

UNDERSTANDING PROBLEM AND THE COMPREHENSION OF THE USERS OF ICT BASED AS THE BASIS OF MEDIA DESIGN FOR SPREADING HEALTH INFORMATION OF *POSYANDU* CADRES

Candra Wibawa¹
Intan Rizky Mutiaz²
Hilwadi Hindersah³

¹ Graduate Student of Master's in Design Program, Bandung Institute of Technology, Indonesia, (E-mail: candrawibawa@students.itb.ac.id)

² Faculty of Art and Design, Bandung Institute of Technology, Indonesia, (Email: intanrm@yahoo.com)

³ School of Electrical Engineering and Informatics, Bandung Institute of Technology, Indonesia, (E-mail: hilwadi@stei.itb.ac.id)

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Abstract: *The descriptive research by quantitative method was conducted in 13 local health posts (pos pelayanan terpadu) Curug village, Bojongsari district, Depok city, west java. The local health post is a way to empower society to provide maternal and child health services. The chores of the local health post consist of registering, weighing, keeping records, and counseling. Based on the scope of the study, this study is the basis for understanding the issues of posyandu cadres when carrying out operational activities. Besides understanding the problems of the operational activities this research is also to understand the type of technology has been used by cadres in the area. This research activity was carried out from February to March 2017 by utilizing the posyandu activities that took place at that time. The result of the research is served as guidance for designing a suitable media to enhance the performance of local health post cadres. Quantitative method was applied in order to understand the problem level in the operational activities of local health post and to investigate the users' attitudes towards the technology. The instrument of the research is questionnaire. The respondents of the research consisted of 82 female respondent aged 20-60 years old. The result of the research showed about 55 respondents (67.07%) claimed that the counseling is the most difficult task. The facilities availability is the main obstacle in counseling stated by 21 respondents (38.18%). The question on kinds of information and communication media used was answered by 47 respondents (57.31%) and stated that they used smart phone. In spite of the use of smart phone showed higher number, the smart phone was not used optimally. About 40 respondents (48.78%) used internet only to access social media. There was a very small number of respondents who used internet to shop online and send emails. The chance to use computer was positively responded. There were 57 respondents (59.51%) stated that they needed*

computer to support the operational activities and accompanied by computer training. It can be concluded that smart phone and computer can be applied as media to support cadres in spreading health information. The media for counseling was designed to be easily used and fitted to the users especially for cadres who had limited knowledge of computer. Social media can be a supportive way of counseling.

Keywords: *Local Health Post/Integrated Health Service Post, Counseling, Information Technology and Communication*

Introduction

Nowadays the information and communication technology (ICT) comes into widespread use in all levels of society. The development of mobile computer application or programs can be used to fulfil and solve problems in society. One of the problems that the society has to cope is health problem. Health is one of the priority aim of Indonesian national goals. According to Soemitro (2016) currently several countries in the world have developed electronic health, electronic health is very important to support services and management of the health system. Depok city is one of the cities in West Java province which has developed and applied the information and communication technology in solving the health problems.

Local health post/integrated health service post is a center managed by society in village level to monitor and decrease infant and mother mortality rates (Ministry of Health Republic of Indonesia ,2012). In one Local health post/integrated health service post consists of 3 to 10 cadres that chosen by society voluntarily. The chores of the cadres are to manage and provide health service included registering, weighing or measuring, keeping records, and counseling. Saepudin, Rizal, and Rusman (2017) stated that most people still consider posyandu to be only a means of weighing toddlers, while posyandu is a means of information about the health of mothers and toddlers. Counseling is to give health information to society especially the member of the local health post/integrated health service post based on the health checking. The counseling is carried out by midwife, health workers, and cadres. The cadres are the long arm of health workers and midwives, they have to have counseling ability.

