

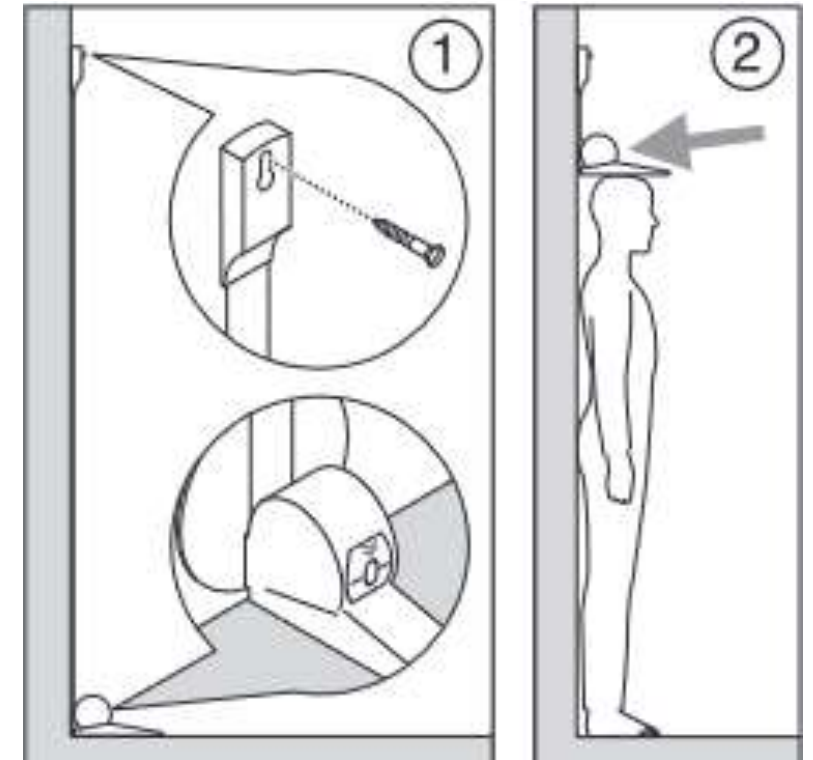
Role of Nursing officers for Client assessment

Client assessment

1. History
2. Physical examination
 - Height
 - Weight
 - BMI
 - Waist Circumference
 - Waist to height ratio
 - Visual acuity
 - Breast Examination
 - Oral examination
3. Biochemical examination

Measuring Height - Preparation

- Select a suitable wall to place the stadiometer
 - Flat & smooth wall
- Fix the Stadiometer on the wall.
 - Place the meter on the floor against the wall
 - Pull the tape measure far enough for the zero to line up exactly with the red stripe in the read-off area.
 - Then mark the site of the drill hole on the wall in the upper part of the attachment hole.
 - Attach the end of the tape measure to the wall using the screw supplied.
- Draw a line on the floor underneath the fixed Stadiometer
 - Clients can keep their feet on either side of the line
- Don't remove it after each session

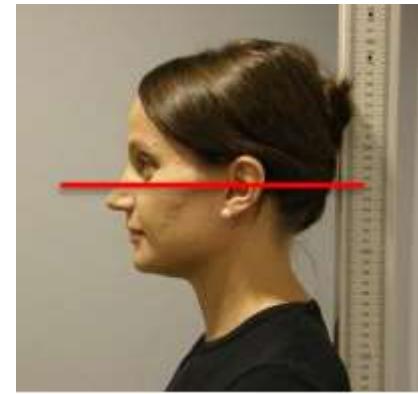


Measuring Height - Preparation

Ask client to;

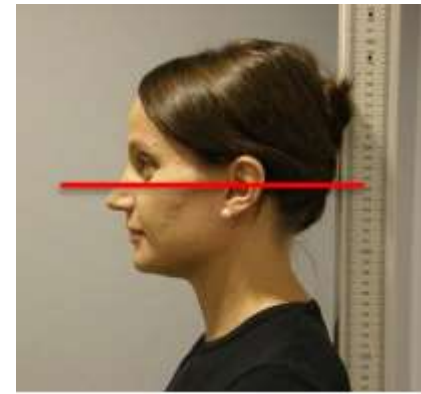
1. Take off shoes, and remove headbands/ ponytail.
2. Stand straight on the stadiometer platform with
 - Feet together
 - Heels against the back board
 - Knees straight
3. Look straight ahead and not look up. (Make sure eyes are the same level as the ears)

Make sure the **heels, back, shoulders, and head** all are touching the wall.



