

Development of Handbook for Handling Sports Injuries in Elementary School

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Abstract

This study aims to develop a textbook for primary school PJOK teachers in Tanah Karo, Berastagi district, a pocket book for handling sports injuries as a medium for handling injuries if they occur at school. This research is a research and development R&D (Research and Development). This research was carried out with 9 steps, namely: potential and problems, data collection, product design, design validation, use trials, product revisions, product tests, design revisions, and product revisions. In developing this pocket book, it has been validated by several experts, namely material experts, media experts, and linguists. This product trial was directly carried out by 10 actors, either small group trials or large group trials. The subject of this research is the teacher of elementary school PJOK in the sub-district of Berastagi, Karo district. The data collection technique used in this research is to use a questionnaire instrument. The data analysis technique of this research is descriptive qualitative and descriptive qualitative percentage. The results of this study indicate that a pocket book in providing an understanding of the management of sports injuries in elementary schools is feasible. The results obtained from material experts amounted to 77.5% or can be said to be feasible; media experts by 82.5% or appropriate; linguists 85% or worthy, and the results of the PJOK teacher's questionnaire in elementary schools regarding media, materials and also the language of pocket books showed that the assessment was categorized into 95.5%. The conclusion of this study is that the pocket book has been completed until it is introduced and understands about handling sports injuries in elementary schools in Berastagi District, Karo Regency.

Keywords

development; pocket book; sports injury in elementary school



I. Introduction

Nassir Rosyidi (1983:10-11) concludes that physical education, sports and health is education that actualizes the potential of human activity in the form of attitudes and works to be given form, content, direction towards personality in accordance with human ideals. Furthermore Nasir Rosyidi said it was not only physical education that was important.

Physical education Sports and health are an integral part of overall education, aiming at aspects of physical fitness, movement skills, critical thinking skills, social skills, reasoning, emotional stability, moral action, aspects of a healthy lifestyle and the introduction of a clean environment through physical activities, sports and activities. selected health services that are planned systematically in order to achieve national education. Ministry of National Education (2006:131) Physical education, sports and health is one of the subjects given at a certain school level which is one part of the overall

education that prioritizes physical activity and fostering a healthy life for physical, mental, social and emotional growth and development. harmonious, harmonious and balanced.

According to Astuti et al (2019) Education is an obligation of every human being that must be pursued to hold responsibilities and try to produce progress in knowledge and experience for the lives of every individual. Education is one of the efforts to improve the ability of human intelligence, thus he is able to improve the quality of his life (Saleh and Mujahiddin, 2020). Education is expected to be able to answer all the challenges of the times and be able to foster national generations, so that people become reliable and of high quality, with strong characteristics, clear identities and able to deal with current and future problems (Azhar, 2018).

Engkos Kokasih (1992:4) states that physical education, sports and health is education that actualizes the potential of human activity in the form of attitudes, actions and works to be given form, content and direction towards unity in accordance with human ideals. Syamsu Yusuf (2009: 24) states that the elementary school age period is often referred to as the intellectual period or the period of school compatibility. At the age of 6 or 7 years, usually children who have matured to enter elementary school. During this school compatibility period, children were relatively easier to teach than before or after.

Purwanto, (2009: 77) concludes that injury is a disorder that occurs in our body that can cause pain, heat, redness, swelling, and cannot function properly, especially in muscles, tendons, ligaments, joints or bones due to movement activities. overload or accident. Injury is an excessive or too heavy force in an activity that causes pain, disability, or other pain. Mistakes in handling accidents can result in injury to students. Injuries must be treated properly. If there is an error in handling the injury, it can cause serious injury and even death. The teacher is the closest person when the children are in the school environment. Teachers need to understand and be able to provide first aid to children when they have an accident or bad condition in the school environment (Setiani & Priyonoadi, 2015: 8).

Injuries that often occur in elementary school children are sprains or often called sprains, bruises that occur during sports, abrasions due to falling while playing, collisions while playing, nosebleeds, bumps due to stumbling etc. In line with (Arif Setiawan 2011:95) the causes of sports injuries are usually the result of direct trauma/impact or repeated training and can also be due to a curious mindset, so that many movements can still be incorrect, even playing with a very long time.

In this study, the author raises the issue of developing a pocket book in which the material is on handling sports injuries in the physical education teaching and learning process for PJOK teachers in elementary schools throughout the sub-district of Berastagi, district of Karo. A teacher must know how to handle and help injuries, during the quality learning process it is necessary to immediately receive serious attention and treatment from the parties in it.

