

All babies < 30 days should be fed with Mother's Own Milk (MOM) during their hospitalisation in Ward 56



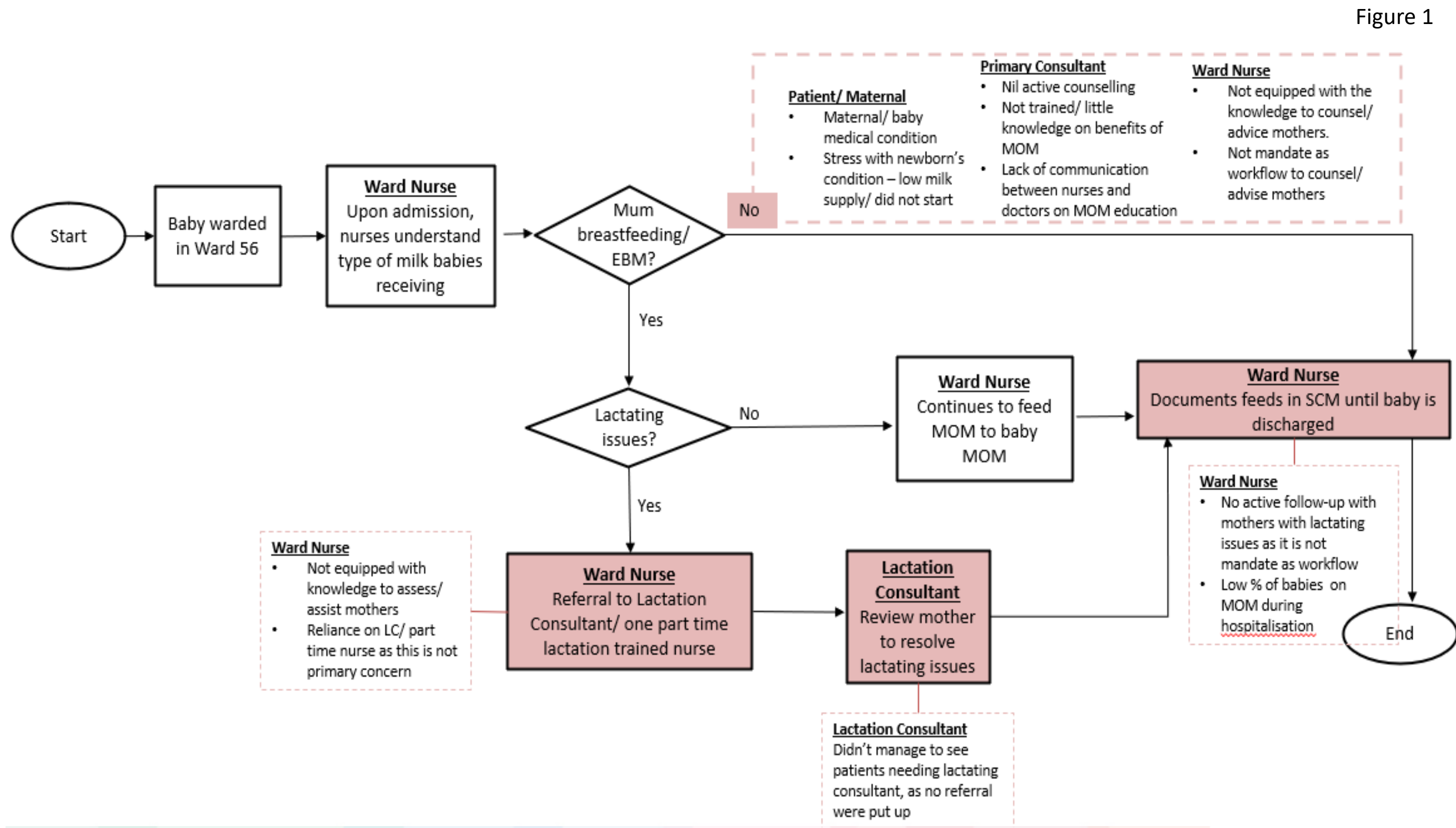
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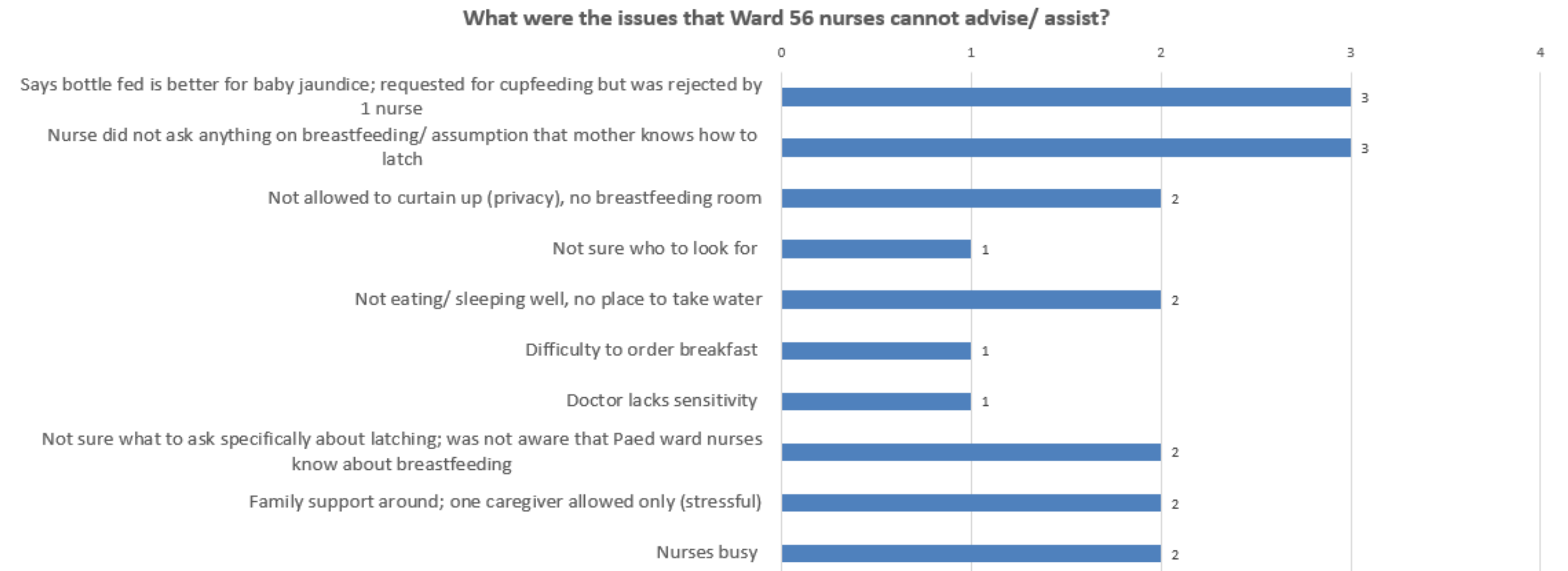
Background