Problems

According to Wahjuti (2016) counseling in broaden meaning is a service or system to help the community to increase knowledge and living standard of society. The counseling is expected to give obvious result and impact to the society. The counseling is one of the important programs in the health post but from the observation of the research, it seems that the counseling is rarely conducted. The counseling can be successfully conducted due to several factors, as follows the counseling facilities, the capabilities of the cadres in doing counseling, and the time schedule. Based on the information derived from Depok health city officers the use of ICT in the form of apps and computer program on mobile basis has been widely used in the level of health officers and offices. Several apps development and computer program which are designed to assist the local health post/integrated health service post. The observation taken in the location of the research showed that the apps and computer programs to assist the activity of local health post/integrated health service post in Indonesia have not been used. It indicates that the use of ICT in health sector has not been fully applied in all levels of society especially in village society.

Objectives

- a. The study aims to understand several problems which affect the counseling program in local health post/integrated health service post.
- b. The study attempts to find out the chance of the use of ICT in order to be applied and developed.

Literature Review of The Study

Factors Which Influence Local Health Posts Activities Based on The Previous Research

It takes knowledge on several factors which influence local health posts activities before conducting the research to map the problems and to find out the level of understanding of the cadres towards ICT application. Previous studies explained that factors that influence the success of the activities are motivations and the knowledge level of the cadres. According to Notoatmodjo in Nugroho and Nurdianan (2008) The knowledge of the cadres about the local health posts motivates and supports the cadres' behavior in activating the local posts activities and as the result the work program of the posts is successful. Djuhaeni, Gondodiputro, and Suparman (2010) mentioned that sufficient knowledge of the cadres will help to create the continuous role in the activities. In another research conducted by Lubis and Syahri (2015) showed that the training of the cadres becomes a great benefit and can help to increase the knowledge of the cadres.

The Importance of The Counseling in Local Health Posts

Nindrea (2016) conducted a research stated that the counseling program on nutrient of elementary school children can increase the children's behaviors towards having breakfast. Supianti, Ruhyana, and Fitriyanti (2017) says the importance and success of the counseling are also shown in their study which stated that the nutrient counseling applied on mothers with toddlers can increase the mothers' motivation to provide balanced menus .

Obstacles in Conducting the Counseling of Local Health Posts in Previous Studies

Sulistiyawati, Widagdo, dan Purnami (2014) in their research explained that the counseling itself could not be carried out optimally because of the time limit, the time to conduct counseling was very short and there was only one out of five cadres who had courage and confident to counsel. Another research conducted by Isra, Suryawati, and Kartini (2014) showed that lack of facilities and counseling materials have great influence on the implementation of the counseling. It can be viewed that the ability of the cadres, the time availability for counseling and counseling facilities greatly influence the counseling itself. However, the research needs to be followed up in order to measure the priority scale of the cadres' needs in conducting counseling.

The Use of ICT in Local Health Posts Activities Based on Previous Studies

Nowadays there are studies on the use of ICT in operational activities of local health posts. Research literature on the use of ICT in operational activities of local health posts will help to understand to what extent the application of ICT in helping the cadres to conduct the operational activities of local health posts. Mulyani et.al (2013) explained that the use of computer technology as the information system of toddlers data in local health posts in Ploso village, Pacitan regency becomes great help to the cadres in processing the data than conducted manually. In the research conducted by Sholihan and Kusumadewi (2015) showed that the data calculation done manually by the cadres of local health posts could become a problem for the

health posts and health center but when they created information system computer based, it made the calculation and recapitulation easier. Utomo dan Amin (2014) designed a mobile application web system on information of local health posts counseling in order to help cadres and midwives to give counseling. The mobile application web system is expected to be accessed by the cadres anytime and anywhere. Musliani,Wati, and Mawarni (2017) designed a processing application of local health posts data to help cadres input toddlers and pregnant women data. The test result of the application showed that their application could help the cadres in processing the data. According to Suprianto and Hartono (2017) From previous studies it can be viewed that technology based on ICT has an opportunity to apply in local health posts activities however the reseaches have not yet explained about the understanding and problems of the cadres when using the technology.

