

# TOWARDS INCREASING THE PERCENTAGE OF TODDLER ORAL HEALTH COVERAGE BY KLINIK PERGIAN CAMERON HIGHLANDS (KPCH)



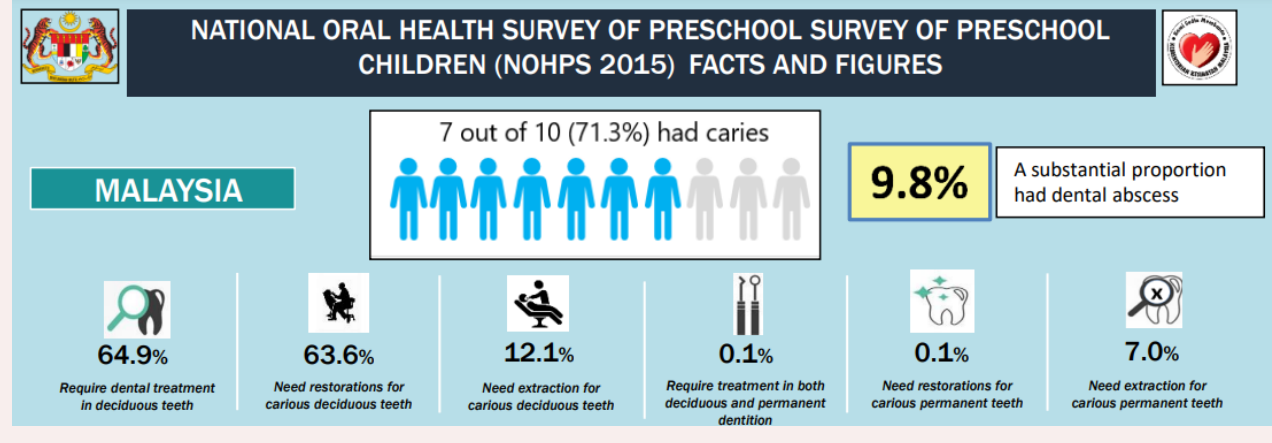
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## INTRODUCTION

The first dental visit for toddlers is a critical moment. It not only provides a chance to educate parents about oral health but also plays a crucial role in preventing dental diseases. In Malaysia, a staggering 71.3% of five-year-olds suffer from tooth decay (NOHPS, 2015). This issue may be rooted in the community's low level of awareness regarding dental health screenings.



## DEFINITION

**Toddler:** Refers to children aged 4 years and below.

## 1. SELECTION OF OPPORTUNITIES FOR IMPROVEMENT

### 1.1 PROBLEM PRIORITISATION

Weightage: 1= Low 2= Medium 3= High  
Voting performed by 9 group members

No	Quality Problems	Score					Total
		S	M	A	R	T	
1	Low percentage of complete case among antenatal patients in KPCH.	22	20	21	18	18	99
2	Low percentage of maintaining orally fit (TPR) among secondary school children.	20	21	20	18	18	97
3	Low percentage of toddler oral health coverage by KPCH.	24	22	21	22	23	112
4	Low percentage of periodontitis case referral to specialist in KPCH.	19	20	18	17	19	93
5	Low percentage of denture issued within 8 weeks for elderly aged 60 years and above in KPCH.	18	19	17	20	18	92

### 1.2 RATIONALE FOR SELECTION

**The SMART Criteria**

<b>SERIOUSNESS</b>	Toddler oral health coverage is crucial to prevent early childhood caries and risks of developmental complications such as infection and early tooth loss. Low visits during the toddler stage can significantly lead to extensive dental interventions to be provided under pre-school and school programs which can negatively impact the quality of life as well as the performance of KPCH in this regard.
<b>MEASURABILITY</b>	Relevant data can be sourced from KKK201A, PG101A and Gi-Ret 2.0.
<b>APPROPRIATENESS</b>	Enhancing toddler coverage will significantly improve patients' future oral health status, elevate awareness about oral health, and enhance overall quality of life. KPCH also stands as the sole government clinic providing coverage for Klinik Kesihatan (KK)/Klinik Desa (KD) in the district.
<b>REMIEDIABLE</b>	Improvement measure can be implemented
<b>TIMELINESS</b>	Study can be conducted within a reasonable timeframe

