

CHAPTER 2

LITERATURE REVIEW

2.1 Health Education Concept

2.1.1 Definition of Health Education

Health education is the process of helping a person by acting individually or collectively, to make knowledge-based decisions about matters that affect personal health and that of others to increase the community's ability to maintain their health and not only relate to improving knowledge, attitudes, and practices but also to improve or improve the environment (both physical and non-physical) in order to maintain and improve health consciously (Nugraheni, 2018).

Health education is an effort or activity to create community behavior that is conducive to health. This means that health education seeks to make people aware of how to maintain their health, how to avoid or prevent things that are detrimental to their own health and the health of others, where to seek treatment if they are sick etc (Windasari, 2014).

According to WHO in the Ministry of Health (2006), defines health education is a process of empowering individuals and communities to increase their ability to control health determinants so that they can improve their health status (Subaris, 2016). Based on the description above, it can be concluded that health education is an activity or effort to provide improve health and increase knowledge about health in order to avoid disease and know where to seek treatment if sick and so on.

Health education is an application of the concept of education in the health sector. It is an activity to help individuals, groups, or communities in improving their abilities or behavior to achieve optimal health. The role of health education includes: the role of health education in environmental factors, the role of health education. The conclusion is, health education shows that this is clear and can be proven. With this awareness of the importance of health, it is hoped that the characters of young people who are mentally and physically strong will be formed. Finally, with the seriousness of schools and teachers in health education, it is hoped that students will not only have intellectual, emotional, and spiritual intelligence but also have a healthy and strong body.

2.1.2 Health Education Goals

According to Susilo (2011), The goals of health education consist of:

2.1.2.1 Goals related to healthy boundaries

According to WHO (1954), health education is to change the behavior of people or society from unhealthy behavior to healthy behavior. As we know, if a behavior is not in accordance with health principles, it can cause health problems. This problem must be thoroughly controlled by all health cadres at all levels and ranks because the term healthy is not just what is seen by the eye, namely the appearance of a large and muscular body. Maybe it really is suffering from a mental or mental disorder that causes him to be unstable, his behavior and attitude. To achieve health as defined above, then one must follow various exercises or know what to do so that people really become healthy.

2.1.2.2 Changing behavior in relation to culture

Attitudes and behavior are part of the culture. Habits, customs, values , or norms are culture. Changing habits,

especially beliefs that have become norms or values in a community group, is not that easy to change. It was through it is a very long process because culture is an attitude and behavior, and way of thinking of people that occurs through the learning process. Although broadly speaking, health education aims to change unhealthy behavior into a healthy behavior, this behavior actually covers a broad area, so it is necessary to classify these behaviors in a fundamental way. According to Susilo (2011), divides health behavior as a health education goal into three types, namely:

- a. Behaviors that make health a of value in society. Thus the cadre health has a responsibility in counseling leads to the situation that healthy ways of living become habits of life everyday society.
- b. Independently able to create healthy behavior for himself or create behavior healthy in the group. That is why in this case Basic Health Services (PHC = Primary Health Care) is directed to be managed by the community itself, in terms of tangible form is PKMD (Development of Village Community Health). An example of PKMD is Posyandu. In this activity, it is hoped that there will be steps to prevent the onset of the disease.
- c. Encouraging the development and use of facilities proper health services. Exist sometimes, people take advantage of health facilities that are in excess. On the other hand, it hurts Haven't used existing health facilities yet as they should be.

2.1.3 Health Education Benefits

According to Notoatmodjo (2007) in Yensya (2020), health education includes:

2.1.3.1 Making health something of value in public

2.1.3.2 Helping individuals to independently or groups hold activities to achieve goals healthy life.

2.1.3.3 Encouraging development and proper use of existing health care facilities.

2.1.3.4 For that the sufferer (the community) has a greater responsibility for the health (of himself).

2.1.3.5 For that people take positive steps to prevent illness, prevent the development of the disease becomes more severe, and prevent infectious diseases.

2.1.3.6 Cultivate clean and healthy living behavior for individuals, families, and the general public to have a significant impact on the health status of the community.

2.1.3.7 Increase understanding of prevention and treatment of various diseases caused by changes in lifestyle and healthy behavior so that the morbidity from these diseases is reduced.

2.1.4 Factors Affecting Health Education

according to Natoatmodjo (2016), there are several factors that affect the success of health promotion in carrying out Health education includes:

2.1.4.1 Health promotion in predisposing factors

Health promotion aims to raise awareness and increase public knowledge about maintaining and improving health for people themselves, their families, and society. Besides, in the context of health promotion as well provide an understanding of the tradition of belief in society and so on, both detrimental and which benefits health. This form of promotion is carried out by counseling, exhibitions, service advertisements, health, and so on.

2.1.4.2 Health promotion in enabling factors (reinforcing)

The form of health promotion is carried out in order to empower the community and be able to provide health facilities and infrastructure by means of technical assistance, provide direction, and ways to find funds for the procurement of facilities and infrastructure.

2.1.4.3 Health promotion in reinforcing (enabling) factors this health promotion is intended to provide training for religious leaders, community leaders, and health workers themselves with the aim that attitudes and behaviors

2.1.4.4 the behavior of officers can be an example, an example, or a reference for the community about healthy living.

2.1.5 Health education strategy

Health education strategies are the ways chosen to deliver the material, adapted to environmental conditions, nature, scope, and sequence of activities, including components of health education materials (Purba, 2013).

