the palace. It also frequently hap-

### Life of Moses Maimonides [1]

Maimonides was born in 1138 in Cordoba, Spain, to a celebrated rabbinic family. His mother died in childbirth. His father Maimon, a rabbinic scholar and judge in Cordoba, gave his son a broad Jewish and general education that included mathematics, astronomy and philosophy. In 1148, Cordoba was conquered by the Almohads, a fanatical Muslim sect that forced Jews to convert to Islam. Maimonides' family fled Cordoba, spent time in Spain and probably also in Provence, and in 1160 settled in North Africa in the city of Fez. Maimonides continued his studies during this period and began his literary work. As he writes, "while my mind was troubled, and amid divinely or-

\* Presented at the first International Maimonides Conference on Medicine and Ethics, Tiberias, 20-24 March 2005 and at the Annual Meeting of the Israel Society of Hematology and Blood Bank, 12 July 2005.

pens that ... royal officers fall sick, and I must attend to their healing ... I do not return to Fostat until the afternoon. Then I am almost dying with hunger... I find the antechambers filled with people both Jews and Gentiles, nobles and common people, judges and policemen, friends and foes – a mixed multitude, who await the time of my return. I dismount from my animal, wash my hands, go forth to my patients, and entreat them to bear with me while I partake of some light refreshments, the only meal I eat in twenty-four hours. Then I go forth to attend to my patients, and write prescriptions and directions for their various ailments. Patients go in and out until nightfall, and sometimes even ... until two hours or more into the night. I converse with them and prescribe for them even while lying down from sheer fatigue; and when night falls, I am so exhausted that I can hardly speak.

Despite his busy medical and rabbinic schedule, Maimonides found time for comprehensive literary work in various fields, which will be thematically described below.

Maimonides died on 13 December 1204 and was buried in Tiberias, Israel. His only son Abraham (1186-1237) succeeded

him in the position of *naggid* [3]. The Jewish community across the world mourned the loss of this remarkable personality, as best summed up by the folk saying: "From (the biblical) Moses to Moses (Maimonides), there arose no one like Moses."

**Maimonides as rabbi** [Figure 1A]

Maimonides' *Comprehensive Commentary to the Mishnah* (1168) was the first of its kind and the earliest codex of classical rabbinic literature (3rd century CE). In his commentary he elaborates upon the development of Jewish law and deals with the fundamental principles of Judaism as formulated in his thirteen articles of faith [4]. Most of his Talmudic commentaries have been lost.

In his numerous letters to students and friends, Maimonides deals with personal and contemporary historical issues. The Jews of Yemen, for example, turned to Maimonides when local rulers issued religious decrees, forcing the Jews to choose between conversion and death. Maimonides sent them his famous *Letter to Yemen* (1172), written in simple language so "that men, women and children could read it," in which he offers the Yemenite community encouragement and practical advice [5]. His numerous responsa regarding practical issues of *halakha* (the body of Jewish law) had a major impact.

