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Mongolian Emergency Service
Hospital Hygiene Project

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Report of the visit to Ulaanbaatar 11 – 18 January, 2025

Participants:

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Course and visits in Erdenet

We were 2 days in **Erdenet** to make a 1 day **course** together with Mongolian Nurses Association (MNA). There were 200 participants and we gave presentations about hepatitis, nosocomial infections and reprocessing of medical products in dentistry:



We had different visits, eg to a **dental hospital (Erdene Dent)**. They have only private patients, many children. Dispensers for hand disinfection and paper towels are quite ok. Reprocessing is in 2 rooms with products from Melag and Alpro. They have air purifier – mainly because the stools are very close to each other.



We visited **gynecology hospital Misheel**. We saw a very good cooperation of the doctor and the nurses, but too many textiles:



They cannot be disinfected and should be removed.

The rooms for reprocessing are very small. We recommend to give all reprocessing of medical products to an external hospital with sterilisation unit.

Hand disinfectants, fluid soap, paper towels is not available at all washing basins.

Then we visited **Shigtgemel hospital**, which is for dental medicine and very new, still not opened. It is planned very large-scale, all thought about and planned very well and in detail. For example, there are also very big staff lockers:



Big rooms for reprocessing:



Hand disinfection equipment is ok, also a small children's toilet:



Finally, we visited a **hospital for traditional medicine**. Acupuncture needles and scalpels for bloodletting are single use. Cupping heads are cleaned and disinfected with alcohol. So there seems to be no big risk of virus transmission in cupping. On the washing basins is only fluid soap and textile towels:



This must be improved.

Visits in UB

On the last day, we visited **Khan Uul district hospital** in UB.

We saw the sterilisation unit. Workers' protection is very well there:



Perhaps they should additionally have eye protection (face shield or glasses) in the dirty room.

In the laboratory we asked for ring tests regarding hepatitis and antibodies. We were told that they get spiked samples from Shastin hospital every half year and have to report the results to them.

Also we saw emergency room and ICU – with some patients ventilated:



It seems that ventilation on ICUs increased very much in the last years.

There is an isolation room on ICU, but the doors were open. Also it is not clear whether really always workers protection is worn.

The bedpans are cleaned by hand. There are bedpan washers (including thermal disinfection) on the market and we recommend to buy and use them.

We saw the endoscopy unit: At the moment they only perform gastroscopy, not colonoscopy. There is manual cleaning and then half-automatic washer disinfector. The plastic mat in the basin for manual cleaning should not be used because beneath there will be a lot of biofilms with bacteria in it:



Also we were in the dental room with one stool. It seems to us that surface disinfection as well as instrument reprocessing is not sufficient. There was a small textile towel to clean the wash basin – not to recommend. Also it seems that handpieces and contra-ankle handpieces might not be reprocessed after every patient, also maybe only outside. The whole process must be more structured and improved.

The hospital will get a new building in 2026.

After the hospital we visited the **Emergency Service branch** there.

Meetings and presentations

Together with MNA and Hospital No 2 we had a **halfday seminar** where some of the homework was presented of participants who visited our course in June 2024 in UB. Also there were presentations from Hospital No 2 and NCCD. There was a fruitful discussion and interesting facts were presented:



We met the **new head of NCCD, Dr Ankhbayar Enkhbold**, whom we know from former years.

Walter had a **presentation** about hepatitis at the NCCD and Anette one about reprocessing of medical devices in dentistry:



On another day Anette had a **3 hour seminar for dentists** in Hospital No 2 about reprocessing of medical devices in dentistry:



In parallel, Walter had a **presentation about “Hygiene and Ethics”** at NCCD.

We had a **meeting with Amartuvshin Amgalanbayar, Deputy Governor of UB for Social Sector, Green Development, Air and Environmental Pollution**. We were talking about how to extend the existing cooperation treaty between the cities of Ulaanbaatar and Essen.

He told that they might buy air purifiers for schools and hospitals. We will give some advice about it, but basically the causes of air pollution must be eliminated.

Social life

On the arrival day, we were outside UB in a ger resort.

On many evenings we had dinner with our friends.

Air pollution

Air pollution is very bad and did not improve in the last years. See the air pollution cloud over UB, starting at 5 pm:



There is urgent need to improve the situation in winter.

Additionally, we were told that Emergency Service is transporting around 100 cases of carbon monoxide (CO) intoxications each day! This is hard to believe, especially as some of them will keep permanent damages (eg of brain).

General recommendations

Based on this visit and also on our experiences in the last 14 years we would like to give the following recommendations:

- There is no need for film over surfaces in dental units. They should not be used and instead the surfaces should be disinfected after each patient by wiping a disinfectant.
- Since 14 years we always have to wear gowns, caps and overshoes (and sometimes also masks) when we are in hospitals. This does not make sense for us – all workers, all patients, all visitors do not wear them. So why we?
- To our knowledge, there is no Mongolian journal for hospital hygiene and infection control. We recommend to start such a journal. The articles might be short at the beginning and the scientific requirements might not be too high. But we think there are a lot of experiences which wait to be exchanged.

By the way, our German society has an English journal which is available for free: <https://www.egms.de/en/journals/dgkh/>

- Until now, we said that flexible endoscopes and dental units might be the main reason for hepatitis transmission. As we again saw, in some hospitals the carrier rate of hepatitis virus is quite high. So also hepatitis positive healthcare workers might be one of the main transmitters to patients. In our presentations about hepatitis we always tell how the problem is handled in Germany (commission to decide and antibody ranges which are more or less safe, also look for risk work in hospital). We recommend to go a similar way in Mongolian healthcare systems.
- In the 14 years we have been in Mongolia, absolutely nothing changed regarding the cleaning in hospitals: Old and terrible wooden scrubbers are used and everything done by hand:



There are modern cleaning cars on the market with different wipes for surfaces (eg different colors for floor, toilet, sanitary room and patient room). Example:



- Again we saw that results for hepatitis D carriers and antibodies are quite different in the hospitals. Some hospitals have rather high numbers of workers who have only hepatitis D. This is very uncommon as hepatitis D is usually only positive in hepatitis B carriers. Also some hospitals have good antibody levels after hepatitis B vaccination – around 95 % show good immunity (comparable to Germany). In other hospitals nearly 50 % are non responders.

So we have some doubts about the lab quality and we would recommend ring tests which might be organised by NCCD. We were told that Shastin hospital is doing something like that, but we don't know more about that.

Next steps

A Mongolian group of MNA will come in February, 2025, to visit German hospitals.

In June, 2025, we will go to Mongolia again for the course with MNA – then in Dornod aimag.

In October Walter Popp and Ali Canbay will go to UB and take part at 100 years celebration of Hospital No 1.

End of November, 2025, a Mongolian group will come to Germany.

Walter Popp, 30 January, 2025

Ice sculptures on Sukhbaatar Square:

