There are different approaches to teaching the history of medicine in different countries. Teaching the history of medicine in Georgia is bound to its traditional medicine. Georgian medicine originated at the crossroads of the East and West and thus integrates the principles of both medical traditions. The Research Department of the History of Georgian Medicine and Traditional Medicine at Experimental and Clinical Medical Institute of Tbilisi State University has, over 40 years, collected a unique material on Georgian folk medicine, including thousands of recipes and hundreds of active components of herbal, animal, and mineral origin. Our project for the future is to prepare National Formulary of Georgian Medicine. In the work with students, we aim to teach them the basis of Chinese, Indian, Caucasian, Arabian, American, Australian, and African folk medicine, the basis of homeopathy and anthroposophy, paleopathology, and bioarcheology so that they incorporate them into modern medicine and clinical practice.

Key words: cross-cultural comparison; education, medical; Georgia; history of medicine; medical education; modern medicine; traditional medicine

All countries where the history of medicine is taught have their own specific approach to the subject. Some study only historical and factual materials (1) and others focus on bioethics and legal issues (2), health care organization and medical practice (3), philosophy of science (4), or medical humanities in the general (5). Considerable differences exist in epoch-matched studies (6). Thus we have to deal with a broad scope of approaches, which certainly requires generalization to form a universal model. These approaches involve traditional medicine of various countries, the principles of bioarcheology (see ref. 7), informatics, etc. Integrated information that respects the epoch studied, national peculiarities, religion, and philosophy, all correlated with contemporary scientific medicine, should serve as the basis for a unified study of the history of medicine. At the same time, special attention has to be paid to the methods of assessment of undeservedly forgotten remedies, as well as to finding the ways of their possible return to the medical practice.

The Study of History of Medicine – Necessity and Controversies
The history of medicine is an integral part of the world culture and thus reflects different epochs, cultures, national specificities, and modes of life (2-9). But a single chair or institution cannot encompass all possible avenues of the studies. Hence we face the situation where various universities are focused on different problems of the same field, which inevitably results in one-sided rather than comprehensive study of the issue.

For every country, it is desirable to teach the history of its medicine. It is quite natural and necessary because future physician should be devoted to his/her profession and country (8). But due to the peculiarities inherent to the country, the accumulated knowledge to be conveyed is confined to the limits of the epoch and way of thinking. Thus, the rich and voluminous history of China and India leave little if any time for the students to study the history of medicine of other countries (10). The issues of the history of medicine of Middle Ages, i.e., factual material and biographies of eminent scholars and practitioners, occupy an important place in the medical curricula of European countries (6). Teaching of the history of medicine in the former Soviet Union reveals a diversity of approaches and a number of problems (9). The range of interests is rather wide and it is impossible to represent them within a unified program. Yet, the history of medicine is a subject requiring common unified basis.

What is the way out? First we must determine what to teach a student, i.e., to establish the principal goal of the education (2,3). A rather wide spectrum of variations within the basic trend can be offered. Second, the volume of studies must be determined, as well as the place of the subject within the whole system of teaching.

Problems of Contemporary Medicine
Today modern scientific medicine is based on the principle Contraria contrariis curantur (opposite cures the opposite). This approach dates back to ancient Kolcheti, legendary Medea, acquiring its
final form in Greek medicine, and afterwards transforming into European medicine (11). However, the man is too complicated to be treated in a straightforward, absolutely objective manner, even when it is done in the most sophisticated technology of our times (12).

Great interest in traditional medicine (13-17) has come to the fore in modern medicine lately (15,18). Particularly great is the interest in production of remedies from natural raw material and in their application (18,19). For example, I believe that the treatment of chronic diseases of digestive system (cholecystitis, gastritis, colitis, etc.) and some psychiatric disorders (19,20) should rely only on natural remedies and use the methods of traditional medicine. Increased utilization of natural remedies should dramatically decrease the use of chemical agents. Although in a number of cases of treatment with methods and remedies of traditional medicine quantity and quality of data were insufficient to make definite conclusions about their efficacy or safety, information published to date is of clinical interest in diagnosing, counseling, and treating patients by this approach (19). The treatment of a number of diseases should gradually switch first to a combined therapy with chemical agents and natural remedies (21) and then with natural remedies only.

Traditional Medicine

The treatments and procedures which are not officially accepted by modern medicine are called "alternative", "complementary", "unconventional", even "untraditional". These terms can only blur the essence of the issue because none of them expresses the nature of the procedures. Remedies used in traditional medicine are neither alternatives nor complements, and certainly not alien, to the official medicine. Actually, every new medicine could be considered an alternative to those already existing. Yet nobody considers this a fatal opposition between them. I believe that every remedy has its clear-cut role at a definite period (phase) of disease and a place in a definite treatment regime.

The resistance to complementary medicine partly stems from frauds (22) and inefficiency (23) of some of its "parts". In essence, I believe that the traditional, folk, medicine should be distinguished from other parts of "complementary" medicine, and especially those that are so unfounded that can be called only "paramedicine" (22). The official medicine evades a number of unsolved questions by replacing the answers with subtle scientific reasoning (22,24), whereas the unstudied part of traditional medicine is considered "empirical". The key difference between the mainstream and traditional medicine lay in the lack of explanations for the effectiveness of traditional methods and conditions which would define the efficiency of traditional approaches; although research methods in complementary medicine do not in principle differ from those in mainstream medicine, in certain instances they may require some adaptation to fit the special needs of complementary medicine (25). I believe that it would be worth taking some things a priori — a tactic widely adopted in official modern medicine. For example, the phrase "the mechanism of action is unknown" is often used in modern pharmacology in relation to some very good medicines (26). This naturally calls for asking: Why should we require a precise knowledge of pharmacokinetics of any remedies, even the industrial ones? The majority of the traditional remedies are safe, their harmlessness being statistically supported by centuries-long trust of the people (6,10). This is contrary to precise and logical propositions used to disprove the methods and effects of traditional medicine.

