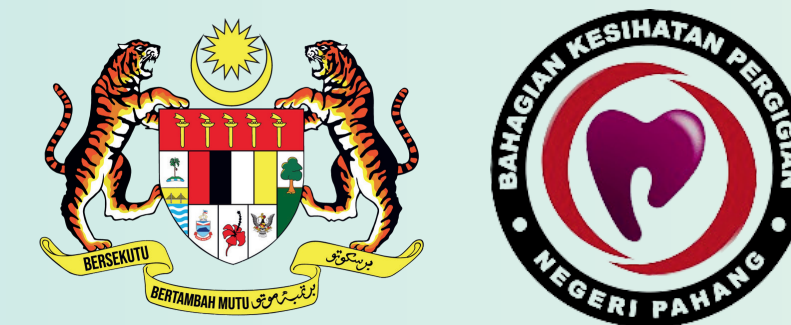


# TOWARDS ZERO PERCENTAGE OF FAKE BRACES WEARERS AMONG SECONDARY SCHOOL STUDENTS IN BENTONG DISTRICT

PP-20

Najah MN<sup>2</sup>, Mai Rozyhasniza R<sup>1</sup>, Loginy R<sup>2</sup>, Sue Ann T<sup>2</sup>, Siti Mardhiah AM<sup>2</sup>, Vishal Shree S<sup>2</sup>  
<sup>1</sup>Pejabat Kesihatan Pergigian Daerah Bentong, Pahang, <sup>2</sup>Klinik Pergigian Bentong, Bentong, Pahang



## 1. SELECTION OF OPPORTUNITIES FOR IMPROVEMENT

### 1.1 INTRODUCTION

**Fake braces** is a term used to describe dental braces that are fitted by unlicensed dentist. Dental Health education could focus on empowering teenagers for healthier behaviours, including saying no to fake braces (Ayuni et. al., 2022)

