Assistance in the Use of PROLANIS Cader Guidebook For Health Cadres in The Work of Kujangsari Health Centre

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Abstract

WHO (2016) stated that the number of people with Type II Diabetes Mellitus (type 2) worldwide amounted to 422 million people, while the number of DM sufferers in Indonesia rose from 6.9% to 8.5%. In West Java, the data for DM sufferers is around 31 thousand people (2017), while the number of DM patients in Bandung is 22,996 people, and the number of deaths caused by DM is 507 people (2019). The Chronic Disease Management Program (prolanis) is a healthcare system and a proactive approach implemented in an integrated manner involving participants/ sufferers of DM. One of the prolanis implementations going well is the Kujang Sari Health Center in Bandung City. The number of prolanis participants was 68 people. The activeness of the participants to check themselves, the understanding still needs to be comprehensive, and monitoring activities at home have yet to be carried out. Assistance to cadres is expected to increase the role of cadres in educating DM patients in their area. The cadre manual can be an effective medium for cadres in providing dietary assistance and education for DM patients.

Keywords: Manual, Health Cadre, Prolanis DM

INTRODUCTION

Lifestyle changes and socioeconomic levels due to urbanization and modernization are the causes of the increasing prevalence of degenerative diseases (Irwansyah & Kasim, 2020). Diabetes Mellitus (DM) is a degenerative disease, and chronic disease that occurs because the pancreas gland cannot produce insulin or when the body cannot use the insulin created effectively, increasing the concentration of glucose in the blood (hyperglycemia) (Azizah et al., 2019). WHO (2016) predicts an increase in the number of people with DM in Indonesia from 8.4 million in 2000 to around 21.3 million in 2030. WHO (2016) states that the number of people with DM in the world is 422 million people (World Health Organization, 2016), while the number of DM sufferers in Indonesia rose from 6.9% to 8.5% (KEMENKES, 2018). In West Java, the data for DM sufferers is around 31 thousand people (West Java Health Profile, 2017). The number of DM patients in Bandung, the number of DM sufferers, is 22,996 people, and the number of deaths caused by DM is 507 people (DINKES, 2019).

The government seeks to control the incidence of DM and provide care for people with DM by implementing an elderly coaching program through the Non-Communicable Diseases Posbindu (PTM) in every area of the Warga (RW) and chronic disease management is the Chronic Disease Management Program (Prolanis) in health services. The Chronic Disease Management Program (Prolanis) is a health care system and a proactive approach that is implemented in an integrated manner involving participants/ sufferers of DM, First Level Health Facilities (FKTP), and the Health Social Security Administering Body (BPJS) with chronic diseases to achieve optimal quality life with effective and efficient service costs (KEMENKES, 2018). Prolanis is held in Puskesmas and other healthcare facilities.

One of the prolanis implementations going well is the Kujang Sari Health Center in Bandung City. Data obtained from the coordinator of prolanis until January 2020 showed that the number of DM patients in the work area who took part in prolanis was 68. Still, the number of active participants was 43 people. During the Covid-19 pandemic, the attendance of participants varied from 25 to 43 visits. DM prolanis activities at the Kujang Sari Health Center, which were carried out included: education about DM and how to treat it, checking blood sugar levels once a month, and exercise. Activities that are routinely carried out are only checking

blood sugar levels, while education and practice cannot be carried out anymore due to pandemic conditions.

The coordinator of the prolanis for the DM Kujangsari Health Center said that during the current pandemic, attendance had decreased, and educational activities were not carried out. Gymnastics activities have stopped since the beginning of the pandemic. Activities that are always carried out routinely are only monitoring blood sugar levels. Participants' visits were also reduced due to fears of the spread of the coronavirus.

Community service activities that will be carried out at the Kujang Sari Health Center are education on diet management and activities for DM patients carried out by health cadres through mentoring and using the Prolanis DM Cadre Workbook media. This requires activities according to the pillars of type 2 DM management through community service activities from lecturers at Aisyiyah University Bandung (UNISA Bandung). UNISA Bandung always carries out the tri dharma of higher education and one other dharma, namely AI Islam and Kemuhammadiyahan (AIK).

The DM Prolanis Cadre Workbook contains education on diet management in DM patients and must be continuously informed to patients and their families. The Prolanis DM Cadre Workbook made a certificate of Intellectual Property Rights (HAKI) with the number **EC00201987921, on December 10, 2019.** According to (Jamiat & Rahmat, 2020), health cadres who are part of the support group have been able to carry out their role in educating DM patients and have succeeded in increasing the perception of DM patients about DM care. The results of Jamiat's research (2020) state that cadres need media to educate residents when there are community activities. This DM prolanis cadre workbook can be used as an educational medium as well as a press for evaluating DM patients and the performance of health cadres.