Table 1. Number of teachers in each elementary school in Berastagi sub-district, Karo district

No	Teacher Name	Teaching at	Graduated	PPC Learning	
				Yes	No
1.	Rugun R Simanulang	SD Negeri 040458 Berastagi	Unimed'09		√
2.	Rencana sitohang	SD Negeri 040462	Unimed'09		√
3.	Dian Pranata Tarigan	SD Swasta Trinity	Unimed'12	√	

4.	Nuriati	SD Negeri Impres 1	Stok binaguna'2010	√	
5.	Pretty Br Sembiring	SD Negeri 040457	Unimed'18	√	
6.	Dies Sitepu	SD Swasta Methodist Berastagi	Unimed'12	√	
7.	Romila Sari	Sd Swasta Gemilang Berastagi	Unimed'19	√	
8.	Mayor Tarigan	SD Negeri 040459	Stok binaguna'13	√	
9.	Limia Tridewani Br Tarigan	SD Swasta Masehi Berastagi	Unimed'15	√	
10.	Adam Ginting	SD Swasta Masehi Berastagi	Unimed'17	√	

Source: Karo Regency Government Education Office in 2020.

The results of observations and research findings as for the problems that occur at this time and have not been resolved, as follows:

- a. That as PJOK teachers, it is often found that during physical education lessons that children often fall, bump into PJOK teachers are confused in terms of handling and end up going straight to UKS.
- b. The lack of knowledge of PJOK teachers about handling in the event of an injury
- c. When injuries happen to every child, it can hinder the growth and development of the child.
- d. Lack of information and direction in dealing with injuries quickly and appropriately in the event of an injury.
- e. Not all schools have UKS facilities, even people who are competent in the field of handling injuries

In this case, the researcher can conclude that the pocket book is a guide and as a reference to be able to deal with sports injuries at school, it may not be new anymore but it is possible that there can be a lot of knowledge from the development of the pocket book, which is simple, small, complete, and easy to understand, you can take it everywhere, even though this pocket book will be located in Mr.'s room or UKS room so that everyone can read it and even sispa can use this pocket book. Alternative learning resources developed through this research are pocket books. A pocket book is a small book that is easy to carry and can be put in a pocket (Big Indonesian Dictionary, 1990:811).

The pocket book developed through this research measures 10 cm x 7 cm so that it is easy to carry anywhere and the reading descriptions on each page are relatively short. The presentation of this pocket book uses many pictures and colors so that it gives an attractive appearance. Students tend to like interesting readings with few descriptions and lots of pictures or colors (Wardhani, 2012:12). According to Setyono (2013:13) in his research shows that the learning media developed in the form of bulletins Handling injuries during the teaching and learning process for PJOK teachers in the form of pocket books has very good criteria based on the assessments of material experts, Indonesian language experts, and design experts giving an average the average rating is 86.56%.

Specifications The product developed in this research is an injury handling pocket book which will be easy and very practical to develop knowledge, understanding of injury handling, with the injury management pocket book, the PJOK teacher can quickly and precisely handle injuries if they occur, even the pocket book easy to carry everywhere Because in the fur pocket is a book that contains knowledge of injuries, injury

management, injury prevention precisely and quickly which will be displayed by pictures, and the descriptions of course make it easier to understand, easy to carry everywhere which is more practical and useful for elementary school teachers in reducing the risk of injury and handling injuries when an injury occurs.

Research Purposes

The aims of this research are as follows:

1. Making a pocket book for handling sports injuries in elementary school.
2. Knowing the feasibility of a pocket book for handling sports injuries in elementary schools.

II. Research Method

This development method is a qualitative and quantitative method. Which is a step to develop a product that Sugiyono has been able to account for (2020: 9), this research is perfect for producing products by adapting Sugiyono's development model (2020: 35). Research and development (R&D) is a basic research activity to obtain information on user needs (needs assessment), then proceed with development activities to produce products and how to assess product effectiveness.

III. Results and Discussion

3.1 Model Development Steps

a. Potency and Problem

This stage is intended to look for early sources in the form of the main problems faced by Physical Education Teachers. At this stage the authors seek information in several related sources regarding the handling of sports injuries for CAD subjects.

