

1.0 SELECTION OF OPPORTUNITIES FOR IMPROVEMENT

Introduction

Venous Thromboembolism (VTE) leads to severe mortality and morbidity. The incidence of VTE is rising among the Asian population. The reported maternal mortality ratio due to VTE in Malaysia from 2007 to 2016 ranges between 1.5 to 4.7 per 100,000 live births.

Definition :

VTE is a condition caused by forming a blood clot in a vein. It encompasses Deep Vein Thrombosis (DVT) and Pulmonary Embolism (PE). DVT happens when a clot forms in deep veins, commonly in the lower leg, thigh, or pelvis. However, DVT can also develop in the arms, particularly when there is a large intravenous central line in place.

1.1 Problem prioritization

PROBLEM	S	M	A	R	T	SCORE
Lack of awareness on VTE among Antenatal and Postnatal mothers.	12	11	12	9	11	55
Patients not compliant with anticoagulant treatment.	10	9	9	9	6	43
Misconception about VTE treatment.	7	7	8	7	8	37
No standardised teaching method to patients by healthcare provider.	9	8	8	4	8	37
Improper administration of anticoagulant injection among patients.	9	10	7	5	9	40

Group member : 4

Score	1	2	3
Indicator	Low	Average	High

1.2 Justification

- S Seriousness** : The study performed from September 2023 to February 2024 found that only (22%) of antenatal and postnatal mothers knew about VTE and anticoagulant medication.
- M Measurable** : Data was gathered from antenatal and postnatal mothers by giving questionnaire.
- A Appropriateness** :
 - It's the health care provider's responsibilities to give information and create awareness among patients.
 - It has a direct impact on patients and improves patients safety during antenatal and postnatal.
- R Remedial** : Knowledge can be improved by giving health education through bedside teaching, VTE risk assessment, providing leaflets, and QR information regarding VTE.
- T Timeliness** : Study done within 6 month.