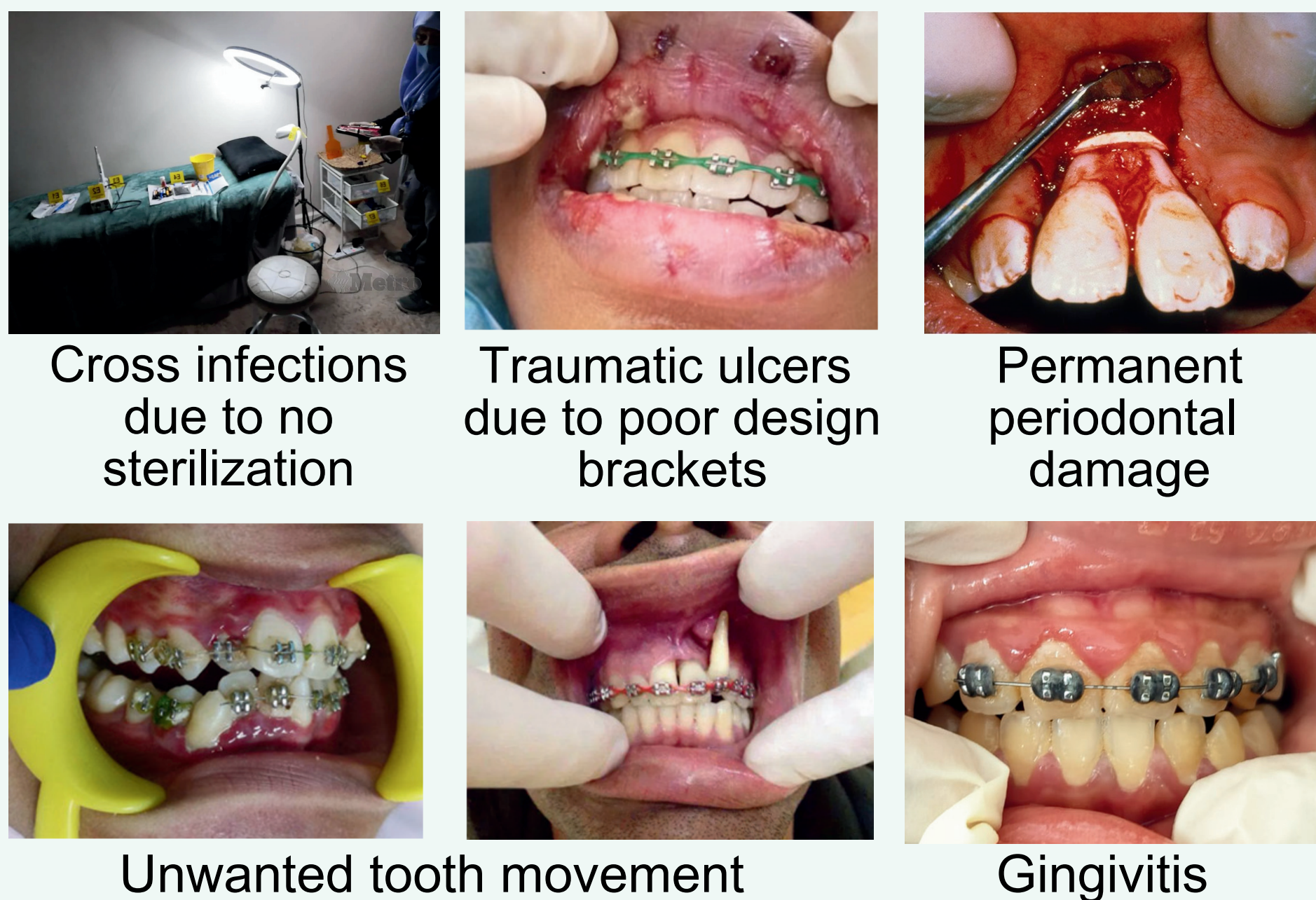
### 1.2 PROBLEM DETERMINATION AND PRIORITIZATION

Based on SMART criteria and nominal group technique, the problem chosen was

High percentage of fake braces wearers among secondary school students in Bentong district

### 1.3 RATIONALE FOR SELECTION

#### S (Seriousness)



#### M (Measureable)

Data can be obtained from patient's treatment record.

#### A (Appropriateness)

Based on Dental Law Enforcement Unit of Pahang, action was taken against 9 fake braces cases in the state from the years 2017 until 2023 and 1 of the cases was identified in Bentong district.

#### R (Remediable)

Increase awareness among populations and strengthen authorities involved.