According to WHO (1984) in Subaris (2016: 8), education strategies health includes:

2.1.5.1 Advocacy, the goal is for policymakers to issue regulations that benefit health.

2.1.5.2 Social support is for health promotion activities to get support from community leaders.

2.1.5.3 Community empowerment (empowerment), the goal is that the community can improve their health, while according to the Ottawa charter (1986), the health education strategy is:

- a. Health Insight Policy
- b. Supportive Environment
- c. Health Service Reorientation

- d. Individual Skills
- e. Community Movement

2.1.6 Health education goals

according to Susilo (2011), The targets of health education in Indonesia, based on the development program in Indonesia, are:

- 2.1.6.1 The general public with community orientation is rural.
- 2.1.6.2 People in certain groups, such as women, youth, youth. Included in this special group are educational groups ranging from kindergarten to university, private and state religious schools.
- 2.1.6.3 Individual targets with individual health education techniques. According to the Ministry of Health (2011), states that in the implementation of health promotion, there are 3 (three) types of targets, namely:

- a. Primary Goal

The primary (main) target of health education efforts
Actually, patients, healthy individuals, and families (households) as components of society. They are expected to change their unclean and unhealthy living behavior into clean and healthy living behavior (PHBS). However, it is realized that changing behavior is not something easy.

- b. Secondary Goal

The secondary targets are community leaders, both informal leaders (eg, traditional leaders, religious leaders, etc.) and formal leaders (eg, health workers, government officials, etc.), community organizations, and the mass media.

c. Tertiary Target

The tertiary targets are public policymakers in the form of laws and regulations in the health sector and other related fields, as well as those who can facilitate or provide resources.

2.1.7 Health Education Method

The method of health education is basically an approach that used in the educational process to convey messages to the target health education, namely individuals, groups/families, and communities (Suliha, 2002). Here are the forms of health education methods :

2.1.7.1 Lecture method

Lecture is a speech delivered by a speaker in front of group of visitors. Lectures are essentially a transfer process information from teaching to learning objectives.

2.1.7.2 Group Discussion Method

Group discussion is a planned or prepared conversation between three or more people on a particular topic with one leader.

2.1.7.3 Panel Method

Panels are talks that have been planned in front of visitors about a topic and three or more panelists are required a leader is needed.

2.1.7.4 Panel Forum Method

Forum panel is a panel in which visitors participate in discussion.

2.1.7.5 Role Playing Method

Role play is a play on situations in life humans without any training, carried out by two or more people more to be used as material for analysis by the group.

2.1.7.6 Symposium Method

The symposium is a series of short speeches in front of the audience with a leader. These speeches highlight aspects of different from a particular topic.

2.1.7.7 Demonstration Method

The demonstration method is a learning method that presents a procedures or tasks, how to use tools and how to interact.

2.1.8 Health Education Media

According to Machfoedz, I & Suryani, (2013), what is meant by media Health education is essentially an educational tool. It is called educational media because these tools are channels to convey health. Based on its function as the distribution of health messages (media), it is divided into 3, namely:

2.1.8.1 Print media

Print media as a tool to convey health messages vary widely, including:

- a. *booklet* is a medium for conveying health messages and in the form of books, both in writing and in pictures.
- b. A *leaflet* is a form of conveying information or messages through folded sheets. The information content can be in the form of sentences or pictures, or a combination.
- c. A *flyer* (sheet) is like a leaflet but not in the form of a fold.
- d. A *flip chart* (back sheet) is the delivery of messages or health information in the form of flipcharts such as in book form.
- e. Rubrics or writings in newspapers or magazines regarding the discussion of a health problem or matters related to health.

- f. A poster is a form of printed media containing messages or health information, which is usually pasted on walls, in public places, or on public transportation.
- g. Photos that reveal health information.

2.1.8.2 Electronic Media

Electronic media as targets for conveying health messages or information include:

- a. Television is a transmitter of messages or health information through television media in the form of plays, discussion forums, discussions of health problems, and so on.
- b. Radio is the delivery of health information or messages via radio in the form of chats, lectures, and so on.
- c. Video is a delivery of information or health messages can be through video.
- d. Slides can also be used to convey health messages.

2.1.8.3 Media Board (BillBoard)

Boards posted in public places can be filled with messages or health information. Here, media boards also include messages written on zinc sheets affixed to public transportation (buses or taxis).

2.2 Behavior Concept

2.2.1 Definition of Behavior

Behavior is a set of actions or actions of a person in responding to something and then becoming a habit because of the values that are believed. Human behavior is essentially an act or activity of humans, both observable and unobservable by human interaction with their environment, which manifests in knowledge, attitudes, and actions.

Behavior more rationally can be interpreted as the response of an organism or a person to stimuli from outside the subject. This response is formed in two kinds, namely the passive form and the active form, where the passive form is an internal response that occurs in humans and can not be directly seen from others, while the active form is when the behavior can be observed directly (Adventus et al., 2019).

According to Notoatmodjo (2017), behavior from a biological perspective is an activity or activity of the organism in question. Human behavior can be interpreted as a very complex activity, including behavior in speaking, dressing, walking, perception, emotion, thought, and motivation.

The conclusion is that human behavior is strongly influenced by all aspects of life that there are around it, such as economic, social, political, cultural aspects, and even environmental factors. The development of science and technology is also very it affects human life in society. Aspects of life there will form a human attitude in his life. Human will be a good person if all aspects of life are around you. Supporting to be good, and vice versa.

According to Skinner (1938), in Notoatmodjo (2016), formulate a person's response or reaction to a stimulus or external stimulus. This behavior occurs through the process of a stimulus to the organism, and then the organism responds, so Skinner's theory is called "SOR" or Stimulus-Response Organisms.

According to Blum in Adventus et al., (2019), An educational psychologist divides behavior into three areas, namely, the area does not have clear and firm boundaries. The division of this area is

carried out to develop or improve the three behavioral domains, which consist of the cognitive domain (cognitive domain), the affective domain (affective domain), and the psychomotor domain (psychomotor domain).