1.3 Problem statement

Data collected from May 2022 to May 2023

Antenatal and postnatal mothers with risk of VTE **73.2%**

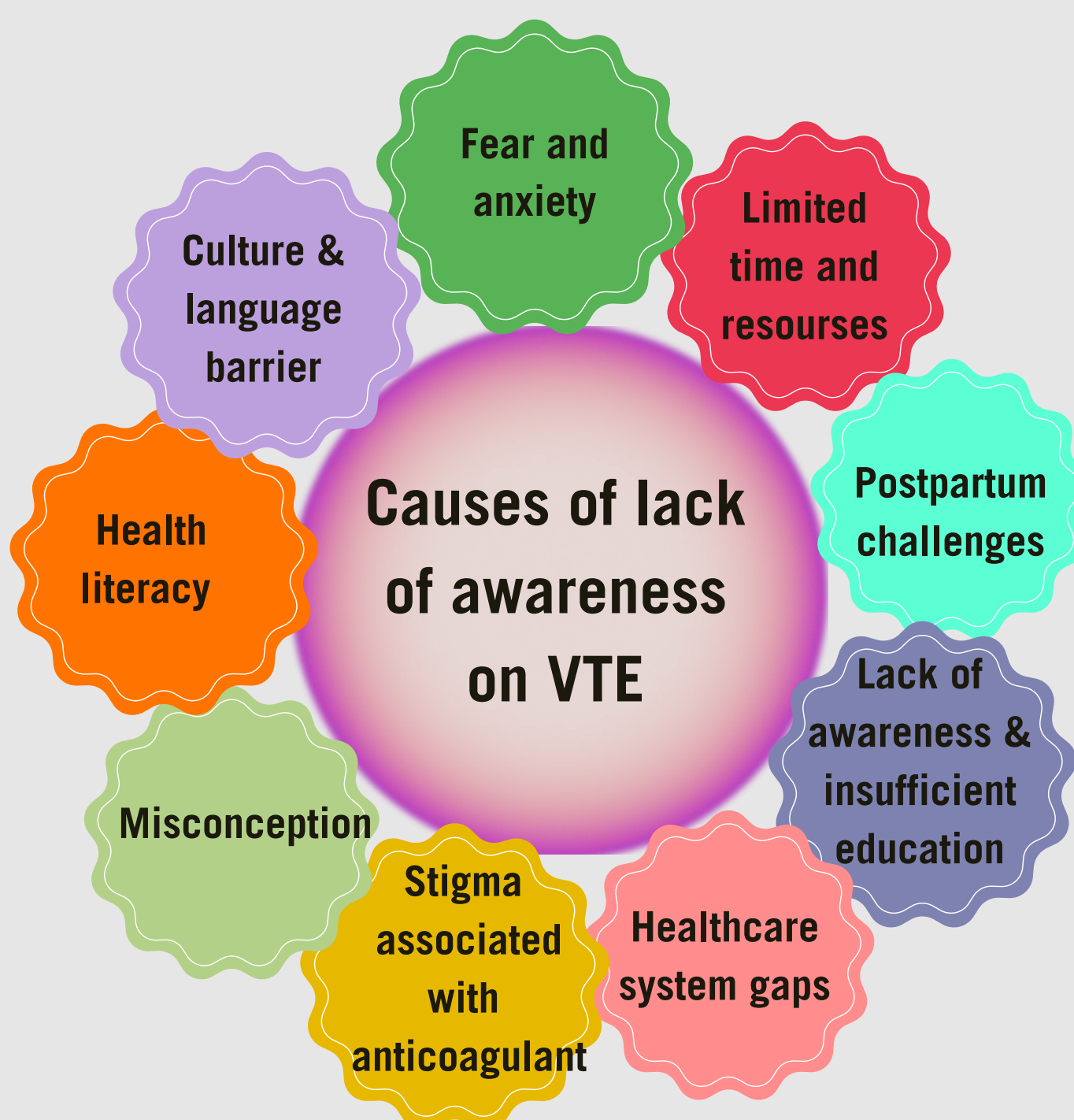
Patients were aware on VTE **ONLY 16.7%**

1.4 literature review

- Fen et al. (2022) study showed that the knowledge of VTE among pregnant women in Malaysia is generally poor. Results found that 95.8% of women had low knowledge.
- The reported maternal mortality ratio due to VTE in Malaysia from 2007 to 2016 ranges between 1.5 to 4.7 per 100,000 live births (Moh and Asa.,2018a).
- Shaban et al. (2024) concluded that less than two-thirds of pregnant women studied had poor knowledge at Benha University Hospital, Egypt.

2.0 KEY MEASUREMENT OF IMPROVEMENT

2.1 causes of lack awareness



2.2 Process of care



2.3 Study objective

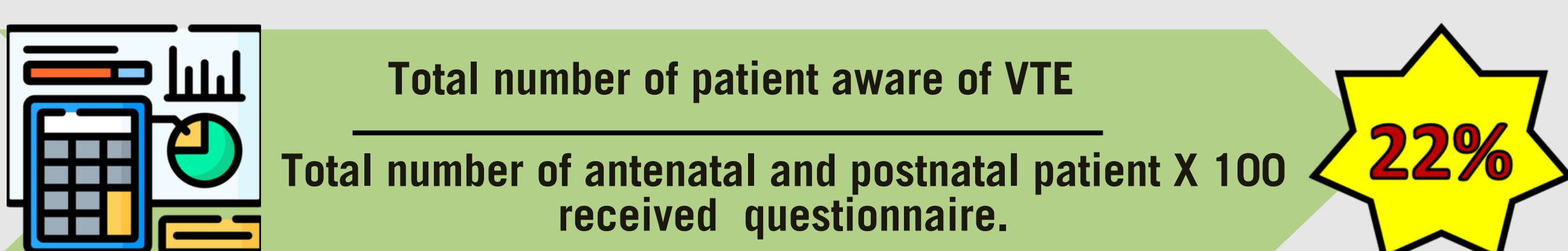
General Objective :

The goal was to increase patient knowledge of anticoagulant treatment and reduce the risk of VTE among antenatal and postnatal mothers.