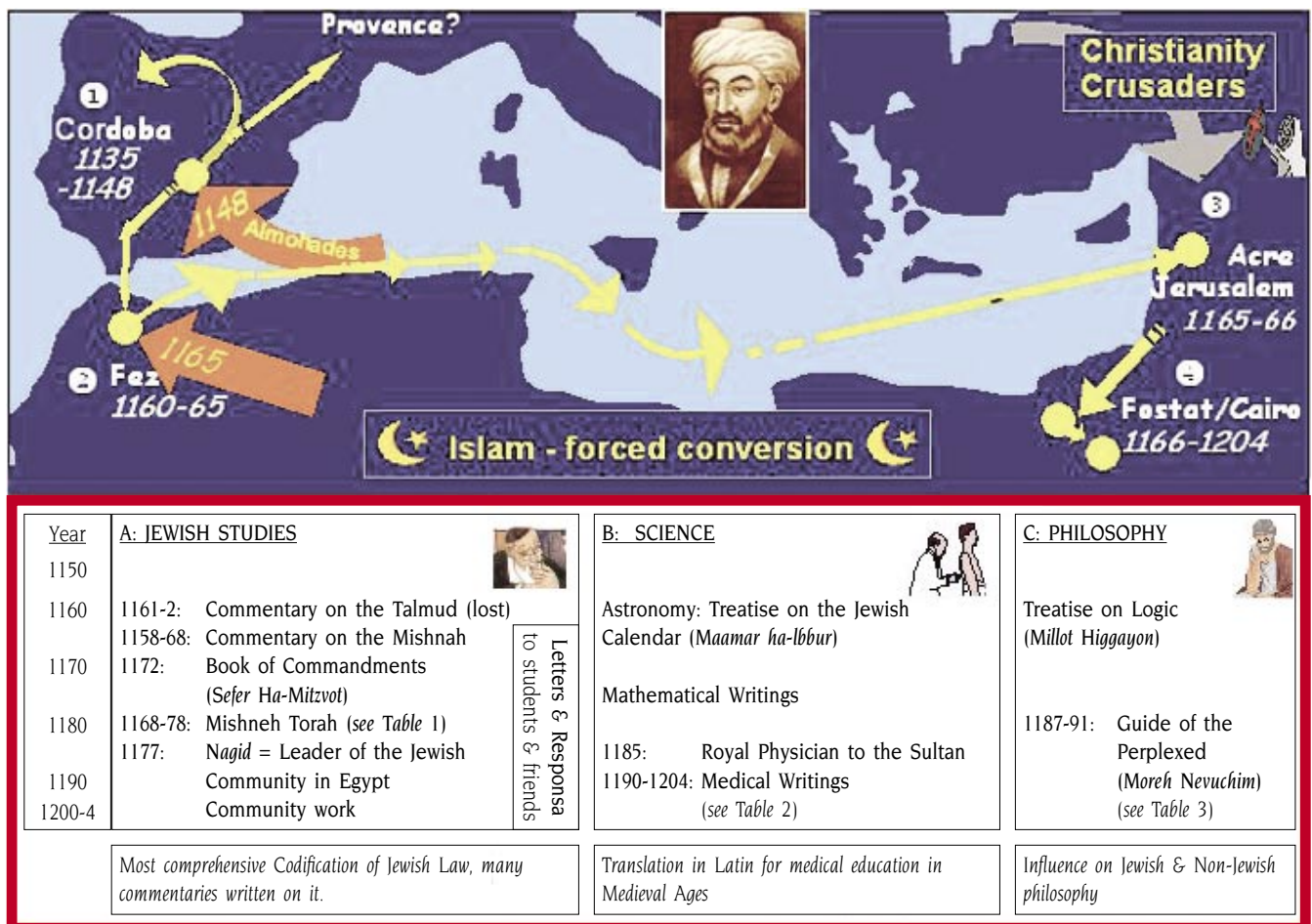


Figure 1. Moses Maimonides (1138-1204): his life and writings

**Table 1. Mishneh Torah – content and structure**

	Book (Sefer)	Motto (according to the Biblical reference at the beginning)
Basic religious philosophical, psychological concepts	1. Knowledge (Maddah)	Continue Thy loving-kindness unto them that know Thee; and Thy righteousness unto the upright in heart (Psalm 36:11)
	2. Love (Adoration) (Ahava)	How I love Thy Torah: it is my meditation all the day (Psalm 119:97)
Day life		
Jewish calendar	3. Seasons (Zemanim)	Thy testimonies have I taken as a heritage forever, for they are the rejoicing of my heart (Psalm 119:111)
Marital life	4. Women (Nashim)	The teaching of the wise is a fountain of life, to depart from the snares of death (Psalm 13:14)
	5. Holiness (Kedushah)	Order my footsteps by Thy word, and let not any iniquity have dominion over me (Psalm 119:113)
Various religious practices	6. Asseveration (Hafia'ah)	Accept, I beseech Thee, the free will offerings of my mouth, O Lord, and teach me Thine Ordinance (Psalm 119:108)
	7. Seeds (Zera'im)	Let Thy hand be ready to help me, for I have chosen Thy precepts (Psalm 119:173)
	8. Temple Service (Avodah)	Pray for the Peace of Jerusalem: May they prosper that love thee (Psalm 122:6)
	9. Offerings (Korbanot)	I will offer to Thee the sacrifice of thanksgiving, and will call upon the name of the Lord (Psalm 116:17)
Civil and criminal law on different levels	10. Ritual Cleanliness (Taharot)	Create me a clean heart, O God, and renew a steadfast spirit with me (Psalm 51:12)
	11. Torts (Nezikim)	Incline my heart unto Thy testimonies, and not to covetousness (Psalm 119:36)
	12. Acquisition (Kinyan)	The beginning wisdom is: get wisdom, yea, with all thy getting get understanding (Proverbs 4:7)
	13. Civil Laws (Mishpatim)	I will give thanks unto Thee with uprightness of heart, when I learn Thy righteous ordinances (Psalm 119:7)
	14. Judges (Shoftim)	Open thy mouth, judge righteously, and plead the cause of the poor and needy (Proverbs 31:9)