Skinner in Inten (2018) distinguishes between two responses, namely:

2.2.1.1 Respondent response (reflexive) is the response caused by certain stimuli. This stimulus is called electing stimulation because it causes a relatively permanent response, for example, delicious food causes the desire to eat, the bright light causes the eyes to close, and so on. This response respondent also includes emotional behavior, for example, hearing the news of a disaster, being sad and crying, passing an exam, expressing joy by holding a party, and so on.

2.2.1.2 Operant response (instrumental response) is a certain stimulus or stimulus that follows a response that arises and develops then. These stimuli are called reinforcing stimulators and reinforcers because they strengthen the response. For example, a health worker carries out his duties well (responding to his job description) and then gets the respect of his superiors, the health worker will be even better at carrying out his duties.

According to Damayanti (2017), Judging from the form of response to this stimulus, behavior is divided into two, namely:

2.2.1.3 Covert behavior (covert behavior) A person's response to a stimulus in the form of covert or covered (covert). The response or reaction to this stimulus is still limited to attention, perception, knowledge/awareness, and attitudes that occur in people who receive the stimulus and cannot be

clearly observed by others. Therefore it is called covert behavior or unobservable.

2.2.1.4 Overt behavior is a person's response to a stimulus in the form of real or open action. The response to the stimulus is clearly in the form of actions or practices that others can easily observe or see.

2.2.2 Factors influencing behavior

According to Lawrence Green in Damayanti, (2017), the health of a person or society is influenced by two main factors, namely: behavioral factors (behavior causes) and non-behavioral factors. The behavior itself is determined or formed from three factors, namely:

2.2.2.1 Predisposing factors

This factor is influenced by people's knowledge and attitudes towards health, traditions, and people's beliefs on matters related to health, the value system adopted by the community, education level, socioeconomic level, and so on.

2.2.2.2 Supporting factors (enabling factors).

This factor includes the availability of facilities and infrastructure or health facilities for the community, such as clean water, a place for disposal of feces, availability of nutritious food, and so on, including health service facilities such as puskesmas, hospitals (RS), polyclinics, integrated service posts (Posyandu). Village polyclinic post (Polindes), village medicine post, private practice doctor or midwife, and so on. The community needs supporting facilities and infrastructure to behave in a healthy manner.

2.2.2.3 Reinforcing factors (reinforcing factors).

These factors include the attitude and behavior of community leaders, religious leaders, attitudes and behavior of officers including health workers, including here laws regulations, both from the central and local governments, related to health. People sometimes need positive knowledge and attitudes and support for facilities in healthy behavior and need exemplary behavior or references from community leaders, religious leaders, and officers, especially health workers.

2.2.3 Behavior Formation Process

According to Notoatmodjo in Damayanti (2017), from experience and research, behavior based on knowledge will be more lasting than behavior that is not based on knowledge. Roger's writing reveals that before a person adopts a new behavior in that person, a sequential process occurs, namely:

2.2.3.1 *Awareness*

People (subjects) are aware in the sense of being able to know the stimulus (object) first.

2.2.3.2 *Interest*

This person has begun to be interested in the given stimulus. The attitude of the subject has begun to emerge.

2.2.3.3 *Evaluation*

The person begins to weigh whether the stimulus is good or not for himself. It means that the attitude of the respondents has started to get better.

2.2.3.4 *Trial*

People (subjects) begin to try new behaviors according to what the stimulus wants.

2.2.3.5 *Adoption*

The person (subject) has behaved differently according to his knowledge, awareness, and attitude towards the stimulus.

If the acceptance of a new behavior goes through the stages as above, based on knowledge, awareness, and a positive attitude, then the behavior will be lasting.

2.2.4 Behavioral domain

According to Benjamin Bloom in Adventus et al., (2019), An educational psychologist divides human behavior into three domains, according to educational goals. Behavior is divided into three domains, namely:

2.2.4.1 Knowledge

Knowledge is the result of knowing, and this occurs after someone has sensed a certain object. Sensing occurs through the five human senses, namely: the senses of sight, hearing, smell, taste, and touch. The knowledge covered in the cognitive domain has 6 levels, namely:

- a. Know (know) know means to remember something that has been studied previously. Included in this knowledge is recalling something specific from all the material studied or stimuli that have been received. Therefore "know" is the lowest level of knowledge.
- b. Understanding (comprehension) understanding is defined as the ability to correctly explain known objects and interpret the material correctly.
- c. Application (application), the application is defined as the ability to use the material that has been studied in the actual situation or condition.

- d. Analysis (analysis) is an ability to describe the material or an object into components, but still within an organizational structure, and still have something to do with each other.
- e. Synthesis refers to the ability to put or connect parts in a new whole form.
- f. Evaluation (evaluation) is related to the ability to justify or evaluate a material or object.

2.2.4.2 Attitude

Attitude is a reaction or response of someone who is still closed to a stimulus or object. In everyday life, attitude is an emotional reaction to social stimuli. Attitude is a readiness or willingness to act and is not the implementation of a particular motive. Attitude has three main components, namely :

2.2.5 Behavioral Measurement

According to Natoatmodjo (2016) there are two ways to measure behavior, namely:

2.2.5.1 Behavior can be measured directly, namely, interviews with activities carried out several hours, days, months ago (recall).

2.2.5.2 The behavior that is measured indirectly is by observing the respondent's actions or activities.

Behavior consists of three domains, including knowledge, attitudes, and actions. Here's how to measure each domain as follows:

2.2.5.3 Knowledge measurement

According to Arikunto (2014) states that this level of knowledge can be assessed from a person's mastery of the object or test material that is objective or essay. An

objective assessment of a person will be given questions about an object or subject in the form of multiple-choice types, questionnaires, etc. Each type of question has a certain weight value, after which a score will be obtained for each respondent from each question answered correctly. According to Arikunto (2014), the measurement of the level of knowledge can be categorized into three, namely :

- a. Knowledge is good if the respondent can answer 76-100% correctly of the total answers to questions.
- b. Knowledge is sufficient if the respondent can answer 60-75% correctly of the total answers to the question.
- c. Lack of knowledge if the respondent can answer 60%.

