



**MeshHp e.V.**  
Mongolian Emergency Service  
Hospital Hygiene Project

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## **Report of the visit to Ulaanbaatar 7 - 21 June, 2024**

### **Participants:**

Walter Popp, HyKoMed, Dortmund  
Anette Simonis, Berlin  
Klaus Wiese, St. Johannes Hospital und DGSV, Dortmund  
Adelheid Jones, DGSV, Köln  
Heike Kamphusmann, St. Elisabeth Gruppe, Herne  
Marina Lorsch, Gesundheitsamt Recklinghausen

### **Course for link nurses**

The primary aim of the visit was the yearly course for link nurses together with the Mongolian Nurses Association (MNA). 50 nurses were listening in presence during the 4 days.



Some topics were:

- Nosocomial infections - definitions, causes, surveillance
- Cleaning, disinfection, sterilisation
- Reprocessing of medical devices like instruments or flexible endoscopes
- Organisation and work of hospital hygiene units
- Microbiology – basics and multiresistant bacteria
- Dentistry and reprocessing of instruments in dentistry
- Hepatitis

- Injections

A second part will follow in October, 2026, in UB where the nurses have to present their “homework” – eg show data about hepatitis vaccination or nosocomial infections in their respective hospitals.



As the course was in the Blood Center, we saw a drone which is intended to be used for transport of blood products:



## Hospital Visits

You may find the report of Klaus Wiese and Adelheid Jones at the end of this paper.

## Meetings and social life

As always, we had a lot of **private contacts** with our Mongolian friends.

We or some of us (who did not have presentations on the respective day) had some **sightseeing** in UB, eg Zaisan, Gandan monastery. Outside UB, we went to Khonkhor, Chinggis Statue and Hustai National Park.

Finally, we spend some nice days in **Dund Gobi** and saw, for example, Tsagaan Suvraga.

Also we met a herder who is a drummer, playing in a separate ger, and preparing a stage for a summer concert – in the middle of nowhere:





One night we spent outside.



## Next steps

In October, 2025, Walter Popp and Ali Canbay will go to UB and take part at 100 years celebration of Hospital No 1.

In December, 2025, a Mongolian group will come to Germany.

Also in February, 2026, a Mongolian group will come to Germany.

Presumably, a small German group will go to UB in March, 2026.

The next course with MNA will be in June, 2026, in Dornod Aimag.

Walter Popp, 3 July, 2024

## Hospital visits – done by Klaus Wiese and Adelheid Jones

### Bayanzurkh District Hospital



#### Endoscopy

There is only one gastroscope in the department. Gastrosopies are performed every 30 minutes.

The rinsing bottle on the examination tower is not used.

The reprocessing room is too small for proper, hygienic endoscope reprocessing. It is not possible to separate contaminated and clean workstations in the small reprocessing room.

There is an equipment cabinet for drying or UV radiation in the reprocessing room. The equipment cabinet is not in operation. Its function could not be cleared. UV disinfection is not suitable for endoscopes with channels.

Reprocessing begins immediately after the examination.

The reprocessing basin is lined with a plastic mat; the formation of biofilm under the mat is to be expected. No leak test is carried out. The employee does not wear safety goggles when brushing the channels. Brushing is only carried out once per channel under running water, the brush is not pulled through completely, but pulled back again. The valves are not brushed. The valve inlet is not brushed. 20 ml of cleaning solution is drawn up from a prepared cup and sprayed through the channels via both legs of the cleaning adapter using a syringe.

The cleaning agent is not rinsed out.

For disinfection, the endoscope is placed in a semi-automatic machine (disinfection and final rinsing only). Not all channels are connected because this is not possible.

There is no workstation for drying.

The rinsing system and the disposable brush were placed in disinfectant solution. The disinfectant solution does not cover all parts.

The PE tongs used were disposable

Hand sanitiser had to be searched for.



### Summary

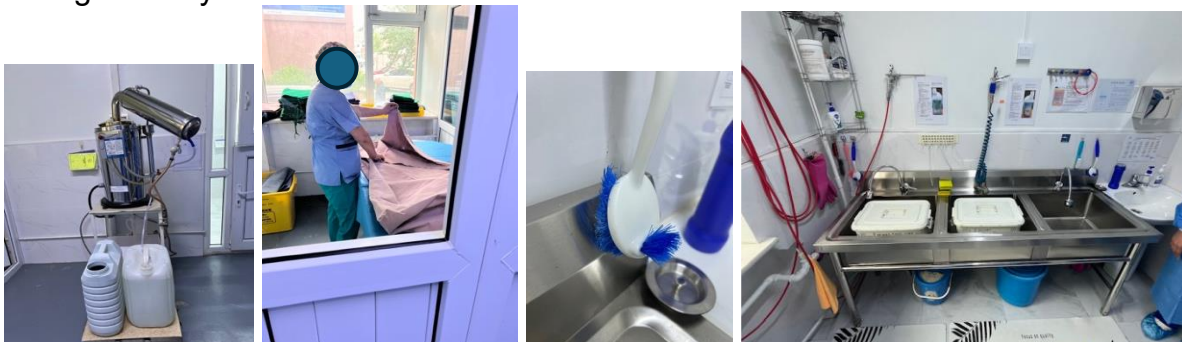
Correct reprocessing cannot be carried out in 30 minutes. The reprocessing room is not suitable. Brushing should be carried out in the cleaning solution below the liquid level (personnel protection). Each brushable channel should be brushed at least twice and the brush should be pulled through completely each time. The mats in the basin should be removed.

