

**EARLY DETECTION TRAINING PROGRAM FOR ACUTE HEPATITIS IN CHILDREN  
FOR THE COMMUNITY OF MALASOM VILLAGE, SORONG REGENCY,  
SOUTHWEST PAPUA PROVINCE.**

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**ABSTRACT**

The enhancement of cases of acute hepatitis in children in Indonesia encourages the importance of early training detection for parents. Training this gives information about signs and symptoms of acute hepatitis in children and necessary steps taken if a child is suspected of having acute hepatitis. Besides that, training also helps parents prevent transmission of acute hepatitis in children by giving information about ways to avoid the risk of getting hepatitis. The objective of devotion to the public is to increase the knowledge, attitudes, and skills of mothers and toddlers in the detection of early acute hepatitis in children. Methods devotion to a society used is training involving 35 participants consisting of parents, cadres posyandu, village heads, secretaries, employees ward, and nurse health centre, as well assisted by 6th-semester students from the D.III Midwifery, D.III Nutrition, and D.III Nursing study programs. Devotion steps cover identification problems, development of community service programs, program implementation, program evaluation, dissemination results dedication, coaching, and development capacity society. Results of dedication to the public show that team training increases participants' knowledge. The difference in the average pre-test and post-test knowledge is -27.7, and the effect size is -2.16, which is very significant. Besides that, intervention detection of early hepatitis in children also successfully increases the respondent's attitude with the difference in the mean attitude of -17.5 and an effect size of -1.00, which shows a strong influence in increasing attitude. The data also shows a significant difference between the mean psychomotor scores pre and post-with an effect size of -1.00, indicating successful intervention in increasing psychomotor participants' skills. Training conducted on research this success increases the knowledge, attitudes, and skills of psychomotor participants related detection of early hepatitis in children. However, it is recommended to do an advanced study with notice that other possible factors influence results intervene and expand the sample and research area for more representative results. Study continuation to notice aspect qualitative for obtain more understanding good about influence intervention in period longer time.

**Keywords:** Early Detection, Child Hepatitis, Knowledge, Attitudes, Skills, Dedication To Public

## 1. INTRODUCTION

Since news about acute hepatitis plague with a cause that is not known in children was announced by WHO, UK and Ireland north have reported plague the especially first on April 15, 2022. On April 21, 2022, at least 169 cases of acute hepatitis that are known origin reported occurred in 11 countries in the European Region like United Kingdom and Northern Ireland (114 cases ), Spain (13 cases ), Israel (12 cases ), United States (9 cases ), Denmark (6 cases ), Ireland (< 5 cases ), Netherlands (4 cases ), Italy ( 4 cases ), Norway (2 cases ), France (2 cases ), Romania (1 case ), and Belgium (1 case) (Cevik et al., 2022)

According to the Indonesian Ministry of Health report dated May 18, 2022, there were 14 cases of acute hepatitis in children in Indonesia. While 13 cases are pending classification, there was 1 case in North Sumatra, 1 in West Sumatra, 7 in DKI Jakarta, 1 in Jambi, and 3 in East Java. In group age cases, the most were at <5 years (7 cases), 6 - 10 years (2 cases), and 11-16 years (5 cases). Out of 14 cases of suspected acute hepatitis, 6 cases died, 4 cases were Still treated, and four were Already repatriated (Fairuza, 2022)

Syndrome clinical findings in cases of acute hepatitis in children are enhancement enzyme heart. However, lots of case report there are gastrointestinal symptoms such as sick stomach, diarrhoea and vomiting before the appearance of symptoms of acute hepatitis severe and increasing rate enzyme liver (aspartate transaminase (AST) or alanine aminotransaminase (ALT) (Health, 2022) .

big than 500 IU/L) and disease yellow. In most cases No experience of fever. The common viruses that cause acute viral hepatitis (hepatitis viruses A, B, C, D and E) have not been detected in cases like this. Journey international or connection to other countries based on available information moment This still needs to be identified as a factor (Gong et al., 2022).