2.2.5.4 Attitude Measurement

Attitude measurement can be done directly and indirectly. You can directly ask the respondent's opinion or question about an object. Attitude measurement can be done by assessing a person's attitude statement. An attitude statement is a series of sentences that say something about the attitude to be expressed. Attitude statements may contain or say positive things about the attitude object, namely sentences that support or favor the attitude object. This statement is called a clear statement. On the other hand, the attitude statement may also contain negative statements about the attitude object that are not supportive. This statement is called an unfavorable statement.

2.2.5.5 Action Measurement

How to assess actions can be done through observation, checklists, and questionnaires. The checklist contains a list of variables that will be collected data Arikunto in (Utari, 2018)

2.3 Personal Hygiene

2.3.1 Definition of Personal Hygiene

Personal hygiene comes from the Greek language, personal, which means individual and healthy. Personal hygiene is an action to maintain the cleanliness and health of a person for physical and psychological well-being (Kasiati *et al.*, 2016).

Personal hygiene is a condition and practice to maintain health, prevent the spread of disease, improve individual health status, increase self-confidence and create beauty. Personal hygiene or personal hygiene is an action to maintain the cleanliness and health of a person, to maintain physical and psychological well-being (Laily, 2012)

Personal hygiene is a person's efforts to maintain personal hygiene and health to obtain physical and psychological well-being. The personal hygiene carried out is skincare, feet, hands and nails, oral cavity, hair, eyes, ears, and nose (Potter, Perry 2010).

So *personal hygiene* is the act of maintaining the cleanliness and health of a person for his physical and psychological well-being. A person is said to have good personal hygiene if the person can maintain the cleanliness of his body.

2.3.2 Personal Hygiene Goals

according to Laily (2012), The purpose of personal hygiene is to improve health status, maintain personal hygiene, prevent disease, create beauty and increase self-confidence.

According to (Mubarak, Wahit I., Lilis Indrawati., 2015), The general goals of personal hygiene care include maintaining one's personal hygiene, improving one's health status, creating individual beauty, preventing disease in oneself and others.

2.3.3 Factors Affecting Personal Hygiene

according to Laily (2012), Factors that affect personal hygiene include the following :

2.3.3.1 Social Practice

Humans are social creatures and therefore belong to social groups. This condition will allow a person to relate, interact, and socialize. Personal hygiene or personal hygiene greatly affects a person's social practice. During childhood, family habits influence hygiene practices, such as bathing frequency, bath time, and oral hygiene. In adolescence, personal hygiene is influenced by peer groups. Teenage girls, for example, began to be interested in personal appearance and began to wear makeup. In adulthood, friends and workgroups form expectations about personal appearance. While in the elderly, there will be some changes in the form of hygiene practices due to changes in their physical condition.

2.3.3.2 Personal Choice

Every client has their own desires and preferences in their personal hygiene practices, for example, when to shower, shave, do hair care. And also includes choosing the products used in their hygiene practices such as soap, shampoo, deodorant, and toothpaste, according to their preferences and needs.

2.3.3.3 Body Image

Body image is a person's perspective on his body shape. Body image is very influential in practicing *hygiene* somebody. When someone looks messy, untidy, or doesn't care about his personal hygiene, education is needed about the importance of hygiene for health, besides that sensitivity is needed to see why this can happen, whether it is lack or someone's ignorance of personal hygiene or inability someone in carrying out his own hygiene

practice, this can be seen from the person's participation in daily hygiene.

2.3.3.4 Socio-Economic Status

A person's economic status affects the type and level of personal hygiene practice. Low socioeconomics allow for low individual hygiene as well.

2.3.3.5 Knowledge and Motivation

Knowledge of hygiene will affect practice *hygiene* somebody. But this alone is not enough because motivation is an important key in the implementation of hygiene. The problem that often occurs is the lack of motivation due to lack of knowledge.

2.3.3.6 Culture

Cultural beliefs and personal values will affect a person's hygiene care. Different cultures have different hygiene practices. Some cultures may also think that health and hygiene are not important.

2.3.4 Kinds of personal hygiene

According to Tarwoto & Wartona (2015). Various types of personal hygiene include:

2.3.4.1 Skin Hygiene

The skin is an organ of the body as a protector from injury (Kozier, B., Glenora Erb, 2010). Meanwhile, according to Widiанти (2011), The skin protects tissues from injury, absorbs vitamin D, produces oil, regulates body temperature, and transmits sensation through nerve receptors.

Clean skin reflects primary health. Maintaining skin cleanliness is carried out at least 2x a day, using soap, keeping clothes clean, eating nutritious foods such as vegetables and fruit, and keeping the environment clean. (Tarwoto & Wartonah, 2015). Clean or unclean skin is seen from daily living habits, both from

the cleanliness of the food eaten and the cleanliness of the environment. In the aging process, there is a decrease in the regular function of the skin, resulting in several changes such as skin, wrinkles, and skin weakness (Darjani *et al.*, 2020). As for Potter & Perry, (2010), Skin problems consist of dry skin, acne, skin rashes, contact dermatitis, and abrasions. The skin should be smooth, warm, and have good turgor.

2.3.4.2 Head and hair hygiene

Hair hygiene is seen from clean hair, not messy/messy, and does not smell. How to maintain the cleanliness of the hair and head by washing hair 2x a week, washing hair using shampoo, and using other hair care tools. Normal hair hygiene, hair looks clean, shiny, not tangled, and scalp is free of lesions (Potter & Perry 2010). Problems on the head and hair, if not maintained properly, can make hair tangle, smelly, the presence of lice and dandruff (Tarwoto & Wartona 2015). Cleanliness of hair and head increases one's confidence and self-esteem. Hair and head that is well maintained and clean can maintain a person's health.

