The implementation of a chronic disease management program (Prolanis) in Indonesia: a literature review

by Elida Zairina

Submission date: 02-Sep-2021 04:24PM (UTC+0800)
Submission ID: 1639984053
File name: C-8._JBCPP.pdf (51.46K)
Word count: 3476
Character count: 20092

Review

Sesty Rachmawati[1] / Hanni Prihhastuti-Puspitasari[2] / Elida Zairina[2]

The implementation of a chronic disease management program (Prolanis) in Indonesia: a literature review

[1] Magister of Pharmaceutical Sciences, Faculty of Pharmacy, Universitas Airlangga, Surabaya, Indonesia
[2] Department of Pharmacy Practice, Faculty of Pharmacy, Universitas Airlangga, Surabaya, Indonesia, E-mail: elida-z@ff.unair.ac.id

Abstract:
Background: The Chronic Disease Management Program or Program Pengelolaan Penyakit Kronis (Prolanis) is a program initiated by the Social Insurance Administration Organization or Badan Penyelenggara Jaminan Social (BPJS) in Indonesia. Prolanis aim to provide a proactive healthcare service approach for patients with chronic diseases particularly those with diabetes mellitus and hypertension. Prolanis also aims to achieve the optimal quality of life in patients with chronic disease through effective and efficient healthcare services including cost. All primary healthcare centers and a few of the private clinics in Indonesia have implemented Prolanis, however, the impact of the program has not been reviewed. This review aimed to see the implementation of Prolanis in healthcare facilities in Indonesia.
Methods: A literature review was conducted by searching articles through Google Scholar and PubMed databases up to August 2019. The following keywords or terms were used: Prolanis, BPJS indexed with terms related to blood pressure or hypertension in Indonesia. The references, citations and similar articles from the identified articles were used to identify additional sources.
Results: Twenty-four articles were identified through the first search using the key terms although only eight articles met the inclusion criteria. This review showed that the implementation of Prolanis in the healthcare facilities in Indonesia was varied in terms of the activities and services provided. The healthcare professional involved in the implementation of Prolanis were also varied. There were some barriers faced by the healthcare facilities including the availability of funding, the healthcare facilities and infrastructures, the unavailability of standard operating orocedures (SOPs) as well as the limitation of human resources involved in Prolanis.
Conclusions: The implementation of Prolanis in Indonesia has not been optimized, as there were some barriers during its implementation in the healthcare facilities.

Keywords: BPJS Health, chronic disease, primary healthcare facilities, Prolanis

DOI: 10.1515/jbcpp-2019-0350

Received: November 18, 2019; **Accepted:** November 25, 2019

Introduction

Chronic disease is one of main causes of death worldwide. Data from the World Health Organization (WHO) in 2008 showed that 36 million or almost two thirds of deaths were caused by chronic disease [1]. The prevalence of hypertension in the population aged ≥18 years in Indonesia increased from 25.8% in 2013 to 34.1% in 2018 [2]. The prevalence of diabetes mellitus in Inonesians aged ≥15 years also increased by 1.5% in 2013 to 2.0% in 2018 or by 10.9% [2].

The healthcare costs covered by the Social Insurance Administration Organization of Health (BPJS) in Indonesia for chronic disease is huge particularly for cardiovascular disease, hypertension, stroke, and cancer. The Ministry of Health in Indonesia has explained that 30% of costs paid by BPJS since 2014 were for chronic disease medication [3]. The Government of Indonesia has carried out some efforts to reduce the prevalence of chronic diseases. The Chronic Disease Management or Program Pengelolaan Penyakit Kronis (Prolanis) is one of the program designed by the government through the BPJS. Prolanis focused on two major chronic diseases: hypertension and diabetes mellitus.

Elida Zairina is the corresponding author.