#### T (Timeliness)

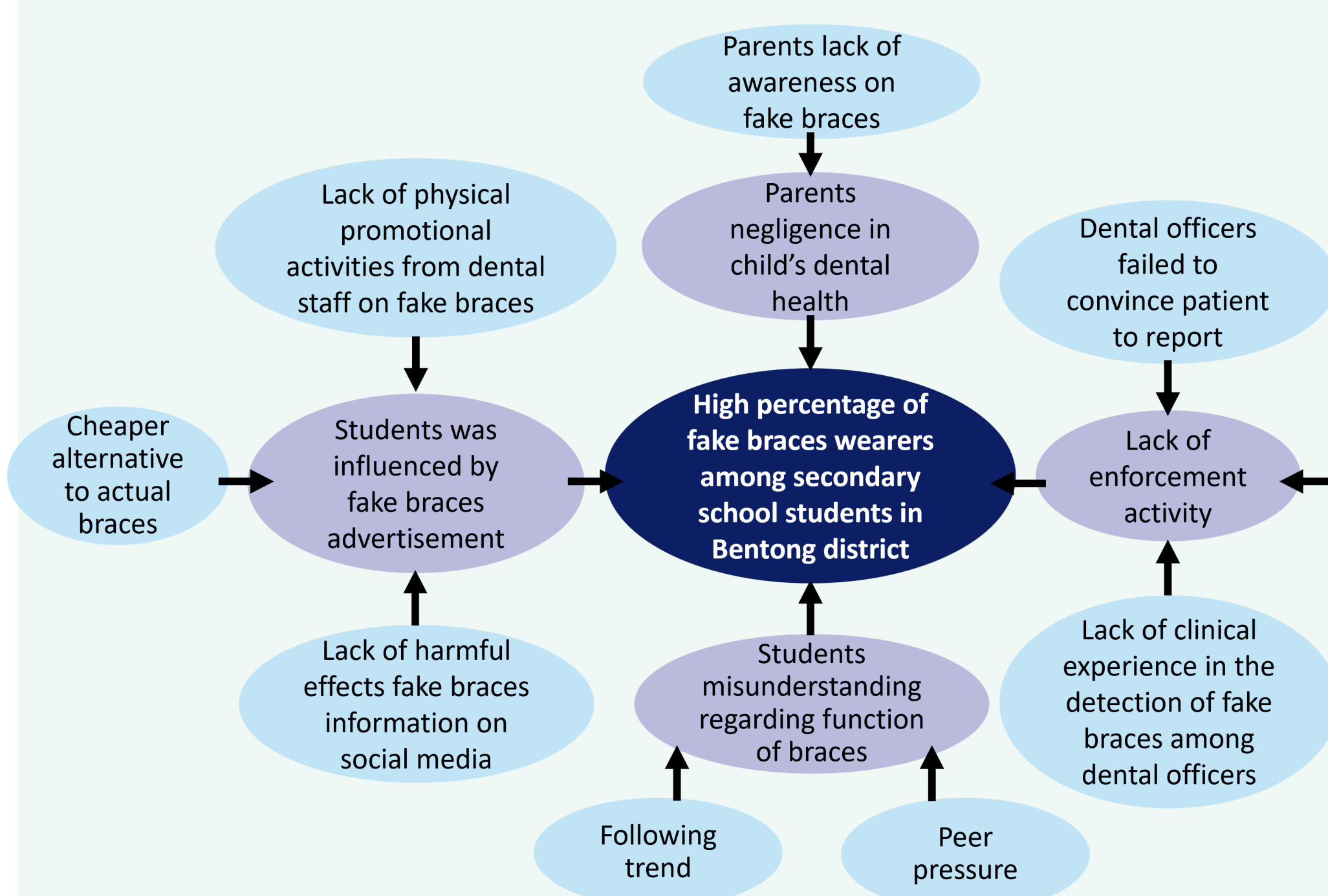
This study can be carried out within 1 year.

### Problem statement

- There is high percentage of fake braces wearers among secondary school students in Bentong district and severe impact of it. This may be due to students misunderstanding regarding function of braces, students was influenced by fake braces advertisement, parents negligence in child's dental health and lack of enforcement activity. Thus, it is important to recognize factors that contribute to the problem so that remedial actions can be taken.

## 2. KEY MEASURES OF IMPROVEMENT

### 2.1 PROBLEM ANALYSIS CHART



### General objective

To achieve zero percentage of fake braces wearers among secondary school students in Bentong district

### Specific objectives

- To verify the prevalence of fake braces wearers
- To determine the contributing factors of fake braces wearers
- To propose and conduct remedial actions to achieve zero percentage of fake braces wearers
- To evaluate effectiveness of the remedial actions proposed

Indicator:  $\frac{\text{Number of students wearing fake braces}}{\text{Number of students wearing braces}} \times 100$

