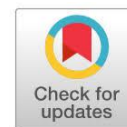


## Empowerment Efforts on *Moria* in Cervical Cancer Prevention in Padang Bulan Community Health Center Working Area, Medan



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### ABSTRACT

Empowerment of fertile age women (*Moria*), with a participatory approach as an effort to build, explore and develop existing potentials by motivating and raising awareness of their potential so that a process of independence in cervical cancer prevention occurs. This study aims to empower *Moria* in the prevention of cervical cancer. The mixed research method: qualitative for empowerment efforts, while the quantitative method for assessing the success of empowerment used a quasi-experimental design (pre-test-post-test group design without control). The data were processed using univariate, bivariate analysis, with a sample of the *Moria*'s group n = 30. Initially, *Moria* only carried out routine religious activities (especially Christianity) plus the function of reproductive health activities. The empowerment that has been carried out in *Moria* makes a change in behavior and social changes in cervical cancer prevention, cervical cancer prevention through empowerment showed a significant increase in the mean score of knowledge, attitudes and actions of fertile age women (p <0.05). Empowerment of *Moria* in cervical cancer prevention is very effective in increasing awareness, knowledge, attitudes and actions of *Moria* in cervical cancer prevention.

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### INTRODUCTION

Cervical cancer is a type of malignant tumor or neoplasm that is located between the uterus and the intercourse.<sup>17</sup> Worldwide, cervical cancer is the second most common type of cancer suffered by women after breast cancer, but it is the main cause of death for women from cancer.<sup>60</sup> Cervical cancer is prevalent in Latin American women (83.9%), Caribbean (81.2%)<sup>69</sup>. Also in East Africa, Zambia, Swaziland, and other developing



countries in Asia, including Indonesia. Countries in Southeast Asia, South Asia, Sub-Saharan Africa and Latin America are listed as countries with a high prevalence of cervical cancer.<sup>16</sup> The number of cervical cancer sufferers increased ten times compared to sufferers in other developing countries, 80% of women in developing countries died of cervical cancer, 27% of all cervical cancer cases occurred in India.<sup>53</sup>

Cervical cancer in Indonesia has a high incidence and mortality rate, amounting to 23.4 per 100,000 population with an average death rate of 13.9 per 100,000 population.<sup>32</sup>

Approximately 52 million Indonesian women are at risk of suffering from cervical cancer, the majority of sufferers (70%) come to health services when their condition is critical or at an advanced stage. This is in accordance with the results of research by Suryapratama (2010) which stated that in East Java as many as 78.1% of cervical cancer patients came for treatment at stage III B, as well as Pradana (2012) and Surbakti (2017) conducted at H. Adam Malik Hospital, Medan, showed that 65.5% of cervical cancer patients who come for treatment were in stage III. Given the high number of sufferers, it is not surprising that this disease is a frightening specter for women, a disease that is deadly, incurable and cannot be prevented, and requires high costs for its treatment.<sup>51</sup>

Treatment of cervical cancer is often delayed due to the lack of symptoms, so that an increase in cases and deaths from year to year has increased and even tends to shift towards a younger age. On the other hand, information about cancer and its prevention is still minimal. Lack of information about cervical cancer, the perception that cancer is incurable, an embarrassing disease and trust in alternative medicine, and relatively few trained health workers. The awareness of fertile age women in this case showed that *Moria* is still lacking on early detection and prevention of cervical cancer has not become a priority.<sup>56</sup>

Prevention of cervical cancer can be done by primary prevention such as preventing risk factors, HPV vaccination, which can be given to girls who have not been sexually active. But it cannot be a mass immunization, due to limited vaccines and high costs. Secondary prevention can be done with pap smear or *IVA*, to detect changes in the cervix early before they develop into cancer so that they can be cured immediately.<sup>46</sup> Cervical cancer can be cured if it is found at an early stage. The sooner the cancer is found, the easier it is to treat, and the greater the hope for a cure. This can be done by early detection of cervical cancer

The coverage of early detection of cervical cancer is still low, this is closely related to the knowledge of women women, the helplessness of women in preventing cervical cancer, lack of funds, lack of information and limitations of *Puskesmas* officers. As a preliminary study in the work area of the Namorambe community Health Center regarding the Development of *IVA* (Visual Inspection of Acetic Acid) as a strategy for early detection of cervical cancer, it found that the level of fertile age women's knowledge about early detection of cervical cancer was still low (44%), had a lack of attitude (55.6%) and do not perform early detection of cervical cancer (0%). Through empowerment on *Moria*, early detection can be done regularly, more and more women can be saved from cervical cancer.

Several studies that have been carried out through empowerment programs such as research Triharini, 2019); Agustini, 2019)<sup>61</sup>, which aims to increase public awareness, especially women (*Moria*), to the importance of cervical cancer prevention, early detection of cervical cancer on a routine basis without having to force it.

Empowerment can be interpreted as health development based on individual, family and community values according to socio-cultural diversity, problem needs and community potential.<sup>62</sup> Efforts to make fertile age women independent through their potential capabilities, so that they can improve their quality to be empowered and independent in early detection and prevention of cervical cancer. Low knowledge and less

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attitude makes fertile age women (*Moria*) even more convinced not to do early detection of cervical cancer.

The initial survey conducted at the research locus found limitations in implementing cervical cancer early detection programs at the health center, lack of personnel in the Communication, Informatics, Education program and limited operational funds so that community empowerment, in this case *Moria*, was needed in the area of Padang Bulan community health center.