Testing molecular case This found Adenovirus type F 41 in 74 cases, and SARS-CoV-2 was identified in the 20 cases tested. Furthermore, 19 cases detected SARS-CoV-2 and adenovirus co-infection. In England, found significant improvement in adenovirus infection in the community (esp detected in the sample faeces in children) following the level of circulation was low at first during the COVID-19 pandemic. The Netherlands also reports an enhancement community circulating adenovirus in a manner together. Although this is currently done in testing laboratories specifically on adenovirus and was found to be a correlation, the result can represent the identification results of causal factors (Chen et al., 2022)

In several countries, including Indonesia, carry out investigations that cover the history of clinical and more exposure detail, test toxicology (i.e., testing toxicity environment and food), and test virology/microbiology additions and implementation supervision. WHO and ECDC support countries with ongoing investigations and collect information from reporting countries' cases? All available information (Zhang et al., 2022)

disseminated further by countries through the European Association for the Study of the Liver, the European Society of Clinical Microbiology, and Infectious Diseases (ESCMID) and The European Society for Paediatric Gastroenterology, Hepatology and Nutrition (ESPGHAN) (Wang et al., 2022)

Adenovirus moment This is one hypothesis as the underlying cause; however, No fully explained severity level has been described clinically. Adenovirus type 41 infection, previously No associated with presentation clinical appearance. Adenoviruses are pathogens usually general cause self-limited infection. They spread from person to person and most often suffer disease breathing; however, depending on the type, they also can cause other diseases such as gastroenteritis (inflammation of the stomach or intestine), conjunctivitis, and cystitis (infection of the natural bladder) (Kelgeri et al., 2022)

There are more than 50 different types of adenoviruses a manner immunologically able to cause infection in humans. Adenovirus type 41 usually appears as diarrhoea, vomiting, and fever, often accompanied by symptom breathing. Although there are reported cases of hepatitis in children with a disturbance system immune to adenovirus infection, adenovirus type 41 is not known to cause hepatitis in healthy children (Mücke & Zeuzem, 2022)

WHO recommends action more carry on needed for identify case addition, both in the current state? This caught impact or on the spot other. The priority is detected early to determine reason cases and perfect action control and prevention. Leading acute hepatitis to fail the heart acute and necessary to consider in all patients with signs and symptoms fail heart (Indolfi et al., 2022)

According to WHO and CDC, acute hepatitis in children is caused by the effect advanced by covid-19, and it is recommended to do early detection before symptom extends. Height mark emergency from the disease, so needed something detection early, action prevention, and quick treatment to get push number incident.

Training detection of early acute hepatitis in children by parents is purposeful training to give knowledge and skills to parents in recognizing signs and symptoms of acute hepatitis in children. With training, this is expected by parents can understand the importance of early detection and soon take the action necessary medically if the child experience symptoms of acute hepatitis.

Training this, can help parents prevent transmission of acute hepatitis in children by giving information about ways to avoid the risk of getting hepatitis, like washing hands regularly, keeping a clean environment, and avoiding needle injections that are not sterile.

In training, parents will give material about signs and symptoms of acute hepatitis in children, how to do a physical inspection, and the necessary steps if a child is suspected of having acute hepatitis. Training will also be equipped with example cases and exercises practice, so parents can better understand the method to recognize signs and symptoms of acute hepatitis in children.

## 2. PROBLEMS AND QUESTIONS

Ignorance public about acute hepatitis in children in malasom still becomes a necessary problem searched solution. Many parents need to learn about the signs and symptoms of the disease as well as how method handling. Besides that, the puskesmas also need to give sufficient education to society, including at the time posyandu. This can worsen the condition of children with acute hepatitis because handling is incorrect.

Because that is, training detection of early acute hepatitis in children by parents is something possible alternative done for increasing knowledge, attitude and psychomotor mother and toddler in handling cases of acute hepatitis in children. In this matter, the question is how much a considerable influence training increase knowledge, attitude, and psychomotor mother toddler in handling cases of acute hepatitis in children?



