Quality Improvement of Community Health Center During Covid-19 Pandemic

Hamzah Bakri
Centre for Health Training (BBPK) Makassar, Indonesia

http://dx.doi.org/10.18415/ijmumu.v7i4.1614

Abstract

This article describes the improvement of the quality of community health centre services during the COVID-19 Pandemic which includes the Management of community health Centre, Community Health Efforts, Individual Health Efforts, and Infection Prevention and Control. The method used is literature search and documentation studies based on rules and regulations. The results of this search indicate that the Quality Improvement of Service Centre for community health in the Pandemic Era COVID-19 made adjustments related to efforts or activities as well as funding to be made, adjustments related to resource management also need to be done. Despite the fact that each community health centre faces different conditions that are influenced by the number of COVID-19 cases in its working area. Given the development of science related to the COVID-19 Pandemic, policies or guidelines may change so that the community health centre and the Health Office must actively follow the development of these changes from official sources so that they can be immediately adapted to the protocol of services to be provided.

Keywords: Quality Improvement; Community Health Service Centre; COVID-19

Introduction

Community health centre is a health service that interacts directly with the community that is comprehensive in nature with its activities consisting of promotive, preventive, curative, and rehabilitative efforts. This is based on the Regulation of the Minister of Health (Permenkes) of the Republic of Indonesia Number 43 of 2019 concerning Community Health Centre which is a health service facility that organises community health efforts and first-level individual health efforts, by prioritising promotive and preventive efforts in the working area. The Minister of Health emphasised that community health centre should be established in each sub-district. Under certain conditions, in one sub-district more than one community health centre can be established which must meet the location, building, infrastructure, equipment, personnel, pharmacy, and clinical laboratory requirements.

In 2019, there were 10,134 community health centers throughout Indonesia spearheading health services. Community health centers are at the forefront in breaking the chain of transmission of COVID-19 because they are located in each district and have a regional concept. In this COBID-19 outbreak condition, public health centers need to make various efforts in handling prevention and limiting infection transmission. Although this is currently a priority, it does not mean that community health centers can
leave other services that are the functions of community health centers, namely implementing the first level of Individual Health Efforts (UKP) and Community Health Efforts (UKM) as stipulated in Permenkes number 43 of 2019 about the community health centres. Based on Blum's theory (1974) that the degree of health is influenced by 4 interrelated factors namely the environment (40%), health behaviour (30%), health services (20%), and genetic (10%). Among them, behavioural and environmental factors have a big influence. This factor is strongly influenced by the behaviour of the community itself, therefore the implementation of the Healthy Living Community Movement (Germas) in promoting a healthy living culture and cross-sector involvement needs to be encouraged. This encouragement is carried out by the regional government starting from the neighborhood level to the central level. The role of community health centre in conducting prevention, detection, and response is carried out in an integrated manner in providing health services in the COVID-19 pandemic.

Previous research related to the quality of community health centre services conducted by Indrayathi et al (2014) showed that the results were felt to be unsatisfactory. This happens because there are still difficulties in providing the completeness and readiness of medical equipment so that there are still some patients who are unable to make full use of community health centre services. The same finding was also shown in Astuti’s study (2017) which recommended that community health centre add facilities such as waiting rooms and information media and conduct periodic patient satisfaction surveys.

Previous research on improving the quality of community health Centre Services conducted by Ulumiyah (2018) showed that the implementation of patient safety efforts in community health centres was adjusted to the accreditation assessment standards of community health centre. However, in its realisation there are still obstacles and deficiencies in the fulfillment of patient safety standards so that it is necessary to optimise the application of patient safety efforts from all parties involved. Community health centre must provide safe and quality services to create healthy sub-districts.

This article aims to discuss improving the quality of community health centre services from different perspectives and conditions during the COVID-19 pandemic. This article provides a description of efforts to improve the quality of community health centre services from the aspects of community health centre management, community health efforts, individual health efforts, prevention, and control of infection with a primary focus on the COVID-19 pandemic situation.

**Methods**

The method used is literature review which is one of the data collection methods used in social research methodologies to trace data. Data is also obtained from certain documents that can provide additional information in this article which documents the regulations relating to Quality Improvement of Community Health Centre Services and technical guidelines for handling COVID-19. Study documentation or commonly referred to as document review is a data collection technique that is not directly addressed to research subjects in order to obtain information related to the objects discussed in the article namely Improving the Quality of Community Health Centre Services.

