

Child Health as Viewed by Ibn-Sina

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Summary

Ibn-Sina, or Avicenna as known in the west, was born in the year 980 A. D. in Afshana near Bukhara in Turkistan, which is now called Uzbekistan. He left Bukhara when he was 21 years of age, and spent the rest of his life in various towns in Persia. He composed 276 works; all of them written in Arabic except very few small books written in his mother tongue Persian. *Al-Qanun Fit-tib* (or Code of Laws in Medicine) represents the most important work of Ibn-Sina, and as Osler described it, the most famous medical textbook ever written. In the first book Ibn-Sina devoted a special part for talking about children bringing up and their diseases, and he called it (The first education in bringing up). This part consists of four chapters: The first chapter is for the management of the newborn until the walking age. In the second chapter he talks about milk feeding, the characters of the good wet nurse and weakling. In the third chapter he talked about pediatric diseases and their treatments. The fourth chapter was devoted to children management until adulthood.

In *al-Orjolah fi-ttib*, Ibn-Sina devoted fifty-six verses for talking briefly about prenatal and postnatal care, delivery, newborn baby care and how to choose the suitable wet nurse.

The aim of this study is to highlight child health as viewed by Ibn-Sina, and to present his contribution in this field of medicine.

Ibn Sina

Ibn-Sina, or Avicenna as known in the west, was born in the year 980 A. D. in Afshana near Bukhara in Turkistan, which is now called Uzbekistan. He left Bukhara when he was 21 years of age, and spent the rest of his life in various towns in Persia. When he died in the year 1037 he was known as one of the greatest philosopher in Islam, and in Medicine he was highly regarded that he was compared to Galen, so he was known as the Galen of Islam. Because of his great celebrity, many nations disputed and competed to celebrate his anniversary. Turkish were the first who revive his anniversary in 1937, when they held a great meeting for the occasion of nine hundred years since his death. Then Arabs and Iranians followed them by holding two festivals in Baghdad in 1952, then in Tehran in 1954. To appreciate his contribution in developing the philosophical and medical sciences, in 1978 UNESCO invited all its members to celebrate the anniversary of one thousand years since his birth. All the members participated in the celebration, which was held in 1980.

Ibn-Sina composed 276 works; all of them written in Arabic except very few small books written in his mother tongue Persian. Unfortunately, most of these works were lost, but there are still 68 books or treatises available in the eastern and western libraries. He composed in all branches of science, but he was more interested in philosophy and medicine. Some recent historians consider him as a philosopher more than a physician, but others consider him as a prince of the physicians during the Middle Ages.

The classification of Ibn-Sina works according to their content is as follow:

43 works in medicine, 24 in philosophy, 26 in physics, 31 in theology, 23 in psychology, 15 in mathematics, 22 in logic, 5 in the Holy Koran interpretation. In addition, many treatises in asceticism, love, music and some stories.

Al-Qanun Fit-tib: (or Code of Laws in Medicine) represents the most important work of Ibn-Sina, which is written in Arabic, and as William Osler described it, the most famous medical textbook ever

written. This book is considered a unique reference or document containing all medical knowledge, as it accumulated through many civilizations until the time of Ibn-Sina himself.

In his way of explanation Ibn-Sina was very close to the way which modern medical textbooks follow regarding classification, causes of diseases, epidemiology, symptoms and signs, treatment and prognosis. In this respect we can say that the excellence in its arrangement and comprehensiveness made al-Qanun book the most widespread in the Islamic and European countries. Al-Qanun book was known to the Europeans through the Latin translations of Gerard of Cremona in the 15th century, and remained in use in medical schools at Louvain and Montpellier until the 17th century, and according to the Journal of UNESCO, October issue, 1980, the Qanun book remained in use in Brussels University until 1909.

By the 12th century awareness set in that these compendia were too large to be really useful for ready reference. Consequently, epitomes of the Qanun were produced to make the ideas more quickly accessible, and commentaries were written to clarify the contents. The most popular of all the epitome of the Qanun was that called *Kitab al-Mujiz fil Tibb* or the Concise Book in Medicine. It was written in Syria by Ibn-al-Nafis, who died in 1288.