As a baby friendly hospital, mothers are encouraged to breastfeed their babies throughout their hospitalisation at KK women's and Children Hospital due to its numerous health benefits. However, the team observed that only 46% of babies under 30 days old received Mother's Own Milk (MOM) during the hospitalisation. [Figure 1]

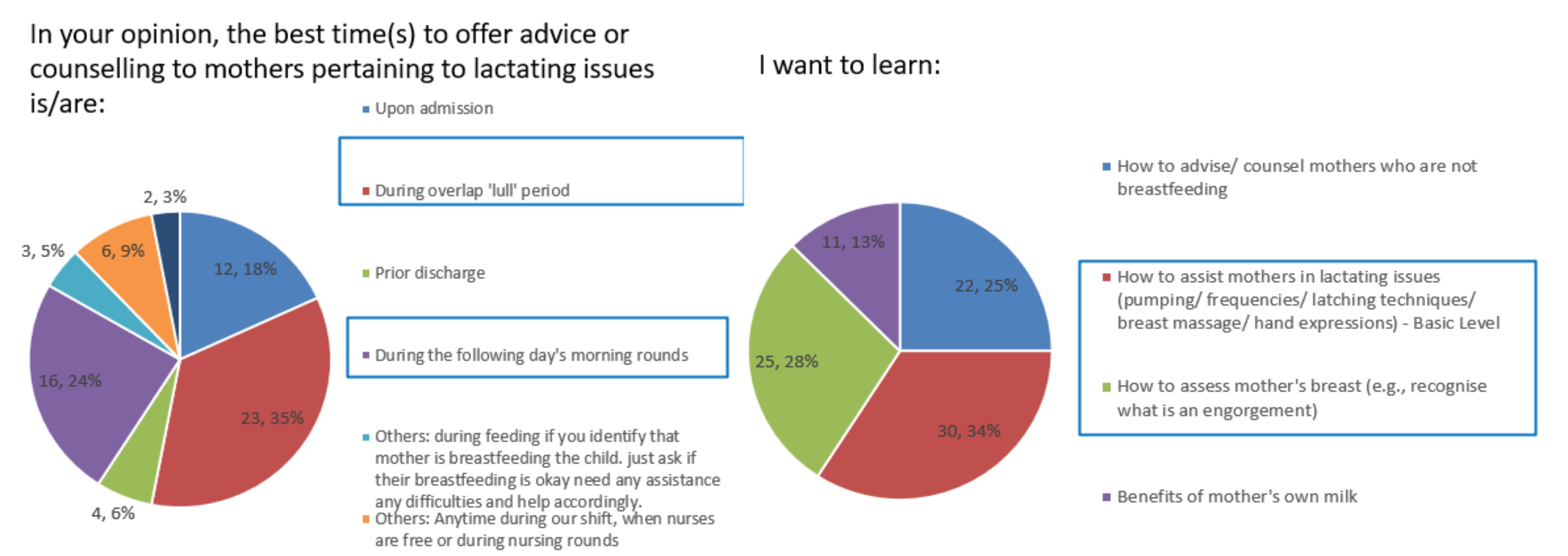


Methodology

Snapshot of mothers' feedback through survey

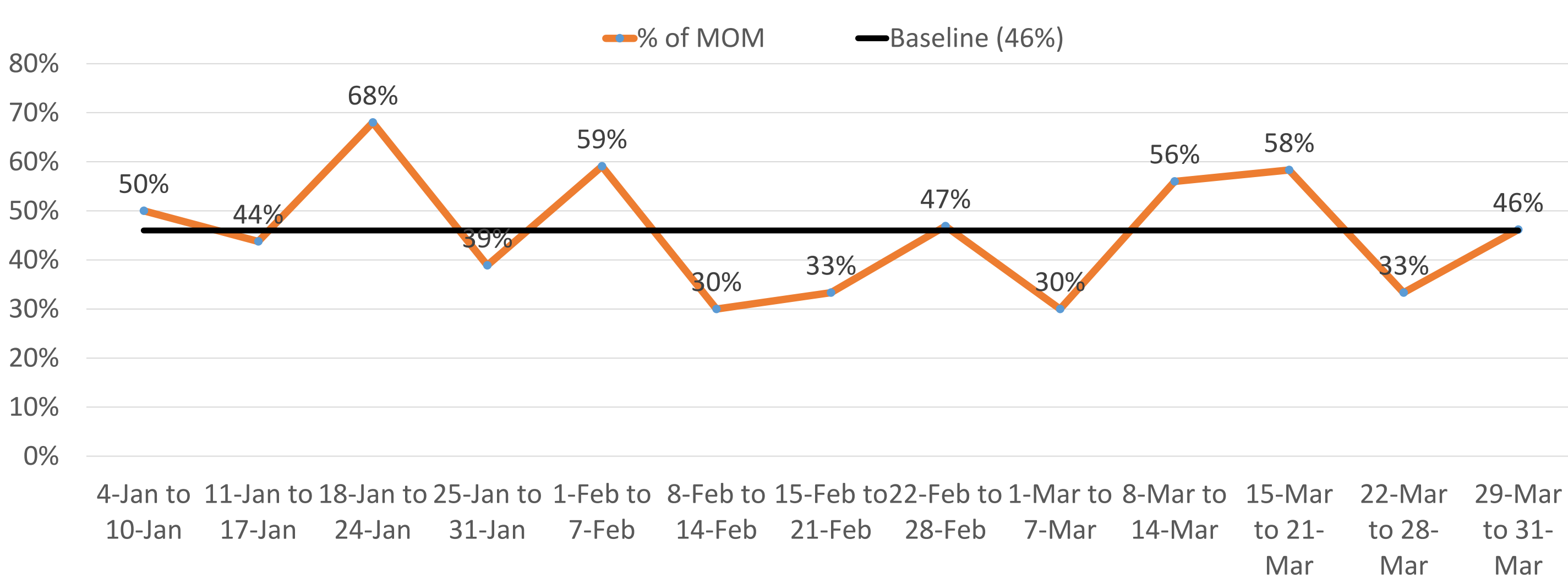


Snapshot of nurses' feedback through survey



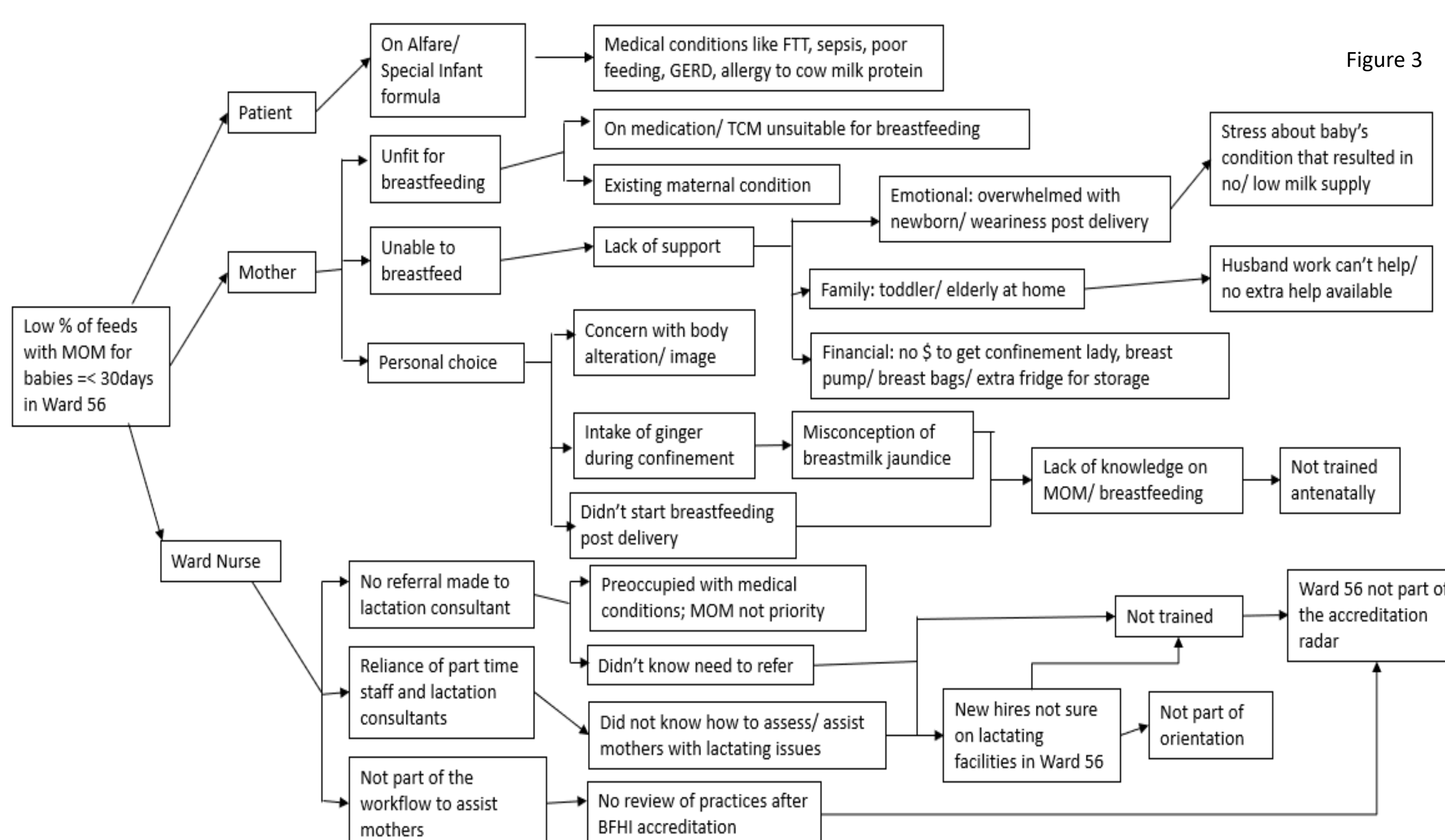
Problem & Aim

% of Babies < 30 days fed with MOM during hospitalisation (Jan 2021 to Mar 2021) Figure 2



A 3-months data for the total number of feeds in Ward 56 is extracted from Jan to Mar 2021 and presented weekly. The median % of babies < 30 days fed with MOM during hospitalization was 46% [Figure 2]. The aim was to improve MOM feeding rate in babies under 30 days old during their hospitalisation in Ward 56 from 46% to **70%** within 12 months (project was halted due to COVID-19 for a year).

Methodology



