

**Research article**

## **Capacity building among frontline health workers (FHWs) in screening for cardiovascular diseases (CVDs): Findings of an implementation study from Bihar, India**

**Neeraj Agarwal<sup>1,†</sup>, CM Singh<sup>2,†</sup>, Bijaya Nanda Naik<sup>2</sup>, Abhisek Mishra<sup>3</sup>, Shamshad Ahmad<sup>2</sup>, Pallavi Lohani<sup>4</sup>, Saket Shekhar<sup>5</sup> and Bijit Biswas<sup>6,\*</sup>**

<sup>1</sup> Community & Family Medicine, AIIMS, Bibinagar, Telangana, India

<sup>2</sup> Community & Family Medicine, AIIMS, Patna, Bihar, India

<sup>3</sup> Community Medicine & Family Medicine, AIIMS, Bhubaneswar, Odisha, India

<sup>4</sup> Community Medicine, Madhubani Medical College & Hospital, Keshopur, Bihar, India

<sup>5</sup> Community Medicine, Rama Medical College Hospital and Research Centre, Kanpur, U.P., India

<sup>6</sup> Community & Family Medicine, AIIMS, Deoghar, Jharkhand, India

\* Correspondence: Email: drbijitbiswas@gmail.com.

† These two authors contributed equally.

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### **Supplementary I. Checklists for various skill ascertainment of FHWs.**

Checklist for availability of logistics for Community Based NCD screening.

Family folder form	Yes [ <input type="checkbox"/> ]	No [ <input type="checkbox"/> ]
CBAC form	Yes [ <input type="checkbox"/> ]	No [ <input type="checkbox"/> ]
Non-stretchable measuring tape	Yes [ <input type="checkbox"/> ]	No [ <input type="checkbox"/> ]
Job-aids for counselling	Yes [ <input type="checkbox"/> ]	No [ <input type="checkbox"/> ]

**Checklist for 1<sup>st</sup> home visit.**

Filled all the details of all family members in the family folder:	Yes [ <input type="checkbox"/> ]	No [ <input type="checkbox"/> ]
Filled CBAC forms for all persons aged $\geq 30$ years:	Yes [ <input type="checkbox"/> ]	No [ <input type="checkbox"/> ]
Informed regarding importance of NCDs:	Yes [ <input type="checkbox"/> ]	No [ <input type="checkbox"/> ]
Informed regarding importance of NCD screening:	Yes [ <input type="checkbox"/> ]	No [ <input type="checkbox"/> ]
Informed regarding modifiable risk factors of NCD:	Yes [ <input type="checkbox"/> ]	No [ <input type="checkbox"/> ]
Informed regarding non-modifiable risk factors of NCD:	Yes [ <input type="checkbox"/> ]	No [ <input type="checkbox"/> ]
Used job-aids (i.e., module) during counselling:	Yes [ <input type="checkbox"/> ]	No [ <input type="checkbox"/> ]
Able to calculate risk score of participants from CBAC form:	Yes [ <input type="checkbox"/> ]	No [ <input type="checkbox"/> ]
Referred all the persons aged $\geq 30$ years for NCD screening:	Yes [ <input type="checkbox"/> ]	No [ <input type="checkbox"/> ]
Prioritised high-risk persons in NCD screening:	Yes [ <input type="checkbox"/> ]	No [ <input type="checkbox"/> ]

**Checklist for follow-up home visit.**

Checked drug compliance of NCD diagnosed patients:	Yes [ <input type="checkbox"/> ]	No [ <input type="checkbox"/> ]
Counselled regarding importance of drug compliance:	Yes [ <input type="checkbox"/> ]	No [ <input type="checkbox"/> ]
Explained importance of follow-up visit to doctor:	Yes [ <input type="checkbox"/> ]	No [ <input type="checkbox"/> ]
Motivated for 150 minutes physical activity or yoga per week:	Yes [ <input type="checkbox"/> ]	No [ <input type="checkbox"/> ]
Motivated for salt restriction in diet:	Yes [ <input type="checkbox"/> ]	No [ <input type="checkbox"/> ]
Motivated for oil restriction in diet:	Yes [ <input type="checkbox"/> ]	No [ <input type="checkbox"/> ]
Used job-aids (i.e., module) during counselling:	Yes [ <input type="checkbox"/> ]	No [ <input type="checkbox"/> ]

**Checklist for logistics availability for weekly NCD clinics.**

Weighing machine	Yes [ <input type="checkbox"/> ]	No [ <input type="checkbox"/> ]
Height measurement tool/ stadiometer	Yes [ <input type="checkbox"/> ]	No [ <input type="checkbox"/> ]
Non-stretchable measuring tape	Yes [ <input type="checkbox"/> ]	No [ <input type="checkbox"/> ]
Blood pressure machine	Yes [ <input type="checkbox"/> ]	No [ <input type="checkbox"/> ]
Glucometer machine	Yes [ <input type="checkbox"/> ]	No [ <input type="checkbox"/> ]
Glucometer strips	Yes [ <input type="checkbox"/> ]	No [ <input type="checkbox"/> ]
Lancet/ needle	Yes [ <input type="checkbox"/> ]	No [ <input type="checkbox"/> ]
Cotton/ alcohol swab	Yes [ <input type="checkbox"/> ]	No [ <input type="checkbox"/> ]
Gloves/ Handwashing facility	Yes [ <input type="checkbox"/> ]	No [ <input type="checkbox"/> ]
Tablet for data entry on NCD portal	Yes [ <input type="checkbox"/> ]	No [ <input type="checkbox"/> ]
Internet connection for data syncing	Yes [ <input type="checkbox"/> ]	No [ <input type="checkbox"/> ]

