

EXPERIMENTAL PACKAGE DESIGN FOR FIRST AID KIT

**BY
MISS PHATNAREE PLOYBOONNAK**

**THIS BOOK IS PART OF THE REQUIREMENT TO FULFILL
VIS 4116 ART THESIS I & VIS 4122 ART THESIS II
DEPARTMENT OF VISUAL COMMUNICATION DESIGN
ALBERT LAURENCE SCHOOL OF COMMUNICATION ARTS
ASSUMPTION UNIVERSITY**

2018

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(A. DARUNEE SA-AREDEE)

DEAN

ALBERT LAURENCE SCHOOL OF COMMUNICATION ARTS

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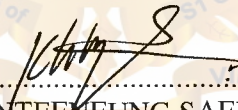
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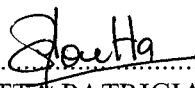
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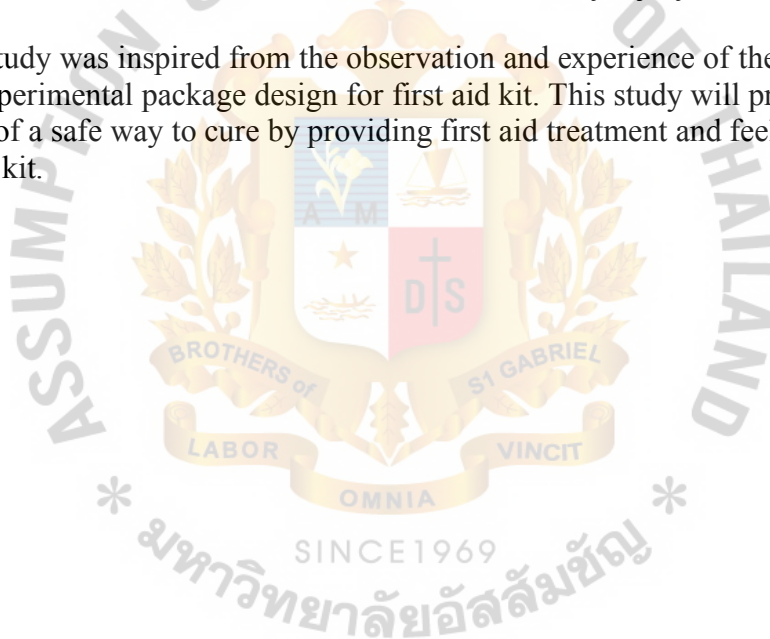


ABSTRACT

First aid is the care that is given to an injured or sick person prior to treatment by medically trained personnel. Accordingly, from my experience I had seen people using external medication in a wrong way, also they do not know how to use a first aid kit, when they get injured, correctly. Moreover, some people have a problem with the size of first aid kit that they cannot bring it outside with them. Therefore, from my observation they are many package designs for first aid kit which does not divide or separate external medication and medical supplies. This study was done to introduce and help people using external medication safely and correctly.

According to the experimental package design for first aid kit, I will create, a package design for First Aid kit which provides info graphic brochure with pictogram about how to provide first aid treatment and also create packaging for medical supplies. First aid kit will be like your close friend that you feel relieved and would like to go out with. To do outdoor activities alone, when you are in an unexpected accident then your friend will protect and help you as the first aid kit to relieve and to recover from any injury that happens to you.

This study was inspired from the observation and experience of the designer and to become an experimental package design for first aid kit. This study will provide and make people know of a safe way to cure by providing first aid treatment and feel comfortable to carry first aid kit.



ACKNOWLEDGMENT

The success and final outcome of this project required a lot of guidance and assistance from many people and I am extremely privileged to have got this all along till the completion of my project. All that I have done is only due to such supervision and assistance and I would not forget to thank them.

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CHAPTER 1 INTRODUCTION

Chapter 1

Introduction

Title: Experimental Package Design for First Aid Kit

1.1 Background:

Household medicine is a collection of medicine that Ministry of Public Health designates as a household medicine which the general public who is not a pharmacist or a doctor can use without any danger and can use it for a first aid kit. Moreover, for treating any sickness that is not serious to a patient or anybody can use it to treat themselves such as cough, headache, and flatulence etc., and it can be bought without a doctor's prescription. Furthermore, household medicine is quite cheap so that anybody can buy it and look for it at any place such as grocery, drugstore or departments store. In order that, Ministry of Public Health want general public can use and effort medicine easily thoroughly the country and can take care and have ability to treat themselves. First aid, or emergency first aid, is the care that is given to an injured or sick person prior to treatment by medically trained personnel. Some self-limiting illnesses or minor injuries may only require first aid intervention, and no further treatment. First aid generally consists of some simple, often life-saving techniques that most people can be trained to perform with minimal equipment. First aid usually refers to administration of care to a human, although it can also be done on animals. The aim of first aid is to prevent deterioration of the patient's situation, to aid recovery, and to preserve life. Technically, it is not classed as medical treatment and should not be compared to what a trained medical professional might do. First aid is a combination of some simple procedures, plus the application of common sense. From my experience I had seen people who have used the external medication by confusion with the shape of the bottle which both look similar. Moreover, in some case because of the information on label it is too small and hard to read. It is dangerous and they might be risk for their health or body if they use the medicine incorrectly. It must be good if there is a kit for external medication and medical supplies which provides information on how to use it clearly. Furthermore, by providing some graphic for visualization of the medication that understandably makes everyone understand the same way and by using medication easily and safely.

1.2 Significance:

This study will help to using external medicine safely and correctly. The kit will provide the user of how to first aid treatment. Also, it gives a clearly pictogram which help people to memorize the product and what type of medicine. For this kit, it provides a necessary external medication and medical supplies in one kit. Furthermore, a user or any other person can know and understand how to render first aid treatment from this kit as well.

1.3 Problem Statement:

From my observation, there are many package designs for a first aid kit which do not divide or separate external medicine and medical supplies. It puts all the medicine and medical supplies together by arranging it in one kit. Moreover, there are some pharmacies or drugstores which set a medicine kit as a gift set for selling, from these they do not have any information of how to use inside the kit and also they let the user read the label or any information by themselves which is also difficult for some people who do not understand of how to use each medical correctly. Furthermore, there are many people who do not know how to use external medicine and know well of how to first aid treatment correctly. As a result of using the first aid the wrong way, it might affect our body more and suffer more pain badly or affect our life.

1.4 Project Objectives

1. To design and create a First Aid Kit based on standard medicine kit
2. To design infographics which contains info about how to provide First aid treatment correctly
3. To provide necessary external medicine and medical supplies for First Aid treatment

1.5 Expected Results

I will create a great First Aid kit of external medicine and medical supplies which make everyone to understand how to use the First Aid kit easily. This package will provide infographic about how to provide First Aid treatment clearly. Moreover, storage and classification or separate of the external medicine and medical supplies clearly. Furthermore, the medicine kit will provide the convenience of using the package and it can help the user to avoid using the wrong types of medication or does not show proper symptoms as well and use the medical safely.

1.6 Scope of Study

1. Packaging for First Aid Kit
2. Packaging for Medical supplies
3. Infographic for First aid treatment
 - Minor cuts and scrapes
 - Mosquito bite
 - Insect bites and stings
 - Snake bite
 - Spiders bites and Scorpion Stings
 - Minor burn wound 1st-degree
 - First aid for Fracture
 - Broken Bone
 - Dislocated joints
 - How to make arm sling
 - Sprain ankle
4. Pictograms for First Aid treatment
5. Basic supplies and medication
 1. Alcohol Prep Pads
 2. Iodine Pads
 3. Soap Wipes
 4. Sting Relief Prep Pad

5. Gauze Pad
6. Band-Aid
7. Triple Antibiotic Ointment
8. Burn Dressing/Burn Gel
9. Adhesive Tape
10. Conforming Bandage
11. Elastic Bandage
12. Triangular Bandage
13. Safety Pins
14. Scissors
15. Tweezers
16. Plasters





CHAPTER 2

INFORMATION ANALYSIS

Chapter 2

Information Analysis

2.1 Literature Review

2.1.1 Art / Design Theories

- **Universal Design**

Universal Design is the design and composition of an environment so that it can be accessed, understood and used to the greatest extent possible by all people regardless of their age, size, ability or disability. An environment or any building, product, or service in that environment should be designed to meet the needs of all people who wish to use it.



Fig.1 Help Remedies – Remedies made simple, no long descriptions and the products are distinguished by a minimalist, eco-friendly packaging.

1. Equitable Use: The design is useful and marketable to people with diverse abilities. Equal Access in order for a design to be truly universal, it must be useful to people with all kinds of conditions and abilities. This includes people with disabilities or activity limitations.



Fig.2 One Handed Home First Aid Kit

2. Flexibility in Use: The design accommodates a wide range of individual preferences and abilities. Flexibility is important so that the design is flexible enough to apply to all different kinds of people who have a huge variety of different abilities or disability. An example might be providing information in Braille underneath signs so that people who are blind can read them.



Fig.3 7-Day Braille Pill Box Drug Tablet Case for Blind

3. Simple and Intuitive Use: Use of the design is easy to understand, regardless of the user's experience, knowledge, language skills, or current concentration level. Simplicity The design should be easy to understand so that people with varying levels of education and experience can use it.



Fig.4 First Aid Kit Redesigned by Kevin Harald Campean

4. Perceptible Information: The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities. Effective communication and design must convey the needed information to the user, even if they have limitations in their sensory capabilities or ability to process this information.



Fig.5 The First Aid Support Kit Employs Infographics for Easy Use by Kristine Erdmann

5. Tolerance for Error: The design minimizes hazards and has adverse consequences of accidental or unintended actions. High tolerance for error. If a user accidentally makes a mistake while using the design, it's important that they are not harmed or their situation is not made more difficult as a result.

6. Low Physical Effort: Minimal effort required A person should be able to apply the design easily, even if they have limits to their physical or mental capabilities. The design can be used efficiently and comfortably and with a minimum of fatigue.



Fig.6 Multi-functional Household - Medicine box multi-layer, many drawers medicine cabinet and strong boxes

7. Size and Space for Approach and Use: Appropriate size and space is provided for approach, reach, manipulation, and use regardless of user's body size, posture, or mobility. Suitable space and size for use No matter what size a person is or how mobile they are, they should have enough space and the ability to effectively use the design.



