**Table 1- Reliability of checklist on IV drug administration** (Part-1) (**N=30)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Items** | **Scale Mean if Item Deleted** | **Corrected Item-Total Correlation** | **Cronbach's Alpha if Item Deleted** |
| Selects appropriate **Supplies and Articles** to prepare tray | | | |
| Compartment tray  Hand sanitizer  Burette (Paediatric Drip set (PD set)  Dilution solutions  Kidney tray  Chlorehexidine/ spirit swabs  Clean or sterile gloves (if required)  Paper bag  Sterile additional pack | 4.80  4.80  4.97  4.80  5.63  4.80  5.17  5.70  5.47 | .589  .589  .464  .589  .224  .589  .398  .407  .471 | .702  .702  .703  .702  .745  .702  .730  .714  .706 |
| **At the time of drug preparation** | | | |
| Check for any pre-medication before medication administration  Asks the parents about any medication allergies and the child’s former responses to drug  Opens additional pack and open a sterile syringe into the opened sterile pad  Cleans the cap of vial with spirit swab and let dry the cap  Withdraws the needle and syringe and keep them on sterile pack.  Keeps the filled syringe in sterile pack and takes it to the child without showing the needle | 6.20  6.57  6.87  6.27  6.87  6.87 | .187\*  .516  .859  .455  .859  .859 | .887  .876  .852  .877  .852  .852 |
| **At the time of drug administration** | | | |
| Explains the procedure to the child /parents clearly using appropriate language and take consent from parents to administer drug to the child  Asks the parents about any known medication allergies  Keep a dry swab under the cannula hub  Cleans the white stopper of cannula  Keeps the white stopper on a sterile additional pad  Cleans the cannula hub with squeezed Chlorehexidine/spirit swab  Observes vitals of the child carefully during & after administration  Uses divertional technique while administration of drug to the child during  Stops injection of the medicine if the child suddenly becomes lethargic or hyperactive | 6.33  6.37  6.77  6.20  6.87  6.30  12.90  12.73  13.47 | .473  .326  .721  .318  .859    .367  .921  .409  .185\* | .877  .886  .861  .883  .852  .882  .950\*\*  .946  .953\*\* |

* + Overall scale mean is 26.50
  + Overall reliability is .947 (standardised Cronbach’s alpha)
  + \* Items in the tool which shows item to total correlation <0.2
  + \*\* Items in the tool whose Cronbach's Alpha value increased if Item deleted

**Table 1- Reliability of checklist on IV drug administration (Part-2) (N=30)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Items** | **Scale Mean if Item Deleted** | **Corrected Item-Total Correlation** | **Cronbach's Alpha if Item Deleted** |
| **Steps for preparation of drug with Burette (PD set)**  Opens the burette from sterile packing and hang over the IV fluid bottle holder  Primes the burette tubing with 15 ml of infusion solution  Fills the prescribed amount of infusion solution  Cleans the drug inducer port on the burette with spirit/ chlorehexidine swab and let dry it  Injects the prefilled medicine in to the burette and mixed thoroughly with the IV solution by agitating the burette several times  Discards 10 ml solution of primed tubing | 12.80  12.80  12.80  12.80    12.80  12.80 | .953  .953  .953  .953  .953  .953 | .940  .940  .940  .940  .940  .940 |
| **Steps for administration of Infusion via Burette**  Clean the injection port with an alcohol swab and allow drying it.  Insert syringe hub to flush the line with 2 mL normal saline  Check the site again for patency  Attach the primed tubing of burette to the 10 cms extension or direct to the vein cannula  Adjust drip rate to administer the solution at the prescribed rate by the physician  Adds 10-15 NS to flush the drug in drip set | 12.83  12.80  12.80  12.80  12.80  12.80 | .857  .953  .953  .953  .953  .953 | .941  .940  .940  .940  .940  .940 |
| **After drug administration to the child**  Flushes tubing/cannula with 5 ml of normal saline or running IV fluid  Praises the child/ use non-verbal approach for cooperation  Observes the child for 15-20 minutes for any side effects and ask the parents to inform you any untoward sign/symptoms if appear after drug administration  Allow the child to express his or her feeling  Reassures the child that next time will be easier  Stay with child and gives feed back /instruction to the child/parent if required  Reminds/tells the parents about the timings of next dose | 12.93  12.77  13.30  13.27  13.47  13.57  13.57 | .474  .242  .408  .371  .304  .202  .202 | .947  .950\*\*  .948\*\*  .950\*\*  .948\*\*  .948\*\*  .948\*\* |

* + Overall scale mean is 26.50
  + Overall reliability is .947 (standardised Cronbach’s alpha)
  + \* Items in the tool which shows item to total correlation <0.2
  + \*\* Items in the tool whose Cronbach's Alpha value increased if Item deleted