

# “A study to identify utilization of digital weighing machine and training need assessment among Anganwadi workers in District Bharuch, Gujarat.”

**Presented by:**  
**Tuhina Verma**  
**Roll No. 1518**

**Guided By :**  
**Prof Barun Kanjilal**

# Contents

- Introduction
- Research Question
- Objective
- Methodology
- Result
- Conclusion
- Recommendations
- Limitation
- Reference

# Introduction

- Growth Monitoring is backbone of the methods of identifying mal nourished children.
- If recorded weight is not reliable or the weighing technique is faulty then the risk of missing malnourished children will be high.
- ICDS follows WHO growth chart to identify the nutrition status of child.

# Research Question

- What is the level of availability of Digital and Salter machines in AWCs?
- What is the level of knowledge of AWW for usage of DWM?
- What are the reasons behind observed underutilization and how can we increase the utilization of Digital weighing machine in AWCs?
- What is the training need of AWWs in the district for DWM?

# Objectives

- To evaluate the level of availability of Digital and Salter machines in AWCs.
- To assess knowledge level of AWWs for usage of DWM.
- To find out the level of utilization and reasons behind observed underutilization of Digital weighing machine in AWCs.
- To assess the Training Need for AWWs to increase utilization of Digital weighing machine.

# Methodology

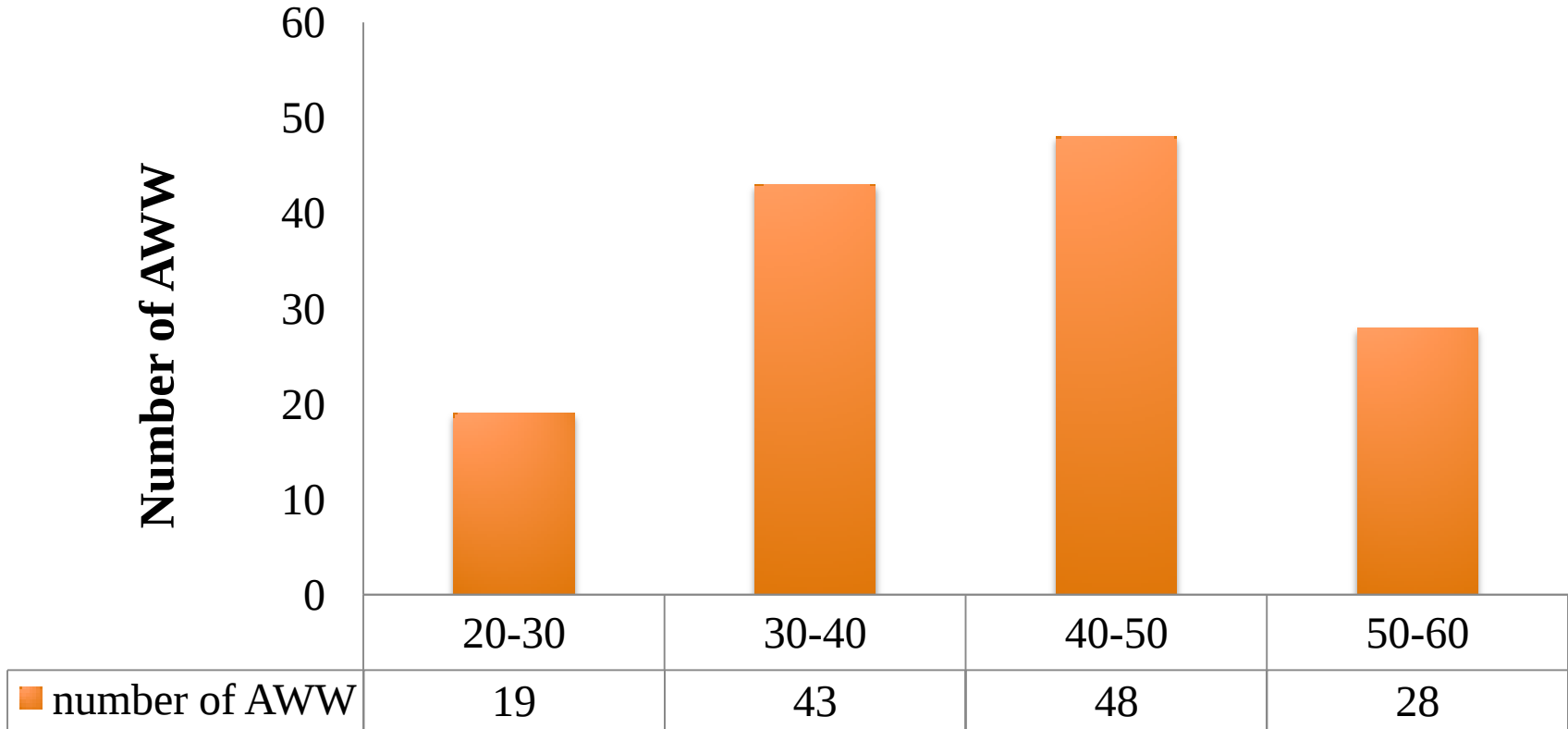
- Study Period : April – May
- Study Design - Descriptive cross sectional study.
- Study Area- Bharuch district, Gujarat.
- Study Participants: Anganwadi Workers, Mothers of children registered in Anganwadi Center.
- Sampling Type- Purposive Sampling.