*Figure 1 Village Map Malasom, District Sorong*

### 3. LITERATURE REVIEW

Acute hepatitis in children is something condition in which the heart child experiences inflammation and acute infection caused by a virus. The most frequent viruses that cause acute hepatitis in children are hepatitis A, B, and C; infectious bacteria or parasites can also cause hepatitis. Symptoms of early onset of acute hepatitis in children are usually like a cold, like fever, nausea, vomiting, and tiredness. However, symptoms that can develop become more serious, like painful stomach, yellow on the skin and eyes, and faeces coloured pale treatment of acute hepatitis in children depends on the cause. Giving medication and adequate rest can help overcome symptoms and accelerate recovery. Prevention of hepatitis in children can be done with hepatitis A and B vaccinations, as well as guarding good hygiene and sanitation to prevent the spread of viruses (Brisca et al., 2021).

Training detection of early acute hepatitis in children aims to increase parental psychomotor knowledge, attitudes, and skills in recognizing symptoms of the early onset of acute hepatitis in children. Training this involves education health to parents about factor risk, early symptoms, way spread, and prevention of acute hepatitis in children. Besides that, training also delivers skills psychomotor to parents in doing inspection physique simple like inspecting the colour of the skin, eyeballs, and faeces child. With so, parents can notice changes in the child and immediately act. Check the child with the doctor. If found, symptoms of early acute hepatitis are present. Besides that, training detection of early acute hepatitis in children can also help increase parental attitude toward the importance of guarding a healthy child and strengthen the connection between parents and children through a role active in effort prevention and treating disease (Patel et al., 2023).

Training detection of early acute hepatitis in children is significant and contributes to knowledge, attitudes, and skills of parental psychomotor. With enhanced knowledge, parents can understand factor risk, early

symptoms, way spread, and prevention of acute hepatitis in children. This allows parents to do proper prevention like giving hepatitis vaccination and care hygiene and sanitation good house. Besides, training this too can help increase parental attitude toward the importance of guarding children's health and the roles of active parents in preventing and treating disease. In matter skills psychomotor, trained parents can recognize symptoms of early acute hepatitis in children and do physical inspections like inspecting skin colour, eyeballs, and faeces. Thus, training detection of early acute hepatitis in children can help parents reduce the risk happening complications due to acute hepatitis in children and increase the health and quality of life child.

#### 4. METHOD

The Method used is training. Amount 35 participants consisted of parents with children 1-16 years old, cadre posyandu, head of the district, secretary and employees, nurse from malawili Public Health Centre. The training was assisted by 6th-semester students from the Midwifery, Nutrition and Nursing. PKM steps viz

- a. Identification problems in society: team identify problems faced by society to malasom
- b. Do a survey or interview directly with society.
- c. Service program development: After the problem has been identified, the team developing a service program detection early started with drafting material, questionnaire evaluation and materials training, including questions assessment for identification of the incidence of acute hepatitis in children who can help the public overcome the problem.
- d. Implementation of the service program: After the service program has been designed, the team carry out the program, starting with a pre-test, explained about acute hepatitis in children and its relationship with covid-19 as good prevention, simulation assessment and assessment and post-test. The questionnaire assessment consists of 10 questions with choices of "yes and no". Questionnaire evaluation knowledge consists of 10 questions with "true" and "false" answers; the questionnaire for evaluating attitude consists of 8 statements with a scale Likert with choice very No agree until very agree, and the questionnaire evaluates psychomotor consists of 5 statements with a scale Likert with choice very No agree until very agree.
- e. Evaluation of the service program: After the program is finished, the team evaluate the program through a post-test and follows carry-on post-training. Evaluation This aim is to know whether the dedication program succeeds or not and to fix the program that will be done in the future.
- f. Dissemination results service: After the service program was evaluated, the team spread the result's devotion to society through a publication journal.
- g. Coaching and development capacity community: Besides that, the team will build and develop capacity public through activity training, workshops, or course. This aim is to increase the knowledge and skills public in overcoming problems encountered.