Height measuring technique

- Lower the horizontal arm on the stadiometer till resting on the top of the head. (the hair is pressed flat)
- The reading of the height should be done from **eye level**
- Record the height measurement to the nearest mm.



Weight measuring technique

- Place the scale on a firm, flat surface.

Scale should be calibrated –

Do not place the scales on: • Carpet • Sloping surface • Rough, uneven surface

- Ask the participant to remove their footwear
- Ask the participant to step onto scale with one foot on each side of the scale and
 - stand still
 - face forward
 - place arms on the side and
 - wait until asked to step off



Body Mass Index (BMI)

$$\frac{\text{Weight (kg)}}{\text{Height} * \text{Height (m}^2\text{)}}$$

BMI	Interpretation
BMI <18.5 Kgm ²	Undernourished
BMI 18.5 – 22.9 Kgm ²	Desirable
BMI 23.0 – 24.9 Kgm ²	At risk for overweight
BMI 25 -26.9 Kgm ²	Overweight
BMI 27 -29.9 Kgm ²	Overweight & at risk of obesity
BMI >30 Kgm ²	Obese

Activity 1

- Measure height and weight of a volunteer and calculate the BMI by one measurer
- Others observe the procedure and identify mistakes
- Compare the two BMI values calculated by two measurers

Accuracy of height measurement causes BMI value erroneous

Height (cm)	Weight (kg)	BMI Kg/m ²	
