World Health Organization

Best Practice Safety Protocols
Clinical Procedures Safety

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Ethics – Patient Consent

Before performing a procedure, it is important to receive consent from the patient:

- ask permission to make an examination
- explain what you intend to do before doing it
- ask the patient if he/she has questions & answer them
- check that the patient has understood
- obtain permission to proceed; and
- be mindful of the comfort and privacy of others

With invasive and surgical procedures, it is particularly important to explain fully:
– what are you proposing?
– what are your reasons for wishing to undertake the procedure?
– what you hope to find or accomplish?

Ensure that you:

- use language that can be understood
- draw pictures and use an interpreter, if necessary
- allow the patient and family members to ask questions
- think about what you have said

It may be necessary to consult with a family member or community elder who may not be present; allow for this if the patient's condition permits.

If a person is too ill to give consent (for example, if unconscious) and their condition will not allow further delay, you should proceed, without formal consent, acting in the **best interest** of the patient.

Record your reasoning and plan.

Informed consent means that:
– patient and the patient's family understand what is to take place,
– including the potential risks and complications of both proceeding and not proceeding, and
– have given permission for a course of action**.**

Some hospitals require patients to **sign a document** indicating that the surgical procedure and potential complications have been explained and that permission to proceed has been granted.
This paper is then included in the patient's record. If this is not a formal requirement in your hospital, **document the conversation** in which consent was given and include the names of people present at the discussion**.**

• It should be a choice made **free from coercion.**

• Our duty as professionals to provide service and care can come into conflict with our personal opinions. It is important to be aware of these feelings when they occur and to understand where they are coming from**.**

• If we are asked to care for someone who is alleged to have committed a crime, it is not our responsibility to administer justice.

Be attentive to legal, religious, cultural, linguistic and family norms and differences.

• However, it ***is*** **our responsibility to provide care**.
This can be difficult, but it is important to recognize that**:**
– Our job is not to judge, but to provide care to all without regard to social status or any other considerations.
– By acting in this way, we will be seen to be fair and equitable by the community we serve.

Record Keeping

- **Admission note/preoperative note**
- **Operating room records usually includes:**
- Patient identity
- Procedure performed
- Persons involved
- Complications
- **Delivery book**
- **The operative note**
- **Postoperative notes** can be organized in the
  - **"SOAP"** format:
  - **S**ubjective: how the patient feels
  - **O**bjective: findings on physical examination, vital signs and laboratory results
  - **A**ssessment: what the practitioner thinks
  - **P**lan: management plan, this may also include directives which can be written in a specific location as "orders".
- **Discharge note:** record:
  – Admitting and definitive diagnoses
  – Summary of patient's course in hospital
  – Instructions about further management as an outpatient, including any medication and the length of administration and planned follow-up

Operating Room (OR)

The operating theatre is a room specifically for use by the anaesthesia and surgical teams and must not be used for other purposes.

O.R. requires:

- Good lighting and ventilation
- Dedicated equipment for procedures
- Equipment to monitor patients, as required for the procedure
- Drugs and other consumables for routine and emergency use

Keep all doors to the O.R. closed, except as needed for the passage of equipment, personnel and the patient;

Ensure that procedures are established for the correct use of the O.R. and all staff is trained to follow them:

- Keep to a minimum the number of people allowed to enter the O.R. especially after an operation has started
- Keep O.R. uncluttered and easy to clean
- Store some sutures and extra equipment in the O.R. to decrease the need for people to enter and leave the O.R. during a case
- Between cases, clean and disinfect the table and instrument surfaces
- At the end of each day, clean the O.R.: start at the top and continue to the floor, including all furniture, overhead equipment and lights, use a liquid disinfectant at a dilution recommended by the manufacturer
- Sterilize all surgical instruments and supplies after use and store them protected and ready for the next use.

Sponge and Instrument Counts

It is essential to keep track of the materials being used in the O.R. in order to avoid inadvertent disposal or the potentially disastrous loss of sponges and instruments in the wound.

It is standard practice to count supplies (instruments, needles and sponges)

- Before beginning a case
- Before final closure
- On completing the procedure

Aim is to ensure that materials are not left behind or lost. Pay special attention to small items and sponges.

Create and make copies of a standard list of equipment for use as a checklist to check equipment as it is set up for the case and then as counts are completed during the case.

Include space for suture material and other consumables added during the case.

When trays are created with the instruments for a specific case, such as a Caesarean section, also make a checklist of the instruments included in that tray for future reference.

