PHOTOTHERAPY

Phototherapy is most often an effective and safe treatment for neonatal jaundice (see "Neonatal Jaundice" guideline)

Preparations
- Make sure the environment is warm enough
- Educate the mother about neonatal jaundice (NNJ) and phototherapy, and reassure her
- Obtain consent from the mother
- Undress the baby, removing blankets, clothing and nappy
- Ensure distance between baby and lights is ± 35cm
- Do not smear the baby’s skin with vaseline
- Place a nappy under the baby
- Cover the baby’s eyes, then put him/her under the lights

Ensure effectiveness of phototherapy
- Remove the baby from the lights only for breast feeding (remove eye shields), and as briefly as possible
- Limit separation of the baby and the mother, if possible nursing baby with the mother
- Use biliblanket (if available) for double lights
- Turn lights off when taking “flash” or TSB
- Change the baby’s position 3 hourly
- Change lights after 1000 hours

Prevent complications
a. Prevent hypothermia and hyperthermia
   - Check temperature 3 hourly, at the same time when the baby is fed
   - Note signs of hypothermia and hyperthermia
b. Prevention of dehydration
   - Check for dehydration, observing skin turgor, perfusion, fontanelles and activity
   - Report any changes in the above.
   - Encourage fluids - increase daily fluid requirement by 30 ml/kg/day
   - Do not give clear fluids as a supplement, e.g. glucose water, rather feed the baby 3 hourly
   - Breast feeding must be encouraged but if TSB levels are climbing get mother to express and feed via cup/NGT to ensure baby stays under lights as much as possible
   - Weigh the baby daily
   - Monitor blood glucose (HGT) 6 hourly
   - Give neonatalyte if HGT is dropping
c. Prevent damage to the eyes
   - Clean eyes with sterile saline 3 hourly
   - Protect eyes with eye shields. Ensure that the shield does not obstruct the nose or mouth. It must fit securely over the eyes and head ensuring the eyes are effectively shielded

Monitor carefully
a. Monitor elimination
   - Record passing of stools and note the consistency
   - Observe for diarrhoea and increase fluids if necessary
   - Ensure baby is passing good amounts of urine - at least one wet nappy per feed
   - Monitor urine dipstix 6 hourly: must maintain SG ≤ 1010
b. Monitor for signs of kernicterus
   - Note signs of hypotonia, lethargy, decreased sucking, abnormal Moro, irritability and opisthotonus
   - Check TSB daily. Refer to secondary / tertiary hospital early if levels continue to rise and an exchange transfusion may be needed

If baby is discharged within first 3 days of life, ensure mother is informed about signs of jaundice. Encourage her to return early to clinic or hospital especially if baby becomes lethargic and won’t drink.

If possible, screen babies prior to discharge using a flash bilirubinometer