

**Gunjaman Singh Hospital,  
Pithuwa Village, Chitwan District, Nepal**

**GGHH Agenda Goals**

- Safe, potable water

**Hospital Goals**

1. Have safe water using the SODIS principle

**Progress Achieved**

We use drinking water disinfected by the SODIS system.

SODIS is an abbreviation of Solar Water Disinfection, a simple procedure to disinfect drinking water. Contaminated water is filled in a transparent PET-bottle or glass bottle and exposed to the sun for 6 hours. During this time, the UV-radiation of the sun kills diarrhoea-causing pathogens. The SODIS-method helps to prevent diarrhoea and thereby is saving lives of people. This is urgently necessary as still more than 4000 children die every day from the consequences of diarrhoea. Thereby people in the south get access to safe drinking water and can improve their health in the long term. Read more [http://www.sodis.ch/index\\_EN](http://www.sodis.ch/index_EN)

The SODIS manual is translated in Nepali language and distributed to our patients also (see below). Any patients coming to the hospital with diarrhoea are told about the system.

तपाईंको स्वास्थ्यको सुरक्षा गर्न पानीको उपचार आवश्यक छ ।

सौर सौर पानी शुद्धिकरण-सोडिस प्रक्रिया- यस प्रक्रियाद्वारा तेजा, भाडा पखाला, टाइफाइड तथाभिन्न अरुप्रकारका रोगहरूसँग अछल सकिन्छ र यो अत्यन्तै सजिलो छ ।

1 बढिमा १० से मि चौडाई (व्यास) भएको, नकोरिएको, नकोरिएको र पारदर्शी बोटलको प्रयोग गर्नुपर्छ । रगिन लेबल भएको तथा सिमाको घोलन प्रयोग गर्नु हुदैन ।

2 बोटलमा पानी भरेर चिको कसेर लगाउने । पानी धमिलो भएमा वा आइरन मात्रा बढी भएमा सफा कपडा वा फिल्टरले छानेर वा थिगाएर सोडिस गर्नु पर्दछ ।

3 पारिलो घाममा कम्तिमा ६ घण्टा पराबैजनी किरण र तापले हानिकारक जीवाण नष्ट हुन्छ । पारिलो घाम वा आंशिक बादल लागेमा १ दिन र पुरा बादल लागेमा २ दिनसम्म राख्नुपर्दछ ।

4 अब तपाईंको पानी पिउन योग्य भयो । पानी सुरक्षित राख्न बोटलमा चिको बन्द गरेर राख्नुपर्छ ।

The World Health Organisation (WHO), UNICEF, and the Red Cross therefore recommend the SODIS method as a way to treat drinking water in developing countries.

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aquatic research  
Swiss Federal Institute of Aquatic Science and Technology  
www.sodis.ch

SODIS  
Safe drinking water for all

Information about SODIS in has been translated

### **The Issue**

The hospital is funded by Swiss NGO “Shanti Med Nepal” and private sponsorship. Environmental health and sustainability is an important factor in decisions in the development in the hospital.

### **Sustainability Strategy Implemented**

Three issues were identified as critical to the environment and public health at the health post: solar power as the region suffers from severe power cuts. Safe drinking water was essential as the local water supply is not safe to drink; and medical waste as there are no facilities for the treatment of medical waste in the region.

### **Implementation process**

In such a small facility, the decision making and implementation process is comparatively simple. Dr Gonseth was responsible for selecting the projects to be undertaken, any necessary fundraising, identifying collaboration partners and directing implementation for all elements within GSH.

### **Tracking Progress**

The success of the water project within the facility is measured by the fact that 10-12 staff and all the patients have safe water at no cost. The success of GSH in disseminating knowledge of the system is hard to measure. Leaflets are available but people who read them do not take them away, and it is not possible to follow up to see if they are using the system.

### **Challenges and lessons learned**

Hospital staff did not adapt to the system readily. They complained about the time needed to fill the bottles, even though it only took a few minutes to do, and tried to pass the responsibility to others. Instead, they used healthcare facility funds to purchase treated water, although this was not permitted. It took a lot of effort to change their habits.

One challenge of changing habits in the community is that people are used to drinking contaminated water and may not see the need to change their ways.

### **Next Steps**

A fifty bed hospital is being built nearby by the same organizations responsible for the day care center. Safe water is a priority for that facility too. The hospital will continue to educate others about the SODIS system whenever the opportunity arises.

### **Demographic information**

Gunjaman Singh Hospital, Pithuwa-3, Chitwan, Nepal, is an independent non-profit day care centre, funded by NGOs and private donation. Gunjaman Singh Hospital has 50 – 70 patients daily and has 10 staff members (including two Nepali doctors). Mostly of the time there is also a volunteer doctor or another specialized person from Switzerland there to give trainings to the staff.

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