**STANDARD: 0%**  
based on research by Fauziah et. al., 2022

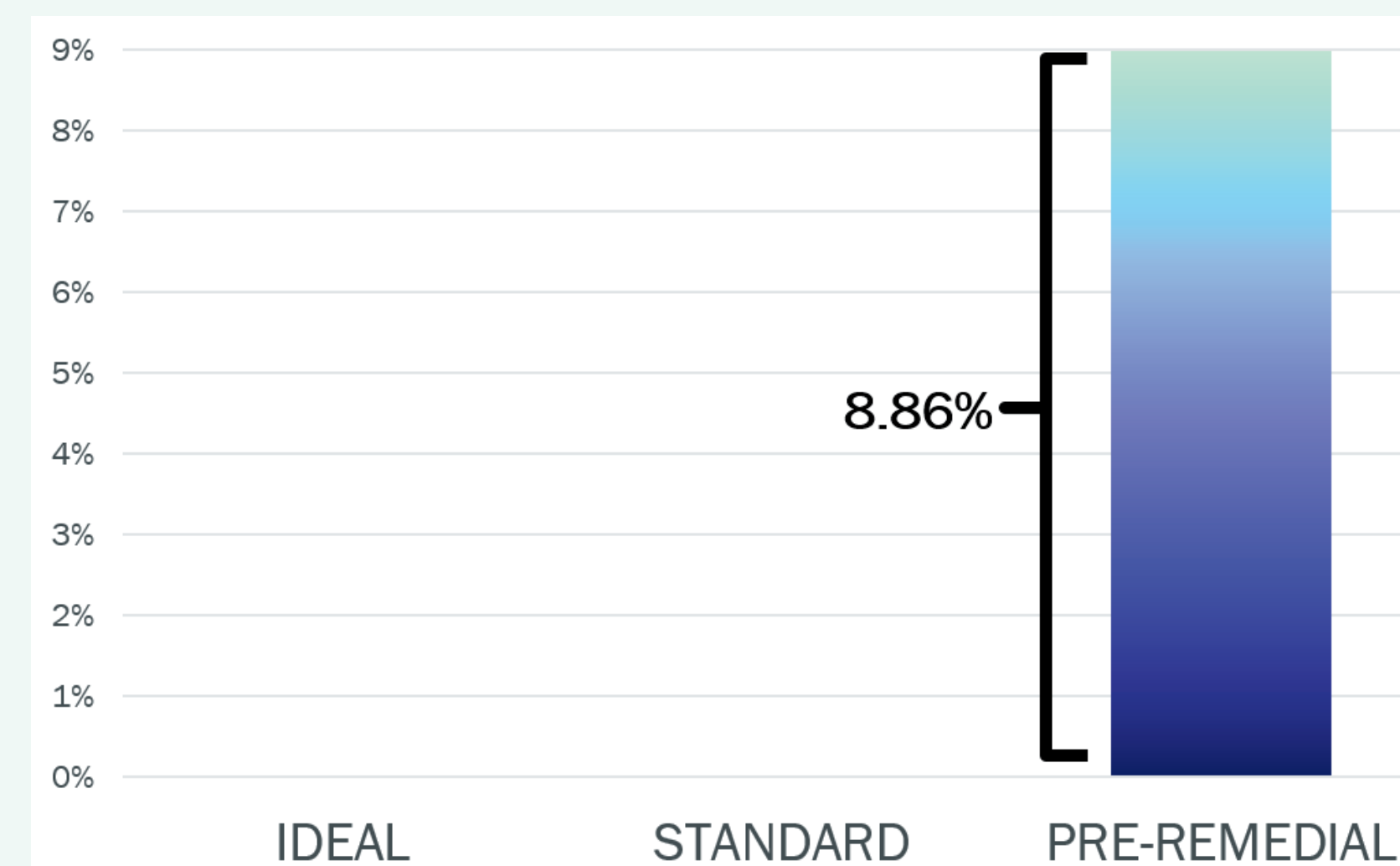
## 3. PROCESS OF GATHERING INFORMATION

### METHODOLOGY

Study design	Interventional study		
Study population	Secondary school students in Bentong district Dental officers in Bentong district Parents of students who were wearing fake braces		
Sampling technique	Convenience sampling		
Sample size	79 secondary school students in Bentong district 43 dental officers 5 parents		
Study period	8 March 2023 – 19 January 2024 • Verification study • Pre-remedial study • Post-remedial study		
Study tools	Questionnaires, interviews		
Inclusion criteria	Students	Dental officers	Parents
	Braces wearers	Working at primer clinics in Bentong district	Parents of students who were wearing fake braces
Exclusion criteria	Non Malaysian citizen		

