ABSTRACT

**Background:** One of the strategies to hold down such economic burden is to improve health promotion services. Family involvement can be used to increase the success in health promotion program. Family involvement in chronic disease management is associated with successful chronic disease treatment. The aim of this study is designing health promotion hospital model to improve family support for patients with chronic disease.

**Method:** This qualitative study was conducted through four focused group discussion (FGD) and six in-depth interview. The data were collected from June–October 2021. The analysis used in this study is Miles and Huberman qualitative data analysis. The analysis was carried out starting from data collection, data reduction, data presentation, and drawing conclusions.

**Result:** From the transcript of four FGDs and six interviews, a family-based health promotion model was obtained. The family-based health promotion model to increase family support for chronic disease patients in hospitals is formed from eight (8) elements, namely: 1) Health literacy, 2) The preferred method is peer-led discussion, group discussion, and face-to-face meeting along with giving of leaflet with materials as desired by the patients and their family; 3) Relaxing and entertaining activities, 7) Effective communication, and 8) Nurse engagement.

**Conclusion:** The health promotion hospital model to increase family support for patients with chronic diseases consists of: Supporting the patient's family to increase the patient's knowledge about the disease and how to treat it. Peer-led discussion, group discussion, and face-to-face meeting along with giving of leaflet with materials as desired by the patients and their family are the education methods preferred by the patients and their family.

**Keywords:** model, health promotion hospital, chronic disease, family support.

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INTRODUCTION

World Health Organization (WHO) reported four types of chronic diseases with high death rate, namely cardiovascular disease (CVD), cancer, chronic obstructive pulmonary disease (PPOK), and diabetes mellitus (DM). According to WHO data in 2018 there were 41 deaths (71% of total deaths in the world) caused by chronic diseases.

Patient with chronic disease high visit rate to primary health care and hospital may potentially increase health service cost. Patients with chronic diseases need routine treatment for their disease management, including regular visit to hospital. Hospital is one of health facilities serving to give complex and holistic health services. However, many hospitals only focus on curative services more than preventive and promotional services. On the other hand, the increasing population and increasing number of chronic disease patients have caused an increase in curative health service cost. Previous research results conclude that the number of chronic diseases in productive age dominates the health cost for participants of the National Health Insurance (NHI) at hospital.

One of the strategies to hold down the high economic burden is to improve health promotion services. Health promotion hospitals program (HPH) is one program that can help the government reduce the amount of chronic disease financing. Promotional services through community health effort and individual health effort are important in support of NHI Program. This is the case since no matter how much the health cost collected from the premium is, it will surely be exhausted when there is no improvement in promotional efforts.

The possible effect of no promotional effort is that the State Budget may potentially be exhausted since more and more people get sick. Therefore, health promotion in hospitals is a solution to holding curative health service financing down.

Health promotion is a process aiming at developing the community to improve and maintain their health status individually. This program covers community and population based health, community health, primary health service, advocacy, health policy, social justice, and health education. The Health Promotion Hospitals (HPH) strategy can be carried out through community empowerment, advocacy, and partnership. This strategy aims to help and facilitate the target, expectedly to improve their knowledge, desire, and capability to prevent and solve health problems in the community.

The partnership principles must
be enforced, both in community empowerment and advocacy. Hospital cannot perform good health promotion without partnership. The health promotion's purpose of behavioral change may be achieved when HPH involves many relevant elements and sectors. Cooperation can be established between HPH team and various parties, such as multi-proessions, local governmental health office and related inter-sectors, first level health facilities (FKTP), and the existing sources in the community, such as health-conscious groups, religious figures, profession groups, non-government organizations, and mass media.9

One of the strategies to improve the success in health promotion program is to involve family role. People with good closeness, relationship, and communication with family tend to have better clinical health condition, while those with contradictory family characteristics tend to have worse clinical health condition. A family with a family member having chronic diseases has increased problems in the family compared to a family with healthy family members. Based on previous research results, an epidemic of chronic disease and NCD such as depression, DM, CVD, and cancer has higher morbidity and mortality rates. This is expected to add to their burden for the next 20 years.9

