DEVELOPMENT AND REFORM OF PHARMACEUTICAL EDUCATION CURRICULA IN THE CENTRAL ASIAN REPUBLICS

Report on a WHO Meeting

Tashkent, Uzbekistan
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**EUROPEAN HEALTH21 TARGET 18**

**DEVELOPING HUMAN RESOURCES FOR HEALTH**

By the year 2010, all Member States should have ensured that health professionals and professionals in other sectors have acquired appropriate knowledge, attitudes and skills to protect and promote health

*(Adopted by the WHO Regional Committee for Europe at its forty-eighth session, Copenhagen, September 1998)*

**ABSTRACT**

The Seminar was held with the purpose of identifying critical issues and creating a forum for further intercountry exchange and joint work. Problem areas were identified for each of the countries. A resolution was adopted calling *inter alia* for an overall review of the curricula for pharmacists and pharmacy assistants, the harmonization of curricula in the central Asian republics and the strengthening of intercountry collaboration. Intercountry working groups were formed and plans of action drawn up.

**Keywords**

EDUCATION, PHARMACY – trends  
CURRICULUM – trends  
INTERNATIONAL COOPERATION  
ASIA, CENTRAL

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Introduction

Reforms of the pharmaceutical sector in the central Asian republics (CAR) are rapidly taking place and the role of the pharmacist is changing accordingly. Training institutions find themselves under pressure to reorient the goals and directions of pharmaceutical curricula as well as to provide new opportunities for continuous professional development for practising pharmacists.

The purpose of this seminar was to identify critical issues related to curricular development in the CAR and to create a framework for further collaboration. The intention is to establish mechanisms and tools for information exchange on new developments and experiences on pharmaceutical education (see Annex 2 for Programme). All five CAR (Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan) were represented (see Annex 3 for the list of participants).

The following priority problem areas in the field of pharmaceutical education in the CAR, country by country, were identified by the participants.

Problem areas

1. Teaching materials are outdated. No textbooks on new subjects exist. Kazakhstan
2. Absence of continuing education systems.
3. Large information gap. Lack of subscriptions to periodicals. Lack of information on the status of other newly independent states (NIS) (and even CAR) education systems. The appearance of new structures means rupturing of the earlier existing network between institutions in CAR.
4. Very few regional meetings on scientific and educational issues are held in CAR. Regional initiatives can be taken at national level.

1. Underdeveloped facilities of any kind, due to the financial situation of the country, but also due to low priority given to the pharmaceutical faculty by the medical university. Kyrgyzstan
2. Although some improvements have taken place, the information gap is still large.
3. Lack of modern textbooks, especially for students.
5. Lack of training possibilities for teachers.

1. The political, social and financial situation of the country. Tajikistan
2. Only one teacher with pharmaceutical background. All other teachers are chemists, etc. Lack of human resources in the pharmaceutical sector.
3. Lack of all technical facilities.
4. Lack of textbooks. Large information gap.
5. No clinical orientation of the curriculum.
6. Absence of a continuing education system.
1. Lack of possibilities for exchange of knowledge between institutions in CAR.  
2. Outdated textbooks and other teaching materials.  
3. Age of teachers. Young teachers are not motivated.  
4. Language problems (no English), but owing to lack of interest and motivation among teachers, available foreign literature is neither read nor translated.  
5. Communication via e.g. a central Asian pharmaceutical journal is very much needed.  

1. Language problems.  
2. Brain drain. The most qualified newly graduated pharmacists leave Tashkent Pharmaceutical Institute (TPI) for employment elsewhere. A whole new generation of scientists and teachers will be missing.  
3. Conservative teachers (older generation) are not sufficiently interested in updating knowledge, new information technology or new ways of teaching.  
4. Difficult financial situation which leads to lack of modern equipment, analytical reagents, etc.  
5. The politicians are often making decisions on education reforms without proper involvement of and consultation with teaching institutions.

The participants in the meeting proposed the following steps to be taken:

**Plan of action**

1. Establishment of an advisory committee on pharmaceutical education in CAR

The participants recommend that an advisory committee be formed.

*Chairperson:* Professor Sadulla Iskandarov, Tashkent Pharmaceutical Institute.

*Members:* Two members from each country. The official delegates to this first meeting could become the first members of the advisory committee.

*Secretariat:* Tashkent Pharmaceutical Institute (TPI).

*Frequency of meetings* of the advisory committee: Annually.

*Place:* Preferably on a rotating basis. Next meeting (1999) is proposed to be held in Almaty, Kazakhstan.

Representatives from medical colleges responsible for the education of pharmacy assistants should be invited as observers.
Terms of reference
The Chairman of the advisory committee will develop a draft proposal to be discussed and adopted by the members of the advisory committee.

Working groups
In order to make preparations for the annual meetings of the advisory committee and to maintain the interregional collaboration on a working and regular basis, it is proposed to form the following working groups:

a. Quality of education
The working group should discuss and develop standards for good educational practice (GEP) with the long-term goal to establish the formal basis for a mutual recognition of diplomas.

b. Training of teachers
In collaboration with the Tashkent Pharmaceutical Institute the group would organize meetings, seminars and courses for teachers on selected subjects.

c. Teaching materials
The group should review existing teaching materials and propose a collaborative approach to improve the situation by sharing existing materials; agree on priority needs and delegate to national institutes the development of new teaching materials for regional use. The text books language should preferably be in Russian.