*Moria* is a part of Fertile Age Women (aged 15-49 years) who are married and become members of organizations or associations, in this case the women of the Batak Karo Protestant Church (*GBKP*), who grow and are cultured in the community, have an important role to be empowered. In improving health services in particular improving the status of maternal reproductive health both in terms of knowledge, attitudes, and actions in preventing cervical cancer in the working area of Padang Bulan Medan community health center.

The purpose of this study is to explain and analyze the efforts to empower *Moria* in the prevention of cervical cancer in the working area of Padang Bulan community health center, Medan.

## **METHOD**

### **Research design**

This research was conducted with two approaches, namely quantitative and qualitative (Mixed Method). Qualitative research aims to empower and intervene on problems together with *Moria*. Quantitative research was used to measure or evaluate the success of empowerment with a quasi-experimental design, pre-test-post-test group design approach without control. The research was conducted in the working area of Padang Bulan community health center in Medan. The research period in the field started from November 2016 to August 2017. Before the research was carried out, an ethical test was first conducted at the Research Ethics Commission of the Faculty of Nursing, University of North Sumatra with number 1030 / XIISP / 2016.

### **Population and Sample Research**

The informants in this study were fertile age women in *Moria* group in Titi Rantai village of Padang Bulan community Health Center working area in Medan, totaling seven *Moria's women*. The selected participants are *Moria* who has higher education and low education, has never checked for IVA or Papsmear or has ever checked but more than five years ago, mothers who have many children, mothers who have husband jobs as drivers. The informants from the two health workers were a midwife who is in charge of IVA implementation and Obygn Doctor at community Health Center. There were ten participants for the FGD activity in *Moria*, namely *Moria Runggun* two people, four of the most active participants from *Moria*, two health cadres, one community Health Center's officer and one *PKK's* woman.

*Moria GBKP*, Titi Rantai Village, Padang Bulan community Health Center, showed that many women do not know about cervical cancer and are willing to be invited to participate in cervical cancer prevention. The researcher introduced himself and *Moria* also introduced himself to each other. Incidentally, researchers from the *Karo* tribe introduced themselves as *ertutur* (meaning acquaintances based on clan) so that we know each other whether as *sembuyak*, *kalimbubu* or a new child. The form of *Moria's* activities every week is a worship activity with a Bible Study (*PA*) system for mothers.

Researchers explored problems related to *Moria's* empowerment in cervical cancer prevention at the research locus. Empowerment of *Moria* in preventing cervical cancer is expected to be able to encourage the creation of a dynamic participatory social system, which can increase *Moria's* capacity not only in terms of knowledge, attitudes and

actions but also in habituating how to think and act with your own awareness of wanting to prevent cervical cancer in health care. culture that can be passed down from generation to generation along with the surrounding environment.

The population in this study were fertile aged women (aged 20-49 years) who were members of an organization or association in the community, namely *Moria*. *Moria* is an association of women in the center of the *GBKP* church that actively grows in the community, the dynamics in this organization are very thick with the character and behavior of women, especially Karo women.

### Collection / Research Stages

Data collection techniques in this study are:

- a. In-depth interviews to find out knowledge of *Moria's* attitudes and actions towards cervical cancer prevention before empowerment.
- b. Observations were made to see *Moria's* activities accurately, note the phenomena that appeared and consider the relationships between aspects of the phenomenon.
- c. FGD (Focus Group Discussion), for systematic collection of data and information regarding problem-solving solutions through group discussions.

### Research Instruments

The instrument in this study using a questionnaire developed by the researcher, modified according to the local culture. The research questionnaire was used to measure knowledge and attitude of *Moria* before and after empowerment, and the validity and reality tests had been carried out.

### Data analysis

Qualitative data analysis, through observation, interviews, and documentation. The qualitative analysis method was carried out by using an interactive model analysis, namely data reduction, data presentation and conclusion drawing / verification. Quantitative data analysis was performed using univariate and bivariate analysis (Wilcoxon test and Mc Nemar test).

## RESULTS

### Empowerment in *Moria* Group

The study was conducted in the *Moria* *GBKP* group on Jalan Bahagia, Titi Rantai village of Medan, in the working area of Padang Bulan community Health Center. In this group, it was found that many women who do not know about cervical cancer and are willing to be invited to participate in cervical cancer prevention. It is hoped that the implementation of *Moria* empowerment in cervical cancer prevention is expected to be able to encourage the creation of a dynamic participatory social system, which can increase *Moria's* capacity not only in terms of knowledge, attitudes and actions but also habituation of how to think and act with one's own awareness to prevent cultural health services that can be passed down from generation to generation along with environment.