Fig.7 Outdoor First Aid Emergency Medical Kit Survival bag
Wrap Gear Hunt Travel Storage Bag medicine kit

- **Medical Packaging**

Medical packaging serves as several important functions, but its primary role is to protect a packaged medical or pharmaceutical product. Because medical products can feature unique specifications and often require sterilization prior to packaging, medical packaging is designed to both uphold the highest medical standards and ergonomically protect the integrity of a product. As a result of the wide array of medical components, medical packaging ranges from pre-formed packages to customized packages for specialty parts. Variations in size, dimension, rigidity, breathability and sterility enable even the most delicate medical component to be shipped in an appropriately engineered package. Packaging is responsible for maintaining the quality, safety and stability, and purity of pharmaceutical products packaged until it is exhausted or expired. The packaging is so important. To protect the product contained within it from the environment such as light, heat, moisture, gases and microorganisms. The changes will affect the chemical and physical properties of the drug, which causes deterioration of quality of pharmaceutical products.

1) Primary Packaging - This is the first packaging envelope which is in touch with the dosage form or equipment. The packaging needs to be such that there is no interaction with the drug and will provide proper containment of pharmaceuticals.

a. Blister packaging - Blister packs are commonly used as unit-dose packaging for pharmaceutical tablets, capsules or lozenges. Blister packaging protects pharmaceuticals in the home better than bottles do. Tamper evidence is another strength of blister packaging. The dosage units are individually sealed in constructions of plastic, foil, and/or paper. With blister packaging, however, each tablet or capsule is individually protected from tampering until use, so any form of tampering with a blister package is immediately visible.

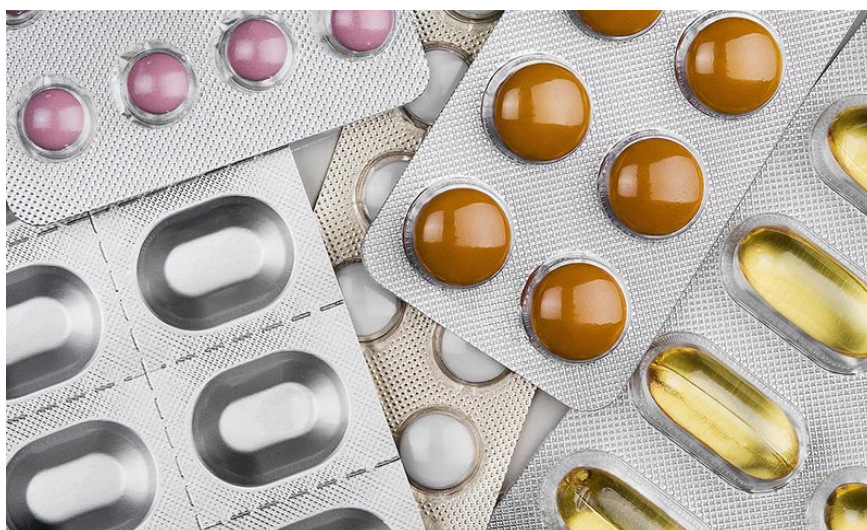


Fig.8 Blister Packaging

b. Strip packaging - Strip packaging offers a more user-friendly packaging solution than bottled tablets and capsules. It provides economical packaging solutions for highly sensitive drugs. It is a strong and perfect pharma packaging material for protection and distribution of the drug. Strip packaging is the exact size of the capsule or the tablet in question. It keeps the pills and capsules organized, separated and safe. Strip packaging allows one to consume a single tablet without touching the packaging of the other tablets.



Fig.9 Strip Packs Foil



Fig.10 Pharmaceutical Strip Foils

c. Foil or Aluminum Foil - Whether as foil or vacuum-deposited on film, aluminum is a barrier against light, oxygen, and moisture. Those properties are in increasing demand, owing to the growth in medical devices that incorporate pharmaceuticals and biologics. When aluminum is the barrier layer in a lamination, there needs to be a heat-seal layer, since aluminum doesn't seal by itself. From another perspective, aluminum is vulnerable to chemical attack and to flex-cracking, reasons to sandwich it between protective layers. Yet another consideration is aluminum's susceptibility to pin holes, necessitating that it has adequate thickness.



Fig.11 China blister aluminum foil for drug packing

d. Containers (Drug substances) - A container for pharmaceutical which holds or intended to contain and protect a drug and is or may be in direct contact with it. The closure is a part of the container. The container and its closure must not interact physically or chemically with the substance within in any way that would alter its quality. The following terms include general requirements for the permeability of containers (3):

- i. Light-Resistant Container (see light transmission under containers)
A light-resistant container protects the contents from effect of light by virtue of the specific properties of the material of which it is composed, including any coating applied to it. Alternatively, a clear and colorless or a translucent container may be made light-resistant by means of an opaque covering, in which case the label of the container bears a statement that the opaque covering is needed until the contents are to be used or administered. Where it is directed to “protect from light” in an individual monograph, preservation in a light-resistant container is intended.



Fig.12 Amber Medicine Bottles

- ii. Well-closed containers must protect the contents from extraneous matter or from loss of the substance under normal conditions of handling, shipment or storage.



Fig.13 Pill packaging plastic bag



Fig.14 Plastic Medicine Cartridge

- iii. Tightly closed containers must protect the contents from extraneous matter, from loss of the substance, and from efflorescence, deliquescence or evaporation under normal conditions of handling, shipment or storage. If the container is intended to be opened on several occasions, it must be designed to be airtight after reclosure.



Fig.15 Tightly closed containers— Cemol

2) Secondary packaging - This is consecutive covering or package which stores pharmaceuticals packages in it for their grouping. E.g. Cartons, boxes, etc.



Fig.16 Secondary packaging of primary importance



Fig.17 Healthcare Packaging by Platinum Press Inc.

3) Tertiary packaging - This is to provide bulk handling and shipping of pharmaceuticals from one place to another. E.g. Containers, barrels, etc.



Fig.18 Tertiary packaging



Fig.19 Pharmaceutical pack protection

• **Infographic**

An infographic or information graphic is a representation of information in a graphic format designed to make the data easily understandable at a glance. People use infographics to quickly communicate a message, to simplify the presentation of large amounts of data, to see data patterns and relationships, and to monitor changes in variables over time. Creating and designing an infographic are collecting information or information which is hard to understand by a lot of text which is then redesigned and represented in different way such as bar graphs, pie charts, histograms, line charts, tree diagrams, mind maps, Gantt charts, and network diagrams etc. To make an infographic looks interesting, it must have enough of information then summarize it. Moreover, analysis and compile it with picture or image which helps the infographic to be more attractive.



Fig.21 Infographic of how danger of Paracetamol and how to using Paracetamol



Fig.22 Infographic of home first-aid kit

Tips in Designing Effective Infographics

1. Focus on a single topic - First thing to consider is to have a single topic for an infographic. You will have an effective output if you will try to give answers to a single question. You can create clearer visualizations if you know where you are going to. This will also avoid confusion for your readers and viewers. After determining your topic, determine a particular question that you want to be answered in your infographics.
2. Keep it simple - Since you are creating something to convey a message, you have to make sure that it is not over designed and makes the information complicated. You need to keep it simple in order not to confuse the readers and viewers. An over-complicated visual will not be effective and might even cause misinterpretation. Also, if it is too crowded, it might not attract the viewers but drive them away.
3. Data is important - The real reason why you are creating an infographic is to give information about a particular topic or issue. So, in creating it, do not forget that it is the most important thing. Do not overdo the design to the extent that it will dissolve the information. You have to make sure that your design will give clear emphasis to the facts and figures.
4. Be sure facts are correct - It is important to make sure that your data is correct. If not, this will decrease the credibility of your infographics. So, before you make it, be sure your facts are right. Research well and use the right information. Remember that your aim is to give information. So, it has to be right. Never forget to proofread your output and check the facts.
5. Let it tell a story - An effective infographic can manage to tell a story with the illustrations and graphics. It should be able to say something so that it can relay the information even if they haven't read the text yet.
6. Good design is effective - If we speak of visuals, a good design will always hit the mark. No matter how simple your infographics is, use your creativity to make the design appealing. When we speak of design, colors, type, layout and the use of white space matters. People would stare longer at an infographic which has a good design.
7. Choose attractive colors - Colors are vital. Choose those which can give a great impact to the viewers. Take note of color psychology, too. Use the right colors that fit the topic you will create an infographic for. But it doesn't necessarily need to be colorful. Some infographics use only few colors but are still effective.
8. Use short texts - You are creating a visual presentation so you need to use brief texts that are direct to the point. These could be labels or short messages that can support your visuals. To make the story compelling, it is better to use words in minimum number. You also have to choose the right font type that is readable.



Fig.23 Example of folding infographic

- **Pictograms**

Pictograms (often also known as “pictographs” or, as single units, “icons”) are essentially images that are used to represent data. They are usually a simplified representation of a concept, with an uncolored flat design. Pictograms are ideal for designers because they can give a snapshot of quantity and volume in a visually impactful way.

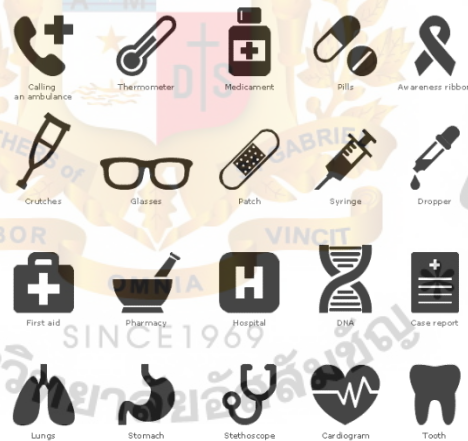


Fig.24 Medicine and health pictograms

The use of pictograms in the health care

The ability of patients to understand pharmacotherapy information is critical to the successful use of medications. One of the risk factors that may predispose the patient to non-adherence is the low retention of verbal information. Thereby, one way to facilitate the understanding of patients regarding prescribed pharmacotherapy is to incorporate pictograms to transmit information in a clear, expeditious, and simple manner.



