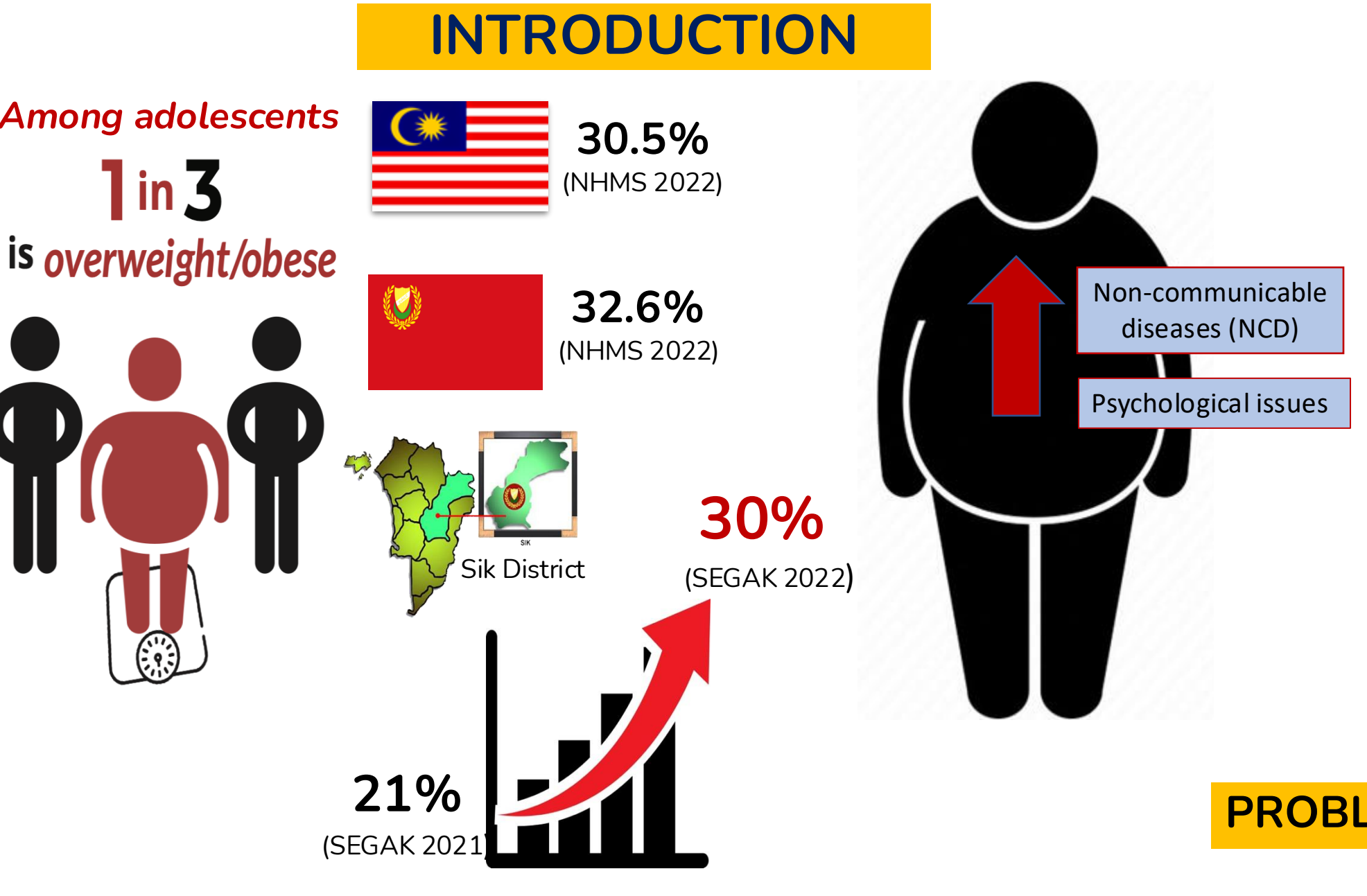




1. SELECTION OF OPPORTUNITIES FOR IMPROVEMENT



PROBLEM PRIORITISATION

PROBLEM	S	M	A	R	T	Σ
Increase in anemia problems (Hb < 11g/dl) among pregnant women at 36 weeks POA.	1	3	1	1	3	9
Low percentage of diabetic patients with HbA1c < 6.5 in the Sik district.	2	3	1	1	2	9
Increase in overweight and obesity problems among adolescents in the Sik district	3	3	3	3	3	15
Percentage of BSSK screenings among adolescents not reaching the set target	1	3	1	1	3	9
Increase in the percentage of children under 5 years old who have issues with being underweight.	3	3	2	2	2	12

