

# **The Duties of Sangging in the Implementation of the Hindu Religious Ceremony of Manusa Yadnya Metatah Mass in Bali: A Study of Occupational Health Science**

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## **KEYWORDS**

Sangging, Occupational Health Metatah Ceremony.

## **ABSTRACT**

Occupational Health and Safety (K3) is our effort to create a healthy and safe working environment, so that it can reduce the probability of work accidents / diseases due to negligence that result in demotivation and deficiencies in work productivity. According to the Basic Health Law of the Republic of Indonesia No. 9 of 1960 Chapter I Article II, Occupational Health is a health condition that aims for workers to obtain the highest level of health, both physical, spiritual and social, with prevention and treatment efforts for diseases or health disorders caused by work and the work environment or general diseases. In all work activities in human social and religious life such as research on mass metatah ceremonies that are often carried out by Hindus in Bali, in this case the position of the sangging is the key in this metatah ceremony. Sangging is a person who is tasked with cutting teeth during the metatah ceremony. The duties of the sangging in carrying out metatah are to sharpen the two canine teeth and four incisors in the upper jaw with a file. Providing toothpaste made from turmeric, betel lime and sandalwood rubbing. Following up on the Yama Pati Tatwa palm leaf, a sangging needs to understand the structure of tooth tissue and occupational health science to maintain the sanctity of the ceremony. The metatah ceremony or 'mepandes', 'mesangih' or 'metah ceremony' (Balinese) is a Hindu religious ceremony that must be carried out by all Hindus in Bali. The metatah ceremony contains meaning for life, namely changing behavior to become a true human being who can control himself from the temptation of lust, and fulfilling the obligations of parents to children in order to find the true nature of humanity. This study aims to analyze the nature of the implementation of the mass metatah ceremony in Bali Province in the study of occupational health science. The research design uses a case study based on its type, namely an explanatory case study, which focuses on the mass metatah ceremony. Data is analyzed descriptively and carefully until complete. The results of the study indicate that: 1) occupational health knowledge for the sangging in the mass metatah ceremony has the nature to achieve the maximum goal of the yadnya metatah ceremony, namely suppressing bad thoughts, words, and behavior by controlling themselves from the temptation of lust; 2) the process of implementing the metatah ceremony carried out by a sangging is done by filing both canine teeth and four jaw incisors. However, the process is carried out carefully according to health science and the impact of mass metatah, namely social, psychological, health and economic impacts. The implications of the research results, namely the implementation of the 'manusa yadnya' metatah must be carried out carefully by paying attention to health risks when the metatah ceremony is carried out, internence and application of occupational health science need to be carried out so that religious ceremonies become pure physically and mentally according to the purpose of the metatah ceremony.

## **1. Introduction**

Every ceremonial activity is a gathering place for sick and healthy people, which allows for environmental pollution, health problems and/or can be a place where disease transmission occurs, so sanitation conditions need to be considered. The steps that must be taken are to reduce the risk of infection by preventing and mitigating microorganisms which are generally carried out through two stages of procedures, namely disinfection or sterilization at the desired germ-free level (Notoatmodjo, 2011).

The importance of a condition that is free from pathogenic microbes, requires an effort to eliminate pathogenic microbes in various facilities/equipment, especially facilities/equipment that are directly used in tooth cutting and pathogenic microbes that are attached to the sangging. Likewise, for every action aimed at tinatah, there is a risk of pathogenic microbes entering the body of the ceremony participants.

Contamination of the bale-bale with sweat, blood, urine, body fluids, needs to be disinfected. The floor disinfection process that is commonly carried out in ceremonial places is by mopping the floor using a disinfectant dissolved in water or by spraying

Based on the Decree of the Minister of Health Number 7 of 2019, Disinfection is an effort to reduce/eliminate the number of pathogenic microorganisms that cause disease (excluding spores) by physical and chemical means. In this case, what needs to be considered is an effective disinfectant so that optimal killing power can be

achieved on germs. Chemicals used to prevent infection or contamination of microorganisms and to kill or reduce the number of microorganisms are called disinfectants. Not all disinfectants are effective for all environmental conditions. The effectiveness of disinfectants against germs on floors is sometimes not achieved even though they have been tested properly in the laboratory. In the special requirements for environmental health of rooms and buildings, floors must be clean (Purnawijayanti, 2001).