#### a) *Moria's* Knowledge about Cervical Cancer

*Moria* generally did not know about cervical cancer, and that it was a disease that occurs in the female genitals, which grows in the cervix, like a tumor, dangerous and even deadly and brings misery. (Mrs.ES, 40 years old, high school, housewife; Mrs. R, 43 years old, housewife). Participants stated that they did not know the dangers of cervical cancer at all, although there were also those who stated that the dangers of cervical cancer could cause death and required a lot of money (Mrs. RB, 46 years old, bachelor degree, housewife). Knowledge of *Moria* is associated with risk factors for cervical cancer, some participants stated that it was due to changing partners, smoking, lack of hygiene, lifestyle, vaginal discharge, as well as dietary factors (Mrs. R.B). Some *Moria* stated that they had

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had pap smears but it was more than five years ago, meaning that they did not carry out routine prevention. In general, participants stated that cervical cancer prevention requires a healthy lifestyle, not changing partners and a pap smear (Mrs.KU, 49 years of graduate school education, work as a civil servant)

b) Prevention of cervical cancer

Prevention of cervical cancer can be done with pap smear or Visual Inspection of Acetic Acid /IVA. In general, participants have never heard of IVA but pap smears are often even very familiar, so the pap smear is to see germs (Mrs.KU). There were also participants who stated that they inserted the genitalia, cleaned the inside of the genitalia and taken fluids from the genitals, even through the pap smear warts could be found (Mrs.KU). In fact, there are some participants who have had pap smears but did not do regular checks, actually the pap smear must be routine (Mrs. ET, housewife, Senior high school). But there were also those who say they didn't want a pap smear because they are embarrassed, afraid, and even *Moria* said that she did not detect it early because she was sure she didn't have cervical cancer, because all causes had been avoided (Mrs.Hanna E). There were also participants who stated that they were not ashamed of their name to be healthy, but they were afraid that if a positive examination result would cause concern, *Moria* did not want to be examined (Mrs.KU, 49 years old, S2 education, Civil Servant)

c) Sources of Information About Cervical Cancer

Sources of information about cervical cancer prevention in general, the participants stated that no information was obtained from health workers but from TV, a pocket book distributed by researchers. But you can also get information from neighbors who died of cervical cancer, because neighbors often tell the participant Mrs. R.

d) Attitudes about Cervical Cancer Prevention

Maternal attitudes towards cervical cancer prevention: associated with risk factors, the mother's perception of having sex at an early age, multiple sexual partners or multiple partners, low economic status (may not be able to pay for Pap smears or IVA regularly), participate in High-risk sexual activity, smoking habits, large numbers of children and the use of contraception. Some participants' perceptions of fertile age women against cervical cancer prevention are that the causes of cervical cancer are changing partners, diet and hygiene, vaginal discharge, not using family planning. (Mrs. HE).

The attitudes of women who have sex at an early age are not good, their reproductive organs are immature, so having sex for less than 20 years is damaging to reproductive health (Mrs.Rh). Sexual partners in many people or multiple partners, can transmit the disease quickly and say "I didn't hit it".... such as the statement of MRs.DS, 37 years old, high school education.

The perception of WUS about low economic status (unable to pay for Pap smears or IVA routinely) on cervical cancer prevention, generally the participants stated that *Moria* did not have pap smears not because of cost but because they were lazy. They do not question costs because health services are currently free, there is BPJS (Mrs. Deliana)

Smoking habits, on the prevention of cervical cancer, some participants said smoking can cause cervical cancer even on billboards it is also stated that smoking can cause cancer with a fiery face and as if they want to tell people not to smoke (Rahmawati). Some participants stated that the large number of children can cause cervical cancer and some even said that many children had a lot of luck but that was first (Rahmawati).

The use of contraception, on the prevention of cervical cancer, some participants said that the use of contraception is not a problem. But some other participants said the use of contraception beyond the specified time can cause cervical cancer (Rahmawati)

Based on the results of the interview above, the following conclusions can be drawn:

1. Lack of knowledge of *Moria*, including the dangers and risk factors for cervical cancer

2. *Moria's* lack of knowledge about cervical cancer prevention, for example about IVA
3. A small part of *Moria* knew about pap smears. But in general, *Moria* has never been detected early for cervical cancer. Even if you have, you have not done pap smears regularly / periodically.
4. *Moria* generally did not want to do an examination (IVA or Pap smear) because of embarrassment, fear that the results of the examination are positive, and some even think they will not get cervical cancer because they feel they have avoided all the causative factors
5. Sources of information about cervical cancer are obtained from various sources, almost never from health workers
6. *Moria's* perception of cervical cancer prevention did not need early detection, which is important to avoid causative factors such as not changing partners.
7. *Moria's* perception of early age sex, can damage the reproductive organs, changing sexual partners generally disagrees and can spread the disease quickly. *Moria* did not know that the large number of children could be a risk factor for cervical cancer. Some even said that many children had a lot of sustenance, as well as contraceptive use and smoking habits in general *Moria* did not know to be a risk factor for cervical cancer.

The solution to the problem that was agreed upon by *Moria* was through empowerment, so an FGD (Focus Group Discussion) was conducted. The solutions for solving the problem are: conducting counseling, inviting cervical cancer sufferers to share stories so that they are motivated to carry out early detection, empowering *Moria* to participate and invite *Moria* or other fertile age women to check IVA and even invite neighbors or family to do an examination.

Before doing problem solving solutions, it is necessary to explore the potential or resources that *Moria* has. The potential possessed by *Moria* is the willingness and motivation for early detection of cervical cancer. Want to know in depth about cervical cancer prevention. Provide time to participate in all series of activities both outreach and discussion (question and answer). The potential for existing officers in health services, where some officers have been trained on the implementation of IVA. IVA activities at community health center are scheduled, carried out every week, namely Wednesday and Thursday (Midwife A)

Cervical cancer early detection activities at community health center are very limited, many other programs must be completed, generally the officers have multiple activities. As IVA officers who have participated in training, they also have other program tasks so that there is almost no time to visit the community or special groups in the community such as *Moria*, *Perwiritan* and so on to provide counseling and invite them to participate. However, due to time constraints and so on, we officers wait for the community at the Puskesmas, such as the following statement:

Midwife A, "... But due to the limitations of the staff, counseling for early detection of cervical cancer cannot be carried out outside the community health center. In fact, with the technical instructions regarding the Community-based Integrated Non-Communicable Disease Development Post (*POSBINDU PTM*), health workers must go to the community in certain community groups to gather / carry out routine activities, for example in mosques, officers, churches, sports clubs and others " .

