Family Member’s Influence on Child Safety Seat Usage

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Abstract. The efforts in achieving all indicators of Sustainable Development Goals (SDGs) should be done by everyone. One of the goals that is needed to be achieved is to reduce road traffic fatalities by 50% by 2020. The burden caused by road injury is very big. Preventive step such as a safety tool usage is needed to reduce the burden. Child Safety Seat (hereinafter abbreviated CSS) is one of the preventive measures that could be done to reduce the impact caused by road injuries in children. Mother usually takes the main role in deciding what or what not to give to the children, including CSS. There are internal and external factors that could influence their choices. One of the factors is the influence from other family members. This research aims to explore the influence given by other family members regarding the CSS usage level in Bandung. This research used qualitative research design using focus group discussions. The discussions were done to 12 parents in Bandung who own private car and children under the age of 10. The analysis was done using the WHO’s Determinants of Health framework. Mothers of the informants didn’t recommend their children to use CSS, on the other hand, the spouses of the informants supported their wife in using CSS for their children. From this research, it can be concluded that there were positive and negative influences from the other family members regarding CSS usage.

Keywords: Child Restraint; Child Safety Seat; Family Members’ Influence; WHO’s Determinants of Health

1. Introduction

According to the World Health Organization, road injury was one of the top 10 causes of death globally in 2015.¹ Annually, there are 1.25 million of deaths caused by road crash and around 93% of the incidents occurred in low- and middle-income countries.²³ These accidents cost the country around 3% of their gross domestic product which can lead into an obstacle in the development of a country. Because of the enormous impact, the United Nations created the Global Plan for the Decade of Action for Road Safety 2011-2020 back in 2010.

The harmful impact caused by road injury can be reduced by doing preventive actions. And the actions are different for each age group and vehicle. For example, helmet is the one of the preventions for
motorcycle users, while safety-belt is one of the preventions for car passengers. These preventions, if done appropriately, can reduce the burden of road injury. As for children, one of the preventive measures to reduce harmful impact in their age group when travelling in car is by using Child Safety Seat (CSS).

CSS is a safety equipment specifically designed for children under ten years old when travelling in four-wheeled vehicles. CSS designed to accommodate the anatomy of a child that is based on their body mass to cope with a road crash incident. The mechanism of CSS for children is similar to the mechanism of safety-belt for adult. If installed correctly, CSS can reduce mortality rate in infants by approximately 70% and between 54% and 80% in children.

According to a previous 2017 study by Bloomberg’s Initiative for Global Road Safety, the CSS usage level of Bandung City was only 0.7%. The low usage level can be caused by many factors, including external factors, like other family member’s belief and support, that can affect the main decision maker of a family. In Indonesia, mother usually take an important roles to decide what or what not to give to the children, including the use of CSS. Therefore, it is important to know the factors that can influence mothers to use or not to use CSS.

The aim of this research is to explore the factors from the other family members that affect the decision on whether to use CSS or not. This research also expected to be a basis for further research on CSS so the number of CSS usage can increase.

2. Method
This research was done with qualitative research design using phenomenology approach to get a more detailed data regarding the informants’ behavior, experience, knowledge, and belief towards CSS usage. The researchers also use triangulation method, a process where the researchers are using not only one approach to collect data, to get more plentiful data and to confirm the research result. The data were collected using Focus Group Discussion (FGD) method. The FGDs were done to mothers in Bandung City with children aged two to ten years old. The researchers used FGD method because of its ability to empower the informants to be more vocal in giving their perspective, also because of its ability to explore the informants’ perspective towards a specific issue.

The researchers were separating the FGD into two appointments. The first one was done to the CSS users group and the second one was done to the non-users group. The researchers chose the informants based on their residence location, monthly income amount, last formal education degree, and occupation to represent each level of society. The FGDs were done by asking open questions in semi-structured interviews with a previously determined theme. The FGDs were led by researcher who acted as both moderator and note taker.

The researchers documented the FGDs using a recorder and wrote down the findings. The researchers then transcribed and analyzed the discussion recordings. The analysis process was done using Nvivo Plus 12 software. The researchers coded and then categorized the aforementioned transcription document. After that, the researchers drew a conclusion. Last, the researchers were validating and presenting the data.

The data analysis process in this research was done based on the WHO’s determinants of health framework, specifically on social support network which is coming from other family members. The other family members included spouse, parents, siblings, or other relations of the informants. The data then divided into positive and negative directions based on their tendency to use or not to use CSS.

