**Strengthening essential** emergency surgical care and introduction of latest technical progress in Mongolian surgical practice

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# **Purpose of the project**

- To improve and further strengthen the essential emergency surgical care at level of national, aimags (provinces) and soum hospitals.
- Introduction and development of latest technical progresses (laparoscopic surgery) in Mongolian surgical practice.
- e-learning in formation of surgeons.

# **Datas of the project (1)**

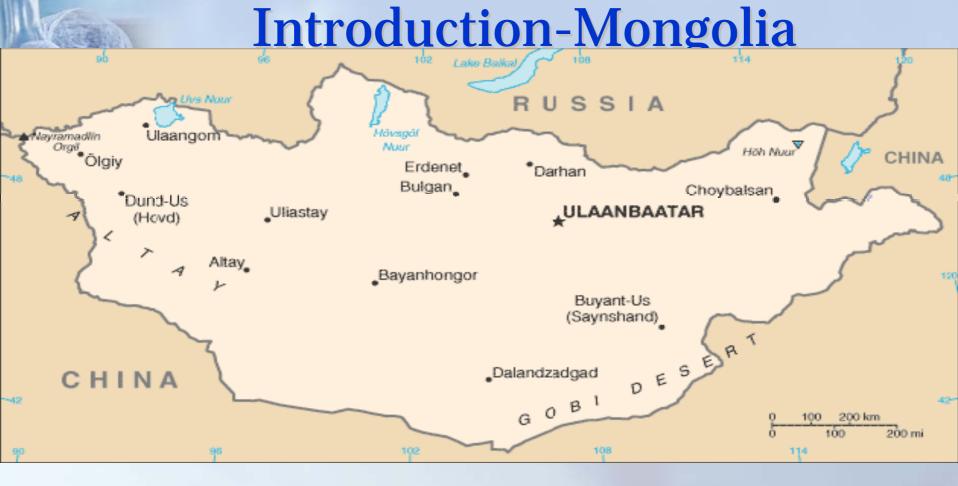
Time period:

- April 2006 June 2008
- Implementation :
  - Surgical department of Health and Science University of Mongolia (HSUM)
- <u>Coordinator</u> :
  - Pr.Sergelen Orgoi (chief of surgical dep. of HSUM)
- <u>Partnership</u> :
  - WHO
  - SST
  - Mongolian Ministry of Health
  - Colorado's University (USA)
  - Swanson's foundation (USA)
- Financial support :
  - WHO
  - SST

## **Datas of the project (2)**

#### **Resource staff:**

- Academician Pr. B. Goosh (surg.)
- Dr.Salik Govind (WHO)
- Members of SST
- Pr. MD. N. Davaatseren (surg.)
- Pr. G. Nyamhuu (surg.)
- Pr. MD. B. Munkhtogoo (surg.)
- Pr. MD. L. Ganbold (anesth.)
- MD. M. Tumennasan (ped.surg.)
- Dr. Y. Erdene-Ochir (surg.)
- Dr. B. Nergui (surg.)
- Dr. S. Erdene (surg.)
- Dr. Ts. Ish-Dorj (surg.)
- Dr. G. Narangua (anesth.)
- Participants :
  - In Ulaanbaatar course: 85 physicians
  - In Uvur-hangai course: 17 physicians



Mongolia is located in Northern Asia, between Russia and China. It has an area of 1'564'116 sq. km and a population of 2'791'272. Population growth rate is 1.45%; Birth rate: 21.52 birth/1000 population; Death rate: 7.03 death/1000 population. Median age of population is 24.28. Life expectancy at birth: 64.52 years (male: 62.3 and female: 66.86 years)

# **Introduction-Mongolia(2)**

Mongolia has gone through turbulent political, economic and social changes since 1990s when the country shifted to a market-guided economy and towards democratic society: industry collapsed and social services and employment faltered.

The changes have brought some consequences, resulting increased poverty (population below poverty line is 36.1% of the population).

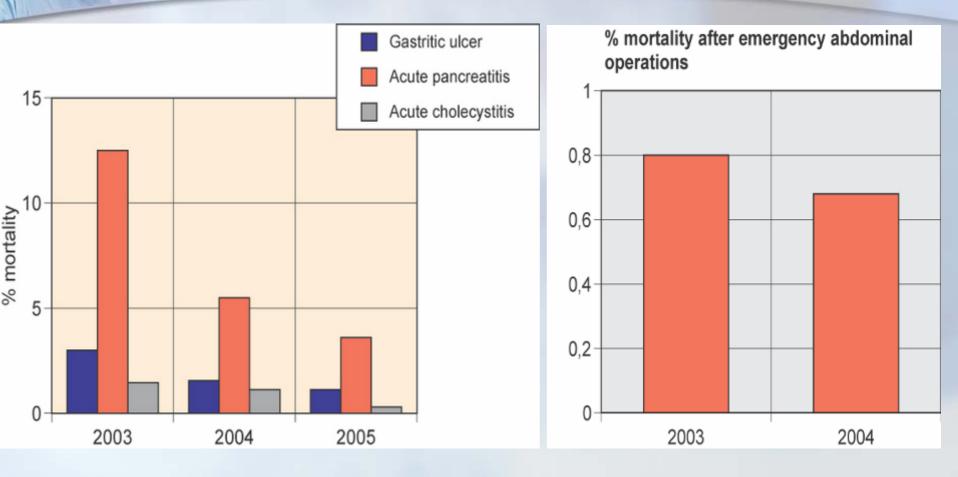
Currently GDP-per capita: 2.220US\$.(174th rank on 232 countries by the world factbook-CIA)