Treatment for patients with chronic diseases such as DM, CVD, cancer, and PPOK needs various daily treatment management and complex interaction with health workers. The Word health organization (WHO) recommends patients with chronic diseases to have comprehensive daily treatment to keep their condition from getting worse. Such treatment includes regular medicine consumption, healthy lifestyle, keeping dietary pattern, and routine control at health facilities. To keep and manage their healthy condition, chronic disease patients can use the existing health service in community health center, hospital, or through personal and professional consultancy with health workers. In addition, it can also use informal community such as “Prolanis” (in Indonesian: Program Pengelolaan Penyakit Kronis (Chronic Disease Management Program) or “Persadia” (In Indonesian: Persatuan Diabetes Indonesia/ Indonesia Diabetes Association). However, such facilities are unavailable for or inaccessible to patients on a daily basis, thus they cannot provide sufficient support in the long run to meet patients’ daily necessity.10

Family’s role, function, and support are quite necessary in the treatment of chronic disease patients, since it is family who always exists and accompanies patients. Community empowerment bases social support greatly affects patients with DM condition, especially support from family members. Patients who lived with their family and had close relationship with family showed improved self-treatment capability.11 Many patients with chronic health condition stated that family or friend involvement in their treatment was an important source of daily support. Over 60% adults with DM or heart failure reported that their family members and friends were regularly involved in their chronic disease treatment.10

Social support from family and friend may greatly, potentially help chronic disease patients manage their condition better. Family and friend’s positive social support affects patients improved self-efficacy, better self-management behavior, better patient-doctor communication, and better health result. Many patients’ family members built good relationship with patients’ health service providers. Doctor-patient contact and familiarity have been associated with success in professional disease management. For family, this means higher chance of involvement in patient’s clinical treatment and patient and health service provider’s increased confidence when patient’s family is involved.12 The aim of this study is designing family based health promotion model to improve support for chronic Disease at hospital.

METHODS
Research Type and Design
This qualitative research was conducted through focused group discussion (FGD) and semi-structured in-depth interview with patients, patients’ family, hospital staffs, structural officials in charge of HPH, director, internist, one in charge of information technology (IT), and public figure. Patients and patients’ family were outpatients of Muhammadiyah Ponorogo Hospital with cancer, DM, CVD, and chronic obstructive pulmonary disease (COPD) diagnoses. Hospital staffs consisted of HPH officers and nurses in charge of related specialist polyclinic. From the result of FGD and in-depth interview, a family-based health promotion model would be designed that was expected to improve family support for patients with chronic diseases.

Study Subject and Object
The study subject was patients and family of outpatients with chronic diseases (cancer, DM, CVD, and COPD diagnoses) at Muhammadiyah Ponorogo Hospital in July-September 2021. Besides patients and patients’ family, hospital staffs also served as the research subject. The hospital staffs consisted of HPH officers and nurses in charge of specialist polyclinic and on in charge of relevant IT.

Population, Sample, and Sampling
The study samples were twenty-four people consisting of five HPH officers, six nurses of specialist polyclinic, five patients, and five patients’ family, Head of Public Relation Sub-Division and HPH, one in charge of IT, Director, internist, and Muhammadiyah public figure. The study would carry out four FGDs with the HPH team, nurses, patients with chronic diseases, and family of patients with chronic diseases. After conducting four FGDs, the data obtained was still insufficient, so it was added by conducting interviews to obtain data saturation.