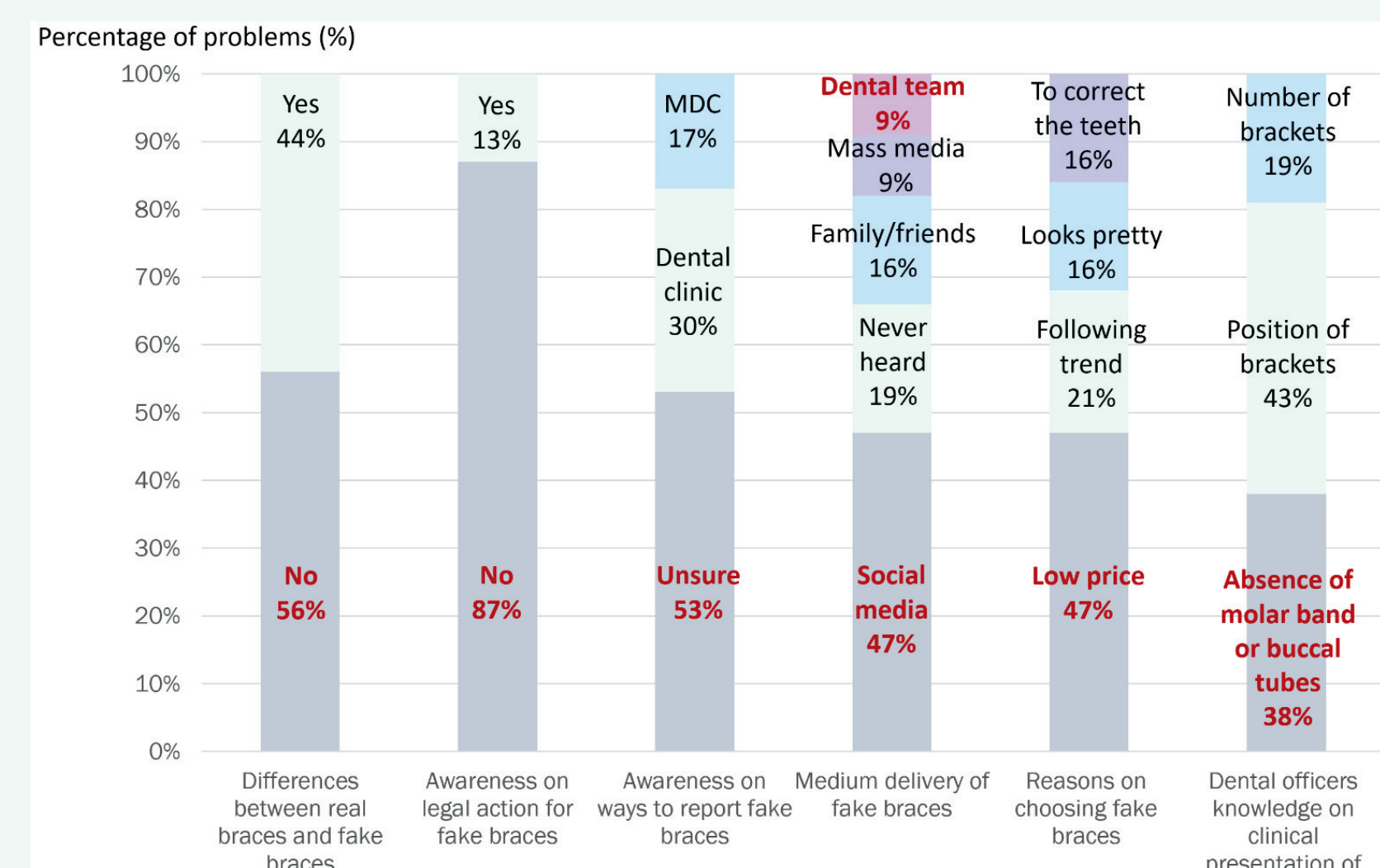
## 4. ANALYSIS AND INTERPRETATION

### 4.1 VERIFICATION STUDY



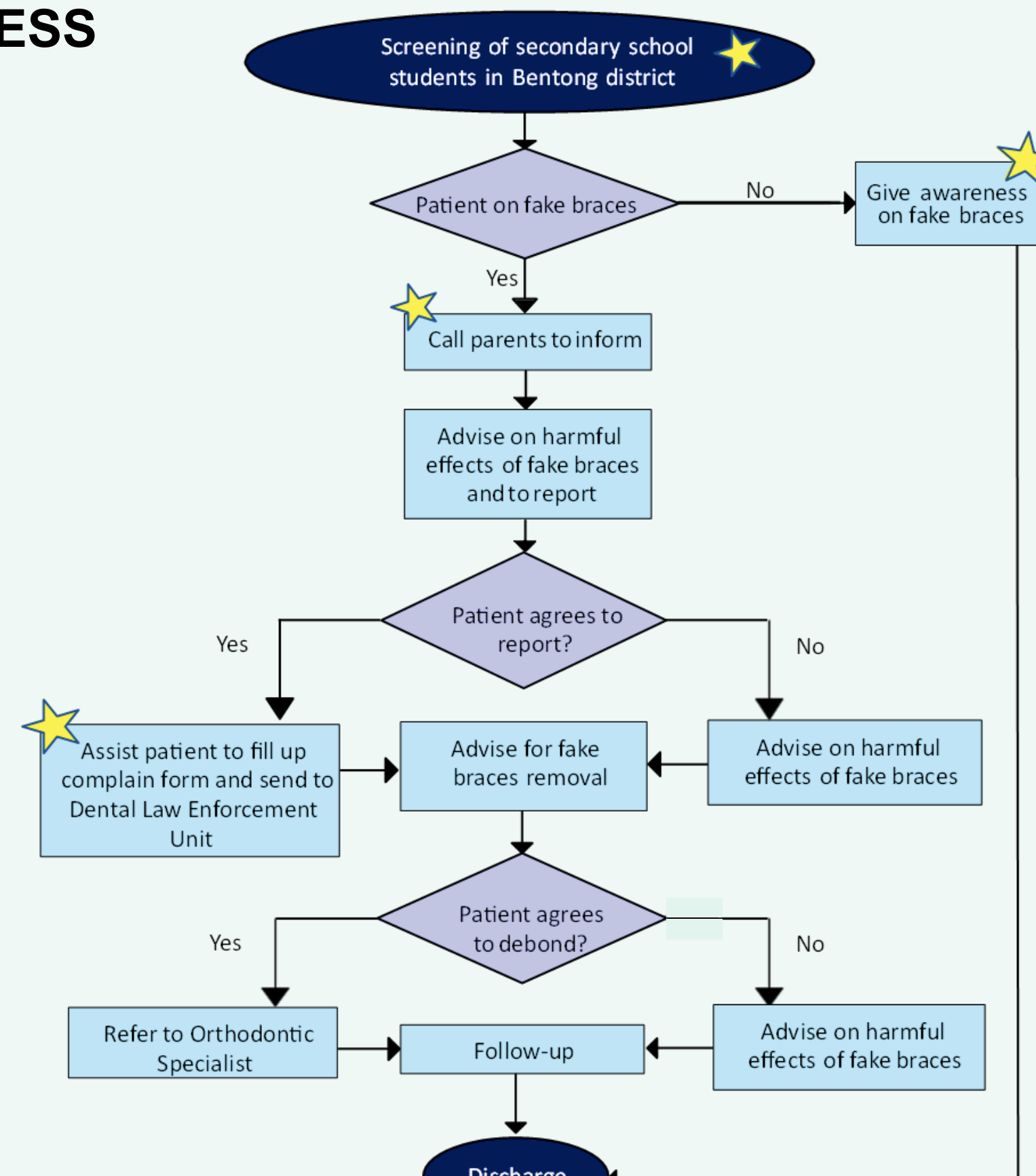
ABNA graph showed percentage of secondary school students in Bentong district wearing fake braces

### 4.2 PRE-REMEDIATION STUDY



Factors contributing to high percentage of fake braces wearers based on Questionnaires

### 2.2 PROCESS OF CARE



## 4.2 PRE-REMEDIATION STUDY

Based on 4 major contributing factors determined:

- Students misunderstanding regarding function of braces
- Students influenced by fake braces advertisement
- Parents negligence in child's dental health
- Lack of enforcement activity