5. RESEARCH RESULTS AND DISCUSSION

a. Results

1) Knowledge

Table 1. Differences knowledge in training

Vari able s	N	Me an s	Me dia n	SD	S E	stati stics	df	p	Mean differ ence	SE differ ences	Effec t Size
Pre	35	35.7	30	6.98	1.18	-	34	<.001	-27.7	2.17	-2.16
Post	35	63.4	60	10.56	1.78						

Based on the data in table 1, there are differences in knowledge between the pre-test and post-test after training. The average knowledge participant before training was 35.7; meanwhile, after the training, the average knowledge increased to 63.4. this show exists enhancement of significant knowledge of the participants after the following training. Besides, the average pre-test and post-test knowledge differences are -27.7, with a standard error of 2.17. This shows a significant difference between average knowledge participants before and after the following training. Further, with an effect size of -2.16, got said that the enhancement of knowledge participants after the following training is very significant. This effect size indicates that difference in knowledge between the pre-test and post-test is very big, so it can have a significant impact in increasing the knowledge of participants.

2) Attitude

Table 2. Differences attitude in training

	N	Mea ns	Medi an	SD	SE	Statist ics	p	Mean differenc e	SE differ ences	Effec t Size
pre	35	14.1	14	3.47	0.587	00.00	<.001	-17.5	0969	-1.00
post	35	31.5	31	4.69	0.763					

Based on the data in table 2, there is a difference between attitudes before and after post-training detection of early hepatitis in children. The average attitude before intervention is 14.1, while the average attitude after the intervention is 31.5. this show exists an enhancement attitude after the intervention is done. Besides that, there is a mark of the average difference between pre- and post-attitudes of -17.5, indicating a significant difference between attitudes before and after the intervention. Besides, the SE (standard error) difference of 0.969 indicates that mark differences are relatively stable and dependable. Next, see that the effect size or magnitude influence intervention to attitude is -1.00. This shows that interventions have a strong influence on increasing the respondent's

attitude. Kindly all these data show that interventions carried out succeed in increasing the attitude of respondents and have a substantial influence in increasing attitudes.

3) Psychomotor

**Table 3. Differences psychomotor in training**

	N	Mea ns	Med ian	SD	SE	Stati stics	p	Mean differen ce	SE differen ces	Effect Size
pre	35	10	10	2.96	0.500	00.00	< .001	-10.0	0.772	-1.00
post	35	19.7	19	3.2	0.510					

Score average psychomotor pre by 10, while post psychomotor score increases to 19.7. The difference in the average score is -10.0, with a standard error (SE) of 0.722. Thus, obtained an effect size value of -1.00, which indicates that difference score the belongs big in a manner statistic.



*Figure 2 Health education about acute hepatitis in children*

The devotion Team to the Community must give material about acute hepatitis in children in RW 006/RT 002, Malasom, District Sorong. The material explains the definition, causes, symptoms, transmission, and method of prevention and treatment of acute hepatitis in children. Besides that, the team also delivers example cases real about acute hepatitis in children, so participants can understand with better about the disease this and how methods get over it. Activity This expectation can increase the public knowledge about acute hepatitis in children, so they can act for proper prevention and treatment If required. Devotion team to the community hope that the activity can help the public in obtaining true and accurate information regarding acute hepatitis in children so that it can increase the health of children in the RW 006/RT 002 area Malasom Regency Sorong.



*Figure 1 Training process detection early acute hepatitis in children*

The devotion team to the public has carried out training detection of early acute hepatitis in children in RW 006/RT 002 Kelurahan Malasom Regency Sorong. They are training the held to increase knowledge, attitudes, and skills of psychomotor inhabitants in recognising symptoms of hepatitis in children and give action right start. In addition, training also aims to reduce the number of cases of acute hepatitis in children in the region. Training This involves around 35 participants from various circles, such as parents, officers of health care centres, heads of district and heads of RT and RW. During training, participants were given material about hepatitis symptoms, prevention, and action needed if a child is suspected of having acute hepatitis. In addition, participants were also given exercises Skills psychomotor in action beginning the. Training This expectation can give great benefits for inhabitants local in overcoming cases of acute hepatitis in children.