The in-depth interview was conducted with director, internist, IT staff, nurses, Head of Public Relation Sub-Division and HPH, and Muhammadiyah public figure. Inclusion Criteria of study Participant are: 1) study participants ranged from 17-65 years old, 2) study participants were patients and family of outpatients of Ponorogo Muhammadiyah Hospital with cancer, DM, CVD, and COPD diagnoses, as the most diagnoses chronic disease in Muhammadiyah Hospital Ponorogo 3) study participants were HPH officers, nurses, director, internist, IT staff, and Muhammadiyah public figure, and 4) study participants were literate.
Ponorogo Muhammadiyah Hospital is a type C hospital with 151 beds and has collaborated with BPJS since 2014 and has served chronic disease patients for seven (7) years, so this research can be applied in other hospitals.

Research Instruments
The study instrument was guidelines on FGD and in-depth interview, while the measures of research instrument making were as follows: 1) making list of questions for FGD and in-depth interview, 2) selecting questions pursuant to research variables, 3) making guidelines on FGD and in-depth interview for the study, 4) conducting validity and reliability test on research instrument, and 5) preparing instruments needed for interview.

Validity Test
Qualitative experts ensure that the data collection process is in accordance with qualitative study procedures, including ensuring that study results are not biased. Triangulation of sources is done by adding participants in in-depth interviews. Additional participants were the Director, Internal Medicine Specialist, IT staff, Muhammadiyah leaders and HPH staff.

Data Analysis
Verbatim transcript was made from the qualitative data analysis on the FGD and in-depth interview and analyzed manually or using NVivo application for comparison. The manual data analysis was conducted by making open coding, axial coding and theme out of the verbatim transcript with the help of excel. The Nvivo application was also used to compare with the manual data analysis.

Research Stages
The qualitative study started with analysis on and observation of the research environment to determine the research participants that conformed to the sample inclusion criteria. The next stage was making guidelines on FGD and interview in the form of list of questions to be asked to the study participants. The study participants were outpatients with chronic diseases and family of patients of Muhammadiyah Ponorogo hospital and hospital officers. After FGD and interview, the recording would be transformed into verbatim transcript. The verbatim transcript result was processed and analyzed using Microsoft Excel and analyzed using Nvivo application for comparison. The data analysis process would result in interpretation, that was the basis of making of an effective family-based health promotion model for patients of chronic diseases.

RESULT AND DISCUSSION
Result
This study was conducted in July-August 2021 using FGD and interview to collect the data. Focus group discussion (FGD) was conducted four (4) times, namely FGD with Nurses of Specialist Polyclinic, FGD with HPH Team, FGD with Chronic Disease Patients, and FGD with Patients’ Family. The study participants in the interview were six (6) people consisting of Director of Muhammadiyah Ponorogo Hospital, Muhammadiyah public figure, Internist, HPH Team Member, Nurse, and IT Staff. The age group was dominated by 26-45 years old with 20 participants. Participants’ last education was mostly D3 with 13 people. The study participants’ most employment was Wage Recipient (WR) of 21 people (table 1).

Discussion
a. Improving patients’ and their family’s knowledge
Improving self-control and health requires knowledge. Through the knowledge in possession, behavioral changes are expected to occur, in this case health life behavior, which will improve individual’s health degree pursuant to the objective of health promotion. pursuant to the following participant’s quote:

Figure 1. Research Stages.

Table 1. Participants’ Demographic Data.

<table>
<thead>
<tr>
<th>No</th>
<th>Participant</th>
<th>Sex</th>
<th>Age</th>
<th>Education</th>
<th>Employment</th>
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<tr>
<td></td>
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<td>M</td>
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<td>46-65</td>
</tr>
<tr>
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<td>Director</td>
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<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>2</td>
<td>Public figure</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
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<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
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<td>HPH Team</td>
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<td>3</td>
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<td>0</td>
</tr>
<tr>
<td>5</td>
<td>Nurse</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>IT Staff</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>7</td>
<td>Patient</td>
<td>1</td>
<td>4</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>Patient’s Family</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>13</td>
<td>13</td>
<td>1</td>
<td>20</td>
</tr>
</tbody>
</table>

