INCREASING THE RECRUITMENT OF OBESE POSTNATAL MOTHERS FOR PRE-PREGNANCY CARE(PPC) IN BARAT DATA DISTRICT

PP 24

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KEMENTERIAN KESIHATAN MALAYSIA
JABATAN KESIHATAN NEGERI PULAU PINANG

INTRODUCTION

Pre-pregnancy care(PPC) recruitment which includes registration and intervention of obese women(BMI ≥ 27.5 kgm²) is crucial to reduce complications towards the mother and child during pregnancy.

1. SELECTION OF OPPORTUNITY FOR IMPROVEMENT

1.1 REASON OF CHOOSING

No	Problem	S	M	A	R	T	Total
1	Inadequate recruitment of obese postnatal mothers for pre pregnancy care in Barat Daya District	24	20	19	20	19	102
2	Increasing unsatisfactory pap smear result in Barat Daya District	19	16	17	15	15	82
3	Low rate of code 1 contraception in Barat Daya District	19	17	16	13	15	80
4	Low rate of sputum AFB screening in Barat Daya District	17	13	15	14	16	75
5	Poor enrollment into quit smoking clinic in Barat Daya District	17	15	14	16	12	74

Scale: 1 – low, 2 - medium, 3 - high / Group Members : 8

|	
S	Verification data showed that 33.1% of obese postnatal mothers in Barat Daya District were registered in the PPC registry, but none of the registered mothers were recruited to receive appropriate interventions for PPC
M	Data can be monitored and collected from Antenal Care book
A	Obese postnatal mothers able to be identified for further intervention prior to next conception
R	Generate a uniformed work flow and system for Pre-pregnancy care among obese postnatal mothers
T	Can be completed within the time frame

1.2 LITERATURE REVIEW

- National Health and Morbidity Survey (NHMS) revealed an **increasing trend** of obesity prevalence, from 13.4% (2015) to 18.3% (2019).
- Almost all pregnancy complications such as gestational hypertension, preeclampsia, gestational diabetes mellitus (GDM), large-for-gestational-age (LGA), congenital malformations occur **more frequently in obese women** than in women with a normal body mass index (Heslehurst et. al, 2008, Birdsall et. a, 2009, Stothard et. al, 2009).
- The time before and after childbirth is critical for intervening to delay or prevent obesity in women, support women's health during pregnancy, and reduce health risks for future generations. (Hollis et. al, 2017)

1.3 PROBLEM STATEMENT

- There is inadequate recruitment of obese postnatal mothers for PPC in Barat Daya District.
- This may result in postpartum mothers not using proper contraception and the risk of metabolic syndrome going undetected.
- The low recruitment rate of obese postnatal mothers may be due to low awareness, non standardization of workflow and inadequate counselling.
- We hope to increase the recruitment of obese postnatal mothers for PPC in Barat Daya District.