Since ancient times until now, Hinduism has been believed by Hindus historically, sociologically and culturally (Donder, 2017; Azumardi Azra, 2018). One of the Panca Yadnya, namely Manusa Yadnya in the form of a metatah ceremony is still implemented in Hinduism in Bali. The essence of metatah is threefold, namely (1) changing behavior to become a true human being who can control oneself from the temptation of lust, (2) fulfilling the obligations of parents to children so that they become true humans, and (3) the hope that they can meet in heaven between children and parents after death. Socio-cultural-religious phenomena, such as mass metatah ceremonies, are faced with complex issues about health. From the perspective of Hindu religious beliefs, the metatah ceremony means changing behavior to become a true human being, fulfilling the obligations of parents to children and the hope that they can meet in heaven after death (Purwita, 1992:69). From a modern medical perspective, metatah activities can have negative impacts, such as cultural clashes between tradition and health issues.

The metatah ceremony is a religious ceremony held by Hindus, especially for teenagers. This learning consists of education on values and knowledge needed by teenagers in their development from childhood. Hindus believe that tradition, culture and religion are the unification of various elements. During the metatah ceremony, the six teeth located in front will be cut. According to Widayanti (2010) of the 85 respondents who expressed their complaints after their teeth were cut, namely: almost all of them complained after the metatah ceremony, around 30.58% experienced three complaints, and only 2.35% experienced 6 complaints. The purpose of this study was to analyze the relationship between sangging knowledge about dental and oral health methods. The research design applied descriptive research with a cross-sectional design method. The study population included all sangging in Bali. Data were collected and analyzed univariately, namely frequency and average to understand the relationship between variables. Data were analyzed using the Rank Spearman Correlation test. The results showed that the level of knowledge of the sangging about dental and oral health varied greatly. The correlation between the use of metatah ceremonial equipment and the level of sangging's knowledge about dental and oral health is very significant. The difference between this study and the dissertation study lies in the research design which is correlational quantitative, while the dissertation study conducts a more critical analysis of the nature, process and impact of the metatah ceremony. This study was conducted based on three main objectives, namely: (1) the implementation of the Hindu belief to deactivate lust through the metatah ceremony, (2) modifying the governance of the metatah ceremony by considering health aspects and (3) with an ergonomic and occupational health approach, minimizing the negative social, economic, psychological and health impacts in the implementation of the metatah religious ceremony on the 'tinatah' or those who are the subjects of the metatah ceremony.

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The implementation of Hindu religious rituals and ceremonies in Bali, where in its implementation requires very unique upakara facilities, facilities in making banten in the form of young coconut leaves, flowers, fruits, and others. Upakara facilities also have two properties, namely Auri sampad and daiwi sampad or the nature of the

giant, namely green young coconut leaves, while the facilities that have the nature of divinity are yellow young coconut leaves. In this context, it is important for the forms of religious ceremonies and upakara to be able to understand their meaning, function and usefulness, in order to increase the firmness of feelings in carrying out the ceremony itself (Cudamani, 1987). Especially in ceremonies, there are still various variations, both regarding their meaning, upakara and procedures. Facilities and infrastructure have symbols and meanings of holiness that must be maintained and preserved, especially regarding their cleanliness. Where the cleanliness of the ceremonial equipment results in cemer and cuntaka, because the Hindu religion is flexible and elastic in the sense that it can be implemented according to Desa Kala Patra or Place, Time and Condition

## **2. Results and Discussion**

The purpose of implementing occupational safety in sangging during the mass metatah ceremony is to indicate that occupational safety activities are carried out with efforts to identify and formulate implementation activities supported by supervision in order to obtain satisfactory results.