- Sample Size: 414
- Data collection Tool: Semi Structured Questionnaire schedule
- Data collection Method-Face to face interviews
- Data Analysis Plan- - Data collected will be cross checked for any incomplete or partial filling. Using Excel collected data will then be edited, coded, tabulated, organized according to requirement of study.
- For qualitative data analysis key words will be identified and analyzed

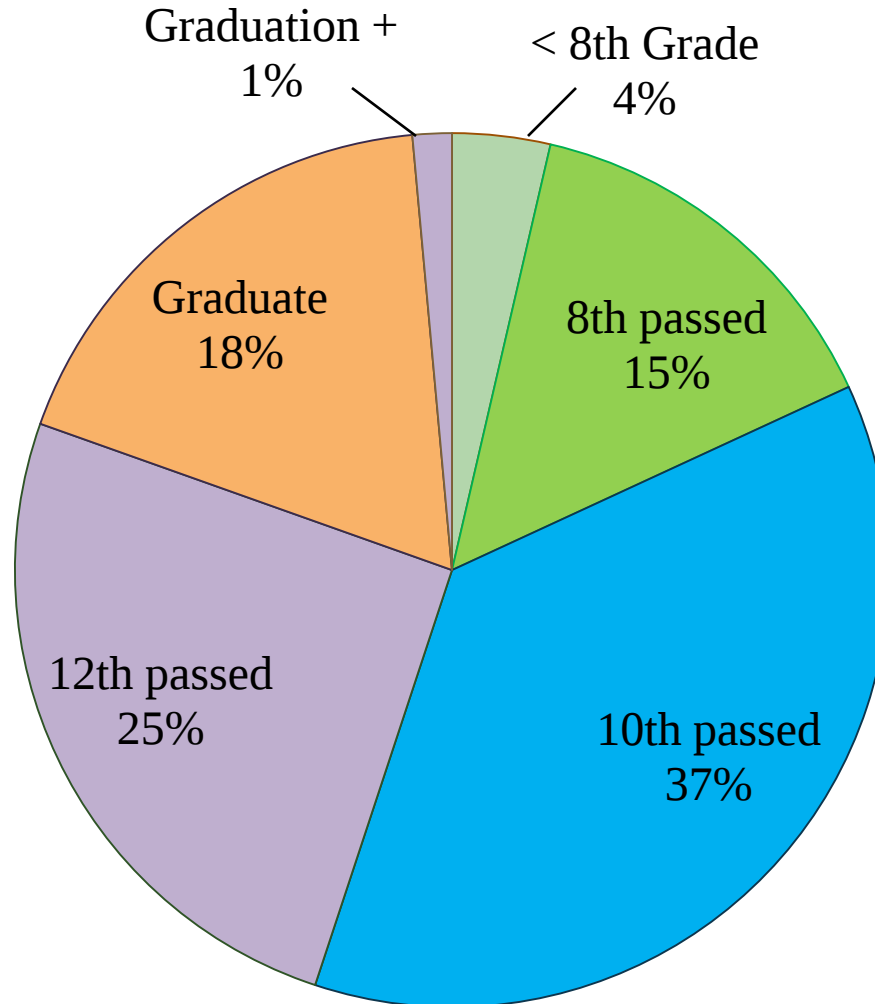
# Result

- Age and Education Level Of AWWs : (N = 138)