In his *Book of Commandments* (1172), Maimonides briefly summarizes the practical aspects of all 613 biblical commandments. It may be viewed as a card-index to his rabbinic opus magnum, the *Mishneh Torah* (*Review of the Torah*) (1180s), the first systematic codification of the entire corpus of Jewish law. Written in elegant and concise Hebrew, the 14 books [Table 1] follow a logical development from basic religious, philosophical and psychological concepts (1), through daily life (2), the Jewish calendar (3), marital life (4), various religious practices (5-10), to civil and criminal law on different levels (10-14) [6]. His description of the Messianic era at the end of this work reflects ideas found in classical Greek philosophy, with the Messianic Davidic king portrayed as philosopher-king, the lawgiver of the ideal state [7]. Each book is divided into various topics that are further divided into chapters (1,000 in total). The *Mishneh Torah*

incorporates philosophical [6,8], scientific and medical knowledge [9]. Because of its brilliant scholarship, popular style and systematic presentation of the entire body of rabbinic tradition, it was rapidly accepted throughout the Jewish world. As the *summa theologiae* of Judaism it remains one of the most important creations of rabbinic literature to the present day.

### Maimonides as physician [Figure 1B]

Maimonides acquired his medical knowledge from well-known Jewish and Muslim physicians in Spain and Fez. In his *Glossary of Drugs* he refers to Spanish-Moroccan physicians and provides the names of drugs in Arabic, Spanish and Berber, reflecting his medical training. He lectured on medicine and his clinical position as royal physician exposed him to eminent doctors, which enhanced his professional reputation [10].

Despite his demanding rabbinic obligations, Maimonides devoted much of the last ten years of his life to medical theory and practice. He was driven by a profound religious and philosophical appreciation for medicine. The sciences are the "maid-servants to the Torah" [11], an ideal way to recognize and love God [12]; this attitude also accounts for his interest in astronomy and mathematics [13]. He wrote: "The art of medicine is given [in Judaism] a very large role with respect to the virtues, the knowledge of God, and attaining true happiness. To study it diligently is among the greatest acts of worship... for it enables us to perform our actions so that they become human actions, leading to the virtues and the truth" [14]. He claimed that the preservation of health and life is a Divine commandment [15], and that there is no greater joy than to help and support the needy [16].

Maimonides' scientific and medical teachings are clearly rational in character. He employed scientific methods in his treatment of disease and was outspokenly opposed to guesswork, superstition, and blind belief in authority. He criticized or simply ignored medical concepts found in classical Jewish or Greek sources if they were not in accord with his own scientific experience: "Today he [the physician] can discover his errors of yesterday and tomorrow he may obtain new light on what he thinks himself sure of today."

Maimonides' medical writings (1190-1204) span a wide range of topics in contemporary medicine [Table 2]. Although he reviewed and commented upon the medical writings of classical and contemporary physicians and extracted from the medical works of (1) Galen (129-199 CE) and (2) Hippocrates (460-370 BCE), his medical writings reveal independence and originality of thought. An example is (3) *Aphorisms of Moses* (*Pirkei Moshe*), his most famous and voluminous medical work, which includes clinical descriptions of many diseases [17].