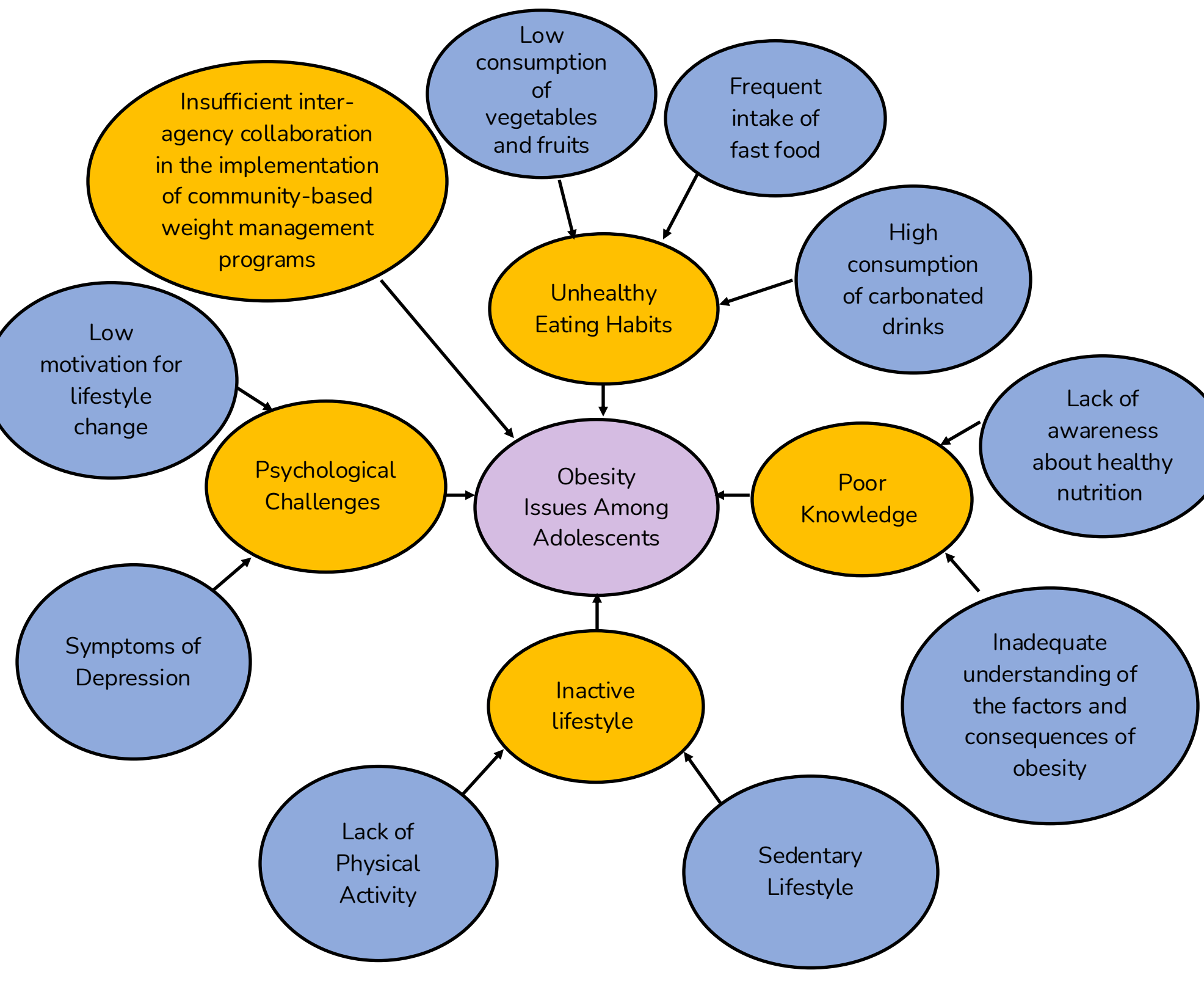
Group members: 5, Score: Low-1 High-3

RATIONALE FOR PROBLEM SELECTION

S	1. An increase in adolescent obesity and overweight issues in the Sik district from 21% (2021) to 30% (2022). 2. This can increase the risk of non-communicable diseases, psychological issues, and burden the healthcare system
M	1. Anthropometric measurement is collected from monthly assessment 2. Variables from validated questionnaires on motivation, knowledge, and practices
A	Adolescent weight management can lower the risk of adult non-communicable diseases and reduce burden on the national health system.
R	This intervention module can be implemented at community or institutional levels to tackle adolescent overweight and obesity.
T	Interventions are implemented over a 3-month period to assess outcomes. 3 cycles are conducted to determine program sustainability.