**Age Distribution of AWWs**

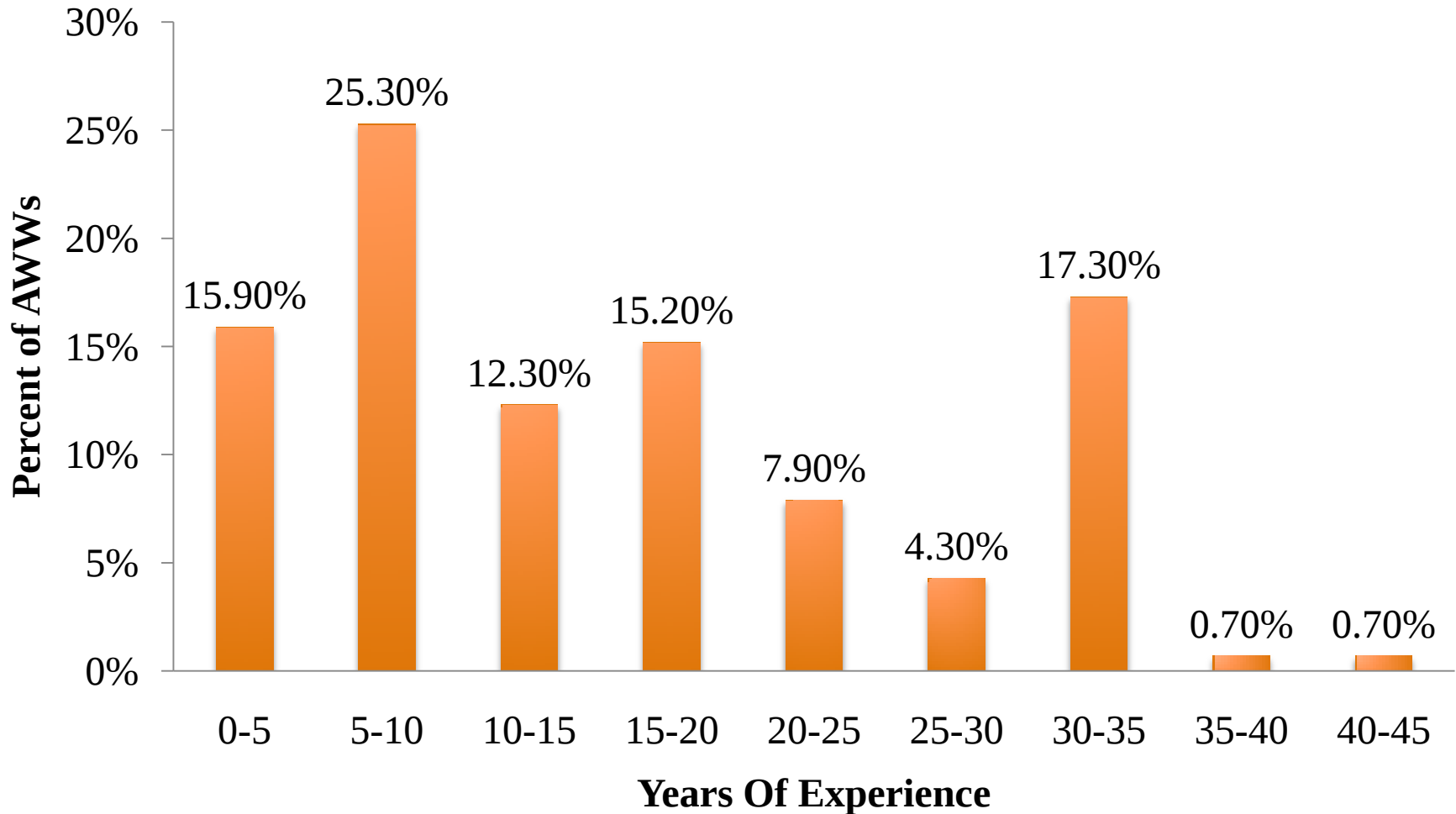


## Education Level Of AWWs (N = 138)



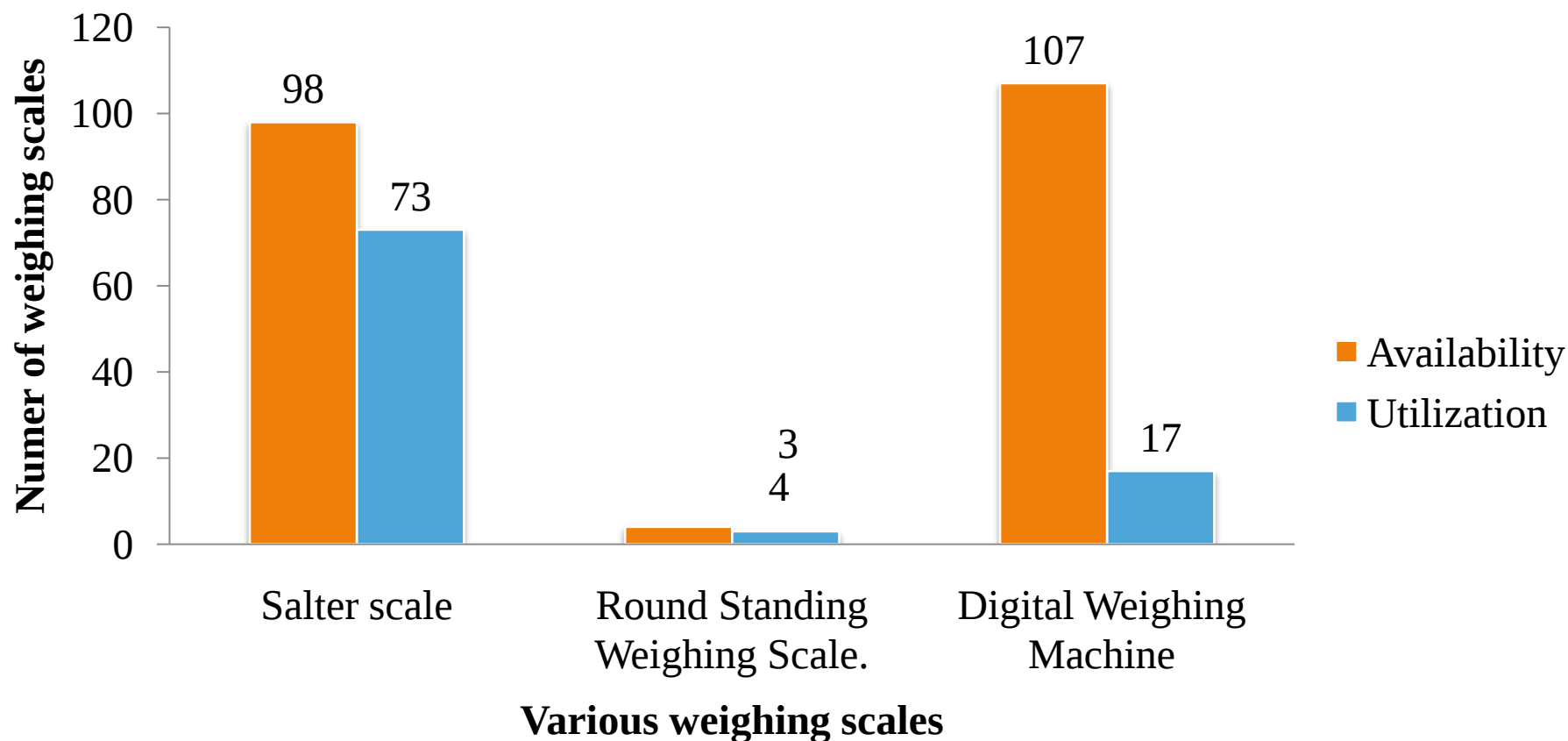
# Work Experience of AWWs: N = 138

## Experience of AWWs



# Availability and Utilization of Weighing Scales in Chosen Population (N=107)

**Availability and utilization of Various