The metatah ceremony is one of the traditions of the Hindu community in Bali which is still considered to have values that are still quite relevant to the needs of its supporting community. In addition to being a human effort to be able to connect with the spirits of ancestors, it is also a manifestation of human ability to actively adapt to nature or its environment in a broad sense. The relationship between nature and humans is a necessity that cannot be rejected, because this relationship has very high sacred values. This is expressed in the mystical personification of natural forces, namely belief in supernatural beings, belief in the creator god, or by conceptualizing the relationship between various social groups as a relationship between natural forces. The metatah ceremony is closely related to religious rituals or also called rites. Rites are tools for religious humans to make changes. It is also said to be a symbol of religion, or the ritual is "religion and action". Religious rituals carried out by the community based on the beliefs held by the community, beliefs such as these are what encourage humans to carry out various actions or deeds aimed at seeking a relationship with the supernatural world of the ruler of nature through rituals, both religious ceremonies and other traditional rituals that are felt by the community as critical moments, which can bring supernatural dangers, misery and disease to humans and plants (Koentjaraningrat, 2000:243-246).

The implementation of metatah ceremonies and religious rituals based on the existence of supernatural powers and obligations of the natural world are still carried out by the Hindu community in Bali. These rituals have become traditions and become part of the daily lives of most people because they have been passed down from generation to generation by their ancestors to the next generation. The existence of various rituals and traditions that are carried out have strengthened the existence of the religion embraced by the community because various traditions related to the life cycle develop and become strong when patterns and beliefs have become traditional and cultural in the midst of community life, where the essence of its teachings is already included in the community's traditions because it has content in the hearts of the community's culture (Kruyt, 1906). In Emile Durkheim's terms, religion can lead individual members of society to become social beings. Religion preserves society, maintains it in the presence of humans in the sense of giving value to humans, instilling basic human nature for Him. In the ritual of worship, society reaffirms itself in symbolic actions that show its attitude, which thereby strengthens society itself. Meanwhile, the ritual itself is a means for social groups to periodically re-establish themselves (Narwoko, 2004:254).

The existence of a tradition is certainly inseparable from the role of the supporting community to emphasize that society has a value system that regulates its social life. The cultural value system is a series of abstract concepts that live in the minds of most citizens of a society. This cultural value system functions as a guideline as well as a driver of human attitudes and behavior in their lives, so that it functions as a system of behavior that is at the highest level (Azyumardi Azra, 2018).

Religious rituals or traditions that have a function in people's lives will last a long time and will not easily disappear, as stated in functional theory that everything that has a function will not easily disappear by itself, because from the past until now it still exists, has a function, and even plays a number of social functions that persist inseparable from the low needs of humans themselves and anxiety.

In the metatah ceremony, the role of the sangging is very vital so that the sangging needs to prepare the means of the ceremony so that the ceremony runs smoothly, things that must be prepared. Analyzed from the science of dental and oral health, the meaning of the lontar above is the imperfect eruption of permanent teeth where the formation of permanent tooth roots is perfectly formed about three years after eruption. The maxillary canine roots are perfectly formed at the age of 12-14 years. Periapical tissue is a continuation of the periodontium tissue

towards the apex of the tooth, although in fact the tissue near the apex of the tooth is more like the contents of the root canal than the periodontium tissue. The periodontium tissue is the tissue that surrounds and supports the tooth root, which consists of cementum, periodontal ligament, lamina dura and alveolar bone. If the tooth with imperfect root tip growth will be very susceptible to damage to the periodontal tissue if traumatic actions such as carving or filing are carried out, damage and inhibition of tooth root formation will occur so that it will inhibit tooth growth. Every effort needs to be made to maintain the pulp, both in permanent and young permanent teeth. this is very important to allow for continued root development and apical formation. The pulp in young permanent teeth has the capacity to heal after traumatic pulp exposure, luxation injury, or significant root fracture. which aims to maintain the pulp and allow continued root development. By trying to create conditions that allow tissue to grow into the root canal of young permanent teeth that experience pulp necrosis. From the analysis of the lontar quote above, we can understand that it is not permissible to perform the metatah ceremony on children who are not yet adults related to the growth of the apical foramen on the teeth or teeth that have not erupted perfectly.