History of Medicine in Georgia

Georgian medicine originated at the crossroads of the East and the West, resulting in a harmonious integration of eastern and western medical traditions. Georgian traditional medicine comprises the methods of diagnosis and treatment which exist in Sumerian, Chinese, Indian, Tibetan, as well as in Greek and Roman medicine (11). It has a solid philosophical foundations in the mentality and culture of Georgian people (27).

Georgian traditional medicine comprises ancient written classical documents and folk medicine. More than 500 manuscripts from the 10th to the 19th century have been found and described in Georgia and elsewhere. The first volume of the "Georgian Medical Thesaurus" has been recently published (11).

Practice

Upon the initiative of professor Michael Shengelia, the Research Department of History of Georgian Medicine and Traditional Medicine at Experimental and Clinical Medical Institute of Tbilisi State Medical University (Tbilisi, Georgia) was founded in 1956. In the next 40 years the Department, together with the Department of History of Medicine, has performed a fruitful work, and published about a thousand of scientific reports. More than 40 expeditions to many parts of Georgia were organized, collecting unique materials of Georgian folk medicine — thousands of recipes and hundreds of active components of herbal, animal, and mineral origin; herbariums have been compiled and exhibits collected.

The material has been systematized according the region of the country and the field of medicine (gastroenterology, pulmonary and respiratory tract diseases, cardiology, obstetrics and gynecology,
pediatrics, surgery, etc.). More than a thousand traditional Georgian remedies are of natural origin (plant, animal, and mineral products), and their technology and dosage are precise. In many aspects they are similar to their counterparts in the western and eastern countries.

Future
The Research Department, Department of the History of Medicine at Tbilisi Medical University, and the State Museum of Georgian Medicine form an official medical practical unit, founded in 1986. Committee of the Ministry of Health Care passed a statement on research of traditional medicine and its application in the same year. Our future activities will be focused on the organization of expeditions all over Georgia to study folk medicine and collect therapeutic materials from all regions of the Republic. We aim at publishing a Georgian work similar to India’s “National Formulary of Unani Medicine” (1982), which contains recipes for the preparation of herbal, animal, and mineral remedies rationed in grams, as well as the technology of their preparation. The aim of improving the chaos existing in Georgia in this field and laying firm scientific grounds for Georgian medieval traditional medicine will firstly require passing a bill protecting Georgian traditional medicine on the basis of already available experience (e.g., Indian), and creation of the Georgian traditional medicine pharmacopoeia.

Teaching
It is impossible to familiarize a contemporary student with a spectrum of medical developments without new system of thinking and without studying traditional medicine of other countries. Traditional medicine in every country comprises two trends: ancient medical traditions contained in century-old documents and folk medicine preserved as medical ethnology. We think that both should be the subject of study of history of medicine. Our aim is to teach the students the basis of Chinese, Indian, Caucasian, Arabian, American, African, and Australian folk medicine, the grounds of homeopathy and anthroposophy, paleopathology and bioarcheology, so that they can develop their own medical systems of thinking and transform all this into their medical practice (Table 1).

Table 1: Lectures on the history of medicine for the students of the Tbilisi State Medical University

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<td>1</td>
<td>Our view is that the history of medicine should be taught during the second and third year of the medical curriculum and that it should have a final essay and oral examination. Secondary medical schools must be established where the study of principles of traditional medicine, cultivation of herbs and technology of preparation of remedies will be taught.</td>
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Discussion
At the turn of twenty-first century, it is difficult to imagine a physician who will be guided solely by the principle “opposite cures the opposite”. (the main homeopathy principle is “like cures like”, ref. 28). However, it was indeed a pleasant surprise to see Wayne Jones’ article (29) in which the principles of teaching traditional medicine are listed precisely and comprehensively. Jones states that: (a) medical and nursing education should include information about complementary medicine practices; (b) medical and nursing education on complementary and alternative practice should include information on the discipline’s philosophical paradigm, scientific foundation, educational preparation, practice, and evidence of safety and efficacy; (c) national centers of excellence should continue to foster collaboration among complementary practitioners, nurses, and physicians, and to promote synergy among education, research, and clinical practice. It was also good to learn that the method of acupuncture has gained a substantial recognition (30) although many attempts to substantiate this (30) and other (31) methods with materialistic science failed. Also, other complementary methods undergo scientific scrutiny (JAMA thematic issue of November 11, 1998), some still failing to be unequivocally proven, but there is no doubt that many will be accepted by the mainstream clinical science. I believe that the main goal of medical historian is to a priori reveal a study of treatment with traditional approach, and assess its methods and remedies. A priori assessment of traditional medical means is the prerogative of a medical historian – the assessment which precedes clinical trials basing on various parameters. A historian of medicine makes the primary assessment and gives recommendations after a complex cycle of study about the practical use of agent or its prohibition.

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