### **CSSD**

The contaminated instruments are brought into the unclean reprocessing room via a window. Three basins or tubs are available there. One basin is used for cleaning. One basin is used for disinfection, and one basin is used both for rinsing the contaminated instruments and for final rinsing after disinfection. A washer-disinfector is not available. The manual work line does not allow manual reprocessing without cross-contamination.

Two hot air devices are used to dry the instruments. These are located in a separate room. The largest room in the CSSD is only used to produce distilled water. The room is otherwise unused. There is no separate packing room for the visual inspection and assembly of the instrument trays. This task is carried out in the room with the heat sealer. There is a room for preparing laundry for sterilisation and a room for assembling dressing materials. Sterilisation is carried out using a steam steriliser and a H<sub>2</sub>O<sub>2</sub> steriliser. Batch documentation is kept for both devices. The steam steriliser has a programme at 134°C and a programme at 121°C. The random sampling of the batch documentation of the steam sterilisation process showed that sterilisation only takes place at 131°C and 2.1 bar overpressure with a time of 20 minutes.

The functionality of the steriliser is determined using a BD test. The sterile air filter on the steriliser has never been changed. The cartridges for the water treatment are changed every three months.



### Summary

The department was recently renovated. Access for the delivery of contaminated materials is from outside. All areas were clean and tidy. The separation of laundry



preparation and dressing material packaging is to be rated positively. The documentation of sterilisation was very good.

In the cleaning and disinfection area there are 3 basins and a hand wash basin. The order of reprocessing should be from contaminated to disinfected, starting on the left with cleaning, rinsing, disinfection and final rinsing. The cleaning accessories should be changed regularly. Wire brushes are unsuitable and damage the instrument surfaces. The number of different reprocessing chemicals should be checked and minimised.

## **Mongolia-Japan Teaching Hospital**



### **Endoscopy**

Hand sanitiser is available at the hand-washing basin.

The reprocessing room is large and technically well equipped. The area is tidy and clean.

The two cleaning basins (gastrosopes/coloscopes) are equipped with a pad, but are not filled with solution.

Beware of biofilm formation under the mats!

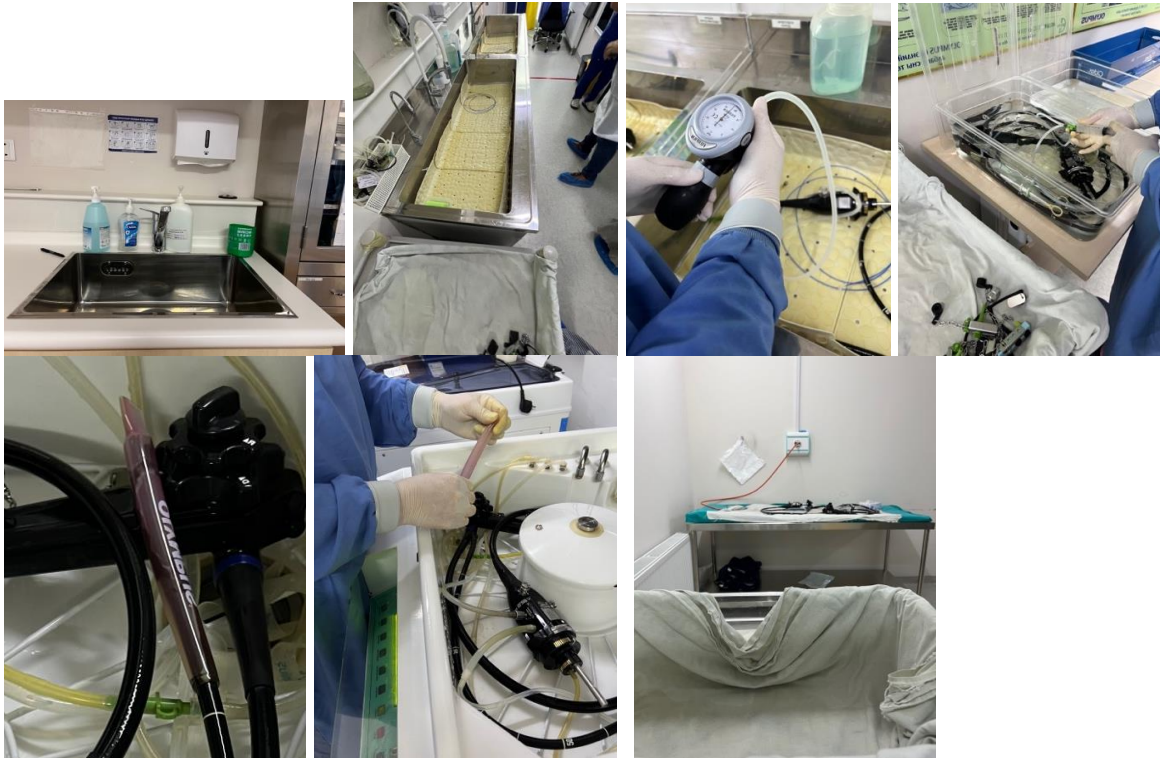
The leak test is carried out correctly.