2. KEY MEASURES FOR IMPROVEMENTS

2.1 CAUSE EFFECT ANALYSIS
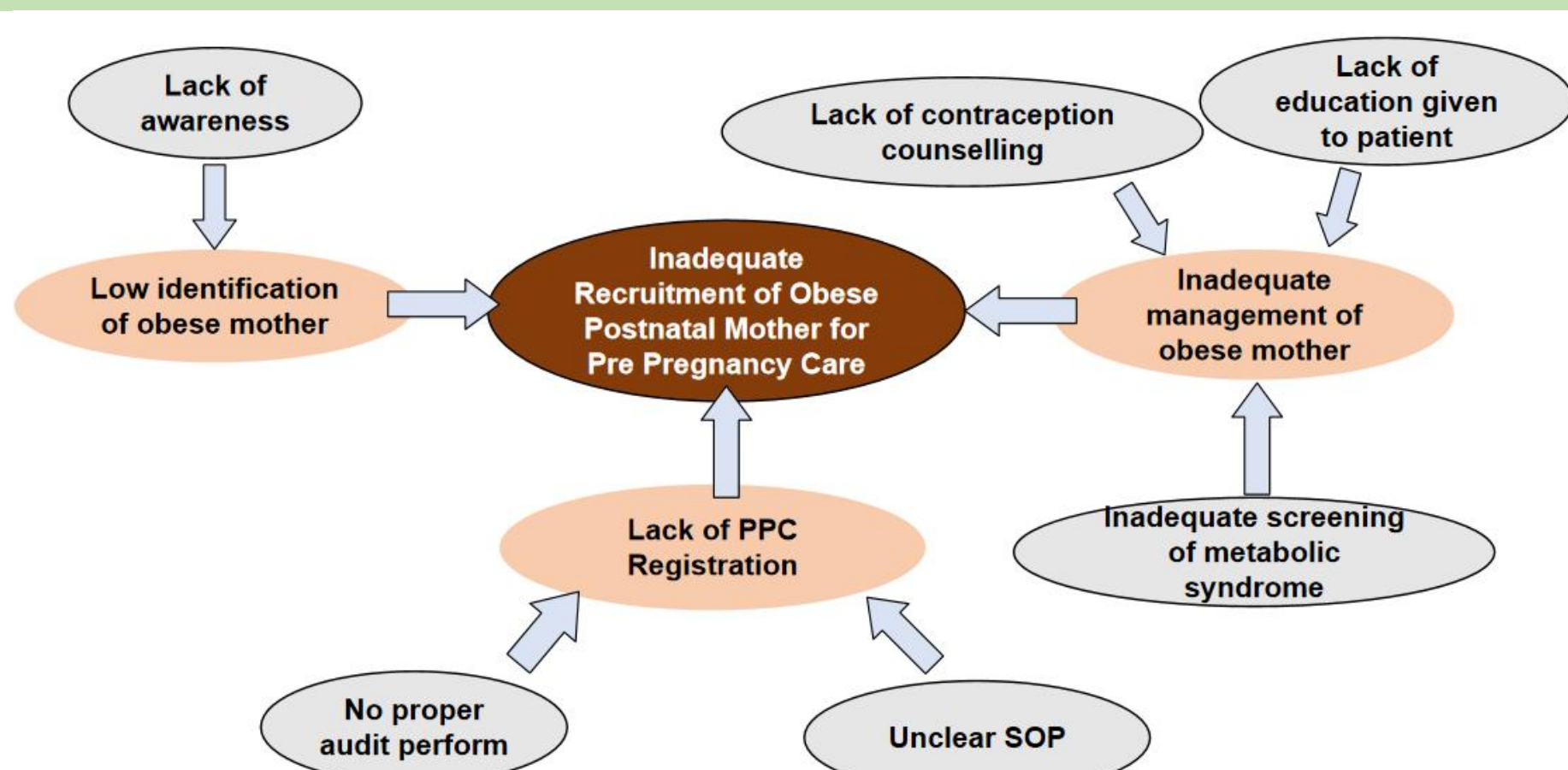