There are still many *Moria* who did not know about cervical cancer prevention because they are ashamed, do not dare to come to health care, worried if the results are positive which can interfere with the next life process. Therefore, the number of cervical cancer sufferers continues to increase from time to time. There was no high awareness to

prevent cervical cancer. There was still a feeling of embarrassment and laziness to examine, like the statement of Mrs. Deliana.

After agreeing with *Moria* and resource persons from the community health center who were facilitated by researchers, counseling was carried out, and the results of the discussion together with *Moria* were also invited by Mrs. R (who has cervical cancer) to share her experiences and treatment process, to share experiences so that every *Moria* would want to prevent cervical cancer. In this activity there were about 35 participants who attended.

Empowerment activities have been carried out in accordance with the planned interventions. *Moria* has already participated after hearing information about cervical cancer prevention. Prevention of cervical cancer is a necessity. Even though from the results of observations and interviews there were still some fertile age women who did not pay attention, after the event *Moria* wanted to go straight home, did not want to participate. From the results of the first post test (I) it can also be seen that there was an increase in the score of knowledge, attitudes and actions of fertile age women but it was still very low.

The understanding of *Moria* in cervical cancer prevention from the measurement of knowledge, attitudes and actions in the first cycle can be seen in Table 1. Evaluation of the first cycle (I) before and after the empowerment process can be seen in Table 1.

Table 1  
 Distribution Of *Moria*'s Knowledge, Attitudes and Actions in the Phase I Evaluation In The Working Area Of Padang Bulan Community Health Center

Category	Intervention			
	Pre Test		Evaluation in First Stage	
	f	%	f	%
Knowledge				
Good	2	6,7	20	66,7
Less	28	93,3	10	33,3
Attitude				
Positive	5	16,7	22	73,3
Negative	25	83,3	8	26,7
Action				
Yes	6	20,0	12	40,0
No	24	83,3	18	60,0
Total	30	100	30	100

Source : Primary Data, processed (2018)

From table 1 it can be seen that the level of knowledge of *Moria* before empowerment was generally less than 93.3 percent. After empowerment (evaluation stage I), *Moria*'s knowledge was in the good category 66.7 percent, but 33.3 percent of the knowledge was still lacking. *Moria*'s attitude before empowerment was generally negative 83.3 percent. After empowerment (evaluation stage I) it became positive 73.3 percent, although there was still a negative attitude 26.7. *Moria*'s actions before empowerment generally did not carry out examinations as much as 83.3 percent and after empowerment category yes (doing examinations) there were 40.0 percent and still 60.0 percent did not prevent cervical cancer.

The results of the empowerment intervention at stage I of *Moria* can be seen from the results of the post test I (first): most of *Moria*'s knowledge, attitudes and actions are still lacking. There are still some *Moria* who have not participated, there are still those who feel that cervical cancer prevention is not yet a necessity. The results of the observations were also lacking, so it was continued with stage II (second).

The results of the discussion were agreed with Moria that there will be counseling again using different media, namely counseling using pocket books, video playback of IVA examination, singing and dancing (landek) with the Karo version of the song to prevent cervical cancer.

Counseling is carried out by providing pocket books that can be read at home, so even if Moria comes home before completing activities, the pocket book can still be read at home. The video was screened to convey a more interesting message and it could be seen directly how the examination process was, so that Moria would more easily understand and want to carry out the examination.

Researchers and community health center officers again provide counseling on cervical cancer prevention. Inviting Moria to participate in cervical cancer prevention. Various solutions that have been chosen are implemented together and observe Moria's reaction or response to the solution (intervention) that is implemented. After the empowerment, there were several Moria who wanted to test IVA or Pap smear, which means that there was a positive response from Moria. If Moria's reaction or response is lacking, then it is still necessary to re-plan the changes or solutions.

After various empowerment activities, Moria has carried out IVA or Pap smear examinations gradually up to 90.0 percent plus some of Moria's neighbors or Moria members who are not active members and are not included in the list of Moria's group have participated in early detection of cervical cancer. Some mothers in the Moria group can invite their friends to participate, such as the following statement:

Mrs. Yani, "I am not in the Moria group, I am just a neighbor with Mrs. R. But Mrs. Yani gave me an explanation about cervical cancer prevention, and invited me to come to health services for IVA examination so I came to the community health center".

*Moria* has the enthusiasm and motivation to ask questions that are poorly understood about cervical cancer, prevention, risk factors and all of these are a discussion with Moria. The atmosphere for the empowerment activities to take place is very active until it is finished at each stage of the activities that have been carried out.