### 1.3 LITERATURE REVIEW

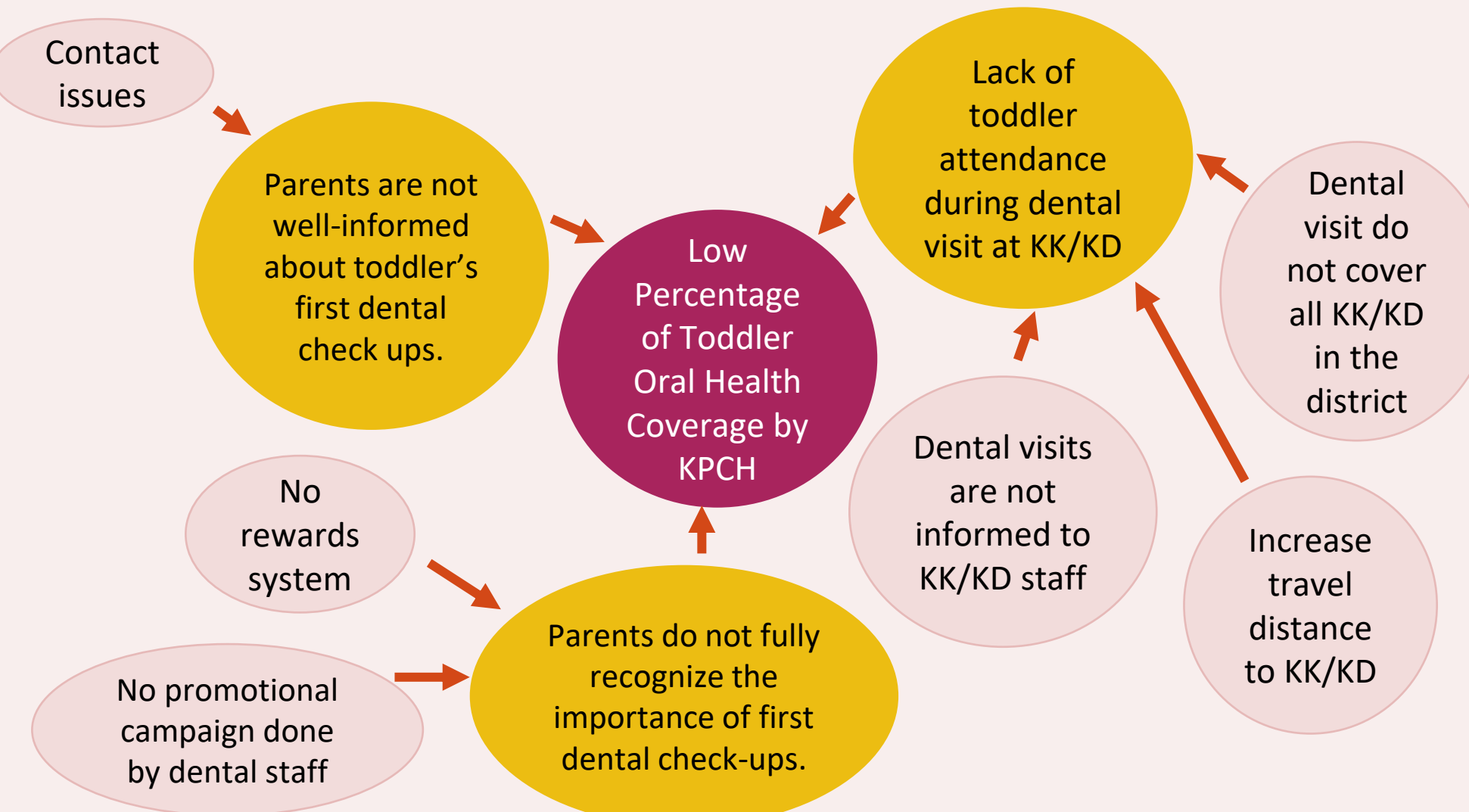
American Academy of Pediatrics	A child should visit the dentist within six months of eruption of the first primary tooth and no later than 12 months of age.
Hall-Scullin et al. (2017)	Toddler first visit is very important because it offers an opportunity to educate and inform the parents about oral health. If appropriate measures are applied sufficiently early (in infancy) it may be possible to raise a cavity-free child.
Baker et al. (2019)	With every year past age one that we delay dental visits, it is increasingly likely that dental disease can no longer be prevented or arrested but will require surgical intervention.

### 1.4 PROBLEM STATEMENT

KPCH experienced a 39% decline in the percentage of toddler oral health coverage from 2018 to 2020. The root cause of this problem is multifaceted, encompassing a lack of awareness, contact issues, and logistical challenges. This study aims to enhance the percentage of toddler oral health coverage thus contributing to the broader goal of promoting better oral health outcomes for all toddlers.

## 2. KEY MEASURES FOR IMPROVEMENT

### 2.1 PROBLEM ANALYSIS CHART



### 2.2 GENERAL OBJECTIVE

To increase the percentage of toddler oral health coverage by KPCH.

### 2.3 SPECIFIC OBJECTIVE

- To verify the percentage of toddler oral health coverage by KP Cameron Highlands.
- To identify the contributing factors leading to low percentage of toddler oral health coverage by KP Cameron Highlands.
- To formulate and implement appropriate remedial measure.
- To evaluate the effectiveness of remedial measures taken.

### 2.4 STANDARD & INDICATOR

<b>INDICATOR</b>	Percentage of toddlers' oral health coverage by KPCH.
<b>FORMULA</b>	$\frac{\text{Number of toddlers' first dental visit}}{\text{Number of toddlers' new attendances in KK/KD}} \times 100$
<b>STANDARD</b>	70% (Reference: District Specific Approach, 2020)