The purpose of this research and development is to produce a product in the form of a pocket book for handling sports injuries in elementary schools. Based on the objectives, the research model used in the study is a conceptual research model. Where the conceptual model which is a model based on the operationalization of theory or principles through validation of the procedure in leading to the production of an alternative form of problem solving. The resulting product is then systematically tested, evaluated, revised until the product meets the specified criteria in terms of quality, effectiveness or other standards.

Research and development also makes adjustments to procedures to the conditions of research and development that are faced and investigated. The researcher uses ten steps/procedures of research and development but it is adjusted by the researcher according to the limitations and conditions of the researcher. The steps modified by the researcher are in the operational field test and dissemination and implementation stages. At the operational field test stage, the researcher's involvement and the available samples made the researcher to carry out tests that were not comprehensive, which were only carried out in 9 schools. At the dissemination and implementation stage, it is limited to a few schools. Therefore, the researcher changes the name of the procedure at the dissemination and implementation stage to limited dissemination.

The research and development of sports injury handbook products is not only useful for physical education teachers in elementary schools, but all teachers in elementary schools because this injury management pocket book is related to everyone who is faced with sports injuries in these elementary schools. So that this pocket book can be useful for all, not just physical education teachers in elementary schools.

The development of this pocket book, including the product, is intended to find out how important it is that a product is needed to overcome the problems encountered in PJOK subjects and in this stage it is intended to find preliminary sources in the form of problems that are perfectly faced in PJOK learning needs by using an analytical questionnaire. needs that are spread to several teachers. This stage is carried out for product analysis to be developed. The results of the observations made in the study, the researchers saw that the guidebook or literacy for dealing with sports injuries in elementary schools was still lacking, especially for PJOK teachers in elementary schools. At least the teacher has a handbook or media to be able to handle sports injuries personally, even for every teacher at the school can use the pocket book in handling injuries that will occur in the future.

From the results of this analysis, it can be produced in the form of a book development, namely an injury handling pocket book which will contain injury handlers.

b. Data collection

c. Developing product

Developing is intended to find out how important a product is needed to overcome the problems encountered in learning activities. This can be done through observation and questionnaires.

From the results of the development of needs that have been carried out, the researchers got the idea to develop a product in the form of developing a pocket book for handling sports injuries in elementary schools.

d. Product Design

After the idea is generated, the next step is to design a product design that is in accordance with the potential and existing problems, the researcher also conducts an analysis of the material to be discussed. This analysis includes an analysis of the structure of the content, the material discussed is adapted to the material on handling sports injuries. The results of the analysis that have been obtained are used as a reference for determining product design. The process of making a design which includes the contents of the book, images, background, type and color of the text as well as the appearance in the book.

e. Design Validation

At the validation stage, researchers who have designed the product do not yet know whether the product design can be applied in the extension group or not. Therefore, validation is needed to assess the product design that has been produced. After the product design stage is complete, it proceeds to the next stage, namely the media and product validation stage. In this case, the product in question is in the form of a sports injury management pocket book for primary school PJOK subjects to be developed, a feasibility assessment is carried out by the reviewer to get scores and input. The feasibility assessment was obtained from three experts, namely:

Material expert Dr. dr Novita Sari Harahap, M.Kes, as a media expert Mr. Dr. Indra Kasih, S.Pd., M.Or, and as a mother tongue expert Dr. Elly Prihasti Suryanti., S.S, M.Pd

1. Material experts assess aspects in the form of appropriateness of the contents of the pocket book to determine the quality of the material.
2. Design experts assess several aspects including design aspects, content design, images, colors, text and book forms.
3. Linguists assess the aspects of how the language in the pocket book is, Is it feasible and can be understood by the reader? How to use EYD in the pocket book?

f. Design Revision

Based on expert validation, the incoming data is then used as a reference in revising the product. In making this sports injury handbook, there were several revisions by experts ranging from material experts, who had revised the material in the pocket book on traditional karo materials. Design experts who revise on how to cover appropriate for the pocket book, and linguists who revise about the grammar used in the pocket book. The results of the first product revision are then used in product trials.

g. Product Trial

This trial is intended to obtain various inputs, suggestions, corrections and assessments about the products that have been produced. In this trial, it will be carried out giving pocket books to experts, so that researchers can find out how appropriate the pocket books are used before being used for elementary school PJOK teachers.

h. Product Revision

After passing the trial, it will be known the weaknesses contained in the development that the researchers did. By studying the weaknesses in the resulting product, the researcher will revise the product, by collecting data from the participants being tested. So that the data obtained will facilitate researchers in conducting product revisions.

i. Trial Usage

The results of the second product revision will then be used in a trial use. The use trial is intended to obtain assessments, inputs and suggestions about products that have been previously revised.