Prolanis is a health care service system, which was designed by involving patients, primary healthcare centers facilities and the BPJS [4]. Prolanis aims to maintain health and achieve optimal quality of life in patients with chromic diseases (hypertension and/or diabetes mellitus) through an effective and efficient health care service to prevent complications of the diseases [4]. There are six activities in Prolanis including: an education group, medical consultations, health monitoring, Prolanis gymnastics, home visits, and a drug information service [5]. Through Prolanis, all healthcare facilities at primary healthcare facilities (PHF) are expected to reduce the incidence of chronic diseases, particularly diabetes mellitus type 2 and hypertension, as those diseases can be handled and detected in the early stages.

According to the Regulation by Ministry of Health (No.71; 2013) regarding the Healthcare Service in the National Health Coverage, the healthcare facilities should be primary healthcare centers with general practitioners or family doctors, dentists, primary care clinics or the equivalent, hospital type D or the equivalent [6]. The implementation of capitation service fees led to competition between some of the PHFs by increasing the quality of service they provided and in providing a more comprehensive service. Additionally, the BPJS regulation (No.2; 2015) has also required the capitation system to be based on service commitment, the result of the adjustment of the amount of capitation fee based on individual health assessment conducted by PHFs thus increasing the quality of service [7].

The increasing prevalence of diabetes mellitus type 2 and hypertension at both national and district/city level shows that Prolanis in Indonesia has not been implemented optimally. This was also shown by the huge amount of healthcare cost issued by the government to care for these diseases. Therefore, a review about the implementetaion of Prolanis in various PHFs in Indonesia is needed and is provided by this paper. By reviewing the available evidence, it can be used to help policy makers to improve the implementation of Prolanis.

Materials and methods

A literature review was conducted by searching articles through Google Scholar and PubMed databases from 2013 to August 2019. The following keywords or terms were used: Prolanis, primary care, Fasilitas Kesehatan Tingkat Pertama (FKTP) and BPJS indexed with terms related to blood pressure or hypertension in Indonesia. The references, citations and similar articles from the identified articles were used to identify additional sources. Additional keywords used in the article search included: general practitioners, family doctors, Puskesmas and primary healthcare centers.

Results

Twenty-four published articles were retrieved through Google Scholar and PubMed databases. From the 24 articles, 16 articles were excluded as they did not meet the inclusion criteria. The results of the articles obtained and included in the analysis are shown in Table 1. The majority of the studies investigated the implementation of Prolanis by family doctors and primary healthcare centers (Puskesmas). None of the studies dealt with the implementation of Prolanis in primary clinics (klinik pratama). Table 2 shows the results of the analysis from all the studies included. From Table 2 it can be seen that only a few studies observed the implementation of Prolanis in managing hypertension and diabetes mellitus in PHFs in Indonesia. As all the included studies had different study designs all data were analyzed descriptively.

Table 1: Grouping based on journal.

No.	Journal type	Number
1	Journal of Public Health Science 4(3) November 2013	1
2	Higeia Journal of Public Health Research and Development 1(3)	1
3	Journal of Public Health Science 4(4) October 2013	1
4	Hearty Jurnal Kesehatan Masyarakat 6(2) 2018	1
5	Journal of Indonesia Health Policy 8 (2) June 2019	1
6	Higeia Journal of Public Health Research and Development 3(1) 2019	1
7	Repository of Universitas Sumatera Utara 2018	1
8	Journal of Indonesia Health Policy 6(4) December 2017	1

Table 2: Results of literature review.