Method

This study is categorized as descriptive research based on the aims of the research. The data collection is conducted using surveys. The surveys are carried out by distributing questionnaires to 130 local health post/integrated health service post cadres in Curug village, Bojongsari district , Depok city. There are 82 respondents that are validated and analysed. The result of the study is presented in percentage.

Result

The result of the studi consists of information which shows the levels and kinds of problems in operational program in local health post/integrated health service post and also the kinds of media based on ICT used by local health post/integrated health service post cadres.

Problems in Operational Program of Local Health Post/Integrated Health Service Post

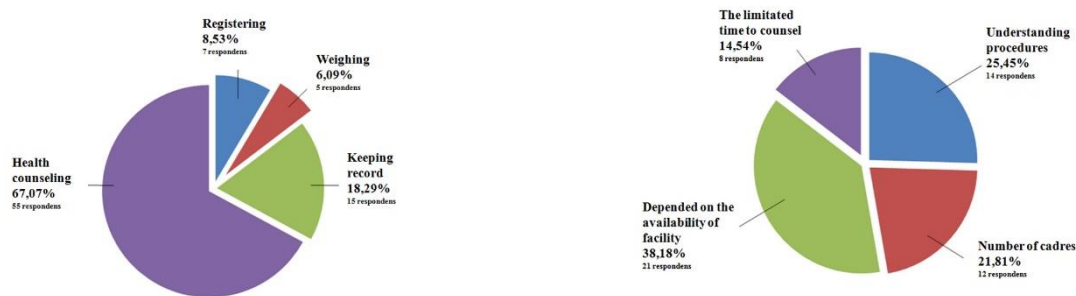


Figure 1: The Piechart Ratio of Four Operational Local Health Post/Integrated Health Service Post Which are The Most Difficult to Understand or to Conduct by The Cadres and The Piechart Ratio of Four Factors Which Affect the Counseling to be Hard to Conduct.

The followings are the results of the study which show opinions of cadres towards the ratio level of difficulty in counseling and in every program and problems of local health post/integrated health service post. Based on the data 67.70% respondents stated that health counseling is difficult to conduct. 18.29 % claimed that keeping record is hard to conduct while 8.53% respondents admitted that registering is the difficult activity to conduct, only 6.09% respondents agreed that weighing is difficult to conduct.

On the right figure 1 it shows that 38.18 % respondents stated that the counseling is mostly depended on the availability of facility. 25.45% respondents claimed that the understanding of procedures become obstacle of counseling. While 21.81% respondents said that the counseling depends on the number of cadres who are present in the local health post/integrated health service post. 14,54% respondents admitted that the counseling is difficult to conduct due to time, the limited time to counsel.

The Use of Media Based on ICT By Local Health Post/Integrated Health Service Post Cadres

The use of media based on ICT in this research is the use of electronic media which is used to communicate among cadres and the activity of cadres when using internet. The followings are the kinds of media used to communicate among cadres and the activity of cadres when using internet.