2.2 PROCESS OF CARE
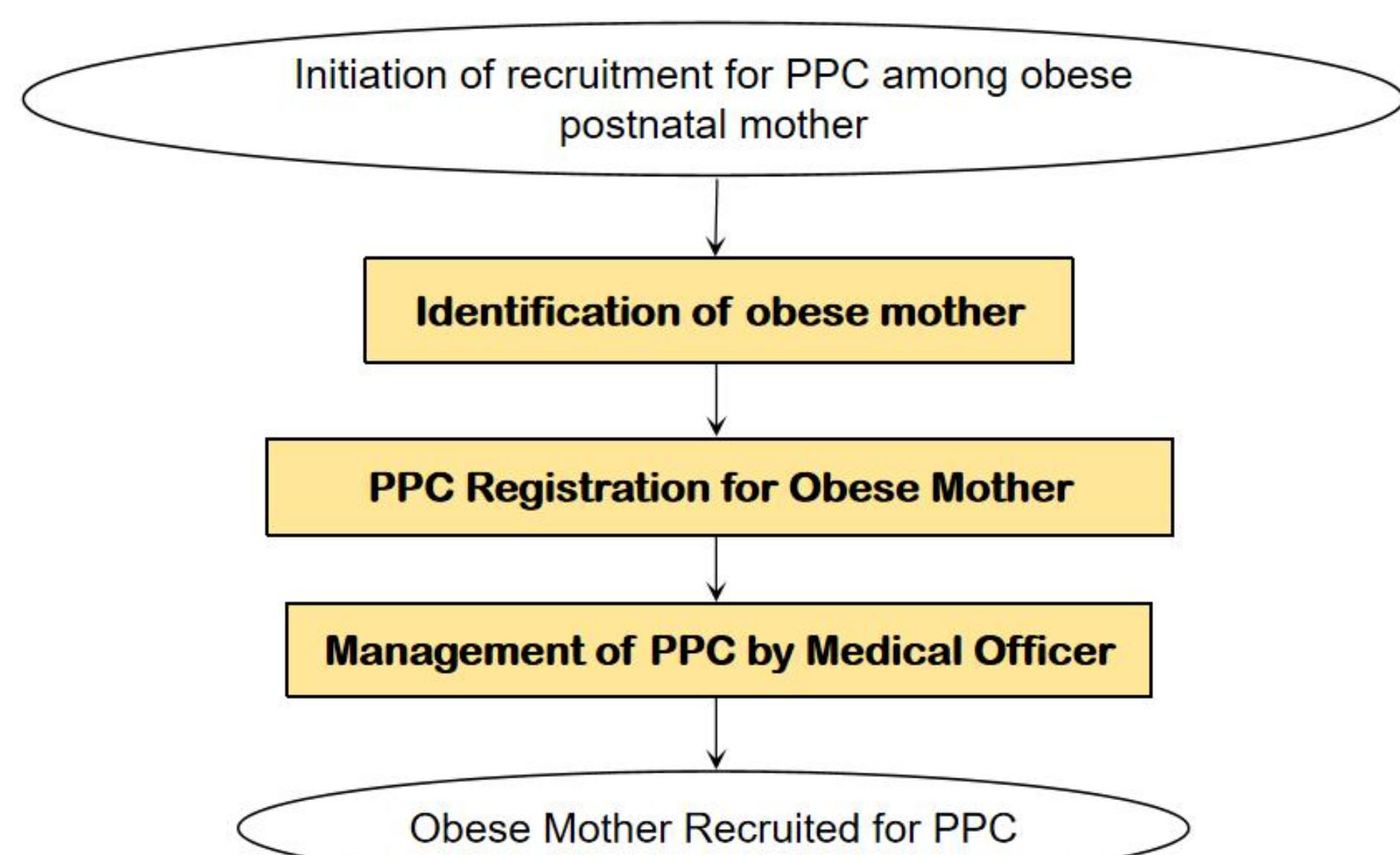
2.3 GENERAL AND SPECIFIC OBJECTIVE