Specific Objective :

- Ensure pregnant women and new mothers understood VTE, its risk factors, and potential consequences.
- Symptom recognized : Help patients to recognize early signs of VTE.
- Risk assessment : Assessed individual VTE risk of each patient.
- Anticoagulant Awareness : Ensure patients understood the importance of anticoagulant treatment.
- Patient empowerment : Empowering patients to actively engaged with their own health.

2.4 Indicator



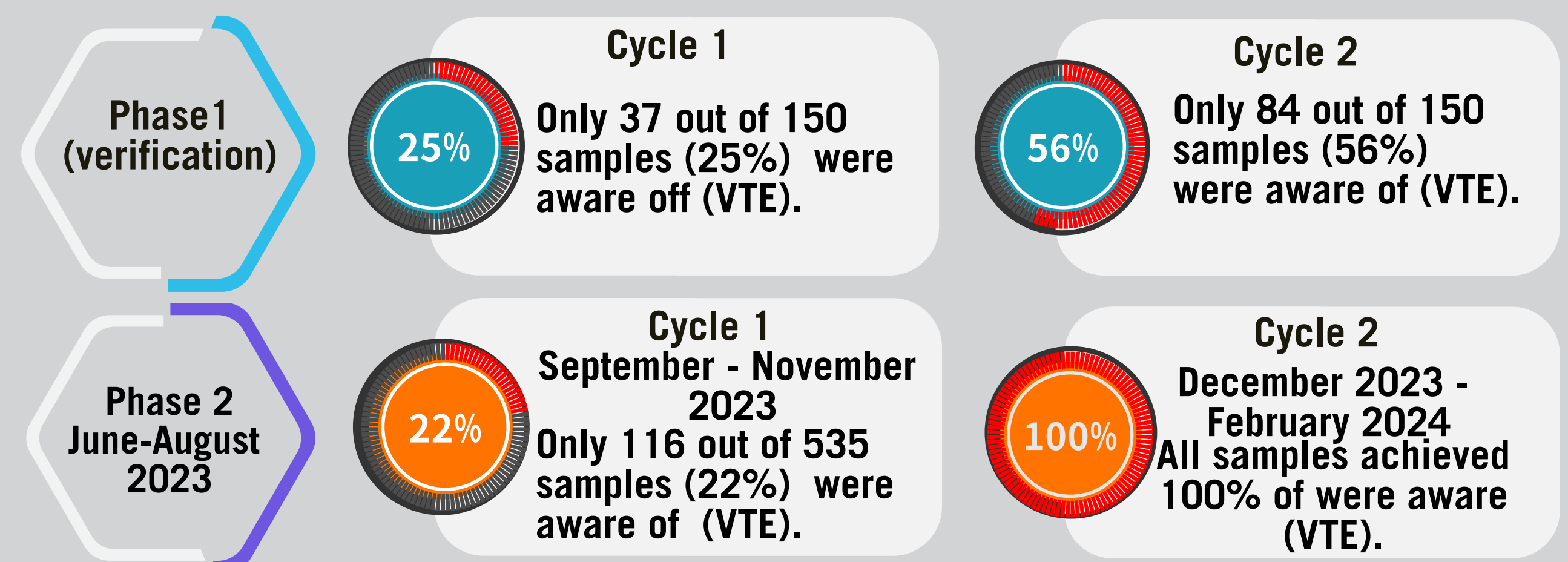
3.0 PROCESS OF GATHERING DATA

A cross-sectional study was conducted on 535 pregnant women to assess their understanding of Venous Thromboembolism (VTE), categorizing the data by demographics and knowledge levels. Mainly focused on patient's experience and perceptions of VTE, its causes, and risk factors.