No.	Research objective	Sample/participant	Setting	Research result
1	To see the Prolanis implementation based on PT Askes (Persero) regulation number 51 of 2012 at the family doctor level of PT Askes in Palembang	Family doctor and the BPJS n = 16 people	Family doctor in Palembang	Implementation of Prolanis in family doctor offices is still not optimal. This can be seen from the presence of family doctors who only carried out five pillars of Prolanis,including: medical consultations, clinical guidelines, routine health status monitoring, fast and integrated drug services and reminders. The family doctors who did not actively carry outthese activities due tothe space unavalaibility, high workload, and unwillingness of participantsfor attending the Prolanis program.
2	To see the implementation of a chronic disease management program at Halmahera primary healthcare centers in Semarang (2017)	Prolanis officers, and participants at the Halmahera primary healthcare centers, BPJS health n = 7 people	Halmahera public health primary healthcare center in Semarang	There are six Prolanis activities based on the Prolanis handbook: medical consultation, Prolanis group education, reminders via an SMS gateway, home visits, club activities and health status monitoring.The reminders via SMS gateway can not be donebecause of limited funds and home visits that were not specifically conducted for Prolanis but are included in other programs. The SOPs for implementing Prolanis were available but not yet written or not yet recorded
3	To analyze the implementation of BPJS's Prolanis in Pekalongan	Doctors and Prolanis participants with family doctors, the BPJS and the head of operational service office n = 27	Family doctors in Pekalongan t	Prolanis's activities in the form of medical consultations, group education, club activities, health monitoring and drug services can be carried out well; only two family doctors carried out the SMS gateway reminderwhile home visit activity was not conducted.In addition, there were no SOPs for Prolanis activities after 2 years of the program implementation.
4	To obtain in-depth information about the implementation of the BPJS Prolanis program for hypertension patients at the UPTD of primary healthcare centers of Tegal Gundil in Bogor (2017)	Head of primary healthcare centers, Prolanis person in charge, BPJS, Prolanis participants n = 5	Public Health Center of Tegal Gundil, Bogor City	Five Prolanis activities were conducted as group education, SMS gateway reminder, home visits, club activities and health status monitoring had been carried out well in the Tegal Gundil Public Health Center. Although the Prolanis materials including budget, human resources, SOPs, had been fulfilled well, however there were still inadequate facilities and infrastructure. The SOPshas beendone by the Prolanis person in charge and was determined by thedoctor.

5	evaluate the Chronic Disease Management Program (Prolanis) inputs	Medical and paramedic staff, head of PMP BPJS health KCU Semarang, Prolanis participants at Pandanaran and Karang Anyar public health centers n = 13	Pandanaran and Karanganyar primary healthcare centers	Prolanis at the Pandanaran Public Health Center and Karanganyar Public Health Center show that there was no Prolanis official decree so that no special personnel were assigned to carry out Prolanis. In the Pandanaran Public Health Center, the Prolanis staff consists of doctors, nurses and midwives, while in the Karanganyar Public Health Center the Prolanis officers consist of only doctors and nurses. However, Prolanis trained personnelwere still lacking. No written SOPswere available at the Pandanaran Public Health Center, while at the Karanganyar Public Health Center, the written SOPswere in the form of a laboratory examination and the availability of Prolanis drugs.
6	see the implementation of Chronic Disease Management Program (Prolanis) at primary healthcare centers in Kedai Durian Medan Johor, North Sumatra	Kedai Durian primary healthcare centers of Medan Johor, North Sumatra and BPJS health n = 9	Kedai Durian primary healthcare centers in Medan, Johor, North Sumatra	The implementation of Prolanis has not been effective since the primary healthcare centers carried out only four Prolanis activities. Those were medical consultations, club activities, education and health status monitoring, while the reminder could not be carried out due to an insufficient budget. The home visits could not be done as well because of a lack of time. In addition, other obstacles were the lack of socialization to health workers and Prolanis participants, and the absence of SOPs and indicators of success that contain Prolanis implementation rules.
7	To describe the influence of external, internal and individual character factors on the scope of the implementation of the Chronic Disease Management Program (Prolanis) in Kendari	Primary healthcare centers of Poasia, Kendari	Primary healthcare centers	The inhibiting factor in implementing Prolanis at the Poasia Public Health Center was the lack of patient awareness to participate in the Prolanis club and the lack of understanding of healthcare workers about Prolanis
8	identify the implementation of the Chronic Disease Management Program (Prolanis) in hypertension disease at the Jetis Yogyakarta	Head of primary health care section, Prolanis manager, PTM manager, Prolanis doctor, Prolanis patient n = 18	Primary healthcare centers of Yogyakarta	Prolanis activities that have been carried out at Jetis Public Health Center include medical consultations, group education, SMS gateway reminders, club activities, monitoring health status, while home visits could not be carried out due to limited human resources.