Note: M: male; F: female; JHS: junior high school; SHS: senior high school; D3: diploma; S1: bachelor; S2: master; WR: wage recipients (company employees/civil servants/retirees); NJ: non-wage recipients (self-employed/ farmer/handyman).
Diabetes disease is like this, the symptoms are like this, its handling is like this, and the diet should be like this. I got the information from Persadia (Man 53 years old, FGD with Patient's Family, 55)

b. Designing special group of chronic diseases and community empowerment
Such a medium was expected to be built for chronic diseases. The meeting between patients of the same disease would grow support between the patients or families joining the medium, as stated in the following quote:

There was the medium, for those who felt the same fate, and there were activities, and the blood glucose level, blood tension, and others were also monitored. After the pandemic, there will be no more of such activities from Persadia (Woman 45 years old, FGD with Patient's Family, 66)

c. Preferred education method
1. Peer-led education technique is good for patients and their family, as implied the quotes below:
   The chronic diseases were arranged to meet so that it would be as if they had friends, community. Their family would also have community. (Man 53 years old FGD with Patient's Family 86)

2. Group Discussion Method
   Patients and their family of the same diseases desired meeting, thus they could have group discussion as one performed in Persadia's activities, as shown in the quote below:
   Patients’ family was arranged to meet multiple times. They met and got acquainted to each other, and they would learn how to handle it, this was the family, and if a family member got sick, he/she should be treated this way. They were arranged to meet every once in a while. (Man 53 years old, FGD with Patient's Family, 84)

3. Face-to-face meeting
   Face-to-face meeting is a health promotion method still preferred by patients and their family. For old and literate patients, their family desired face-to-face meeting and giving of leaflet that it would make it easy to remember the education delivered, as shown in the quote below:
   There should be leaflet in each polyclinic, explaining “This is your disease. Please read it at home”. God willing, it would be clearer, the patients would be more obedient to the doctors’ recommendation. (Man 44 years old, FGD with Patient's Family, 87)

d. The health literacy desired
   The quotes below were made by the participants related to literacy desired:
   Maybe the hospital can give us some advice for what we should do to walk, have activity, be more convenient, what it is like, that may be necessary. (Woman 50 years old, FGD with Patient, 80)

In FGD with nurses, a nurse stated that education without example will render it difficult for patients. Patients need a form of tutorial to understand the education given, and watching tutorial the patients will understand it better, such as tutorial on insulin injection.

Because in such condition the patients can see, understand more with movement, voice, that's it. (Woman 27 years old, FGD with Nurse, 81)

The materials expected by the patients were education from the hospital for the family to have better patience facing their member having chronic diseases, as shown in the quote below:

Thus, family plays a great role in family health. Therefore, the health institution is expected to give some advice to the patients’ family to do this and that, that's a must, because the family usually lacks of education, maybe, that the patients are shouted at, and so on, that should be consulted for, thus the officer can give suggestion to the family, since health is not only based on medicine, but also comes from the mind. Thus, when the patients have their heart hurt, their family must give them support. (Man 73 years old, FGD with Patient, 122)

e. Nurse's Role in Engagement with Patient
   The other material also given to patients with chronic diseases and their family was in the form of Spiritual Guidance by giving motivation: praying, seeking forgiveness from God and repentance, as shown in the quote below:

   Like, for example, we have health promotion in the hospital, especially that it is an Islamic hospital, the role of Binroh (spiritual guidance) is good, that the patients at the polyclinic were frequently visited by Binroh to give support, motivation, besides medicines and others, there was also support from Binroh to have prayer, seeking forgiveness from god, repentance. (Woman 27 years old, FGD with Nurse, 72)

   The other thing the family need to maintain the family's role in the health promotion for patients with chronic diseases is quite important considering that family is the one having most time with patients with chronic diseases. Besides, family's role can also become the reference of whether patients with chronic diseases can recover or not since family serves as the support system, such as giving motivation and facilities in support of patient recover, as shown in the quote below:

   Those aware of the daily details are certainly the family. And, any information delivered is certainly absorbed from the family. It is the family who can surely share with the patients, who would give their utmost support and play the active role. (Man 37 years old, IT Staff, 22)

