



Mongolian Emergency Service Hospital Hygiene Project

MeshHp.mn

Assessment of Hospital Hygiene in Mongolia

ADB, October 2011

Walter Popp, University Clinics Essen, Germany

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Mongolia

Second biggest landlocked country in the world.

Population 2.7 million, half of them in capital Ulaanbaatar.

Many nomads still in countryside.

Extreme continental climate, mean temperature -35°C - $+30^{\circ}\text{C}$.

Very rich in natural resources (coal, copper, uranium, oil, silver, rare earths).

One third of population is under 30 years old.



Health system in Mongolia

One health insurance for all Mongolians, many private hospitals.

Only 4.3 % of GDP are spent for health care system.
(US: 15.4 %, Germany: 10.4 %, Sweden: 9.1 %. Russia: 5.4 %)

High interest in modern medicine, but bad structural conditions.

Many Mongolians go abroad for medical treatment (Korea, China, Russia, Japan, Europe, USA).

Mean life expectancy: 67 years.



MeshHp project

Initiated by German Embassy in Ulaanbaatar in 2009.

Hygiene experts from Germany: Hospital Hygiene (University Clinics Essen) and Fire Brigade Essen.

Pilot units in Ulaanbaatar: National Central Hospital (University Clinics), Chingeltei District Hospital (secondary care hospital), UB Emergency Service 103 (emergency service for whole Ulaanbaatar).

5 visits of German hygiene experts in Ulaanbaatar since 2010.
2 visits of Mongolian hygiene staff in Essen, Germany, in 2011.

MeshHp: Mongolian emergency service hospital Hygiene project.
Own website: www.meshhp.mn
Part of cooperation treaty of both ministries of health.

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Welcome to project website

The initial idea for the project was developed by Mr. Patrick Kreuz, a member of the Embassy of the Federal Republic of Germany to Mongolia. During heavy rainfalls in the summer of 2009 lots of the remote areas - the so-called ger-districts - of Mongolias capital Ulaanbaatar where effected buy a flood, which destroyed lots of gers (Mongolian traditional housing tents) and submerged lots of the latrines, dug into the ground by the population of those ger-districts... [read more](#)



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Pilot areas

National Central Hospital

National Central Hospital was established in 1925 with 15 beds. This was the very first hospital opened in history our country.

Emergency Medical Service 103

Нийслэлийн Түргэн тусламжийн төв нь 1930 оны 10 сарын 20-нд ардын эрүүлийг хамгаалах яамны сайдын тушаалаар бие даасан үйл ажиллагаа явуулж эхэлсэн юм.

Chingeltei District Hospital

One of the main goals of the project at the Chingeltei District Hospital is to improve hand hygiene among health workers.

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News

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Presentations

[Control of Hospital hygiene - eng - 925 KB](#)

by Prof. Dr. W. Popp, University Clinics Essen, Germany

[Disinfection and Sterilization - eng - 1,06 MB](#)

by Prof. Dr. W. Popp, University Clinics Essen, Germany

[Food hygiene in Hospitals - eng - 1,05 MB](#)

by Prof. Dr. W. Popp, University Clinics Essen, Germany

[Hand disinfection - eng - 1,98 MB](#)

by Prof. Dr. W. Popp, University Clinics Essen, Germany

[Training Emergency Service 103 - eng - 685 KB](#)

by Mr. J. Spors, Fire Brigade Essen, Germany

[Hygiene training for health workers - eng - 2,65 MB](#)

by Mr. J. Spors, Fire Brigade Essen, Germany

[Occupational medicine - eng - 936 KB](#)

by Prof. Dr. W. Popp, University Clinics Essen, Germany

[Reprocessing of medical devices - eng - 1,8 MB](#)

by Prof. Dr. W. Popp, University Clinics Essen, Germany

[Occupational medicine table - eng - 20KB](#)

by Prof. Dr. W. Popp, University Clinics Essen, Germany

[To lift and carry patients - de - 846 KB](#)

by Mr. J. Spors, Fire Brigade Essen, Germany

[To lay patient down safely - de - 368KB](#)

by Mr. J. Spors, Fire Brigade Essen, Germany

[Hospital infection control system in Mongolia - en - 8,5MB](#)

by Dr. Ts.Altannavch, Mongolia

Reports

Media files

[Study tour report in February](#)

by Dr. Ulambayar, Cooperation Program, CDHU, Mongolia

Infectious problems in Mongolia

4,000 new cases of tuberculosis in 2010.

17,000 new cases of sexually transmitted diseases in 2010, increasing.

Many cases of enteritis. Few HIV cases.
Also tularemia, Q fever, brucellosis, plague.

Rather bad reporting by ministry:
e.g. hepatitis A, B, C together in one number.

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Infectious problems in Mongolia

Main problem hepatitis B and C:

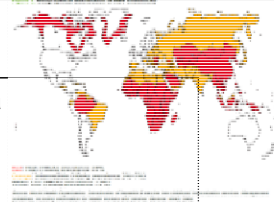
20 – 30 % of Mongolians are virus carriers.

Primary liver cancer is most common cancer in both sex.
Additionally high alcohol consumption.

Very few adults vaccinated, even not in healthcare system.

Presumed reasons for high hepatitis prevalence:

- Blood products are not consequently tested.
- Use of one glass syringe for all family members in former decades.
- Insufficient reprocessing of medical devices.
- Many iv applications of drugs in hospitals without real indications.



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Hygiene in hospitals in Mongolia

Nosocomial infections 0.01 – 0.05 % according to official data.
5.4 % according to an Australian prevalence study.

Frequent use of antibiotics in hospitals – for every operation?

No antibiotic resistant statistics available.

Antibiotics can be freely bought in supermarkets.

Mongolia is part in WHO program „Clean care is safer care“.
WHO posters are everywhere – but no alcoholic handrub available.

Reprocessing of medical devices only done manually, no control of autoclaves, very old instruments containers.

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First results of MeshHp project

Hospital own production of alcoholic handrub and distribution over all wards.

Start of hepatitis B vaccination campaign in pilot hospitals in order to vaccinate all staff.

Training of hygiene staff (train the trainers) and other staff in hygiene issues.



Next aims of MeshHp project

Improve reprocessing of medical devices.

Get more reprocessing by machines – problem: price and maintenance.

Train hygiene staff of other hospitals.

Traineeship for some hygiene staff in Essen, Germany.

Test water quality.

Make one day prevalence study of nosocomial infections once a year.



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Hygiene in UB Emergency Unit

Make hygiene plan.

Training of drivers.

Upcoming: training of nurses – and doctors.

Training in Essen, Germany.





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Thank You for your attention