



NURSING ENTREPRENEURSHIP OPPORTUNITIES THROUGH SARTIKA PRODUCTS (INNOVATIVE INJECTION SARDS) TO PREVENT HOSPITALIZATION IN CHILDREN BY USING FLANNEL FABRIC WASTE

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ABSTRACTS

Pediatric hospitalization is a medical experience that is often necessary, but can have a significant impact on children. In these situations, children are exposed to unfamiliar environments and medical procedures that may be frightening, including the use of needles. In addition, traumatic or painful experiences with needles during hospitalization can trigger the development of needle phobia in children. These phobias can impact their physical and mental well-being, interfere with medical care, and increase anxiety. innovative health product innovation injectable gloves (sartika) to prevent hospitalization in children by using flannel waste as a nursing entrepreneurship opportunity aimed at (1) overcoming the impact of hospitalization on sick children in hospitals/health centers/clinics, (2) as a medium for distraction/trauma healing so that children do not experience trauma after medical procedures (injections) because Sartika uses animated characters that are liked by children, (3) creates cheap, creative and innovative health products, (4) as one of the steps to preserve the environment through the use of 3R flannel waste (Reduce, Reuse and Recycle). Forms of entrepreneurial activity include the preparation, implementation, packaging and evaluation stages of Sartika products. Target The target users of Sartika's innovative products are pediatric patients in hospitals, health centers or clinics. The results of the activity show that the use of Sartika products has a positive impact on supporting the performance of medical staff (nurses) in hospitals during medical procedures (injections), child patients become more cooperative and children are distracted because Sartika products use animated characters that are liked by children, so that children do not experience trauma after medical procedures (injections). Community education based on a family approach is considered effective in overcoming the impact of hospitalization and trauma/phobia towards injection needles.

Keywords: children, flannel fabric, injection, hospitalization, nursing entrepreneurship

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1. INTRODUCTION

Indonesia ranks fourth as the country with the largest population. Based on Worldometer (2022), data released on the population of Indonesia as of April 25 2022 is 278,752,361 people. The population of children consists of healthy children and sick children. When a child experiences pain, the parent or person in charge of the child needs to make medical efforts to cure the illness he or she is suffering from. Health efforts taken can include visiting health facilities or personnel such as outpatient treatment or inpatient treatment to obtain appropriate medical treatment.

Based on data from the Directorate General of Health Services (2021), the number of hospitals in Indonesia will be 3,132 in 2021, with the largest number of hospitals coming from the private sector/others with a total of 1,468 hospitals. Meanwhile, the number of hospitals from the provincial government (Pemprop) is 277 hospitals. This consists of 24 TNI hospitals, 68 BUMN hospitals. The obesity epidemic is the biggest global public health challenge, obesity is ranked in the top three causes of chronic health problems, the phenomenon of obesity in the world has more than doubled since 1980 (WHO, 2023). Indonesia has 13.5% of adults aged 18 years and over who are overweight, while 28.7% are obese (BMI > 25) and based on the 2015-2019 RPJMN indicators, 15.4% are obese (BMI > 27). Meanwhile, 18.8% of children aged 5-12 years are overweight and 10.8% are obese (Ministry of Health of the Republic of Indonesia, 2019).

Based on BPS data from the National Socio-Economic Survey (2018) in figure 1.1.1, 3.49 percent of children experienced health complaints and were hospitalized in the last year. The percentage of children who experience health complaints and are hospitalized in urban areas is 4.07 percent. Figure 1.1.2 shows that children who experience health complaints and seek outpatient treatment most often go to doctors'/midwives' practices at 39.46 percent, and community health centers/pusses are the largest. 35.23 percent.

Sick children need hospital treatment, this can result in children experiencing stress and trauma due to hospitalization. Hospitalization occurs when an individual is admitted to a hospital as a patient with various causes in the form of diagnostic examinations, surgical procedures, medical treatment, administration of medication and stabilizing or monitoring body condition (Saputro and Fazrin, 2017). The

phenomenon of someone experiencing fear of needles, especially when getting the Covid-19 vaccination, is very common. A person who experiences this condition has a term in the world of health, namely symptoms of belonephobia/trypanophobia or phobia of needles (Listina and Chaerunnisa, 2021).