Fig.25 Medicine supplies pictograms

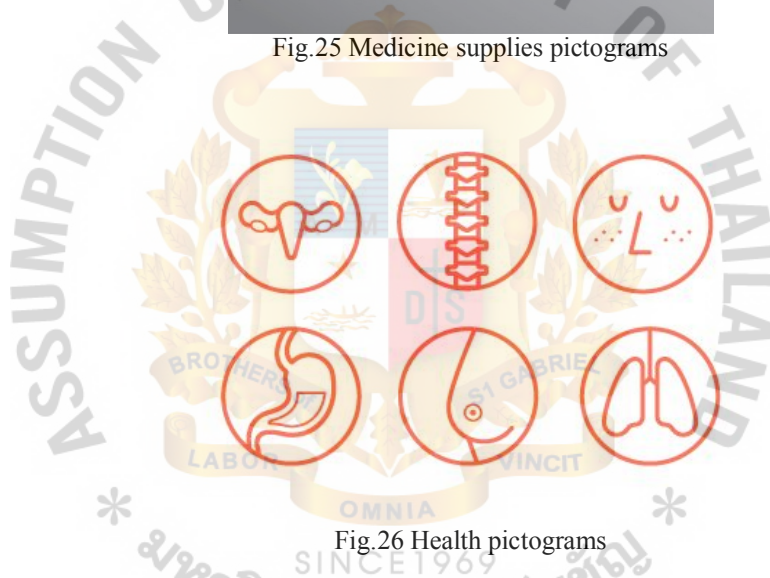


Fig.26 Health pictograms

2.1.2 Other Related Topics

- **Medicine Kit**

Medicine kit is a necessary and important one for the family. When an illness like flu, hives, diarrhea, flatulence-gas. We don't need to rely on a doctor or go to hospital every time due to general illness, some can heal by themselves. And if you get sick at night. To go to the hospital late at night might be difficult and inconvenient, especially in remote rural areas. It also reduces the economic loss if we know the self-healing by the initial treatment.



Fig.28 First aid kit

• First Aid treatment

First aid means to assist those who meet with an accident or sudden illness, using tools or equipment that you can find. To help relieve the symptoms of patients and help patients get hurt less before being taken to hospital for medical treatment.

การปฐมพยาบาลเบื้องต้น

การให้ความช่วยเหลือเบื้องต้น แก่ผู้ที่ได้รับอุบัติเหตุหรือเจ็บป่วยกระทันหันโดยใช้เครื่องมือ หรืออุปกรณ์ที่พอจะหาได้ในบริเวณนั้น เพื่อช่วยบรรเทาอาการของผู้ป่วยและช่วยให้ผู้ป่วยได้รับอันตรายน้อยลง ก่อนที่จะนำส่งโรงพยาบาลเพื่อให้แพทย์ทำการรักษาพยาบาล ต่อไป

First aid for Minor cuts and scrapes

1. Wash your hands in order to help avoid infection.
2. Stop the bleeding by applying gentle pressure with a clean bandage or cloth and elevate the wound until bleeding stops.
3. Wipe around the wound with alcohol and then apply Povidone-Iodine on the wound.
4. Cover the wound by apply a bandage, rolled gauze or gauze held in place with paper tape.
5. Change the dressing, do this at least once a day or whenever the bandage becomes wet or dirty.

See a doctor If you see signs of infection on the skin or near the wound.

มีดบาดและแผลถลอก

1. ล้างมือให้สะอาดทุกครั้งก่อนทำแผล เพื่อป้องกันการติดเชื้อ
2. การห้ามเลือด ให้ใช้ผ้าสะอาดหรือผ้าพันแผลกดตรงบาดแผลเพื่อห้าม เลือดโดยกดจนกว่า เลือดจะหยุดไหล
3. เช็ดรอบบาดแผลด้วยแอลกอฮอล์จากนั้นใส่ยาสำหรับแผลสดลงบนบาดแผล
4. ปิดบาดแผลด้วยพลาสติกหรือผ้าก๊อซสะอาด หรือใช้ผ้ายัดพันแผล ปิดบาดแผลให้เรียบร้อย
5. ทำความสะอาดบาดแผล อย่างน้อย วันละครั้ง หรือเมื่อพลาสติกหรือ ผ้าพันแผลชื้นหรือสกปรก

สังเกตอาการ หากสงสัยว่าแผลมีอาการติดเชื้อ ควรไปพบแพทย์ทันที



Fig. 29 First aid for scrapes

Insect bites and stings

1. If the insect's stinger is still embedded in their skin, remove it by gently scraping a flat-edged object, such as a credit card, across their skin. Avoid using tweezers to remove the stinger, since squeezing it may release more venom.
2. Wash the area of the bite with soap and water.
3. Place a cold compress or ice pack on the area for about 10 minutes at a time to help reduce pain and swelling.
See a doctor if the area seems to be getting larger or redder or is oozing, which are signs of infection.

แมลงหรือสัตว์มีพิษกัดและต่อย

1. ถ้ามีเหล็กไนให้ใช้บัตรลักษณะแข็ง ค่อยๆ ขูดเอาเหล็กไนออกมา หลีกเลี่ยงการใช้แหนบดึงเหล็กไนออก เนื่องจากอาจทำให้พิษหลั่งออกมามากขึ้น
2. ทำความสะอาดบริเวณที่ถูกกัดด้วยสบู่ และน้ำสะอาด
3. วางแผ่นประคบเย็นบริเวณบาดแผลประมาณ 10 นาที เพื่อบรรเทาอาการปวดและบวม

สังเกตอาการ หากสังเกตเห็นอาการใดๆ ที่แย่ลงหรือเริ่มรู้สึกว่ามีผิวหนังบริเวณนั้นเกิดการติดเชื้อ ได้แก่ มีรอยแดง การบวม หรืออาการเจ็บปวดเพิ่มขึ้น มีแผลพุพองหรือน้ำเหลืองบนบริเวณที่เกิดแผล



Fig.30 Insect bites and stings bite mark

First aid for Mosquito bite

1. Wash the area with soap and water.
 2. Apply Sting relief pad on skin area.
 3. Put an ice pack on the bite.
- See a doctor if a bite causes fever, vomiting, or shortness of breath.

ยุงกัด

1. ล้างบริเวณที่ถูกกัดด้วยน้ำสะอาดหรือน้ำสบู่
 2. ทายาฆ่าเชื้อ บรรเทาอาการคัน บริเวณที่มีอาการคัน
 3. ประคบเย็นที่แผลถูกกัดด้วยน้ำแข็งหรือน้ำแข็งห่อผ้าประคบบริเวณตุ่มคัน
- สังเกตอาการ หากหลังจากถูกกัด เกิดมีไข้ อาเจียน หรือหายใจถี่ ควรรีบไปพบแพทย์ทันที



Fig.31 Mosquito bite mark

Spider bites and Scorpion Sting

1. Clean the wound. Use mild soap and water.
2. Apply an antibiotic ointment.
3. Apply a cool compress. Use a cloth dampened with cold water or filled with ice. This helps reduce pain and swelling. If the bite is on an arm or leg, elevate it. See a doctor If you were bitten by a black widow or brown recluse spider. You have severe pain, abdominal cramping or a growing ulcer at the bite site.

แมงมุมกัดและแมงป่องต่อย

1. ล้างบริเวณแผลด้วยน้ำสะอาดและน้ำสบู่
 2. ทายาปฏิชีวนะลงบนบาดแผลที่ถูกกัด
 3. ประคบเย็นที่แผลที่ถูกกัดด้วยน้ำแข็งหรือใช้ผ้าชุบน้ำเย็นแล้วบิดให้แห้งประคบประมาณ 10 นาที เพื่อลดการกระจายของพิษ ตลอดจนอาการปวดและบวม หากถูกกัดบริเวณแขนหรือขา ให้ยกบริเวณที่ถูกกัดให้สูงไว้
- สังเกตอาการ หากคาดว่าอาจถูกแมงมุมแม่ม่ายดำหรือแมงมุมสันโดยสีน้ำตาลกัด และมีอาการแพ้ใด ๆ เกิดขึ้นหลังจากนั้น หรือบริเวณที่ถูกกัดติดเชื้อ มีผื่น หรืออาการป่วยรุนแรงตามมา ควรต้องรีบไปพบแพทย์ทันที



Fig.32 Spider bite mark



Fig.33 Spider

Snake bite

If you are bitten by a venomous snake, call 1669 or your local emergency number immediately, especially if the area changes color, begins to swell or is painful.

1. Remain calm and move beyond the snake's striking distance.
2. Remove jewelry and tight clothing before you start to swell.
3. Position yourself, if possible, so that the bite is at or below the level of your heart.
4. Clean the wound, but don't flush it with water. Cover it with a clean, dry dressing.
5. If wound is still bleeding then apply more gauze pad on the wound.

งูกัด

หากถูกงูกัด ให้รีบโทรหาเบอร์แพทย์ฉุกเฉิน 1669 โดยเฉพาะเมื่อสังเกตเห็นบริเวณบาดแผลที่ถูกกัดเปลี่ยนสี เริ่มบวมอักเสบและมีอาการปวด

1. เคลื่อนไหวร่างกายบริเวณส่วนที่ถูกกัดเท่าที่จำเป็น
2. หากใส่เครื่องประดับ หรือสวมใส่เสื้อผ้าที่คับแน่นให้ถอดออก
3. ปรับท่าให้ตำแหน่งบริเวณที่ถูกกัดอยู่ในระดับต่ำกว่าหัวใจ
4. ล้างบาดแผลด้วยน้ำสะอาดและปกป้องบาดแผล โดยการใช้ผ้าพันแผล หรือผ้าก๊อชปิดบริเวณบาดแผล
5. หากเลือดยังคงไหลอยู่ ให้เพิ่มผ้าพันแผลหรือผ้าก๊อช โดยให้วางทับซ้อนบนผ้าพันแผล ที่ซุ่มเลือดก่อนหน้านี้ไม่ควรนำผ้าพันแผลก่อนหน้านี้



Fig.34 Snake bites mark

Minor Burns Wound 1st-degree

1. Hold the burned area under cool, not cold running water for 15 to 20 minutes or until the pain eases.
2. Don't break small blisters. If blisters break, gently clean the area with mild soap and water.
3. Apply an antibiotic ointment or Relieve Burn Gel which may provide relief.
4. Cover the wound with a nonstick gauze bandage or clean cloth.
See a doctor if you develop large blisters or if you notice signs of infection, such as oozing from the wound and increased pain, redness and swelling.