The activities carried out at this stage were the collection of the research data base line in the form of pre-test data on Moria's knowledge, attitudes and actions. Before and after the intervention in the Moria group can be seen from the measurement results in table 2:

Table 2  
Distribution of Knowledge, Attitudes and Actions of Fertile Age Women Before And After Empowerment Against Cervical Cancer Prevention of *Moria* Group In The Working Area Of Padang Bulan Community Health Center, Medan

Category	Intervention			
	After		Before	
	f	%	f	%
Knowledge				
Good	2	6,7	27	90,0
Less	28	93,3	3	10,0
Attitude				
Positive	5	16,7	25	83,3
Negative	25	83,3	5	16,7
Action				
Yes	6	20,0	27	90,0
No	24	80,0	3	10,0
Total	30	100	30	100

Source: Primary Data, processed (2017)



Table 2 showed that the level of knowledge of respondents before empowerment was generally less than 93.3 percent. After empowerment, *Moria's* knowledge was in the good category 90.0 percent, but it was still found that the knowledge category was less than 10.0 percent. The attitude of *Moria* before empowerment is generally negative 83.3 percent. After empowerment, 83.3% percent is in the positive category, but there is still a negative attitude of 16.7 percent. *Moria's* actions before empowerment generally did not carry out 80.0 percent of the tests and after empowerment the yes category (carried out the examination) was 90.0 percent and only 10.0 percent did not prevent cervical cancer.

As an additional medium, the empowerment activities for *Moria* are carried out by singing and dancing (*landek*) in Karo, so that it is more flexible to carry out health promotion with the Karo version of the song Prevent cervical cancer. Every time you start the activity, always sing a song to prevent cervical cancer and easy to understand and remember the message conveyed. The singing and dancing (*landek*) media in the *Moria* group do not need to be translated because they generally know the Karo language. And this activity can inspire the atmosphere to be more accepting and motivate to prevent cervical cancer.

### Bivariate Analysis

#### The Effect of *Moria's* Empowerment on Knowledge and Attitudes in Cervical Cancer Prevention

Assessing the effect of *Moria's* empowerment on knowledge and attitudes in cervical cancer prevention before and after the empowerment process was carried out by the Wilcoxon test. We can see the test results in table 3 below:

Table 3

Difference in mean knowledge and attitude of *Moria* after empowerment in cervical cancer prevention at Padang Bulan Community Health Center in Medan

Variable	Moria	
	Mean ± SD	P value
Knowledge		
Before	12.60 ± 3.20	0.001 <sup>a)</sup>
After	19.87 ± 2.50	
Delta	7.27 ± 3.70	0.016 <sup>b)</sup>
Attitude		
Before	40.80±16.32	0.001 <sup>a)</sup>
After	70.73±13.92	
Delta	29.93±15.51	0.001 <sup>b)</sup>

<sup>a)</sup> p value score *within group* (*wilcoxont test*) ; <sup>b)</sup> p value score *between* (*mann withney*)

Table 3 showed that there was an effect of *Moria* empowerment with a value of  $p < 0.05$ , and there was a difference in the increase in the mean of knowledge and attitudes with a value of  $p < 0.05$ . Initial knowledge overall, the average score of knowledge, the individual attitude of *Moria*, there was a significant increase in empowerment with  $p$  value  $< 0.05$  (Wilcoxon).

#### Effect of Empowerment of *Moria* on Actions in Cervical Cancer Prevention

The effect of *Moria* empowerment on actions in cervical cancer prevention before and after the empowerment process was carried out by using the Mc Nemar test. We can see the test results in table 4 below:

Table 4

### Differences In Moria Actions Before and After Empowerment In Cervical Cancer Prevention In Padang Bulan Community Health Center In Medan

Action Before	Action After		p value*
	Unexamined	Examined	
Unexamined	3	21	0,001
Examined	0	6	

<sup>\*)</sup> p value score *within group* (Mc Nemar test)

In Table 4, it can be seen that before empowerment was carried out in the *Moria* group only 6 people carried out the examination. After empowerment, there was a significant increase in the number of *Moria* in IVA / Pap smear examination with a p value of 0.001 at  $\alpha$  0.05.

## DISCUSSION

### Empowerment of Moria in Cervical Cancer Prevention

The results of the study, stated *Moria's* lack of knowledge about the definition, dangers, prevention and risk factors for cervical cancer. The same thing can be seen in table 1, that the level of knowledge of *Moria* before empowerment is generally less than 93.3 percent (evaluation stage 1) and good knowledge is 90.0 percent at the final stage of evaluation. This is one of the successful empowerment of *Moria*. At the beginning of the interview, *Moria* actually said that cervical cancer is a frightening disease, causes death, brings misery, and a person's body is getting thinner. This is also stated by Ogden (2017), where cervical cancer, will cause misery, suffering, body weight decreasing over time, especially at an advanced stage. The more advanced the stage, the heavier the general condition of the patient, becoming thin, anemic due to continuous bleeding, malaese, loss of appetite, shock and death.<sup>5</sup>

Women with a diagnosis of cervical cancer will experience physical, psychosocial, financial problems and will also affect the family situation. Behavioral factors can also lead to cancer such as smoking, diet, obesity, alcohol, physical activity, maintaining cleanliness. Preventing cervical cancer transmission through non-sexual channels can be done by increasing vigilance in maintaining the cleanliness of female reproductive organs personally, especially when caring toilets in office toilets, markets and other public places.<sup>9</sup> Genital hygiene in women will increase pathogenic bacteria in the vagina so that the possibility of developing disease is greater. To prevent this, this can be done through a healthy lifestyle by maintaining a diet, avoiding high-fat foods, instant foods that contain dyes, flavorings, and preservatives.<sup>31</sup> The development of a healthy lifestyle can increase the body's resistance to carcinogens.<sup>2</sup> Therefore, it is advisable to consume a balanced nutritional diet.<sup>31</sup>