General objective
To increase recruitment of obese postnatal mothers for pre-pregnancy care in Barat Daya District

Specific objectives
- To determine the recruitment rate of obese postnatal mothers for pre-pregnancy care in Barat Daya District.
- To identify factors affecting the recruitment rate of obese postnatal mothers for pre-pregnancy care in Barat Daya District.
- To formulate and implement remedial measures efficiently in improving the recruitment rate of obese postnatal mothers for pre-pregnancy care
- To evaluate the effectiveness of remedial measures implemented.

2.4 INDICATOR AND STANDARDS

Indicator : Percentage of obese postnatal mother recruited for Pre Pregnancy Care (PPC)

$$\frac{\text{Obese postnatal mother recruited for PPC}}{\text{Number of obese postnatal mother}} \times 100\%$$

**Standard : ≥ 80%** - based on consensus during QA PKDBD Meeting

2.5 MODEL OF GOOD CARE

No	Process	Criteria	Standard	Pre Remedial	1st Cycle	2nd Cycle	3rd Cycle
1	Identification of obese mother	MCH Nurses aware to identify obese postnatal mother by attaching PPC Form in the ANC book	100%	26.3%	32.1%	73.9%	100%
2	PPC Registration for Obese Mother	1. Medical Officer to make sure PPC form is filled up completely	100%	26.3%	28.6%	56.5%	100%
		2. Nurse incharge to register case into (PPC 101 Pind. 2019)	100%	26.3%	28.6%	56.5%	100%
3	Management of PPC by Medical Officer	1. Counsel on mode of contraception	100%	89.4%	89.3%	100%	100%
		2. Educate on the lifestyle modification	100%	0	7.1%	43.5%	100%
		3. Order screening for metabolic syndrome	100%	0	3.5%	26%	84%

3. PROCESS OF GATHERING

METHODOLOGY	
Study Design	Cross - sectional
Duration of Study	Pre Remedial : March 2023 Remedial Measure 1 : April - June 2023 Post Cycle 1 : July 2023 Remedial Measure 2 : August - October 2023 Post Cycle 2 : November 2023 Remedial Measure 3 : December 2023 - February 2024 Post Cycle 3 : March 2024
Sampling Method	Convenience sampling
Sampling Tools	Antenatal Book, Questionnaire to paramedic, Audit Checklist
Inclusion Criteria	- Postnatal 1 month mother with *BMI ≥ 27.5 kgm²* at booking - Booking done at 1st trimester <12weeks POA
Exclusion Criteria	Women who undergone Hysterectomy/Bilateral Tubal Ligation/Comorbidities prior to pregnancy/Transfer in/out case

4. ANALYSIS AND INTERPRETATION

Prevalance of Postnatal Obesity in Barat Daya

NO obese postnatal mother was recruited for PPC
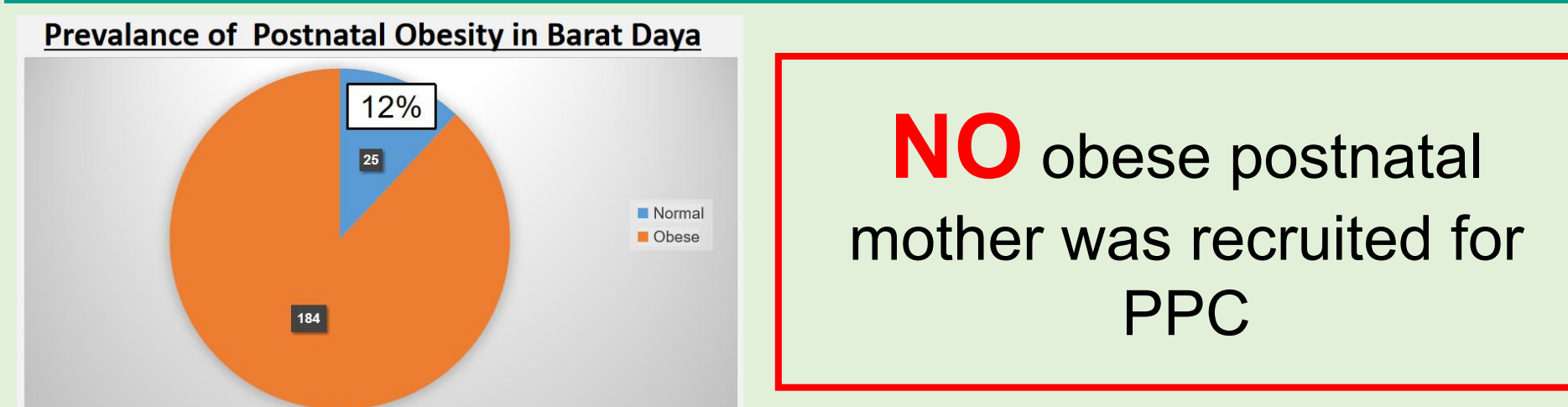
Shortfall In Quality