## 3. PROCESS OF GATHERING INFORMATION

### 3.1 METHODOLOGY

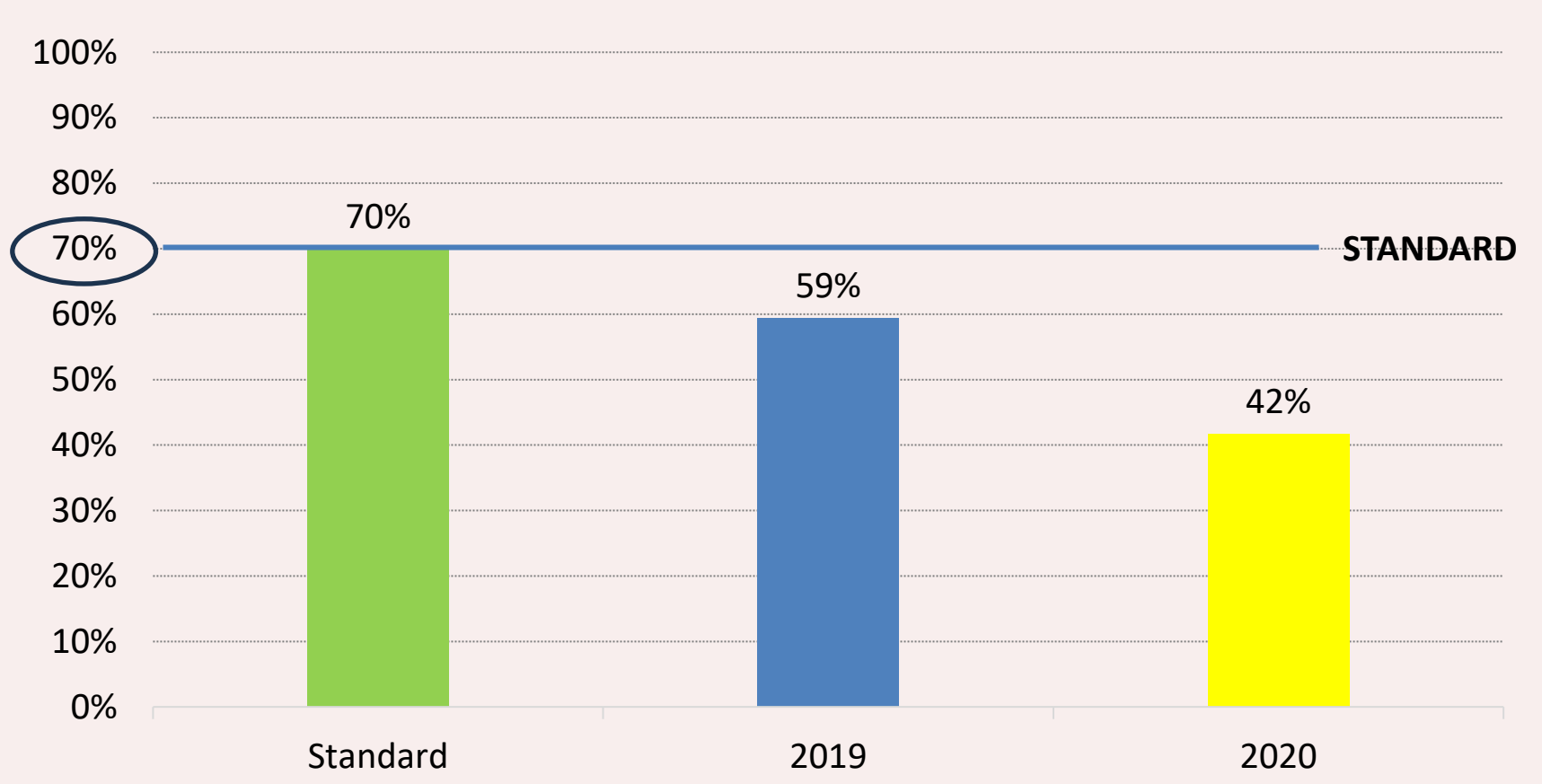
<b>TYPE OF STUDY</b>	Quality improvement study using nonprobability sampling method
<b>DURATION OF STUDY</b>	Verification Study: August 2020 - November 2020 Post Remedial Cycle 1: March 2021 - May 2021 Post Remedial Cycle 2: September 2022 - December 2022 Post Remedial Cycle 3: September 2023 - December 2023
<b>TOOLS</b>	1. Self-administered questionnaire 2. Observation checklist for dental officers 3. Laporan Bulanan Kedatangan ke Klinik Kanak-Kanak (KKK201A) 4. Buku Pendaftaran Pesakit KK/KD (PG101A) 5. KKM dental reporting 2023 (Gi-Ret 2.0)
<b>INCLUSION CRITERIA</b>	Toddler attend their first dental visit.
<b>EXCLUSION CRITERIA</b>	No exclusion criteria