2.3.4.3 Dental and oral hygiene

Dental and oral hygiene really need to be considered and maintained properly. Problems that often occur if dental and oral hygiene is not maintained properly cause cavities, bad breath, inflammation of the gums and tongue. Maintain oral and dental hygiene by brushing teeth 2 times a day using toothpaste or toothpaste (Mubarak & Chayatin 2015).

While according to Hidayat, R. & Tandiari (2016), This can be done by brushing your teeth, gargling with mouthwash or antiseptic, brushing your tongue, and cleaning dentures if there are any after eating. Dental and oral care must always be kept clean

2.3.4.4 Nail and hand hygiene

Nail hygiene is an effort to keep nails clean and maintain disease-causing germs from entering the body through nails. Hand and toenail hygiene that is not maintained properly will look brittle, break easily, dirty, and change color and cause infection. How to keep fingernails and toenails clean by soaking nails in warm water before cutting them, washing nails with soap and brushing nails with a soft brush. It's best to trim nails once a week. Causes of damage to the nails such as convex nails, brittle nails, and nail discoloration. Nail infections can occur due to inflamed and swollen nail folds, separated nail plates due to trauma, yellowish nail color due to fungal infection (Rosdahl, 2014).

2.3.4.5 Genitalia Hygiene

Genitalia care for women and men must always be well maintained and clean. Genitalia care is carried out by cleaning the genital area when bathing, rinsing with clean water after urinating, and regularly changing underwear (Mubarak 2015).

2.3.5 Definition of Menstruation

Menstruation is the process of bleeding from the uterus that occurs due to the shedding of the inner uterine wall, which contains many blood vessels and unfertilized eggs. The menstrual process can occur because the egg in the female organ is not fertilized, this causes the endometrium or the lining of the uterine wall to thicken and become shed, which will then bleed through the female reproductive tract. The normal menstrual cycle is 21 days to 35 days, marked by the discharge of blood as much as 10 to 80 ml per day.

Menstruation is cyclical bleeding from the uterus. The length of the menstrual cycle is the distance between the date of the start of

menstruation and the start of a new period. The start of bleeding is called the first day of the cycle. The normal length of the menstrual cycle is considered a classic cycle of 28 days, but the variations are quite wide between several women and the same woman. More than 90% of women have a menstrual cycle between 24 to 35 days. The length of menstruation is usually between 3-6 days, some are 1-2 days and followed by a little blood, and some are up to 7-8 days. In every woman, the length of menstruation is usually fixed. Approximately 50% of menstrual blood is excreted in the first 24 hours (Fitriani H et al, 2017).

The menstrual cycle is a continuous process of hormonal changes and leads to the formation of the endometrium, ovulation, as well as wall decay if pregnancy does not occur. Each month, the egg must be selected and then stimulated to mature (Verawaty, 2012)

The conclusion is menstrual patterns are a series of menstrual processes that includes the menstrual cycle, the length of menstrual bleeding, and the amount of bleeding, as well as other menstrual disorders. Cycle length menstruation is the distance between the start date of the last menstruation and the start of the next menstruation. The day of the start of bleeding It is called the first day of the cycle. Generally, the distance of the menstrual cycle ranges from 15-45 days with an average of 28 days. The length varies between 2-8 days, with an average of 4-6 days. Long menstruation the number of days it takes to start bleeding. Menstruation until bleeding stops in 1 menstrual cycle. The length of menstruation is divided into 3, namely hypomenorhea if The length of menstruation < 2 days, normal if the length of menstruation between 2-8 days, and hypermenorhea when the length of menstruation > 8 days.

Menstruation that occurs with a cycle of more than 35 days is included in the category of an abnormal cycle, this occurs due to many causes

such as hormonal imbalance, stress, use of family planning, or because of a tumor. according to Sinaga (2017), menstruation or menstruation in women occurs through four phases, namely: the menstrual phase, the follicular phase, the ovulation phase, and the luteal phase.

2.3.5.1 Menstruation Length

Menstruation or menstruation is a process of sexual maturity for a woman. Menstruation can also be defined as the process of bleeding from the endometrium that occurs regularly through the vagina as the process of cleaning the uterus of blood vessels, glands and cells that are not used due to the absence of fertilization or pregnancy (Cahyaning 2018).

The duration of menstruation is usually between 3-5 days, some are 1-2 days followed by a little blood, then some are 7-8 days. In every woman, the length of menstruation is usually fixed. On average, the amount of blood that comes out is ± 16 cc, if more than 80 cc is pathological (Panggih 2019).

Several factors affect the length of menstruation (Verawaty, SN and Liswidyawati, 2012)

- a. Stress
- b. Chronic Disease
- c. Malnutrition
- d. Physical activity
- e. Taking certain medications such as antipsychotic antidepressants, thyroid and some chemotherapy drugs.
- f. Hormone imbalance

2.3.5.2 Types of disorders during menstruation

Disorders that occur during menstruation according to Sinaga (2017) that is:

a. Pre-Menstrual Syndrome (PMS)

Premenstrual syndrome (PMS) is a group of unpleasant physical and psychological symptoms experienced by women about one to two weeks before menstruation. Abnormal hormone levels do not cause PMS but a person's sensitivity or sensitivity to changes in hormone levels that occur in the body during menstruation. Signs and symptoms most often experienced by adolescents include swelling and pain in the breasts; Acne develops. Increased appetite; get fat; Abdominal pain and bloating, sometimes cramping; Constipation (constipation); headache; Hurt; Sometimes there is swelling in the tips of your fingers, hands, or feet. Back pain; Weakness and lethargy; Tired easily Irritable and irritable; rebuttal; depression; difficulty concentrating; And insomnia (insomnia).