Discussion

Based on the search results, most of the studies observed the implementation of Prolanis on the islands of Java, Sumatra and Sulawesi. On Java, studies about the implementation of Prolanis were conducted at the primary healthcare centers in Semarang, Pandanaran, Karanganyar, Yogyakarta, and Bogor and by family doctors in Pekalongan. On Sumatra, the studies on the implementation of Prolanis were conducted by family doctors at Palembang and in the primary health care center in Medan. Meanwhile on Sulawesi, the study was conducted at the Poasia clinic in Kendari.

Prolanis is a program organized by the BPJS, whose implementation is conducted at PHFs in collaboration with the BPJS. Puskesmas and family doctors were some of the PHFs that have implemented Prolanis since 2010 (by PT Askes (Persero) until 2014 when the National Health Insurance began. The forms of implementation of Prolanis are listed in the Prolanis practical guidelines including: (1) medical consultation, (2) group education, (3) home visits, (4) health status monitoring, (5) Prolanis gymnastics and (6) drug information services [5].

The result showed that not all Prolanis activities could be conducted at the primary healthcare centers and by family doctors. A study by Assupina and Rahmiwati [8] explained that not all Prolanis activities can be carried out according to the guidelines, because the lack of suitable venues, doctors being too busy and unattended Prolanis activities. Most of the studies also show that the implementation of Prolanis requires some resources including: human resources, funding and budgets for healthcare facilities. However, in terms of human resources, most of the studies claimed that there was still a lack of human resources to implement Prolanis in certain areas. The shortage was due to the limited number of human resources involved and the absence of a Prolanis executive officer decree. These deficits had an impact on the implementation of Prolanis activities such as in some primary healthcare centers including Jetis in Yogyakarta, Padanaran and Karanganyar in which home visit activities cannot be carried out due to their limited human resources [9], [10]. The impact of the limitations of human resources also affects the doubling of duties and unclear main tasks and functions. In practice, the implementation of the Prolanis program only involves primary healthcare centers' employees such as nurses and doctors. This happened at primary healthcare centers in Kedai Durian Medan Johor North Sumatra and at several family doctors in Pekalongan [11], [12].

Another Prolanis activity which cannot be fully implemented in the primary healthcare centers and family doctor facilities is group education. In a family doctor's office in Pekalongan and Poasia primary healthcare centers in Kendari, group education was not conducted because the number of Prolanis participants was too small or not enough to conduct the group education activities [12], [13]. This could be because of the low awareness of Prolanis participants to attend and avail of the benefits of Prolanis activities for improving their quality of life and manage their chronic health condition. Some Prolanis participants also did not realize the importance of gymnastics activities as one of the sporting needs for each individual. Therefore, the PHF officers are expected to make the Prolanis activities more sociable so more particpants will join the program.

The funding or budget availability was an important component in supporting the sustainability of the Prolanis program or activities. Based on the data it can be seen that the main source of the funding for the implementation of Prolanis came from the BPJS. All the funds were allocated to subsidize the Prolanis activities. However, the impact of the lack of funding caused one of the Prolanis activities to be cut or unsustainable in several PHFs, that being the implementation of the SMS gateway reminder. This occurred at the Halmahera primary healthcare centers in Semarang, in several family doctors in Pekalongan and in Kedai Durian primary healthcare center in Medan Johor and also in Bogor [11], [12], [14], [15]. Therefore, it is necessary to review and improve budgetary resources both in terms of fares, length of time for service payout and agreements between the BPJS and program implementers (PHFs).

