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Report of the visit to Ulaanbaatar 9 – 19 March, 2024

Participants:

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The primary aim of the visit was a special look on reprocessing of flexible endoscopes and dental instruments (a special report from Anette Simonis will follow about this).

Hospital and Clinic Visits

Chingeltej District Hospital (outpatient department):

There is the 3rd new director within only half a year.

The new building is under construction. The construction of the other new building financed by ADB has still not started.

Endoscopy unit:

Fluid soap, hand disinfectant and paper towels is more or less available at sinks.
Endoscope reprocessing is done manually.



A cabinet for clean endoscopes is available.

Dental doctors:

As in most dental units, the patient stool and some other surfaces are covered with plastic films.

At least some of the root instruments are reprocessed and sterilised. We could not see any cleaning of channels in hand and contra-angle handpieces. Disinfection and sterilisation of instruments is done downstairs in **reprocessing area** which is very narrow. There are 3 rooms, very small. In the dirty area only gown and gloves are used by workers, no mask and no face shield. Both should be used additionally for worker's protection. The first cleaning is done under flowing water only:



This poses a high risk for the workers because of aerosol production. Cleaning first is ok, but should be done in cleaning solution and under solution surface (no aerosol production). 15-20 dental instruments (in one hand) are controlled under magnifying glass and dirt on the instruments is not detected:



It seems that a washer disinfectant is used. But we cannot see connectors to wash channels.

Dental Clinic Pro Med

There are 2 young dentists who just build up the clinic, only for children. Everything is clean and well organized.



Some of instruments are single use:



Cleaning is done by ultrasound, then rinsing by water, then disinfection. They have German Alpro products, especially for channels. It is not clear whether they use it every day.

Heat sealer is defect, so they use curling scissors.

New steriliser.

Storage of sterile goods is done in cabinet with UV disinfection:



Platinum Dental Clinic:

This is the best dental clinic we saw. Many rooms, 4 patient stools, 8 doctors, 8 nurses. Very clean, very well organised.



Many single use products.
They use the Alpro products.



They have a water filter at the entrance of water to the clinic, changed once a year.
2 small reprocessing rooms, well organised. Documentation is done by photos.



Also hemocheck and protein check is used.

Enerel Dental Clinic:

Very big hospital, many stools for adults and children. Very clean, very well organised.



Also many single use products.

Manual reprocessing in 2 rooms: First cleaning, then rinsing with water, then disinfection, then rinsing again, dryer.



Then sealing and sterilisation:



Also Bowie Dick Test is used:



Correct reprocessing.

Od Dent Clinic:

6 doctors, some nurses and administration staff.

We can see a UV disinfectant, but it is unclear whether it is still used for hand and contra-angle handpieces (if used: it is not working in the channels!).



The surfaces are disinfected between patients, but with extremely small cloths. As in many other dental clinics, the distilled water is produced on the ground:



This should not be done, because it can be contaminated.

Megadent Oral Care:

Also here, very tiny disinfection cloths were used for big surfaces. As in other clinics, we saw UV disinfection tubes in many rooms:



If at all, they should be used only if no people are in the room. Here, the patient stool was without plastic film:



So this policy with plastic films on surfaces is not really clear for us (and it is not necessary from hygienic view).

Evada Dental Clinic:

3 very small rooms for reprocessing of instruments. Left is dirty room, middle is sealing room, right is sterilisation room. But the middle room is a mixture as also the Alpro products are used there (cleaning) – this should be done in the dirty room.



Also here, production of distilled water on the ground, with tube in the produced water (risk of contamination!):



Also here, no plastic films on the patient stool (see comments above and down):



Mungun Dent:

This was the most problematic clinic. Very small, very small rooms. Only one very tiny room for reprocessing:



No real structure available. Used instruments and used syringes are laying around. Clothes are dried in a treatment room:



Mungungur Hospital:

We saw a gastroscopy (without sedation).

They make a pre cleaning and rinsing (ok), then cleaning with flowing water, sponge and cleaner:



This is dangerous because of aerosols and it should be done with gastroscopie completely under surface of cleaning solution.

Plastic mats should not be used because biofilms and bacteria can grow under them. (If they are used they must be completely cleaned and dried every day after work)

Disinfection is done in half automatic washer disinfector. Air pistol is available. Biopsy forceps is single use.

Bona Vita Hospital:

No patient on the day, basically they make gastroscopy and coloscopy.

In cleaning sink water is flowing all the time – after that they will take water probes.

