

# INCREASING THE PERCENTAGE OF TODDLERS WHO COMPLETED FOUR TIMES FLUORIDE VARNISH APPLICATION IN KLINIK PERGIGIAN (KP) SIKAMAT

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## INTRODUCTION

Fluoride varnish (FV) is a professionally applied topical fluoride

- Treat the tooth surface so that dental caries (tooth decay) are controlled and their progression is slowed, halted, or even reversed efficiently (Bonetti, 2016)

## 1.0 SELECTION OF OPPORTUNITIES FOR IMPROVEMENT

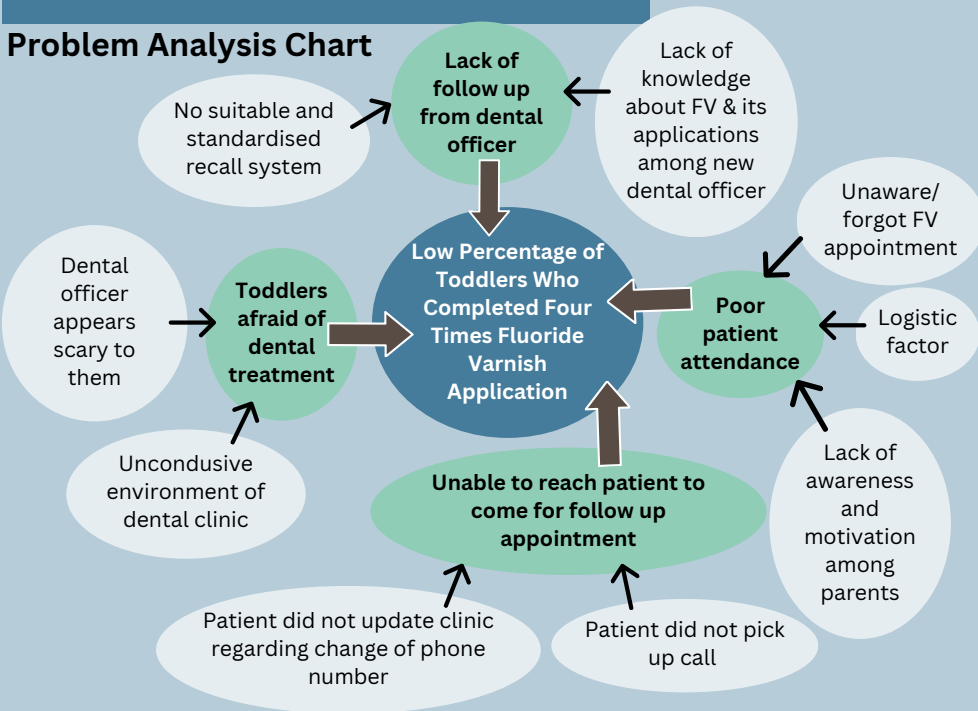
Problems	S	M	A	R	T	TOTAL
Low percentage of toddlers who completed four times fluoride varnish application	21	19	21	18	19	98
Risk of repeated radiation exposure during IOPA among patient in KP Sikamat	15	15	16	14	10	70
Poor awareness of oral health knowledge among antenatal mother at KP Sikamat	11	16	15	11	19	72

7 group members

Scale: 1 = Low 2 = Medium 3 = High

## 2.0 KEY MEASURES FOR IMPROVEMENT

### Problem Analysis Chart



## INDICATORS

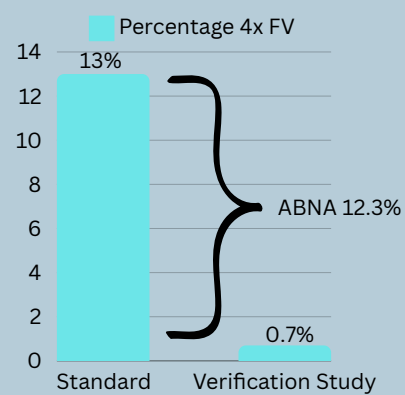
Number of toddlers comes 4 times for fluoride application / Total number of toddlers indicated for fluoride application x 100%

Standard ≥13%

## 3.0 PROCESS OF GATHERING INFORMATION

<b>Type of Study</b> Cross-sectional study	<b>Location</b> KP Sikamat	<b>Inclusion criteria:</b> All toddler patients (age <4years old) with high and moderate risk for caries visiting KP Sikamat
<b>Study period</b> 2 Year	<b>Study sample</b> All toddlers requiring FV	
		<b>Exclusion criteria:</b> • All toddlers at low risk for caries visiting KP Sikamat • Toddlers with asthma

## 4.0 ANALYSIS AND INTERPRETATION



Only 0.7% toddlers completed 4x FV application during verification study.

## 5.0 STRATEGIES FOR CHANGE

1) Creation of FV-Recall database

### Cycle 1

2) Creation of FV form to document toddler's FV visit

3) Parents were contacted via call or text to remind them on child's follow-up appointments.

### Cycle 2

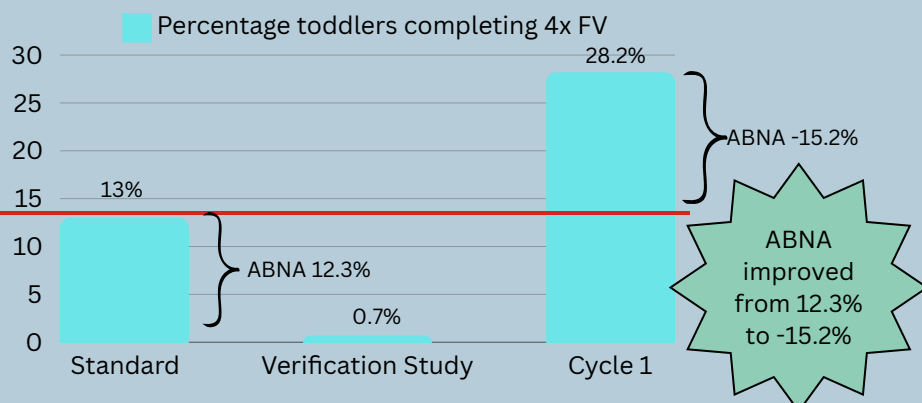
1) Creation of FV-Pocket card consisting of information on FV

2) Devising steps to positively reinforce toddlers attending the clinic and surgery rooms were decorated



## 6.0 EFFECT OF CHANGE

### Post-intervention analysis (ABNA)



The interventional measures are being continuously implemented and monitored while undergoing Cycle 2.

## LESSON LEARNT

- Our remedial strategies proved successful in increasing the percentage of toddlers who completed four times FV application in KP Sikamat
- We managed to achieve beyond our standard of 13%

## THE NEXT STEP

- Maintain Success:** We're dedicated to preserving our current results through ongoing implementation of effective remedial actions.
- Expand Reach:** Our goal is to roll out these innovative measures across all government dental clinics in Seremban.
- Launch i-Remind:** Introducing our new app to keep parents engaged with timely reminders for follow-up appointments.

## Acknowledgement

We would like to express our gratitude to patients and parents who willingly contributed and cooperated throughout this study being conducted. We would also like to thank our mentor, Dr Dewi Mayang Sari Binti Kamarozaman, our fasilitator for her undivided encouragement and support throughout this QA study.

## Sources

- QA/QI WORKBOOK- The Problem-solving Approach, 3rd Edition
- Bonetti D, Clarkson JE. Fluoride Varnish for Caries Prevention: Efficacy and Implementation. Caries Res. 2016;50 Suppl 1:45-9. doi: 10.1159/000444268. Epub 2016 Apr 22. PMID: 27100219.