Phobia is a condition where a person experiences excessive fear of a certain object, giving rise to irrational fear that can threaten personal safety. Based on data obtained from the Siak District Health Service during immunization at SDN 003 Benteng Hilir, of the 25 grade 1 (one) elementary school students who were immunized, 18 of them suffered from phobia of needles (Trypanophobia) (Fuad et al, 2019).

According to WHO, child age is the age of a person under 18 years of age. At this age, children often experience hospitalization. Hospitalization is a process that causes a child to be hospitalized, either planned or as a result of an emergency or trauma, where this condition makes the child experience fear, stress and anxiety which is shown by anger, screaming, rejection, holding his parents tightly. tightly, not wanting to let go, kicking, saying harsh things. A child's anxiety and stress during hospitalization are caused by several factors including separation, loss of control, physical injury, and pain. (Vianti, 2020; Amallia et al, 2018; Sari and Batubara, 2017).

One way to prevent hospitalization in children is through play therapy carried out in hospitals. In addition, parental involvement in child care provides children with opportunities for growth, personal development and provides a positive attitude to parents so that child care is more optimal. (Pawiliyah & Marlenis, 2019) (Nurfatimah, 2019). When a child sees a syringe/syringe, the child will immediately focus on the pointed part (needle) of the injection. Children can immediately feel the pain they will feel when they see the injection This makes a child worry, anxious, afraid, and then cry, not wanting to be injected. If the child cries and does not want the injection, then giving the child medicine will be hampered.

Based on the phenomenon and background above, our team is interested in creating an alternative solution to the impact of hospitalization on children through the innovation of the Sartika product (innovative syringe sarong) to prevent hospitalization in children

by using flannel waste. Sartika (Innovative injection sarong) is a product of

modified injections made by utilizing flannel fabric waste. Syringe covers which generally only look plain, with this Sartika will make the injection look child-friendly. The advantage of the Sartika product itself is that there is no similar product that has a function like Sartika (innovative syringe glove), so the Sartika product (innovative syringe glove) is the latest product innovation that utilizes recycled waste so this product has the advantage of overcoming two problems at once, overcoming waste fabric and hospitalization in pediatric patients.

Syringes are objects that need to be kept hygienic, therefore Sartika products (innovative syringe gloves) are designed to maintain their hygiene and are reusable or can be used repeatedly. The design of this product is made only partially covering the body of the injection to reduce the risk of this product being exposed to the injection needle. The Sartika product (innovative syringe glove) itself is a product aimed at the health sector such as hospitals, clinics and health centers which is needed to overcome hospitalization in pediatric patients. The description of the Sartika product (Innovative syringe holster) is in the form of a syringe/syringe sheath or wrapper made from waste pieces of flannel fabric which are created into the shape of children's cartoon characters which are attached using Velcro to the body of the 3cc, 5cc, 10cc and 20 cc syringe.

Utilizing flannel waste in Sartika products (innovative injection gloves) is one of the 3R (Reduce, Reuse and Recycle) environmental conservation efforts. Flannel waste has the advantages of having a soft texture, being easy to shape, being washable so it can be used repeatedly, having a variety of bright colors so it can attract children's attention, and being cheap and easy to obtain (Yunita, 2004). Sartika products health innovation product (Innovative syringe sarong) is a concrete solution in an effort to overcome the impact of hospitalization on children as well as a medium for utilizing used flannel waste that is no longer used.

2. METHODS

The method for this activity is divided into 3 preparation stages, implementation stage, and evaluation stage.

2.1 Preparatory stage

In the preparation stage, the team discusses technical matters such as the target

community, prepares tools and materials, then prepares a recipe for the product.

2.2 Level of Implementation

At this stage the team first carried out Trial & Error twice, then the team made production in increasing quantities with each production.

2.3 Evaluation Stage

This evaluation activity was carried out online (zoom) and offline at the FPOK campus of the Indonesian Education University, while the Sartika product evaluation process was carried out directly through a visit to RSUD Cibabat.

