



**Prof. Dr. W. Popp**  
HyKoMed GmbH, Lünen/Dortmund  
Germany

## **Report of the visit to Ulaanbaatar 10 – 17 October, 2023**

### **Participants:**

Walter Popp, HyKoMed, Dortmund  
Adelheid Jones, Köln

### **Course with Mongolian Nurses Association**

There was the second part of the the course for link nurses together with Mongolian Nurses Association (first part in June, 2023). Around 50 link nurses presented the situation in their hospitals regarding different infectious diseases.



Most presentations were good and interesting.

The **antibody results after hepatitis** vaccination were presented by different hospitals. The results had a broad range and many hospitals had a large number of Non/Low Responders – those coworkers should be vaccinated again. Eg, in one hospital of 281 vaccinated workers, 84 had antibodies > 100 IU/L, but 77 <10 IU/L. In another hospital 231 workers were vaccinated and 91 had antibodies >100 IU/L, 92 between 10 and 100 IU/L and 48 <10 IU/L. Usually in Germany the Non Responder percentage is around 5 %.

The results from surgical wards showed that very often all patients get **antibiotics**. Microbiologic diagnostic before starting antibiotics is very rare and resistance testing

even rarer. There is urgent need to improve this situation: Try to take samples for microbiologic testing before starting antibiotic therapy and change (or not) antibiotics according to results of resistancy testing.

A lot of hospitals showed very high rates of **MRSA**, eg in one hospital 2,561 Staphylococcus aureus (Staph. au.) found, 1,750 of them MRSA (68 %). In another hospital 381 Staph. au. found and 271 of them MRSA (71 %). In a third hospital 598 Staph. au. found and 507 of them MRSA (85 %).

To compare with Germany: Around 20 years ago we had around 20 % MRSA, now it is 7 %.

Also there were some very interesting presentations about studies from different epidemiologists from UB (eg Hospital No 2, NCCD).

Some of the presentations could be published in a medical journal. So our **recommendation is to start a free online Journal of Hygiene** in which presentations like those could be published in a text version. In the beginning, the expectations should not be too high. There should be only a simple review process at the beginning to exclude big mistakes and passages which cannot be understood.

## Visits

We visited a welcome event of **Misheel Kids Foundation** in their outreach in the Khaan-Uul District. They provide free dental treatment and oral health education for underprivileged children of this district.



There, they have a room for dental treatment and also one for reprocessing of medical devices (according to MeshHp recommendations). The Foundation is working in UB and aimags since 2015.

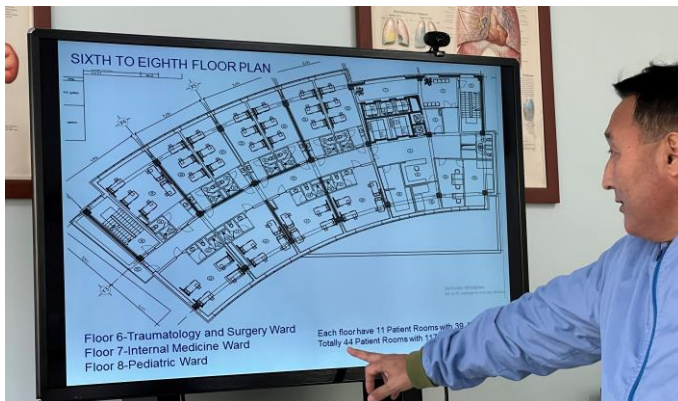
Also we saw the education of children in the classrooms.



Very impressive work and results!

In **Chingeltej District Hospital** – which we know since 12 years – Dr Uka explained the ongoing and planned new construction of hospital buildings:

- There is an additional hospital house under construction (117 beds) at the existing place.



- A very new hospital will be built in the ger district financed by ADB. The construction will be very similar to existing new Songinokhaikhan district hospital.
- Also 2 new buildings are planned for Outpatients/Public Health und a Screening Center.

We visited **National Trauma and Orthopedic Research Center** and had a meeting with General Director Dr Galbadrakh, his deputy, the quality manager and a hygiene doctor. We will try to find some contact in Germany for them.

There is a big number of patients in the hospital because they are coming from all over Mongolia. Despite of this, the hospital is very clean. The building is very old, a lot of wood (cannot be disinfected), bad ventilation.



The **sterilisation unit** was part of Health V. Big rooms, lot of space. In one of the two washer disinfectors water is standing – water pump may be not working. At the cleaning line, there are different brushes for MRSA, HIV, hepatitis and nothing of it. In Germany, we do not use different brushes but work „as if“ every instrument is contaminated – so always the same high standard of workers' protection: Cap, apron, coat, gloves, mask and eye protection.

Very old textile wrapping is used for the sterile instruments:



Tyvek wrapping is used for plasma sterilisation (very good).

Only very few sinks have the correct equipment for hand hygiene: Dispensers for hand disinfectants and fluid soap, paper towels. There is a big lack of hand disinfectants! In most cases we saw only textile towels and no soap or even nothing at all:



Regarding this, the situation is much better in many hospitals in Mongolia since years.

Single needles are used for acupuncture (good).

Sterile swabs are bought on the market and not sterilised in the sterilisation unit like in many other hospitals (very good).

In the **emergency unit**, we saw textile curtains for dividing the rooms:



We recommend movable firm folding separations which can be disinfected easily.