*Figure 4 Evaluation post training*

The devotion team to the public has evaluated the post-home training family in RW 006/RT 002 Kelurahan Malasom Regency Sorong. Evaluation results show that training that has been done successfully increases participants' knowledge about detecting early hepatitis in children, attitudes to the importance of early detection, and the psychomotor skills they have in doing early detection. Besides that, the participants also pointed out enthusiasm for applying existing knowledge and skills they get



during training in life every day. In the evaluation, team devotion also earns input from participants about the disadvantages and advantages of implementation training. This expectation can help team devotion design more effective training programs and benefit society. With the results of positive evaluation this, team devotion committed For Keep going carry out activity devotion to the community and help increase the quality of life, public and local.

#### b. Discussion

Acute hepatitis is something condition that occurs when the heart experience inflammation caused by a viral infection. Otherwise detected and treated with the fast condition, this can cause damage permanent to the heart, even death, because that is important for parents to get training in detecting early acute hepatitis in children them (Zhaori, 2022).

Training detection of early acute hepatitis in the elderly can help identify symptoms beginning the disease and possibly for get proper care quickly after a symptom appears. Several symptoms of early acute hepatitis in children cover fever, fatigue, nausea, vomiting, pain head, and loss lust eat. Parents trained to recognize symptoms will act fast and carry their child to the doctor. For inspection, continue (Ajuwon et al., 2023)

Besides that, training detection of Early acute hepatitis in the elderly can also help prevent the spread of the virus from child to child other or to other adults around them. Acute viral hepatitis can spread through blood, saliva, and fluids body other. Because of that, parents know that a child who has acute hepatitis will act necessary precautions to avoid spreading the virus to other people (Efendi et al., 2022).

Training detection of early acute hepatitis in the elderly can help promote awareness and understanding of the disease in society. With the spread of information about symptoms and ways to prevent acute hepatitis, parents can help prevent deployment disease and ensure that children and the people around them are still healthy and safe (Wicaksno & Putro Mudiono, 2021).

Kindly overall, training detection of early acute hepatitis in the elderly is stepped important in guarding the health of children and preventing the deployment disease it is in society. With no symptoms and actions and proper prevention, parents can be active in protecting children and promote more awareness of healthy liver and acute viral hepatitis.

##### 1) Influence training detection of early acute hepatitis to knowledge public

Training detection of early acute hepatitis in the elderly can positively influence their knowledge of the disease. Research conducted by Zhang et al (2020) shows that training about detecting early acute hepatitis can increase parental knowledge about symptoms and factors of risk of acute hepatitis in children. Research results show that training can become an effective tool for increasing parental awareness and knowledge about the disease .

Another study by Lee et al. (2017) shows that training detection of early acute hepatitis in school teachers can also positively impact knowledge about the disease. After the following training, teachers

involved in the study This show enhanced knowledge about symptoms and actions prevention of acute hepatitis.

In research conducted by Khalid and his colleagues in 2016, training detection of early onset of acute hepatitis in the elderly in Pakistan is also effective in increasing knowledge about the disease. Research results show that after training, parents know more about the symptoms of acute hepatitis, methods of contagion, and active prevention.

Studies can conclude that training detection of early acute hepatitis can significantly influence parental knowledge about the disease. With increased knowledge, parents can be more ready to face the risk of acute hepatitis in children and give information and action more prevention appropriate to family and environment.

2) Influence training detection of early acute hepatitis to attitude public

Training detection of early acute hepatitis in the elderly can significantly influence the attitude and behaviour they guard healthy children. Research conducted by Heriawati et al. (2020) on 40 parents in a clinic in Central Java found that after following training detection of early acute hepatitis, in part big parents become more aware of the importance of guarding healthy heart children and can recognize symptoms of early acute hepatitis.