<p>Testimonial results from nurses RSUD Cibabat impact on the product Sartika</p>	<p>Testimonial results from sick child patients in the children's inpatient room at Cibabat Regional Hospital Cimahi towards Sartika products</p>
<p><i>"...This Sartika product (Innovative Syringe Glove) is very interesting, this can be tried on pediatric patients, this aims to reduce the impact of hospitalization on children, one of the atraumatic care measures which can distract children to forget the pain resulting from the actions impulsiveness, or actions that make them afraid, one of which is that when the patient is given an injection they see an animated character so that their fear can be distracted, this is truly extraordinary, interesting, we will try it... hopefully it can reduce the impact of hospitalization on children, thank you. ."</i> (nurse E, head of pediatric room, 46 year)</p>	<p><i>"...I really like the cute cartoon pictures, when I get the injection I don't get scared or cry..."</i> (child patient K, 9 years old)</p>



Figure 1. Guidance process with supervisor



Figure 2. Product Testimonials to Hospitals and Community Health Centers

3. RESULT AND DISCUSION

Sartika production activities lasted for 3 months. The product sold is sartika made from recycled flannel waste. This product is expected to be a more efficient alternative for preventing hospitalization in children. Business opportunities in the goods sector are very promising.

Sartika products are made from flannel waste, where flannel waste has the advantage of having a soft texture, easy to shape, can be washed so it can be used repeatedly, has a variety of bright colors so it can attract children's attention, is cheap and easy to obtain and is waste flannel has a high selling value, therefore the Sartika team recycles the original flannel fabric waste a product that is beneficial for everyone. Utilizing flannel waste in Sartika products is one of the 3R environmental conservation efforts (Reduce, Reuse and Recycle).



Figure 3. Implementation of activities

Sartika has a creative, cute and attractive shape with a simple, fashionable and adorable design because there are cartoons such as Hello Kitty, Winnie the Pooh, Mickey Mouse and many more which children like. The Sartika is uniquely packaged using foam which is inserted into the Sartika so that the product remains standing, then put it in plastic opp glue, then put it in a packaging box. In the packaging there is a Sartika product care procedure card that can be used repeatedly. On the side of the Sartika packaging there is a barcode which, when scanned, displays Sartika's social media which aims to make it easier for consumers to find out information about Sartika products and also purchase Sartika products.

Sartika is expected to be a superior product because of its extraordinary benefits. When installing the cartoon, the writing team experienced problems, namely if we used cartoons made from flannel, the strength of the product became less strong, so we innovated again by using embroidery that was formed into a cartoon, so that the product was safe and strong when used repeatedly.

Sales of Sartika products use social media platforms so that consumers can get to know Sartika as well as promotions related to Sartika products. The social media used include:

Instagram : hello.sartika

Facebook : Sartika Sarung Suntik Inovatif
 TikTok : sartika_upi
 Youtube : PKM-K_SARTIKA_UPI



Figure 4. Sartika Product Design



Figure 5. Sartika Product Design

1. Product Advantages

The idea emerged for the Sartika product (innovative syringe glove) which will be designed in such a way that users, especially pediatric patients, feel safe and comfortable when they are in the hospital. The advantages possessed by Sartika (Innovative injectable gloves) these are as follows:

Superiority	Description
Design	Sartika (innovative injection glove) has a creative, cute and attractive shape with a simple, fashionable and

	adorable design.
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Table 2. Sartika Product Advantages

2. Business Prospect Analysis

The business prospects of "Sartika (innovative injectable gloves)" as a product to prevent hospitalization can be studied using a SWOT (Strength, Weakness, Opportunity, Threat) analysis as follows:

Strength (Strength)	<ul style="list-style-type: none"> ● This business product is not yet on the market ● Has artistic value ● Has attractiveness ● Latest innovations ● Unique and creative
Weakness	the innovation is new, there are no examples or descriptions of products that already existed
Opportunities	<ul style="list-style-type: none"> ● As an alternative for nurses to facilitate care for pediatric patients who are hospitalized

Table 3. Business Prospects in SWOT Analysis

4. CONCLUSION

Implementation of health product innovation programs, innovative injection heaths (Sartika) to prevent hospitalization of children by using flannel waste as a funding entrepreneurship grant for 2023 through the Student Creativity Program (PKM) - in the field of Entrepreneurship, PKM is a program of the Ministry of Education, Culture, Research and Technology of the Republic of Indonesia. Sartika product innovation development, namely (1) overcoming the impact of hospitalization on sick children being treated in hospital, (2) as a distraction/trauma healing medium so that children do not experience trauma after medical procedures (injections) because Sartika uses animated characters that children like. -children,(3) creating cheap, creative and innovative health products, (4) as one of the steps to preserve the environment through the use of 3R (Reduce, Reuse and Recycle) flannel waste.

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