Health cadres in carrying out education for DM patients will also involve the families of DM patients. The family of DM patients will provide care for their family members. The results of the study (Ananda et al., 2020) stated that there was a relationship between family support and the activity of Prolanis Diabetes Mellitus participants. Research (Jamiat, 2020) also says there is a relationship between family health tasks and the stability of blood sugar levels in DM patients. Both studies show that the management of DM diet, in addition to DM patients, must also involve family members.

DM patient care programs require the seriousness of DM patients and support from various parties (Anggi & Rahayu, 2020). The pandemic condition has changed the pattern of prolanis services. Education provided by puskesmas officers cannot be carried out. The role of health cadres needs to be appropriately optimized (Hani, 2020). Based on the results of previous studies obtained data that cadres can provide education to DM patients. However, an evaluation of cadres' performance has yet to be carried out. Media for health cadres is very much needed in assisting the care of DM patients.

RESEARCH METHODS

The target of community service activities is 22 health cadres in the working area of Kujang Sari Health Center, but during the training, the number of cadres is 16 people. The training will be conducted in the Kujang Sari Health Center Hall, Bandung City. The mentoring was implemented in 2 meetings, namely on July 26 and October 10, 2022. The method of activities in implementing educational activities for DM prolanis participants used the pre and post-test methods, discussions, lectures, and questions and answers, as well as demonstrations on the use of the DM prolanis cadre work manual.



Figure 1. Teaching process to Cadre Prolanis DM

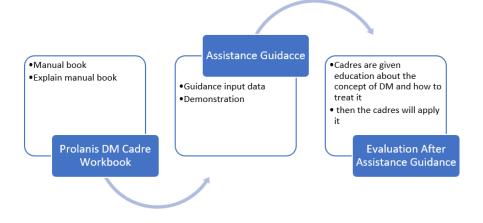
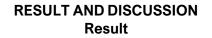


Figure 2. Flowchart Assitance

The innovation in this PKM is the Prolanis DM Cadre Work Manual. This book will be used by health cadres in the working area of the Kujangsari Health Center in Bandung in carrying out their roles and functions in providing education and assistance to DM patients. Cadres are given education about the concept of DM and how to treat it, then taught how to use the Prolanis DM Cadre Workbook, and then the cadres will apply it in their duties in the community and will be evaluated in the next two months.



Figure 3. The cadres activity in training



The activity of assisting cadres in using the DM prolanis cadre work manual is an activity that has been well-designed and systematic. The results of previous studies and PKM continue to refer to efforts to control normal blood sugar levels in DM patients participating in Prolanis at the Puskesmas. The following are the results of the assistance activities that have been carried out.

Age	Rate	Prersentage 6.25	
30-40	1		
40-50	6	37.5	
50-60	9	56.25	
	16	100	

 Table 1. Characteristics Of Cadre Assistance Participants

Based on table 2, the average number of cadres who have carried out their role for 6-10 years is as much as 56.25%. The longer the cadres carry out their parts, the more people will be served, as long as they are continuously nurtured and given knowledge and skills according to their roles.

Table 2. Time to be a cadre				
Time of occurrence	Rate	Prersentage		
0 - 5 tahun	2	12.5		
6 - 10	9	56.25		
tahun				
11 - 15	3	18.75		
tahun				
16 - 20	2	12.5		
tahun				
	16	100		

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Knowledge Sub-	Average Initial	Average Final	Change
Variables	Knowledge	Knowledge	
DM Concept	80.63	85.63	5.00
DM Treatment	71.25	82.5	11.25
Sport	84.28	92.19	7.91
Pharmacology	78.13	78.13	0.00
Total Knowledge	78.75	84.25	5.5
Use Of Books	82.5	83.75	1.25

Table 3 shows a change in cadres' average knowledge before and after mentoring the use of the Prolanis DM Cadre Work Manual by 5.5%. The initial intermediate knowledge of cadres is quite good, namely 78.75%. While the ability to use the DM prolanis cadre manual increased by 1.25%. A post-test was carried out at the end of the mentoring activity, and the average result was 83.75%. This shows cadres' increasing knowledge in using the DM prolanis cadre

work manual. This ease of use will have a positive impact on the service of DM patients in the community by cadres.