PROBLEM STATEMENT This issue concerns PPD Sik and PKD Sik as it increases the risks of NCDs (Mok WKH et al, 2021) and psychological issues (Collins dan Bentz, 2009) due to poor diet (Papandreou et al. 2013), lack of exercise (Vandewater et al, 2004), limited knowledge (Mok WKH et al, 2021) and the absence of community weight management programs. The study aims to increase $\geq 2.5\%$ weight loss among overweight and obese teenagers in Sik district through interventions promoting a healthy lifestyle.

PROBLEM ANALYSIS CHART



2. KEY MEASURES FOR IMPROVEMENT

MAIN OBJECTIVES

To increase the percentage of $\geq 2.5\%$ weight loss among overweight and obese adolescents in Sik district $\geq 50\%$ of the participants involved.

SPECIFIC OBJECTIVES

- To identify BMI category among participants
- To identify factors contributing to adolescent overweight and obesity
- To develop and implement appropriate improvement strategies.
- To assess the effectiveness of improvements in reducing body weight by $\geq 2.5\%$ from baseline

INDICATORS AND STANDARDS

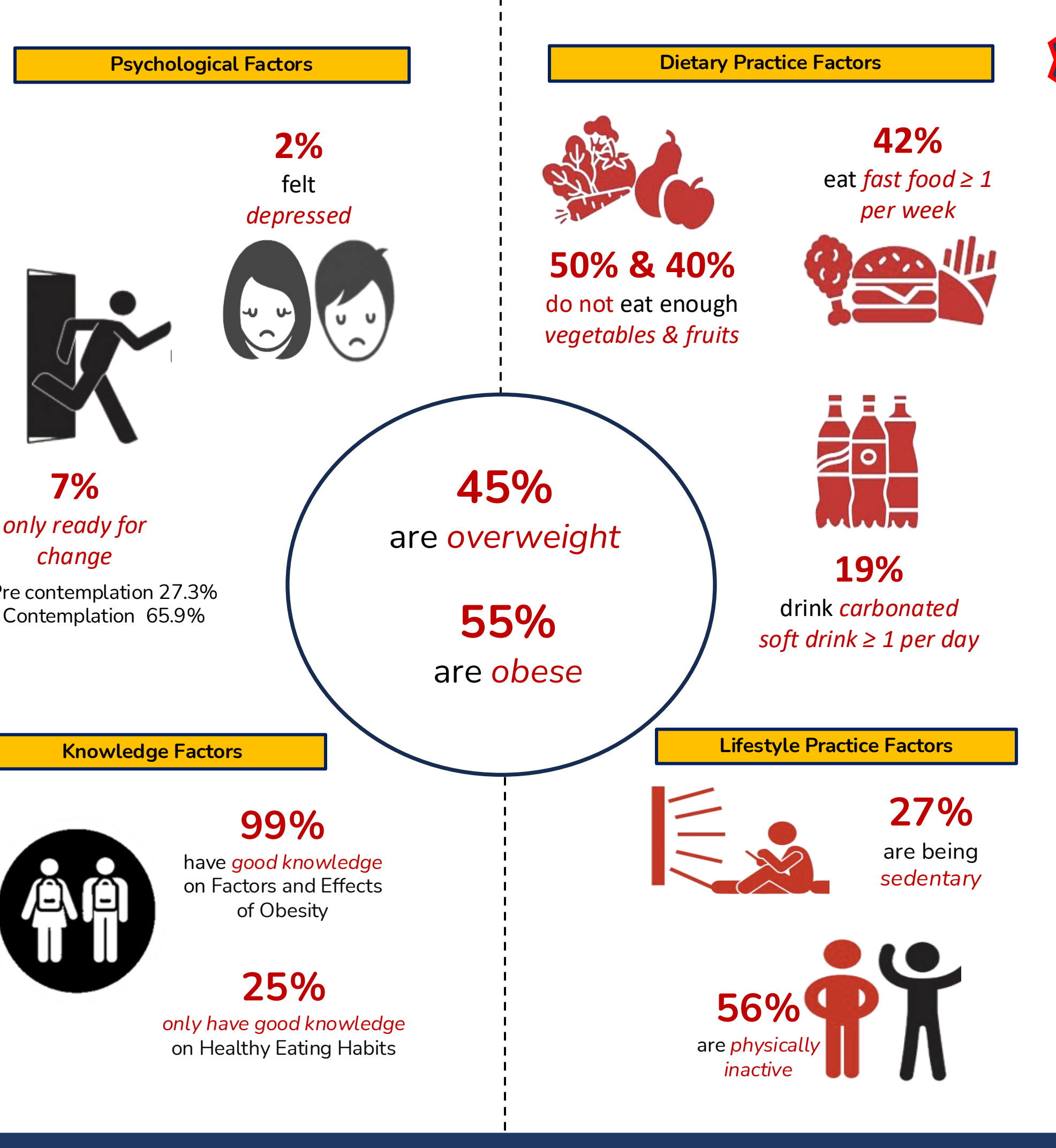
Indicator	Percentage of $\geq 2.5\%$ weight loss in participants over a 3-month period
Formula	$\frac{\text{Number of participants achieving a } \geq 2.5\% \text{ reduction in body weight from baseline within 3 months}}{\text{Number of participants with overweight and obesity}} \times 100$
Standard	$\geq 50\%$ Based on consensus Pegawai Sains Pemakanan Clinical Meeting, PKD Sik 2022.