b. Dysmenorrhea

Dysmenorrhea is also known as dysmenorrhea or dysmenorrhea. Menstrual pain usually occurs in the lower abdomen but can radiate to the lower back, lower back, pelvis, upper thighs, and calves. Pain may also be accompanied by severe abdominal cramps, which

c. Amenorrhea

Amenorrhea is a condition when menstruation stops or does not occur during the fertile period or when menstruation must occur regularly. Amenorrhea is divided into two types: primary amenorrhea and secondary amenorrhea.

d. Polymenorrhea

Polymenorrhea is a menstrual cycle disorder that causes a woman to experience menstruation several times a month. Women who experience cramps have menstrual cycles of less than 21 days in a regular pattern, and the amount of bleeding

is the same or higher than usual. Menstrual disorders are caused by an imbalance of the hypothalamic-pituitary-ovarian hormone system, resulting in shorter menstrual cycles.

e. Menorrhagia

Excessive menstrual bleeding is excessive menstrual bleeding where the bleeding exceeds 7 days or is too much (more than 80 ml) than the average amount of normal female bleeding during menstruation (about 30-40 ml of blood for about 5 to 7 days during menstruation). Some of the symptoms that cause a menstrual overdose include hormonal imbalance, uterine fibroid tumors, cervical polyps, endometrial polyps, pelvic inflammatory disease or worse, cervical cancer, endometrial cancer, or blood clotting disorders.

2.3.6 Personal Hygiene During Menstruation

Hygienemenstruation is personal hygiene when menstruation. Menstrual hygiene is very important because when handling during menstruation is not sterile, it can lead to infection of the reproductive organs. Personal hygiene during menstruation is actions to maintain health and cleanliness in the area of femininity during menstruation, the genitals, especially the vagina, have a high enough humidity so that it is a good medium for the growth of various germs or bacteria, including fungi. So that's how women are required to maintain the cleanliness of the reproductive organs on a regular basis and in the right way (Sarasawati, 2017).

Hygiene at the time of menstruation is an important thing in determining the health of adolescent girls' reproductive organs, in particular, preventing infection of the reproductive organs. Therefore at the time, menstruating women should really be able to take care of good hygiene of the reproductive organs, especially in the vagina, because if it is not kept clean, it will cause microorganisms such as bacteria, fungi and

viruses too much so that it can interfere with the function of the reproductive organs (Sarasawati, 2017).

During menstruation, the body tends to produce more sweat, oil and other body fluids. Body parts that close and folds of skin such as the genital area is the most important part. When the body If you sweat a lot, then this part tends to be moist and bad microorganisms such as fungi are easy to breed which can eventually cause infection. The goals of treatment during menstruation are to the maintenance of personal hygiene and health during the menstrual period to get physical well-being and psychological and can improve a person's health status (Pribakti.B, 2008).

2.3.7 Things to Pay Attention to During Menstruation

Based on Yuni (2015) things that need to be considered by adolescent girls during menstruation, namely:

2.3.7.1 Skin and Facial Care

The face is the most sensitive part for a teenager, especially young women. At the time of menstruation the work of the sebaceous gland will increase so that sweat production increases. This condition can cause acne problems on the face. Acne problems in adolescents are related to their appearance. At the time of menstruation it is very beneficial to clean the face two to three times a day to help prevent the onset of acne. Use non-irritating soap. and don't use bath soap for wash face.

2.3.7.2 Hair Hygiene

Keeping hair clean is very important because when the menstrual scalp is more oily and sweaty, so it will facilitate the emergence of dandruff and other microorganisms.

2.3.7.3 Body Hygiene

Body hygiene during menstruation is also very important attention, and should take a bath 2 times a day when bathing the external reproductive organs need to be carefully cleaned. The best way to clean the female area is to wash it with clean water. One thing that must be considered in washing the female area is especially after defecation, namely by washing it from front to back (from the vagina to the anus), Not the other way around. Because if the reverse direction washes it, then germs from the area will be carried to the anus. front and can enter the vagina. At the time of cleaning, the genitals do not need to be cleaned with cleaning fluids or other liquids because these fluids will further stimulate the bacteria that cause infection. When using soap, it is better to use a mild soap (with a pH of 3.5), such as baby soap which is usually pH neutral. After using soap, it should be washed with water until it is clean (until there is no soap residue left), because if there is still soap residue left in the left behind will cause disease. After washing, must dry with a towel or tissue, but do not rub. Keeping the body clean can provide freshness for the body and accelerate blood circulation.

2.3.7.4 Cleanliness Of Evryday Clothes

Changing clothes every day is very important, especially underwear, use dry underwear and absorb sweat because wet underwear will make it easier to grow mold. Underwear that has been exposed to blood should be soaked first. Wearing pants that are too tight should be avoided, because this causes the skin to breathe hard and can eventually cause the feminine area to become moist and irritated. For the selection of materials, you should use materials that are comfortable and absorb sweat, such as cotton. The use of pantyliners every day continuously is also not recommended. Pantyliner should only be used when

whiteness is a lot, and you should not choose a pantyliner that uses perfume because it can cause skin irritation.

2.3.7.5 Use of sanitary napkins

During menstruation, the blood vessels in the uterus are very easily infected therefore genital hygiene must be more guarded because germs are easy to enter and can cause diseases of the reproductive tract. Choose sanitary napkins that are highly absorbent so you still feel comfortable while using them. We recommend choosing a pad that does not contain gel because the gel in most pads can cause irritation and cause itching. Choose sanitary napkins that don't use fragrances and colorless. This is done to reduce exposure to substances chemistry in genitalia. Pads during menstruation should be changed regularly 4-5 times or after every bath and urination. The appropriate replacement for the pad is if there is a blood clot on the surface of the pad. The reason is that the blood clots that are on the surface of the pads are the most common places very good for the growth of bacteria and fungi. If using disposable sanitary napkins should be cleaned before wrapping and then thrown in the trash. Other sanitary napkins should be soaked with soap in place closed before washing. Choose pads are soft and absorb fluids well. For prevent infection preferably before and after using sanitary napkins should wash hands first.