**Results and Discussion**

The results and discussion describe a number of aspects of improving the quality of community health centre services in the Pandemic Era COVID-19, among others, Management of community health centre, Community Health Efforts, Individual Health Efforts, and Infection Prevention and Control (PPI). For more details, can be described as follows:
Community health centre management

In the aspect of management of community health centre, starting with the Planning of community health centre by mapping needs, the community health centre set targets for cases related to COVID-19 with a prevalence rate from the district/city health office. For example suppose that from the total population there will be 5% infected with COVID-19, 20% of whom will need treatment in hospital and 80% can be self-isolated at home.

Then carried out the implementation of activities and special forums through monthly Mini Workshop (Lokmin) and quarterly Lokmin still carried out. If it is possible to hold a meeting, then pay attention to the rules at the time of the COVID-19 pandemic such as physical distancing, but if it is not possible, can utilise information/online technology.

During the monthly mini workshop, it will discuss the activities that have been and will be carried out, the community health centre needs to discuss together various guidelines related to services in the COVID-19 pandemic situation. This needs to be done considering that at present many programmes guidelines are adapted to the conditions of the COVID-19 pandemic and the release is also almost the same. To anticipate this so that staff at the community health centre can quickly follow developments, the head of the community health centre shares the task of reading the guidelines with the relevant officers and then the officer will alternately explain to all officers in the monthly mini workshop forum.

Community health centres continue to monitor the achievement of priority targets for health development at the district/city level as well as the achievement of targeted indicators of success in handling COVID-19 in the working area that has been developed, such as - Percentage of OTG (People without symptoms), ODP (People in Oversight), PDP (Patient in Oversight) that have been found, percentage ODP, recovered PDP, no OTG, ODP, PDP who died at home - ODP and mild self-isolated PDP were monitored daily at 100%. In the context of supervision and control, these indicators are assessed every month. The financing for the implementation of services during the COVID-19 pandemic comes from the APBD (Regional Revenue and Expenditures Budget), APBN (State Revenue and Expenditures Budget) and other legitimate sources whose use is in accordance with applicable regulations.

Implementation of Community Health Centre Management in addition to adjustments related to the efforts or activities as well as funding to be carried out, the community health centre also makes adjustments related to other resource management, especially related to human resources (HR). If needed, the head of the community health centre can review the division of HR tasks of the community health centre adjusted to the current situation of the community health centre and still consider the ability of HR to carry out their duties. HR could be one of the sufferers related to COVID-19 cases, both infected from patients and from families.

In this situation the SOP (Standard Operating Procedure) for handling COVID-19 cases must still be carried out on the officers of the community health centre. If tracing results are already in place or many human resources are in contact, the head of the community health centre must immediately coordinate with the District / City Health Office to take anticipatory steps. The basis for the decision chosen must be to consider how the community in the working area of the community health centre still receives health services, even in situations where all human resources affected by COVID-19 cases must carry out independent isolation or treatment according to SOP of COVID-19.

Community Health Efforts

During the COVID-19 pandemic, community health centre continued to take out basic services based on priority scale according to the Minimum Service Standards (MSS) to achieve the fulfillment of regency
/municipal MSS in the health sector as regulated in Permenkes Number 4 Year 2019 concerning Technical Standards for Fulfillment of Basic Service Quality in Minimum Service Standards in the Health Sector. Implementation of UKM (Community Health Efforts) and UKBM (Human Resources Health Efforts) pay attention to the rules of Prevention and Control of Infection and physical distancing in order to break the chain of transmission.

Health promotion includes community empowerment that can be done through the formation of a task force or COVID-19 standby task force from the village level to the level of the neighborhood. It is intended that the activities to be carried out are more structured and organised. Some things that need to be considered in community empowerment are the condition of the community (not only from the aspect of health but also psychological, social, cultural, including political), are voluntary by developing existing potentials, leading to specific positive behaviours, and based on local zeal mutual cooperation. Activities that can be carried out include data collection on community health, dissemination of health information and health education, disinfection of public facilities, provision of handwashing facilities, provision of independent isolation facilities, case tracking, monitoring of ODP or PDP cases that are self-isolated including migrant workers returning village or going home, meeting basic needs for affected people in need, etc.

Then the implementation of Posyandu (Post Integrated Services) and other UKBM (Human Resource Health Efforts) can be agreed with the health cadres and adjusted to the policies and conditions of the local area. If a PSBB (Large-scale Social Limitation) policy has been established in the area and there is a COVID-19 confirmation case, the Posyandu (Post Integrated Services) activities will be temporarily suspended. If there is no PSBB policy or there is no COVID-19 confirmation case, Posyandu (Post Integrated Services) can be carried out with strict requirements such as applying the principles of PPI (Prevention and Control of Infection) and physical distancing.