Even though the government has been allocating around 6.3% of its budget in health sector it is still not enough to solve the pressing issues of the sector.

## The current situation of surgery and emergency services

 Today a total of 300 surgeons and 200 anesthetists are working in surgical field. Health Ministry communicates that, on average, the post surgical complications were 0.42% and death cases 0.16% throughout 2001-2003, while in 2004 there were 0.36% complications and **0.22% deaths.** 

# The current situation of surgery and emergency services



#### **Conclusions** :

- The statistic database remains stationary and numbers of complications and deaths has not been reduced.
- In the countryside, the situation is worse. (For instance, in 2004, in Khentii province there were, on average of 1.68% post surgery complications, while in Orkhon province 0.6% and in Bayankhongor 0.64%.)
- It indicates that in the countryside, the emergency service performance and surgeons (staffs) skills are limited.
- Therefore, it is essential to provide training and retraining for surgeons to improve their skills and competence.

#### **Current issues** :

 No systematic professional job training has been organized for surgeons both abroad and locally during last years.

- Lack of field related books or textbooks available in Mongolian language.
- Due to geographical situation and financial difficulties the rural doctors could not join training courses in Ulaanbaatar.

#### International support and participation :

 Since 1998 the members of SST have been working jointly with surgical department of HSUM to provide the training and to improve the postgraduate formation of surgeons and anesthesiologists.

- Each year Swiss surgeons were visiting Mongolia for a period of 3 weeks. (2 weeks of practical experience and 1 week of theory)
- Since 2004, WHO implementing in collaboration with Health Ministry and HSUM, the programme to improve the essential emergency surgical care in countryside hospitals.
- A total of 120 PHC workers were trained in six selected aimags.( provinces)

#### **The project activities :**

- The project team will be consist of surgeons from SST and Surgical department of HSUM.
- The project is a continuation of the project implemented earlier (Strengthening essential emergency surgical care services to rural Mongolia)
- Each year, training courses will take a place during a 3 weeks from May to June, at mean hospitals in Ulaanbaatar and 3 regional centers (Uvurkhangai, Khovd and Dornogobi provinces)
- Doctors from neighboring 3-4 provinces could take a part in the training courses.

# Expected outcomes of the project :

- Skills of surgeons, (especially from countryside) will be improved.
- Theoretical knowledge and professional expertise of surgeon will be strengthened.
- Quality of the urgent surgery service delivery will be enhanced.
- Textbooks on common surgical procedures will be released.

### **Training programme :**

Mean surgical trainings and demonstrations will be held in different surgical services and ICU of State Central Clinical Hospital (SCCH), Central Traumatological Hospital (CTH), National Cancer Center (NCC) and Maternal and Children Hospital (MCH) of Ulaanbaatar.

- 21 countryside surgeons will be divided in 5 subgroups and for a week they will be training in rotation, in different services.
- At Uvurkhangai province hospital, during 14 days, training courses will be organized at the same time.
- Multidisciplinary seminars will be organized at different centers during this period.

# **Training programme (2):**

- Laparoscopic surgical trainings will be organized by surgeons from Colorado's University and Swanson's Foundation (USA) at SCCH in period of 06-17 May 2006.
- E-learning courses will be given by surgeons from SST and professors of HSUM between 22 May to 04 June 2006 at HSUM.

# Monitoring and evaluation

- All participants of the training will be evaluated through test for their knowledge prior the training course.
- After training course, all participants who are officially enrolled to the course will pass a test for the evaluation of their practical and theoretical improvement.
- Coordinator of this training will do comparative research of mortality and morbidity after emergency abdominal operations.

#### Monitoring and evaluation

- Study materials will be offered as CD to the all participants and their return to the home hospitals the participants will organize training activity using their knowledge.
- Each province will be provided report papers.15 provinces will submit Report concerning this issue till 01.09.2006.
- Final report to WHO will be submitted by 01.02.2006

#### Summary

 After training will decrease after emergency operations mortality and morbidity Thank you