

APPENDIX B

Procedure for Taking Body Measurements

A room was selected in the Home for Crippled Children where the body measurements could be taken.

Instruments and Garments Used

Weighing scale, stainless steel linear scale, measuring tape, L-scale, silver chain, marking pencil, protractor and black string.

Garments: The upper measurements were taken over banyan or vest and lower measurements were taken over a knitted hosiery cotton well fitted panty.

Locating the Body Landmarks and Measuring the Subject:

For locating all the landmarks and for taking the measurements each subject was asked to stand erect on a flat surface. The landmarks on the body were marked with small crosses.

The following landmarks were located on the body before the subject was actually measured.

Front neck base point, cervical point, highest shoulder point, armpit base, side seam line, waist level, hip level, mid thigh, knee level, ankle level, armpit on arm, wrist level.

After all the landmarks had been placed on the body and all the levels marked, the measurements were taken by the investigator and recorded in centimeters.

1. Weight: The weighing scale was checked for accuracy. The subject was asked to stand on the centre of the scale. The weight was recorded in kilograms.
2. Standing height: The measurement was taken against a firm smooth wall. The child was asked to stand erect touching the wall.
3. Circumference of the head: The head circumference was measured by passing the centimeter tape over occipital protuberance posteriorly and just above the supracbital ridges anteriorly to get the maximum circumference.
4. Round neck at base: One end of the chain was placed on the centre of the neck base and the other was taken around the back neckline base touching the back cervical point and meeting the front neck base. At this point the chain was held between the thumb and forefinger. It was then removed and placed straight on a linear scale to get the measurements of the neck base circumference.

5. Right shoulder width:

&

6. Left shoulder width:

The zero point of the tape was placed at the right highest shoulder point and the tape taken across the shoulder line till the lowest shoulder point. This measurement gave the right shoulder width. The left shoulder width was measured in the same manner as right shoulder.

7. Shoulder tip to shoulder tip (back): The measurer stood behind the subject. The zero point of the tape was placed at the lowest right shoulder tip point and then across the back neck to the left shoulder lowest tip point and the readings were recorded.

8. Posterior arm length (straight): The subject was made to hold the hand straight downwards. The zero point of the tape was placed on the lowest shoulder point and was taken vertically downwards to the wrist level and the readings recorded.

9. Posterior arm length (bent): The subject was asked to bend the arm and to place the hand in level with the waist. The zero point of the tape was placed on lowest shoulder tip point and passed over the elbow to the wrist level. The reading was then recorded.

10. Total armscye: The subject was asked to raise the arm sideways. One end of the chain was placed at the lowest shoulder point and the chain was taken around the front armscye to the armpit point. From there onwards the chain was taken around the back armscye to meet the previous end at the lowest shoulder point. At this point the chain was held between the thumb and forefinger. It was then removed and placed over the linear scale to get the total armscye measurement.
11. Round arm at armpit level: The zero point of the tape was placed on the outer side of the arm at the armpit level on arm and taken around the arm to the starting point zero of the tape and reading was recorded.

Front lengths

12. Centre front neck base to waist: The tape at the zero point was placed at the centre front neck base and taken vertically downwards to the waist level and the readings were recorded.

For all the length measurements in the front the zero point of the tape was placed at the highest shoulder level. The tape was taken vertically downwards and the readings were noted for the various lengths.

13. Highest shoulder to armpit level:

14. Highest shoulder to waist level:
15. Highest shoulder to crotch level:

Back lengths

16. Centre back cervical to waist: The tape at the zero point was placed at the cervical and taken vertically downwards to the waist level and the readings were recorded.
17. Highest shoulder to waist level:
18. Highest shoulder to crotch level:

Side measurement

19. Side length from waist to mid thigh: The zero point of the tape was placed at the waist level and taken down vertically to the mid thigh and the reading was recorded.
20. Side length from waist to knee: The zero point of the tape was placed at the waist level and taken down vertically to the knee level and the reading was recorded.
21. Side length from waist to ankle: The zero point of the tape was placed at the waist level on the side seam line and taken down vertically to the ankle bone and the reading was recorded.