Submission of information is open, current and factual. Information can be conveyed by the head of the task force or task force, the head of the community health centre, the health worker of the community health centre, or community leaders. Information can also be conveyed in the form of print media, electronic media, or other communication media such as SMS, Whatsapp, etc. Information that needs to be conveyed includes symptoms and methods of transmission of COVID-19, ways of prevention at the individual and community level, vulnerable groups and what to do, one's status and acts of disgrace, regional risk maps, and other related information.

Community health centre can create information hotlines or corners that provide information about COVID-19. Community health centre can create their own IEC media or reproduce IEC media compiled by the Ministry of Health. The Self Aware (SMD) Survey and the Village Community Deliberation (MMD) were carried out while still applying the principles of PPI and physical distancing.

Environmental health efforts in COVID-19 countermeasures are carried out through health, safety, control, and supervision (linen and decontamination) carried out with counseling, environmental health inspection, environmental health interventions and management of wastewater, domestic solid waste and B3 waste (hazardous and toxic substances).

Management of Family Health Efforts carried out in accordance with the Life Cycle, namely in pregnant women, maternity mothers, postpartum mothers, newborns and toddlers, school-age and adolescents, and adults (prospective brides), and the elderly.

During the COVID-19 pandemic, the focus of the community health centre was on prevention, detection, and response to COVID-19 cases without ignoring other disease prevention and control activities.
In carrying out the prevention, detection, and response of COVID-19 control, the community health centre must work together with its network such as Pratama clinics and individual practices. (1). Prevention is to carry out risk communication including the dissemination of IEC COVID-19 media to the public and monitoring to public places. (2). Detection of Influenza-Like Illness (ILI) and pneumonia Surveillance through the Early Awareness and Response System (SKDR), Active surveillance/monitoring of travelers from infected areas/countries, and Building and strengthening surveillance networks with authority, cross-sectoral and community leaders. (3). The response is clinical management according to the patient's condition, making referrals to the hospital according to medical indications, paying attention to PPI principles, tiered case notification 24x24 hours and conducting epidemiological investigations in coordination with district/city health offices, identifying close contacts from the community and health workers, monitoring light PDP health, ODP and OTG, recording and reporting the results of routine monitoring, educating patients for self-isolation at home, and conducting risk communication to families and the community, collecting specimens and coordinating with local health authorities regarding specimen delivery.

In addition to the three things above, controlling COVID-19 requires mental and psychosocial health support to reduce mental health problems arising from this pandemic. Mental and psychosocial health support is given to healthy people, OTG, ODP, PDP, confirmation cases, vulnerable groups, and staff working in the frontline with reference to applicable guidelines.

This is done due to the impact experienced by the COVID-19 pandemic not only in terms of health but also outside of health such as the economy, boredom due to staying at home or limiting social activities and others. The Healthy Indonesia Programme with the Family Approach (PIS-PK) has been implemented by the community health centre. From the results of family visits, community health centres can obtain individual raw data as a database in their working area.

Community health centres also have a database of vulnerable groups, namely the elderly, pregnant women and comorbid factors such as hypertension, pulmonary tuberculosis and aggravating behaviour, smoking. By mapping vulnerable groups, community health centres will more often intervene in these groups to be given education and conducted rapid tests to prevent transmission. If transmission of COVID-19 cases occurs in this group, it will have a poor prognosis for recovery and the potential for death from COVID-19 infection. Therefore, the PIS-PK data can be used for mapping risk factors as well as determining intervention targets which can ultimately reduce the Case Fatality Rate (CFR) due to the COVID-19 case. In addition to data from PIS-PK family visits, data from the results of the dasawisma cadres can also be used to map this vulnerable group.

**Individual Health Efforts**

In the implementation of Individual Health Efforts (UKP) during the COVID-19 pandemic, community health centre made use of information technology in order to prevent the spread of COVID-19. Community health centre deliver information related to UKP restrictions or delays in services to reduce the risk of COVID-19 transmission. Such information can be conveyed in writing through print media or other communication media. It can also utilise information technology such as online registration as a form of service limitation.

Individual health efforts consist of Services Inside the Building, Services Outside the Building, Pharmaceutical Services, Laboratory Services, Referral System, and Corpse Handling. As for matters relating to services in buildings, namely: Outpatient services, community health centre minimise community visits for non-urgent or emergency services by utilising information technology or other media as needed. The community health centre carries out triage as a patient examination system at the first point of entering the community health centre. Triage is an important part in identifying, early detection of fever, coughing and symptoms of respiratory tract infections so that the patient is placed in a waiting room separate from other patients. In addition, the community health centre also modifies the schedule based on programme objectives.
Then Services with a bed or Inpatient services are prioritised in non-COVID-19 cases. Providing inpatient services for non-COVID-19 cases must pay attention to the principles of PPI and physical distancing. Inpatient services in COVID-19 related cases are based on applicable provisions taking into account the standard of COVID-19 case services, availability of resources (human resources, facilities, infrastructure, medical devices, BMHP (used Medical Material), and financing) and approval from the local District/City Health Office.

