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Pulau Tanjung home care program: A concept of home-based primary care in developing countries

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Abstract

In developing countries, it is not only the pandemic that is the main problem. However, difficult access to health care facilities is also a chore that has not been properly resolved by the government. In order to answer the above phenomenon, an initiative has been drawn up that leads to the development of the Pulau Tanjung Home Care Program (PHC program). Unlike home care in general, the PHC program places more emphasis on preventive action by not neglecting curative and rehabilitative. This program is structured with two main perspectives: Islamic economics approach and person-centered care. This program also has four main pillars that must be met: home-based medical check-up, home-based assessment and treatment, sustainable treatment and follow-up based on diagnosis, and health insurance for everyone. This literature review aims to develop the concept of this program so that it fits the background of the program in developing countries.

Keywords: Home care; Islamic economics; Person-centered care; Primary care

1. Introduction

Corona Virus Disease 2019 (COVID-19) not only has an impact on health services in hospitals, but also becomes a problem for primary health services, especially at public health centers [1,2]. This virus teaches us that visiting health care facilities during a pandemic is something that needs to be considered carefully. Rapid transmission either through droplets - or air borne according to some researchers - deserves to make patient think twice before visiting health facilities [3,4]. On the other hand, they are also faced with confusion about what conditions should force them to visit health facilities. This confusion not only results in delays in management of acute cases, but can also increase mortality rates that are not directly related to COVID-19 [5,6,7].

In developing countries, such as Indonesia, it is not only the pandemic that is the main problem.[8] However, difficult access to health care facilities is also a chore that has not been properly resolved by the government [9]. This is also a phenomenon that encourages the development of a primary care concept, which can not only reduce the risk of exposure and reduce the incidence of COVID-19 but can also increase the ease of access to services while maintaining the quality of health services: patient experience, safety, and clinical effectiveness [10].

In order to answer the above phenomenon, an initiative has been drawn up that leads to the development of the Pulau Tanjung Home Care Program (PHC program). Unlike home care in general, the PHC program places more emphasis on preventive action by not neglecting curative and rehabilitative. This program is structured with two main perspectives as follows.

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1.1. Islamic economics approach

The Islamic approach to health care issues began in the 8th century with the establishment of Bimaristan, where every health service was free of charge with the best quality. It is based on the Bimaristan principle, "All costs are to be borne by the hospital whether the people come from afar or near, whether they are residents or foreigners, strong or weak, low or high, rich or poor, employed or unemployed, blind or signed, physically or mentally ill, learned or illiterate." [11].

1.2. Person-centered care

Person-centered care is a step to improve the quality of health services which was introduced by World Health Organization (WHO) in 2015 and adopted by the International Society for Quality in Health Care (ISQua) since 2018. This perspective aims to involve families in patient care and put forward the perspective that patients are individuals who have different wants and needs [12,13].

However, in its development, the concept of the PHC program application at the primary care facilities must be structured in such a way that it cannot only be an innovation but can also be a pioneer in improving primary health services in Indonesia. In formulating the concept, several qualitative PHC program applications were carried out by taking one of the working areas of the primary care. Pulau Tanjung health center is the main choice in the application of this program, because its working area can be accessed by two modes of transportation, land and water.

1.3. Pulau Tanjung health center profile

Pulau Tanjung health center is located 1.8 miles from the secondary health care facility, dr. H. Andi Abdurrahman Noor hospital. The working area includes six villages, about 1209 hectares and 4,654 people. Meanwhile, two of six villages are remote areas that are difficult to reach by land, with roads made of stone and clay. In addition, in the middle of the year floods often occur due to overflowing river water which makes almost all villages in the working area are submerged [14].

Table 1 Total population of Pulau Tanjung health center working area

Village	Geographical	Area (Ha)	Total population		
			Male	Female	Total
Pulau Tanjung	Lowland	559	326	270	596
Salimuran	Lowland	2,501	587	590	1,177
Karya Bakti	Lowland	600	137	120	257
Satiung	Lowland	1,322	462	436	898
Saring Sungai Binjai	Lowland	1,366	617	627	1,244
Serdangan	Lowland	4,851	253	229	482
TOTAL	**4,654**				

Source : Pulau Tanjung health center profile 2020

The number of workers at the Pulau Tanjung health center has exceeded the minimum required number with five general practitioners and one dentist. However, in terms of the type of personnel, this health center still does not meet the minimum criteria with absence of medical laboratory technology experts and pharmacist. Meanwhile, pharmacists are still needed as a complete report on the use of narcotics and psychotropic drugs.