Risk factors for cervical cancer, some *Moria* said they did not know, but some informants said that it was due to vaginal discharge, improper lifestyle, for example changing partners. Can know that vaginal discharge is also one of the early symptoms of cervical cancer. Under normal conditions, the vagina secretes fluid from the uterus, which is slightly clear and odorless. During pregnancy, before menstruation, at the time of ovulation and due to sexual stimulation, the vagina tends to release more fluid which is still considered normal.<sup>37</sup> However, if the discharge from the vagina is excessive, sometimes itchy and smells bad, it is necessary to be aware that it is an early symptom of cervical precancer. Early detection should be done, for example pap smear or IVA.<sup>70</sup> Having sex at an early age disrupts the reproductive health system, especially at the age before 20 years, especially those under 17 years old. Premature sexual intercourse can

affect damage to the cervical epithelial tissue or the walls of the vaginal cavity. This can worsen, leading to cell abnormalities and abnormal growth.<sup>19</sup> A married couple is ideally suited if they are truly mature and ready. If it is ready, immature mucosal cells will undergo changes and can damage cells in the cervix.<sup>68</sup> The younger the age for the first time having sex, the greater the risk of the reproductive area being contaminated with the virus.<sup>41</sup>

Changing sexual partners, or sexual partners in many people, Moria generally disagrees, can cause transmission of diseases very quickly such as HPV or HIV and sin according to religion. The results of the study that changing sex partners six times or more has a ten times risk of cervical cancer.<sup>22</sup> In prostitutes, the frequency of cervical cancer is 4 times more frequent than that of ordinary women.<sup>22</sup> Even the participants stated that changing partners was sinful and prohibited according to religion.<sup>39</sup>

In general, Moria did not know that the large number of children was a risk factor for cervical cancer. According to Al-Halal (2013)<sup>4</sup> cervical cancer is indeed often found in women who have high parity but it is not clear how the relationship between the number of deliveries and the occurrence of cervical cancer, because in women who are not married and do not give birth cervical cancer is also found but it is lower when compared to first delivery at a young age. There is no uniformity in the category of frequent delivery but generally oncologists give a limit of 3-5 times birth.<sup>10</sup> Cervical cancer patients with 7.9% are multiparous and 5.1% are nulliparous, so it can be said that women who give birth to many children vaginally tend to have a high risk of developing cervical cancer and if followed by a labor distance that is too close. Number of births is a consistent risk of cervical cancer. Increased parity, accompanied by women who experience decreased immune problems (for example, HIV / AIDS or chronically use corticosteroids (treatment of asthma or lupus) a higher risk of cervical cancer if they have HPV and consumption of a diet that is less especially in developing countries contributes high incidence rate (IR) of cervical.<sup>10</sup>

The smoking habit is also a risk factor for cervical cancer. Some participants stated that they did not know the relationship between smoking and cervical cancer, even though there were warnings on cigarette packs and on billboards that smoking could cause cervical cancer. The nicotine in cigarettes makes it easier for carcinogens to pass through the membrane. The results of the study, the more and longer women smoke, the higher the risk for cervical cancer.<sup>44</sup> Cigarettes contain a lot of toxic / chemical substances that can cause lung cancer, dangerous substances carried by the bloodstream throughout the body. Cigarette byproducts are often found in the cervical mucosa of female smokers.<sup>52</sup> The nicotine in cigarettes enters the mucus that covers the cervix, thereby reducing the natural resistance of the uterine cells to abnormal changes. In addition, smoking generally lowers the immune system.<sup>25</sup>

The relationship between contraceptive use and cervical cancer, some participants stated that they did not know. Use of oral contraceptives for more than 4 or 5 years can increase the risk of cervical cancer 1.5-2.5 times. This is also supported by research (Aminati, 2013) that the use of pill contraceptives for a long time (5 years or more) increases the risk of cervical cancer twice, because it has a negative effect on preventing pregnancy by stopping and maintaining the thickness of cervical mucus so that sperm do not pass. . WHO reports the relative risk of using oral contraceptives of 1.19 times and increases according to the length of use.<sup>13</sup> A case-control study that has been conducted by WHO found a relative risk of 1.5 times for women pill acceptors as contraception over five years. Barrier methods such as diaphragms and condoms can provide protection against cervical cancer. The results of Vessey's (2013) study showed a significant relationship with positive IVA test results with the use of pill contraceptives.

Moria's perception of cervical cancer prevention is expensive, while there are still many other needs. Moria feels that cervical cancer prevention is not a major health

problem so it does not need to be prevented, as has been argued.<sup>13</sup> Low economic problems that make it possible for Moria to not be able to pay for pap smears or IVA regularly, at first the participants stated that Moria did not have pap smears because they were expensive and afraid that the disease would be discovered, as well as the ignorance of the puskesmas program, especially in early detection of cervical cancer. However, in line with government policies, the problem of cost is not an absolute barrier to early detection because in puskesmas IVA examinations are free. Moria does not papsmear not because he is lazy. If it is a matter of cost, they do not have a problem because health services are currently free through the BPJS. In women with low socioeconomic groups, cervical cancer is often found, this may be related to nutrition and immunity where the quantity and quality of food is less will affect the body's immunity.<sup>23</sup> The wives of unskilled workers can be classified into low socioeconomic conditions, perhaps because good hygiene standards cannot be achieved easily. Low socio-economics tend to start sexual activity at a younger age<sup>23</sup>, usually associated with poor sanitation and health care, low education, young marriage, large numbers of children, work and irregular income, as well as a lack of nutritional factors that will facilitate infection, which causes the body's immunity to decrease, causing the risk of cervical cancer.<sup>54</sup> The existence of a health service system, through the BPJS, Moria should have carried out routine checks. After empowerment, Moria will carry out routine checks.