73.7% obese postnatal mothers failed to be identified by nurses

73.7% cases were not registered into PPC

100% failed management of PPC by medical officers

5. STRATEGIES FOR CHANGE

Cycle 1

S1 : PPC course and briefing at district level
S2: Short infographic Video to increase awareness
S3: Reminder Tag

Cycle 2

S1 : Dedicated team and focus group CME in each health clinic

S2: Revised PPC Form at district level
*adapted by JKN Pulau Pinang and implemented to all health clinics

S3: KIT-OBE Education Tool

KIT-OBE OUTLINE
1. Obesity risk and complication
2. BMI classification
3. Food Pyramid Malaysia
4. Malaysia Healthy Plate
5. Metabolic syndrome
6. Contraception education

Cycle 3
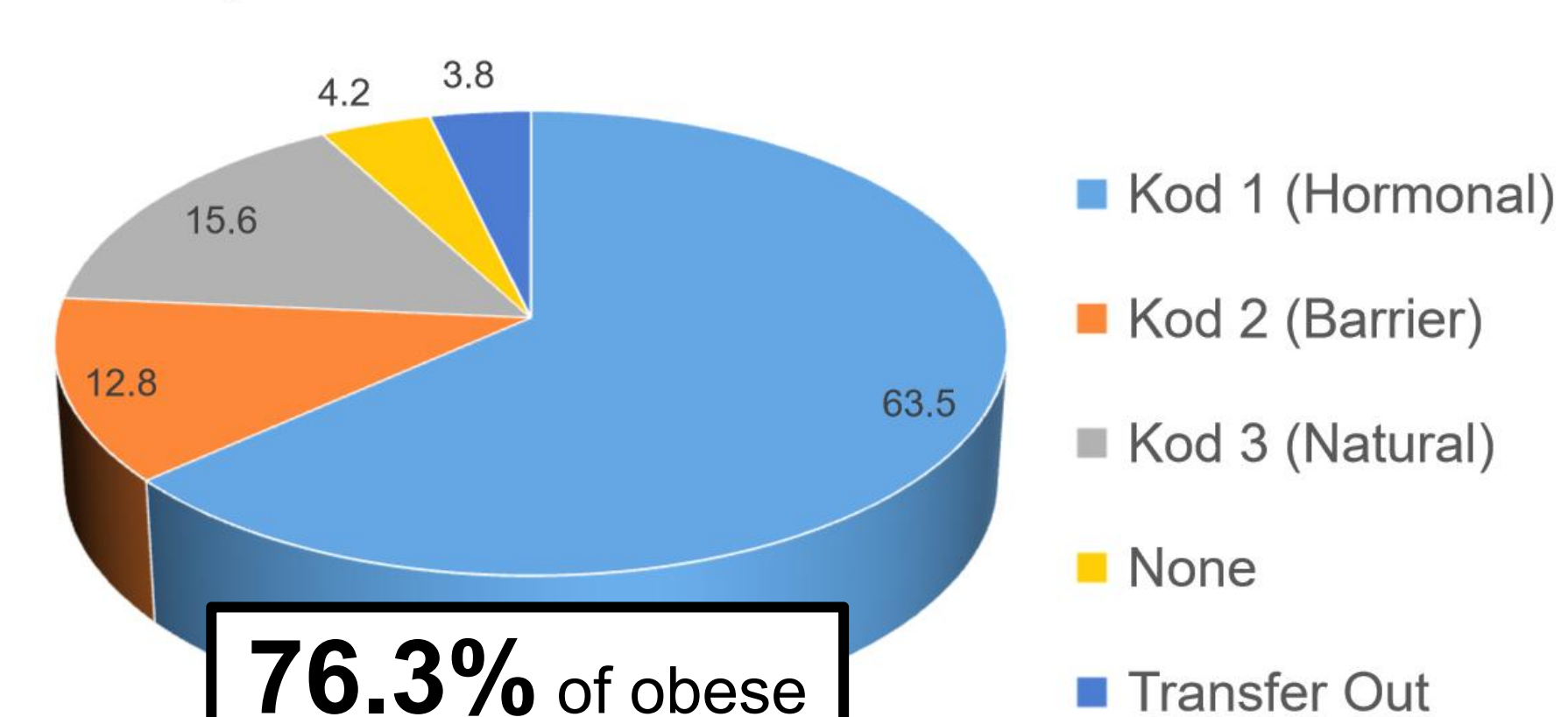

S1 : PPC Alert Card on all tables