According to Ambarwati (2010), the things that need to be considered by adolescent girls during menstruation, including:

2.3.7.6 Maintain cleanliness by bathing twice a day using ordinary bath soap. Be careful when cleaning the reproductive organs. The inside of the vagina does not need to be cleaned using soap or chemicals because it will clean itself naturally. Doing so can cause internal irritation.

2.3.7.7 Change pads at least four times a day, especially after urinating.

If less than four times, for example, instead of more than once every 6 hours, this can cause the bacteria contained in the blood that has been released to turn malignant, and can re-enter the vagina so that it can cause infection and even cancer.

2.4 Teen Concept

2.4.1 Definition of Teen

Adolescence is a period of transition or transition from childhood to adulthood that is characterized by physical, psychological, and psychosocial changes. The term adolescence comes from the Latin term which means "to grow" or "to grow into an adult", so it has a broader meaning through mental, emotional, social, and physical maturity. While the definition of adolescence according to WHO is conceptual, which includes three criteria, namely biological, sociological, socioeconomic, the definition of adolescence is a period when an individual develops when he first shows secondary sexual signs until he reaches sexual maturity, experiences psychological and psychological development. the pattern of self-identification from childhood to adulthood and a relatively independent transition of socioeconomic dependence occurs (Dieny, 2014)

Adolescence is a fun period but also a critical and difficult period because it is a transition period or transition from childhood to adulthood, which is marked by changes in physical, psychological, psychosocial aspects (Wulandari, 2014)

According to (Rosyida, 2019), Opinions about the age range of adolescents vary between several experts, organizations, or health

institutions. Adolescence is a period of developmental transition from childhood to adulthood, between the ages of 10-24 years.

The definition of youth (adolescence), according to the World Health Organization (WHO) in (Rosyida, 2019) is the age period between 10 and 19 years, while the United Nations (UN) refers to youth for the age of 15 to 24 years. The Health Resources and Services Administration Guidelines in the United States, the age range of adolescents is 11-21 years and is divided into three stages, namely early adolescence (11-14 years); middle adolescents (15-17 years); and late adolescence (18-21 years).

Adolescence is a period of transition from children to adults. In this period, there is growth and development of various things, both hormonal, physical, psychological, and social (Qurbaniah, 2017). During adolescence, there is a rate of growth and development both physically and psychologically, especially at the maturity of the reproductive organs.

So, adolescents are residents with an age range of 11-21 years which is a period of transition from childhood to adulthood and through stages of development.

2.4.2 Characteristics of teenagers

Adolescent life has certain characteristics that distinguish it from the previous and subsequent periods. Adolescence is always a difficult time for teenagers and their parents (Putro, 2017).

The characteristics of late adolescence (Pieter, H.Z. & Lubis, 2010) are:

2.4.2.1 Called young adults and left the world of childhood

2.4.2.2 Practice independence in making decisions

2.4.2.3 Emotional maturity and learning to control emotions

2.4.2.4 Can think objectively so as to be able to act according to the situation

2.4.2.5 Learn to adapt to the prevailing norms

2.4.2.6 Fostering heterosexual social relationships

2.4.3 Teenage Phase

According to WHO, late teens (17-21 years) want to be the center of attention, want to stand out, in a different way from early teens. He is idealistic, has high ideals, is passionate and has great energy. He tries to establish self-identity, and wants to achieve emotional independence (Diananda, 2018). This stage is a period of consolidation towards the adult period and is marked by the achievement of five things (Sarwono, 2015) namely:

2.4.3.1 A growing interest in the functions of the intellect.

2.4.3.2 His ego looks for opportunities to unite with others and in new experiences.

2.4.3.3 It formed a sexual identity that will not change again.

2.4.3.4 Egocentrism (too much self-centeredness) is replaced by a balance between self-interest and the interests of others.

2.4.3.5 Growing "wall" that separates him personally and the general public.

2.4.4 Developmental tasks of adolescence

One period in the life span is (phase) adolescence. This period is an important segment of life in the individual development cycle and is a transition period that can be directed towards healthy adult development. To socialize well, adolescents must carry out developmental tasks at their age well. If this social development task can be done well, adolescents will not experience difficulties

in their social life and will bring happiness and success in completing developmental tasks for the following phases.

Conversely, when adolescents fail to carry out their developmental tasks, it will have negative consequences in the social life of the following phases, causing unhappiness in the adolescents concerned, causing community rejection, and difficulties in completing subsequent developmental tasks (Putro, 2017).

The tasks of adolescent development, according to Danim (Hulukati, 2018) are as follows:

2.4.4.1 Adolescence (12-21 years old):

- a. Achieve more mature relationships with peers.
- b. Achieve social roles as male or female.
- c. Accept the physical state and use it effectively.
- d. Achieve emotional independence from parents and other adults.
- e. Achieve guaranteed economic independence.
- f. Choose and prepare for a career.
- g. Prepare for marriage and family life.
- h. Develop intellectual skills and concepts necessary for citizens.
- i. Achieve socially responsible behavior.
- j. Obtain a set of ethical system values as a guide/guide in behaving.