The tools in the metatah ceremony have various functions that can help the sangging in carrying out its activities in the metatah ceremony, especially if the sangging only has one set of tools, therefore the sangging must really know the tools and their uses so that there are no fatal consequences during the ceremony or the transmission of disease by the sangging tools. Tools for the metatah ceremony do not always have to be large, heavy, or luxuriously engraved, tools for the ceremony are simple and small, but have great functions, and are easy to clean to avoid germs nesting.

Every sangging is advised to always prepare tools for the metatah ceremony at home. This is done so that initial handling can be carried out when the tools become blunt, the tools are complete or experience something like rust that can transmit tetanus.

Basically, the minimum tools that must be available in the metatah ceremony are smeti (hammer), file, chisel, for the file and chisel, try to use them once, so the handle of the tool should be designed so that it is easy to disassemble and reassemble and when storing the tool, it should be wrapped in cloth to reduce humidity which has the potential to rust the tool due to air oxidation.

1. Semeti (hammer); Semeti which is specifically used in the implementation of the metatah ceremony is made in a small form from dapdap wood, is a symbol (niyasa) of Sang Hyang Tunggal to provide self-control strength, so that later the child can control himself against the trials of his life while in the world. 2. Chisel; as a symbolic tooth cutter, is the niyasa of the power of the God Indra as the God of Heaven who provides strength, happiness, so that children who carry out the tooth filing ceremony find physical and spiritual happiness in the next life. A chisel is a carpentry tool in the form of a sharp iron blade at the end to make holes or carve hard objects such as wood, stone or metal. The handle is made of wood or metal. In its use, the chisel is pressed against the material to cut the material. The angle is 80 degrees and is unlimited. This chisel tool has a fairly simple function. As the name implies, the cutting chisel is only used to cut objects. This tool has special rules for using it, namely by tilting it. Then this tool also has special care to be sharpened regularly. Even when it is about to be used, this carving tool must be sharpened first.

2. In the development of the era along with the development of science, there is dental care with metal materials in the oral cavity to avoid galvanic flow, so chisels are made from precious metals, namely gold and silver as in

3. File/sharpening tool; The file tool as a symbol of the power of Hyang Brahma to provide creative power, so that the child will later have creative power (imagination) in connection with his life later. A file is a hand tool that is useful for scraping work objects. The use of a file in cutting work is to flatten and smooth a plane, make it flat and right-angled between one plane and another, make it flat and parallel, the shape of the file is made in various ways according to its function and needs. Here are the forms of files and their functions:

- a. Flat file (plate), the thickness of the file is the same throughout, the width of the file at the end is tapered like a file. Its function is to flatten and make planes parallel and perpendicular.
- b. Block file, the width of the file is the same throughout, the width of the file at the end is reduced. Its function is to make one plane flat, parallel and at an angle to another.
- c. Square file, its function is to make one plane flat and at an angle to another.
- d. Triangular file (negative) its shape is triangular, the triangle of the file at the end tapers. Its function is

to flatten and smooth planes with an angle of 60 or greater.

- e. Knife file (knife) its shape is similar to a knife, its function is to flatten and smooth planes with an angle of 60 or less
- f. Half round file, its function is to smooth, flatten and make concave planes.
- g. Cross file (crossing) its function is to smooth concave planes, and make concave planes.
- h. Round file (round) the round shape at the end becomes narrower. Its function is to smooth and increase the diameter of the round surface.

Related to the ingredients in the metatah ceremony, an ethnomedicine study needs to be conducted related to the content of the ingredients so that it is necessary to know the composition and chemical content.