แผลไฟไหม้ น้ำร้อนลวก ระดับที่ 1

1. ล้างทำความสะอาดแผลโดยเปิดให้น้ำไหลน้ำสะอาดอุณหภูมิปกติ ไม่ควรใช้น้ำเย็นจัด ให้ไหลผ่านส่วนที่เป็นแผลประมาณ 15-20 นาที หรือจนกว่าอาการปวดแสบปวดร้อนจะลดลง
2. อย่าทำให้ตุ่มพองเล็ก ๆ ที่อาจเกิดขึ้นแตก หากตุ่มใสแตกให้ล้างบริเวณบาดแผลด้วยสบู่อ่อนและน้ำสะอาด
3. ทายาปฏิชีวนะหรือ ทาเจลสำหรับแผลไฟไหม้เพื่อบรรเทาอาการปวด
4. ปิดบาดแผลด้วยผ้าก๊อชหรือผ้าสะอาด

สังเกตอาการ ถ้ายังมีอาการปวดแสบปวดร้อน ผิวหนังมีรอยถลอก มีตุ่มพองใส หรือมีสีของผิวหนังเปลี่ยนไป ควรรีบไปพบแพทย์



Fig.35 First aid for burn

Fracture: Broken bone

Call 1669 or your local emergency number immediately

1. Stop any bleeding: If there is bleeding then elevate.
2. Apply pressure to the wound using a sterile bandage, a clean cloth, or a clean piece of clothing.
3. Apply cold compression to the area. Wrap an ice pack or bag of ice cubes in a piece of cloth and apply it to the injured area for up to 10 minutes at a time.
4. If you suspect they've broken a bone in their neck or back, help them stay as still as possible.

Don't try to realign the bone or push a bone that's sticking out back in. If you suspect they've broken a bone in one of their limbs, immobilize the area using a splint or sling.

กระดูกหัก

โทร 1669 หรือรีบนำส่งผู้บาดเจ็บไปรักษาที่โรงพยาบาลโดยทันที

1. ห้ามเลือด โดยหามมีเลือดไหล ให้ยกบริเวณบาดแผลให้สูงขึ้น
2. ใช้ผ้าพันแผล หรือผ้าสะอาด กดตรงบริเวณบาดแผลเพื่อห้ามเลือด
3. ใช้แผ่นประคบเย็น หรือผ้าสะอาดห่อด้วยน้ำแข็ง ประคบบนลงบาดแผลโดยประคบมากกว่า 10 นาทีขึ้นไป
4. หากกระดูกหักที่หลังหรือคอ ให้ทำการป้องกันโดยไม่ให้เคลื่อนไหวตัว ไม่ควรพยายามจัดกระดูกเข้าที่เดิม หากหักที่แขน ขา ให้ใช้ผ้าสามเหลี่ยมคล้อง หรือพันบริเวณที่หัก



Fig.36 First aid for Broken bones

Dislocated joints

1. Advise them to stay still and help them to support their dislocated joint in the most comfortable position.
2. Stop the joint from moving using a bandage. For an arm injury, make a sling to support the arm. For a leg injury, use padding or broad-fold bandages.
3. To give extra support for an injured arm, tie it in place by bandaging around the sling and the chest.
4. Once you've stopped the joint from moving, take or send the injured person to hospital.
Keep checking their breathing, pulse and level of response. Check the circulation beyond the bandages every 10 minutes and loosen if necessary.

ข้อเคลื่อน

1. ผู้บาดเจ็บควรอยู่ในท่าที่สบาย และให้พักข้อหักนั้นๆ เตรียมพร้อมสำหรับการปฐมพยาบาล
2. การป้องกันไม่ให้ข้อเคลื่อน ใช้ผ้าสามเหลี่ยมสำหรับข้อเคลื่อนที่แขน และสำหรับบาดแผลบริเวณขา ให้พันด้วยผ้ายึด โดยไม่ควรแน่นเกินไป
3. สำหรับข้อเคลื่อนที่แขน สามารถใช้ผ้ายึดพันผ้าสามเหลี่ยมเข้ากับหน้าอกได้
4. หลังจากป้องกันผู้บาดเจ็บไม่ให้ข้อเคลื่อนได้แล้ว ให้ส่งตัวผู้บาดเจ็บไปรักษาที่โรงพยาบาล
สังเกตดูอาการ คอยสังเกตจังหวะหายใจและชีพจรของผู้บาดเจ็บ และตรวจสอบผ้าพันแผล
ทุกๆ 10 นาทีและคลายออกถ้าจำเป็น

How to make an Arm sling

An arm sling stops someone's arm moving and protects it so it can heal.

1. Slide the triangular bandage underneath it, with the longest edge parallel to their body at the tip of the little finger. The tip of the bandage should stick out past their elbow.
2. Gently pull the top bit under their bad arm and around the neck to the opposite shoulder. Take the bit that's hanging down over their arm and up to meet the other end at their shoulder.
3. Tie the ends together in a reef knot at the hollow above their collar bone and tuck in the ends.

4. Twist the tip by their elbow until it fits snugly around their elbow and tuck it in or safety pin it.
5. Check their circulation in their fingers and keep checking every ten minutes. If it's too tight, loosen the bandage and sling and tie them again.

การใช้ผ้าสามเหลี่ยม

ผ้าสามเหลี่ยม ใช้คล้องเพื่อให้บริเวณที่หักหรือเคลื่อนอยู่นิ่งๆ

1. วางผ้าสามเหลี่ยมให้มุมยอดของผ้า สามเหลี่ยมอยู่ใต้ข้อศอกข้างที่เจ็บ ให้ชายผ้าด้านพบพาไปที่ไหล่ข้างหนึ่ง
2. จับชายผ้าด้านล่างตลบกลับขึ้นข้างบน ให้ชายผ้าพาดไปที่ไหล่ข้างเดียวกับแขนข้างที่เจ็บ
3. ผูกชายทั้งสองให้ปมอยู่ตรงร่องเหนือกระดูกไหปลาร้า
4. เก็บมุมสามเหลี่ยมโดยใช้เข็มกลัดติดให้เรียบร้อย
คอยสังเกตที่นิ้ว และตรวจสอบทุกๆ 10 นาที ถ้าผ้าที่พันนั้นแน่นเกินไป ให้คลายออกแล้วผูกด้วยผ้าสามเหลี่ยมอีกรอบ



Fig.37 How to make an arm sling

Sprain ankle

1. Help them to sit or lie down and support in a comfortable raised position the part they've hurt.
2. To cool the area, apply a cold compress, like an ice pack or cold pad. This will help to reduce the swelling, bruising and pain. Do not leave on for more than 10 minutes.
3. Leave the cold compress in place or wrap a soft layer of padding, e.g. cotton wool, around the area. Tie a support bandage around it, to hold it in place, which goes up as far as the next joint on each side. For example, for an ankle injury, the bandages should go from the base of the toes to the knees.
4. Elevate the injury and support it with something soft, like cushions.
5. See a doctor If the pain is severe, or they can't use their limb at all, take or send them to hospital.

ข้อเท้าเคล็ดหรือแพลง

1. วางผู้บาดเจ็บลง หรือให้อยู่ในท่านั่ง เพื่อให้สามารถยกขาข้างที่ได้รับบาดเจ็บขึ้นได้อย่างสะดวก
2. ประคบด้วยความเย็นในบริเวณที่บวมแดง จะช่วยบรรเทาอาการปวดและลดการบวม ประคบทิ้งไว้นาน 10 นาที
3. การพันผ้าพันแผล ใช้ผ้าพันบริเวณที่พลิก แต่ผ้าที่พันควรเป็นผ้ายืดและไม่พันแน่นจนเกินไป วางผ้าลงบริเวณที่ต้องการพัน พันจากส่วนปลายไปหาส่วนโคน หรือ พันจากข้างล่างขึ้นข้างบน หรือ พันจากส่วนเล็กไปหาส่วนใหญ่ เมื่อสิ้นสุดการพัน ควรผูกหรือใช้เข็มกลัด ให้เรียบร้อย
4. ยกบริเวณที่บาดเจ็บให้สูงเข้าไว้ หรือหาเก้าอี้หรือเบาะนุ่มๆมาหนุน เพื่อลดอัตราการหล่อเลี้ยงของเลือดไม่ให้เข้าไปยังบริเวณที่บวมได้สะดวก
สังเกตอาการ หากอาการบวมไม่หายและยังคงมีอาการปวดอยู่ หรือมีไข้ ควรไปพบแพทย์ทันที



Fig.38 First aid for sprain ankle



Fig.39 First aid for sprain ankle

- **Basic supplies**



Fig.40 Grove sterile



Fig.41 Sterile-Dress kit



Fig.42 Bandage Triangulaire



Fig.43 Elastic Bandage



Fig.44 Gauze pad



Fig.45 Transpore tape



Fig.46 Cotton



Fig.47 Cool pack

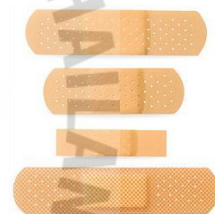


Fig.48 Band-Aids



Fig.48 Soap



Fig.48 Scissors



Fig.48 Tweezers

- **Medication**

1. Paracetamol - used to treat aches and treat mild to moderate pain.
2. Inhaler- use to relieve the dizziness and nasal congestion.
3. Balsum - used to relieve pain, swelling due to insect bites.
4. Liniment Oil – used to relieve the muscle aches and pains.
5. Calamine - used to relieve pain, itching, and discomfort from minor skin irritations such as poison ivy, poison oak, and poison sumac.
6. Burnova Gel – Moisturizing and soothing gel nourishes the skin which is sensitive to heat, sun, etc.
7. Solcoseryl Jelly 10% - For weeping wounds and burns
8. Antibiotic Ointment - used to prevent and treat minor skin infections caused by small

- cuts, scrapes, or burns. It is available without a prescription for self-medication.
9. Povidone-Iodine
 10. Ethyl Alcohol Solution
 11. Normal Saline Solution

2.2 Data Analysis

2.3.1 Key Questions

- a) What are the inconveniences of using First Aid Kits?
- b) What is the problem of user using medicine and medical supplies?
- c) Opinion on visual design of Experimental of First Aid Kits

2.3.2 Data Gathering

- Tools to Gather data:
 - a. Interview with 3 of pharmacists at drugstore or pharmacy
 - b. Questionnaire (Online) asking about using and buying Medicine kit and First Aid kit and general information about the problem of using medicine and Medicine kit.
- Respondent:
 - a. Interview
 - 1) Ms. Sukanda Maieam
Gender & Age: Female, 28
Social status: Pharmacist at drug store in Bang Phli District, Samut Prakarn Province
Education & Profession: Doctor of Pharmacy Program, Silapakorn University
 - 2) Ms. Tawanrat Lertwanichkitkul
Gender & Age: Female, 26
Social status: Pharmacist at drug store at Market Village
Education & Profession: Doctor of Pharmacy, Huachiew University
 - 3) Mr. Kasipat Pattanabovornwut
Gender & Age: Male, 41
Social status: Pharmacist and business owner at Health drug
Education & Profession: Bachelor's Degree in Pharmaceutical Science
 - b. Questionnaire (Online)
 - 1) Male and female, age from 20 years old and above, Thai people.

