

INTRODUCTION

- Medical nutrition therapy (MNT) consists of nutritional assessment, nutritional diagnosis and dietary intervention. Women at risk of Gestational Diabetes Mellitus (GDM) should receive MNT as needed preferably by a dietitian¹
- There is **19.8% increment** in the number of GDM cases and time consumption for dietary consultation from 2018 to 2019

1.0 SELECTION OF OPPORTUNITIES FOR IMPROVEMENT

Problem Identification

No	Issues	S	M	A	R	T	Total
1	Low compliance on dietitian prescription for oral nutrition supplement (ONS) among ward staff	18	21	21	18	18	96
2	Ordering diet in SPP (<i>Sistem Pengurusan Pesakit</i>) not updated	16	16	15	14	14	75
3	High defaulter rate at Diet Clinic	14	20	20	15	15	84
4	Long time consumption for dietary consultation among Gestational Diabetes Mellitus (GDM) inpatient	21	20	21	21	21	104

Process of Care

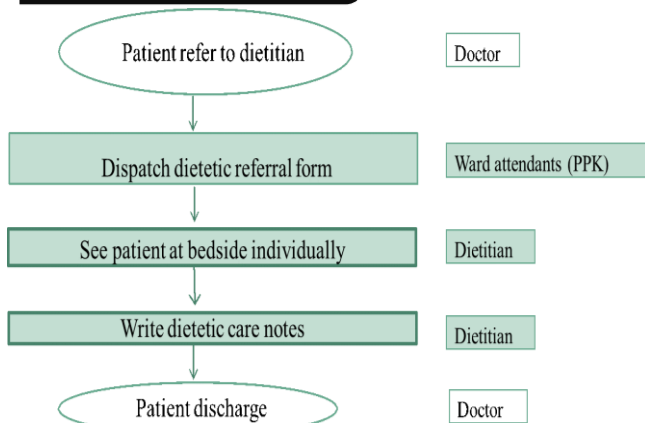


Figure 2 Existing Process Of Care

Model of Good Care

No	Process	Criteria	Standard
1	Patient refer to dietitian	- All GDM patients referred to dietitian - Doctor filled in referral form	100%
2	Dispatch dietetic referral form	- Referral form dispatch to Dietetic Department by PPK on same day of referral	100%
3	See patient at bedside individually	- Dietitian implement nutrition care process - Nutrition assessment - Nutrition intervention (dietary consultation)	85%
4	Write dietetic care notes	- Dietitian write nutrition care process in dietetic care notes	100%
5	Patient discharge	- Patient allow discharge by doctor	100%

3.0 PROCESS OF GATHERING INFORMATION

- Sampling method**: Convenience sampling
- Study sample**: GDM inpatient cases referred and seen by dietitian
- Inclusion criteria**:
 - GDM cases
 - Type 2 DM complicating pregnancy
- Exclusion criteria**:
 - Type 1 DM complicating pregnancy
 - GDM with placenta previa
 - GDM with anaemia
- Data collection**:
 - Data collection from dietetic census
 - Time consumption on dietary consultation
 - Jan – March 2020 (pre intervention)
 - July – Nov 2020 (post intervention)

4.0 ANALYSIS AND INTERPRETATION

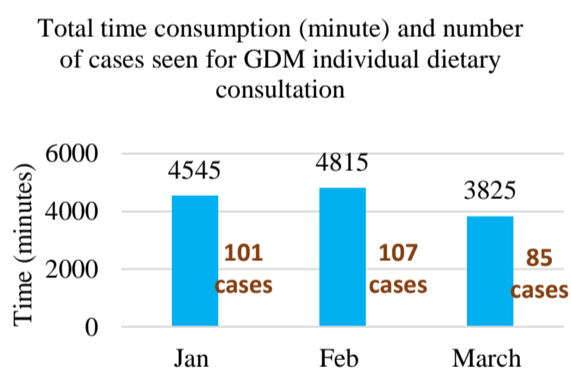


Figure 3 Total time consumption (minute) and number of cases seen for individual dietary consultation among GDM inpatient from January to March 2022