22. Inside length from crotch to ankle: The zero point of the tape was placed at the crotch level on the inside of the leg and taken down vertically till the ankle bone and the reading was recorded.
23. Crotch length (sitting) waist to chair: The subject was asked to sit erect on the chair with legs held down straight. The hands were made to rest gently on the thighs. The steel linear scale was held vertically along the side of the body and the reading was recorded in centimeters from the level of the chair to waist level.

Girths

24. Total girth at chest: The tape was placed on the right side seam line and taken across the front and stretched across the back to the right side seam line from behind, the entire tape reading was recorded as the total chest girth.
25. Total girth at armpit level: The tape was placed on the right side seam line at level and was taken across the front, passed through, on the left side seam line, and taken across the back and brought to the previous point. This was the total girth at armpit level.

26. Total girth at waist level: The zero of the tape was placed on the right side seam at the waist level taken across the front, passed through on the left side seam and brought back after taking across the back. This reading was recorded for the total girth at waist level.
27. Total girth at hip level: The zero point of the tape was placed on the right side seam line and taken across the front, passed through on the left side seam line, brought back to right side seam. This reading was recorded for total girth at hip level.
28. Round thigh at crotch level: The zero point of the tape was placed on the right side seam line and was taken around the thigh and was brought back to the starting point. This reading was recorded.
29. Round mid thigh: The zero point of the tape was placed on the right side seam line and was taken around mid thigh and brought back to the starting point. This reading was recorded.
30. Round knee: The zero point of the tape was placed on the right side seam line and was taken around the knee and brought back to the starting point. This reading was recorded.

ScheduleBackground information

1. Name of the child :
2. Permanent address :
3. Age :
4. Sex : Male _____ Female _____
5. Disability :
6. Appliance :
7. Cause :
8. Occupation :

Body measurements

1. Weight :
2. Height :
3. Circumference of the head :

Neck

4. Round neck at base :

Shoulder

5. Right shoulder width :
6. Left shoulder width :
7. Shoulder hip to shoulder tip :
(back) :

Arm

- | | |
|---------------------------------|---|
| 8. Posterior arm length - | : |
| straight | : |
| 9. Posterior arm length - | : |
| bent | : |
| 10. Total armscye | : |
| 11. Round arm at armpit level | : |
| 12. Round arm 3-5 cms below the | : |
| armpit level | : |

Front lengths

- | | |
|--------------------------------|---|
| 13. Centre front from neckbase | : |
| to waist in position | : |
| 14. Highest shoulder to armpit | : |
| level | : |
| 15. Highest shoulder to waist | : |
| level | : |
| 16. Highest shoulder to crotch | : |
| level | : |

Back lengths

- | | |
|--------------------------------|---|
| 17. Centre back cervical to | : |
| waist in position | : |
| 18. Highest shoulder to waist | : |
| level in position | : |
| 19. Highest shoulder to crotch | : |
| level | : |

Side measurements

- | | |
|-------------------------------|---|
| 20. Side length from waist to | : |
| mid thigh | : |
| 21. Side length from waist to | : |
| knee | : |

- 22. Side length from waist to ankle :
- 23. Inside length inner crotch to ankle :
- 24. Crotch length sitting waist to chair :

Girths

- 25. Chest girth - 1) Front :
- 2) Total :
- 3) Back :
- 26. Total girth at armpit level :
- 27. Total girth at waist level :
- 28. Total girth at hip level :
- 29. Round thigh at crotch level :
- 30. Round mid thigh :
- 31. Round knee :
- 32. Length - 1) Shirt :
- 2) Bush-shirt :
- 33. Sleeve length - 1) Half :
- 2) Full :
- 34. Round sleeve :
- 35. Short's length :
- 36. Trousers' length :
- 37. Round leg - 1) Shorts :
- 2) Trousers :
- 38. Blouse length :
- 39. Skirt length :
- 40. Dress length :