## 5. STRATEGIES FOR CHANGE



Talks on fake braces to every secondary school in Bentong district



Report card collection day at school



Home visit to inform parents on student with fake braces



Follow up with student after removal of fake braces

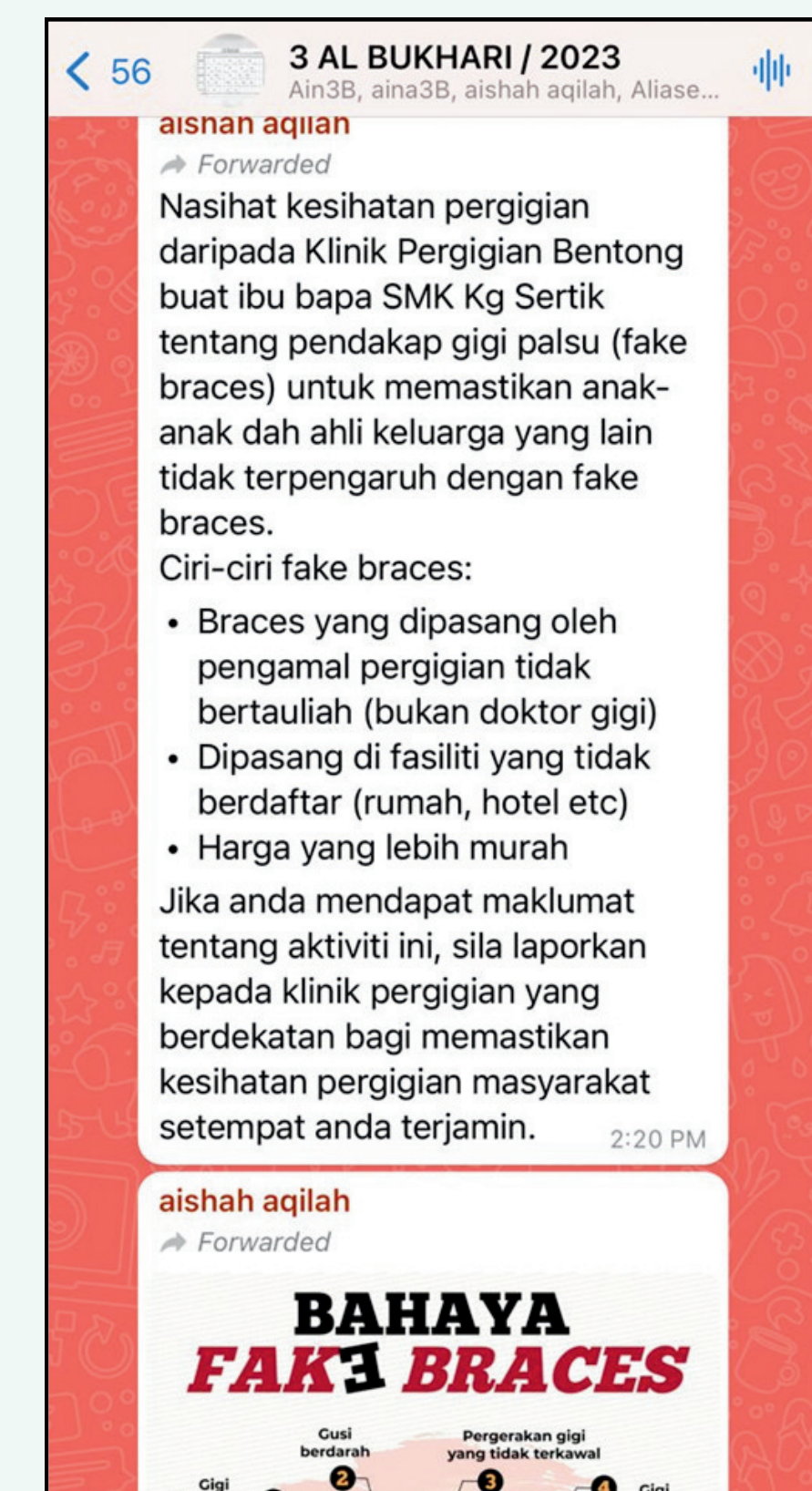


Hari Kesihatan Pergigian

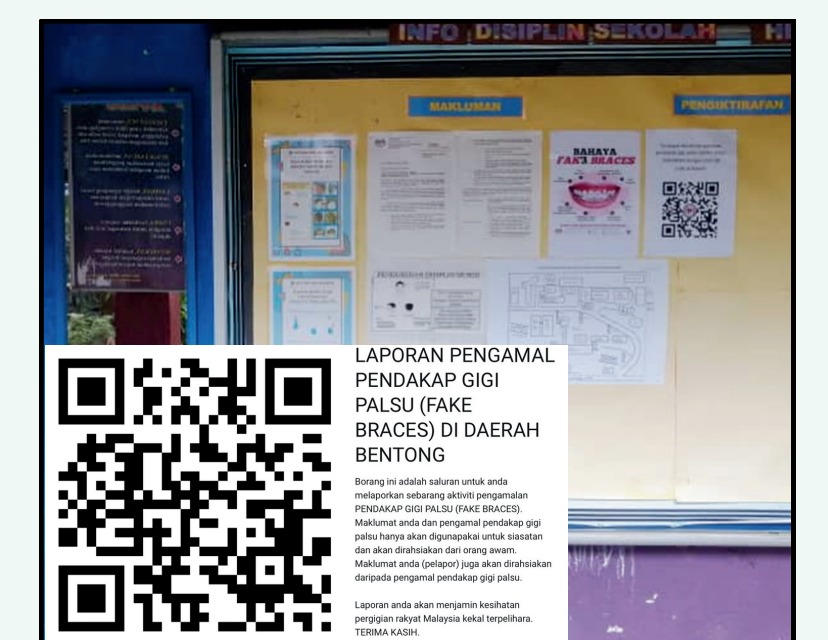


World Oral Health Day at vocational school

Modus operandi of fake dentist was used as promotional material during dental events at schools



Posting regarding fake braces awareness on school's whatsapp group with parents



Poster posted at school and QR code was created for efficient reporting of the case



SOP of fake braces management was provided in surgery room as reference for dental officer and CDE given by orthodontic specialist

## 6. EFFECTS OF CHANGE

### Evaluation of Model of Good Care (MOGC)

PROCESS	CRITERIA	Standard	Pre-remedial	Post-remedial
Screening of secondary school students in Bentong district	Dental officers in Bentong district were given CDE by an orthodontic specialist regarding fake braces detection and management	100%	0%	100%
Give awareness on fake braces	Promotional activities by dental team: • Awareness given through talks during school visits and school events • Materials on fake braces awareness delivered to schools and posted on social media • Efficient medium created for fake braces reporting	100%	0%	100%
	Questionnaire 1 to assess students' awareness • Function of braces • Legal action on illegal practitioner • Ways to report fake braces	100%	16%	100%
Contact parents to inform	Give awareness to parents and ensure the removal of fake braces	100%	0%	100%
	Advise to report and debond fake braces	100%	0%	100%