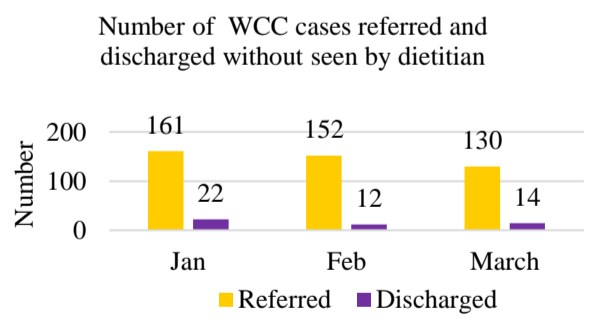


Figure 4 Number of cases referred to dietitian from Women and Children Centre (WCC) from January to March 2022

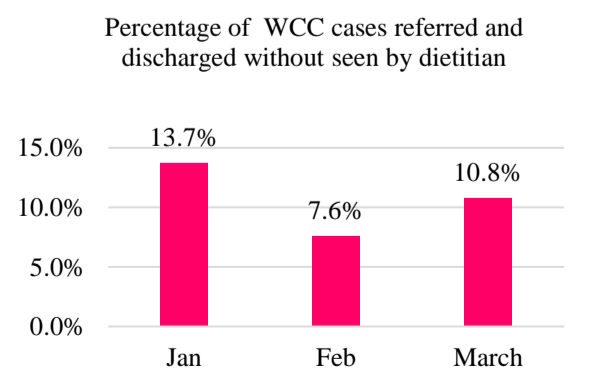


Figure 5 Percentage of cases referred to dietitian from Women and Children Centre (WCC) from January to March 2022

REFERENCES: ¹ CPG Management Of Diabetes In Pregnancy, MOH/P/PAK/353.17(GU), 2017
² Ann Murphy, Anne Guilar & Diane Donat, Canadian Journal of Diabetes, 2004;28(2), Nutrition Education For Women With Newly Diagnosed Gestational Diabetes Mellitus.

5.0 STRATEGIES FOR CHANGE

- Structured Focus Group (SFG)**
- 10 patients / session
- 90 minutes / session
- TV room, ward 5B Kenanga



6.0 EFFECT OF CHANGE

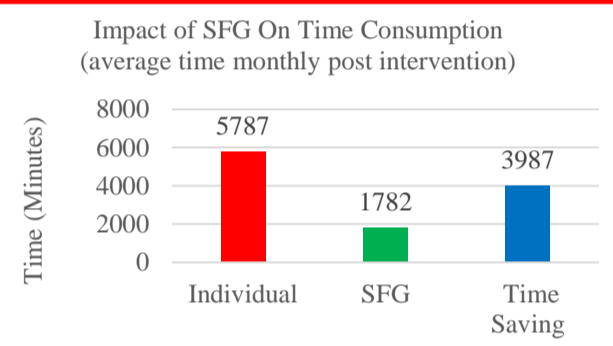


Figure 5 Impact of SFG on time consumption

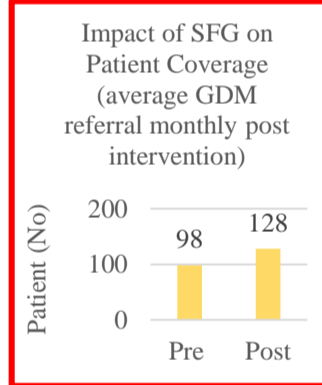


Figure 6 Impact of SFG on patient coverage

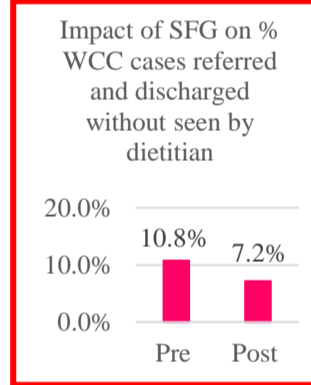
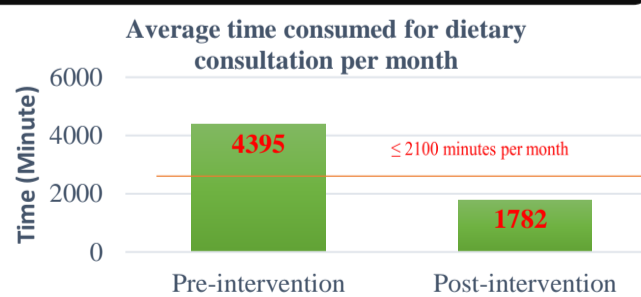


