

Title: Increasing The Percentage Of Basic Periodontal Examination Among Adult Outpatients in Klinik Pergigian Batu Pahat

Authors Names: Sarah AR¹, Nur Aliah Afifah I², Nabilah AS², Ungku Farah Wahidah UI², Huey Shuan T²
¹Pejabat Pergigian Batu Pahat, Johor
²Klinik Pergigian Batu Pahat



SELECTION OF OPPORTUNITIES FOR IMPROVEMENT

NO	PROBLEMS	ACHIEVEMENT	S	M	A	R	T	TOTAL
1	Percentage of completed case among antenatal mothers examined in KKIA Batu Pahat	38.93% (DSA Goal >50%)	15	15	10	8	10	58
2	Percentage of 6 years old children with caries free status	54.04% (DSA Goal >60%)	8	15	10	9	7	49
3	Percentage of senior citizens' dentures issue within 8 weeks	39.72% (NIA Goal >50%)	10	15	8	10	8	51
4	Percentage of senior citizen having 20 functional teeth	41.8% (NIA Goal >60%)	8	15	8	6	7	44
5	Percentage of Basic Periodontal Examination among adult outpatients	1.73% (DSA Goal >50%)	15	15	12	15	15	72

MEMBERS=5, SCALE 1: Poor 2: Moderate 3: Good

S=seriousness, M=measurable A= appropriateness, R= remediable, T= timeliness

Table 1: Selection of opportunity based on SMART criteria

S Periodontal disease is a major oral health concern among adult, however, only 6% Malaysian adults have healthy gum (NOHSA 2010) and only 1.73% of outpatient adult in KP Batu Pahat undergone Basic Periodontal Examination screening from January to June 2019. **Seriousness**

M Data related to this study are quantifiable, and the process is clearly defined. **Measurable**

A High cases of advanced periodontal disease among adult in Malaysia were not cater at its earliest stage due to lack of BPE screening in dental clinic. Therefore, establishment of BPE as routine dental examination is very essential. **Appropriateness**

R Solution possible within capacity of dental team and less requirement of others' involvement. **Remediable**

T Project does not take too long and changes can be seen immediately after strategies implemented. **Timeliness**

Infographic 1: Explanation of selection criteria via SMART

KEY MEASURES FOR IMPROVEMENT

General objective: To increase percentage of Basic Periodontal Examination among adult outpatient in Klinik Pergigian Batu Pahat

Specific objectives:

- To verify the problem
- To identify the contributing factors towards low number of Basic Periodontal Examination (BPE) implemented
- To take remedial actions towards contributing factors
- To evaluate the effectiveness of remedial actions taken

Indicator: $\frac{\text{Number of BPE screening done} \times 100}{\text{Number of new adult outpatient}}$ **New Adult Outpatient:** include adult who first time come to the clinic for the current year

Standard: **≥30%** This is District Specific Approach (DSA)
 The standard was set based on current achievement and discussion with group members and senior dental officers