In implementing Prolanis, all the PHFs carried out the activities based on the Prolanis Practical Guidebook. A written Standard Operating Procedure (SOP) was not yet available from the BPJS although the BPJS has conducted socialization related to its implementation in all healthcare facilities. In the Halmahera primary healthcare center in Semarang, it was stated that there was an SOP for the implementation of Prolanis, even though the SOP was not yet written or recorded [14]. The SOP was a standard laboratory examination performed at FKTP. The availability of a guidebook for implementing activities was very important. Without a guidebook, an activity will be difficult to do. Therefore, it is expected that an SOP will soon be formed by the BPJS.

Conclusions

From this review, it can be concluded that the implementation of the chronic disease management program (Prolanis) in primary healthcare centers and family doctors' offices showed some issues including the availability of Prolanis personnel, funds or budget and the absence of SOPs.

Acknowledgment

This paper has been presented at the 8th APPEN Conference and the 2nd HPC Conference on 8-9 October 2019, Universitas Airlangga, Surabaya, Indonesia.

Research funding: None declared.

Author contributions: All authors have accepted responsibility for the entire content of this manuscript and approved its submission.

Competing interests: Authors state no conflict of interest.

References

[1] WHO (World Health Organization). 2008–2013 Action plan for the global strategy for the prevention and control of communicable diseases. Geneva: WHO, 2008.
[2] The Ministry of Health of Indonesia. Riset Kesehatan Dasar. Jakarta: Badan Penelitian dan Pengembangan Kesehatan, 2018.
[3] Kinanti AA. Menkes Sebut Dana BPJS Banyak Diserap Hipertensi 2017. . Available at: https://health.detik.com/berita-detikhealth/d-3446688/menkes-sebut-dana-bpjs-kesehatan-banyak-diserap-hipertensi?_ga=2.187586848.941299295.1574035937-15235773.1574035937. Accessed: 4 Nov 2019.
[4] Badan Penyelenggara Jaminan Sosial Kesehatan. Panduan Praktis Prolanis (Program Pengelolaan Penyakit Kronis). BPJS Kesehatan 2014:3–6. DOI: 10.1117/12.497904.
[5] Badan Penyelenggara Jaminan Sosial Kesehatan. Peraturan Bersama Sekretaris Jenderal Kementerian Kesehatan Republik Indonesia Dan Direktur Utama Badan Penyelenggara Jaminan Sosial Kesehatan Nomor HK. 01.08/III/980/2017 Tahun 2017 Nomor 2 Tahun 2017 Tentang Petunjuk Teknis Pelaksanaan Pembayaran Kapitasi Berbasis Pemenuhan Komitmen Pelayanan Pada Fasilitas Kesehatan Tingkat Pertama. Jakarta, 2017.
[6] Kementerian Kesehatan Republik Indonesia. Peraturan Menteri Kesehatan Republik Indonesia Nomor 71 Tahun 2013 Tentang Pelayanan Kesehatan Pada Jaminan Kesehatan Nasional. Jakarta: Kementerian Kesehatan Republik Indonesia, 2013.
[7] Badan Penyelenggara Jaminan Sosial Kesehatan. Peraturan Badan Penyelenggara Jaminan Sosial Kesehatan Nomor 2 Tahun 2015 Tentang Norma Penetapan Besaran Kapitasi dan Pembayaran Kapitasi Berbasis Pemenuhan Komitmen Pelayanan Pada Fasilitas Kesehatan Tingkat Pertama. Jakarta, 2015.
[8] Assupina M, Rahmiwati A. Analysis of implementation of the chronic disease management program (Prolanis) at family doctors of PT Askes in Palembang on 2013. J Ilmu Kesehatan Masyarakat 2013;254–61.
[9] Anita M. Implementation of chronic disease program (Prolanis) in patients with hypertension in Puskesmas Jetis Yogyakarta. J Kebijakan Kesehatan Indonesia 2019;8:51–8.
[10] Ria NU. Input Program Pengelolaan Penyakit Kronis di Puskesmas. J Higeia Public Health Res Dev 2019;3:63–73.
[11] Nasution NM. Implementasi Program Pengelolaan Penyakit Kronis (Prolanis) di Puskesmas Kedai Durian Medan Johor Tahun 2018. Repositori Institusi USU. 2018. Available at: http://repositori.usu.ac.id/handle/123456789/11343
[12] Sitompul S, Suryawati C, Wigati PA. Analisis Pelaksanaan Program Pengelolaan Penyakit Kronis (Prolanis) BPJS Kesehatan Pada Dokter Keluarga di Kabupaten Pekalongan Tahun 2016. Jurnal Kesehatan Masyarakat (e-Journal) 2016;4:145–53.
[13] Ramsar U, Trisnantoro L, Putri LP. Implementation of chronic disease management (Prolanis) program in Puskesmas Poasia Kendari. J Kebijakan Kesehatan Indonesia 2017;6:200–3.
[14] Rosdiana AI, Raharjo BB, Indarjo S. Implementasi Program Pengelolaan Penyakit Kronis (Prolanis). J Higeia Public Health Res Dev 2017;1:140–50.
[15] Latifah I, Maryati H. Analisis Pelaksanaan Program Pengelolaan Penyakit Kronis (Prolanis) BPJS Kesehatan Pada Pasien Hipertensi di UPTD Puskesmas Tegal Gundil Kota Bogor. Hearty J Kesehatan Masyarakat 2019;6:1–11. DOI: 10.32832/hearty.v6i2.1277.