In many rooms, we saw UV disinfection tubes. They should not be used if people are in the room because UV is classified as carcinogenic by IARC.

In the **laundry**, there are many very old devices, many of them not working any longer:



Each day, they have at least 60 big yellow tons of **infectious waste**, Element company is coming twice a day. These amounts we did not see in any other hospital and it is very expensive of course. So there should be a comparison with other hospitals and the ministry's order what is really necessary to declare as infectious waste.

The room for the yellow boxes for infectious waste is nasty and should be renovated – walls and floor must withstand disinfectants:



**Endoscopy unit:** Very few gastroscopic examinations in a week (also bronchoscopies? – at least we saw a bronchoscope). Room for reprocessing is very small. No hand disinfectant to see, neither in examination nor in reprocessing room. ICU is renovated. Hand disinfectants are available at the wall, but not enough – too long walking ways to disinfect the hands. When we were there, the ward was basically cleaned. This is done very simple, putting the same cloths again and again in the cleaning solution – with the risk to distribute bacteria everywhere by this way:



On ICU cleaning alone is not enough, you have to use disinfectants.

**Conclusion:**

- The hospital is clean despite a high number of patients.
  - There are massive deficits regarding hand disinfection. Many hospitals in UB are much better.
  - The amount of infectious waste should be thought about and, maybe, reduced.
- On our next visit, we may see the second (new) building.



We visited the **City Health Department** and met new head Dr Erkhembulgan. He studied in Hannover/Germany. There is big interest in common projects and also the problem of financing the activities is seen. Big interest of a partnership with Essen City, at the moment only cooperation.

We visited **Central Military Hospital** and met with Commanding Officer Colonel Dr Enkh-od Baggansuren and different doctors. A lot of them are speaking German because of long cooperation with Bundeswehr/German Army.

The **sterilisation unit** is half a year old, lot of space, clean, good organised. They have two washer disinfectors which disinfect with 85°C water temperature. They have two autoclaves and one plasma steriliser. There is even a staff lock with equipment (hand disinfectant, fluid soap, paper towels) between dirty and clean areas:



They have a lot of **hand disinfectants**, but only in bottles standing, not on the walls. Very often gel which is often sticky and, therefore, not so nice. Some of the disinfectants have only 62 % alcohol which is not enough for killing viruses (at least 70 % necessary).

**ICU:**



It seems that urine bottles on ICU are disinfected in a bucket (not really nice):



It is not clear how bedpans on ICU are cleaned and disinfected.

There are washer disinfectors on the market for urine bottles and bedpans.

The **personel lock to operating theatre (OT)** should be divided in two parts – there should be some distance between taking off clothes and put on OT clothes.

**Endoscopy:** The manual cleaning is done in sinks which are lined out with some aluminium blankets:



They should be done out and thrown away because beneath them will be biofilms and a lot of bacteria might grow there. The ventilation is not good in these rooms. We might go there again during our next stay.

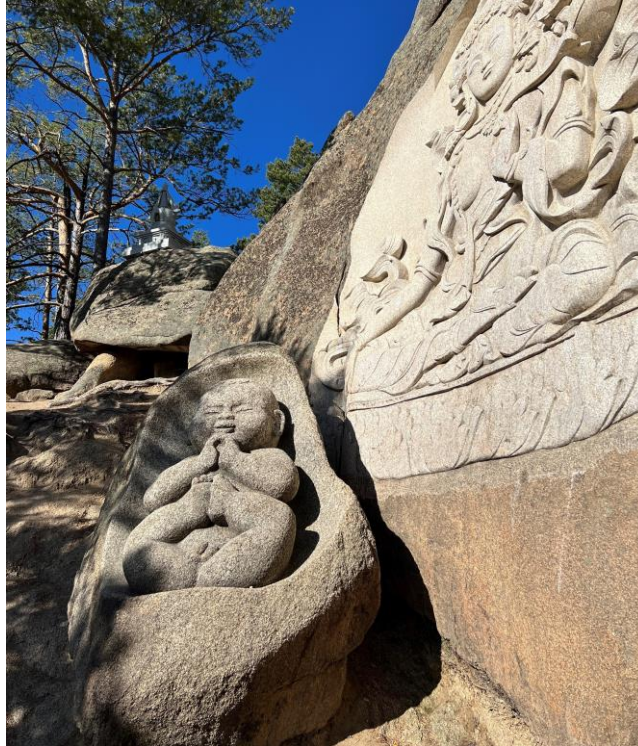
We visited **ADB** and the PIU caring for the new building of Emergency Service 103. It was very nice to meet there Dr Khulaan, Dr Altantsetseg and Dr Bayasgalan whom we know since many years.



## Social contacts

As usual we had a lot of social contacts.

With our friends from Emergency Service 103 we had a visit to **Aglag Buteeliin Hiid**:



With Dr Bolor and Dr Ganaa we had a visit to Nalaikh and **Terelj**.

We listened to the **band of Dr Uka** in a restaurant:



## Next steps

End of 2023, Bolorchimeg from Central Military Hospital will come to Germany for 3 weeks to work in surgical units in Herne.

Maybe, in March 2024 a small group from Germany will go to UB and some aimags.

In June, 2024, we will come again and have a two day course with MNA and two days congress with them.

Perhaps, in July or August a Mongolian group will come to Germany.

A MNA group might come end of 2024 for a visit to Germany.

Walter Popp, 31 October, 2023