**Checklist for NCD portal skill.**

Able to open NCD portal	Yes [ <input type="checkbox"/> ]	No [ <input type="checkbox"/> ]
Able to log in on NCD portal	Yes [ <input type="checkbox"/> ]	No [ <input type="checkbox"/> ]
Able to enter family folder in NCD portal	Yes [ <input type="checkbox"/> ]	No [ <input type="checkbox"/> ]
Able to enter CBAC form in NCD portal	Yes [ <input type="checkbox"/> ]	No [ <input type="checkbox"/> ]
Able to sync data in NCD portal	Yes [ <input type="checkbox"/> ]	No [ <input type="checkbox"/> ]
Able to retrieve data in NCD portal	Yes [ <input type="checkbox"/> ]	No [ <input type="checkbox"/> ]
Able to check due-list in NCD portal	Yes [ <input type="checkbox"/> ]	No [ <input type="checkbox"/> ]

**Checklist for weight measurement.**

1. Weighing scale kept at a flat surface: Yes [ ] No [ ]
2. Calibrated the weighing scale: Yes [ ] No [ ]
3. Asked participant to remove heavy objects like shoes, winter clothing's, head gear Yes [ ] No [ ]
4. Asked participant to stand at centre of the scale with slight gap between the feet: Yes [ ] No [ ]
5. Asked participant to look straight: Yes [ ] No [ ]
6. Looked at the reading from above: Yes [ ] No [ ]

**Checklist for height measurement.**

1. Made the participant stand on a flat surface Yes [ ] No [ ]
2. Made the participant stand against the stadiometer or wall Yes [ ] No [ ]
3. Asked participants to remove headgear and shoes: Yes [ ] No [ ]
4. Correctly positioned the participant with 4 points touching the wall or stadiometer:  
(back of head, shoulder, lower back, ankle) Yes [ ] No [ ]
5. Asked participant to look straight with slight gap between the feet: Yes [ ] No [ ]
6. Kept a cardboard or hardboard register above head of the participant: Yes [ ] No [ ]
7. Looked at the reading from above: Yes [ ] No [ ]

**Checklist for waist circumference measurement.**

1. Used non-stretchable measuring tape: Yes [ ] No [ ]
2. Asked participant to stand and look straight with slight gap between two feet: Yes [ ] No [ ]
3. Asked participant to reveal abdominal part or remove heavy clothing: Yes [ ] No [ ]
4. Put the measuring tape at the level of umbilicus: Yes [ ] No [ ]
5. Checked for fit (not too tight, not too loose): Yes [ ] No [ ]
6. Checked alignment of the tape all around the participant: Yes [ ] No [ ]
7. Measured waist circumference at the end of normal exhalation: Yes [ ] No [ ]

**Checklist for blood pressure measurement.**

1. Asked the participant whether they have done following in past 30 minutes:
  - 1.1. Consumed Tea/Coffee Yes [ ] No [ ]
  - 1.2. Smoked Yes [ ] No [ ]
  - 1.3. Heavy exercise Yes [ ] No [ ]
  - 1.4. Consumed alcohol Yes [ ] No [ ]
2. Asked whether the participant need to empty the bladder Yes [ ] No [ ]

3. Position of the participant while measuring:

3.1. Seated	Yes [ ]	No [ ]
3.2. Back supported	Yes [ ]	No [ ]
3.3. Feet resting firmly on the floor	Yes [ ]	No [ ]
3.4. Feet not crossed	Yes [ ]	No [ ]

4. Position of the arm

4.1. Supported from elbow till palm	Yes [ ]	No [ ]
4.2. At the level of the heart	Yes [ ]	No [ ]
4.3. Palm facing up	Yes [ ]	No [ ]

5. Placement of the cuff:

5.1. 2–3 cm/ 2 finger above the antecubital fossa	Yes [ ]	No [ ]
5.2. Covering brachial artery	Yes [ ]	No [ ]
5.3. Edge of the cuff is not restricted by clothing	Yes [ ]	No [ ]
5.4. Checked for fit (not too tight, not too loose)	Yes [ ]	No [ ]

6. Documentation of reading:

7. Asked the participant not to move	Yes [ ]	No [ ]
8. Asked the participant not to talk	Yes [ ]	No [ ]
9. Clicked the START/STOP button	Yes [ ]	No [ ]
10. Checked and documented reading after 30–45 seconds	Yes [ ]	No [ ]

Checklist of random blood sugar measurement.

1. Explained the procedure to the participant:	Yes [ ]	No [ ]
2. Checked availability of lancet, test stripes and functional glucometer	Yes [ ]	No [ ]
3. Put on gloves/ washed hands prior to testing:	Yes [ ]	No [ ]
4. Cleaned the participants finger to be pricked with cotton:	Yes [ ]	No [ ]
5. Insert the test strip in glucometer:	Yes [ ]	No [ ]
6. Hold and pricked the finger of the participant with lancet/ needle:	Yes [ ]	No [ ]
7. Confirmed that the machine is ready for the test:	Yes [ ]	No [ ]
8. Discarded the first drop then applied the second drop of blood to the test strip:	Yes [ ]	No [ ]
9. Asked participant to lightly press pricked finger with cotton:	Yes [ ]	No [ ]
10. Recorded and documented the test result:	Yes [ ]	No [ ]
11. Properly disposed generated wastes	Yes [ ]	No [ ]



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