

TURKISH MEDICAL FOLKLORE AND SOME MEDICINAL PLANTS

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The size of Turkey is about 800.000 sq. km. Subtropical, Mediterranean and dry climates are all to be found in this land and we can say that Turkey has many very different kinds of climate. These varied climates give rise to very different kinds of vegetation in different parts of the country. It must also be added that this land has a great and ancient history, and the oldest civilisation was founded here. There is, therefore, a wide tradition and folklore. Of course the subject in which we are interested is medical folklore. We can find a great deal of achievement written on this subject. In these books we can find countless remedies. It is very difficult to separate the good ones from the useless remedies, because today we must prove the real curative properties of a plant which was recommended many years ago, in a medical way. It is wrong and also difficult to speak about them before we apply chemistry and pharmacology. This means that we have a great deal of work before us. It is possible that among thousands, only one folklore medicine will be of help to us and will be worthy of today's scientific methods.

We must work very hard to find these remedies but also be very careful in giving results. If we do not do it in this way we shall find ourselves in difficulties. In our own Department we have followed this method even though it means long and patient work. We must: (a) arrange trips to different parts of the country, and (b) find out which folklore medicines are still in use.

When you consider that the country is a big one you will understand that to carry out these searches is not an easy task. Although medical folklore can be found in every part of the land, it is most frequently met with in the East and South East of Turkey. There is no doubt that many educated people use these remedies, recommended to them for their illnesses.

1. As an example I am going to tell you about a woman who lived near our house. This lady was suffering from eczema on her hands. She went to many physicians including our Dermatology Department, but the medicines they gave lost their effect after a few days. Then an old woman gave her the following medicine:

Lead carbonate 10%
Litharge 10%
Vaseline 80%

This ointment had a magnificent effect and the woman became well in 24 hours. This was one case which I saw myself, and from that time (6 years) she has been perfectly healthy. It is possible to find many examples like this one.

2. There was also some news one day in the Turkish papers which excited everyone very much. A villager and one of his relatives said that they had found medicine to cure cancer. Unfortunately the newspapers gave some wrong information. The truth of the matter is like this: In Sinop, a beautiful city on the Black Sea coast, there is an illness called "Yenurce." This illness causes wounds on the face, lips and neck which cannot be cured. For these wounds they use the root of a plant called "Yenurceotu". We sent one of our assistants to the city. He had a little difficulty in contacting the persons in question because they hesitated to come forward. They were afraid of prosecution and also that someone might take this opportunity out of their hands. After many promises we were able to get a small specimen of the plant, of which we had no knowledge. At the moment we have only the plant and I do not know whether it is worth while working on it or not.

3. During our researches we came across an important case: In Istanbul, the mother-in-law of an Inspector from the Department of Culture became ill. She was about 65 years old. First of all she was suffering from rheumatism and then after a while she got jaundice. When the jaundice began to disappear the patient's abdomen swelled. Two famous physicians suspected liver cirrhosis and they said there was nothing to do but diet and occasional injection of a mercurial diuretic. The swelling of the abdomen and the legs gave a bad result. The patient was seriously ill but no physician could help her. Everybody wanted to help her but no one was able to. After she had been ill for five months someone gave her this advice: About 90 km. from Izmir, the third biggest city in Turkey, on the Mediterranean coast, there is a beautiful town, and also a very historical town, called Bergama. In this little town there is a man who makes certain medicines for patients. She was advised to invite him to Istanbul by letter. This she did and he came to Istanbul and saw the patient and gave her some medicine. It was a powder mixed with honey. He also said that the effect of this medicine would only be seen if the kidneys of the patient were healthy and if the illness

had not been of more than 6-month duration. The patient was suitable for the medicine. She took the medicine three times a day and after 18 days all her oedema had disappeared and she was healthy. This event happened in 1953, and we only learned about it, as a coincidence, in 1955. We saw the patient only after all this had happened, therefore we do not know her first condition. We have heard that this man had many other cures to his credit. After a year and a half had passed, we went to Bergama and searched for him but unfortunately he had died. We found one of his friends with whom he had worked and with great difficulty we learned which plant they used. It was the root of a wild plant called *Ecballium elatrium*. It is known that in the fruit of this plant there is an effective matter called 'elaterine'. This substance was used as a remedy for diarrhoea as also for jaundice, but afterwards they stopped using it because of its toxic effect, but we could find no record about its root. We have the powdered root in our hands. We wanted to control the diuretic effect of it. We did not look for its effective matter. First we made experiments for toxic effect on rabbits and rats. But we could not see any toxic effect with a quantity of 5 g. per kg. We used male and female rats about 100-150 g. for a method we used R. Jaretaky's modified method. That means to each rat 10g. of wheat for every 100g. We also gave the drug by mouth and with some other substances to control. By this method we were able to compare the effect of this root with distilled water, glucose and honey, separately and opposing each other. We made our experiments in 4 groups of animals. Each group contained 10 rats :

Group I	Distilled water	5 cc./100g.
Group II	Plant root (1%)	5 cc./100g.
Group III	Glucose (10%)	5 cc./100g.
Group IV	Honey (10%)	5 cc./100g.