weighing scales**



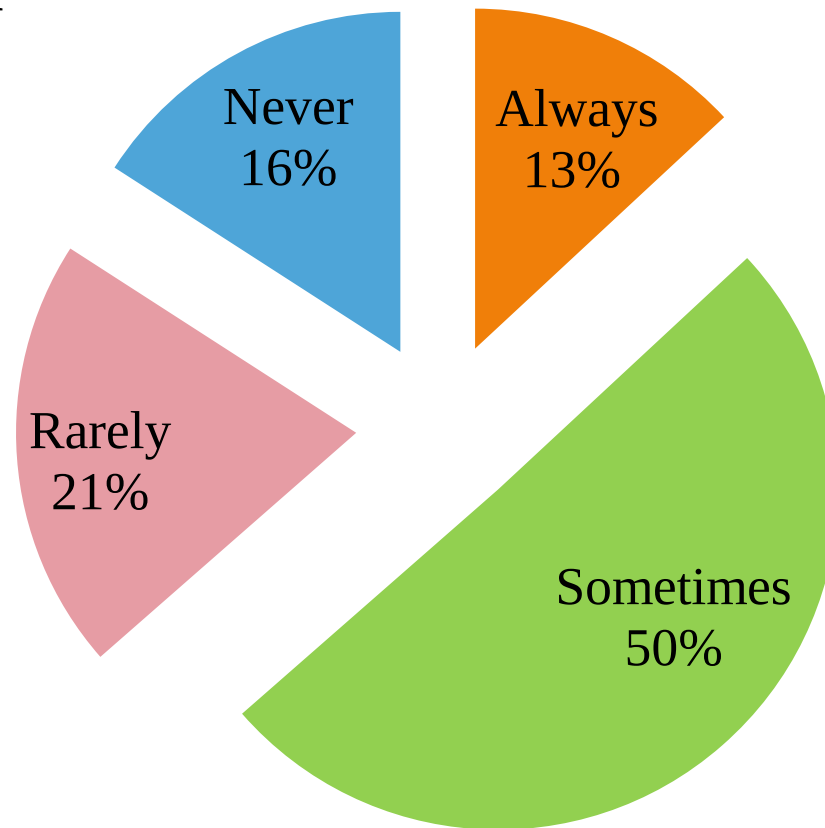
- Number of AWWs who received training previously

|                                                 |     |
|-------------------------------------------------|-----|
| Number of AWWs who received training previously | 107 |
| Number of AWWs who were not trained previously  | 31  |