He wrote a treatise on poisons and their antidotes (7) and organized drugs alphabetically in one of the earliest pharmacopoeias in medical history (10). He published monographs on hemorrhoids (4) and asthma (6). Psychological well-being (8, 9) as well as intimate relations (5) [18] are crucial focuses of his medical philosophy. His medical writings were translated into Hebrew and Latin [19], with many editions during the early pe-

**Table 2.** Maimonides' medical writings

Title (year)	Short description
(1) Extracts from Galen, Art of Cure	Extracts from over 100 books written by Galen (129-199 CE), compiled as a small work for medical students or as a <i>vademecum</i> for physicians.
(2) Commentary on the Aphorisms of Hippocrates	Commentary on Hippocrates' aphorisms, with occasional criticism of Hippocrates and Galen. "Life is short, and the art long, the occasion fleeting, experience fallacious and judgment difficult. The physician must not only be prepared to do what is right himself, but must also make the patient, the attendants and the externals cooperate" ( <i>Aphorism of Hippocrates</i> 1, 1)
(3) Medical Aphorisms of Moses ( <i>Pirkei Moshe</i> )	1500 aphorisms taken from Greco-Latin medical writings; 25 chapters on anatomy, physiology, pathology, symptomatology, diagnosis, etiology of disease, therapy, fevers, bloodletting, laxatives and emetics, surgery, gynecology, hygiene, exercise, bathing, diet, drugs, medical curiosities.
(4) Treatise on Hemorrhoids	Written for a nobleman; seven chapters on normal digestion, harmful and beneficial foods, general and local therapeutics.
(5) Treatise on Sexual Intercourse	Written for the nephew of Saladin Sultan al Musaffar Omar Ibn Nur Ad-Din. Maimonides describes the physiology of sexual temperaments and advises moderation in sexual intercourse.
(6) Treatise on Asthma (1190)	Written for a patient. Thirteen chapters dealing with rules of diet, drugs, ideal climate and environment for the prevention of asthma: "The first thing to consider... is the provision of fresh air, clean water and a healthy diet. The concern for clean air is the foremost rule in preserving the health of one's body and soul."
(7) Treatise on Poisons and their Antidotes	Maimonides was asked by the Grand Vizir and Supreme Judge Al Fadhil to write guidelines for laymen in order to treat patients prior to the arrival of the physician. He describes in popular and scientific fashion various symptoms of poisoning, distinguishes between different types of snake venom and suggests the establishment of collections of antidotes in state pharmacies. His treatise was used as a textbook of toxicology in the Middle Ages.
(8.) Guide to Good Health ( <i>Regimen Sanitatis</i> ) (1198)	A short, concise and popular treatise written for Al Afdal, eldest son of Saladin the Great, a pleasure-seeking young man, subject to melancholy, depression, excessive indulgence in wine and women, warlike adventures against his own relatives and in the Crusades. Maimonides demands the strengthening of all vital forces, which influence man's health and cultivate his moral character in order to preserve one's peace of mind in all circumstances. One of the earliest treatises of psychosomatic medicine.
(9) Discourse on the Explanation of Fits or Coincidences (1200)	Four chapters: (1) Diet; (2) Hygiene and drugs; (3) Healthy mind in a healthy body; (4) Prescriptions regarding climate, domicile, occupation, bathing, sex, wine drinking, diet, respiratory infections. Also written for Sultan Al Malik Al Afdal, who requested an explanation of the causes for his continued depression (22 chapters); continuation of Regimen of Health with detailed hour-by-hour regimen for the daily life of the Sultan.
(10) Glossary of Drug Names	Pharmacopoeia; in the introduction Maimonides explains why it is necessary to identify drugs by their popular names. Alphabetical list of 350 remedies in Arabic, Greek, Syrian, Egyptian, Persian, Berber, and Spanish.

riod of printing, some of them becoming classics in medieval European medical schools.

Maimonides' comprehensive and systematic approach to almost all fields of contemporary medicine is remarkable. The physician plays an important role not only during sickness, but also prophylactically when the body is healthy. Maimonides stresses the necessity of preventive medicine, hygienic conditions, physical exercise, proper breathing, work, family, an intimate life, diet, walks in pleasant surroundings, music, poetry, art – all of which contribute to the maintenance of good health [20]. His understanding of the relationship between mind and body (psychosomatics) and his ideas regarding psychological and spiritual well-being are based on philosophical and religious principles. Physical and biological rules are integrated with moral and ethical values. He emphasizes the relationship between psyche and soma [21]. According to Maimonides, when a person consciously integrates himself into the natural biological laws of the world, he walks in the path of science and wisdom, fulfills the biblical commandment of *imitatio dei* and achieves true knowledge and perfect bliss.