Refer to orthodontic specialist	Dental officers successfully convinced patients to debond	100%	0%	0%
	Dental officers made a report if patient refused	100%	0%	14.28%
Refer to orthodontic specialist	Refer patient with fake braces to specialist	100%	0%	86%
	Follow-up to confirm removal of fake braces	100%	0%	100%

## CONCLUSION

Percentage of fake braces wearers among secondary school students in Bentong district was reduced from 8.86% to 0%.

## LESSON LEARNT

Difficulty was faced in convincing patients to lodge a report due to failure to advise the importance of reporting and some of illegal practices took place in another state. We learnt that adults involvement was very important.

## THE NEXT STEP

To collaborate with the Parents Teacher Association and enforcement officers from other states to increase awareness on fake braces reporting.

**ACKNOWLEDGEMENT**  
We would like to thank our senior dental officer, Dr Roslina Binti Mohamad Salleh for supporting our project. Special thanks to Pejabat Pendidikan Daerah Bentong and health teachers of all secondary school students in Bentong district who give cooperation in arranging dates for dental screening and to all involved in the project.

**REFERENCES**  
1. Mohd N. N., Abdul A. M., Ramasindarum C., and Kamarudin Y. (2023) Fake braces': a content analysis of instagram posts by unlicensed providers. Journal of Health and Translational Medicine (JUMMEC)  
2. Fawaz, S. S. (2022) Knowledge, Attitude, and Practice of Fake Braces Among Secondary School Students-Malaysian Journal of Pediatric Dentistry.  
3. Nor A. M. N., Wan N. W. H., Mohd Z. M. M., Zamros Y. M. Y. (2022) Fake Braces by Quacks in Malaysia: An Expert Opinion