### 3.2 MODEL OF GOOD CARE

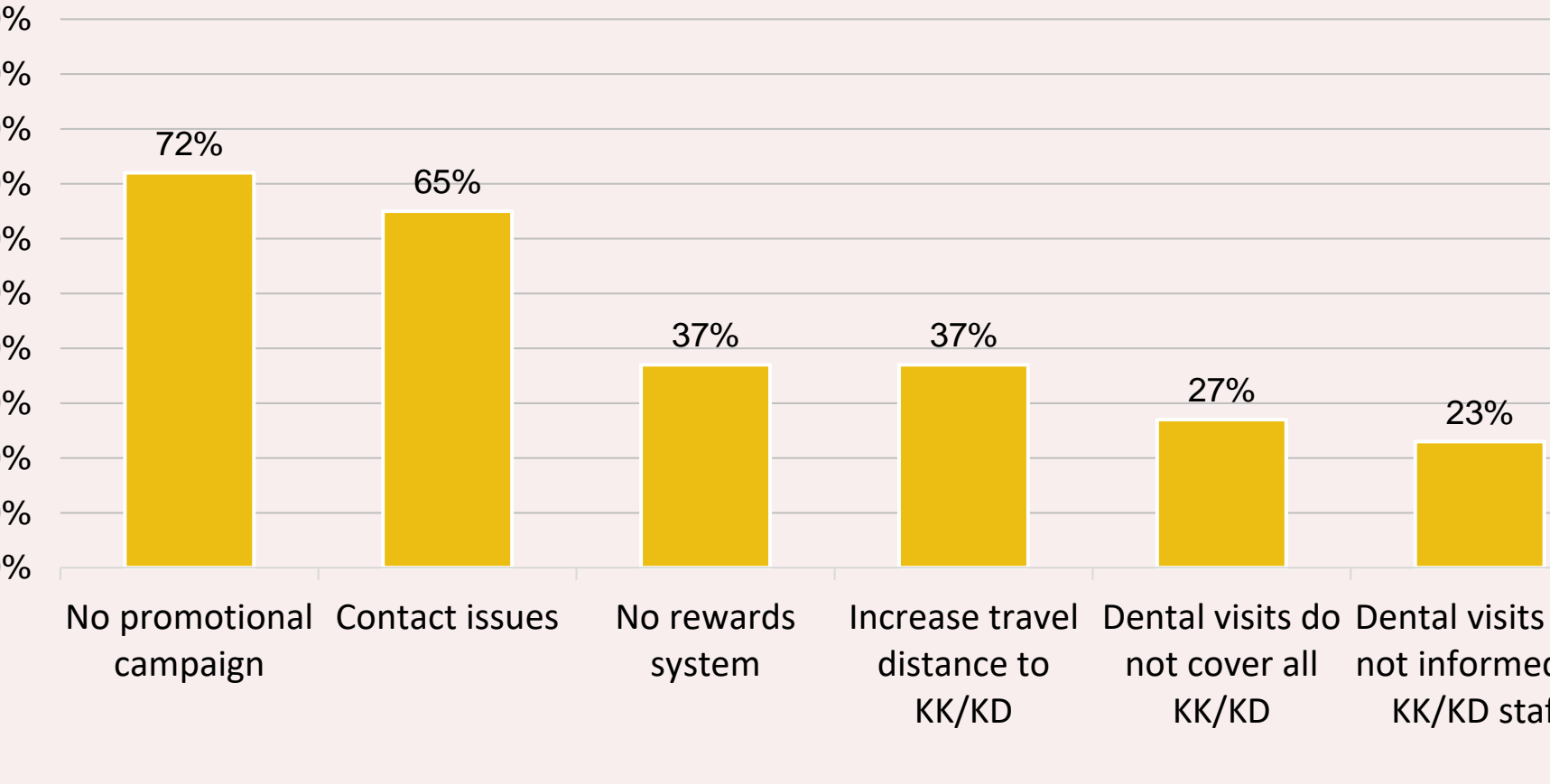
No	Critical Steps	Criteria	Standard	Pre-remedial	Cycle 1	Cycle 2	Cycle 3
1	Prepare the KK/KD list	1. All KK/KD in the district are included in a monthly dental visit	100%	54%	100%	100%	100%
2	Prepare visiting schedule	1. The schedule should encompass all KK/KD in the district and visiting should be conducted at least once every month. 2. The visiting schedule should incorporate home visits for parents facing transportation issues.	100%	0%	23%	100%	100%
3	Distribution of schedule	1. The visiting schedule planned for current and subsequent year is distributed to all facilities.	100%	0%	23%	100%	100%
4	Inform KD/KK of the dental visit	1. Comprehensive information and updates regarding dental visits are provided to all KK/KD.	100%	0%	23%	100%	100%
5	Contact parents	1. Parents are contacted at least a day before visit	100%	8%	23%	100%	100%