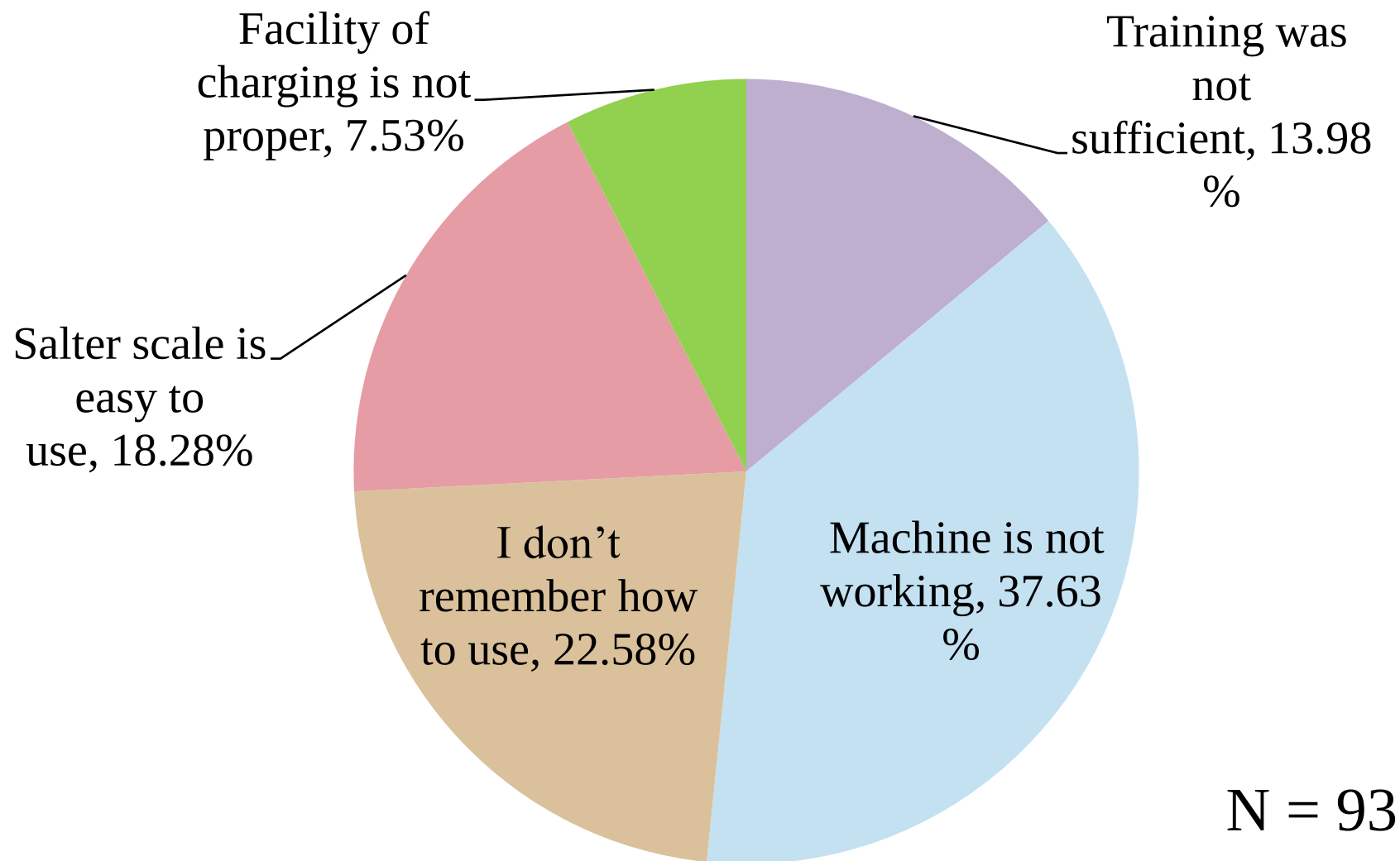
- 100% of AWWs preferred Gujarati as language of communication.
- Even if they belong to non Gujarati community , they are still fluent and comfortable in Gujarati language.

