

## Overview of Maternal First Aid For Children With Wounds At Home

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### ABSTRACT

Mothers didn't know how to give wound first aid properly. Improper handling of wounds can cause the wound healing process to be prolonged. This study aims to determine the description of mothers' first aid for children who experience wounds at home. The research design used was quantitative descriptive with a sample of 31 people selected using quota sampling technique. Data collection was carried out on January 17 - February 17, 2024 by door to door in the Jatitengah Village. The instrument used was an observation sheet using a measuring instrument 3 Standard Operating Procedures (SOP) on bruises, open wounds, and burns. The results of this study showed 96.8% were lacking in handling bruises, 54.8% were lacking in handling open wounds and 80.6% were lacking in handling burns. The overall ability of mothers in providing first aid 90.3% (n = 28) have less ability, 9.7% (n = 3) of respondents have sufficient ability. The overall ability of mothers in providing first aid 90.3% (n=28) had less ability, 9.7% (n=3) of respondents had sufficient ability. The conclusion of this study is that almost all respondents get less ability due to lack of information about first aid, low education level and belief in using traditional methods. Therefore, it is necessary to educate health workers (Nurses) to mothers in order to improve the ability of mothers, so as to minimize more severe complications from the occurrence of wounds.

**Keywords:** first aid, child, wound

### Background

Injury is an undesirable event that causes damage to the structure or function of the body due to trauma or physical or chemical stress that can cause disability if not treated quickly and appropriately (1). According to the Nantulya (2) in the World the total deaths due to injury are 4.4 million deaths and as many as 3.16 million deaths are caused by unintentional injury events. Injury is one of the world's health threats that needs special attention because the number of prevalences continues to increase every year. The World Health Organization states that more than 684,000 deaths occur each year due to falls, which is a growing and poorly known public health problem (2).

The World Health Organization (WHO) says as many as 90% of deaths from injuries occur in developing countries (2). From the results of the Basic Health Research in 2018, it is known that the prevalence of injuries in Indonesia that can interfere with daily activities has increased, namely 9.2% from previously in 2013 which was only 8.2% and 7.5% in 2007. While the incidence of injury in East Java province is also quite high at 9.1%. The proportion of causes of injury that occurred most in Indonesia was due to falls, with a percentage of 40.9% (3). While the proportion according to the place of injury most often occurs at home with a percentage of 36.5%. This percentage is much higher than the incidence of injuries at school

which is only 5.4%.

Falls are one of the events that result in injuries that can cause both minor and severe injuries. A wound is defined as a break in the continuity of body tissue by physical, mechanical, chemical and thermal causes. Open or closed wounds are one of the most common problems that occur in daily activities or in emergency rooms(4). In the Regulation of the Ministry of Health of the Republic of Indonesia Number 66 of 2014, it is stated that there are various types of wounds due to injuries, namely, slashes, lacerations, open stab wounds, closed stab wounds (punctured by nails, thorns, etc.), bruises, abrasions, animal bites, and burns. However, according to the results of the Basic Health Research in 2018, it is known that abrasions, bruises or bruises are the first most common cases, which amounted to 64.1%, followed by lacerated/stab wounds, which amounted to 20.1%, while the incidence of animal bites and burns has a small percentage. The percentage of burns was only 1.3% (3).

Wounds are often accompanied by damage to nerve tissue and tearing of blood vessels, resulting in bleeding. Bleeding is the excessive discharge of blood from a blood vessel due to damage to the vessel. This damage is usually caused by physical impact, cuts, punctures, scratches, which can result in rupture of blood vessels. Excessive bleeding that is not treated quickly and appropriately can result in fluid deprivation and hypovolemic shock or the inability of the heart to supply sufficient blood to the body due to a lack of blood volume (5).

According to Candry, et al (6) some of the risk factors for injury include age, gender, environment, and social economic level. Based on the age range of toddlers and children are vulnerable groups who most often experience injuries, namely as much as 20.3%. In Indonesia, the number of toddlers is very large, which is about 10 percent of the entire population (6). According to the Ministry of Health of the Republic of Indonesia in PMKRI (7) on Monitoring Growth, Development, and Child Growth and Development Disorders, explains that the first five years of a child's life is a period that is very sensitive to the surrounding environment. This period cannot be repeated, and lasts very short. This period must be properly utilized by parents because the toddler period is called the "golden period" (golden period), "window of opportunity" (window of opportunity) and at the same time as a "critical period".

