



# Mongolian Emergency Service Hospital Hygiene Project

MeshHp.mn

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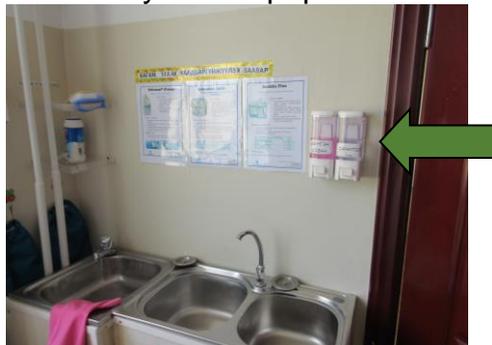
## Report of the visit to Ulaanbaatar 19 – 26 April, 2017

### Participant:

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### Hospitals

I had a visit to the new **Emergency Service unit in Khan-Uul district**. The rooms are rather big, the center is just starting now. Fluid soap and alcoholic handrub are available in dispensers, unfortunately still no paper towels.



In sterilization unit, there is manual disinfection and drying by an oven as often in Mongolia

I had a visit to the **Dental Center**. Our contact trial to “Dentists without Limits” was successful and they delivered cabinet and radiology equipment, some more is expected.



It is planned that the number of handpieces is increased so that every patient will get a sterile own handpiece.

The budget for equipment, service etc is only 6,500 \$ per year and was cut by 11 % this year.

All staff is vaccinated against hepatitis B three times and antibodies shall be determined.

Also disinfection and sterilization of instruments was improved, staff wearing correct personal protection.



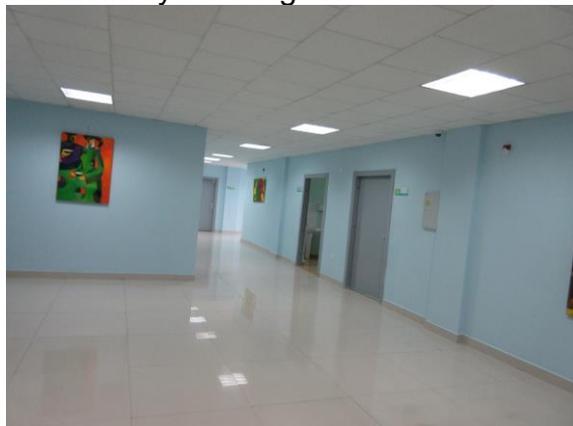
An electronic library of important books is under construction, but still usable. There might be more personal protection (masks) if grinding in prosthesis and crown production.

There was a visit to **General Hospital for State Special Servants** and meeting with General Director Battur.

After some different plans how to use, this house became a hospital and is just opened now. The outpatient area started to operate, inpatient areas has still to be opened. 6 operation rooms shall be build next to the building.

At the end, the hospital will have 250 beds. There were 53,000 examinations in the first 3 months, mostly preventive ones. The MRT was installed some time ago and is not working because of that.

The hallways are big and there are hand disinfectant dispensers on the hallways.



There is fluid soap and paper towels at the sinks.  
Textile towels should be taken away.



A lot of the mattresses can be cleaned and disinfected by wiping. On the other hand, we saw a patient in a VIP patient room laying on the mattress without any protection. The hospital is a “green hospital“, we saw sorting of waste. Between floor and walls, there are many covers like in German hospitals. The microbiologic lab will be seen again in June by us. At the ear-nose department, there was a treatment unit and the doctor is cleaning optics and other critical instruments on his own, only with alcohol. This must be improved, but will not be easy – first have a look what producer is recommending.



Endoscopy (gastroscopy, coloscopy) is planned, but still not working. In sterilization unit, only manual reprocessing is done. Instead of heat sealer, an iron is used.



Also autoclave is very old. So sterilization unit is in no good condition.

During visit to **Maternity Hospital No 2**, we met Director Oyunkhand. They use a lot of hand disinfectant and also surface disinfectant. Therefore, they urgently need a dosing unit for surface disinfectant. Unfortunately, the dispensers for paper towels were empty – maybe because of budget problems. We recommend to think about paper kitchen towels which can also be used. Fluid soap is available.



Basically, the building is very old and renovated a lot with many many paints over each other:



All the rooms are much too small for the big number of mothers and babies. Beds are touching each other and, by this, increasing the risk of bacteria transmission. There is only one solution which is urgently needed: they need a new and much bigger building!

A hear and hip screening is done and there is cooperation with Switzerland were a second opinion is given.

In sterilization unit, they change to paper wrapping and throw the old containers away – positive.



There was a visit to **Hospital No 2** and a lot has developed there:

95 % of staff are vaccinated against hepatitis B with 3 shots. Until now (not all tested), 64 % have immunity after vaccination. Hepatitis carriers are 7 % for Hep B (one additional D), 8 % for Hep C and 0.5 % for B and C together.

All carriers of Hep C virus shall get a therapy, paid by health insurance.

This decision, to make hospital staff first in therapy, is a very good one because they are the biggest risk for patients.

Hygiene training is done yearly for all staff. Also the emergency car drivers were trained.

The available UV disinfection lights were tested by NCCD and 72 % were out of order.

Dr Khosbayar is now consultant in No 2 re multiresistant bacteria. Some of the patients are screened now when coming in hospital. If they carry multiresistant bacteria, their patient record is marked in red.

They took part in measuring hospital acquired infections in the INICC project and the results are published in a good American journal (AJIC). Only three hospitals in Mongolia were engaged there (No 1, No 2, Intermed).

In routine, a checklist is used to detect possible cases of nosocomial infections which have to be confirmed. In 2016, based on 8,000 – 9,000 inpatients, 50 cases were confirmed by this.