Ibn-Sina begins his book al-Qanun by definition medicine by saying: Medicine is a science, from which one learns the states of the human body, with respect to what is healthy and what is not, in order to preserve good health when it exists, and restore it when it is lacking.

Al-Qanun book consists of five books, the first concerned with general medical principles. The second with materia medica. The third with diseases occurring in a particular part of the body. The fourth on diseases not specific to one bodily part (such as fevers), in addition, to traumatic injuries such as fractures and dislocations of bones and joints. With the final book containing a formula giving recipes for compound remedies.

In the first book Ibn-Sina devoted a special part for talking about children bringing up and their diseases, and he called it (The first education in bringing up). This part consists of four chapters:

The first chapter is for the management of the newborn until the walking age. In this chapter we can find the concepts of Ibn-Sina and all other physicians before him regarding issues, which are necessary to be carried out for every newborn baby. He says that after delivery the umbilical cord should be cut for a distance of four fingers breadth, and ligated by using a wool string, then a bandage dipped by oil applied on. All of his body should be washed, with a necessity of dropping inside his eyes, and the nose orifices should be cleaned. Then Ibn-Sina talked about the newborn bathing, dressing and sleeping.

In the second chapter he talks about milk feeding, the characters of the good wet nurse and weakling. In this regard Ibn-Sina stresses on the necessity of doing all efforts to keep the newborn on his mother milk-feeding as possible, because it is in its essence like his feeding during the embryonic stage. Regarding weakling Ibn-Sina says that it should be gradually, and should be given first light food such as light meat with soup. Then he stressed on the necessity of not enforcing the baby to sit or stand before he could perform that by him self.

In the third chapter he talked about pediatric diseases and their treatments. Among these diseases are: gum tumors, aphtha, xophthalmous, thrush, ear pain and discharge, difficult breathing, cough, common cold, throat tumors, diarrhea, vomiting, hiccup, abdominal cramp, rectal prolapse, tenismus, worms, crying, sleeping disorders, bad dreams.

The fourth chapter was devoted to children management until adulthood. In this chapter Ibn-Sina talks about the moral and emotional education of the children, revealing his opinions in this regard.

In the other chapters of al-Qanun book we can find some remarks related to pediatric diseases such as: bed wetting, convulsions, measles, smallpox and some congenital deformities.

When he talked about traumatic dislocation of the hip, Ibn-Sina says that this dislocation may develop before or just after delivery, mentioning to what is known now congenital dislocation of the hip.

Al-orjozah fi-ttib (Medicine in a poem)

This is considered the second most important medical works of Ibn-Sina after al-Qanun. Ibn-Sina

composed a popular poem included all branches of medicine in a very interesting and easy way. This is called Orjozah (taken from the name of the poem meter or measure, which is called al-Rajaz). Indeed, many Orjozah are attributed to Ibn-Sina, but the most famous one is the long poem and consists of 1337 verses. The next famous Orjozah consists of 146 verses in which Ibn-Sina talked about health management in the four seasons.

The long Orjozah is considered as a revision of al-Qanun book, and Ibn-Sina intended to make it as a quick reference for the medical students, in addition to be easily memorized.

Ibn-Sina divided this poem into two parts, the first one is theoretical, while the second is practical exactly as he did in his book al-Qanun.

Many medical students in the middle ages benefited because of this Orjozah. Ibn-Zuhr praised it and said it contained the most important medical principles, so it is possible to dispense with so many other medical textbooks.

Ibn-Sina begins the long Orjozah:

حفظ صحة برء مرض من سبب في بدن منذ عرض

While he begins the second Orjozah which is devoted for talking about health preserve during the four seasons:

يقول راجي ربه ابن سينا
يا سائل عن صحة الأجساد
ولم يرزل بالله مستعينا
اسمع صحيح الطب بالإسناد

Ibn-Sina devoted fifty-six verses for talking briefly about prenatal and postnatal care, delivery, newborn baby care and how to choose the suitable wet nurse.