   Thus, we need to go to family for support. It is about routine control, diet, regular medication, and others that the family need to maintain (Woman 27 years old, Nurse, 33).

f. Nurse's Role in Engagement with Patient
   Nurse plays a big role in giving health promotion to patients with chronic diseases. A nurse usually knows well patients with chronic diseases and their family since they often meet during patients’ routine control. This makes a nurse have close relationship with patients, as shown in the quote below:

   Chronic Diseases need monthly control, thus after years of encounter,
we sometimes are like relatives. It is also easy to give them information. (Woman 27 years old, Nurse, 13)

g. Social Media's Role in Chronic Disease Control

Education on chronic diseases distributed via social media is expected to participate in controlling chronic diseases.

The previously mentioned internet media are usable, Instagram can also be improved, Facebook, and YouTube are also usable. (Woman 27 years old, Nurse, 31).

Meanwhile, WhatsApp that is more focused on giving education is preferred by patients’ family, as shown in the quote below:

It would be good if the information can be passed via group. My mother, for example, has a religious study every in his group, it would be good if the hospital team realizes my suggestion, if possible, just like chat groups, I don’t know that it is called. The information can include reminding meal, sport time every day. (Man 44 years old, FGD with Patient’s Family, 87)

The other participants, meanwhile, also like using WhatsApp in education, as shown in the quotes below:

WA care is temporarily only for control, but in my opinion, later it will not only be for control. It is the previously stated educations, on diseases the patients have (Woman 37 years old, FGD with Patient’s Family, 98)

Evaluating the success in health education can be performed through Google Form, as shown in the quote below:

With regard to what is desired, what method is desired, by the patients, and the patients want to know or learn about their disease, it can be distributed through WA contact, through Google Form, that will be recorded by us, and later we will have action to respond their requests. This may be one of the ways, in the future at least, that we still have not made it. (Man 33 years old, FGD with PKRS Team, 95)

h. Effective Communication in Chronic Disease Monitoring

The quote below is related to effective communication:

We can then reeducate them to avoid more asphyxiation; the education should suggest routine control or avoiding the causes of asphyxiation. (Woman 28 years old, FGD with Nurse, 24)

i. Community Leader's Role

Muhammadiah as a mass organization with community leaders whose speeches are believed in by the community can play a role in PKRS program. The community will believe in what is spoken by or direction given by their role model. The preaching of community figures in Muhammadiah can be added with health promotion program, as shown in the quote below:

Talking about the community, it means many people, that is to say, people in general, thus in this case they cannot be separated from the figures or people who are believed in by the community to have better educational background. (Man 30 years old, Community Leader, 48)

j. Preferred HPH activities

In this research, the PKRS activities preferred by the patients and their family, according to the participants, were routine socialization, gymnastics and picnic. Patients’ healthy family even participated in the gymnastic activities that Persadia held, as shown in the quotes below:

And we also had a refreshing program, which means it was not always about the materials we needed to deliver, but they also needed refreshment for entertainment, that’s it. (Man 33 years old, Head of Public Relation Sub-Division & PKRS, 50)

DISCUSSION

The definition of health promotion in hospitals, according to the Standards for Health Promotion in Hospitals, is a process that allows the community to improve their control over themselves and to improve their health. Health promotion can also be defined as improving health through patient, relative, and employee empowerment to improve physical, mental, and social welfare. In a research journal, it is said that lack of knowledge is a cognitive constraint which causes patients and their family not do self-treatment that may affect their health and well-being.

Besides formation of media for patients with certain chronic diseases by hospitals, the community also helped chronic patients improve their health degree, as performed in Yogyakarta, stating that community empowerment based social support greatly affected DM Type 2 patients’ condition.