Figure 7 Impact of SFG on percentage of cases referred and discharged without seen by dietitian

Month	Numerator	Denominator	Result
July 2020	83	102	81.3%
Aug 2020	36	44	81.8%
Sept 2020	90	103	87.4%
Oct 2020	75	90	83.3%
Nov 2020	75	106	82.0%

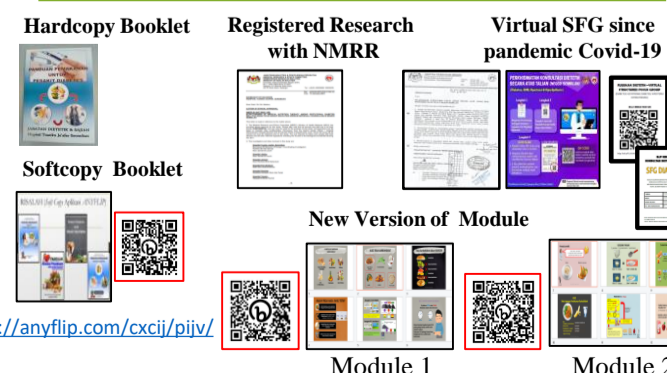
Numerator: total patient achieve test $\geq 60\%$
Denominator: total patient attended SFG and completed post test

Achievable Benefit Not Achieved (ABNA)



7.0 THE NEXT STEP

This module has been standardized and used by all dietitians in Negeri Sembilan



Problem Statement

There is a need to reduce time consumption for dietary consultation and allocate time to assess knowledge post dietary consultation in order to improve dietetic care in delivering MNT for GDM inpatient.

Problem Analysis

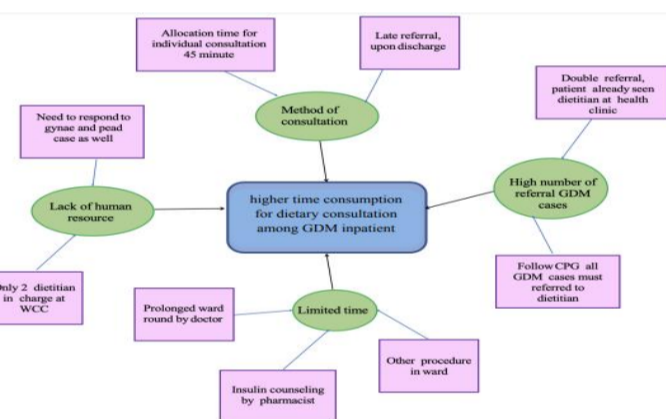


Figure 1 Cause Effect Analysis & Contributing Factors

Topic: Improve Dietetic Care For Dietary Consultation Among Gestational Diabetes Mellitus Inpatient In Hospital Tuanku Ja'afar Seremban, Negeri Sembilan

2.0 KEY MEASURES FOR IMPROVEMENT

Objectives

General Objectives

To reduce time consumption for dietary consultation among GDM inpatient

Specific objectives

- To identify total time consume for individual dietary consultation
- To implement remedial measures to reduce time consumption
- To assess knowledge post dietary consultation
- To evaluate effectiveness of remedial measures

Indicator and Standards

Key Indicator:

Total time consume monthly for dietary consultation GDM inpatients

* National Dietetic WISN *

Time allocation for individual dietary consultation: 45 minutes (per individual)

Time allocation for group counseling: 120 minutes (per group)

Standard:

≤ 2100 minutes per month

(50% from average time consumption in past 2 years)