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RESEARCH ARTICLE

Evaluation on the Implementation of Rural-Based Program for Undergraduate Medical Student

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Abstract

Evaluation of a program is needed to determine whether the program could be implemented and generate inputs to improve the program. The objective of this study was to evaluate the implementation of community-based programs for medical clerkship students in rural areas. This research was a qualitative study using interpretivism paradigm and case study approach. Data collection method was focus group discussions with the head of the public health center (puskesmas) and preceptor. Data were analyzed through transcription, coding, categorization, and generating theme. The study was conducted from August 2015 to November 2016 in Sukabumi and Cianjur, West Java. Triangulation method and member check were conducted to elicit valid and reliable data. Two focus group discussions were conducted with 11 informants comprises 5 heads of puskesmas and 6 preceptors. There were 7 themes generated from the discussion. The themes were socialized and disseminate the information; collaboration and local government involvement; integration of education and service; encourage lifelong learning; encourage the improvement of performance; skill enhancement; and sustainability. Implementation of community-based medical education curriculum in rural areas has been implemented. Sustainability of the curriculum is needed to contribute to the improvement of community health status.

Keywords: Community, medical education, rural, undergraduate

Evaluasi Implementasi Program Ilmu Kesehatan Masyarakat di Daerah Pedesaan untuk Program Profesi Dokter

Abstrak

Evaluasi sebuah program dibutuhkan untuk mengetahui apakah program tersebut dapat dilaksanakan dan mendapatkan masukan yang akan digunakan dalam rangka memperbaiki program. Tujuan penelitian ini adalah melakukan evaluasi pelaksanaan program pendidikan kedokteran berbasis daerah pedesaan untuk mahasiswa profesi dokter. Penelitian ini merupakan penelitian kualitatif dengan paradigma *interpretivism* dan pendekatan studi kasus. Pengumpulan data dilakukan dengan diskusi kelompok terarah kepada kepala puskesmas dan preseptor lapangan. Pengambilan data dilakukan pada bulan Agustus 2015 sampai November 2016 di Sukabumi dan Cianjur, Jawa Barat. Analisis data hasil wawancara dilakukan melalui proses transkripsi, koding, kategorisasi, dan penyusunan tema. Triangulasi dan *member check* dilakukan untuk mendapatkan data yang valid dan reliabel. Dua diskusi kelompok terarah dilakukan kepada 11 informan yang terdiri atas 5 orang kepala puskesmas dan 6 orang preseptor. Berdasar atas hasil diskusi didapatkan 7 tema dalam evaluasi kurikulum pendidikan, yaitu sosialisasi dan diseminasi informasi; kolaborasi dan keterlibatan pemerintah setempat; integrasi pendidikan dan pelayanan; mendorong pembelajaran sepanjang hayat; mendorong peningkatan kinerja staf; pemahiran keterampilan; serta keberlanjutan. Pelaksanaan kurikulum pendidikan kedokteran berbasis komunitas di daerah pedesaan telah dilakukan dengan baik, hal ini terlihat dari beberapa manfaat yang dikemukakan oleh informan. Agar implementasi kurikulum ini memberikan hasil yang lebih baik untuk masyarakat dibutuhkan keberlanjutan program.

Kata kunci: Komunitas, pedesaan, pendidikan kedokteran, profesi dokter

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Introduction

The ideal doctor according to the results of the ASEAN medical council meeting has several characteristics such as professional, ethical, having managerial and leadership skills.[1] This is a challenge for medical education institutions to produce qualified graduates as expected. Medical education in Indonesia is carried out by following international standards recommended by the World Federation for Medical Education (WFME). WFME encourages strategy in medical education to achieve self-directed learning and lifelong learner.[2] This global standard is translated into a competency-based curriculum with an integrated approach (horizontally and vertically), individual, family, and community-oriented health care in the context of primary health services.[1] Medical education is directed to produce graduates who meet the needs of the community and the education process is more emphasis on health promotion, disease prevention, and community assessment.[2]

In order to produce graduates that meet the needs of the community, an educational curriculum is required to encourage the achievement of competencies, focus on interdisciplinary learning, community-based and health service oriented.[3] The curriculum must be able to equip students with management skills, leadership, cross-cultural communication, procedural skills and emergency.[4] Most medical institution do not create the curriculum that encourages students to work in community.[5]

The Faculty of Medicine of Universitas Padjadjaran has implemented a community-based curriculum since 2005. Students are placed in the public health center (puskesmas) in urban areas of West Java. This curriculum aims to provide the environment for students to learn the management of the puskesmas and manage public health problems.[6] In 2014, Faculty of Medicine, Universitas Padjadjaran developed community-based education for rural areas by placing students in the southern part of West Java province. This program has been running for 2 years and has not been evaluated for its success.