1. Honey: Throughout history, honey has been used by humans to treat various types of diseases, but only in recent periods can antiseptics and antibacterials derived from honey be explained scientifically. Honey has a low water content (supersaturated solution), so that the water in the cells of microorganisms that enter the honey will come out causing the cells to shrink and die. Honey has an effect that is basically honey is a mixture of monosaccharides with low water activity  $C_6H_{12}O_6 + H_2O + O_2 \rightarrow C_6H_{12}O_7 + H_2O_2$  (glucose oxidation reaction) (Ichda., 2008). Hydrogen Peroxide is formed from the slow release of the glucose oxide enzyme in honey. This happens if honey is melted, where oxygen is needed for this reaction, is active only if the acidity of the honey is neutralized by body fluids, can be destroyed by the presence of protein-digesting enzymes, and will be destroyed if honey is exposed to heat or light. Honey can also deactivate free metals, which will not catalyze the formation of free oxygen radicals from peroxide, which causes inflammation. Also, the antioxidant elements in honey help clean up the existing free oxygen radicals. In the tooth filing ceremony, the application of honey to the teeth and periodontal tissue, in addition to being a sad rasa, also aims to cause a reaction to form hydrogen peroxide which can function to lift dirt and bacteria in the gingival sulcus and lift fragments of tooth enamel after the tooth filing ceremony so that the remaining necrotic tissue and germs can be lifted which accelerates the wound healing process and the royal jelly contained in honey will form adhesion and fibrin bridges in the wound which is the initial stage of wound tissue healing. Honey can also function to stop bleeding in the soft tissue of the teeth, especially for cases of periodontitis where the gums bleed very easily which of course will result in a narrowing of the sangging field of vision during the metatah ceremony.
2. Sandalwood: Sandalwood oil also contains sesquiterpene acid compounds, namely dihydroa-norcurcumenic acid, a-bergamotinic acid and dihydro-oc-santallic acid. Sandalwood oil can also be a calming aromatherapy. In general, the tinatah will be a little tense during the ceremony. The content of sandalwood oil can help the brain release serotonin so that it can increase positive energy in a person and make them happier (Silalahi, 2014).
3. Turmeric; Indonesia is the largest country after Brazil which is rich in biodiversity including medicinal plants. One of these plants is *Curcuma longa*. In vitro research on the anti-inflammatory effects of curcumin showed that curcumin can inhibit the enzymes lipoxygenase and cyclooxygenase, where this enzyme selectively inhibits COX-2 (Walujo, 2009). In tooth filing ceremonies, in addition to being a filler, the chemical content of turmeric can function as an antiseptic and anti-inflammatory. When teeth are cut, it will cause wounds to the supporting tissue of the teeth so that the role of COX-2 is to inhibit inflammation in the oral cavity. In addition to being used as a medicine (Silalahi, 2014).
4. Chalk (Pamor): Currently, cases of bone damage in the medical world are increasing, this is what encourages scientists to conduct research to make artificial bones. Currently, the closest to the properties of bones and teeth is Hydroxyapatite ( $Ca_{10}(PO_4)_6(OH)_2$ ) which is often used as an artificial bone material. Hydroxyapatite (HA) is a group of apatites that are most often used in the medical world as artificial bones because of its biocompatible and osteoconductive properties. At the tooth-filing ceremony, the use of whiting lime in powder form, calcium carbonate will release heat. Molecules from  $CaCO_3$  will immediately bind water molecules ( $H_2O$ ) which will form calcium hydroxide, a soft substance like paste. Calcium carbonate contained in whiting lime as a calcium supplement in the state of damaged enamel structure after tooth-filing, as an additional osteoporosis therapy. And the formation of secondary dentin (Walujo, E.B. 2009).
5. Betel (Lekesan): Novita's research (2016), namely on the antibacterial activity test of purified extract of green betel leaves (*Piper betle*) against *Propionibacterium acnes* bacteria. In the purification process of green betel leaves, polar antibacterial compounds are produced, namely flavonoids and polyphenols. Tannin is a type

of water-soluble polyphenol that can inhibit microbial extracellular enzymes by extracting betel leaves (*Piper betle*) which is commonly used in health product mixtures. At tooth filing ceremonies, the extract of the betel leaf Sangging Equipment. 1). Ivory coconut is casted, the water is removed and the image of Ardhanaresvari (image of Smara Ratih) is written on it. This ivory coconut will be used as a place for the "spit" and "singgang teeth (pedangal)" which are already used. After the ceremony, the ivory coconut is buried behind Sanggah Kamulan, after the ceremony is finished. When doing kasturi on the coconut ivory as a place for spit and pedamel sangging is tasked with drawing the smara ratih on the coconut ivory. 2). For the tooth/sedal singgang, it is three pieces of dapdap branches and three pieces of night cane/queen cane. The length of this sword is  $\pm 2$  cm. Rajahan Sugarcane Trader: Ong Ang. Rajahan Pedal Dapdap: Ong Ah. 3). The polish is a ring with a ruby stone that is used to write / tattoo the teeth of the Mirah Mantra:

Om Sri Bhatrimsa ya namah, Om Sri Bhatrimsa samyogi ya namah

a) On the forehead: Omkara Amertha Adu Muka

b) On the right canine tooth: Ang

c) On the canine tooth left : Ang

d) On the central incisor : Ah

e) On the lateral incisor : Ang

f) On the tongue : Omkara.

4) Pengurip-urip made from turmeric (inan kunyit), which is peeled until clean and lime (pamor). Used after the ceremony is finished for the first time, Tinatah bites the turmeric and the rip lime.

5) A place containing betel leaf, tobacco, areca nut, gambir. (Inside the betel leaf already contains lime).

6) Several pieces of cloth (new) as body coverings during the ceremony (rurub). Referring to the Eka Pratama palm leaf, the rurup cloth is used in yellow, it is attempted to make it possible to use a wali cloth made from yellow cepuk or at least yellow as a symbol of adolescence.

In making the urip pengurip, a match is made in the form of a lekasan base, turmeric, pamor and Pedangel prepared by the sangging and is usually made at night after the ngekeb ceremony

1. Lekasan base.

2. Turmeric.

3. Pamor.

4. Pedamel from carang dadap.

5. Pedamel from sugar cane.

Rurub is a piece of cloth that has been tattooed according to the Eka Pratama palm leaf that the means for the metatah ceremony is to wear a wali cloth or yellow cloth so that a sangging usually prepares a rurup that has been tattooed from his house

Banten tetingkeb which will be stepped on when getting down from the bale petatahan after the ceremony is finished. In banten tetingkep there is a difference between men and women, men wear cakot, women wear knives.

### Sangging Position

The position of the sangging in relation to its work environment, the ability to adapt to the equipment that will be used so that work efficiency is optimal is also called being applied when carrying out the procedure for carrying out the tooth filing ceremony to reduce stress and fatigue in the sangging and the tinatah

1. The tinatah lies down comfortably and his entire body is supported by the bed.

2. The tinatah's head must always be on the pillow and parallel to the back.

3. When the tinatah is going to be positioned on the bed, the sangging must straighten the pillow to make it easier for the devotee to position himself in the ceremony place.

4. Upright Position is the initial position of the tinatah sitting on the bale bale with a cross-legged or kneeling

position that is upright at a 90° angle to the floor.

5. After ensuring that the tinatah is lying comfortably, the position of the pillow can be changed and adjusted to the position of the sangging, the working area in the tinatah's oral cavity and the procedure to be performed.

According to the Dharma Kahuripan palm leaf, the metatah ceremony is held after performing Pujakalip. The pujakalip ceremony is a ceremony held for those who have just become adults, both for women and men. In reality, among Hindus in Bali, there are also tooth filing ceremonies held together with or in a series of wiwaha ceremonies. This is done if when they become adults they have not had time to continue with the metatah ceremony and they rush to get married. Another factor that drives this is the efficiency of financing, so that the two levels of the Manusa-yajna ceremony are combined into one. The metatah ceremony can also be held in a series of Pitra-yajna ceremonies called the mamukur ceremony. Based on the Dharma Kahuripan and Puja Kalapati lontar, the stages of the metatah ceremony consist of 1) Magumi padangan, 2) Ngekeb, 3) Mabyakala, 4) Ceremony at the merajan, 5) Devotion at the merajan, 6) Metatah, 7) Asking for the blessings of Hyang Guru and ancestors (kawitan), 8) Worshiping the mother and father, as the embodiment and continuation of the Vedic tradition, 9) Ngayab Caru Ayam Putih as a symbol of neutralized giant nature, 10) Asking for tirta as a symbol of asking for prosperity, happiness and eternity, 11) Ngrajah gigi or writing teeth with sacred script, 12) Heading to the metatah place, 13) After the ceremony at the pamarajan is finished, the tinatah who participated in the matatah ceremony is again carried back to the place where the pekandes ceremony is held, 14) Worshiping Bhataras Surya as an announcement and asking for testimony, 15) Worshiping Bhataras Smara and Bhataras Ratih to always guide you to the right path, 16) Asking for holy water from Bhataras Smara and Bhataras Ratih as a symbol of having received His blessing and favor, 17) Ngayap banten pengawak (gading pavilion), 18) Metatah sharpening two fangs and four incisors, 19) Coming down from the metatah pavilion, walking downstream while stepping on the paningkep pavilion, 21) Enjoying betel lekesan, 22) After cutting the lekesan and rubbing it with tobacco, 23) Returning to the ngekeb place which has the meaning of again performing tapa brata, purifying oneself, physically and mentally, and 24) Mejaya-jaya.