In his medical writings, Maimonides provides his readers with important medical information to familiarize them with medical concepts, enhance their understanding and encourage their cooperation. The physician must use art, logic and intuition to obtain a comprehensive view of the patient: "Don't treat the disease, treat the patient." The so-called *Prayer of Maimonides*

succinctly expresses this typical Maimonidean attitude and was therefore mistakenly attributed to Maimonides [22]. One of Maimonides' appreciative patients praised him accordingly: "Galen's art heals only the body, but Abu-Amran's (Maimonides') art heals body and soul. His knowledge made him the physician of the century. He could heal with his wisdom the sickness of ignorance" [23,24]. In a medical letter to one of his Islamic patients, Maimonides respectfully quotes the religious sources from the Koran, combining them also with Jewish concepts, in order to treat him according to his religious beliefs and spiritual context [25]. Maimonides' psychological insight into the mind of his patients and his respectful approach to all human beings regardless of their religious or national background are certainly an exceptional feature of this 12th century healer – a role model for modern physicians.

### **Maimonides as philosopher** [Figure 1C]

Maimonides was the most important Jewish philosopher of the Middle Ages, profoundly influencing the subsequent course of Jewish philosophy until modern Jewish thought.

In his early years, probably at the age of 16, Maimonides wrote his short *Treatise on the Terminology of Logic and Philosophy* [26]. In the 1190s Maimonides completed his philosophical masterpiece *Guide of the Perplexed*, addressing the work to a former student. He refrained from publishing his difficult metaphysical writings for the broad masses because they might

**Table 3.** Maimonides' philosophical work *Guide of the Perplexed*

<b>A.</b>	<b>VIEWS (I:I-III:24)</b>
<b>A'</b>	<b>Views regarding God and the angels (I:I-III:7)</b>
I	Biblical terms applied to God (I:1-70)
II	Demonstrations of the existence, unity, and incorporeality of God (I:71-II:31)
III	Prophecy (II:32-48)
IV	The Account of the Chariot (III:1-7)
<b>A''</b>	<b>Views regarding bodily beings that come into being and perish, and in particular regarding man (III:8-24)</b>
V	Providence (III:8-24)
<b>B.</b>	<b>ACTIONS (III:25-54)</b>
VI	Actions commanded by God and done by God (III:25-50)
VII	Man's perfection and God's providence (III:51-54)

easily misunderstand his philosophy [27]. Maimonides deals with the conflicts between Aristotelian philosophy and Jewish tradition and attempts to provide rational explanations for biblical commandments and Jewish law. While he held Aristotle in high esteem, he differed from him in several issues. The topics of the book follow a logical structure [Table 3].

The title *Guide of the Perplexed* may provide us with a window into Maimonides' philosophical world. Referring to the Israelites' escape from Egypt, he explains that when they left Egypt they feared war with the nations dwelling in the land of Israel; therefore, God led them on a detour in the Sinai desert, causing the Egyptians to believe that they were *perplexed* in the desert. The Egyptians were encouraged to pursue the Israelites, but God saved them (Exodus 13:17-14:9). Retrospectively, the forty years of wandering in the desert constituted a unique experience of religious education that psychologically prepared the Israelites to enter the Holy Land (Deuteronomy 29:1-5). God took human nature into account and His Divine guidance created appropriate possibilities for spiritual striving. The Egyptians' mistaken impression that the Israelites were *perplexed* in the desert turned out to be part of this unique Divine *guidance* [28].

Jewish law and ritual are also interpreted by way of comparison with other belief systems, a viewpoint of comparative religion. God guides man to face the weaknesses of human nature in his journey through life; by self-education and continual psycho-training, man can convert these qualities and attain religious and spiritual perfection. This concept is typical for Maimonides' philosophy, which provides religious, philosophical and medical guidance [29].

