

Designing of The Illustration Book as A Learning Media About Dental Health for Children Ages 4-7 Years

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Abstract. Dental health is one aspect that must be cared for and maintained as early as possible by everyone. But there are still many people who are not yet aware of the importance of maintaining dental health, and this causes a high number of cases of tooth decay in children. The importance of maintaining dental health is directly proportional to the need for media to socialize and inform about how to care for and maintain dental health conditions in the community. Therefore, one solution is the need for information media to educate the public, especially parents and children about the importance of dental health. The media that will be created is an illustration book containing various types of information about how to care for teeth properly, diseases that will arise if we do not care for teeth and the introduction of dentistry to children. The method used is qualitative by searching for data in various ways such as literature, conducting interviews and observations. The design results expected from this illustration book can help parents and their children get basic information and invitations to maintain dental health.

Keywords: book, illustration, learning media, dental health.

1 Introduction

Health is a very valuable asset in a person's life that is influenced by several factors, including heredity, environment and behavior. For a healthy body we must really pay attention to the environment and daily behavior, because healthy behavior will have a good impact. The habit of clean and healthy living needs to be familiarized as early as possible because this habit will carry over into adulthood.

Therefore, the best time to practice a healthy lifestyle for someone is at an early age. Because early childhood sometimes does not know what to do and do not understand what is good and not for them. And a child's growth period is the right time to have a positive influence, teaching many new things and good knowledge to save children in the future. Things like this need to be done and implemented as early as possible for the good and health of individuals later.

One that must be applied to children is awareness of maintaining health such as maintaining dental health. Oral and dental health in Indonesian society needs to be considered. In Indonesia, dental and oral diseases are one of ten diseases spread in various

regions. As well as the percentage of people who have dental and oral problems according to Riskesdas (*Riset Kesehatan Dasar*) in 2007 and 2013 increased from 23.2% to 25.9%. Of the population with dental and oral health problems, the percentage of people receiving dental care increased from 29.7% in 2007 to 31.1% in 2013 including children.

Dental health is an integral part of overall body health, because teeth are an important part of the body. Teeth are parts of the body that function to chew, speak, maintain facial features, and aesthetics. Healthy teeth are clean teeth without plaque, caries, pain, and other diseases. Teeth can function properly if teeth are healthy, if not teeth that are not healthy will cause problems [1].

For this reason, it is expected to maintain dental health from an early age so that the teeth can be free of disease and have healthy teeth. Children need lessons on how to care for dental health because children do not know the importance of maintaining dental health and children sometimes eat or drink whatever they like, especially sweet and cold foods without knowing that it can have an adverse effect on tooth. Then if not treated properly and correctly. Maintaining through behavior and habits is a good starting point to maintain dental health, then consultation and routine checkups to the dentist is also one way to maintain dental health.

However, many children are afraid when they must see a dentist when dental examinations must be done as the best way to maintain dental health. Helping a child to receive dental care without a negative experience that can affect a child's perspective on dental care is one of the skills that a dentist must have. For starters, building trust and empathy in children are two basic principles to be able to make children receive and enjoy the process of dental care. Therefore, there is a need for more in-depth research to obtain various information about how to properly care for teeth and tell about diseases that will arise if we do not care for teeth and others. Researchers make direct observations through visits to the hospital or to obtain data about dental health so that children can get appropriate dental learning.

Learning for children can be done in various ways, one of which is through reading books for children. Through books, children can understand a topic with their own imagination and absorb knowledge by tending to be faster. So, with this background, we need an illustration book for learning media about dental health for children. Furthermore, this book is expected to help and provide useful information and knowledge about packaged teeth and with a series of visuals that can attract children's attention and in simple language.

2 Theory

Picture book are the books most liked by children. As the name implies, the story is often called *cergam* picture is a story that is not only presented in the form of writing or words alone but contains illustrations that support the course of the story. In general, children's books always appear with attractive colors and good pictures. With pictures, the idea of the story is visualized so that his imagination helps to increase the thrill of the story.

Rustan, in the book *Basic Layout & Implementation* describes that a book contains of pages that are quite a lot, thicker than the booklet [2]. And according to Stewing, in Azhari, picture book is a book that teaches a story with pictures [3]. These two elements work together to produce stories with illustrations of images. Usually pictorial books are meant to push toward appreciation and love of books. In addition to verbally should be interesting story, the book should contain images that affect the interest of children to read.