## Frequency of usage of weighing machine (N=107)

### Usage of DWM



# Reasons behind underutilization of DWM

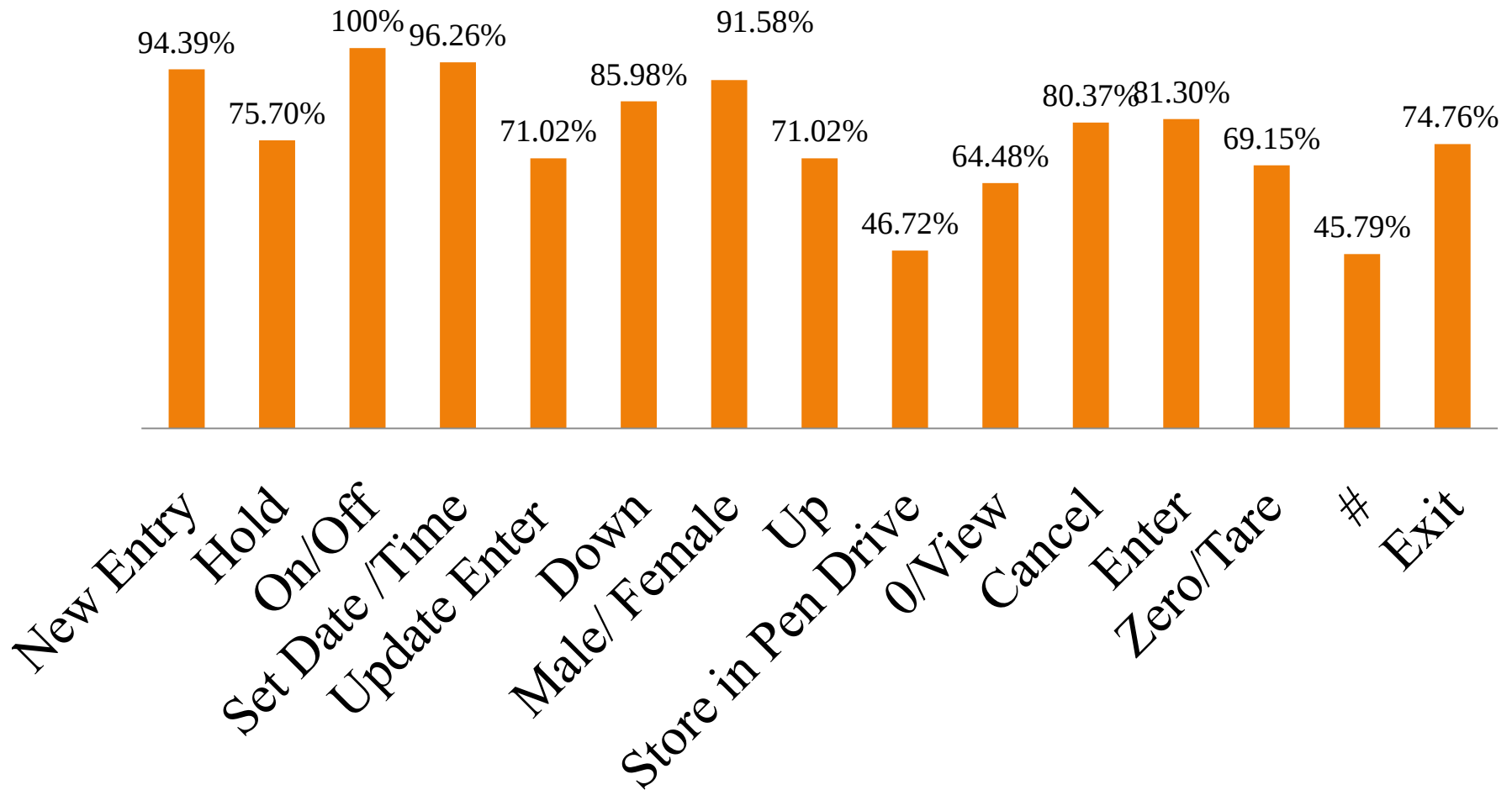


# Knowledge of AWW regarding Digital Weighing Scale

| S. no | Questions                                                   | Correct Answer | Wrong Answer |
|-------|-------------------------------------------------------------|----------------|--------------|
| 1     | What is the highest limit of this digital weighing machine? | 56.07%         | 43.92%       |
| 2     | What are the 3 zones of growth monitoring?                  | 85.04%         | 14.95%       |
| 3     | In which side we put charger?                               | 77.57%         | 22.42%       |