2.3.3 Conclusion

From interview with pharmacists, it is found that Medicine kit is important and that every house should have it at their house. When we get injured from an accident but not serious hurt or sickness such as at night. Then, we can use medicine and medical supplies to treatment and first aid. Which is convenient and easy for first treatment and does not need to go to the hospital. It can help us in emergency situation. Moreover, the problem they found from using their medicine kit is experiment of expired date then they cannot use the medicine when they needed. Furthermore, user and patient have a problem of using medicine. They do not know the clear information or how to use the medicine correctly. In some case, taking medicine over dosage so, they cannot relieve their symptom or disease due to lack of knowledge and misunderstanding of using medicine. In addition, Medicine kit that provides brochure which contains information about each medicine will be beneficial and advantageous for user and patient who does not know about how to use the medicine.

Interview 1: Ms. Sukanda Maieam

She said that medicine kit, it is a thing that everyone should have it at their home because we do not know when we will get sick or have fever which might happen at night so, medicine kit can help. Moreover, the problem which she faces with using her medicine kit was expired date of medicines. Then, she cannot take it or use it. For the most problem of her patient is how to use the medicine. When she had explained about how to use medicine later they do not understand it and use medicine with wrong instruction. Due to that they cannot get better from their sickness and later comeback for buying new medicine. Furthermore, she said mostly patients using medicine from recommendation of pharmacist. In addition, she thought that medicine kit will be nice if it provides how to use each medicine which has to be seen clearly and it can be visualized and know what kind of medicine.

Interview 2: Ms. Tawanrat Lertwanichkitkul

She said the medicine kit provides the convenience of using general household medicine. For example, when we get injured from an accident but not seriously hurt or any accident inside the house for which we do not need to go to the hospital. We do not need to look out for a drugstore, we can just use it and find it in your home for first aid. Mostly of her patients have a problem that they cannot use their medicine correctly. Moreover, they do not complete their dosage such as Antimicrobial drug and Anti-inflammatory drug which one has to continue taking the complete dose as the pharmacist ordered. She said that most patients use medicine as per the pharmacist's recommendation, but in some case they have their brand which they are familiar with when they find an example of the image of medicine they bought. Lastly her comment about Medicine kit was if the kit can provide information or structure of medicine it is good and benefit the user because they are some people who not know how to use the medicine.

Interview 3: Mr. Kasipat Pattanabovornwut

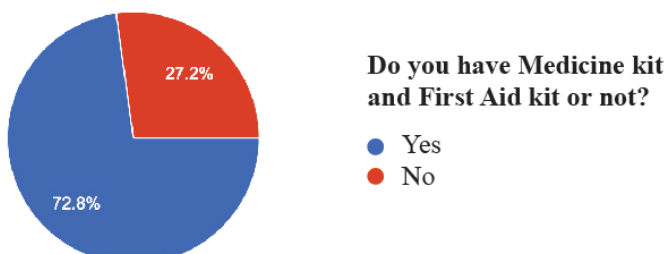
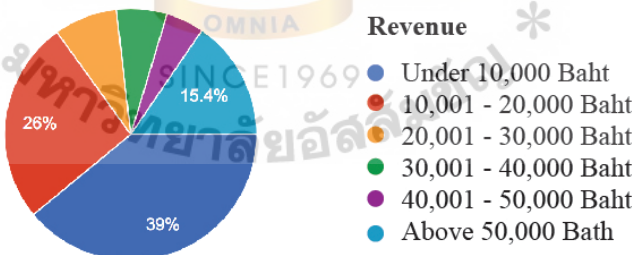
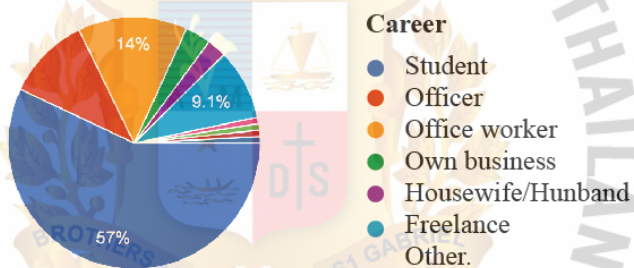
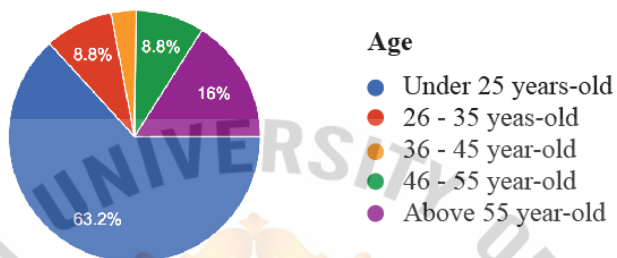
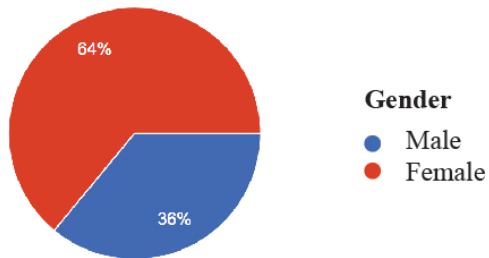
He said that a Medicine kit is important as it is used for first aid. It is very easy to use and it can help us when we are in emergency situations to use it. The problem his patient's faced taking a drug overdose such as taking paracetamol overdose. Mostly Thai people like to take two tablets but actually, people whose weight is less than 50 kilograms have to take one tablet and two tablets for people whose weight is more than 100 kilograms. This is the normal misunderstanding about taking medicine for a long time. Medicine causes liver disease so, they cannot take or use it for a long time. Moreover, it also has alcohol. Thai people think that alcohol is for cleaning wounds but actually used for cleaning medical equipment. If you want to clean your wound, you should use Normal Saline Solution instead of using Alcohol Solution. Furthermore, mostly his patient used medicine by following the pharmacist's recommendation and it depended on social status also like middle to high income will look for drugstore or pharmacy that has a pharmacist. And for the Medicine kit, if it can provide clear information and complete all details which the user needs it will be a good kit. For this part, it can help pharmacist like him to work easier. In addition, how to design labeling or any information it should be correct as per the rules of the documentary or requirement information of medicine.

- **Questionnaire (Online)**

The questionnaire was collected from the age group of 20 to above. 125 responses were evaluated with 80 females and 45 males. From an age range of under 25 years old by 79 people, 20 people were above 55 years old, 11 people were 26-35 years old, 11 people were 46-55-year-old and 4 people were 36-45 years old. Besides this, the questionnaire result shows the result that most respondents to the questionnaires were female at 64%. Moreover, there are students under 25 years-old response to 57%, office worker by 14% and freelance by 9.1% in sequence. The average revenue is about 10,000 to 20,000 Baht. From the result of questionnaire show that there are 72.8% or 91 people have medicine and First Aid kit. From 91 people who having the medicine kit, mostly they had the kit like plastic box, medicine cabinet and cloth bag with portable size in sequence. They bought it from drugstore or pharmacy in department store also, or they buy it from a retail store such as Tesco Lotus or Big C. The price of their kit is about 201 to 800 Baht. The problem about their kit, is that most medicines are arranging together in the kit as a result they cannot get it or it hard to find the medicine that is needed. Secondly, the kit does not separate internal and external medicine and medical supplies. Thirdly, the size of their kit is big, not portable and hard to carry. About the problem of using medicine and medical supplies, the problem is that the user cannot find the position of the manufacturing date and expiration date is hard to find out too. Next, when the label is gone then they cannot identify or recognize the medicine. Moreover, they cannot read manufacturing date and expiration date if it is not like this Exp. Date 02082002. Another problem is they cannot read the label or the pharmaceutical documentation, properties, dosage, administration and manufacturing date and expiration date because of text size being small. The result of 83 people from 91 people are interesting. Quality, price and packaging are the factors of deciding to purchase or not.

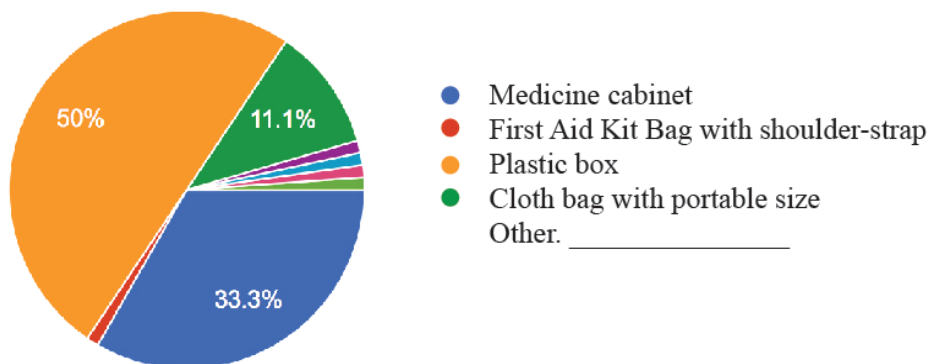
In addition, people have medicine kit in their house and mostly they have a plastic box which is easy to carry and is portable. And the problem from using their kit and medicine are various. The kit does not separate internal and external medicine which is hard to find the medicine if they need to use it. Another problem is information on labelling of each medicine is hard to read due to text being small. Besides this, it is hard for them without labelling or information on medicine package due to which they do not know how to using the medicine. They would like to have the kit which is easy to carry and portable and should separate internal and external medicine and provide information about medicine and expiration date clearly. Lastly, the medicines and medical supplies should be too much in one kit and provide only a necessary amount to avoid use beyond the expire date.