Hospital No 1:

We have a visit with 2 very engaged epidemiologists.

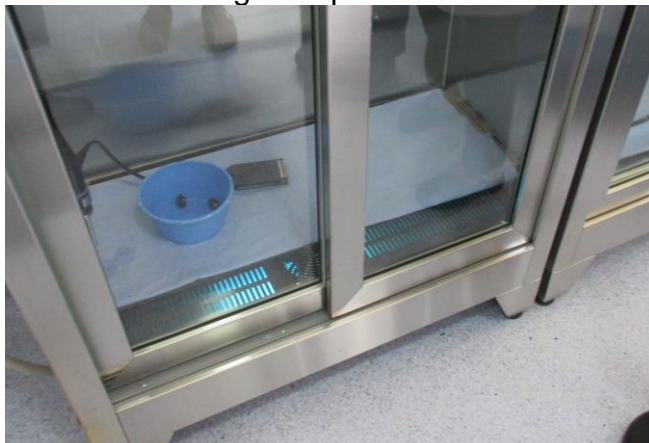
We go to the new and big **endoscopy unit** we already know. They use products of Dr. Weigert. 3 sinks, one for gastroscopy, coloscopy, bronchoscopy each:



Brushes are thrown away latest after 3 days. Many products single use. Washer disinfector with documentation: washing, air, washing, rinsing, 15 minutes disinfection, air, washing (or rinsing?), 20 seconds alcohol, air drying:



Storage in cabinet with UV from underneath. But above the UV tube is paper, so cannot work (only air disinfection might be possible which is not really necessary):



Then **room for ERCP**:

There is an air conditioner:



It was said that it is taking air from outside. The risk for the ERCP patients by this is low because usually infections are done by ERCP endoscopy and not via air.

If you use these air conditioners (or air cooling devices) the filters should be changed at least once a year and they should be controlled by technicians once a year. If they are not working well, they can be contaminated inside (if air is cooled water will condensate).

Then the new **ICU** we already know:

They screen some of the inpatients when they are taken up, eg for operations. 60 % of the screened patients are carriers of MRSA.

It was said that MRSA positive persons may organise in self-help groups. There Bacterocin oint is recommended for decolonisation. Bacterocin contains Mupirocin which may be effective – you may get Bacterocin in pharmacies without prescription. We have some doubts whether self-help therapies are the right way.

They isolate in the big room on the left and the others on the right.

We hint that they have to wear gowns, mask, hat, gloves consequently when caring for isolated patients. And make hand disinfection before and after **each** patient!

Basically we saw that workers' protection was not really good and we saw no hand disinfection at all in the time we were there.

It was said that especially doctors are not caring for the rules. (We have similar problems in Germany but this is nowhere acceptable)

Despite this, the main problem may be bad antibiotic policy. We will come again in October for this topic and also give a 3 day course.

Multiresistant gram-negative bacteria might be a much bigger problem than MRSA in Mongolia which is not under focus now (eg Klebsiella, E. coli, Acinetobacter...).

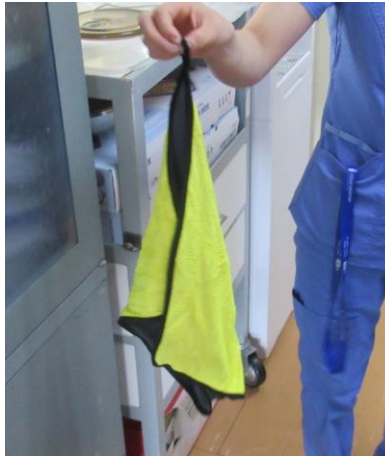
Then we went to the **transplantation unit** we also know:

It is really horrific. It seems that all the old furniture from the whole hospital was put there: wooden furniture, textile couch and curtains – both cannot be disinfected and should be thrown away. No food at the workplace in hospital!



There is no organisation. A lot of things are there which seem not to be used at all. This must all be thrown away. Only those products should be there which are really used and which can be disinfected (steel or plastic).

It seems that cleaning is done with old cloth rags which are used again and again and sometimes washed at the sink:



On such a ward, only disinfection should be done, most of all with single use rags which are put in disinfection solution only once and then thrown away (or fluid packs). Because of multiresistant bacteria only aldehydes or oxygen producing agents should be used, not QATs (not reliable with respect to gram-negatives).

Regarding air cooling units, see above:



Especially on this ward, yearly control by technicians is Must!

Amgalan Maternity Hospital:

We met director Dr. Batbold whom we know since a long time.