Children between the ages of 3-6 years are pre-school. During this period, physical activity increases along with skills and thought processes. At this time the child begins to be introduced to a wider environment, namely the environment outside the home and its surroundings. Children will begin to enjoy playing outside the home and making friends with other children (8). At this age, children will normally explore and tend to be active and have a high curiosity. At this stage, children begin to have initiative in learning and actively seek new experiences through the activities they do. If children are prohibited or prevented, they will grow feelings of guilt and disappointment. This is in accordance with the stages of child development, but if these activities do not receive good supervision from parents and people around will bring bad effects on children such as injury (9).

The cause of injury is basically the lack of children's ability to protect themselves from infrastructure, facilities, tools and lack of supervision from parents and teachers in the environment where children (6). At the age of 3-6 years, parents play an important role because almost all of the child's daily activities are carried out at home and the surrounding environment. Parents are responsible for children who must be able to ensure health, safety and security for children. In this case parents need to know how to first aid if the child is injured. In a study conducted by Uskun (10), it was found that the level of knowledge of parents about first aid in accidents, especially household accidents, was still very low, namely 15.8%, and only 4.3% knew the first handling of accidents correctly. Many possibilities will occur if first aid is done in the wrong way, one of which is the wound healing process becomes long, infection can occur, causing disability to death (11).

First aid is the initial handling and treatment that aims to prevent or minimize disability,

risk, and more severe complications from an injury event. At home, parents are the ones responsible for keeping children safe. This includes minimizing the dangers that may occur to children. Based on the data that has been found, the authors want to examine the description of maternal first aid for children who have wounds at home.

## Methods

The research design used in this study is descriptive quantitative. The population in this study were parents who had children aged 3-6 years in Jatitengah village spread over 5 RW as many as 134 people. The sample in this study were 31 samples taken using non probability sampling quota technique. The place and time of this research was at the home of each respondent on January 17 - February 17, 2024. The variable in this study is first aid in the event of a wound injury in children. Data collection in this study used observation sheets using SOPs that focused on assessing the mother's ability to perform wound care. Data analysis used in this study was univariate analysis.

## Results

Table 1. Characteristics of respondents

No	Respondent characteristics	f	%
1	Age	17- 25 years	1 3,2
		26 - 35 years	17 54,8
		36 - 3 years	12 38,7
		46 - 55 years	1 3,2
2	Last education	Primary School	3 9,7
		Junior High School	9 29
		Senior High School	16 51,6
		University	3 9,7
3	Jobs	Housewife	26 83,9
		Merchant	2 6,5
		Tailor	1 3,2
		Civil Servant	2 6,5
4	Obtain wound first aid information	Ever	6 19,4
		Never	25 80,6

Based on table 1, it is known that more than half, 54.8% of respondents, are aged 26-35 years (early adulthood). More than half as many as 51.6% of respondents have a high school education. The characteristics of respondents when viewed from the type of work of the majority of respondents in this study are working as housewives, as many as 83.9%. most of the respondents as much as 80.61% have never received information about first aid.

Table 2. Maternal first aid for children with bruises, open wounds and burns

No	Type of Wound	Category	f	%
1	Bruises	Good	1 3,2	
		Simply	0 0	
		Less	30 96,8	
2	Open Wound	Good	5 16,1	
		Simply	9 29	

No	Type of Wound	Category	f	%
3	Burns	Less	17	54,8
		Good	3	9,7
		Simply	3	9,7
		Less	25	80,6

Based on table 2, it is known that most 96.8% of respondents cannot perform first aid on bruises correctly. In the case of open wounds, only a small proportion of 16.1% of mothers were able to provide first aid correctly. Whereas in the case of burns, a small percentage of 9.7% of mothers were able to perform first aid on burns properly.

Table 3. Actions done and not done

Type of Wound	Action	Done		Not Done	
		f	%	f	%
Bruises	Compress the bruised area with cold/ice water to reduce bleeding and swelling.	6	19,4	25	80,6
	If it occurs on the hands or feet, position the wound higher than the heart.	1	3,2	30	96,8
Open Wound	Stop the bleeding by pressing the bleeding area with a cloth or gauze for 1-2 minutes.	6	19,4	25	80,6
	Clean the wound with naCl liquid or running water	28	90,3	3	9,7
	Providing antiseptic	19	61,3	12	38,7
	Covering the wound with gauze	9	29,0	22	71,0
	Bandaging with plaster	8	25,8	23	74,2
	Burns	Soak or flush the wound with clean, cold water (not ice water).	10	32,3	21
	Do it for 3-10 minutes to reduce pain	8	25,8	23	74,2
	If there are blisters, do not break them	8	25,8	23	74,2
	If the blister breaks clean it with running water.	7	22,6	24	77,4
	Apply burn ointment	12	38,7	19	61,3
	Then cover with gauze	4	12,9	27	87,1

Based on table 3, it is known that in the case of bruises, only 19.4% compress the bruise with cold water (ice), in the case of open wounds, if there is bleeding, 80.6% of respondents do not know how to stop bleeding properly. In the case of burns, less than half of them drain into cold water, namely 32.3%.