The education methods we caught from the participants were peer-led discussion, group discussion and face-to-face meeting. Whatsapp group containing patients and family of patients with the same diseases allow formation of peer-led discussion. The peer-led education technique was performed with education for behavioral change through making peer group with similarities one with the other (age, sex, disease status, socio-economic status, religion, ethnicity, residence, culture or education). The members reminded and supported each other. In general, the main purpose of support from friend, friend supporting groups also covered an educational component that was related to supporting function, such as on how to manage medication or stress.

Family can be a peer support for patients with chronic diseases. In the context of chronic diseases, the peer support means “support for individual with chronic condition from individual with the same condition”. Individuals giving peer support offer three types of support, namely: emotional, informational, and appraisal. Emotional support covers care, empathy, and suggestion. Information support covers advice, suggestion, and feed relevant to the topic. Appraisal support, meanwhile, covers strengthening feeling, mind and behavior by giving motivation and support to individual to solve problem and get away from difficulties.

The research conducted in Canada states that online peer support intervention can help develop online peer support program, thus effective and continuous programs can be developed. The California Health Care Foundation (CHCF) in 2006 in its
article “to build peer support program for chronic disease management” created peer support models, such as:

1. Professional-led group, where patients with the same chronic diseases and the same treatment met in a group led by a professional of health nursing.
2. Management program, where group members could serve as educator and facilitator and facilitate group based program delivered either personally or via the internet.19

Meanwhile, the peer-led education technique performed in high school in South Africa associated with lifestyle chronic diseases was an acceptable health education technique. Theoretically, the peer-led education technique is believed to help improve knowledge and eventually help prevent the risk of chronic disease incident.20

In other hand, face-to-face meeting is a health promotion method still preferred by patients and their family. For old and literate patients, their family desired face-to-face meeting and giving of leaflet. Leaflet is an effective media to educate patients and their family, improving patients’ knowledge, satisfaction and clinical condition.21 Leaflet that is a traditional media in health promotion is still useful in this digital era, especially for adult patients. Leaflet is also more effective when it is combined with other media such as video, telephone interaction, games, and others.22

Previous research reports that 85-95% family accompanying patients with chronic diseases were not trained, and often lacked of knowledge and skill in treating patients with chronic diseases. Therefore, the family that accompanies patients with chronic diseases must be competent and have patience to undergo a long, painful, and distressing journey with patients with chronic diseases.23 The spiritual and religious values in some researches show significant relationship with patients and their family’s process of coping with their diseases. Many researchers have studied the complexity and correlation between spirituality/religion, health and quality of life. Latest global researches and surveys show that spiritual and religious dimensions need to be an integral part of patients’ life.24

Family’s role in the health promotion for patients with chronic diseases is quite important considering that family is the one having most time with patients with chronic diseases. Besides, family’s role can also become the reference of whether patients with chronic diseases can recover or not since family serves as the support system, such as giving motivation and facilities in support of patient recover. Family serves very important role and function in family member treatment, both for those healthy and sick. The condition of family member with chronic disease history needs special attention and support from the family to achieve optimal health condition and prosperous life. Core family’s role and function are very important in giving motivation and support to patients in order to improve their health condition optimally.25

Family involvement in the treatment of patients with chronic diseases is greatly needed. Chronic disease treatment management is quite difficult for patients and health service providers. To prevent complication and severity of disease, patients are required to have medicine with a complex schedule, strict diet, physical activities, and routine check-up. In addition, patients and health service providers arrange control time and reference, and continuously update patient treatment management plan.26

Patients want to be accompanied by their families when exercising because, physical activities were related to lower risk of chronic diseases, especially for heart, hypertension, respiration, allergy, DM Type 2, and Obesity problems. Moreover, even if the physical activities were implemented in low intensity, but they can reduce the risk of chronic diseases.27,28

Patient engagement is described as the relationship between patients and the one giving treatment. When such relationship develops well, trust will develop. Patients who feel empowered will be active participants in their own treatment. Nurse as the one to give frontline treatment is in the most appropriate position to help patients and their family play active role in obtaining information and making decision related to health.26 In previous studies stated that providing education in a language that was difficult for patients to understand was an obstacle in providing educational materials.5