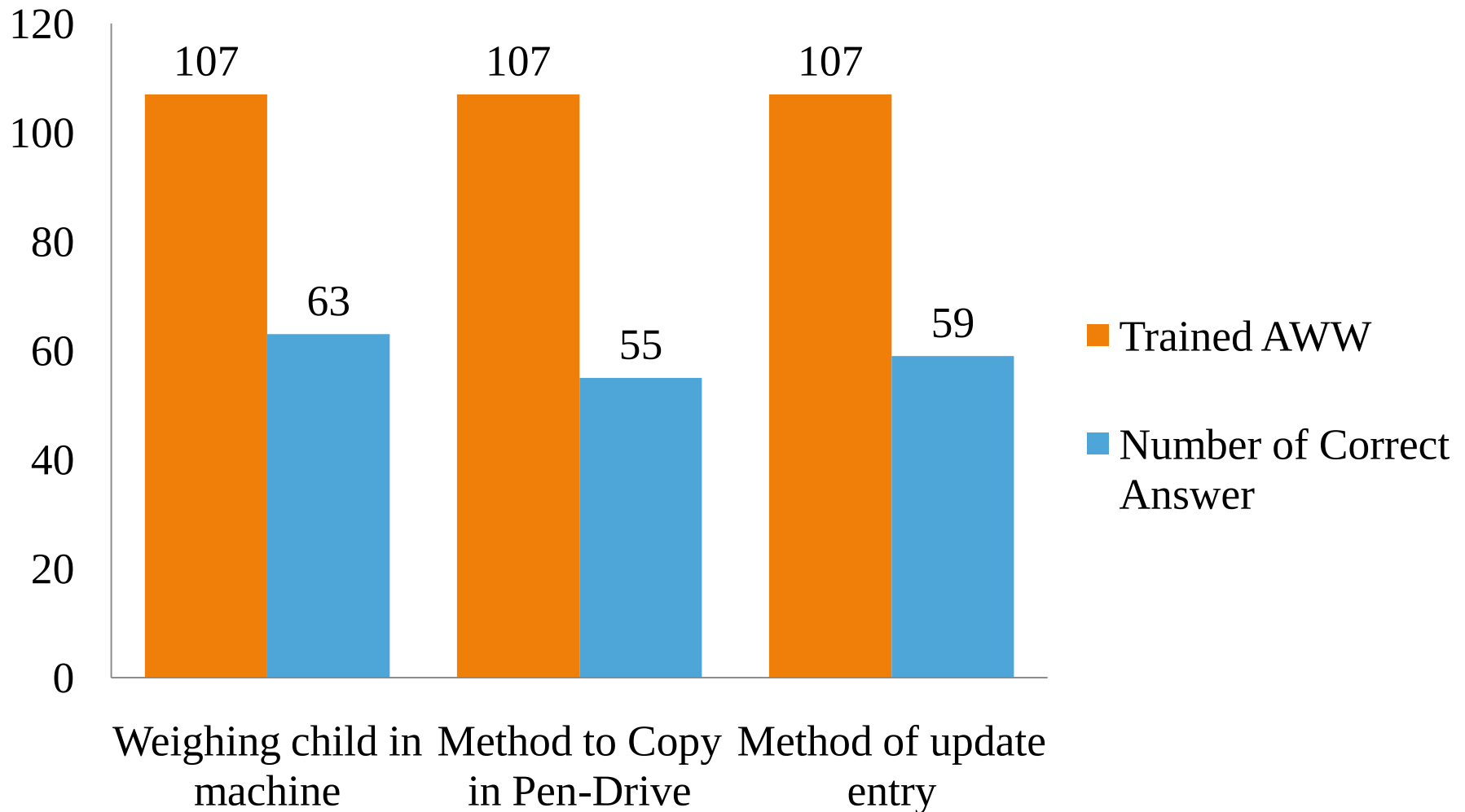
N = 107

# Knowledge of AWWs regarding Functions of DWM. (N = 107 )

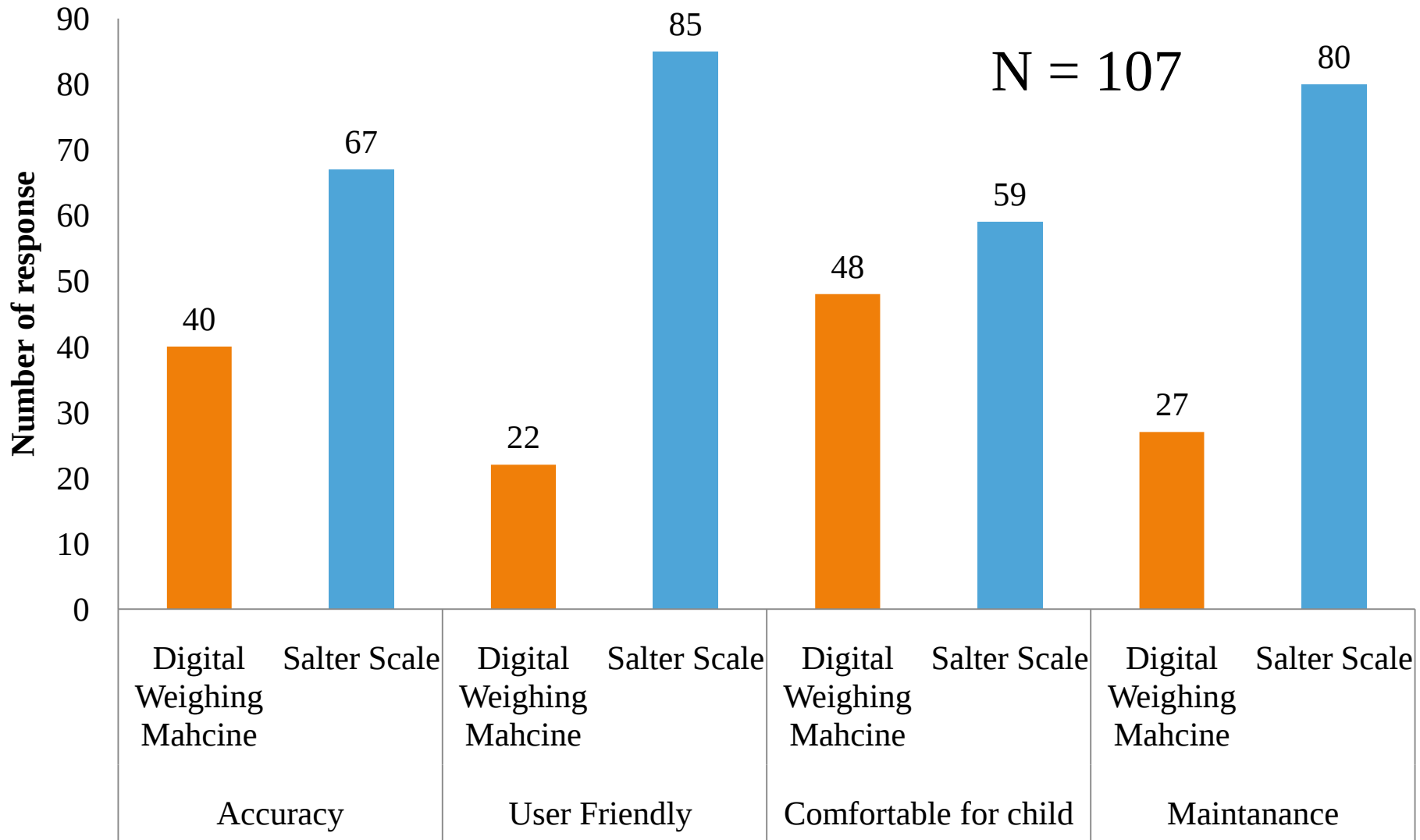


Knowledge of commands

# Knowledge of AWWs regarding functioning of DWM



# Preference between Salter and Digital Weighing Machine



# Conclusion

- AWW's education level, only 19% are graduates. Of the remaining workers, 15% workers are 8<sup>th</sup> passed, 37% are 10<sup>th</sup> passed and 25% are 12<sup>th</sup> passed.
- Out of all, maximum 25.30 percent anganwadi workers had 5-10 years of experience, 17.30 percent workers had 30-35 years of experience. Around 1.5 percent of AWWs had experience of 35-45 year of experience.
- In spite of better availability of Digital Weighing Scale, Utilization of Salter scale was more.
- Because of lack of refresher training and guidance, AWWs were not using DWM as major tool to weigh child.
- As they don't use machine for long time, so they tend to forget proper method of weighing.

# Suggestions

- Change the Font of machine, from English to Gujarati fonts. In already purchased machines, stickers in Gujarati language can be used.
- Continuous monitoring and follow up of AWWs for the weighing technique so that faults can be corrected on the spot.
- For other workers, a less complicated model of Digital Weighing machine should be introduced.

- For continuous guidance of AWWs, Digital weighing machine training should be given to CDPOs, Supervisor and coordinators also, so that they can help the worker in case of confusion.