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## PEDANGEL AS ANTICIPATION OF WORK ACCIDENTS

An accident is an unexpected and unexpected event that can disrupt the process that has been set from an activity and can cause harm to humans or property while a work accident is an unexpected and unexpected event that can cause injury, illness, loss to humans, property or the environment. Work accidents related to work relationships during the ceremony occur because they are caused by work or when carrying out work. So in this case an accident is a direct result of work or an accident that occurs while work is being done (Suma'mur, 2009).

a) There is a tingling sensation in part or half of the face or in Bali it is commonly called sempengot. Bell's palsy is paralysis on one side of the facial muscles so that one side of the face appears to droop. Bell's palsy occurs

suddenly, but is usually not permanent. b) Sensitive enamel teeth can be abraded over time during the metatah ceremony, enamel erosion occurs even if it is only touched. When the middle layer of the tooth is exposed, anything eaten or drunk can reach the nerve endings, causing toothache, especially when filing teeth, if there is a crack, the nerve endings in the teeth will be exposed, so that the sensitivity of the nerve endings will cause a feeling of pain in the teeth. c) Loose teeth. in varying sizes, round to crescent-shaped with a red or yellowish-white lesion base and reddish edges. Traumatic ulcers can be caused by physical trauma, from chisels or files during the metatah ceremony. The possibility of trauma will increase in parts that are prone to trauma, such as the lips, buccal mucosa, this can be caused by the narrow field of view of the sangging or the narrow working area due to the position and size of the pedal that is too small.

e) Mandibular dislocation usually occurs due to an interruption in the normal sequence of muscle contractions when the mouth is closed after opening it extremely. The masseter and temporalis muscles lift the mandible before the lateral pterygoid muscle relaxes, causing the mandibular condyle to be pulled anteriorly to the bony prominence and out of the temporal fossa. Spasm of the masseter, temporalis, and pterygoid muscles causes trismus and prevents the condyle from returning to the temporal fossa. This type of dislocation can occur unilaterally or bilaterally. Acute anterior dislocation occurs due to trauma or dystonic reactions, but is usually caused by excessive mouth opening such as yawning or opening the mouth too wide during a ceremony. Anterior mandibular dislocation can occur unilaterally or bilaterally and is classified into acute or chronic forms. Chronic forms include recurrent, habitual and long standing. Acute mandibular dislocation is defined as displacement of the condyle anterior to the articular eminence and complete separation from the articulating surface and locking in that position. Acute dislocations are quite common and occur spontaneously after trauma or in association with psychiatric illnesses and drug therapy. Acute dislocations require immediate manual repositioning of the mandible to prevent progressive muscle spasm. This may occur with yawning, vomiting, laughing or vigorous masticatory efforts.

Temporomandibular joint dislocation is different from a broken jaw. Because a broken jaw can cause facial swelling and bruising. However, temporomandibular joints and broken jaws can both trigger severe pain in the jaw and can limit jaw movement. The temporomandibular joint or better known as the jaw joint, is a structure of bones that are interconnected between the upper and lower jaws. This joint functions so that the jaw can open and close properly.