Table 4. Frequency distribution of first aid measures for pediatric wounds that are not in accordance with SOP

Type of Wound	Category	f	%
Bruises	Warm Compress	4	12,9
	Left	5	16,1
	Wasp Oil	10	32,3
	Massaged/twisted pressure	9	29
Open Wound	But-but Oil	2	6,5
	Wasp Oil	7	22,6
	Washed only	4	12,9
Burns	Left	2	6,5
	But-but Oil	2	6,5
	Toothpaste	4	12,9
	Balm	1	3,2

Based on table 4, it is known that in cases of bruises and open wounds the most first aid uses wasp oil, namely as many as (32.3%) and (22.6%), in cases of burns there are 4 respondents or (12.9%) who still use toothpaste.

Table 5. Data on the results of the study Mother's first aid to children who have injuries

Category	f	%
Simply	3	9,7
Less	28	90,3
<b>TOTAL</b>	<b>31</b>	<b>100</b>

Based on table 5, it is known that the majority of mothers get the less category, which means that mothers cannot perform wound first aid properly.

## Discussion

### First Aid Category Less

Based on the results of the study, almost all 90.3% (28 people) were in the insufficient category. This means that respondents only scored  $\leq 55$  or performed less than 8 actions out of a total of 13 first aid actions. The main factor that causes respondents to get the less category is the lack of knowledge caused by the low level of education and the lack of information about wound first aid that respondents have. As evidenced by the results of the research, the respondents who received the insufficient category in this study were 9.7% (n = 3) with elementary school education, 29% (n = 9) with junior high school education, 51.6% (n = 16) with high school education. Antoro and Sari (12) say that education affects a person's behavior in taking an action. Education influences a person's learning process (13). Of the 31 respondents studied, respondents who got the less category did not understand what to do and tended to hesitate in providing first aid, so that the practice of first aid provided was less than optimal.

In each wound case, the majority of respondents in providing first aid had a deficient category, namely in the case of bruises 96.8% of respondents, 54.8% in the case of open wounds and 80.6% of respondents in the case of burns. In addition to a low level of education, the factor that influences respondents' knowledge so that they get the criteria less in this study is the lack of information and experience about wound first aid. Knowledge can be obtained from



formal and informal learning. Formal learning can be seen from the mother's level of education, while informal learning can be obtained through, seminars, counseling, self-learning from the internet, or asking directly to experts in the field. Previous experience and information is one of the factors that influence a person's knowledge (13). As evidenced by almost all 80.6% (n=25) of respondents in this study had never received information about wound first aid. In performing first aid actions, respondents who have knowledge and experience in performing first aid actions will be different from respondents who have never had experience. Therefore, previous information and experience are very important in determining the attitude of a person to act in performing first aid. One of the impacts that can be seen from the lack of knowledge that respondents have, in this study respondents who have a less category are still using traditional methods such as giving oil, toothpaste, balm and rub (12).

The results of this study are in line with research conducted by Restu, et al., (14) found that mothers' knowledge of first aid was still low in the event of a fall injury, namely (58%). Some first aid measures that many respondents did not take were in bruises 80.6% (n = 25) of respondents did not take the main action, namely compressing with cold water. These results are in line with research conducted by Nirmalasari, Nofiyanto and Hidayati (15) which found that the most common first aid for bruises was massage (34.8%). Handling bruises is by applying cold compresses or ice to stop bleeding in bruises and reduce pain. In the case of open wounds, 80.6% (n=25) did not know how to stop bleeding in the wound. In fact, if there is a wound and bleeding occurs, the bleeding must be stopped immediately. According to Savitri dkk (16) The first subscription if someone is bleeding the action taken is to stop the bleeding by pressing directly on the bleeding site can stop the source of bleeding using a rolled cloth or other tool / object with enough force. If this action is not taken, the blood will continue to come out and can cause more serious risks. Whereas in the case of burns, the main first aid action was to drain or soak in running water, only less than half of 32% (n=10) of respondents. The purpose of soaking or flowing in cold water is to neutralize the temperature due to heat, so it is hoped that the severity of the burn can be minimized. From the results of this study, it is also known that there are still many mothers who do not know how to provide first aid for burns correctly, such as giving toothpaste and oil. These materials should not be used on injured skin. Wounded skin if not treated properly can cause damage to skin tissue, irritation and infection. This will result in a longer healing process (16).