3.1 Methodology

Study Design	Cross Sectional Study
Duration of Study	(Phase 1) Verification study – June –August 2023. (Phase 2) Cycle 1 : September – November 2023 Cycle 2 : December 2023 – February 2024
Sampling Tool	Questionnaire
Sampling Method	Universal Sampling (535)
Inclusion Criteria	Antenatal and Postnatal Mothers

4.0 ANALYSIS & INTERPRETATION



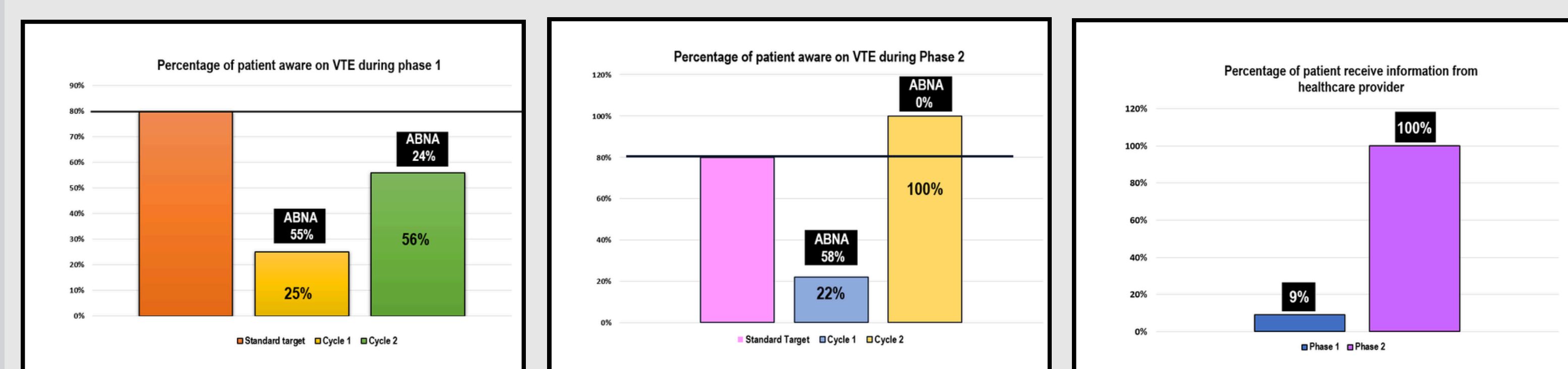
4.1 Model of Good Care

Process	Criteria	Standard	Phase 1		Phase 2	
			1 st cycle	2 nd cycle	1 st cycle	2 nd cycle
Assess patient's level of knowledge and understanding on VTE	Heard about VTE (Questionnaire)	80%	25%	56%	22%	100%
	Healthcare provider giving information regarding causes of VTE					
	a) Blood clot in vein.		16%	18%	21.5%	78.1%
	b) Lack of oxygen in vein	80%	18%	20%	23.6%	21.9%
	c) A tumour in vein		26%	28%	38.3%	0%
	d) Lack of fluid in vein		14%	17%	16.6%	0%
Demonstration Session (n=59) of postnatal patient	Healthcare provider teach postnatal mother how to inject anticoagulant	80%	-	-	18%	98%
Carry out assessment and intervention	a) Bedside teaching and VTE risk assessment form	80%	-	56%	-	-
	b) Bedside teaching, VTE risk assessment form, QR code and Leaflet information		-	-	53.4%	100%

5.0 STRATEGIES FOR CHANGE

- QR code is displayed at the O&G clinic and in the patient's room.
- Providing leaflets to all patients.
- continued with VTE Risk Assessment and Bedside teaching to all patients.

6.0 EFFECT OF CHANGE



6.1 Conclusion

There was a highly significant positive correlation between knowledge and culture practices. By providing proper knowledge and education, 100% of the patients improved their understanding on VTE and anticoagulant which may lead to no complications among antenatal and postnatal patients if not practice.

6.2 Lesson learnt

Despite the evaluation results promising quality improvement, further efforts were needed to ensure eligible patients to received proper Venous Thromboembolism (VTE) information. It was also important to have continuous awareness and education activities.

7.0 NEXT STEP

For future and for better improvement, VTE information will be introduce as an important concern in parentcraft class.

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