The Chairman of the advisory committee is responsible for the establishment of the working groups, oversee the ongoing work and make reports to the annual meeting of the advisory committee.

2. Scientific and professional journals
Pharmaceutical journal for CAR
TPI is publishing a scientific journal on chemistry and pharmacy. Contributions from other CAR are welcomed. The TPI will facilitate translation, if necessary, and provide free copies to other CAR. The TPI welcomes members for the editorial board from other CAR.

In addition, the participants recommend that the possibilities for establishing a pharmaceutical journal for central Asia be investigated.

3. Organization of interregional meetings, seminars and courses for teachers
Training of teachers
The TPI is prepared to act as a secretariat for courses to be held under the auspices of the working group.

4. Teaching materials and development of new materials
Teaching materials
The TPI is prepared to act as coordinator for exchange of teaching materials and development of new materials.
Conclusions and recommendations

The common conclusions of the meeting were adopted in the form of a resolution (Annex 1).
Annex 1

INTER-REGIONAL (CENTRAL ASIAN REPUBLICS) MEETING ON DEVELOPMENT AND REFORM OF PHARMACEUTICAL EDUCATION CURRICULA

RESOLUTION

While recognizing

• the difficult financial situation in the education sectors in all central Asian republics, and
• the need for reforms and strengthening of pharmaceutical curricula at university level (pharmacists) as well as in medical colleges (pharmacy assistants) in parallel with ongoing reforms of the pharmaceutical sector,

the participants recommend that:

• the curricula for training pharmacists and pharmacy assistants should be modernized in accordance with national drug policies and WHO recommendations on the role of pharmacist;
• steps should be taken to coordinate and harmonize the curricula for training pharmacists and pharmacy assistants in central Asia republics, using as an example the curricula at the Tashkent Pharmaceutical Institute and taking into account national curricula and teaching traditions;
• collaboration should be strengthened between the training institutes in central Asian republics, e.g. by exchange of teachers and by coordinating plans for development of new teaching materials and use of common textbooks in priority subjects, etc.;
• there should be collaboration on training programmes for teachers; and
• there should be collaboration on publishing scientific papers and also the possibilities for publishing a pharmaceutical journal for central Asian republics should be explored.

The participants are aware that modernizing the curricula for pharmacists and pharmacy assistants is relatively costly because of the necessary equipment, analytical reagents, computers, etc. and recommend, therefore, that authorities, medical universities and medical colleges take this into account when allocating funds to national schools and faculties of pharmacy.
Annex 2

PROGRAMME

Thursday, 8 October

10.00–10.30 Opening and introduction

*Dr Nata Menabde, Project Manager, Special Project for NIS, Programme for Pharmaceuticals, WHO/EURO*

*Professor Sadulla I. Iskandarov, Rector, Tashkent Pharmaceutical Institute*

*Dr Roufat Yansoupov, WHO Liaison Officer for Uzbekistan*

10.30–11.00 The ideal profile of the pharmacist in Uzbekistan: Role, functions, theoretical and practical skills

*Professor Sadulla I. Iskandarov*

11.00–11.30 Exchange of opinions and discussion:

*Representatives of Kazakhstan, Kyrgyzstan, Tajikistan and Turkmenistan*

11.30–12.00 Coffee break

12.00–12.30 The role and functions of the pharmacist in Europe

*Kurt Fonnesbaek Rasmussen, Head, WHO Collaborating Centre for Drug Policy and Pharmacy Practice Development and Director, Danish College of Pharmacy Practice*

12.30–13.00 Discussion

13.00–14.00 Lunch

14.00–14.20 Reform of pharmaceutical curricula in Uzbekistan: innovations and future projections

*Professor Sadulla I. Iskandarov*

14.20–15.30 Discussion: status of pharmaceutical education in CAR

*Representatives of Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan*

15.30–16.00 Coffee break

16.00–16.20 Problems and challenges in reforming pharmaceutical education curricula

*Professor Sadulla I. Iskandarov*

16.20–17.30 Discussion: overcoming barriers in the process of pharmaceutical curricula reform in CAR

*Representatives of Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan*

Friday, 9 October

10.00–10.30 Quality of education: influence of various factors and ways of improvement

*Kurt Fonnesbaek Rasmussen*

10.30–11.30 Discussion

*Representatives of Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan*

11.30–12.00 Coffee break

12.00–12.15 The pharmacist of the future: a businessman or a health care professional? The role of the education system

*Dr Nata Menabde*

12.15–13.00 Discussion

*Representatives of Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan*

13.00–14.00 Lunch

14.00–16.00 Final discussion: Collaboration and exchange of experiences on the pharmaceutical education reform in CAR

DEVELOPMENT OF AN ACTION PLAN

16.00 Closure of the meeting
Annex 3

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