Soedarso defines illustration as an art of drawing or painting that is perpetuated or another purpose, which provides an explanation or accompanies understanding, such as a short story in a magazine [4].

In the book 'Understanding Color' Holtzchue said that color is stimulating, calming, expressive, disturbing, impressional, cultural, exuberant, and symbolic [5]. Albert H. Munsell in Swasty revealed 10 basic hue families namely red, yellow, green, blue and purple as primary colors and orange, yellow-green, blue-green, purple-blue and red-purple colors as intermediate colors [6].

3 Research Methods

The research method in this design process is by distributing questionnaires to 25 respondents, to find out about dental health care activities, whether teeth are regularly examined by dentists, what media is appropriate for children's learning media and so on. In addition, interviews were also conducted to support existing data so that the design of this book can produce more valid results. In this design also uses a matrix to compare visual objects in the form of three similar books that are used as references for making learning media for children.

3.1 Data and Analysis Results

The conclusion of this analysis is that children's books must have pictures to attract attention and be useful for conveying clearer information. The illustration technique for the three books analyzed is using cartoon style and with digital illustrations. The colors used are dominated by bright colors that are suitable for children and typography is used especially sans serif letters such as *Summertime Lovin* and *Playtime with Hot Toddlies*. The concept of the message of three books is to provide information and provide examples to children so that their children's knowledge can grow wider.

4 Design Concept

Based on the results of data analysis obtained by the author on learning media for children in the form of picture books about dental health and the introduction of dental profession, it is necessary to have the concept of messages that are easily understood by everyone who will read it, especially children.

Therefore, the concept of the main message is educational books that are adapted for cognitive development of children aged 4-7 years with the use of simple language but still contain clear information with the help of interesting illustration, so it is suitable for reading at any time.

The creative concept used to provide children's knowledge about dental health and the introduction of the dental profession for children using an interesting illustration approach and using the correct and easy language approach to understanding children towards the process of information delivery achieved and motivating children to be more diligent in learning.

This illustration book will explain about dental health and the introduction of the dentist profession which consists of several chapters, with the use of three characters in the book namely Dika (the main character), mother and doctor Billy (the dentist). This book is designed in accordance with the creative concepts that have been designed, namely with language that is easily understood by children and the use of illustrations that are quite dominant.

The use of colors for this illustration book will be dominated by bright colors that are striking and eye-catching. Bright colors have a cheerful nature and spirit according to the character and nature of children so that it is expected to motivate children to be more

enthusiastic to learn and attract children to increase interest in reading the illustrations of this book.

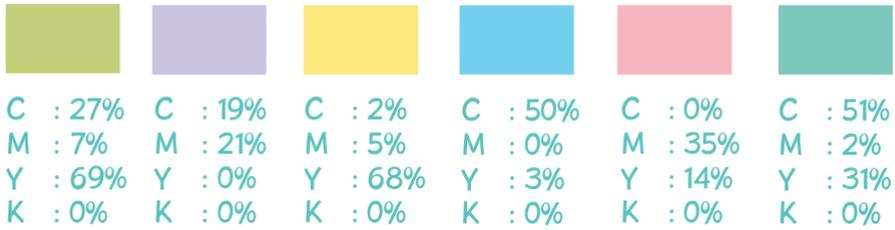


Fig. 1. Color Palette (Author’s Documentation)

The type of letters used is to represent the characteristics of children who are stories and fun, also have a good level of legibility. The name of the font used is *Summertime Lovin* and *Playtime with Hot Toddies*.



Fig. 2. Font Summertime Lovin and Playtime With Hot Toddies (Author’s Documentation)



Fig. 3. Layout and Grid Sample (Author’s Documentation)

5 Conclusion

The design of this illustrated book that aims to help parents and children in maintaining and caring for their teeth is made with simple illustrations that are suitable for children, including the selection of picture characters, colors, and typeface.

The contents of the book are also made quite comprehensive which contains insight into dental health and disease, and also reminds children to keep their teeth every day. Apart from that, further research is highly recommended to be able to improve the results of making this book.

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