Maimonides' *Guide* is a difficult book and has frequently been misunderstood by proponents and opponents alike. The *Guide* evoked a great deal of conflict, known as the Maimonidean controversy. Through the *Guide's* Latin translation, Maimonides had a powerful impact even outside the Jewish community; an example is the Christian scholar St. Thomas Aquinas (1227-1274) [30,31].

## Discussion

Maimonides was a giant in Jewish literature, philosophy and medical history. Some of his distinctive features might inspire modern physicians even after 800 years:

- **Academic and literary capacity.** Maimonides was an avid reader and prolific writer. He mastered nearly everything known in the fields of Jewish studies, law, medicine, astronomy, mathematics, philosophy and ethics and provided new insights in these fields. All his writings demonstrate the same lucidity, conciseness, and formidable power of systematization and organization.
- **Rational thinking and search for truth.** These being crucial principles in all of Maimonides' writings, he was willing to learn from everyone: "Accept the truth from every author" [32] regardless of his national and cultural background, for every human being can contribute to human wisdom and knowledge [33]. In all aspects of his rich academic activities, he systematically reviewed the existing literature before presenting his own observations and insights. Aware of his rabbinic and philosophic innovations, he was fearlessly committed to the truth, even when it gave rise to severe confrontation with other rabbinic opinions [3].
- **"Architect of Judaism."** Maimonides revolutionized Jewish thinking with his monumental rabbinic contributions and was named the "architect of Jewish studies" [34].
- **Comprehensive knowledge and synthesis of various fields.** Maimonides attained encyclopaedic knowledge and expertise in many fields. His various writings from different periods of his productive life demonstrate considerable consistency, and the interaction and synthesis between the various fields create an elegant lattice-work. In his early writings Maimonides explained that illustrious scholars are called *eshkolot* (clusters), because they know how to combine in their personalities "outstanding moral virtues and the various fields of science," just like the different parts of a cluster form a single unit [35]. There is probably no better example of this characteristically Maimonidean ideal than Maimonides himself, who synthesised philosophical values with all fields of contemporary knowledge and science along with his own insights.
- **Social involvement, understanding and adjustment to the needs of his audience.** Maimonides adjusted his style of writing in his Hebrew or Arabic texts according to scholarly, philosophical, practical, popular and personal contexts. He is one of the first Jewish letter writers to find his way into the minds and hearts of his correspondents. His letters reveal his whole personality, rich in human passion and emotion. His famous *Letter to Yemen* (1172) provides, spiritually and socially, "a remedy and cure" for his generation suffering from persecution, since as a Rabbi he serves also as religious philosopher and physician. He assumed responsibilities as a religious leader and teacher, as a physician caring for their medical and spiritual problems by providing them also with the wisdom to understand their situation, and as a philosophical guide of perplexed people. He treated all people, Jewish and Gentile alike. His tolerance and respectful interest in other cultures and religious traditions is certainly a venerable characteristic and one to aspire to.
- **Physician.** Last but not least is Maimonides' contribution

to the history of medicine. This includes: scientific research based on detailed clinical observations, education of physicians and patients, hygiene and preventive medicine, and a holistic approach to the patient integrating all the dimensions (scientific, humanistic, philosophical, psychological, psychosomatic, spiritual, religious). Although medical prescriptions from the 12th century are obviously obsolete for our time, the above concepts are of special interest to modern medicine, which is marked by (over-)specialization and the possible neglect of the invisible mind.

As evident from his biography and writings, medicine was an integral part of Maimonides' life. As Sir William Osler (1849-1919) noted, Maimonides – the celebrated physician to sultans and princes – was also the “Prince of Physicians” [36].

**Acknowledgment.** We would like to thank the following experts for reviewing this manuscript and providing important comments and suggestions: Prof. Shimon Glick (Ben-Gurion University, Beer Sheva), Prof. Shmuel Kottek (History of Medicine, Hebrew University-Hadassah Medical School, Jerusalem), Prof. Peter Singer (Joint Centre for Bioethics, University of Toronto, Canada), Prof. Avraham Steinberg (Medical Ethics, Hebrew University, Jerusalem), and David Strauss (Efrat).

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