156	62	25.47	
158	62	24.83	

Waist Circumference

The accuracy of waist circumference measurements depends on

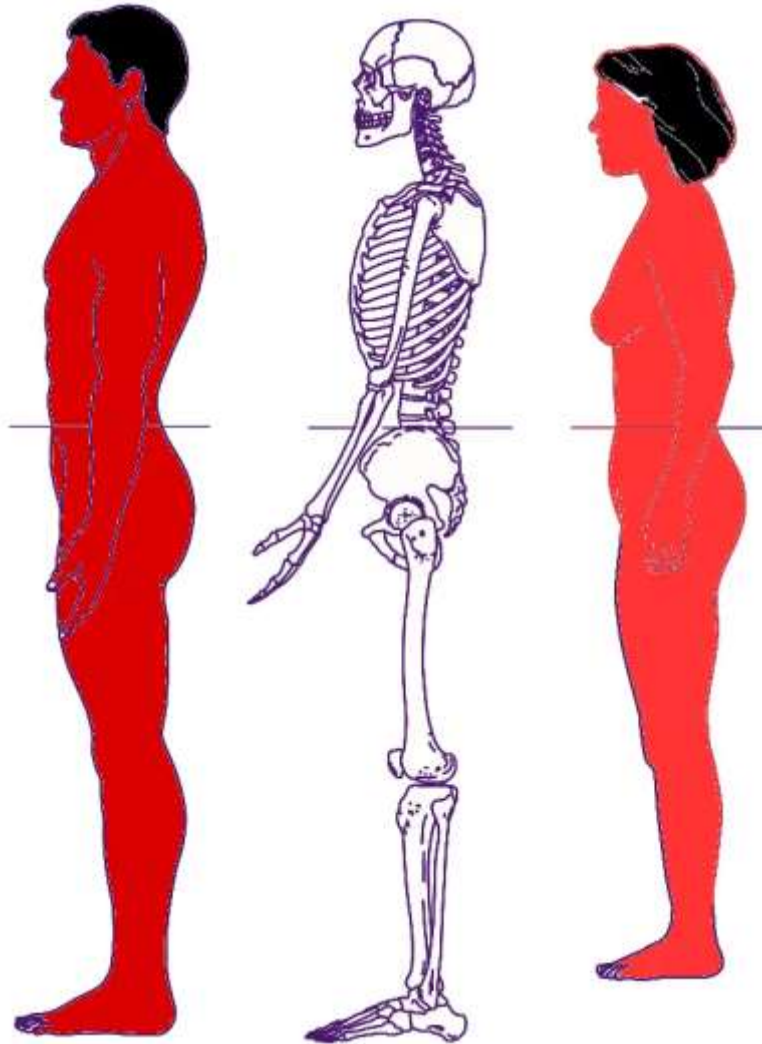
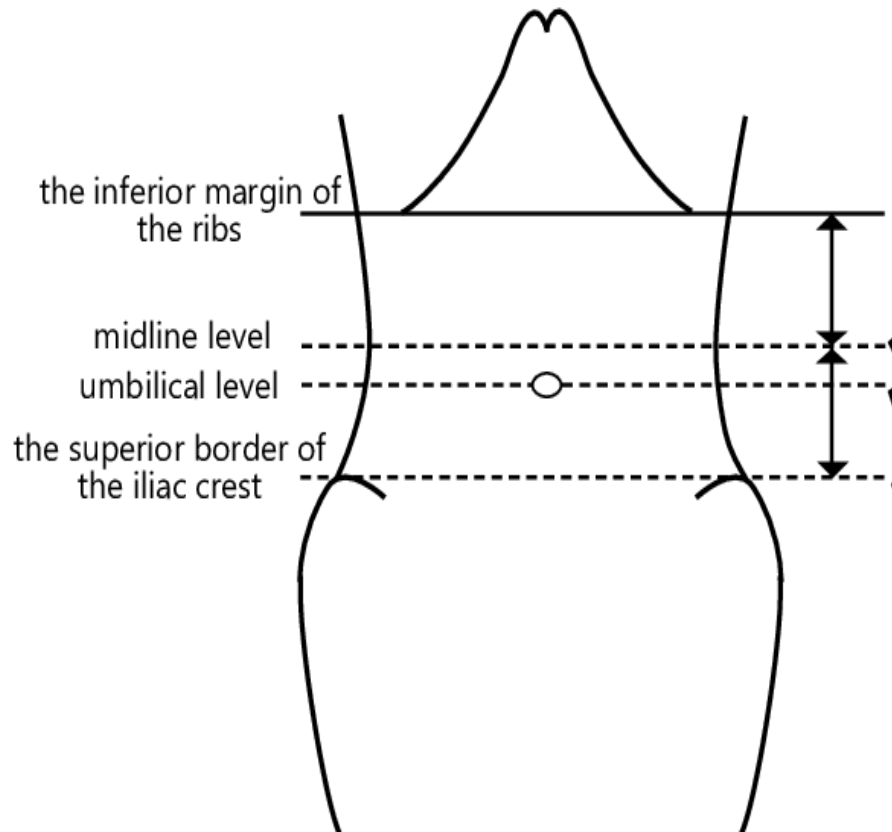
1. Tightness of the measuring tape (**stretch resistant tape**)
2. Client's posture, Phase of respiration and Clothing
3. Correct positioning of the tape (parallel to the floor at the level at which the measurement is made)



Measuring waist circumference

1. Explain the procedure
2. Positioning of the client
 - ✓ Stand with feet close together
 - ✓ Arms at the side
 - ✓ Body weight evenly distributed
 - ✓ Should wear light clothing.

Waist Circumference



Midpoint
between the

lower margin of the
least palpable rib
and
the top of the iliac
crest

using a stretch-
resistant tape

Measuring waist circumference

1. Measure the waist circumference at the level of the mark.
 - Make sure tape is **horizontal around the waist**
 - Keep the tape snug around the waist, but **not compressing the skin**
 - Measure waist just after **breathe out**
2. Take **average the two measurements** taken to the nearest 0.2cm



Abdominal Adiposity According to the Waist Circumference

	MALE	FEMALE
Sri Lankan	≥90 cm	≥80 cm

Waist to height ratio

- Use the following formula to calculate the ratio.