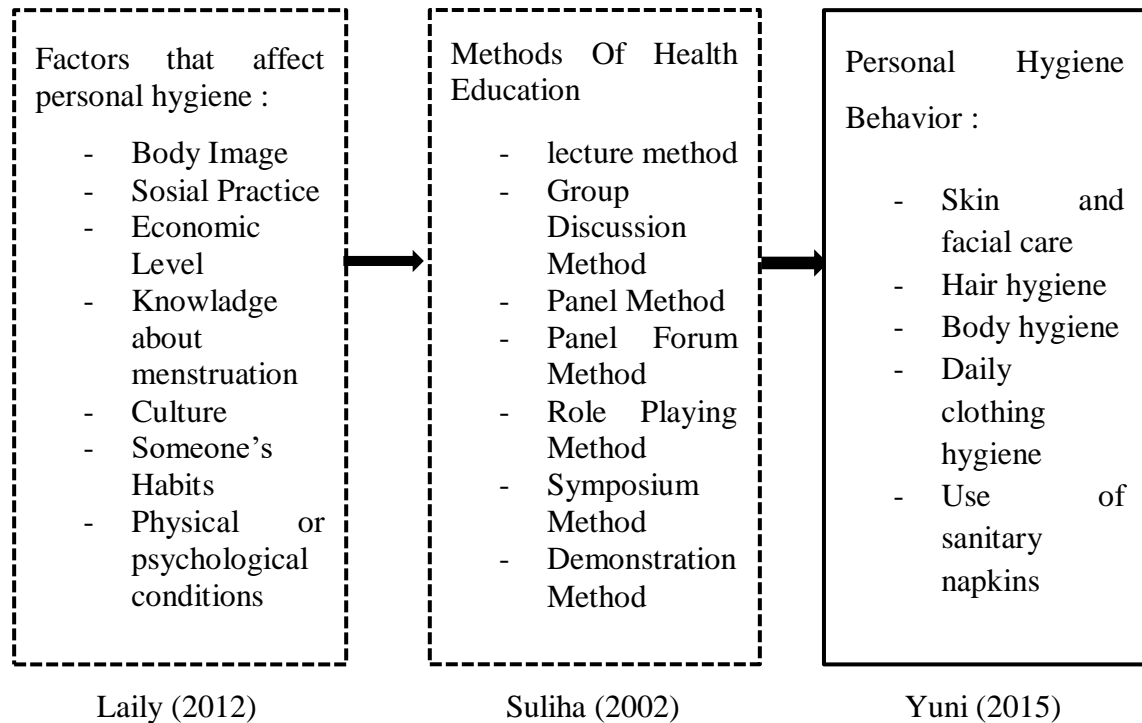
Adolescents in their lives will go through several developmental tasks where this period is an important cycle in adolescent development.

2.5 Definition of Islamic Boarding School

Pesantren, according to its basic understanding, is a place for students to learn, while pondok means a simple house or dwelling made of bamboo. In addition, Pondok also comes from the Arabic funduk, which means hotel or hostel. There are several terms that are found and are often used to designate the type of traditional Indonesian Islamic education or better known as pesantren.

The boarding school at its inception had a simple meaning, namely a place for educating students to learn Islamic religious knowledge under the guidance of an Ustadz or Kyai. Pesantren, Pondok Pesantren, or simply called Pondok, is an Islamic boarding school located in Indonesia. Islamic boarding school students (referred to as santri) study at this school while living in a dormitory provided by the pesantren, in other words, pesantren as a type of non-formal education, is different from the meaning of non-formal education in general education, where the meaning of non-formal education in the sense of General means providing skills or abilities that students already have in order to be able to serve the increasing needs in connection with the challenges of the work they face. So non-formal education in pesantren means underlying, animating and complementing the values of formal education. Not everything can be taught through formal school programs, here the pesantren fills the gap (Mubin, 2020).

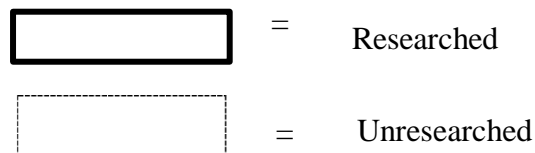
2.6 Theoretical framework



Scheme 2.1 Theoretical framework

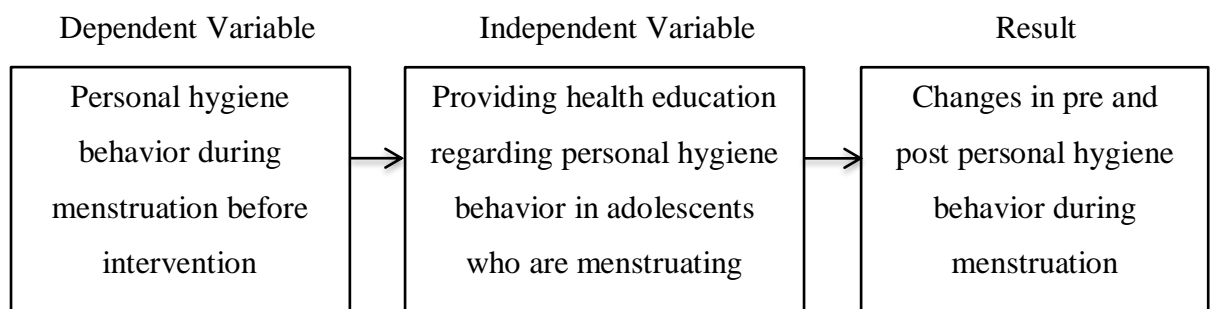
Source by Laily (2012), Suliha (2002), Yuni (2015)

Information:



2.7 Conceptual framework

The conceptual framework is a chart of the research design that will be carried out, including the research subjects. Variables to be studied or research subjects. Variables to be studied and variables that influence the research (Hidayat, 2015)



Scheme 2.2 Conceptual framework

2.8 Hypothesis

The hypothesis applied in this study is that health education has an effect on changes in personal hygiene behavior in adolescents during menstruation at the Ibnu Mas'ud Islamic Boarding School.