Prevention of cervical cancer can be interpreted as the recognition of various causes, especially risk factors, efforts to avoid risk factors, reduce exposure and increase the body's resistance to carcinogenic substances, fostering a healthy lifestyle. Primary prevention can be done such as having safe sex, abstaining from sexual intercourse before the age of 20, not smoking. Health promotion for vulnerable groups, efforts to increase adolescent knowledge about reproductive health and sex education at an early age.<sup>18</sup>

In general, Moria has never participated in early detection of cervical cancer due to a lack of knowledge. The results of the interviews were that a small number of Moria had undergone IVA examinations or Pap smears, but they were not routine because they felt that there was no urgent need. This is in accordance with several research results<sup>63</sup> that the perceived barriers to behavior in early detection of cervical cancer are also influenced by socio-culture. Actually Pap smears are easy and inexpensive to implement, they can be done in laboratory clinics.<sup>12</sup> Pap smears are the gold standard of screening programs because they are easy to do, quick and painless and can be done at any time, except during menstruation. Pap smears also have high sensitivity and specificity, so that the pap smear is able to prevent the incidence of cervical cancer by up to 93%.<sup>8</sup>

The results of the interviews generally stated that the participants had never listened to and did not know about IVA, but their pap smears were very familiar. This is in accordance with the results of research by Surbakti, E 2017, from in-depth interviews that the coordinating midwife responded to the same thing that the knowledge and attitude of WUS about IVA was still low. Actually they know what IVA is, but in different words, that IVA is a pap smear. The same is true of Moria in the working area of the Padang Bulan Health Center in Medan. Moria could not differentiate between IVA and Pap smear, both of which are early detection of cervical cancer. The IVA method is very suitable for developing countries including Indonesia which have islands because apart from being easy, cheap, practical, simple, effective, non-invasive equipment, it can be carried out by health workers other than gynecologists such as midwives, has wide coverage and the ability to provide good results. immediately, the sensitivity and specifics are quite good.<sup>12</sup> Thus the IVA examination is very suitable for simple health services.<sup>47</sup>

Moria obtained information about cervical cancer from various sources such as TV, pocket books and leaflets during the research process, almost never from health workers. This may be due to the health workers' busyness with various programs because WUS, in

this case Moria, must actively participate in cervical cancer prevention which is carried out through Moria empowerment. This is in line with (Ferlay, 2015; Lee, 2017)<sup>20</sup> the majority of respondents stated that they had never received information about Pap smears or IVAs from health workers or other people, print media and electronic media. This indicates that the source of information plays a role in influencing a person's decision to carry out cervical reproductive organs examination, where someone who is more frequently exposed to the mass media will have more information than people who have never been exposed to information, which is the reason why respondents do not perform Pap smears or IVA out of ignorance.

Moria generally does not want early detection of cervical cancer (IVA or Pap smear) because of embarrassment, fear that the examination results will be positive, and even feel that they will not get cervical cancer because all causes have been avoided. This is also in line with Surbakti's research (2017) which was conducted in Namorambe, where most WUSs have a fear of doing IVA examinations as much as 90.1 percent. Fear and worry about the results of the IVA examination if it shows you have cancer, afraid if the examination process feels pain and ache. But through the empowerment process, Moria was not afraid and was even willing to carry out an examination and convey to her neighbors as well as her daughter-in-law. In addition to the above, Moria also felt reluctant because she opened her genitals, was embarrassed by removing her lower clothes, and wanted to see a female doctor. This is also in line with Chigbu's (2013) research that shame and fear of having a pap smear examination are also the reasons for the majority of respondents in examining their cervical reproductive organs.

### **The Effect of Moria Empowerment on Knowledge in Cervical Cancer Prevention**

There was an increase in the category of knowledge before and after empowerment. This can be seen from the results of the research in tables 1 and 2, showing that the knowledge of respondents before empowerment was generally in the poor category of 91.7 percent and after empowerment it was in the good category of 88.3 percent, although 11.7 percent of knowledge was still lacking. Likewise, the results of research on differences in the mean knowledge of Moria before and after empowerment in cervical cancer prevention can be seen in table 3, namely there is an effect of Moria empowerment with a value of  $p < 0.05$ , and there is a difference in the increase in mean knowledge with  $\Delta 7.27 \pm 3.70$ . High knowledge in Moria is generally very much influenced by various empowerment activities that have been carried out in Moria. Through empowerment, Moria can get to know and understand more about cervical cancer prevention. Prevention tends to be due to having a great awareness of early detection of cervical cancer by IVA or Pap smear examination, this is in line with several research results such as (Maharani, R, 2019; Mustika, I, 2019).<sup>30</sup> But there are also several studies that are in accordance with this, such as (Maharani, R, 2019)<sup>30</sup>, where sometimes high knowledge does not necessarily make someone consciously carry out IVA examinations or pap smears. This can be caused by various things, for example cultural factors, where the community (Moria) considers that examination of the genital area is considered taboo, shame and fear of the results obtained later. Meanwhile, respondents who have low knowledge tend not to be aware of the dangers of cervical cancer. They do not even know the importance of early detection of cervical cancer as soon as possible so that it becomes an inhibiting factor for conducting the examination.<sup>58</sup>