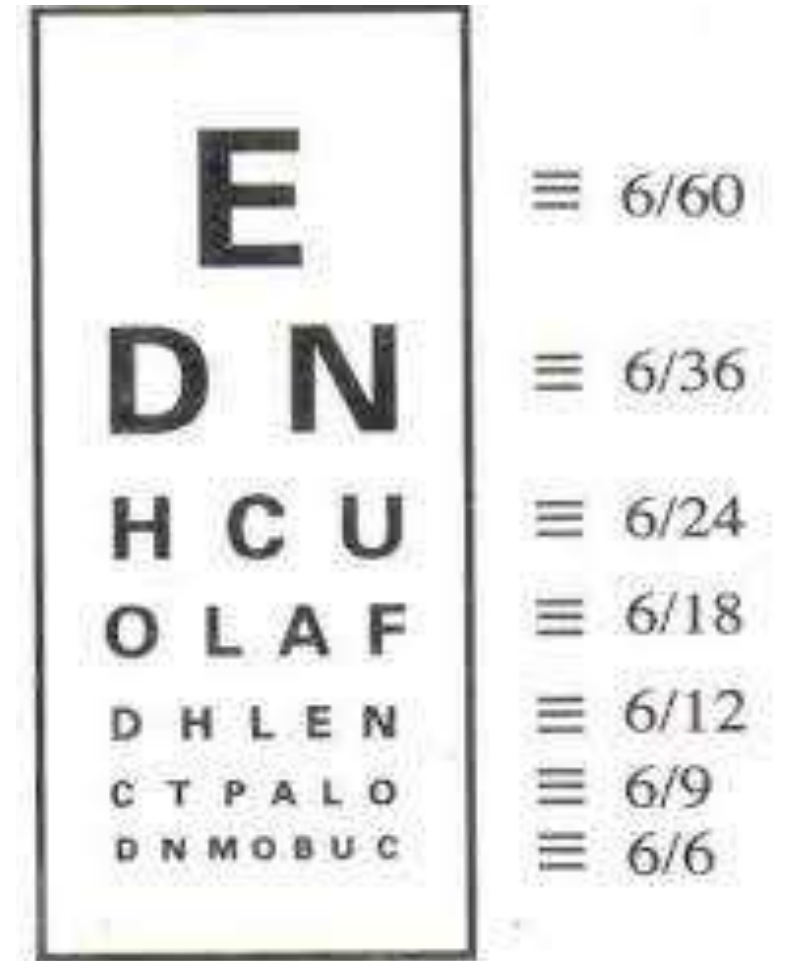
$$\frac{\text{Waist circumference (cm)}}{\text{Height (cm)}}$$

- Example: Waist=72cm, Height=160cm $= 72/160 = 0.45$

Waist to height ratio < 0.5

Visual Acuity-Measure of the resolution power of the eye

- Eg: Ability to differentiate number 6 from number 8.
- If the visual acuity is good this can be done. But if the acuity is poor, 6 may be identified as 8 or 0 or even as a line or dot.
- The Snellen Chart is used in most facilities for testing distance vision They are designed to be read at 6 meters.



Checking Visual Acuity - Preparation

- Place the Snellen chart at **eye level** with **seating/standing** arrangement for the client with **6 meter distance between each other**.
 - Same can be done by allowing to read the **mirror image** of the Snellen chart through a mirror placed in front of the client in **3 meter distance**)
- Ensure **good natural light or illumination on the chart**

Visual Acuity-Procedure

- Ask the patient to wear spectacles if he/she uses normally for distant vision. Reading glasses (magnifiers) should not be worn during distance testing
- Cover one eye with his/her hand (or with a cleaned plain occlude)
- Test each eye separately – the ‘good’ eye first
- Instruct patient to read from the top row to bottom along the chart
- The smallest number line he/she can read (the VA) will be expressed as a fraction, e.g. 6/18 or 6/24 (usually written on the chart).
- The upper number refers to the distance the chart is from the patient (6 meters) and the lower number is the distance in meters at which a person with normal vision should be able to see the chart

Visual Acuity-Documentation

1. Record the VA for each eye in the patient's record, stating whether it is with or without correction (spectacles)

Right VA = 6/18 with correction

Left VA = 6/24 with correction

2. If 6/6 (normal vision) is not achieved, test each eye with a pinhole occlude (plus any current spectacles) and repeat the above procedure at 6 meters.

Visual Acuity-pinhole test

- The use of the pinhole enables assessment of central vision (Because light passes only through the center of the eye's lens, defects in the shape of the lens (errors of refraction) have no effect while the occlude is used).
- If the vision improves, it indicates the visual impairment is due to a refractive error, which is correctable with spectacles.
- Repeat the whole procedure for the second eye.

Summarize the VA of both eyes in the documentation:

L 6/18 with correction (PH 6/9)