Evaluation of a program is needed to find out whether objective is of the program are met and identify feedback for improvement.[7,8] This evaluation should be conducted continuously and regularly involving not only relevant stakeholders but also students.[9] The objective of this study was to evaluate the implementation of community-based programs for medical clerkship students in rural areas.

Methods

This research was a qualitative research using a case study approach. This study uses the paradigm of interpretivism to elicit the perspective of people who are directly involved in the implementation of the program. Sampling was conducted purposively in accordance with the research objectives. Two focus group discussions were performed to collect data. The informants involved were the heads of the puskesmas and preceptors from 5 health centers in Sukabumi and Cianjur districts, West Java. There were 5 heads of the puskesmas and 6 preceptors who were involved in this study. Informants were chosen because they involved actively in the implementation of the program.

Focus group discussions were conducted using interview guidelines, aimed to (1) explore the need for integration of educational and service to strengthen health systems; (2) assess the implementation of the program using the Logic Model theory; and (3) exploring benefits and obstacles in implement the program. The need for integration of educational and service to strengthen health systems was explored from the perspective of informants. The program evaluation is assessed based on input, process, outcomes and environmental factors. The interviews were conducted using the recording device and interview guideline. All informants signed the informed consent. Data analysis was performed through the process of transcription, coding, categorization and theme compilation. Triangulation method and member check were performed to have valid and reliable data. The study was conducted from August 2015 to November 2016 and has been approved by the Health Research Ethics Committee of Faculty of Medicine Universitas Padjadjaran with registration number 033/UN6.C1.3.2/KEPK/PN/2015.

The curriculum of community-based programs for medical clerkship students in rural areas is explained in Table.

Students were placed in the puskesmas for 4 weeks, divided into several groups consisting of 5–10 people. The supervisor who was later called the field preceptor was a functional doctor at the

Table Curriculum of Community-Based Programs for Medical Clerkship Students in Rural Area

The Components	Definition
Competency	Able to manage individual, family or community health problems in a comprehensive, holistic, continuous, coordinated & collaborative manner in the context of public health center.
Objectives	1. Explain how to manage information systems at the public health center. 2. Understand and implement methods to identify the conditions and problems of puskesmas' management and health problems as well as local community resources for solving the problems. 3. Exploring data related to health determinants which include environmental, behavior, heredity and health services both in health care, families and communities. 4. Plan, implement and evaluate group and community helath education program.
Delivery methods	1. Community health teaching with field preceptor. 2. Case report session with internal preceptor. 3. Clinical science session with internal preceptor. 4. Expert session. 5. Home visit, community empowerement.
Evaluation	Writen examination, group mini project. Mini CEX.

puskesmas who had followed the standardization of clinical and community teaching assessment.

Results

Focus group discussions were conducted on 11 informants consisting of 5 heads of the puskesmas and 6 preceptors. There were 7 themes: socialize and disseminate the information; collaboration and local government involvement; integration of education and service; encourage lifelong learning; encourage the improvement of performance; skill enhancement; and sustainability.

Socialize and disseminate the information: before the implementation of the program, socialization and information dissemination was very important. This can be seen from the statement of informants.

"It is very good to do in the beginning, because we know what activities...."

"....with this kind of socialization, we really understand the activities and what can be done by the us (puskesmas)...."

Socialization and information dissemination will assist the preceptor and head of the puskesmas to understand the purpose and process of learning.

Collaboration and involvement of the community and local government: the success of implementing community-based education programs must be supported by collaboration and involvement of local government and communities. The collaboration made local government responsible for the presence of students and the success of the program. This is as revealed by the informant.

"So we are responsible for the existence of students here because they will live and stay with local people...so we have to know what kind of place to prepare."

Integration of education and services: the

placement of students in the community provided benefits for the puskesmas. This was revealed during focus group discussions.

"In the learning process, the preceptors will be responsible…this program is good enough…help to run the program in the puskesmas…."

"….the students are very creative, so the staff is very happy because the students assist them to implement the health service program… and being taught new things…especially for programmers."

Students are required to performed one intervention in the community according to the priority of health problems. This activity is one form of integration between education and health service.

"….my suggestion is students should not identify new health problems but they can assist the puskesmas to solve current health problems… mmhmm…because the puskesmas has targets to be achieved."

"There has been no health education in the village for a long time because lack of staff, but with this program, several activities in the community can be carried out."

In selecting the priority of the health problems is not only based on current data, but could be based on the priority program of the puskesmas.