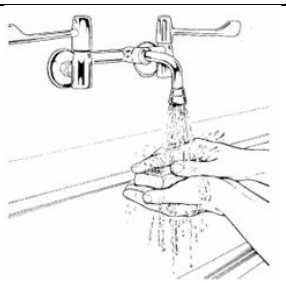
Leave the O.R. ready for use in case of an emergency

Hand washing techniques

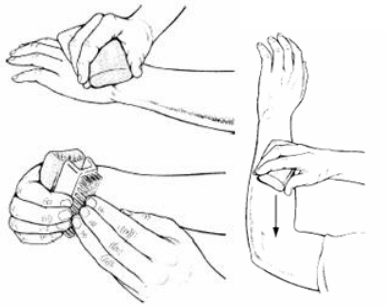
WHEN SCRUBBING

Remove jewellery and trim the nails

Use soap, a brush (on the nails and fingertips) and running water to clean thoroughly around and underneath the nails

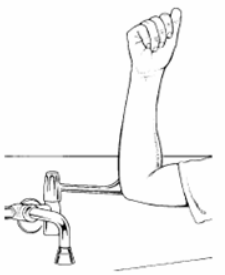


Scrub your hands and arms up to the elbows



After scrubbing, hold up your arms to allow water to drip off your elbows

Turn off the tap with your elbow



AFTER SCRUBBING

Dry your hands with a sterile towel and make sure the towel does not become contaminated

Hold your hands and forearms away from your body and higher than your elbows until you put on a sterile gown and sterile gloves

Always wash your hands after removing your gloves

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Scrubbing and gowning

- Before each operation, all members of the surgical team – that is, those who will touch the sterile surgical field, surgical instruments or the wound – should scrub their hands and arms to the elbows.
- Scrubbing cannot completely sterilize the skin, but will decrease the bacterial load and risk of wound contamination from the hands.
- Every hospital should develop a written procedure for scrubbing that specifies the length and type of scrub to be undertaken.
- It is usual that the first scrub of the day is longer (minimum 5 minutes) than any subsequent scrubs between consecutive clean operations (minimum 3 minutes).
- Surgical gloves prevent transmission of HIV through contact with blood, but there is always the possibility of accidental injury and of a glove being punctured.
- Promptly change a glove that has been punctured during an operation and rinse your hand with antiseptic or re-scrub if the glove has leaked during the puncture.
- Patient safety is of primary concern; do not compromise it.
- Change your gloves only when it is safe for the patient.

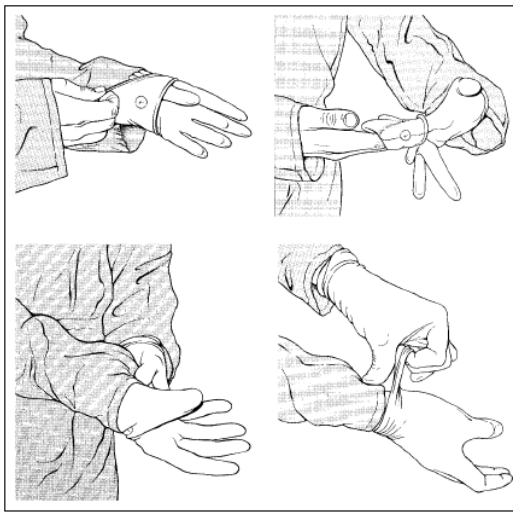

Figure 2.5

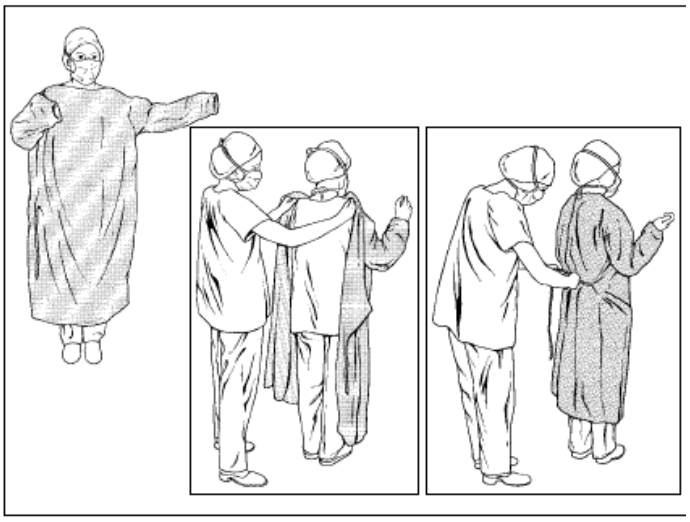

Figure 2.6

HIV Prevention Protocols

Take care of your patients, your co-workers and yourself:

- Do not recap needles
- Set up sharps containers in the places where you use sharps; the further you have to move to dispose of a sharp the greater the chance of an accident
- Do not use the same injection set on more than one patient
- Dispose of your own sharps
- Pass needles, scalpels and scissors with care and consideration

Several points of aseptic routine applicable to members of the surgical team are also particularly relevant to the prevention of transmission of HIV:

- Protect areas of broken skin and open wounds with watertight dressings
- Wear gloves during exposure to blood or body fluids and wash your hands with soap and water afterwards
- Wash immediately with soap and water in case of skin exposure or contamination, whether from a splash, glove puncture or non-gloved contact
- Wear protective glasses where blood splashes may occur, such as during major surgery; wash out your eyes with water as soon as possible if they are splashed
- Wear a protective gown or apron if splash potential exists;
- Clean blood spills immediately and safely.

