#### SCHEDULE IV [See regulation 29(1)(f)]

## MEDICAL TEST FOR CHILDREN ADMITTED INTO INSTITUTIONS

# (1) Medical test for a child admitted into an institution can be broadly divided into two categories:

- (a) To diagnose an illness/ condition that requires specific treatment, and thus testing would help in restoring the health of the child.
- (b) To diagnose an illness/ condition of a nature that implies that the child will require special attention (medical and parental) beyond what a normal child needs, and therefore the family that adopts him/ her should be aware of the condition.

#### (2) Following shall be considered while conducting the medical test:

- (a) The interest of the child has to be foremost.
- (b) If the test results warrant further testing, specific therapy or consultation with specialists, should be undertaken by the agency/ institution where the child is staying.

#### (3) Medical Tests for different age groups:

#### A. Newly born:

- (a) Preterm newborns or those newborns weighing <2000g at birth or admission should be evaluated by a specialist neonatologist or paediatrician. These babies should undergo screening for Retinopathy of prematurity.
- (b) Screening for hypothyroidism by thyroid function test (T4,TSH)
- (c) Hearing screening: Otoacoustic Emissions (OAEs) or Brain stem evoked response audiometry (BERA)
- (d) Screening for critical congenital heart disease: Pulse oximetry
- (e) HBsAg

If any of these screening tests is abnormal, further confirmatory tests and specialists' opinion should be **mandatory**, before labelling the child as special need.

## B. Infants between 1 month to 1 year of age

- (a) Infants should be evaluated by a pediatrician
- (b) Screening for hypothyroidism by thyroid function test (T4,TSH)
- (c) Hearing screening: Otoacoustic emission (OAE) or Brain stem evoked response audiometry (BERA)

- (d) Complete blood count, liver function test and renal function test (CBC, LFT and RFT)
- (e) HIV testing in children older than 4-6 weeks of age
- (f) HCV testing in children older than 3 months of age
- (g) HBsAg

If any of these screening tests is abnormal, further confirmatory tests and specialists' opinion should be **mandatory**, before labelling the child as special need.

#### C. Age 1-3 years and more than 3 years

(a) In high risk areas (central and western states of India and tribal populations), screening for sickle cell anaemia is advised by complete blood count and either of these-haemoglobin electrophoresis or solubility testing for haemoglobin S or isoelectric focusing or high-performance liquid chromatography (HPLC).

If a child is found to be a carrier/trait for beta thalassemia or sickle cell anaemia on screening, he or she is unlikely to be affected or have transfusion requirement, and hence should not be considered as special need.

- (b) HIV Procedure for diagnosis in infants and children below 18 months of age:-
  - (i) HIV serological testing is used for the diagnosis of HIV in adults and children above 18 months of age.
  - (ii) Serological tests are not reliable and difficult to interpret in infants and children below 18 months of age because of passage of maternal HIV antibody across the placenta.
  - (iii) In children younger than 18 months, diagnosis of HIV infection is based on: a positive virological test for HIV or its components (HIV RNA or HIV DNA or ultrasensitive [Us] HIV p24 Ag) confirmed by a second virological test performed on a separate specimen taken more than 4 weeks after birth.
  - (iv) The WHO guidelines strongly recommend that all HIVexposed infants have HIV virological testing at 4–6 weeks of age or at the earliest opportunity thereafter.

- (v) If the child is older than 9 months, an HIV serological test is recommended prior to any virological testing, and a virological test should be performed for those with a reactive HIV serological test.
- (vi) In the non-breastfed or never-breastfed infant, a negative serological test result at or above the age of 9 months can be used to rule out HIV infection.
- (vii) In infants with an initial positive virological test result, it is strongly recommended that antiretroviral therapy (ART) be started without delay and, at the same time, a second specimen collected to confirm the result.
- (viii) All the infants with unknown or uncertain HIV exposure being seen in health-care facilities at or around birth or at the first postnatal visit (usually 4–6 weeks), or other child health visit, have their HIV exposure status ascertained.
- (ix) If the infant is seen <72 hrs after the delivery and HIV exposure is identified, post-exposure prophylaxis (PEP), counselling on safe breastfeeding and an HIV virological test at 4-6 weeks is recommended.
- (x) For infants first seen at 4-6 weeks or the earliest thereafter and in whom HIV exposure is documented, HIV virological testing should be performed and the mother should receive safe infant-feeding counselling.
- (xi) A negative HIV serological test in the mother does not per se exclude HIV exposure; the possibility of very recent incident infection of the mother during this pregnancy should be kept in mind.

In infants and children less than 18 months of age, a positive HIV serological test confirms HIV exposure but cannot definitively diagnose HIV. HIV serological testing can be used to exclude HIV infection.

- (c) HCV diagnosis in infants and children:-
  - (i) Hepatitis C infection (HCV) is a chronic viral infection of the liver that affects 1-2% of adults and about 0.15 to 0.4% of children and adolescents.

- (ii) In children, the infection is mostly acquired from mothers (vertical transmission).
- (iii) Screening is by testing for HCV antibody in blood. The mother's HCV antibody crosses the placenta and can stay in the blood of an infant for up to 18 months. Thus the anti-HCV antibody test cannot be done to screen for HCV in infants <18 months of age.</p>
- (iv) The American Academy of Pediatrics (AAP) recommends testing with antibody test after 18 months of age in high-risk children. Positive antibody test should be confirmed by HCV-PCR.
- (v) If the baby is born to a known HCV positive mother (or in babies in adoption homes), testing with the HCV-PCR can be done. This should be done after 3 months of age due to a high rate of temporarily positive tests in infants under 3 months of age. Two negative HCV-PCR tests separated by at least 2-3 months are needed to confirm that there is not an infection with the hepatitis C virus.
- (d) HBsAg
- (e) CBC, LFT and RFT

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