In former years they belonged to city, then 3 years to MoH, now again with city.

They try to finance themselves.

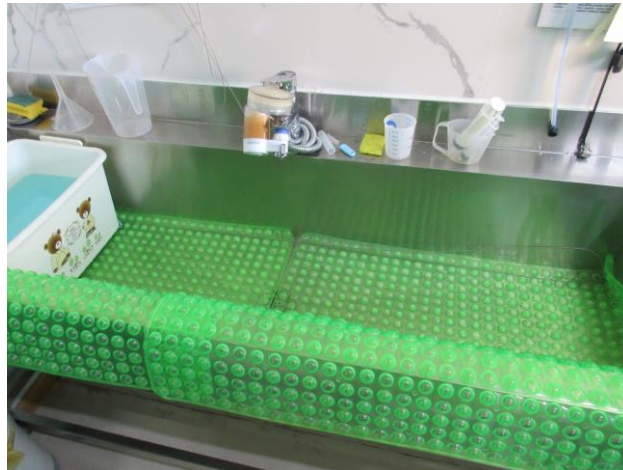
They have **endoscopy** since April 2023. Until now they make gastroscopies, without biopsies. 430 gastrocopies in the last half year, 2 early stomach carcinomas detected.

Hand disinfectant solution in endoscopy is over time since autumn 2023.

Workers' protection is correct.

It seems that also here the first cleaning is under flowing water and then put endoscopes in cleaning solution.

Also here plastic mats in the sinks:



After that they give it in the washer disinfector: There seems discrepancies between what the washer disinfector is doing and what is documented by it. This should be clarified.

Also they should clean in sink before washer disinfector: Brushing under cleaning solution surface.

Use brushes which fit to the channels – may be different ones. Also do not use brushes too long time and often use new ones.

Then **sterilisation unit**: Enough space, but most of sterilisers are not working. They got a new steriliser from Japan, but had to give it to another hospital. The steriliser they actually use is said to be from 2015, but rather destroyed, no documentation. Door damaged and inside lot of coatings:



Also here only manual reprocessing:



They use disinfectant solution 2 % (normal) and 3 % (patient is infectious). We recommend only 3 %. You never know whether a patient is really not infectious. So work should be done under the premission that every patient might be infectious. Using only one concentration they have to throw away less solution.

2 hand disinfectant solutions are over time since autumn 2023.

It seems they have a problem with hand disinfection. Eg the epidemiologists could walk through the whole house and see how many of all hand disinfectants are over time. This would give a first impression.

They have a new public health department for preventive examinations with ultrasound, X-ray, mammografy, ECG and endoscopy.

We come back in January.

Cancer Center:

We met the director we already know and we might come back in October.

In **endoscopy**, gastroscopy, bronchoscopy and coloscopy is done. Again also here: Cleaning under flowing water. In the following washer disinfector we could not see disinfectant solution despite it is written in the program. This must be clarified. No documentation printed.

Endoscopes are dried with air at the end (ok).

The worker there is wearing protective clothings, but is not changing them if going from dirty to clean areas: Disinfected endoscopes are touched with gloves which were used in dirty area. This must be changed, gloves are not necessary in clean area, hand disinfection is enough.

They use transport boxes:



They must also be disinfected (wiping) before a disinfected endoscope is given in it – also new inlay.

Sterilisation unit has enough space and is new (ADB project). 2 new sterilisers, working. Documentation is printed. One plasma steriliser.

2 new washer disinfectors are not working. It was said that spare parts are ordered. So only manual cleaning and disinfection. Also here, first cleaning is under flowing water (aerosol risk for workers!). Additionally, protective clothing is not correct: Elbows and arms are not protected, no face shield:



No hand disinfectant dispensers on the walls.

New traumatology Center:

(Sorry, camera did not work)

We met director Dr. Khishigsuren.

Mostly burn patients.

We visited all levels/**wards**. Nice building, much space, broad hallways, mostly 2-bed-rooms, some 4-bed-rooms, all with own toilet and shower.

Rooms (eg examination rooms) are mostly empty and only necessary devices are in them, mostly well organised. Sinks mostly with hand disinfectants, paper towels and fluid soap.

Some of the hand disinfectants are over time, they seem not to be used very often **Sterilisation unit** with new sterilisers and washer disinfectors. But all instruments are cleaned first manually. This does not make sense if the washer disinfectors are working well (and if they are really used?).