Part 1 : Profile and general information

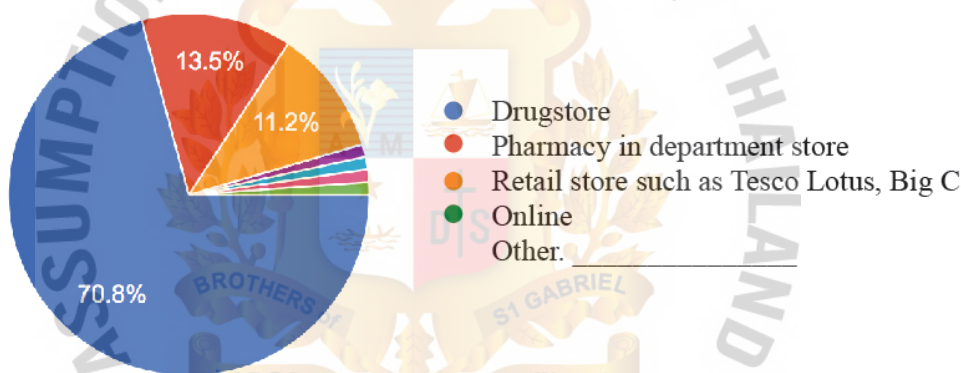


Part 2 : General information of using Medicine kit and First Aid kit

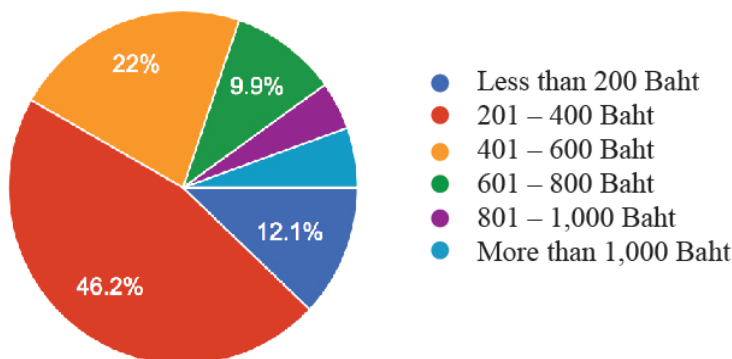
1. What kind of your Medicine kit and First Aid kit looks like?



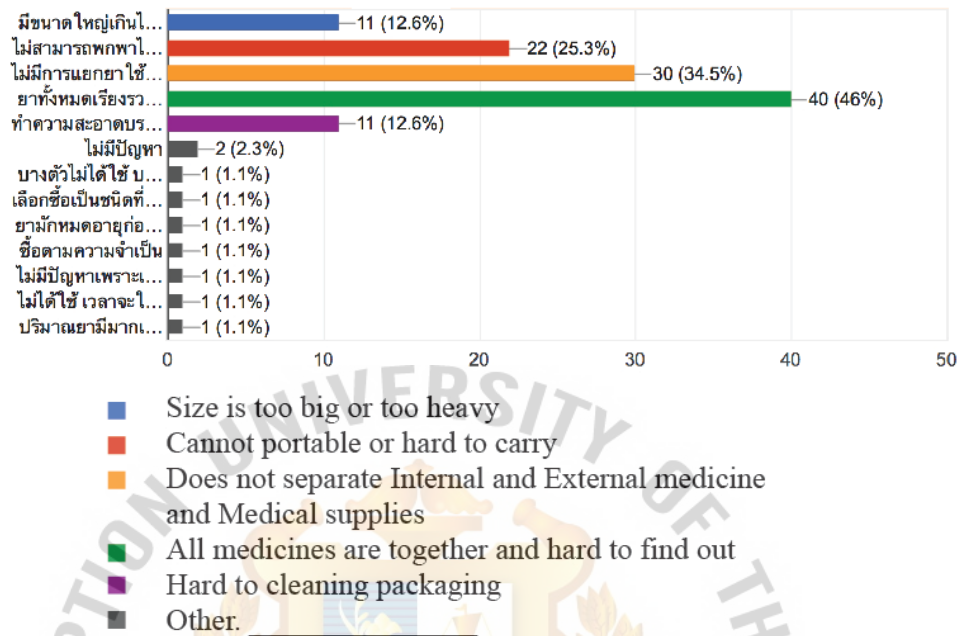
2. Where did you buy your Medicine kit and First Aid kit?



3. How much did you pay for the Medicine kit and First Aid kit?

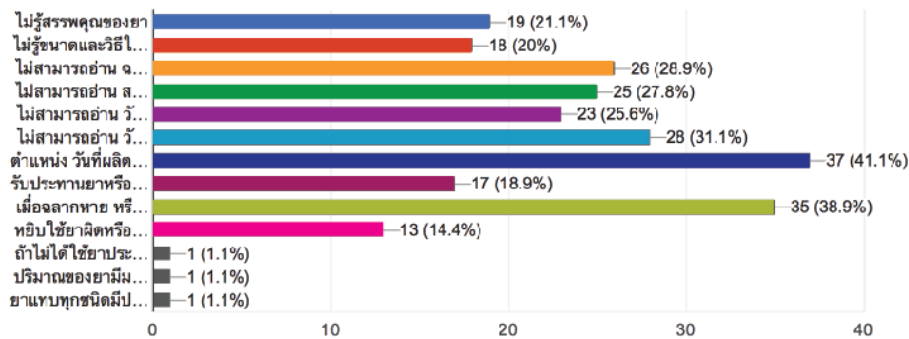


4. What are your problems about using Medicine kit and First Aid kit? (can answer more than one)



5. What are your problems about using medicine and medical supplies? (can answer more than

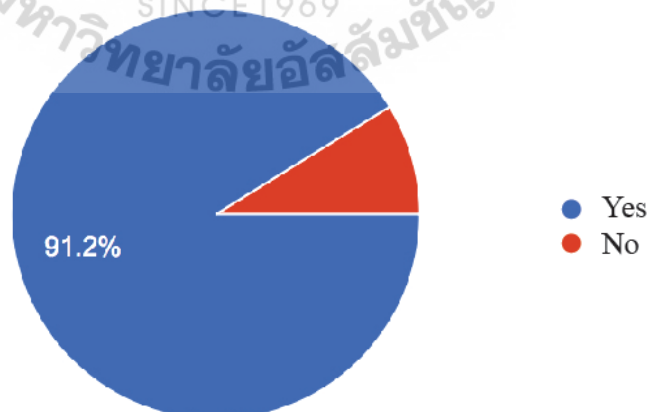
one)



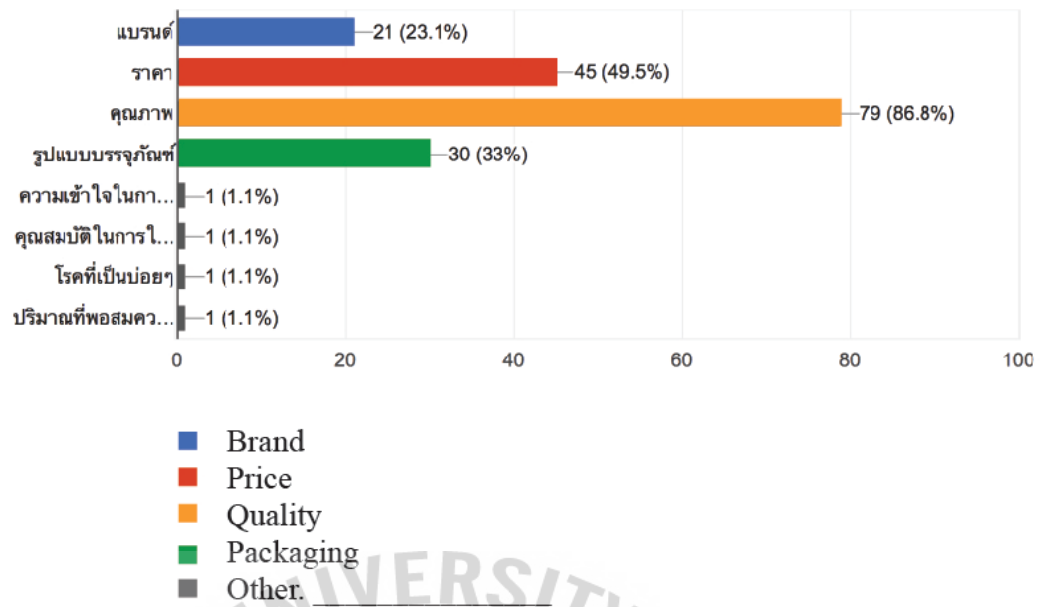
- Does not know properties
- Does not know dosage and administration
- Cannot read labeling or the pharmaceutical documentation because of text size is small.
- Cannot read properties, dosage and administration because of text size is small.
- Cannot read Manufacturing date and Expiration date because of text size is small.
- Cannot read Manufacturing date and Expiration date with arrange as international date
- Position of Manufacturing date and Expiration date is hard to find
- Using medicine by do not know Manufacturing date and Expiration date
- When labeling of medicine gone then cannot identify the medicine
- Using wrong medicine because medicine shape looks similar
- Other.

Part 3 : General information of buying Medicine kit and First Aid kit

1. If there are Medicine kits that provide necessary medicines and medical supplies. Moreover, if given a brochure with information about each medicine and how to use it. Would you be interested or not?



2. What are the factors that affect you from purchasing of packaging?



2.3 Design Analysis

2.3.1 Design Reference 1





Source: Kevin Harald Campean. (2014). *Concept: First Aid Kit*. Retrieved from: <https://www.behance.net/gallery/10177673/First-Aid-Kit>

Form – based on design principles

The main color is orange instead of using the traditional red or blue color to represent medicine. Using orange and contrast with white color make the kit look outstanding and can see the icon clearly. For about layout of all information, they are using sans-serif font and flush left which make all information easy to read. Moreover, using icon to describe of each medical supply is good.