3. PROCESS OF GATHERING INFORMATION

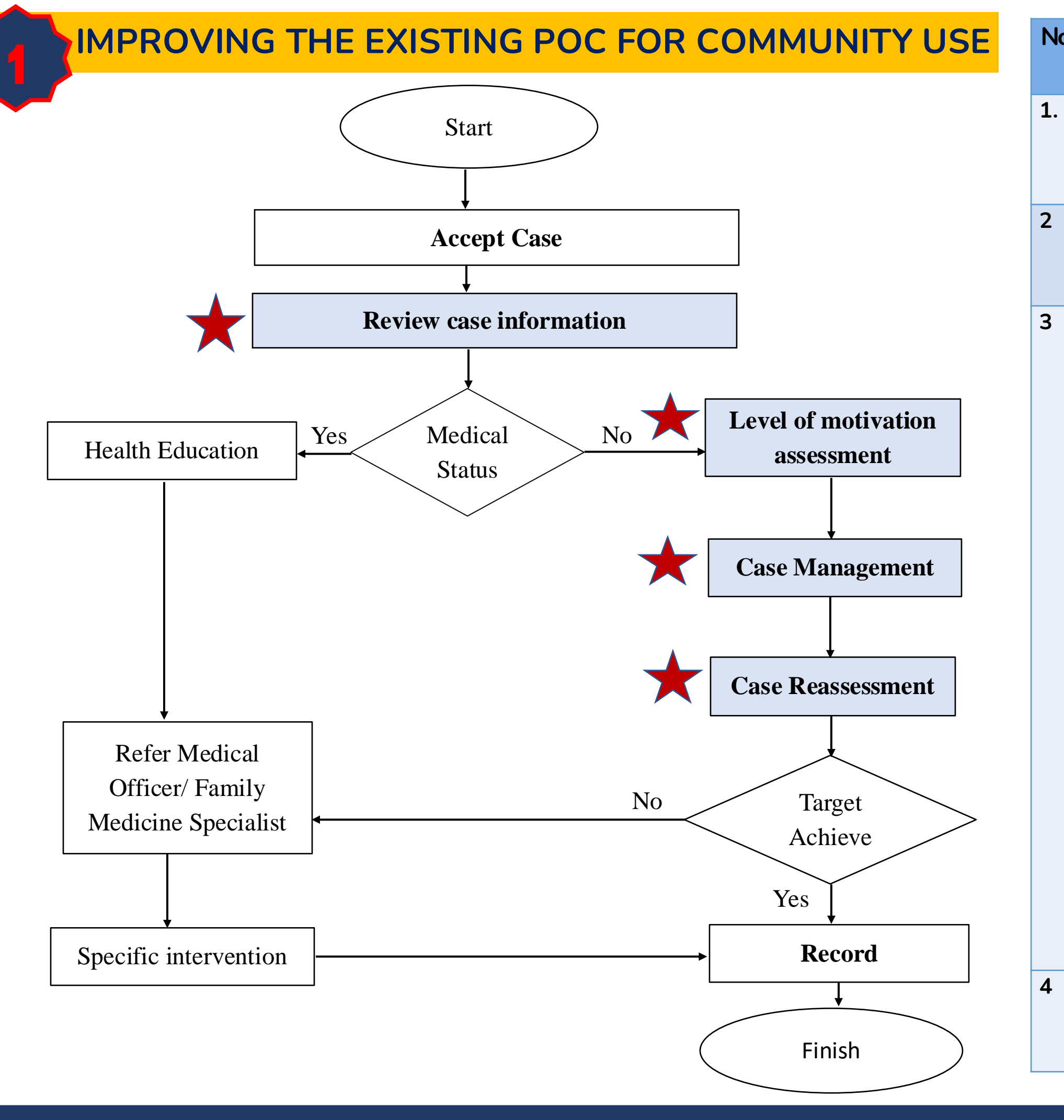
Study design	Cross-sectional study
Sample size	104 adolescents
Sampling method	Convenience sampling
Study duration	Verification study : Early August 2023 Cycle 1 : August 2023 – November 2023 Cycle 2 : December 2023 – February 2024 Cycle 3 : March 2024 – May 2024
Data collection technique	• Face-to-face interview • Self-administered online questionnaire
Inclusion criteria	• Adolescents aged 13 to 15 years old • Adolescents from 10 secondary schools in Sik district • Adolescents who are overweight and obese
Exclusion criteria	• No consent from guardian • Permanent disability that impedes physical activity • Adolescents with unstable comorbid conditions • Adolescents attending only 1 of 3 sessions per cycle