Delivery service is carried out referring to the Guidelines for Pregnant Women, Postpartum Mothers and Newborn Babies During Social Distancing issued by the Directorate of Family Health. Furthermore, emergency services are still carried out according to applicable guidelines by tightening the triage process. If it cannot be determined that the patient has potential COVID, it can be treated as a COVID-19 case.

Then Out of Building Services, for example, monitoring of OTG, ODP, PDP cases is integrated with the family approach, carried out every day using a form in accordance with the guidelines. Services can be done by direct visit or through information and telecommunications systems. Service providers outside the building are Community Health Centre health officers, which can involve cross-sectors such as neighborhood, dasawisma cadres, or community health centre networks.

In addition there are pharmaceutical services that are carried out in accordance with pharmaceutical service standards with regard to standard precautions and apply physical distancing. If necessary, the administration of drugs to patients with symptoms of acute respiratory infections (ARI) can be done separately from non-ARI patients to prevent transmission.

Service activities are sought to utilise information and telecommunications systems. Pharmacy staff coordinate with related programmes to adjust the need for drugs and consumable medical materials (BMHP) including Personal Protective Equipment (PPE) and disinfectants and materials for COVID-19 laboratory tests (rapid tests, sterile containers, dacron swabs or flocked swabs and Virus Transport swabs Medium (VTM) Drug delivery can work with third parties through delivery services.

For laboratory services for non-COVID-19 cases, they are still carried out according to the standard by taking into account PPI and physical distancing. Laboratory tests related to COVID-19 (including the management and delivery of specimens) refer to the applicable guidelines, carried out by health workers who have obtained capacity building related to rapid test and swab test. Laboratory personnel calculate the need for rapid tests, sterile containers, dacron swabs, or flocked swabs and Virus Transport Medium (VTM) according to the direction of the district/city health office by taking into account the prevalence of COVID-19 cases in the working area.

Then the referral system is carried out in accordance with the applicable provisions by taking into account the referral to the Advanced Referral Health Facility (FKRTL) in accordance with the case and the referral system that has been established by the district/city health office. Standards of service pay attention to, among others, namely obtaining approval from patients and/or their families, undertaking first aid or stabilisation of pre-referrals, communicating with recipient of referrals and ensuring that the recipient of referrals have facilities and infrastructure as well as competence and available health workers, making referral covering letter, transportation for referral according to the patient's condition and the availability of transportation facilities, patients who need medical care are constantly accompanied by competent health workers, referral is carried out by applying PPI including ambulance disinfection.

The last part of the individual health effort is Corpse handling of COVID-19 cases carried out in accordance with applicable guidelines. If the community health centre is given the task of carrying out a review of the corpse of the COVID-19 case, then the district/city health office must ensure the availability of resources in the community health centre such as human resources that have gained capacity building, PPE officers, rooms, coffins, and other consumables related to the implementation of corpse handling.
Infection Prevention and Control

The implementation of Infection Prevention and Control (PPI) in community health centre aims to break the cycle of transmission of infectious diseases through standard precautions and transmission/infection-based precaution. Standard precautions are carried out through steps in accordance with applicable guidelines, for COVID-19 cases there are emphases as follows: (1). Hand hygiene, applied by officers according to guidelines. In addition, handwashing facilities such as washbasins with running water, liquid soap must be available so that every visitor/patient performs Handwashing with Soap (CTPS) when arriving and returning from the community health centre. (2). The use of PPE (Personal Protective Equipment), requires 4 elements that must be obeyed, namely, determining the indications of the use of PPE, how to use it properly, how to remove it properly, how to collect (disposal) after use. The method is carried out according to the applicable guidelines. Determination of indications for the use of PPE is done by considering the risk of exposure, where PPE is used by people who are at risk of exposure to patients or infectious material; transmission dynamics, i.e. droplets and contacts, airborne transmission can occur in actions that trigger aerosols such as cardiac pulmonary resuscitation, dental examinations such as the use of ultrasonic scaler and high-speed air-driven bur, nose and throat examination, and swab test. For community health centre that provide services with beds or inpatients services, PPE used must be disposed of in an infectious rubbish bin (yellow plastic) to be destroyed at the incinerator. PPE that will be reused is put into an infectious linen and washed according to the provisions of the Officer who checks using a thermal scan (measuring temperature without touching the patient), and observations or interviews are limited, must maintain a minimum distance of 1 meter. (3). Environmental health includes: air quality, environmental surface, ie cleaning the area around the patient using 0.05% chlorine, or H2O2 0.5-1.4%, if there is body fluid using 0.5% chlorine. In addition, the Ventilation system is a system that guarantees adequate air exchange inside and outside the building, so that the concentration of droplet nuclei decreases. Patient placement, including flow adjustments to place infectious patients separate from non-infectious patients. Besides that, the placement of the patient is adjusted to the transmission pattern of the patient's disease infection (contact, droplet, airborne) preferably in a separate room. In the case of coughing and sneezing ethics, officers, patients, and visitors with symptoms of respiratory tract infections must apply a cough ethic. Education related to this matter is conveyed through the media/directly by officers. Besides that for visitors/patients must use a mask in accordance with applicable regulations.