### **First Aid Fair Category**

Based on the results of the study, it was found that a small proportion of 9.7% (3 people) got a sufficient category. This means that respondents scored 56-75% or performed 8-9 actions out of a total of 13 first aid actions. Respondents who get a sufficient category have a good level of education and have received information about wound first aid. This indicates that respondents have sufficient knowledge in providing first aid measures. Antoro and Sari (12) said that success in providing first aid can be seen from the good and bad behavior of a person which is strongly influenced by the level of knowledge possessed. The higher the level of education a person has, the better his level of knowledge (13). Wiharjo (17) said there are two factors that can affect a person's knowledge and behavior, namely internal and external factors. internal factors include education, occupation, age. While external factors include the environment and socio-culture. From this study, it is evidenced that of the three respondents who received sufficient criteria about wound care, 9.7% (n = 3) had a Bachelor's degree, 6.5% (n = 2) worked as an employee, and had received information about wound first aid. When viewed in each case of injury, respondents in providing first aid with sufficient criteria are in the case of open wounds 29% of respondents and in the case of burns 9.7% of respondents. whereas in this study respondents who received sufficient categories in the case of burns were only a small proportion of 9.7% (n = 3) respondents. In the case of open wounds that received sufficient criteria 29% (n = 9) of respondents. Irma Mustika Sari, dkk., (13) said that someone

who has a fairly good memory and capacity to receive lessons or information, will have a high curiosity, so the greater the level of knowledge of a person, the easier it is for that person to receive information about objects or knowledge.

Based on research conducted by Riamah, et al (18) on first aid, it was found that more than half of the respondents received sufficient criteria 57.3% of respondents. The results of this study are different from the results of research conducted by Antoro and Sari (12) which found that the level of knowledge of mothers about first aid especially on burns is in the good category. In this study, respondents who got a sufficient category did not get a good category because even though respondents had a high level of education and had received information about first aid for wounds, in practice and application some actions were not taken, even though one action that was not taken caused the mother to get a score of 0 so that the first aid provided was not perfect.

### **Other first aid measures taken by mothers for injured children at home**

First aid measures are the initial actions taken to prevent and minimize the occurrence of risks or complications that are more severe than an injury incident. If first aid is not done quickly and appropriately, it will have a serious impact. In the case of injuries that occur in children at home, parents, especially mothers, are someone who must be able to provide first aid. From the results of the study, it is known that the ability of mothers in Jatitengah village who have children aged 3-6 years in providing first aid to wounds both closed wounds (bruises) and open wounds (abrasions, lacerations, slices, stabs) and burns is still in the poor category. Of the 31 respondents, some of them still use traditional methods such as massaging, using oil, balm, and toothpaste. From the results of the study who performed first aid for bruises not in accordance with the sop were warm compresses as many as 4 people (12.9%), left as many as 5 people (16.1%), given wasp oil as many as 10 people (32.3%), massaged as many as 9 people (29%). In the case of open wounds (abrasion, laceration, slice, stab) the first aid that was done not according to the procedure was to apply but-but oil to the wound site 2 people (6.5%), wasp oil as many as 7 people (22.6%), just washed as many as 4 people (12.9%). In the case of burns, the first aid given was not in accordance with the procedure, which was left as many as 2 people (6.5%) were given but-but oil as many as 2 people (6.5%), toothpaste as many as 4 people (12.9%) and used balm as many as 1 person (3.2%).

The results of this study are in line with research conducted by Antoro and Sari (12) which states that the actions in handling burns that are often carried out in mothers are still inappropriate, as evidenced by the results of interviews, namely 5 mothers said that early handling was often done using toothpaste or toothpaste, 2 mothers used soy sauce, 3 mothers by fanning the wound and ignoring the burn.

According to the researcher, in the case of bruises, lay people such as respondents will assume that the wound is a minor injury and does not need to be treated or treated. This perception led to 90.3% not giving cold compresses if the child had a bruise, and as many as 16.1% just left the wound without providing any help. In the case of open wounds, when mothers are given instruments or materials to provide first aid to wounds, some mothers are still unfamiliar and do not know what needs to be used to provide help. This is likely because the majority of respondents work as housewives and on average have a high school education.

First aid for burns is to immediately drain or soak the burn with cold water. This is done to reduce the spread of heat and relieve the burning sensation. Maternal beliefs using traditional methods such as applying oil or even toothpaste are wrong actions that can cause skin irritation.

### **Conclusions and Recommendations**

Based on the results of the study, it shows that mothers in Jatitengah village who have children aged 3-6 years almost entirely 90.3% of respondents have poor ability to perform wound first

aid. Factors that influence respondents to have less ability are due to lack of information about first aid, supported by low education levels and the belief in using traditional methods. Meanwhile, 9.7% of respondents had sufficient skills. Although respondents with sufficient skills had a higher level of education and had received information about wound first aid, some actions were not carried out by respondents in the application of first aid.

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