Content – based on communication theory

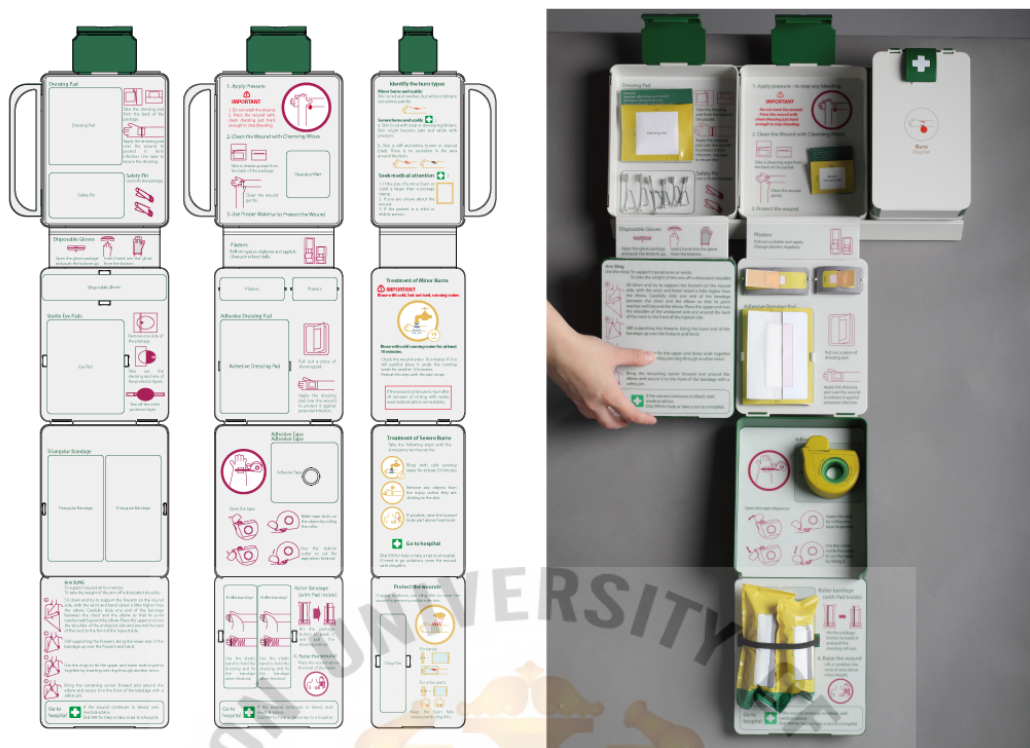
The kit comes with instructions and compartments which make people to find medical supply easily. Each compartment has an icon to describe where everything is located.

Response – based on viewers' reaction

The kit lets the viewer recognize and remember the kit easily from orange packaging. Moreover, people will know and use medical supplies more conveniently by seeing the icon on each compartment.

2.3.2 Design Reference 2





Source: Lucy Lin. (2014). *What If I Am Alone - EmergenSee*. Retrieved from: <http://searaes.wixsite.com/chiajuln/whatifiamalone>

Form – based on design principles

The kit is divided into 3 boxes for guiding users to the First aid treatment by themselves. Using a green color contrast on a light gray background can remind one of a hospital together with a white plus icon. The size of kit is fit to be placed in several places and is easily portable.

Content – based on communication theory

The kit provides instruction designed in the kit for guiding users for giving First Aid treatment information and steps on how to use the first aid kit. Moreover, there is some drawing to show the content of the First Aid instructions and provides content which is shown beside the material.

Response – based on viewers' reaction

A lot of people are interested in this package because instructions are designed in the kit for guiding users towards First Aid treatment which tells users how to give first aid treatment to themselves. These kits are a benefit for people who are living alone and if their hand gets cut by accident then this kit provides the tools that are easy to operate using only the other hand to first aid themselves.

2.3.3 Design Reference 3



Moshithings. (n.d.). *Large First Aid Kit*. Retrieved from: <https://www.mochithings.com/products/51218>

Form – based on design principles

The main color is red and light gray. To identify that this is the first aid kit, they put the plus icon to represent that this kit is for treatment and first aid. The package is made from durable fabric. A zipper lock is provided to open-close the kit which is easy for the user.

Content – based on communication theory

The kit was designed for traveling, camping, classroom, and home. Moreover, it features first aid supplies in one kit. Moreover, it provides medical supplies for first aid treatment.

Response – based on viewers' reaction

The kit was designed for traveling, camping, classroom, and home. Moreover, it features first aid supplies in one kit. Moreover, it provides medical supplies for first aid treatment.



CHAPTER 3

DESIGN IMPLEMENTATION

Chapter 3

Design Implementations

3.1 Communication Objectives

1. To present information about first aid treatment by using design with pictures.
2. To make people know how to use a safe way to cure by First Aid treatment.
3. To make people feel comfortable to carry First Aid Kit.

3.2 Concept I

“Pock - kit (pocket + kit)”

Mood & Tone: Casual/Stability/Fashionable

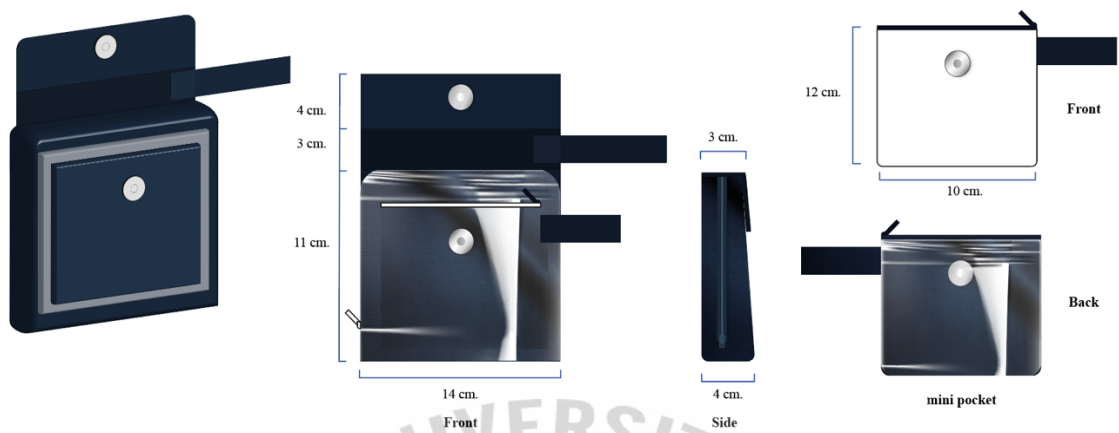
Support:

Due to the problem of the size of first aid kit is uncomfortable to bring and keep it when going outside. Then it became this concept, a kit that can take and carry everywhere with you as a pocket bag. Also, it can separate into two parts in order to use for specific and suitable treatment. It is easy to carry and can keep in your bag due to the portable size of the kit.

Image Board



Sketch Design



Type: Package design
Detail: 11 cm x 14 cm / Dark blue / Nylon fabric
Technique: Hand sewing



Type: Folding brochure design
Detail: 7.5 cm x 7.5 cm / Infographic for first aid kid
Technique: Adobe Illustrator program



Type: Pictogram

Detail: Pictograms for First Aid treatment

Technique: Adobe Illustrator program

Problem & committee's suggestion

The package looks interesting and looks fashionable. The package is hard to recognize and one know where to place the medical supplies when the user is using it and wants to put it back in the same place. It's not clear about the system to arrange all medicine in one package. The color of fabric (dark blue) is too dark. Therefore, I should put more graphic in my work for effective communication and change the color of the package in order to make the kit look more like first aid kit.

3.3 Concept II

“Ju-Jai (จุใจ)”

Mood & Tone: Casual/Natural/Lively

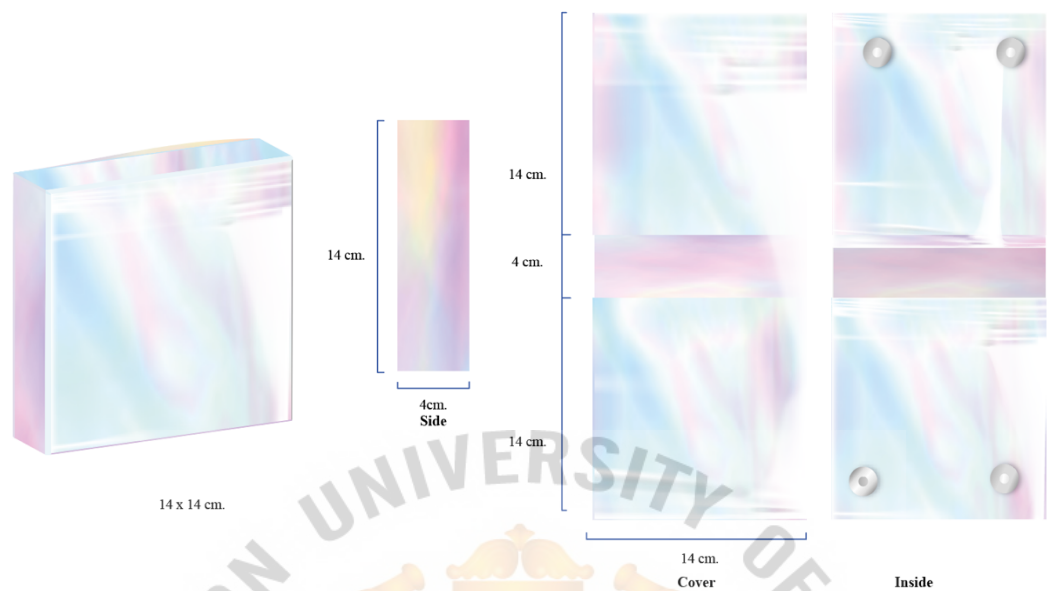
Support:

‘JuJai’ means be satisfied or contain in Thai word. The inspiration of the shape is from clutch bag. The bag is folded at both side view in order to have more space to contain more stuffs. The gimmick of the kit is it can apply and change the shape for more space to keep more stuff then user will be satisfied as the name indicates.


