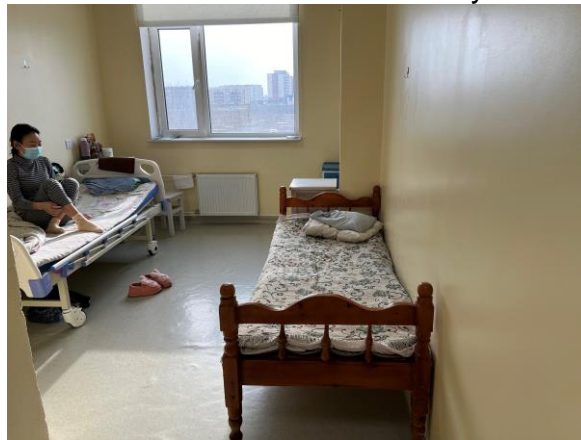
Much space also on **ICU** so that isolation is possible easily.

Trip to Khentii aimag:

We had a 2 day trip to Khendii aimag.

We met Undrakh, a nurse we know from MNA. She is responsible for nurses now in public health department.

In the **hospital** we saw the new **Tb ward** which is nicely renovated.



In former times they isolated each Tb patient at least for 56 days. This is reduced now and the main decision is done according to negative sputum.

Also we saw dentists, endoscopy and sterilisation unit.

Also only manual cleaning:



Additionally, we had a visit to a **hospital for traditional medicine**, the biggest one in Mongolia outside of UB.

Often experiences in endoscopy and recommendations:

- All endoscopies (gastroscopy, colonoscopy, bronchoscopy) are done without sedation. If someone wants sedation he/she has to pay for.
- Bronchoscopy is usually done in sitting position.
- Cleaning of endoscopes should always be done under cleaning solution surface (no aerosol production) – not under flowing water only.
- Plastic mats in cleaning sink should not be used because biofilms and bacteria can grow under them.
- In dirty area, workers' protection should be gown, gloves, mask, hat, face shield.
- Going from dirty area to clean area with the same workers' protection is not allowed. There is no need for gloves in clean area, hand disinfection is enough.
- More and more single use devices should be used.
- Channels in endoscopes may have different sizes. So different brushes are needed.
- If washer disinfectors are used with documentation, the printed documents at the end must be controlled, whether everything went correct. Also from time to time the printed documents have to be controlled whether they really say what the washer disinfectant is doing: eg is cleaning solution really in machine, on the right place, the same for disinfectant solution and so on.

Often experiences with dental doctors and recommendations:

- Private dental clinics cannot care for patients who are financed by health insurance only.
- In most dental units (but not in all) the patient stool and some surfaces (also lamp) are covered with plastic films. It seems that this is order from ministry. We do not see any sense in it because the surfaces should be disinfected between every patients – with or without plastic film.
- Very often storage of sterile goods is done in cabinets with UV disinfection. Maybe this is order of ministry. For us, this does not make sense. If sealing of sterile goods is done correctly and storage is not over time, the instruments should stay sterile. Additionally, UV disinfection might damage the seal films.
- The main problem are the channels in hand and contra-angle handpieces. As usually no washer disinfectors are available in dental clinics, a good solution are the Alpro products for cleaning and disinfection of the channels (we do not know whether similar products from other producers are on the market).
- In many dental clinics, we saw production of distilled (demineralized) water on the ground. This should not be done because it can be contaminated very easily and distilled water is a good growth medium for bacteria (better than usual tap water).
- In many rooms we saw UV air disinfection tubes. We do not see any reason for them in dentistry because there infections are not transmitted by air. Also IARC (WHO) has classified UV as carcinogenic. So if at all, they should be used only if there are no people in the room.
- Cleaning of instruments should not be done under flowing water, but under surface of cleaning solution (no aerosol production).

Meetings

We had a meeting with new **German ambassador Mr Kulitz**.

Social contacts

As usual we had a lot of social contacts.

We spent first day in **Khan Jims** with our friends from **Emergency Service 103**.



We had a trip to **Manzushir Khiid** and a Golf Resort with skiing (not we).



Once again we were on **Zaisan**:



In Khendii aimag we were invited by **Undrakh** in her home.



(Above: Back in the left is Chinggis Khan)
During night we had heavy snowfall there.

Next steps

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

In October we (2 people) will go to UB and make a 3 day course about antibiotics therapy.

A Mongolian group will come to Germany in the time before Christmas.

In January, 2025, we will go to UB again and finish the MNA course and have 2 half day courses for reprocessing in dentistry.

In February/March, 2025, a group from MNA might come to Germany

Walter Popp, 8 April, 2024