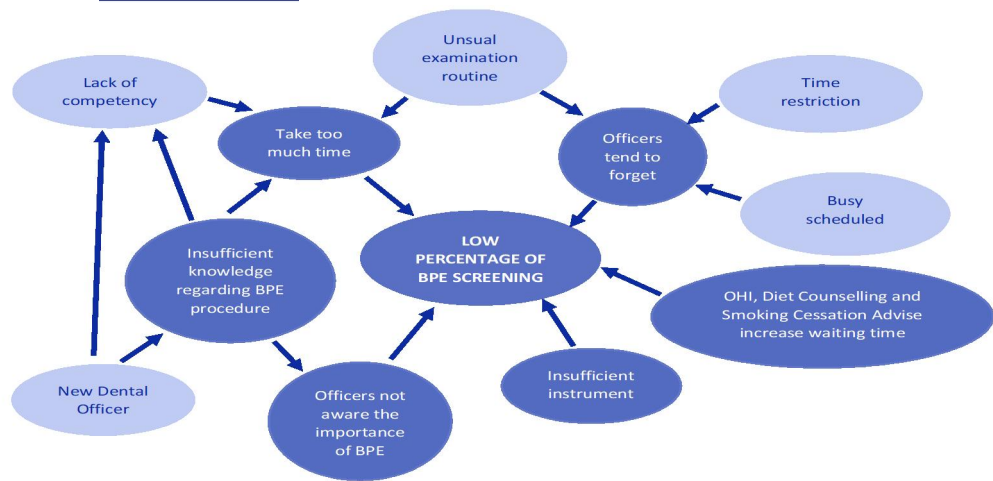


Diagram 1: Cause Effect Analysis

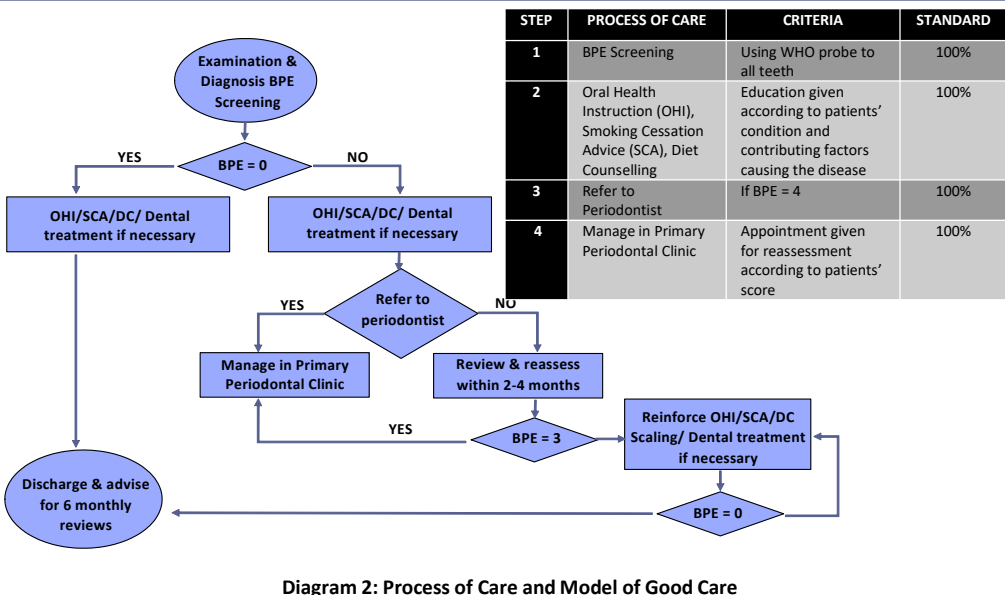


Diagram 2: Process of Care and Model of Good Care

PROCESS OF GATHERING INFORMATION

- QA study (cross sectional) was implemented in Jun 2019 to identify contributing factors towards low BPE screening in KP Batu Pahat.
- Distribution of instruction and online questionnaire link was given to 80 dental officers but only 68 of them responded.
- Self-structured questionnaire consisted 3 questions about SOP awareness and source of information, 5 questions about knowledge in BPE and 6 questions about practice perception in BPE procedure.
- Duration of BPE procedure was recorded through observation. Data was analysed using Microsoft Excel 2013

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ANALYSIS AND INTERPRETATION

CRITERIA	%	MEAN (SD)
AGE: Range 24-35	-	26.83(±2.86)
GENDER		
Male	22.1	
Female	77.9	
DURATION OF SERVICE: < 2 years	79.4	

Table 2: Sample profiling of respondents

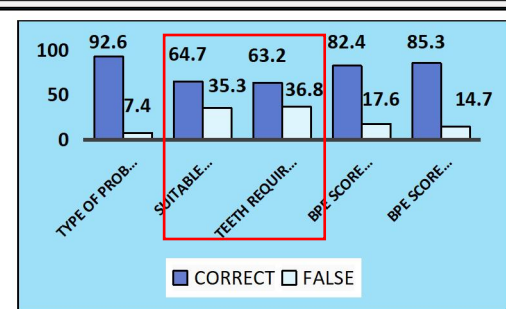


Chart 2: Knowledge in BPE (n=68)