Team used the tree diagram [Figure 3] to illustrate the root causes in which they were verified by conducting surveys among mothers (n=32) and nurses (n=40) to further understand their challenges and needs.

PDSA cycle 1 - (Revised workflow for healthcare providers, training for nurses, new workflow for referral developed)

Hand Expression Techniques

- Purpose: Collect colostrum and clear blockage.
- Place fore finger and thumb at the edge of areola and press back towards the chest.
- Bring fingers together and compress the areola using the finger pads in a rhythmic pattern.
- Change fingers position rotating between C & U positions.

Case Study 1

Mrs A. is 1 week post-delivery. She tells you:

- her breast is sore
- her breast is hard and painful
- She also said that "there is no milk coming out when she pumping"
- She has been applying warm compress to help relieve symptoms

Role as a nurse:

- History taking
- Assessment
- Education

PDSA cycle 2 - (Refinement of training content and referral workflow; documentation for handover - nurses)

Workflow on Referral*

A. Total breastfeeding

Nurse to ask the following questions:

- How is your feeding? Baby sucking/ latching well? Pumping? Frequency?
- When did baby last PU/ BO?
- How is your breast? Hard? Pain? If pain, where is the pain?
- How is your nipple condition? Painful?

If patient answer any or combination of below:

- A1: not sucking/ latching well, cry after feed
- A2: More than 3 hours no PU/BO
- A3: Hard and Painful
- A4: Short, big, sore/ painful

Action: Refer to Lactation Consultant

B. Partial Breastfeeding

Nurse to ask the following questions:

- How is your feeding? Baby sucking/ latching well? Pumping? Frequency?
- How much you supplement? Cupfeeding or bottle? Why supplement?
- How is your breast? Hard? Pain? If pain, where is the pain?
- How is your nipple condition? Painful?

If patient answer any or combination of below:

- B1: not sucking/ latching well, cry after feed/ pumping more than 3 hours apart
- B2: Low milk supply
- B3: Hard and Painful
- B4: Short, big, sore/ painful

Action: Refer to Lactation Consultant

C. Not Breastfeeding

Nurse to ask the following questions:

- Understand why patient is not breastfeeding?
- Ask whether patient wishes to learn?