Infection Prevention and Universal Precautions

Hand washing is the single most important measure for prevention of infection
Hand washing, the use of barrier protection such as gloves and aprons, the safe handling and disposal of "sharps" and medical waste and proper disinfection, cleaning and sterilization are all a part of creating a safe hospital.

Key Points

1. A safe injection does not harm the recipient, does not expose the provider to any avoidable risk and does not result in any waste that is dangerous for other people.

2. Use a sterile syringe and needle for each injection and to reconstitute each unit of medication.

3. Ideally, use new, quality controlled disposable syringes and needles.

4. If single-use syringes and needles are unavailable, use equipment designed for steam sterilization.

5. Prepare each injection in a clean, designated area where blood or body fluid contamination is unlikely.

6. Use single-dose vials rather than multi-dose vials.

7. If multi-dose vials must be used, always pierce the septum with a sterile needle; avoid leaving a needle in place in the stopper of the vial. Once opened, store multi-dose vials in refrigerator.

Waste disposal in clinical procedures

It is essential for the hospital to have protocols to deal with biological waste and contaminated materials. All staff must be familiar with them and follow them.

- All **biological waste** must be carefully stored and disposed of safely.
- **Contaminated materials** such as blood bags, dirty dressings and disposable needles are potentially hazardous and must be treated accordingly.
- If biological waste and contaminated materials are not disposed of properly, staff and members of the community could be exposed to infectious material and become infected.
- Disposal of **bio hazardous materials** is time consuming and expensive, so it is important to separate non-contaminated material such as waste paper, packaging and non-sterile but not biologically contaminated materials. **(Only 15% to 20% of medical wastes are considered infectious).**

Make **separate disposal containers** available where waste is created so that staff can sort the waste as it is being discarded. **A three colour coding system** with **black** for non-infectious waste, **red or yellow** for infectious and **yellow** for sharps is recommended.

Organize things in a way to discourage the need for people to be in contact with contaminated waste.

- All infected waste should then be treated by **steam sterilization or high temperature incineration** equipped with emission control devices. Whenever feasible, plastic material such as syringes or blood bags should not be incinerated.
- Burying waste is the only option in some areas where not controlled landfill exists. If this is the case, you should do as much as possible to protect the burying site to prevent access and to avoid environmental pollution, especially for underground water sources.
- Prior to burying, for safety **infected waste can be disinfected** by soaking in a 0.5% hypochlorite solution for at least 30 minutes.

Do not mix waste **chemicals**, unless you are certain that a chemical reaction will not take place. This is essential to prevent any unwanted or dangerous reactions between the chemicals, which could endanger laboratory staff.

Always follow local guidelines on the disposal of waste chemicals to avoid any chemical contamination of the surrounding land or water supply.

Provide a **safe system for getting rid of disposable items** such as scalpel blades or needles. The risk of injury with sharp objects increases with the distance they are carried and the amount they are manipulated.

A container for the **safe disposal of sharp objects** should be:

- Well labeled
- Puncture proof, Watertight
- Break resistant (a glass container could break and provide a serious hazard to the person cleaning up)
- Opening large enough to pass needles and scalpel blades, but never large enough for someone to reach in
- Secured to a surface, such as a wall or counter, to ensure stability during use
- Removable for disposal

These containers must then be disposed of safely. ***(They can be steam sterilized, then shredded and disposed of to a controlled land fill with municipal waste, encapsulated in a pit or any other options according to national protocols approved by the public health department and ministry of environment.)***

Health-care workers and waste handlers should wear protective equipment such as gloves, apron, mask and be immunized against HBV.

A budget line for a safe waste management should be systematically included when planning a medical activity.

References
1. WHO Surgical Care at the District Hospital Manual 2003
2. WHO Management of Solid Health-Care Waste at Primary Health-Care Centres : a decisionmaking guide 2005

Transportation of critically ill patients

Transporting patients is **risky**. It requires good communication, planning and appropriate staffing.
Any patient who requires transportation must be effectively **stabilized** before departure.
As a general principle, patients should be transported only if they are going to a facility that can provide a **higher level of care**.

- **Planning and preparation include consideration of:**
  - Type of transport (car, lorry, boat, etc.)
  - Personnel to accompany the patient
  - Equipment and supplies required en route for routine and emergency treatment
  - Potential complications
  - Monitoring and final packaging of the patient

- **Effective communication is essential with:**
  - The receiving centre
  - The transport service
  - Escorting personnel
  - The patient and relatives

- **Effective stabilization necessitates:**
  - Prompt initial resuscitation
  - Control of hemorrhage and maintenance of the circulation
  - Immobilization of fractures
  - Analgesia

- **Remember, if the patient deteriorates**
  - Re-evaluate the patient by using the primary survey
  - Check and treat life threatening conditions
  - Make a careful assessment focusing on the affected system

Be prepared: if anything can go wrong, it will – and at the worst possible time!