Furthermore, transmission/infection-based precautions pays attention to the way it is transmitted, the type of transmission-based precautions that applies to suspected cases and COVID-19 is precaution based on droplet, contact, and airborne transmission under certain conditions that are implemented referring to the applicable guidelines. Transmission-based precautions through airborne i.e. arrangements for the placement of examiners, patients, and mechanical ventilation in a room with regard to the direction of incoming and outgoing clean air supply.

The last part is controlling infection for the community while accessing services at the community health centre and during daily activities. Therefore, the community should undertake: (1). Wash hands regularly with six steps soap with clean running water (2). Avoid crowds (3). Avoid touching the eyes, nose, and mouth (4). Conduct ethics coughing and sneezing (5). Stay at home (6). Avoid areas with high COVID-19 cases (7). Self quarantine for 14 days if you have a history of traveling to the affected area (8). Do not shake hands (9). Immediately change clothes and take a shower after traveling outside the home (10). Clean items that are frequently touched (11). Use a mask when leaving the house.

The handling of COVID-19 really directs to the community health centre to become a health service facility that is responsible for organising health efforts i.e. promotive, preventive, curative, and rehabilitative in a work area (Wowor et al., 2016). The community health centre as the organiser of health development is an integral part of national development and also has a very vital role as a public health implementing institution (Adisasmito, 2014; Makatumpias et al., 2017).
Related to the covid-19 virus examination, there are a number of ways to be done when viewed from its sensitivity, namely by examining the molecular method, using PCR in the form of an immunoglobulin examination as an initial screening test and can be carried out en masse. The aim is to quickly find out the condition of the people who are positively exposed to the Coronavirus, so that further isolation efforts can be done.

Communities are encouraged to isolate themselves or self-isolation which is carried out independently at home and will be monitored by community health centres or health workers (Yunus & Rezki, 2020). This is in line with the views of Evans et al (2015) that community health centres are expected to play an important role in providing increased demand in primary care services, especially among low-income patient populations. Comprehensive medical services for Medicaid and Medicare patients at an enhanced reimbursement rate, and serve uninsured patients on a scale fee basis.

Community perceptions about community health centres in Indonesia, specifically the way they measure service quality, are important, urgent, and interesting to study. This is because knowledge of quality measures (quality dimensions) will help practitioners and policymakers in community health centre clearly assess what needs to be monitored, analysed, maintained, and improved in terms of service quality (Rakhmawati, 2013; Laksono et al., 2019).

The role of community health centre needs to be strengthened in terms of prevention, detection, and response in accordance with their authority as a first-level health service facility. On the other hand, the community health centre also has the duty and function of organising community health efforts and individual health efforts in the context of meeting minimum service standards for the community that must not be abandoned during the COVID-19 pandemic.

**Conclusion**

Quality Improvement of Services Community health centre in the Pandemic Era COVID-19 made adjustments related to efforts or activities as well as funding to be made, adjustments related to resource management were also carried out. Despite the fact that each community health centre faces different conditions that are influenced by the number of COVID 19 cases in its working area. Services can be developed by taking into account the rules of breaking the transmission chain by using official and accountable guidelines such as those issued by certain programmes. Considering the development of science related to the COVID-19 pandemic, policies or guidelines may change, so the community health centre and the Health Office must actively follow the development of this change from official sources so that it can be immediately adjusted to the service protocol that will be provided. Regularly integrated and continuous guidance to the community health centre is urgently needed, including increasing the competency of the community health centre staff in COVID-19 services and the Priority Programme.

**References**


Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (http://creativecommons.org/licenses/by/4.0/)