2. Initial concept

With these two perspectives, PHC program has four main pillars that must be met. The first is home-based medical check-up. This pillar aims to determine the level of health of individuals in the house visited as well as the level of health of the environment around the house. This is the main pillar in this program [11,15].

The second pillar, home-based assessment and treatment, is a supporting pillar in this program, where if a medical check-up turns out to be a disease, the individual must be given treatment according to the disease he is suffering from.

It is intended that the health services in this program are complete in accordance with the person-centered care perspective [15].

The third pillar is sustainable treatment and follow-up based on diagnosis. This pillar aims to provide sustainable health services for patients who cannot access health services, either because of difficult transportation or because of limited mobility due to their illness [15, 16].

The fourth pillar is health insurance for everyone. This pillar aims to provide free health services and ensure continuity of services without cost barriers. One of the steps is to make sure every individual in the house has a health insurance card. It also supports one of the Indonesian Government's programs, universal health coverage. If necessary, health workers can play an active role in completing this administration [9, 17].

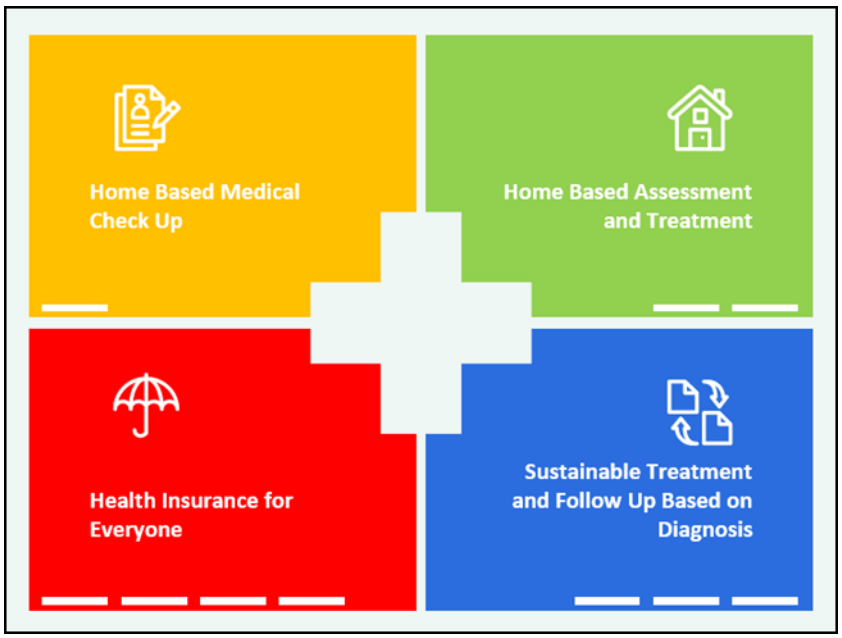

Figure 1 Four pillars of Pulau Tanjung home care program

3. Comprehensive perspective of primary care

In providing primary services in Indonesia, there are limitations that service providers should not oversteps, their competence as a nurse or general practitioner at the primary care. They are not allowed to provide specialist services and if patients need these services, they must be willing to be referred to a secondary or tertiary health care facility (hospital). And if they refuse, then there is no continuity in treatment.

The program attempts to blur those boundaries, but doesn't eliminate them altogether. This is so that patients can still get optimal services at the specialist level but do not violate the limits of competence that have been set. This can be done by establishing intensive communication with relevant specialists in accordance with the needs of the personnel who provide the home visit service.

To be able to guarantee communication with specialist doctors, of course there must be regulations that regulate and become legal protectors for each medical worker [9]. This regulation can be stated in the form of a memorandum of understanding (MOU) with secondary and tertiary health care facilities. With a good agreement, the boundaries that ensnare health services are easy to widen for optimal service that patients will get. However, to obtain this agreement, of course, a familial approach is needed.

In terms of inspection, primary service facilities in Indonesia also experience limitations, especially in remote areas where there is minimal attention from relevant stakeholders.[8,9,17] Therefore, cooperation with secondary and tertiary health care facilities is also very necessary, especially in the examinations of specific visitors: blood laboratory, ultrasonography (USG), electrocardiography (ECG), and other portable examinations. This is so that patients can still get optimal supporting examination services even though they do not go to secondary or tertiary health care facilities.