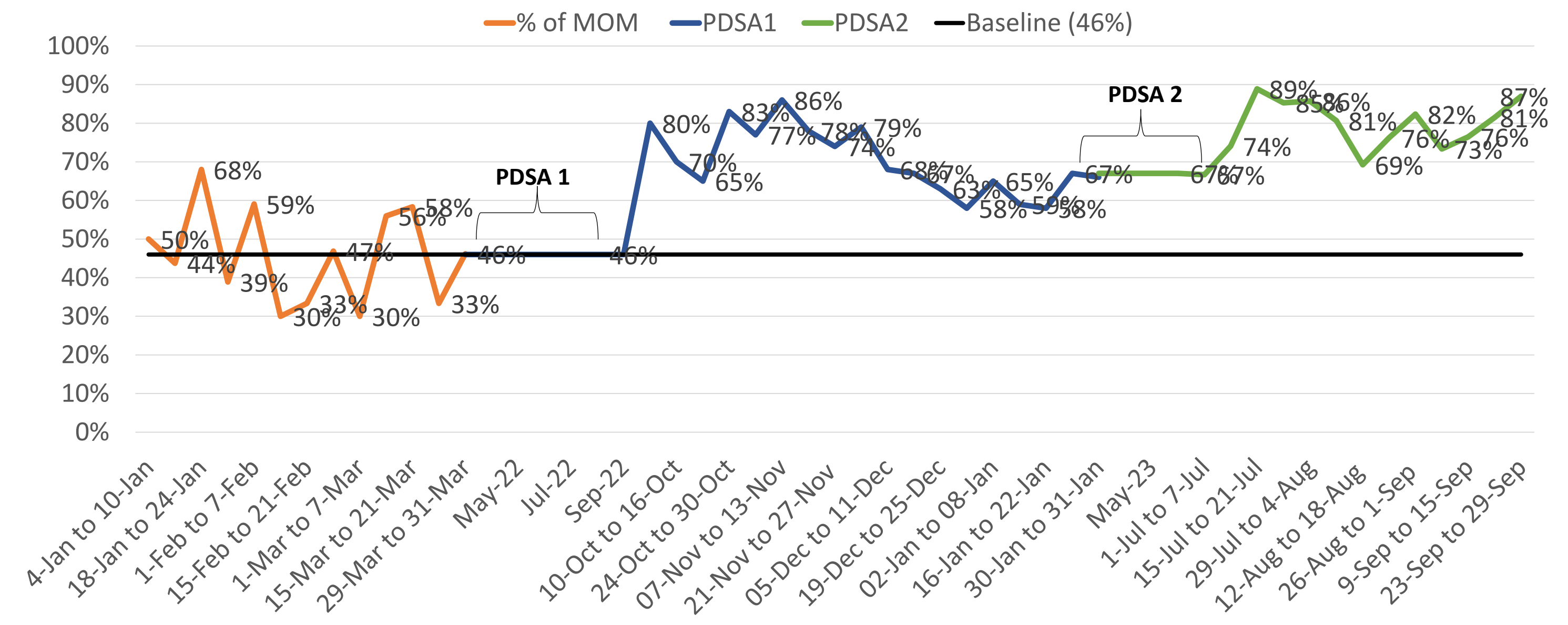
If patient answers:

- C1: Yes
- C2: Yes

Action: Refer to Lactation Consultant

Results and Conclusion

% of Babies < 30 days fed with MOM during hospitalisation (Jan 2021 to Sep 2023) Figure 4



Data analysed from 1 Oct 2022 to 31 Jan 2023 illustrated an improvement of the median % of babies < 30 days fed with MOM during hospitalization improved from 48% to **68%**. From 1 Jul 2023 to 29 Sep 2023; this % improved further to **76%**. The overall improvement was **74%**.

QI interventions including breast milk feeding education/training and early referral to lactation consultants could significantly improve MOM feeding rate in sick young babies during hospitalization.

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