- NCV worker can be given responsibility to weigh the child on DWM.
- A safety box can be distributed to keep the machine safe.

# Limitations:

- Sample were collected from nearby AWCs, so that excludes AWWs of distant areas.
- Out of 138 AWWs, 105 were trained previously in DWM training, so rest of 33 AWWs were left out in the questions regarding knowledge of DWM.

# References:

- N. V. Lalitha, Judith Standley. Training workers and supervisors in growth monitoring: looking at ICDS. *The Indian Journal of Pediatrics* 1988; 55(1): .  
<http://link.springer.com/article/10.1007/BF02810389> (accessed 10 April 2015).
- P. R. Deshmukh, A. R. Dongre, S.S. Gupta, B.S. Garg. Newly developed WHO growth standards: Implications for demographic surveys and child health programs. *The Indian Journal of Pediatrics* 2007; 74(11): .  
<http://link.springer.com/article/10.1007/s12098-007-0181-0> (accessed 8 April 2015).
- Paul Garnera, Ratana Panpanich, Stuart Logan. Is routine growth monitoring effective? A systematic review of trials. *Archives of disease in childhood* 1999;  
<http://adc.bmj.com/content/82/3/197.short> (accessed 10 april 2015).
- Chloe Angood. *Weighing scales for young infants: a survey of relief workers*.  
<http://www.ennonline.net/fex/29/weighingscales> (accessed 8 april 2015).
- Reference text sheet from Apple Weighinfra Limited. Electronic Baby Weighing Scales With Child Growth Chart.

- Thank you