"….in our puskesmas…the selection of health problems are based on input from the head of the puskesmas…."

Encourage lifelong learning: this program provides an opportunity for field preceptors to recall the theory of management in puskesmas and learn the latest issues in public health.

"The material provided is aspects that we have forgotten for a long time, for example thinking about problem analysis, we only know how to practice but not for theory…so this really helps us to recall the theory…."

The benefits perceived by the field preceptors are this program bring new insights and knowledge for them. Being the field receptor makes the preceptors feel proud because they have the experience of being an educator.

"Happy to be a preceptor…new experience…new insights…learning again…interesting…."

Encourage the improvement of staff performance: the program can improve staff capacity in terms of management skill. In the learning process, students observe and interview staff to obtain data and perform situation analysis. This activity triggered the staff to provide comprehensive data and improve the recording and reporting process in the puskesmas.

"….the staffs are trying to tidy up their records… usually they reluctant to provide data…but because the students ask…finally staff provides data and encourage them to tidy up the data…."

"There are so many staffs who are difficult to provide data when the student ask…mmmhhhh they are afraid, especially those who manage the program at the puskesmas. It's difficult for students to intervene…but finally, the data are given."

"Staffs are taught to make good graphics on the computer…so that data can be read easily… creative students…."

Skill improvement: specific skills related to the data collection process must be learned by students before being placed in the community.

"The method of data collection is more emphasized, how to retrieve data…because students are confused and need to know how to retrieve data, including how to analyze it…in the puskesmas they should do that."

This program provides opportunities for students to apply the knowledge and skills. Before the students are placed, students should be equipped with adequate skills including cultural competence.

*"….the discipline of students is good, but they don't make good relationship with staff and local people…it's like…there is a gap with the staff… maybe because of the language barrier…*ewuh pakewuh-lah.*"*

Sustainability: based on the FGDs, the sustainability of the program is necessary to integrate education and services which in turn it will help to solve local health problems.

"It is better if the program is continued…because it will be very helpful for puskesmas…so that the activities can be evaluated continuously."

The head of puskesmas expected the community interventions conducted regularly and evaluated continuously.

"….when the activities are continuous…it can be evaluated for its success…for example disease prevention…."

"….hopefully in the future there will be better cooperation…there are doctors who can be placed in Sukabumi because we really need it…."

Discussion

This study was a case study to evaluate community-based medical education programs in rural areas. This program had been implemented in several rural areas in West Java. The study found that the success of a program implementation requires several support systems and influenced by several factors.

The socialization of the program will influence the success of the program. At this stage, detail explanation about the objectives of the program, learning methods, and supporting resources was introduced. This effort helps related stakeholders understand the benefits of the program.[8]

The results of this study found that the implementation of the program will run optimally if related stakeholders such as the community and local government are involved from the beginning of the program. This study supports other research that collaboration between related stakeholders greatly determines the success of the program so that the program can be developed in a wider scope.[10,11] Community and local government support will help implement the program continuously.[12–14] Through community involvement, community members are actively involved in fostering students and contributing to their educational experience.[13]

This study showed that the implementation of this program not only encourages the learning process but also the improvement of health services at puskesmas. Previous research stated that placing students in the community will help in identifying health-related problems that ultimately help people improve health.[15] Other research stated that participating directly in the community can provide experience to students to manage problems in the community.[3] This integration is a concrete implementation of the learning principles such as student-centered, student-teacher, and student-community/health service relationship.[13]

The involvement of doctors at the puskesmas as preceptor provides benefits for them in enhancing management skills and updating related knowledge. There is also an opportunity for them to become a medical educator.[16] One systematic study stated that doctors in practice setting are the main key to the success of medical education.[4]

The implementation of this program has provided benefits for increasing staff motivation at the puskesmas. Community-based education can be a strategy to improve the performance of medical personnel in rural and remote areas.[17] Regular evaluations will encourage human resources to improve performance.[18]

Programs that involving students will provide direct experience in managing real problems in the community, enhance critical thinking and innovation. Through this program, students can more easily relate theory to practice.[13,19] Students practice to communicate and effectively managing community health problems.[4,8] The early involvement of students should be accompanied by equipping students with the related skills.[11,20]

Sustainability is one of the expected outcomes of program implementation. Program objectives can be assessed if the program can be carried out continuously with regular and periodic evaluations.[21,22]

This study has a limitation because the data obtained does not reflect the overall program implementation. The analysis is needed from the perspective of students as an actor of the program.

Conclusion

The community-based medical education in rural areas has been implemented as planned. Sustainability of the curriculum is needed to contribute to the improvement of community health status.

Conflict of Interest

The authors declare that they have no conflict of interest.

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