Data Collection Tools

4. ANALYSIS AND INTERPRETATION



5. STRATEGY FOR CHANGE



MODEL OF GOOD CARE

No	Process of care	Criteria	Responsibility	Target (%)	Pre	Post (%)	Cycle 1	Cycle 2	Cycle 3
1.	Review Customer Information	Screening of the target group with validated questionnaires and tools.	Medical Officer Healthcare Staff	100	NA	100	100	100	100
2.	Assess Motivation Level	Assess the readiness of adolescents to lose weight	Counselling & Psychology Officer	100	NA	100	100	100	100
3.	Case Management	Cycle 1 1. Students and teachers are introduced to intervention modules: Obesity factors and effects, healthy eating, exercise, and motivation 2. Students participate in physical activity sessions 3. Students engage in motivational sharing sessions	Medical Officer Healthcare Staff	100	NA	100	100	100	100
4.		Cycle 2 & Cycle 3 1. Students participate in physical activity sessions 2. Students practice and present topics on healthy eating practices. 3. Students engage in motivational sharing sessions	Students	50	NA	50	50	50	50
5.		All Cycles 1. Student complete daily physical activity and eating checklist, monitored weekly by teachers	Students and teachers	100	NA	100	100	100	100
6.		Case Reassessment Reassessment of the target group using validated questionnaires and tools	Healthcare Staff Teachers	100	NA	100	100	100	100