Regarding prenatal care he says:

الطفل يحفظ بطن أمه
فاحتط على الحامل في معدتها
ويصلح الدم ويتقى الفضل
إن هاجها الدم فلا تقصدها
أو هاجها خنط فلا تسنهها
كي لا يصيب آفة في جسمه
كي لا ترى الفساد في شهوتها
ذاك الذي يكون منه الطفل
بل بالبرود والتطافي أقصدها
بل بتطريف له عاملها

During labor:

فثُوبَ أُمُورٍ وَضَعَهَا لِسَهْلِهَا
 وَمَا يَلِي الْحَمْلَ مِنَ الْإِقْطَارِ
 وَلَا يَكُونُ عِنْدَ وَضْعِ تَعَبٍ
 وَأَحْسَنُهَا مِنْ مَرَقِ دَهْنٍ
 أَوْ رَوْعَةٍ أَوْ صِرْحَةٍ أَوْ ضَرْبَةٍ
 طَبِيخِ تَمْرَةٍ فِيهِ مَاءُ حَلِيبَةٍ
 تَمُدُّ رِجْلَيْهَا بِغَيْرِ حَنْطَلِهِ
 عَاصِرَةَ لِبَطْنِهَا بِحَكْمِهِ
 فَاسْقِهَا أَقْرَصَةَ مِنْ كَهْرِبَا
 فَاسْقِهَا أَقْرَصَةَ مِنْ مَرٍ
 فَاسْتَعْمَلِ التَّبْخِيرَ بِالْمَحْطَلِ
 وَمِثْلَ كَبْرِيْتٍ وَمِثْلَ حَنْطَلِ

فإن دنا وقت لوضع حملها
 الدلك في الحمام للإحضار
 بالدهن كيما يستلين العصب
 واجعل غذاءها من السمين
 واحذر عليها صيحة أو وثبة
 وأسقها في وضعها من شدة
 واجعل لها قابلة ذي فطنه
 ثم إذا تقنمها من مره
 إن سال منها زائد من الدما
 أو لم يسأل منها دم من ضر
 وإن مشيمة بها لم تنزل
 كالمر والقطران أو كالأهمل

In choosing the wet nurse:

فِي سِنَّهَا مِنْ مَتَوَسِّطَاتٍ
 مَزَاجِهَا يَقْرَبُ مِنْ مَعْتَدَلٍ
 نَقِيَّةِ الرَّأْسِ مَعَ الْعَيْنِيَيْنِ
 صَحِيحَةِ الْأَعْضَاءِ وَالْمَقَاصِلِ
 فِي رِقَّةٍ وَنَيْسٍ بِالْكَثِيفِ
 لَامْتَنِّ مَتَّصِلٌ إِذَا يَسْكَبُ
 وَالسَّمَكُ الرُّطْبُ مَعَ السَّمِينِ

واختر له من المرضع من فتاة
 لحمية ليس بها من رهل
 جسيمة عظيمة الثديين
 سائمة من كل ضر داخل
 ذات لبان ليس بالناطيف
 أبيض لون حلو وطعم طيب
 وغذاها بالحلو والدهين

In the management of the child during the nursing period:

حتى ترى صلابة في جلده |
 ووسط الشد على قماطه
 ولا تمنعه زمانا فيحـم
 يمنعه المنام أو يورقه
 مهذا وطينا يره الظلاما
 إن منع الضر من المنام
 كيما يرى النجوم والسماء
 لكي تغريه على الإبصار
 كيما تغريه على التكلـيم
 وامسح به لسانه وادلكه
 وكندر وخاله في فيه
 من سدة في الأنف أو تصفيه
 وصوته ومطلق أنفاسه

ادهنه بالقابض عند شدّه
 وحمه تنظفه من أخلاطه
 ولا ترضعه كثيرا يتخـم
 ولا تعامله بشيء يقلقه
 ألزمه إن أردت أن يناما
 وامزج له الخشخاش بالطعام
 ألزمه في يقظته الضياء
 أكثر له الألوان بالنهاـر
 ناغيه بالأصوات في تعـليم
 ألعله من غسل أو حتكه
 واجعل قليل رب سوس فيه
 واسطه من هذا لكي تشفيه
 لأن هذا مصلح إحساسه

At the end, I would like to conclude my presentation by a word of truth, written by the European doctor De Poure who declared: Medicine was absent till Hypocrites created it, dead till Galen revived it, dispersed till Rhazes collected it, deficient till Avicenna completed it. Also, in the west it has been said: any one who wants to be a good doctor must be Avicennist.

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