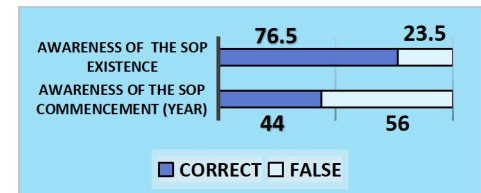


Chart 1: Awareness and source of information

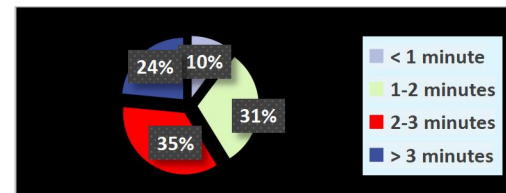


Chart 3: Duration of BPE procedure



Chart 4: Perception on factors to screen using BPE procedure (n=68)

STRATEGIES FOR CHANGE

Cycle 1: July 2019 - December 2019

PROBLEMS	STRATEGY FOR CHANGE	IMPLEMENTATION	IMAGE
Insufficient knowledge regarding suitable pressure and number of teeth require examination	BPE wheel guide as quick reference was placed at each treatment room	July 2019	
Time limitation to give effective chairside counselling	Introduction of Gum Care Alert Centre at dedicated room for Oral Health Instruction, Diet Counselling and Smoking Cessation Advise	July 2019	
Weakness in guideline dissemination from the management	BPE Procedure Workshop was organized involving selected dental officers in Batu Pahat and echo training was done in KP Batu Pahat involving all officers	June 2019	
Difficult to establish as routine	Attach BPE charting sheet at treatment card for easy reminder if BPE not performed	July 2019	

Cycle 2: January 2020 - December 2020

PROBLEMS	STRATEGY FOR CHANGE	IMPLEMENTATION
No proper guideline provided for usage of Gum Care Alert Centre (GCAC)	Guideline produced and disseminated to all dental officers. Simplified version attached in GCAC.	Jan 2020
Changes in SOP for scaling treatment due to Covid-19 pandemic.	Designated AGP room for scaling which can accommodate 10 patients daily.	Aug 2020

Cycle 3: January 2021- December 2021

PROBLEMS	STRATEGY FOR CHANGE	IMPLEMENTATION
GCAC is not fully utilized due to BPE procedure at surgery (BPE Column provided in new LP8)	Designated new memo letter to increase referral to GCAC for detailed individual dental advice.	Jan 2021

Table 3: Strategies of Change Implemented

EFFECT OF CHANGE

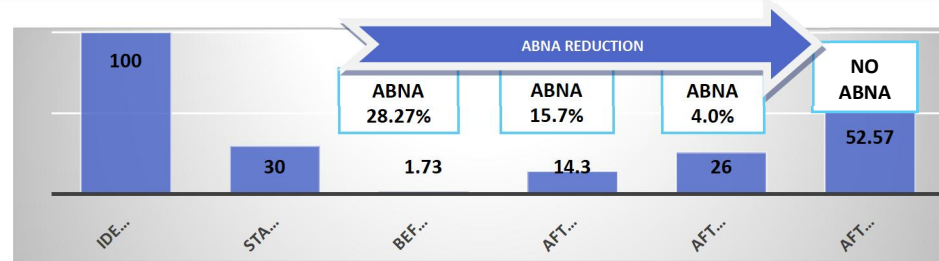


Chart 5: Comparison of ABNA Before & After Intervention

Year/Criteria	2019	2020	2021
Number of patients screened	927	1780	3892
Number of patients indicated for scaling	774	1527	3497
Percentage of patients indicated for scaling	83.50%	85.79%	89.85%
Number of scaling treatment done	868	1120	2657
Percentage of scaling treatment completed among indicated patients	93.63%	73.34%	75.98%

Table 4: Number of Scaling Treatment Done

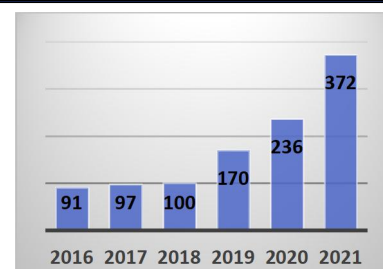


Chart 6: Number of Cases Referred to Unit Pakar Periodontik Batu Pahat

THE NEXT STEP

Increase slot for scaling	Monitor District Specific Approach (DSA)
Continue implementation for 2022 with higher target	Distribute BPE Wheel Guide to other primer dental clinic in Batu Pahat

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