2 DEVELOP THE JOM FIT MODULE

CYCLE 1

- Physical Activity Module
- Motivational Module

CYCLE 2

- Physical Activity Module
- Motivational Module
- Healthy Eating Habits Module

CYCLE 3

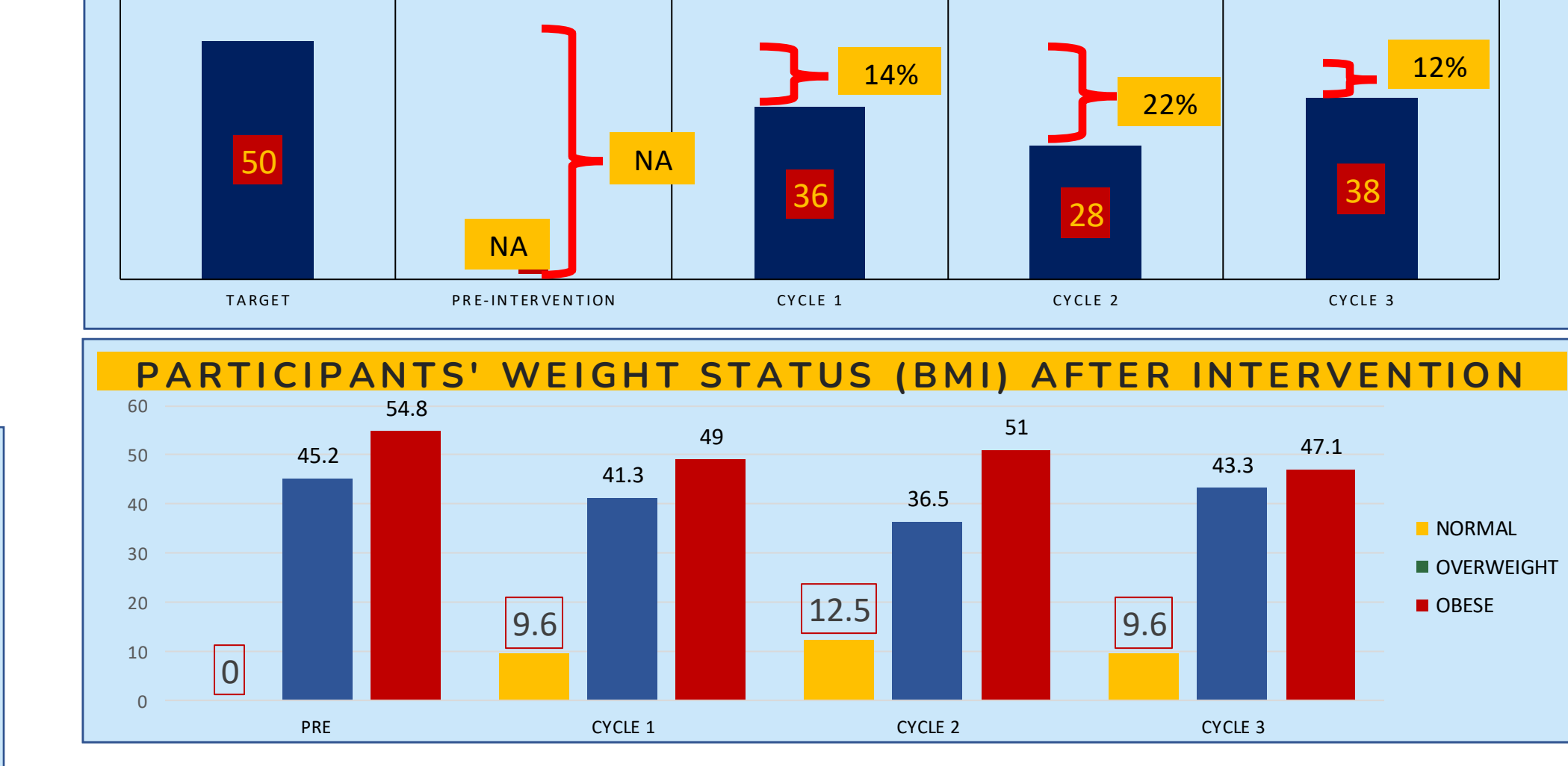
- Physical Activity Module
- Motivational Module
- Healthy Eating Habits Module (During gathering and fasting)

ALL CYCLES
Weekly Weight Management Checklist for Self-Management, monitored by teachers

6. EFFECTS OF CHANGE



ACHIEVABLE BENEFIT NOT ACHIEVED (ABNA)



7. CONCLUSION

Total of 45.2% adolescents were overweight and 54.8% were obese that involve in this study. By the end of 3 cycles, overweight fell to 43.3%, and obesity to 47.1%.

Poor knowledge, psychological challenges, unhealthy eating habits, and inactive lifestyles are the factors to these issues

Strategy for change includes

- Improving the existing process of care for community use
- Develop adolescent weight management module
- Collaborating with PPD SIK

After the intervention, 38% of adolescents achieved a reduction of $\geq 2.5\%$ in body weight, and 9.6% attained a normal body mass index (BMI).

3 COLLABORATION WITH PPD SIK



8. LESSONS, LIMITATIONS & THE NEXT STEP

- Effective collaboration from PPD and teachers is essential for ensuring a successful community-based weight management program.
- Limitation:** No direct involvement from parents or guardians.
- The **next step** is to integrate the weight management module into SEGAK in all Sik schools, with PIBG input, as per 2023 Obesity CPG.
- JOMFIT will continue under SEGAK with PPD and teacher oversight.
- Sustain PKD and PPD collaboration for the success of JomFit module in Sik District.

9. REFERENCES

- World Health Statistics 2016: Monitoring Health for the SDGs.
- The National Health and Morbidity Survey (NHMS): Adolescent Health Survey (AHS) 2022