#### Sterilization of Ceremonial Venue

Every ceremonial activity is a gathering place for sick and healthy people, which allows for environmental pollution, health problems and/or can be a place where disease transmission occurs, so sanitation conditions need to be considered. The steps that must be taken are to reduce the risk of infection by preventing and mitigating microorganisms which are generally carried out through two stages of procedures, namely disinfection or sterilization at the desired germ-free level (Notoatmodjo, 2011).

The importance of a condition that is free from pathogenic microbes, requires an effort to eliminate pathogenic microbes in various facilities/equipment, especially facilities/equipment that are directly used in tooth cutting and pathogenic microbes that are attached to the sangging. Likewise, for every action aimed at tinatah, there is a risk of pathogenic microbes entering the body of the ceremony participants.

Contamination of the bale-bale with sweat, blood, urine, body fluids, needs to be disinfected. The floor disinfection process commonly carried out in ceremonial places is by mopping the floor using a disinfectant dissolved in water or by spraying (Mahon, 2004). Based on the Decree of the Minister of Health Number 7 of 2019, Disinfection is an effort to reduce/eliminate the number of pathogenic microorganisms that cause disease (excluding spores) by physical and chemical means. In this case, what needs to be considered is an effective disinfectant so that optimal killing power can be achieved on germs. Chemicals used to prevent infection or contamination of microorganisms and to kill or reduce the number of microorganisms are called disinfectants. Not all disinfectants are effective for all environmental conditions. The effectiveness of disinfectants against germs on floors is sometimes not achieved even though they have been tested properly in the laboratory. In the special requirements for environmental health of rooms and buildings, floors must be clean (Purnawijayanti, 2001).

### 3. Conclusion

This study looks at the phenomenon of national health problems and from the perspective of occupational health science. This study focuses more on how to package the metatah ceremony in the context of health science so

that a healthy way of filing teeth is obtained and to refute the statement that the tooth filing ceremony can damage teeth. It also reveals health cases that occur in the community and how the sangging as the executor of this ceremony can work around it if they find cases like the one above so that they can avoid disease transmission and can prevent cross-infection at the ceremony site. In this study, more is studied about the ways of oral cavity sepsis by paying attention to what has been inherited by ancestors so that a way or method of filing teeth is obtained by paying attention to health problems both from medical and psychological aspects and the impact of implementing this ceremony for the Hindu community who carry out the ceremony so that the core and objectives run perfectly according to the objectives of the ceremony. In the mass metatah activity, a sangging can maintain his health condition at work. The physical and mental health of employees in the work environment, physical, mental and emotional stability conditions can affect the sanctity of the metatah ceremony at work. In carrying out work, a sangging is asked to be free from disease, injury that can interfere with activities. Pain caused by the work environment affects the individual who is being tатаh.

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- [14] ^ Organisasi Kesehatan Dunia (1958). The First ten years of the World Health Organization. Jenewa: Organisasi Kesehatan Dunia. hlm. 459. ISBN 9241560142. "Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity".
- [15] ^ Stokes, Joseph; Noren, Jay; Shindell, Sidney (1982). "Definition of terms and concepts applicable to clinical preventive medicine". Journal of Community Health. 8 (1): 33–41. doi:10.1007/BF01324395. A state characterized by anatomic integrity; ability to perform personally valued family, work, and community roles; ability to deal with physical, biological and social stress; a feeling of well-being; and freedom from the risk of disease and untimely death.
- [16] ^ Organisasi Kesehatan Dunia (1984). Health Promotion: A Discussion Document on the Concept and Principles: Summary Report of the Working Group on Concept and Principles of Health Promotion, Copenhagen, 9–13 July 1984. Copenhagen: WHO Regional Office for Europe. Health promotion is the process of enabling people to increase control over, and to improve, their health. To reach a state of complete physical, mental and social well-being, an individual or group must be able to identify and to realize aspirations, to satisfy needs, and to change or cope with the environment. Health is, therefore, seen as a resource for everyday life, not the objective of living.
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