Procurement of medicines is also an unfinished homework for primary care facilities in Indonesia. No matter how good the proposed drug formulary is, it seems that the shortage of drug stocks remains a problem [9,17]. Communication with secondary and tertiary services is an important step in providing treatment that is in accordance with evidence-based medicine, not just adjusting to the types of drugs available in primary care facilities. This is expected to improve the recovery rate of patients in this program.

4. Modern to electronic-integrated medical record

The most difficult obstacle to overcome in the implementation of these PHC program is the limited information about the individuals being examined, so that past medical history, especially allergy history, cannot be known with certainty. This is because the health facilities still used the conventional medical record system. The conventional system causes misintegration of information about the history of the disease, because the medical records are separated. Therefore, starting the initial change step by compiling a modern medical record system with the initial change from the medical record number needs to be done [18].

Simple numbering of medical records with the possibility of minor changes can be done using the ID number (identification number). This number is confirmed to be a unique number that is never the same throughout Indonesia, so as to facilitate the integration of medical records. After the successful adaptation of modern medical records, the next step is to develop an EIMR (Electronic-Integrated Medical Record) system, where medical records are recorded online using a central database that is integrated between health center, hospital, and other facilities, so that individual health data obtained will be more complete and lead to service improvements [18,19,20]. And it is hoped that with this system, EIMR will continue at the district, provincial, and even national levels. But like other major changes, the first step is always hard.

This is a challenge that must be answered by the Pulau Tanjung health center and Tanah Bumbu district. This is not only beneficial for improving the quality of health services, it is also useful as a factual health data center at the sub-district level, which is expected to continue at the district, provincial, and national levels.

5. Visit criteria and priorities

This program should be carried out in all houses in the Pulau Tanjung health center working area. With a total number of 1,553 families, to be able to visit all homes every 1 year, 3 doctors are required to visit 10 homes a week. However, the number of visits can be reduced if the focus is only on those with special needs: the elderly, infants, pregnant women, and individuals with limited mobility. However, it is better to carry out regular visits to every house every year or every two years so that the preventive and promotive objectives of this program are still fulfilled, because our job as health workers at the health center is to maintain the health of every individual in the working area of the health center.

6. Integration with existing programs

The healthy family program (*Program Indonesia Sehat dengan Pendekatan Keluarga*, PIS-PK) is one of the Health Departmen programs that uses a family approach to increase target coverage. The family approach is an integrated service strategy between individual health efforts and community health efforts based on data and information on family health profiles through home visits. It's just that in PIS-PK, home visits are based on sick patients or patients who need special attention [20].

Complementing these deficiencies, PHC programs were initiated. This program continues PIS-PK by visiting all houses in the working area of the health center to check the health level of individuals, both healthy and sick. Thus, PHC program focus on medical check-up services that are carried out at home [20,21]. What is meant by one family is a nuclear family unit (father, mother, and children) as stated in the family card. If in one household there are grandparents or other individuals, then the household is considered to consist of more than one family.

Figure 2 Main indicators of the health status of family (PIS-PK)

To state that a family is healthy or not, a number of markers or indicators are used. In the context of implementing the PIS-PK, it has been agreed that there are 12 main indicators to mark the health status of a family. The twelve main indicators are as follows [21].

- Families participate in the Family Planning program
- Mother giving birth in a health facility
- Babies get complete basic immunizations
- Babies get exclusive breast milk
- Toddlers get growth monitoring
- Patients with pulmonary tuberculosis receive treatment according to standard
- Patients with hypertension take regular treatment
- People with mental disorders get treatment and are not neglected
- No family members smoke
- The family is already a member of the National Health Insurance
- Families have access to clean water
- Families have access to or use healthy latrines

Based on these indicators, Healthy Family Index is calculated for each family. Meanwhile, the condition of each indicator reflects the condition of the family concerned [20,21].

7. Conclusion

The PHC Program is one of the answers to improve public health services in developing countries, especially in facilitating access to services and reducing waiting time for services. In the future, further development is still needed regarding the implementation of this program so that it can achieve results according to the vision it carries.

Compliance with ethical standards

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Disclosure of conflict of interest

No potential conflict of interest was reported by the authors.

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