The same thing with research (Abiodun 2014; Mustika, I, 2019)<sup>1</sup> empowerment in fertile age women is an effective way to impart knowledge, and can increase awareness of fertile age women, especially in the prevention of cervical cancer. To increase awareness of fertile age women in cervical cancer prevention can be influenced by several factors such as education, mass media / information, socio-culture, economy,

environment and experience. In general, the higher a person's education, the easier it is to receive information so that the more knowledge one has.<sup>28</sup>

### **The Effect of Moria Empowerment on Attitudes in Cervical Cancer Prevention**

Health attitudes and behaviors will not materialize if they are not accompanied by other supporting factors. The awareness and motivation of individuals to carry out IVA examinations or pap smears will be carried out if they are supported by sufficient knowledge and social support to perform IVA examinations or pap smears. Moria's attitude before empowerment was generally negative 88.3 percent. After empowerment, the Moria attitude became a positive category of 85.0 percent but there was still a negative attitude of 15.0 percent. The results of the study of differences in the mean attitude of Moria after empowerment in cervical cancer prevention can be seen in table 3, there is an effect of Moria empowerment in cervical cancer prevention with a value of  $p < 0.05$ , and there was a difference in the increase in mean attitude with  $\Delta 29.93 \pm 15.51$   $p$  value  $< 0, 05$ . Moria individual attitudes increased empowerment significantly with  $p$  value  $< 0.05$  (Wilcoxon).

The results showed an increase in positive attitudes after the empowerment process. A positive attitude can support Moria to prevent cervical cancer through IVA examinations or pap smears. Attitudes that emerge from within Moria are generally followed by other factors such as the availability of facilities, the attitudes and behavior of the health workers themselves. Moria who have a negative attitude generally tend to refuse to prevent cervical cancer by IVA or pap smear. Some of the factors that influence changes in a person's attitude are personal experiences, the influence of other people who are considered important, such as husbands, cultural influences, mass media influence, education and emotion.<sup>49</sup> Newcomb states that attitude is a readiness to act and not an implementation of a particular motive. Attitude is not yet an action or activity, but is a behavioral predisposition.<sup>36</sup> Abiodun (2014)<sup>1</sup> in his research stated that there was an increase in attitude after counseling in the intervention group. This is in line with the results of research by Thippeveeranna<sup>58</sup> the attitudes of women of childbearing age regarding IVA examination before empowerment are in the poor category and after the intervention has improved. Empowerment is one of the health promotion strategies shown directly to the community. Empowerment of fertile age woman with counseling, is an effort to make people behave or adopt health behaviors by means of persuasion, persuasion, appeals, invitations, providing information, providing awareness and so on, which is called health education or counseling.<sup>49</sup>

### **Effect of Empowerment of Moria on Actions in Cervical Cancer Prevention**

The results of the study can be seen from tables 1 and 2 that the category of Moria action before empowerment generally did not carry out cervical cancer prevention examinations, either IVA or Pap smear, as much as 81.7 percent, who had been checked but not routine was only 18.3 percent. After the empowerment was carried out, it turned out that the WUS actions changed to the "yes" category (taking cervical cancer prevention measures) as much as 91.7 percent but there were still those who did not perform the examination, 8.3 percent. The difference in the action of WUS before and after empowerment in cervical cancer prevention in Moria can be seen from Table 4, Table 4, it can be seen that before empowerment was carried out in the Moria group only 6 people. After empowerment, there was a significant increase in the number of fertile age woman in the IVA / Pap smear examination with a  $p$  value of 0.001 at  $\alpha 0.05$ .

This illustrates that the intervention carried out by empowerment with counseling can increase Moria's actions to want to prevent cervical cancer, meaning that Moria comes to health services to do IVA examiners or pap smears. The same thing with Nurjanah's research stated that there was an effect of cervical cancer counseling with the motivation to do the Visual Inspection Test of Acetic Acid (IVA), where fertile age woman experienced an increase in motivation in conducting better visual inspection tests for

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acetic acid (IVA). Empowerment with counseling on cervical cancer prevention has a motivating effect and raises *Moria*'s awareness to perform a visual inspection of acetic acid (IVA) or a pap smear. This is in line with what was stated (Kim, 2016; Aprilia, R, 2020), empowerment with health education is a health education activity, which is carried out by spreading messages, instilling confidence, so that people are not only aware, know and understand, but also want and can do a recommendation that has to do with health (prevention of cervical cancer). The extension method is considered to be more effective than other methods to increase knowledge and ability of the community to maintain and improve health. There was positive action through the empowerment of *Moria* in the prevention of cervical cancer. This of course cannot be separated from *Moria*'s knowledge and attitude towards cervical cancer prevention. This is also in line with the research: (Mustika, I, 2019; Rusmiati, 2018), Empowerment of *Moria* with counseling can increase *Moria*'s actions to prevent cervical cancer. *Moria* already wants to do IVA or pap smear after empowerment. Likewise, the attitude of the participants in general, they were enthusiastic about participating in the activity, there was a high willingness to know the prevention of cervical cancer.

## CONCLUSION

Empowerment of *Moria* in efforts to prevent cervical cancer in the working area of Padang Bulan Medan community health center was went well where *Moria* actively participated in cervical cancer prevention. Empowerment efforts in preventing disease, especially non-communicable diseases, can be carried out very effectively by health workers to increase community awareness and participation, in this case *Moria* by involving existing local leaders such as: *PKK*'s woman, community leaders and religious leaders and so on.

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