The disposable brushes are used over a longer period of time.

The employee wears correct protective clothing (Gown, gloves, safety goggles). The channels are brushed under running water. The valves are brushed thoroughly. No cleaning agent is used during brushing.

Place the brushed endoscope on a table with a wet cloth and connect the rinsing system. The endoscope is then placed in a tub with cleaning solution and rinsed correctly with the rinsing system. The jet channel is rinsed. The tub is very small, the endoscope is not completely covered with cleaning solution. Inserting the endoscope into the machine for disinfection. Connect all channels. There is a transport protection (approx. 12 cm long) on the distal end which prevents disinfection. At our request, the protection is removed before the machine is started. Once disinfection and rinsing are complete, the endoscope is passed through a transfer window into the room for drying and storage. The endoscope is placed back on a damp cloth (recontamination).

Drying is carried out with compressed air. There are also cloths here that are not changed for each endoscope.



### Summary

The mats in the basins should be removed.

Brushing should take place in the cleaning solution below the liquid level (personnel protection). The basin in which rinsing with cleaning solution takes place should be larger and the liquid level must allow the endoscope to be fully inserted.

The cotton cloths in the reprocessing section must always be removed.

The Olympus transport protection must be removed for cleaning and disinfection and can at best be used for storage after disinfection and drying of the endoscope and transport protection.

### **CSSD**

#### Cleaning and disinfection area

No hand sanitiser at the washbasin.

The cleaning and disinfection area is spacious, tidy and clean. There is a spatial separation between clean and unclean areas.

The employee wears protective clothing.

Contaminated instruments are delivered via an unclean lift and through a door directly into the unclean work area.

The instruments are reprocessed manually in several boxes. The instruments are not completely covered with liquid.

The existing washer-disinfector is only used for drying, as it is too large.

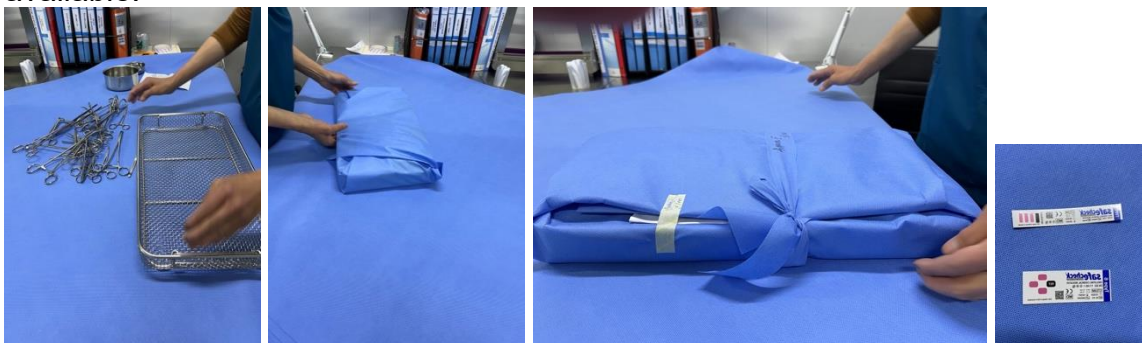


### Pack sterilisation area

The instruments are visually inspected. The number of instruments is documented on a control sheet. Care products are available but are not used. The instrument set is put together properly.

The packaging is diagonal, the closure is made with a strip of sterilisation fleece with a loop and a small adhesive strip with indicator tape. A class 4 indicator is added to the instrument sets.

Sterilisation is carried out with steam. The process documentation is carried out with a chart recorder and could not be assessed by us; the data was not legible. Proper batch documentation (content, times and indicators) is maintained. BD test is available.



### Summary:

Manual cleaning and disinfection should generally be avoided, as a washer-disinfector is available. If manual cleaning and disinfection is used, the instruments should be covered by the solutions.

The non-woven packaging should be sealed with adhesive tape without an indicator. A class 6 indicator in each set is not necessary. The class 6 indicator per batch and the documentation are correct.