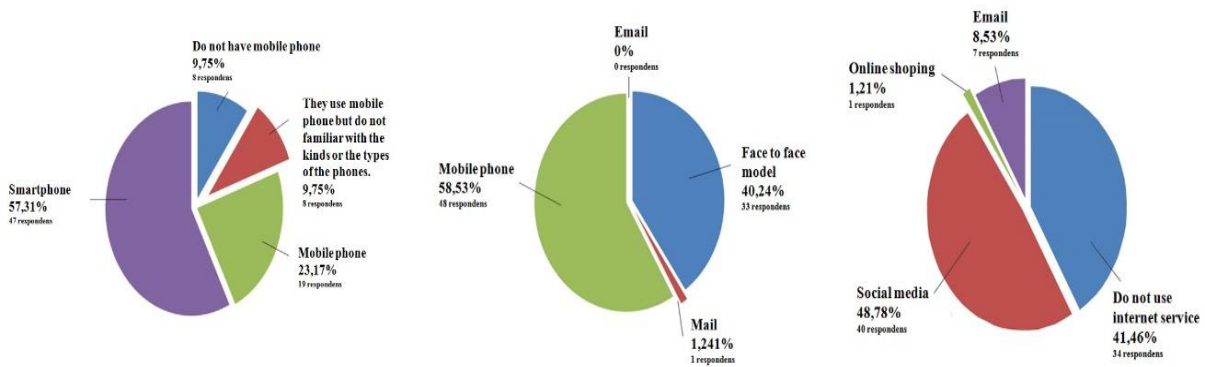


Figure 2: The Piechart Ratio of Kinds or Types of Mobile Phone Which is Used by The Local Health Post/Integrated Health Service Post Cadres, The Piechart Ratio of Kinds of Communication Media Which is Used to Communicate Among Local Health Post/Integrated Health Service Post Cadres, and The Piechart Ratio Which Showing the Comparison of Internet Service Types Accessed by Cadres.

The left piechart shows that about 57.31% respondents have mobile phone that is smartphone. 23.17% respondents claimed that they use mobile phone which only has sms and telephone features. While 9.75% respondents said that they do not have mobile phone and 9.75% respondents also stated that they use mobile phone but do not familiar with the kinds or the types of the phones.

The middle piechart diagram shows that 58.53% respondents have used mobile phone to communicate among cadres. 40.24% respondents use face to face model to communicate among them. Only 1.21% respondents use mails and there is no respondent uses emails to communicate among cadres.

The piechart diagram on the left shows that most of the respondents or 48.78% use internet service to access social media. 41.46% respondents do not use internet service. 8.53% respondents use internet service to access emails and only 1.21% respondents use internet service to shop online.

The Chance of The Use Of Computer to Assist The Cadres in Managing the Programs in Local Health Post/Integrated Health Service Post

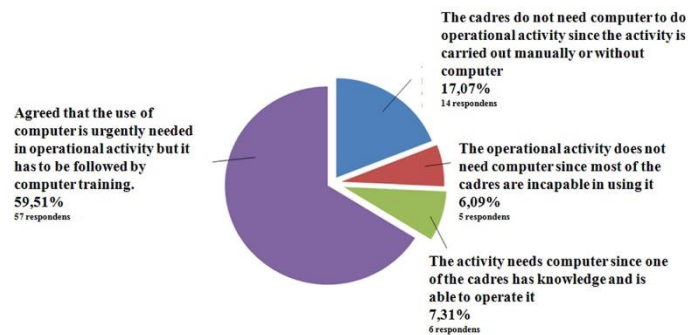


Figure 3: The Piechart Ratio of Support from Local Health Post/Integrated Health Service Post Cadres Towards the Use of Computer in Operational Activity.

The piechart diagram reveals that 59.51% respondents agreed that the use of computer is urgently needed in operational activity but it has to be followed by computer training. 17.07% respondents mentioned that the cadres do not need computer to do operational activity since the activity is carried out manually or without computer. 7.31% respondents stated that the activity needs computer since one of the cadres has knowledge and is able to operate it. While there are 6.09% respondents said that the operational activity does not need computer since most of the cadres are incapable in using it.

Conclusion

The counseling is one of local health post/integrated health service post programs which is hard to conduct. The lack of facilities and tools to conduct counseling are the main factors of the absence of counseling in local health post/integrated health service post. Another factor which becomes obstacle is the lack knowledge of the cadres about the procedure, how to conduct the counseling. Nowadays, most of the cadres use smartphones to communicate among cadres but the use of smartphone and internet is not used maximally. Most of the cadres use internet only to access social media. Communicating through emails has not become a good habit yet among the cadres. Most of the cadres also support the use of computer or ICT technology in managing local health post/integrated health service post programs but it has to be followed by training and availability of facilities. It needs to design an electronic media which can be accessed through smartphone or computer by the cadres. The counseling media should be easily used by the cadres without having ability of counseling. Social media is the most frequently accessed by the cadres and can be a medium to share information on health counseling.

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