S2: PPC Alert Sticker on Antenal Book

6. EFFECT OF CHANGE

SIQ	Pre Remedial	1st Cycle	2nd Cycle	3rd Cycle
Obese postnatal mother failed to be identified by nurses	73.7%	67.9%	26.1%	0%
Cases not registered into PPC	73.7%	71.4%	43.5%	0%
Failed management of PPC by medical officers	100%	96.5%	74%	16%

ABNA
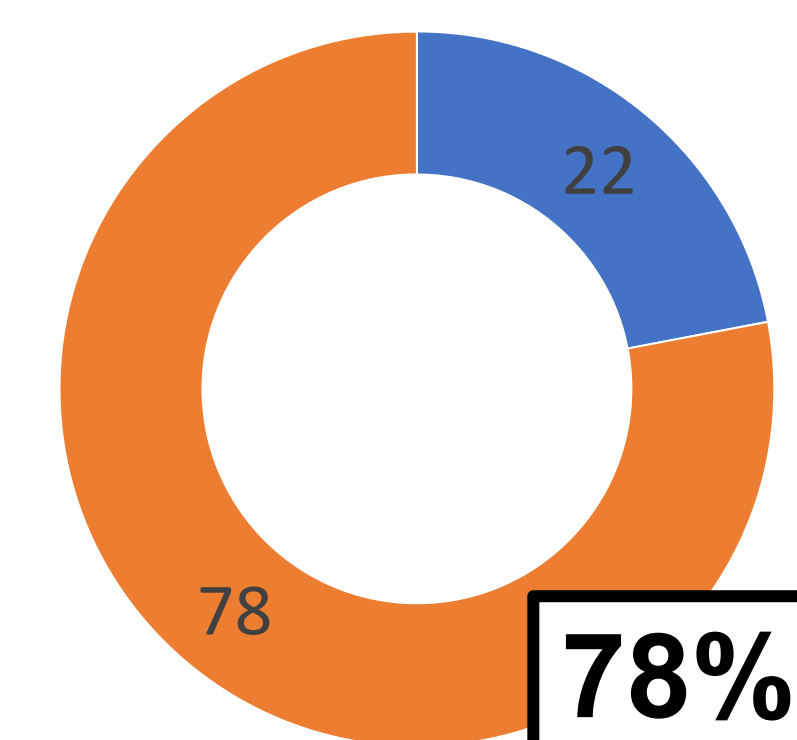
Percentage of Obese Postnatal Mother Recruited for PPC
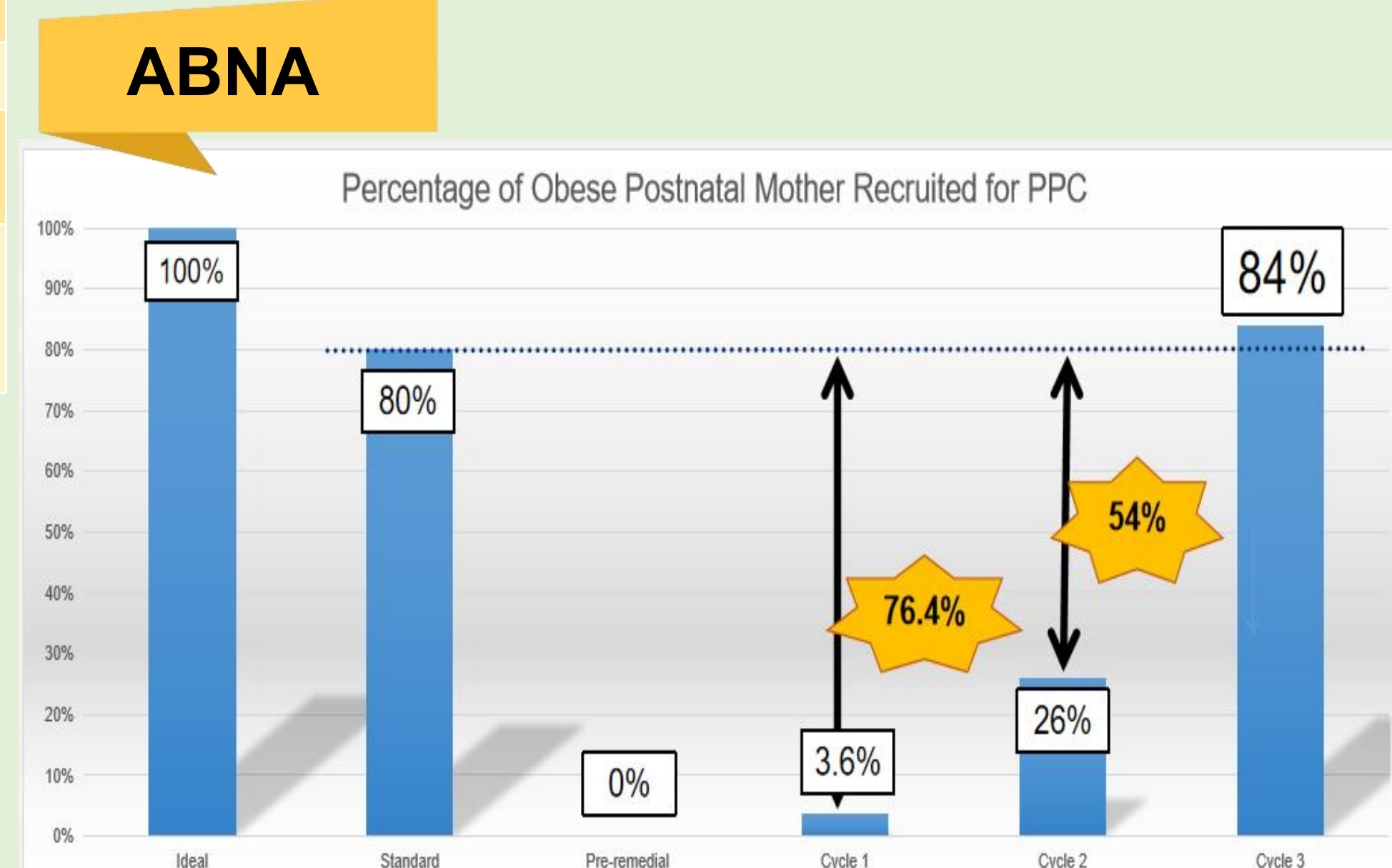
7. IMPACT

Contraception Method of Obese Postnatal Mothers

- Kod 1 (Hormonal)
- Kod 2 (Barrier)
- Kod 3 (Natural)
- None
- Transfer Out

76.3% of obese postnatal mother on contraception

Blood Result for Metabolic Screening

Normal / Abnormal

78% of mother has abnormal metabolic screening result

8. CONCLUSION

- The recruitment rate of obese postnatal mother for PPC in Barat Daya District improved from 0% to 84%.
- The possible factors affecting the recruitment rate of obese postnatal mother for PPC are lack of awareness of staff on PPC for obese mother, non standardization of workflow and inadequate counselling.
- The formulated remedial measures such as **PPC CME/Courses, KIT-OBE, revised PPC form, PPC Alert card and PPC Alert Sticker** have efficiently improved pre-pregnancy care among obese postnatal mothers.

9. THE NEXT STEP

- We aim to sustain our current outcome by consistently implementing the remedial actions.
- We are considering for collaboration with multidisciplinary teams for weight reduction program among obese postnatal mothers.

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