We used the drug as an emulsion because we were not able to dissolve it in water. We have repeated the same experiment with other groups of rats twice. Diuretic experiments were made by controlling, for 24 hours, every half-hour (at night as well). This experiment we have repeated in the same way to the 10 rats in each 4 groups but we could not find any remarkable results. Therefore we may say that it was without any diuretic effects.

We were unable to get an opportunity of using it on a typical cirrhosis case. In some advanced cases we could not find any diuretic or other effects.

4. In some parts of our country there is a plant called Kudret Nari (*Momordica balsamine*) which is

used in medical folklore. The English name of this plant is "Balsam apple" and the German name is "Wunderapfel". As we know, this plant can only live for a year and belongs to the family of *Cucurbitacea*. Its fruit is yellow, as big as an orange and the outside of it is crackled. The fruit is used as medicine. The seeds are removed and the other part is put into olive oil and the jar hung in a sunny place. We grew this plant in our garden. Each plant grows 2-3 m. high and has 4-5 fruits on it. We put it into oil and afterwards we kept it at the same temperature for weeks. After epilation the skin of guinea pigs produced an ultraviolet dermatitis on it. After putting the oil on the skin we could take better results with the controls. But we could not go on with our experiments for certain reasons. We hope to do so as soon as possible.

5. Because of our laboratory work, it is very difficult for us to go to many different places in the country to seek for medical folklore as it takes up a great deal of time. We thought of soliciting the help of other physicians who are to be found in the different towns and villages. Therefore we sent letters to every town or village asking for information about the local folklore. It is not possible here to go into all the details, but I will tell you about two interesting letters we received. The first was about a plant for intestinal parasites, the other for sterility in women. For the first was an interesting story: In a town near the Dardanelles, a woman brought her child to the doctor. The doctor found ascariidosis in the child and gave santonine. After 15 days when he saw the woman again, she said that the medicine was useless and that she had made another drug herself. One day she went to find some herbs for her animals and gave some to the ass. The next day, when she entered the stall she saw that the excreta were full of worms. For this reason she gave the same plant to her child and the child was also cleared of his worms. Now we shall carry on experiment with this plant which is called "Kuzu Sarmasigi" in Turkish (= *Convolvulus arvensis*) and see if we can use it or not. *Convolvulus arvensis* contains Res. glycozid and has a diarrhetic effect. The root of this plant contains 2-3% tannin. Some of the authors have found 8-10% and some only found 0.3-0.6%. Recently a substance was found in the extracts of the root which is water-soluble and has a vitamin-K-like blood coagulation effect.

6. A doctor in another village writes about an old woman who lives in the same village. This woman helps the childless women. The plant which she uses is 'soap root', In Turkish called 'Sabun otu' or 'Choven' (*Saponaria officinalis*). The German name is "Seifenkraut." In our country the villagers use the root of this plant for washing. The doctor says that

the woman mixes the powdered root with butter and makes it as big as an ovule. And she uses it in the same way as we do in our gynaecological purpose. The patient begins to feel ill and the secretion of the vagina increases. Because they do not want the illness to increase they use it only 24 hours. Sometimes, but very seldom, she uses a second ovule. It is known that this root has some saponins in it. Perhaps this is the reason for the reaction and why the endometrial secretion is increased. I think this is an interesting subject for experiments.

7. Another herb is "Meryem Otu" (*Teucrium polium* L.) It is used for abdominal spastic disorders. Specially it is common in the south—east part of Turkey.

We can tell many other events like these. To

summarize our communication we can state the following points:

There is great advantage in searching information about medical folklore.

It is very difficult to get any results out of these events.

We must be very sure before we give any awards.

Laboratory experiments must be done in a careful way and must be compared.

I think working together gives better results.

It is true that our country is full of many different substances derived from plants and herbs. It is also true that we succeed in finding them.