

MEDIHEALTH Program

Introduction

Amidst the high disease burden, non-adherence to medications among Type 2 Diabetes Mellitus (T2DM) patients had reported to be gnarly and devastating. Sarawak Pharmaceutical Services Division had formulated a pharmacist-led, multiple theoretical grounding, culturally sensitive and structured group-based program, namely “Know Your Medicine – Take it for Health” (MEDIHEALTH), to improve medication adherence among T2DM patients.

Objective

To improve the medication adherence among T2DM patients through enhancing their attitude, subjective norms, self-efficacy, skills, motivation, knowledge about the disease and medication, as well as addressing the common wrong perception about the medicines such as side effects, inferiority of generic medicines, misuse of traditional and complementary medicines.

Target audiences

T2DM patients who has problems to adhere with their medication both unintentionally or intentionally (Referred by Physician/Pharmacist). Notably, since this program emphasizes on cultural sensitivity, T2DM patients with same ethnicity and speak same native language will be grouped together.

Language

The content of the program is available in Bahasa Malaysia, English and Mandarin. As aforementioned that this program emphasizes on cultural sensitivity, the facilitator will be communicating with the participants in native language that suits the audiences with same ethnicity and have same native language. For example, if the audiences are Iban T2DM patients, the content of the program will be in Bahasa Malaysia, while the facilitators who can speak Iban language will be facilitating the program.

Number of participants

12-24 per groups

Duration

3 hours, including 35 minutes of answering survey questionnaire before and after the program.

Content of the program:

The intervention mapping of MEDIHEALTH program is showed in Figure 1. The details of the program are available at Table 1.

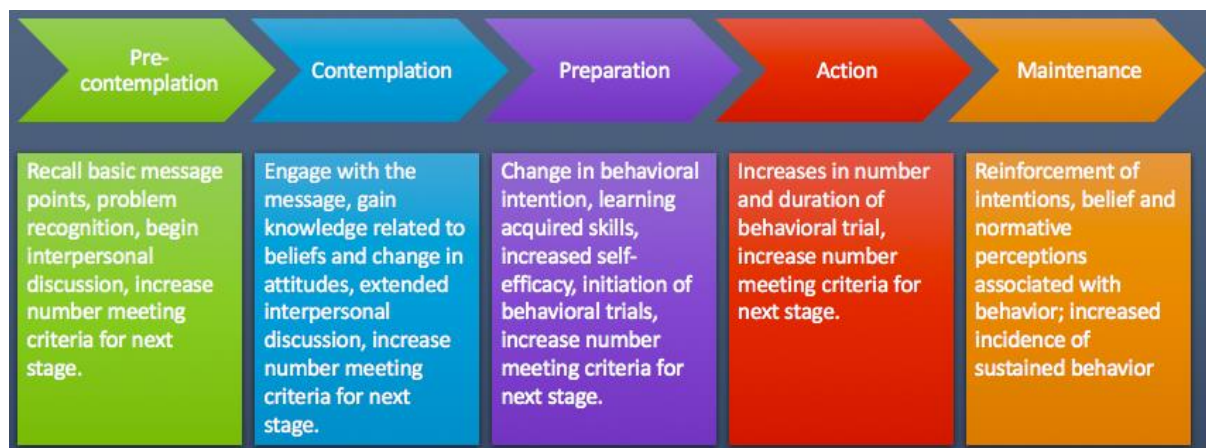


Figure 1: Intervention mapping based on Transtheoretical Model (Prochaska & Velicer 1997)

Source: Slater MD. *Integrating application of media effects, persuasion, and behavior change theories to communication campaigns: A stages-of-change framework. Health Communication. 1999 Oct 1;11(4):335-54.*

Table 1: Contents of the MEDIHEALTH (Copyright of Pharmaceutical Services Division, Sarawak State Health Department)

| Stage of Change | Change techniques | Theoretical support | Content of intervention | Times Allocated |
|------------------------|----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| Pre-contemplation | Recall basic message points, problem recognition, begin interpersonal discussion | (1) Social Learning Theory (2) Elaboration-Likelihood-Model | Pre-test | 15 minutes |
| | | | Breaking respondents into 4 groups (5-6 persons/group) and assign group leader of each group before the program begin. Main facilitator welcome the participants and introduce the other facilitators. Group members have ice-breaking session to introduce themselves to one another by telling their name, their residential area, their favorite food and how long they had been diagnosed with T2DM. | 25 minutes |
| | | | Explain the prevalence and complications of T2DM disease globally and locally. | 5 minutes |
| | | | A welcoming speech by Deputy Director in Pharmacy Program of Sarawak State Health Department and to explain the rationale of conducting the program and the expected outcome of the program. | 5 minutes |
| Contemplation | Gain knowledge about the belief and change in attitude | (1) Theory of planned behavior (2) Information-Motivation-Behavioral Skill model | Group members share their attitude and belief on taking medications through writing it down on a mahjong paper with assistance of facilitators. Only key words are written. | 10 minutes |
| | | | Facilitators will go through the answers given by respondents and recognize the attitude and belief on medication taking behaviors that are correct and rectify those that are incorrect. | 25 minutes |
| | | | A role play involving all participants to illustrate how the T2DM happen, how the medicines work and the complications of the disease if they did not adhere with their medications | 20 minutes |

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|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|---------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| Preparation | Change in behavioral intention, learning skill, increase self-efficacy | (1) Self-efficacy Theory | Address the physical barriers that cause unintentional medication non-adherence such as no time or no transport to collect medicines, forgetfulness, unable to understand the medication label and any issues raised by participants | 10 minutes |
| 5 minutes' break for participants. At the same time facilitators will distribute the medications belonged to the participants that had been dispensed by outpatient pharmacy department of HCPJ/HCKS. | | | | |
| Action | Act on the message, increase number and duration of behavioral trial | (1) Information-motivation-behavioral skill model | Main facilitator will brief participants on the use of the medication chart and they will be asked to write down all the medications they have on the chart with the dosage regimen. Subsequently, they need to identify the types of medications which have problem to adhere and discuss with the group on the method they want to take to improve it. | 15 minutes |
| | | (2) Self-efficacy Theory | Simulation of taking medications according to the medication chart using their own medications one by one with observation by facilitators to ensure the correctness. The simulation only acquires the participants to show the medicines they are going to take and tell the quantity and timing they need to take the medicines to the group facilitator. Facilitators will be able to evaluate the actual understanding and skill in taking medications of participants and rectify right away. Repeat testing the skill of participants until they can demonstrate correct medication taking skill on all their medications. | 10 minutes |
| Maintenance | Reinforce intention, belief and normative perceptions towards behavior | (1) Elaboration likelihood Model | Present a 5 minutes' video clip that show the message delivered by the officer in charge of Sarawak Traditional and Complementary Medicine Division about the importance of taking medication as prescribed amidst their traditional medicines' consumption. | 5 minutes |
| | | (2) Self-efficacy Theory | Group members share their learnings to each other and main facilitator recapitulate the important message of this program. | 10 minutes |
| | | (3) Social Learning Theory | Post-test | 20 minutes |
| Total Time | | | | 180 minutes |