## 4. ANALYSIS & INTERPRETATION

Percentage of Toddler Oral Health Coverage by KP Cameron Highlands

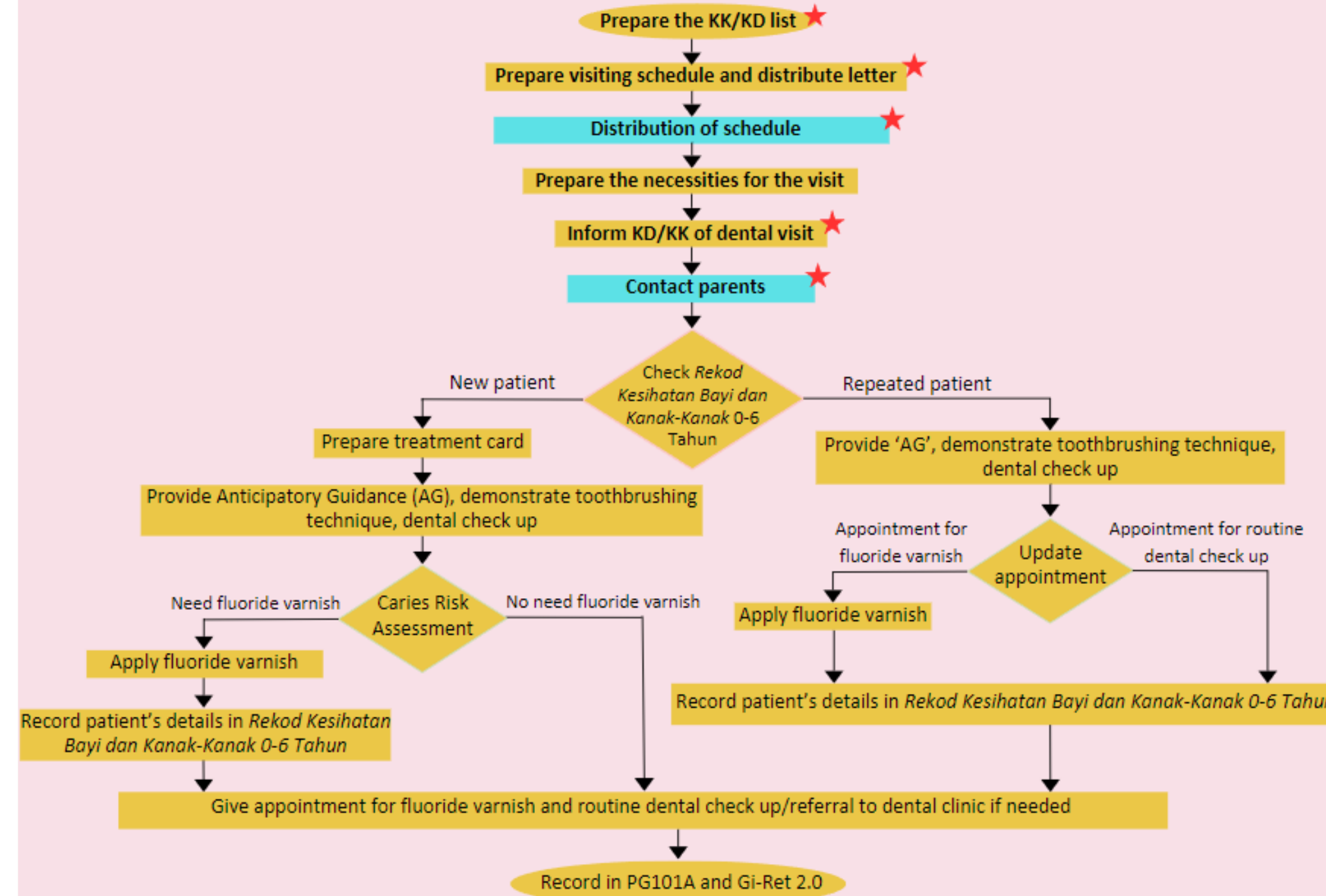


Percentage of Contributing Factors



## 5. STRATEGIES FOR CHANGE

### INTRODUCTION AND IMPLEMENTATION OF NEW PROCESS OF CARE

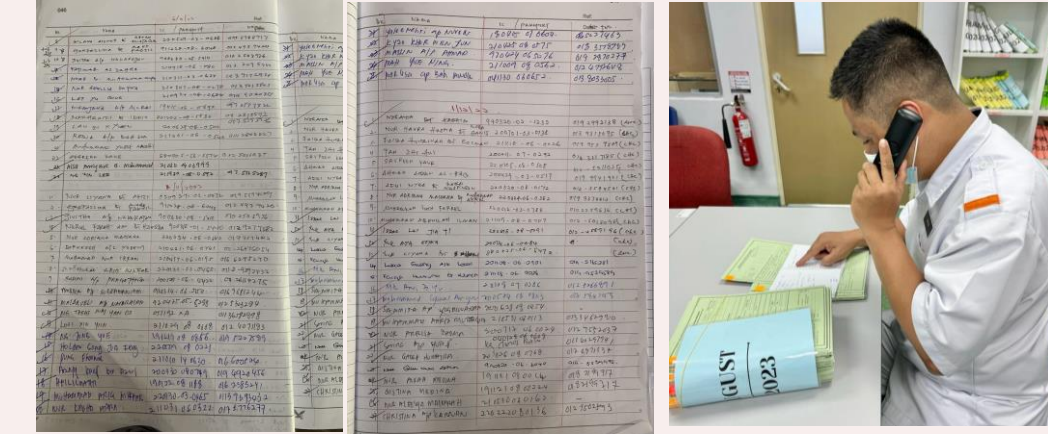


### 5.1 ESTABLISHING COLLABORATION WITH KD KUALA TERLA AND KD TRINGKAP FOR A MONTHLY DENTAL VISIT.

TARIKH	KD/KU	IN CHARGE
4/7/2020	KD/UKIA	DR NEKUS / SYIANI / SARI
5/7/2020	KD Telok	DR SILVAREY / JAMBI / ETI
7/7/2020	KD Ringlet	DR ACBI / JAMBI / SUKRI
12/7/2020	KKA Kg Raja	DR SHARREY
13/7/2020	KD Beramb	DR ACBI / JAMBI / ETI
18/7/2020	Kg Siam	DR JOHN / BERANJ / SUKRI
20/7/2020	KD Langat	DR ALICE / BERANJ / FIZ
25/7/2020	KD Beramb	DR ALICE / BERANJ / SUKRI
26/7/2020	KD Tringkap	DR SHARREY / JAMBI / ETI
31/7/2020	KD Terlu	DR JOHN / AUIS / SUKRI
	KD Telianau	DR KAMINI / BERANJ / SUKRI

- Action involved Dental Officer and Staff Nurse of KD Kuala Terla & KD Tringkap
- Implemented starting December 2020 onwards
- A monthly schedule is prepared before each visit and distributed to each facility.
- L. Morley et al. (2017) - Collaboration in healthcare provides exceptional care and benefits patients, staff, and organizations.

### 5.2 COLLABORATING WITH KK/KD STAFF i: TO OBTAIN DATA AND CONTACT NUMBERS OF TODDLERS WHO HAVE NOT UNDERGONE DENTAL EXAMINATION.



- Action involved Dental Surgery Assistant and Staff Nurse of each KK/KD.
- Implemented starting December 2020 onwards.
- Parents will be contacted and informed about the dental screening one day before the visit.

### 5.2 COLLABORATING WITH KK/KD STAFF ii: BY JOINING PASUKAN BERGERAK ORANG ASLI (PBOA)

- Action involved Dental Officers, dental staff and PBOA team.
- Implemented starting January 2022 onwards.
- Together with PBOA team, home visit to Orang Asli village was done which includes health and dental check up.
- M. Keboa et al. (2019) - Interprofessional collaboration between dentists and nursing staff can improve oral care delivery in long-term care facilities by increasing awareness and addressing barriers.



### 5.3 DISTRIBUTE MONTHLY SCHEDULE TO ALL FACILITIES AND PROVIDE PARENTS WITH APPOINTMENTS FOR TODDLERS' FIRST DENTAL SCREENING BASED ON THEIR RESPECTIVE FACILITIES.