Close relationship between nurse and patients with chronic diseases and their family makes nurse able to build positive relationship with patients and their family, where the family expects their involvement in their family member’s treatment plan [30]. In this study, we found that community leaders play a role in the success of health promotion programs. The community leaders are the resource that is needed greatly for survival of health promotion program through community empowerment in prevention of NCD risk factors.31 The use of social media in community health education has increased because of their capability of eliminating physical constraints that traditionally prevent access in health treatment and resource support. As a health promotion media, social media optimize patients’ health experience online and offline.12

The rise of smart phone, tablet and, cellular application is an important development in health services, especially social applications that provide learning and collaboration opportunity with health professionals. Effective use of smart phone is part of doctor-patient communication in the 21st century. Latest social media trend shows that social network and cellular device services like Instagram and WhatsApp are the correct media to share, discuss clinical case and medical and health knowledge.33

The research also states that WhatsApp is effective for patient and family education. WhatsApp is an application useful to improve patient and family’s knowledge. Through WhatsApp Group where families of patients with the same diseases gather, the information will be more focused and directed. Through WhatsApp Group there will be space available to exchange experience and knowledge. However, in WhatsApp Group an expert moderator is needed to answer WhatsApp Group members questions.24 WhatsApp application can also improve diabetes and hypertension patients’ medication adherence, considering that the medication management for diabetes and hypertension patients is quite complex.35
Effective patient communication and service provision will be useful in monitoring chronic diseases. Effective communication means exchange of information between patient and health service provider, including communication with patient’s family. Effective communication is bi-directional (oral, written, and non-verbal) communication that involves patient in decision making and treatment plan. Effective communication is designed with an openness, honesty, and respect principle and gives the opportunity to have clarification and give feedback.

The first line of family-based health promotion consists of two elements, namely health literacy and educational methods. The health literacy desired by the patient’s family is about the disease and its complications, physical activity, diet, regularity of taking medication, control schedule, spiritual motivation and coping mechanisms. Meanwhile, the educational method expected by the family is peer-led discussion, group discussion and face-to-face with the provision of leaflets. The second line of the family-based health promotion model consists of four elements, namely: media education, nurse engagement, effective communication, and group formation. This second line is to support the first line of the family-based health promotion model. Educational media that can support educational methods are WhatsApp (WA), Facebook (FB), Instagram (IG), and Youtube. Nurse engagement accompanied by effective communication will facilitate the provision of health literacy through educational methods that are expected by patients and their families through groups formed based on the patient’s illness.

The third line that complements the family-based health promotion model is the involvement of key persons such as community leaders and activities that entertain patients in the form of recreation and exercise together. In the end, the implementation of the family-based health promotion model is expected to increase the knowledge of the patient’s family so that the patient’s family can be involved in assisting the patient and in coping mechanisms for both the patient and the patient’s own family.

CONCLUSION

Family based health promotion model for patients with chronic diseases in hospitals covers many things, namely: HPH model must be capable of improving the knowledge of patients and patients’ family, so that they will have the knowledge for self-treatment and treatment of sick family member. Peer-led discussion, group discussion, and face-to-face meeting along with giving of leaflet with materials as desired by the patients and their family are the education methods preferred by the patients and their family. Community empowerment, nurse engagement and public figure involvement along with entertaining activities for patients and patients’ family are needed in educating them. In this 21st century, social media are reliable for HPH.

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DISCLOSURE

Ethical Statement

The Ethical Clearance was obtained from the Muhammadiyah Ponorogo Hospital (Ethical Clearance (EC) No: 002/KEPK/RSUMPO/VII/2021)

Conflict of interest

The authors declare that there is no conflict of interests regarding the publication of this paper.

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Author contribution

All authors contributed equally in manuscript preparation, viewing, revising, and approving final versions submitted for publication.
REFERENCES


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