3. Results

3.1 Informant characteristic
The characteristic of the informants can be seen in Table 1. There were 12 informants involved in this research, where six of them were from the CSS users group and six of them were from the non-users group. The informants were also chosen based on their residence.
Table 1. Informants characteristics

|                           | CSS Users                  | Non-Users                  |
|---------------------------|----------------------------|----------------------------|
| **Quantity**              | Six people                 | Six people                 |
| **Gender**                | Female                     | Female                     |
| **Age Group**             | 32-40 years old            | 32-40 years old            |
| **Education**             | High School – Master degree| High School – Master degree|
| **Occupation**            | Housewife, civil worker, private company employee | Housewife, civil worker, private company employee |
| **Salary range**          | Under IDR 3,000,000.00 to IDR 5,000,000.00 – IDR 10,000,000.00 | Under IDR 3,000,000.00 to IDR 10,000,000.00 |
| **House location**        | 3 from Northern Bandung, 3 from Southern Bandung | 3 from Northern Bandung, 3 from Southern Bandung |
| **Code**                  | I1-I6: CSS Users           | I7-I12: Non-Users          |

3.2 Qualitative Research Findings
The results of the FGDs are presented in Table 2, which was filled with the informants’ statements and the directions. Each statement’s direction is symbolized with the plus and minus sign. Plus for positive direction and minus for negative direction.

Table 2. Statements regarding the other members of the family’s support or beliefs

| Statements                                                                 | Direction |
|---------------------------------------------------------------------------|-----------|
| **Beliefs**                                                               |           |
| My mother thought that using child seat for my child is futile             | -         |
| My husband thought that using child seat is good for our child’s safety   | +         |
| My mother thought that it is safer to let my children sit on my lap rather than using a child seat | -       |

| Supports                                                                 |           |
|--------------------------------------------------------------------------|-----------|
| My husband paid for the CSS that we chose                                 | +         |
| My husband helped me in finding the best CSS for our children             | +         |
| My husband was eager to find the child seat that is worth the price       | +         |

4. Discussion
The awareness of using CSS is not as high as the other prevention measures of road injury. In addition, with the lack of law and regulation regarding the use of CSS in Indonesia, the CSS usage level of Bandung City in 2017 study was only 0.7%. Parents are the responsible ones in choosing on whether their children should use CSS or not. One of the determinants in WHO’s determinants of health is social support networks. Two of the form of this determinant are greater support from the family and beliefs of the family.\[10\]

In this research, there are some factors that can affect the decision in using CSS. The factors were divided into two categories

4.1 Beliefs
When the informants were asked about who should be intervened to increase the CSS usage level, most of the informants from the CSS users group and some from the non-users group said that it would be best to
intervene future parents because most of the mothers of the informants told them that using CSS is a futile effort and it’s better to let the children to sit on the informants’ lap. On the other hand, all of the informants stated that the intervention should be made not only for the wives but also the husbands for the last decision will be made by their husbands as the head of the household and breadwinner of the family. The majority of the informants from the CSS users group stated that their husbands thought that CSS is good for their children’s safety and that their children should use one.

These findings support the findings from a previous 2014 study on CSS use in Saudi Arabia which found that the mothers’ and husbands’ beliefs affect the behavior of the informants regarding the use of CSS and that the mothers’ and husbands’ beliefs were in the same directions as the ones found in this study.\[11\]

4.2 Supports
Most of the informants from the CSS users group stated that their husbands were eager to search for the best CSS for their children. Most of the informants bought their CSSs from online shops. Some of the informants’ husbands were trying to find best quality CSSs with the best price. Not only that, the supports from their husbands were also given in financial aid form. The husbands are the one who paid for the CSS. According to WHO in their article regarding determinants of health, greater supports from family is linked to better health or in this condition, by supporting their wives, the husbands indirectly supported the use of CSS for their children, thus securing their children in case of a road crash accident and reducing the risk that could affect their children.

5. Conclusion
From this research, there were several factors found to be influencing the decision in using CSS. The beliefs and supports from the informants’ mothers and husbands were shown to be affected the informants’ decision regarding the CSS use. This condition might happen due to lack of educational intervention about CSS and its benefits and urgency to use for the public. Because of their low level of understandings, they didn’t know the importance of CSS usage, thus the low CSS usage level in Bandung City. This research is hoped to be one of the source for future studies regarding the use of CSS. Moreover, in order to help the government in achieving a fruitful urban city development, this research was also expected to be a base for further interventions regarding CSS. Future study needs to be done with the informants not only from the mother of the child, but also the husband as the breadwinner of the family.

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