TARIKH	LOKASI
1/7/2021	KK/UKIA
2/7/2021	KK/UKIA
3/7/2021	KK/UKIA
4/7/2021	KK/UKIA
5/7/2021	KK/UKIA
6/7/2021	KK/UKIA
7/7/2021	KK/UKIA
8/7/2021	KK/UKIA
9/7/2021	KK/UKIA
10/7/2021	KK/UKIA
11/7/2021	KK/UKIA
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13/7/2021	KK/UKIA
14/7/2021	KK/UKIA
15/7/2021	KK/UKIA
16/7/2021	KK/UKIA
17/7/2021	KK/UKIA
18/7/2021	KK/UKIA
19/7/2021	KK/UKIA
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24/7/2021	KK/UKIA
25/7/2021	KK/UKIA
26/7/2021	KK/UKIA
27/7/2021	KK/UKIA
28/7/2021	KK/UKIA
29/7/2021	KK/UKIA
30/7/2021	KK/UKIA
31/7/2021	KK/UKIA

- Action involved Dental Officers and Staff Nurse.
- Implemented starting December 2020 onwards.
- Toddlers who have not undergone dental examination will be referred directly to the dental team.
- A. Kuiper et al. (2021) - Appointment scheduling in healthcare services improves flexibility, ease of use, and speed while maintaining a balanced waiting and idle time balance.
- Starting January 2023, two visits per month were conducted at highly populated facilities (KK Ringlet and KK Kg. Raja)

### 5.4 DISTRIBUTE FLYERS TO PROMOTE THE ORAL HEALTH AND DENTAL PROGRAM FOR TODDLERS.

- Action involved Dental Officers and staff.
- Implemented starting December 2020 onwards.
- Parents received concise, straightforward dental information and instructions to raise awareness about oral health.
- H. Spittaels et al. (2006) - Distributing flyers combined with short face-to-face contact increased the number of visitors to the tailored physical activity compared to flyers without contact.