The implementation of a chronic disease management program (Prolanis) in Indonesia: a literature review

ORIGINALITY REPORT

7%	5%	5%	0%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	"Effectiveness of Chronic Disease Management Program in Improving the Quality of Life under National Health Insurance", International Journal of Recent Technology and Engineering, 2019 Publication	1%
2	www.jikm.unsri.ac.id Internet Source	1%
3	journal.fkm.ui.ac.id Internet Source	1%
4	"1st Annual Conference of Midwifery", Walter de Gruyter GmbH, 2020 Publication	<1%
5	Miftakhul Ulfa. "PENGARUH SELF HELP GROUP TERHADAP PENGETAHUAN PASIEN DENGAN PENYAKIT KRONIS", Media Husada Journal Of Nursing Science, 2021 Publication	<1%
6	benthamopen.com Internet Source	<1%

7	repository.unej.ac.id Internet Source	<1 %
8	journal.fk.unpad.ac.id Internet Source	<1 %
9	journal.unnes.ac.id Internet Source	<1 %
10	repositori.usu.ac.id Internet Source	<1 %
11	Indriyati Hadi Sulistyaningrum, Susi Ari Kristina, Ali Ghufron Mukti, - Satibi. "Analysis of Chronic Disease Direct Cost at Public Primary Health Cares in Indonesia", Bangladesh Journal of Medical Science, 2021 Publication	<1 %
12	core.ac.uk Internet Source	<1 %
13	journal.ugm.ac.id Internet Source	<1 %
14	123dok.com Internet Source	<1 %
15	F N Aini, M N Widyawati, S Suryono. "Early Detection of Preeclampsia using a Rule-Based System Information System", Journal of Physics: Conference Series, 2019 Publication	<1 %

16	ejurnal.biges.ac.id Internet Source	<1%

Exclude quotes	Off	Exclude matches	Off
Exclude bibliography	On		

The implementation of a chronic disease management program (Prolanis) in Indonesia: a literature review

GRADEMARK REPORT

FINAL GRADE

/0

GENERAL COMMENTS

Instructor

PAGE 1

PAGE 2

PAGE 3

PAGE 4

PAGE 5

PAGE 6