Discussion

The Prolanis DM Cadre Work Manual was an innovation from the results of research by Nandang Jamiat and Rahmat in 2020. It has obtained IPR from the Government. The socialization with the Prolanis DM coordinator had been carried out previously, and it was agreed that there would be mentoring activities for cadres in the Kujangsari Health Center working area. The content about the concept of DM and how to treat it, as well as case examples and how to write it, make this book accessible for cadres to understand. The mentoring activities above increased the knowledge of cadres and the ability of cadres to use the book.

The DM prolanis coordinator has tried to provide services to DM prolanis participants. Education is critical in changing the behavior of prolanis participants. Jamiat & Rahmat (2020) has reported their research on education for DM patients at the puskesmas. There was an increase in knowledge of DM prolanis participants by 3.08 after receiving instruction from cadres.

The research report of Baillargeon et al. (2020) shows an educational impact for DM patients who are obese and use professional network tools to lose weight. Weight loss as expected in the treatment program.

Transferring knowledge to cadres will increase their expertise in carrying out their roles and functions. This process begins with sense, which is receiving a stimulus from the individual through the senses (Padangsidimpuan, 2017). Efforts to realize or make perceptions require attention, namely the concentration or concentration of all individual activities aimed at something or a group of objects (Ulfa Husnul Fata, Nawang Wulandari, 2020). The use of educational media is an effort to stimulate DM participants in the educational process.

Media education is part of the enabling factor of the learning process. The learning process is an effort made by individuals to change their knowledge and behavior (Sari & Yamin, 2018). Two things support the learning process: training and acquiring new behavior or knowledge (Notoatmodjo, 2010). Prolanis participants increased their knowledge due to direct and individual information so that participants focused on listening and could also ask questions about things that were not clear after the education was carried out. In increasing knowledge, a behavior change strategy must be carried out using force or encouragement and providing information and participatory discussions. The strength in question is the hard effort of the prolanis coordinator at the puskesmas to innovate educationally by utilizing appropriate sources and media (Qurniawati et al., 2020).

Based on the results of the study (Jamiat & Rahmat, 2020), information was obtained that the knowledge of cadres before receiving training was overall good (77.72%), and after giving the training, it increased slightly to 79.50%, but the increase was declared insignificant/very small. Providing health information in changing behavior is very important because it will shape the attitudes and behavior of individuals or communities to realize and maintain their health (Alhogbi, 2017).

The results of education to cadres increased knowledge, although it was not significant. Good management is needed to educate cadres, including implementation time, preparation of materials that are easy to understand by cadres, the ability of presenters, and fun educational methods for cadres. Cadres are included in the diabetic educators. Cadres, as diabetic educators, can work together with other teams to carry out their role in educating DM patients. The process of changing the behavior of cadres (diabetic educators) and DM sufferers requires a cycle that includes assessment, goal setting, planning, implementation, evaluation, and documentation (Burke et al., 2014).

It is hoped that the cadres will be able to educate DM patients to control their sugar levels. A cadre is a basic form of community empowerment. Empowerment is the dominant approach in supporting patients with chronic diseases, primarily type 2 diabetes, because it can build the capacity to strengthen the skills, competencies, and abilities of cadres so that DM patients can manage to improve their quality of life (Fajriati, 2021). Relate with study from Samsidar dan Falah F (2022) showed an increase in the posttest knowledge average in 10 health cadres who had been given education and a decrease in blood glucose levels. The study's results on Prolanis participants showed that the increase in perception was 3.08, which was stated to be very significant . (Jamiat & Rahmat, 2020). This is reinforced by research by Manungkalit (2020), which says that the formation of diabetes cadres affects knowledge, attitudes, and community participation in preventing type 2 DM disease.

CONCLUSION

It is hoped that the cadres will be able to educate DM patients to control their sugar levels. A cadre is a basic form of community empowerment. Empowerment is the dominant approach in supporting patients with chronic diseases, primarily type 2 diabetes, because it can build the capacity to strengthen the skills, competencies, and abilities of cadres so that DM patients can manage to improve their quality of life (Tol et al., 2015). The study's results on Prolanis participants showed that the increase in perception was 3.08, which was stated to be very significant (Jamiat & Rahmat, 2020). This is reinforced by Mahardani's research (2016) which says that the formation of diabetes cadres affects knowledge, attitudes, and community participation in the prevention of type 2 DM.



Figure 4. Group assistance cadre prolanis DM Kujangsari

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