Also they made a one day prevalence study and found 19 cases of nosocomial infections in 250 inpatients. This prevalence of 7.6 % sounds rather valid for me. Documentation was improved, eg giving of injections.

In 2016, they found 178 multiresistant bacteria, half of it MRSA. So, the percentage of multiresistant bacteria (including MRSA) is comparable to Germany – around 2 % of inpatients.

The microbiologic lab moved and got some new equipment, from own budget.

A software program of WHO is used to make statistics of resistant bacteria – very nice.

In sterilization unit, corrosion has been removed, more oil is used and step by step they go to paper wrapping instead of containers. BD test is done every day. Cotton wrapping shall be finished.

Negativ: there are still problems in hand disinfection.

Regarding Health V, nothing happened. Only some training was done, 2 years ago. Until now, no renovation, no equipment.

We had a visit to the sterilization unit:

Structure of work flow is improved, but no new equipment. There is more paper wrapping and old containers are not used any longer.

Workers' protection is fine in dirty area.



There are watches for having correct disinfection times.

Unfortunately, there is no real disinfectant in use, only predisinfectants and cleaners. This may be some result of yearly tenders which seem to lead to often changes of products. Changing products very often implies a lot of misunderstanding and

mishandling and increases mistakes. So regarding tenders, a mixture must be found between prices and quality of goods. I would recommend to go away from yearly tenders – eg School of Dentistry does not have tenders and is buying goods every three months.

There are not enough disinfectant dispensers in the hospital.

Finally, we saw the new lab which is in bigger rooms now. Unfortunately, there are not enough disinfectant dispensers and no paper towels.

Again, we had a visit to **School of Dentistry and Dental Hospital**. They would like to become a MeshHp member. So our Mongolian MeshHp partners have to decide about that. All handpieces are sterilized.

A new clinics is built close near and we had a visit there.



During new building not working, all water pipes should be rinsed daily to prevent biofilms.

It is not yet decided how disinfection and sterilization of instruments will be done – on each floor or central? We recommend central, otherwise it is too expensive (much more equipment). In that case, transport is the problem because there is no elevator. One solution could be to build an elevator on the outer wall. The other solution might be transport by persons on stairs by using appropriate boxes.

We had a visit to **Department of Scientific Analysis, National Institute of Forensic Science**, and a meeting there with Chief Tyuvshin-Erdene. I will try to make some contacts to Germany. Also we will visit again in June. Plants should be removed from all labs.



Finally, once again I visited **Chingeltej district hospital**: there are 15 new cleaning cards now.

In 2016, a health check was made in 323 staff members, 60 % was without pathologic finding.

In 269 staff members tested, they found 30 with HCV (11 %) and 18 with HBsAg (7 %) , 4 combined (1 %), so nearly 20 % at a whole.

137 staff members were vaccinated against hepatitis B with 3 shots, until now no antibodies measured. Vaccination should be extended to all staff members!

Training in hygiene was made.

For disinfection, now they use Sekusept Extra und Sekusept Cleaner.

There were some questions about a planned operating theatre.

Hand disinfectant amount per month increased from 15 l to 60 l after training.

## Meetings

There was a meeting with Dr Bayar and Dr Khulan from **City Health Department**. We were talking about cooperation if Nakopa project application will be accepted. The cooperation treaty between the two cities will be automatically extended according to the treaty text.

There was a visit to the **Ministry of Foreign Affairs**, meeting Direktor Ariunbold Yadmaa and Deputy Director Demchig Tegshjargal.

There was a meeting at **NCCD** with Deputy Director Tsatsralt-Od, Deputy Director Tegshjargal and Deputy Director Tunsag. One topic was tuberculosis and ideas were exchanged how to cooperate in case German Nakopa project will be accepted.

There was a meeting in **Mongolian National University of Medical Sciences, School of nursing**, talking with head Myagmarnaran. A new university clinics is under construction, financed by Japan and built according to Japanese standards. The hospital shall open in 2018 and have 200 beds at the end. We were talking about possible cooperation, eg in the field of hospital hygiene and sterilization unit. Also I will care for some clinical contacts in Germany.

There was a meeting with Dr Altantuya and Dr Raushan from **ADB**. Topic of talks was whether we can cooperate (ADB, MeshHp, Nakopa) regarding a hepatitis project. This discussion seemed fruitful and will go on.

There was a **Meshhp meeting** at Emergency Service 103. It was decided that Bayangol hospital and Baganur Health Center are new MeshHp members. About membership of National Trauma Orthopedic Research Center a decision will be made after new director is elected.

## Social life

There was a nice trip to Terelj national park and a lot of very nice dinners, including karaoke and dancing.



## Next steps

**Next German group** (Mr Renzel, Prof. Popp, Dr. Kehrmann, Mr Schliffke, Mr Rossburg, Mrs Maazouz) will come in June (24 June – 1 July, Mr Renzel going back on 29 June). Hotel costs will be taken from Mongolian side.

There will be a one day **Hygiene Symposium** in Hospital No 2, organized and financed from Mongolian side.

A meeting is planned between Mr Renzel and the Head of the UB City Health Department and, if possible, with the respective Vicemayor – intended on 27 June or the weekend before.

Until 5 May, the German side will get proposals for their presentations. Each presentation should not exceed 15 minutes because also translation will take some time.

Also draft of agenda will come from Mongolian side.

Prof. Popp, Nouzha Maazouz and Prof Heike Martiny (formerly Charite, Berlin) will come in **September** (3 – 10 September) 2017. Main topic will be dentists units.

The **next Mongolian group** going to Germany will come in November 2017, mostly directors. Prof. Popp will prepare first proposal in the next weeks, also make proposal for time to come.

Walter Popp, 4 May 2017

By the way: From 2010 on, 20 Mongolian groups or single persons have been in Essen, making up nearly 100 individuals.