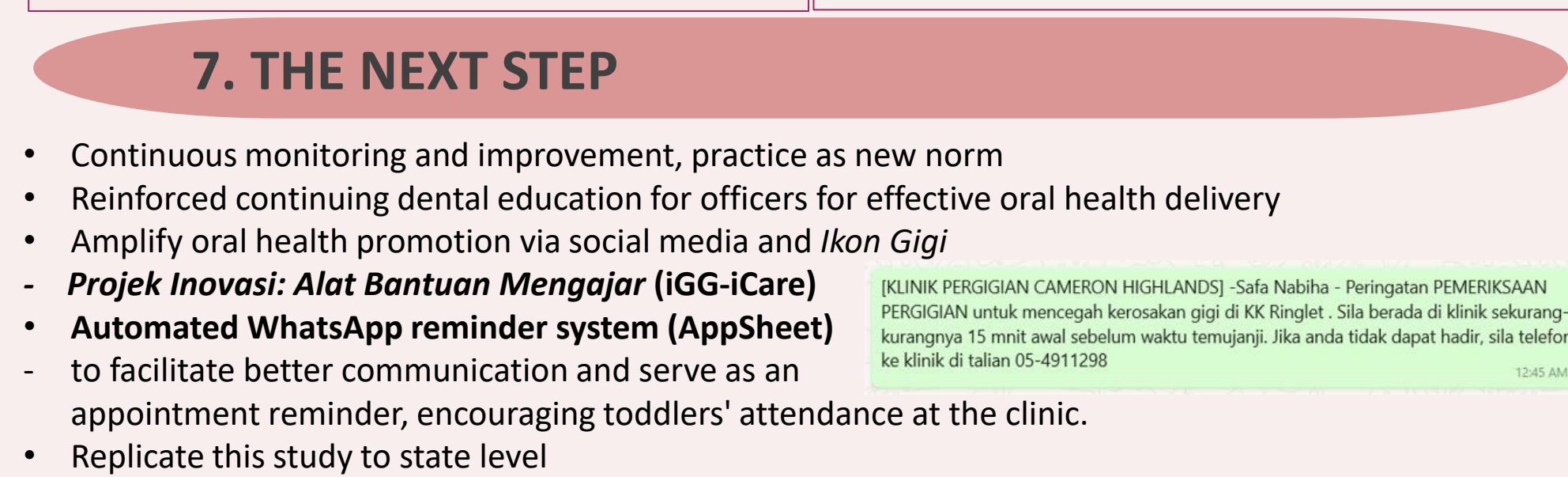
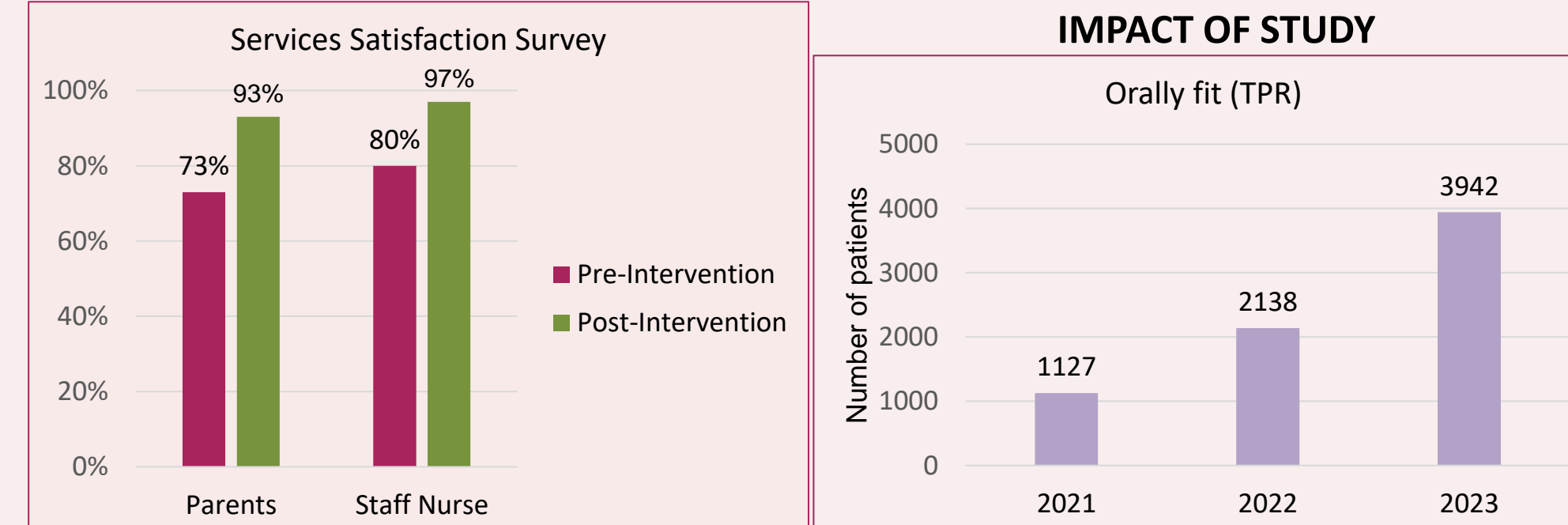
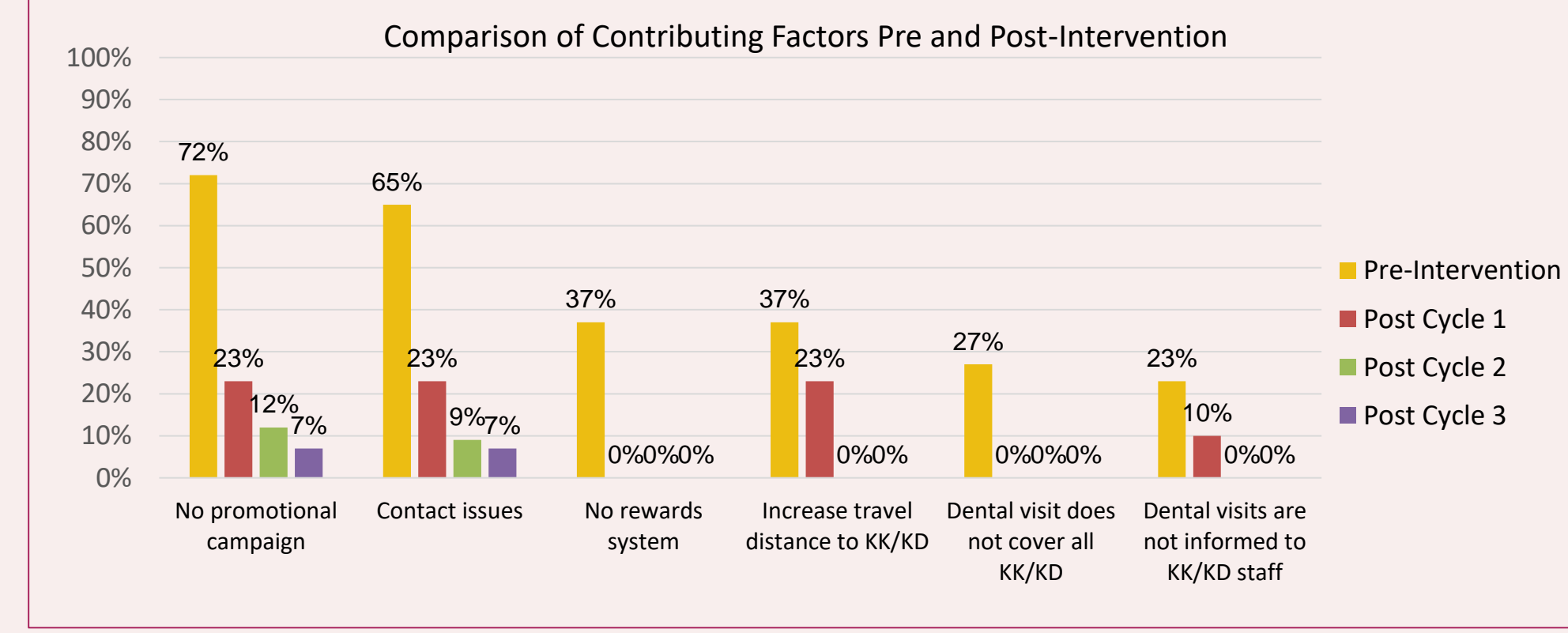
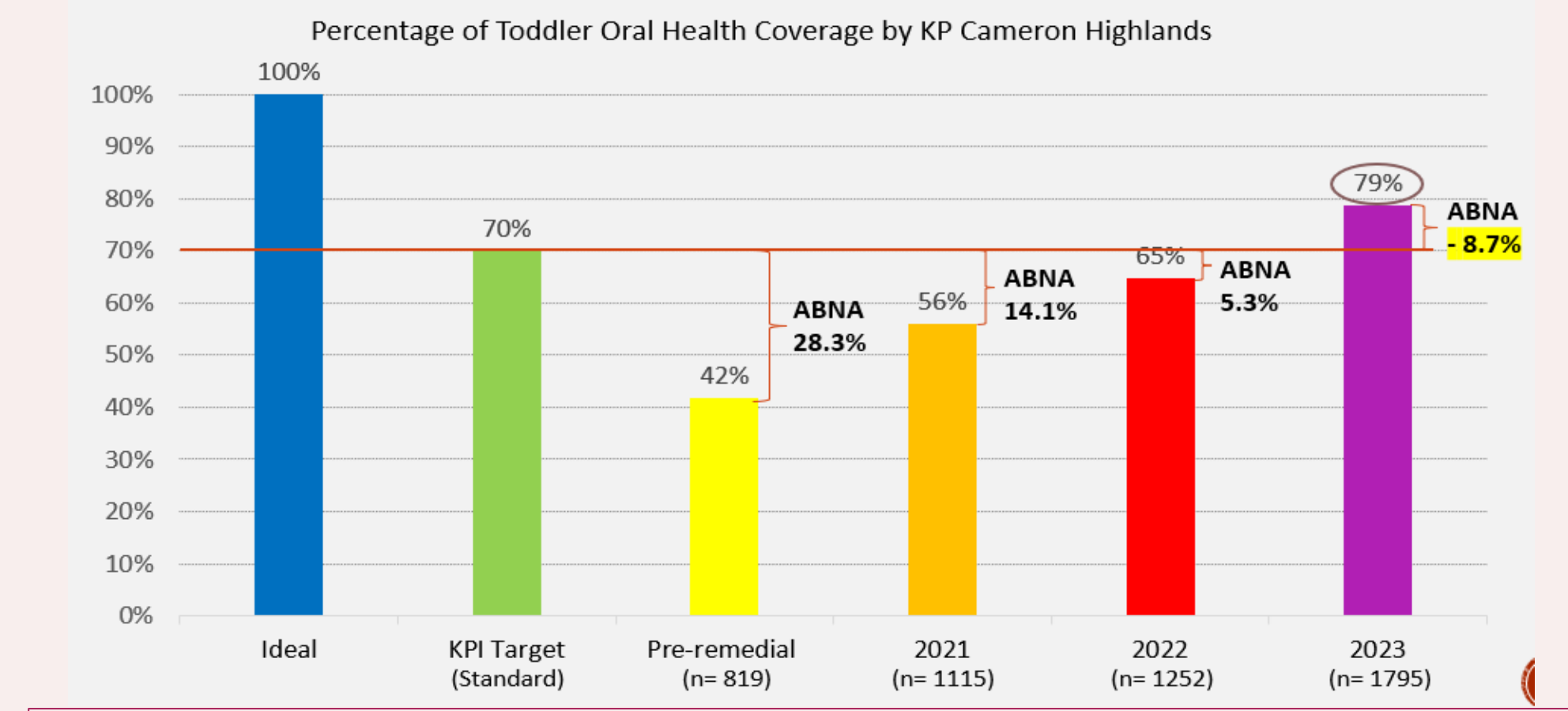
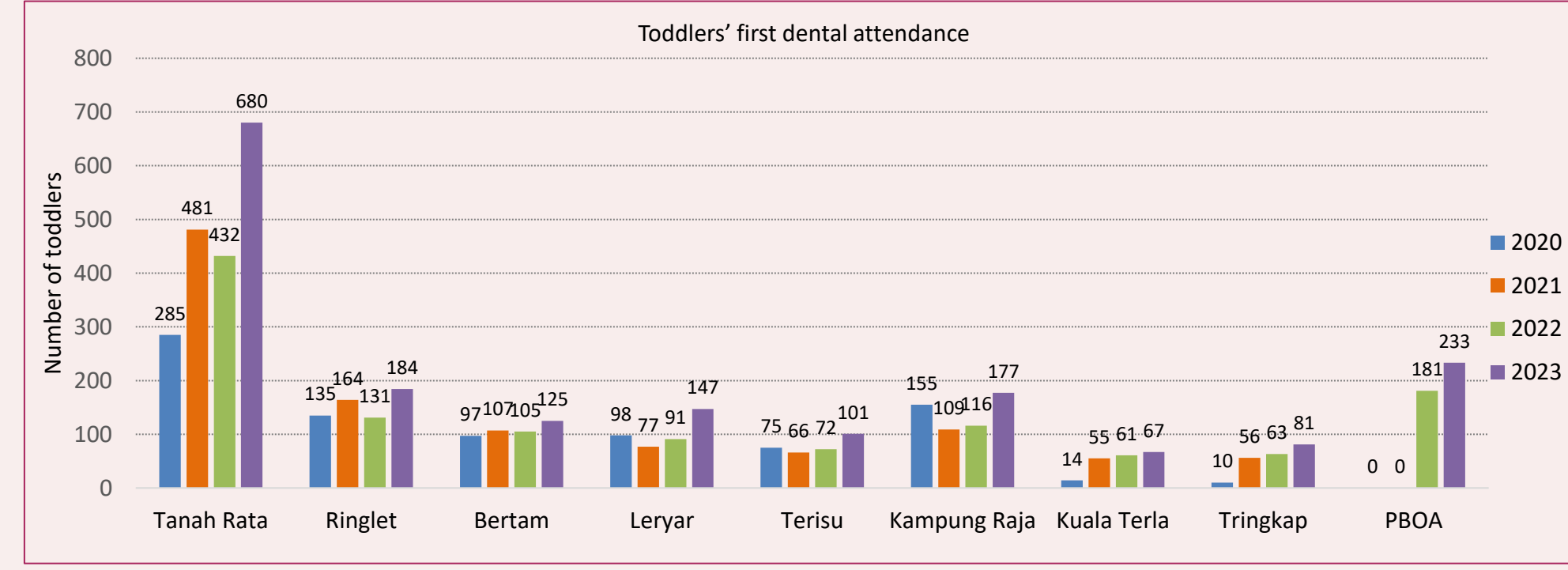


### 5.5 DISTRIBUTE DENTAL KIT GOODIE BAGS AS REWARDS DURING THE FIRST VISIT.

- Action involved mainly Dental Officers.
- Implemented starting December 2020 onwards.
- The complete goodie bag includes a toothbrush, toothpaste, a Mouth Self-Examination pamphlet, and educational flyers.
- M. Reiss et al. (1982) - Multiple contact, incentive, and incentive + problem-solve techniques are significantly more effective in initiating dental visits than control procedures.



## 6. EFFECT OF CHANGE



## 7. THE NEXT STEP

- Continuous monitoring and improvement, practice as new norm
- Reinforced continuing dental education for officers for effective oral health delivery
- Amplify oral health promotion via social media and Ikon Gigi
- Projek Inovasi: Alat Bantuan Mengajar (IGG-iCare)
- Automated WhatsApp reminder system (AppSheet)
- to facilitate better communication and serve as an appointment reminder, encouraging toddlers' attendance at the clinic.
- Replicate this study to state level

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