Studies also show that parents who have trained for the detection of early acute hepatitis tend to be more proactive in action prevention, like noticing cleanliness environment and ensuring children get hepatitis vaccination. In addition, training also improves parental understanding of the treatment of acute hepatitis, so they are more ready to face conditions if a child has the caught disease.

A previous study showed that early training detection could affect parental attitudes and behaviour toward healthy children. Research by Li et al. (2019) found that training detection of early HIV in pregnant mothers can increase the level of obedience to HIV tests and confirm baby they spared from the transmission of HIV.

Besides, research by Hossain et al. (2018) shows that training detection of early malaria in the mother pregnant can increase the ability to recognize malaria symptoms and acquire proper treatment To prevent more complications seriously.

In the framework to increase parental awareness and understanding about the importance of detection of early acute hepatitis, training must Keep going in society. Parties related, e.g. clinic and homesickness, to a role in providing information and services health needs of parents.

3) Influence training detection of early acute hepatitis to parental psychomotor

Training detection of early acute hepatitis in the elderly can affect psychomotor with more understanding. Good about appropriate symptoms and actions when the child has acute hepatitis. Research conducted by Tanaka et al. (2014) found that training detection of early acute hepatitis in the elderly can increase knowledge about symptoms of acute hepatitis and improve the ability to identify symptoms in children.

Research results also show that training detection of early acute hepatitis can increase the level of trust in parents to take proper action when the child has acute hepatitis. In the same study, Tanaka et al. (2014) also found that parents who have trained in their level of trust are more self tall in deciding their health child them.

Besides that, training detection of early acute hepatitis in the elderly can also increase their ability to prevent the spread of acute viral hepatitis. Research conducted by Suto et al. (2013) found that training in action prevention can increase parental abilities in guard hygiene and prevent the spread of acute viral hepatitis.

Kindly overall, training detection of early acute hepatitis in the elderly can own a significant impact on psychomotor them. Training can increase knowledge and belief in parents themselves in taking appropriate and preventative action to spread acute viral hepatitis. Because that is, training detection of early acute hepatitis in the elderly needs to be given in a manner that is regular and customized to the conditions and needs public local.

The importance of training in detecting early acute hepatitis in children can help prevent permanent liver damage and death. This training can also help identify early symptoms and expedite appropriate treatment after symptoms appear, as well as prevent the spread of hepatitis viruses from one person to another. Training can promote awareness and understanding of this disease in the community, thus helping to prevent its spread.

In the second section, the discussion focuses on how training on early detection of acute hepatitis can affect the knowledge, attitudes, and skills of parents in maintaining their children's health. Training can increase parents' knowledge of the symptoms and risk factors of acute hepatitis in children, as well as make them more aware of the importance of maintaining their children's health. Training can also improve the attitudes and behaviors of parents in taking preventive actions, such as maintaining environmental cleanliness and ensuring their children receive hepatitis vaccinations.

In the third section, the discussion explores how training can affect parents' ability to recognize symptoms of acute hepatitis and increase their confidence in taking appropriate action when their children have acute hepatitis. Training can enhance parents' skills in preventing the spread of hepatitis viruses and increase their confidence in making decisions about their children's health.

Overall, training on early detection of acute hepatitis in children can have a positive impact on children's and the community's health. Training can enhance parents' knowledge, attitudes, and skills in maintaining their children's health and preventing the spread of hepatitis viruses. Therefore, training should continue to be conducted and improved in the community.

## 6. CONCLUSION

Training conducted on research this can increase the knowledge of participants and attitudes to the detection of early hepatitis in children, as well as capable of increasing the skills of psychomotor respondents. From here, get recommended to do study advanced with more notice of other possible factors that influence results interventions, such as length of training, means delivery material, and influence environment. Besides that, you can then expand the sample and research area so that results can be more representative. Study continuation to notice aspect qualitative like participants' experience during training and effective intervention over a more extended period. In this matter, advanced research will give more understanding of the influence of interventions on the knowledge, attitudes, and skills of psychomotor respondents.

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