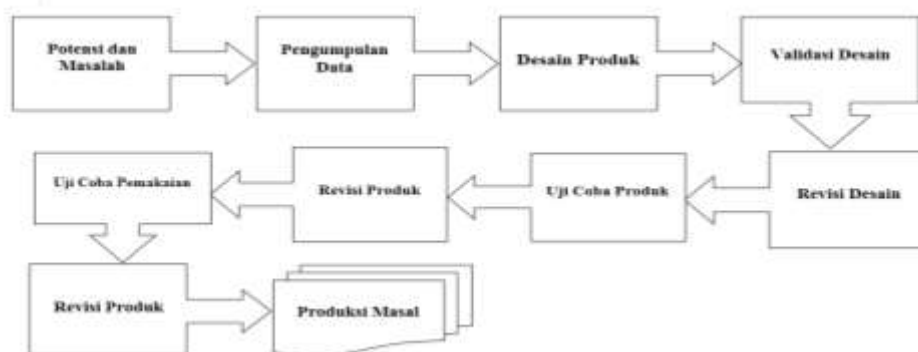
j. Product Revision

Products that have been tested by primary school PJOK teachers will also be revised, which is referred to as product revision, this is because in the trial use for the questionnaires distributed there are suggestions and improvement sheets.

k. Mass Production

The manufacture of this mass product is carried out if the product that has been tested is declared effective and feasible for mass production. However, in this study, it did not reach the stage of mass production, because this product was only available to certain groups of people.

From the description of the steps described above, the series that will be developed in this research are as follows:



Source: Development Research Design (Sugiyono, 2019:404)

Figure 1. Method Use Steps Research and development (R&D)

3.2 Research Result

Table 2. Data on the results of the assessment “Pocket Book for Handling Sports Injuries in Elementary Schools”

No.	Aspects that Rated	The Score Obtained	Maximum Score	Percentage (%)	Category
1.	Eligibility of material content	31	40	77,5	Decent enough
Total score					

In the validation of the percentage obtained 77.5%, it can be stated that according to material experts, at the first validation stage the pocket book media which was developed from the aspect of the feasibility of the content of the material received the "fairly decent" category.

Table 3. Data on Assessment Results of Pocket Book Media for Handling Sports Injuries in Elementary Schools

No.	Aspects that Rated	The Score Obtained	Maximum Score	Percentage (%)	Category
1.	Eligibility of material content	33	40	82,5	Worthy
Total score		33	40	82,5	

In the validation in the first stage, the percentage obtained was 82.5%. Thus, it can be stated that according to media experts, at the first validation stage, instructional media or pocket book guidelines developed from the design feasibility aspect were categorized as "Eligible".

Table 4. Data on the Results of the Language Assessment of Handbooks for Handling Sports Injuries in Elementary Schools

No.	Aspects that Rated	The Score Obtained	Maximum Score	Percentage (%)	Category
1.	Eligibility of material content	34	40	85	Worthy
Total score		34	40	85	

In the validation in the first stage, the percentage obtained was 85%. Thus, it can be stated that according to linguists, at the first validation stage, learning media or pocket book guidelines developed from the aspect of language feasibility were categorized as "Eligible".

Table 5. Data from Primary School Teachers' Research Pocket Book on Handling Sports Injuries in Elementary Schools

No.	Aspects that Rated	The Score Obtained	Maximum Score	Percentage (%)	Category
1.	Eligibility of material content	382	400	95,5	Very Worthy
Presentase		382	400	95,5	

At this stage of validation, the percentage obtained is 95.5%. Thus, it can be stated that according to elementary school teachers, at the validation stage, the pocket book as a developed guidebook is in the "Very Eligible" category.

IV. Conclusion

Through the development steps that have been carried out to test the pocket book which was developed through data analysis carried out on pocket book data, it can be concluded that:

1. The sports injury handbook developed by the researcher is suitable for use by PJOK teachers at schools.
2. The pocket book for handling sports injuries in elementary schools is very effective in being used as a guide book for PJOK teachers.

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