Image Board



Sketch Design



Type: Package design
Detail: 14 cm x 14 cm / Clear plastic hologram
Technique: Sewing machine

การปฐมพยาบาลมีบาดแผลและแผลถลอก (First aid for Cuts and scrapes)			
<div>1</div> <div></div> <div>ล้างมือให้สะอาดทุกครั้งก่อนทำแผลเพื่อป้องกันการติดเชื้อ</div>	<div>2</div> <div></div> <div>การห้ามเลือด ให้ใช้ผ้าสะอาดหรือผ้าพันแผลกดตรงบาดแผลเพื่อห้ามเลือด โดยกดจนกว่าเลือดจะหยุดไหล</div>	<div>3</div> <div></div> <div>ล้างแผลด้วยน้ำสะอาด ใช้สบู่อ่อนๆล้างผิวหนังที่อยู่รอบๆบาดแผล แล้วล้างด้วยน้ำสะอาดอีกครั้งและใช้ผ้าก๊อชหรือผ้าสะอาดซับแผลให้แห้ง</div>	
<div>4</div> <div></div> <div>เช็ดรอบบาดแผลด้วยแอลกอฮอล์จางๆในใยสำลีหรือผ้าสะอาด</div>	<div>5</div> <div></div> <div>ปิดบาดแผลด้วยพลาสเตอร์ หรือผ้าก๊อชสะอาดหรือใช้ผ้ายัดพันแผล ปิดบาดแผลให้เรียบร้อย</div>	<div>6</div> <div></div> <div>ทำความสะอาดบาดแผล อย่างน้อยวันละครั้งหรือเมื่อ พลาสเตอร์หรือผ้าพันแผลขึ้น สกปรก</div>	
สังเกตอาการ หากสงสัยว่าแผลมีอาการติดเชื้อ ควรไปพบแพทย์ทันที			
การปฐมพยาบาลยุงกัด (First aid for Mosquito bite)		การปฐมพยาบาลแมงมุมกัด (First aid for Spiders bite)	
<div>1</div> <div></div> <div>เมื่อถูกยุงกัดไม่ควรเกา เพราะเมื่อเกาจะทำให้ผิวหนังในส่วนที่ถูกกัดคันขึ้นและคันยิ่งขึ้น และอาจส่งผลให้เกิดการติดเชื้อได้</div>	<div>2</div> <div></div> <div>ล้างบริเวณที่ถูกกัดด้วยน้ำสะอาดและน้ำสบู่</div>	<div>1</div> <div></div> <div>ล้างบริเวณแผลด้วยน้ำสะอาดและน้ำสบู่</div>	<div>2</div> <div></div> <div>ประคบเย็นที่แผลถูกกัดด้วยน้ำแข็งหรือใช้ผ้าชุบน้ำเย็น แล้วปิดไว้หนึ่งประคบประมาณ 10 นาที เพื่อลดการกระจายของพิษ ตลอดจนอาการปวดและบวม</div>
<div>3</div> <div></div> <div>ประคบเย็นที่แผลถูกกัดด้วยน้ำแข็งหรือน้ำเย็นห่อผ้าประคบบริเวณคันคัน</div>	<div>4</div> <div></div> <div>ทายาแก้คัน ผื่นคัน คาลาไมน์ เพื่อลดอาการคัน</div>	<div>3</div> <div></div> <div>หากแผลไม่บวมบริเวณบาดแผล และควรรีบพบแพทย์</div>	
สังเกตอาการ หากหลังถูกกัดเกิดมีไข้ อาเจียน หรือหายใจลำบาก ควรรีบไปพบแพทย์ทันที		หากคาดว่า อาจถูกแมงมุมแม้อย่างน้อยหรือแมงมุมสันโดษกัดและมีอาการแพ้ได้เกิดขึ้นหลังจากนั้น หรือบริเวณที่ถูกกัดติดเชื้อ มีผื่น หรืออาการป่วยรุนแรงตามมา ควรรีบไปพบแพทย์ทันที	
การปฐมพยาบาลแมงป่องกัด (First aid for Scorpion bite)		การปฐมพยาบาลงูกัด (First aid for Snakes bite)	
<div>1</div> <div></div> <div>ล้างบริเวณแผลด้วยน้ำสะอาดและน้ำสบู่ ล้างซ้ำหลายๆครั้ง</div>	<div>2</div> <div></div> <div>ประคบเย็นบริเวณที่บวมแดงด้วยน้ำแข็งอย่างน้อย 10 นาที จะช่วยบรรเทาอาการปวด</div>	<div>1</div> <div></div> <div>การห้ามเลือด ให้ใช้ผ้าสะอาดหรือผ้าพันแผลกดตรงบาดแผลเพื่อห้ามเลือดโดยกดจนกว่าเลือดจะหยุดไหล</div>	<div>2</div> <div></div> <div>ล้างบริเวณแผลด้วยน้ำสะอาดและน้ำสบู่</div>
<div>3</div> <div></div> <div>ยกบริเวณที่ถูกกัดให้เหนือกว่าระดับหัวใจของผู้ป่วยที่มีการเคลื่อนไหวบริเวณที่ถูกกัดน้อยที่สุดเท่าที่เป็นไปเพื่อป้องกันไม่ให้พิษกระจายไปส่วนอื่นของร่างกาย</div>	<div>4</div> <div></div> <div>ผู้ที่ถูกแมงป่องกัด จะมีการเจ็บปวดมากกว่าแมลงชนิดอื่น ถ้าอาการยังไม่ทุเลาลงหรือมีอาการแพ้อย่างรุนแรงควรไปพบแพทย์ทันที</div>	<div>3</div> <div></div> <div>ทายาที่ผิวหนังบริเวณบาดแผล เพื่อป้องกันการติดเชื้อ</div>	<div>4</div> <div></div> <div>ปิดบาดแผล โดยการใส่ผ้าพันแผลหรือผ้าก๊อชปิดบริเวณบาดแผล</div>
หากเลือกยังคงให้อยู่ ให้พันผ้าพันแผลหรือผ้าก๊อช โดยให้วางทับซ้อนบนผ้าพันแผลที่พันเลือกก่อนหน้า ไม่ควรมีผ้าพันแผลซ้อนทับกันนอกและรีบนำผู้ป่วยส่งโรงพยาบาลทันที		รีบนำผู้ป่วยส่งโรงพยาบาลทันที	
การปฐมพยาบาลข้อเท้าเคล็ดหรือแพลง (First aid for Sprain Ankle)			
<div>1</div> <div></div> <div>วางผู้บาดเจ็บลง หรือให้อยู่ในท่านั่ง เพื่อให้สามารถยกขาข้างที่ได้รับบาดเจ็บขึ้นได้อย่างสะดวก</div>	<div>2</div> <div></div> <div>ประคบด้วยความเย็นในบริเวณที่บวมแดงจะช่วยบรรเทาอาการปวดและลดการบวม</div>	<div>3</div> <div></div> <div>การพันผ้าพันแผล ใช้ผ้าพันบริเวณที่พลิก แต่ผ้าที่พันควร เป็นผ้ายืดและไม่พันแน่นจนเกินไป วางผ้าลงบริเวณที่ต้องการพัน พันจากส่วนปลายไปหาส่วนโคน หรือ พันจากข้างล่างขึ้นข้างบนหรือ พันจากส่วนเล็กไปหาส่วนใหญ่ เมื่อสิ้นสุดการพันควรมองหรือใช้เข็มกลัดให้เรียบร้อย</div>	<div>4</div> <div></div> <div>ยกบริเวณที่บาดเจ็บให้สูงเข้าไว้ หรือหาเก้าอี้หรือเบาะนุ่มๆมาหนุนเพื่อลดอัตราการไหลเวียนของเลือดไม่ให้เข้าไปยัง บริเวณที่บาดเจ็บได้สะดวก หรือนำผู้ป่วยส่งโรงพยาบาล</div>
ข้อเท้าเคล็ด ข้อเท้าแพลง เกิดจากการเคลื่อนไหวผิดท่าทำให้เกิดการหมุน พลิก บิด ของข้อเท้า การเคลื่อนไหวที่มากเกินไป หรือผิดจากลักษณะปกติ อาจทำให้กล้ามเนื้อมีการฟกช้ำ ฉีกขาด หรือยึดติดได้			

Type: Folding brochure design
Detail: 8 cm x 17 cm / Infographic for first aid kid
Technique: Adobe Illustrator program



Type: Pictogram

Detail: Pictograms for First Aid treatment

Technique: Adobe Illustrator program

Problem & committee's suggestion

No system. User might get stuck when using medicine supplied and does not know where to put in back with the same place. I should put more graphics on the package. The package does not look like a first aid kit, people might not notice it. For the infographic brochure design in order to make it for universal design, the font is too small and it hard to read. Moreover, style of an icon looks interesting but such as icon of animal it hard to recognize and wonder what is this animal. User might be spending time to look at it.

3.3 Concept III

“We go together”

Mood & Tone: Clean, Friendly, Lively

Support:

What are the essential things when you do outdoor activities? In case you have an accident, which happens unexpectedly, in order to relieve and recover ourselves we need first aid treatment. The concept is inspired by a relationship between friends. To do an activity alone, you plan to do it alone but if during that way you meet new friend or found a good friendship. Could you reject that? A friend who is friendly and lively. Also, full of energy to take care of other people and prefer to be your friend than other. First aid kit will be like a close friend that you feel relieved and would like to go out with. A friend who can go with you any place and anywhere that you would like to go. Always willing to help you and protect you from any good or bad situation as a real friend in life. You are willing and prefer to go with he/she because you feel comfortable and trust him/her.

To do outdoor activities alone and save yourselves, you are not alone anymore when you are in an unexpected accident because this first aid kit will be your journey friends who always come along with you and help you at any time. Go together and be safe.

Image Board



Sketch Design



Type: Package design

Detail: 16 cm x 8 cm / ark blue / Nylon fabric

Technique: Sewing machine



Type: Pictogram

Detail: Pictograms for First Aid treatment

Technique: Adobe Illustrator program



Type: Pictogram

Detail: Pictograms for First Aid treatment

Technique: Adobe Illustrator program

Problem & committee's suggestion

The color of the fabric is too dark. It does not give a feeling of first aid kit. I need to put some unique personality and add some experiment in my work. There is no system in this kit. When user bring all supplies for using and if they want to return to the package, it is hard to know where to put it back. And I should design a package for medical supplies also. I have no graphic in all my design in packaging or brochure design. I should put more graphic and find more styles of graphic that relate with the concept. Moreover, I should put a graphic on the package also. Change mood and tone board.





CHAPTER 4

CONCLUSION & SUGGESTIONS

Conclusion & Suggestions

Technical drawing of the 1669 Emergency Call Box, showing dimensions and views:

- Front View:** Dimensions are 16 cm (width) and 9 cm (height). The front face features a red cross logo, the number "1669", and various emergency icons (bicycle, fire, ambulance, etc.).
- Back View:** Dimensions are 9 cm (width) and 16 cm (height). It shows a metal latch at the top.
- Side View:** Dimensions are 5 cm (width) and 16 cm (height).
- Inside View:** Shows the interior of the box with a white base and a metal grate at the bottom.

The drawing also includes a large watermark of the Assumption University of Thailand crest and logo, which features a shield with a red cross, a star, and the text "1669" and "11 GABRIEL".

Detail: 11 cm x 14 cm / Dark blue / Nylon fabric

Technique: Sewing machine

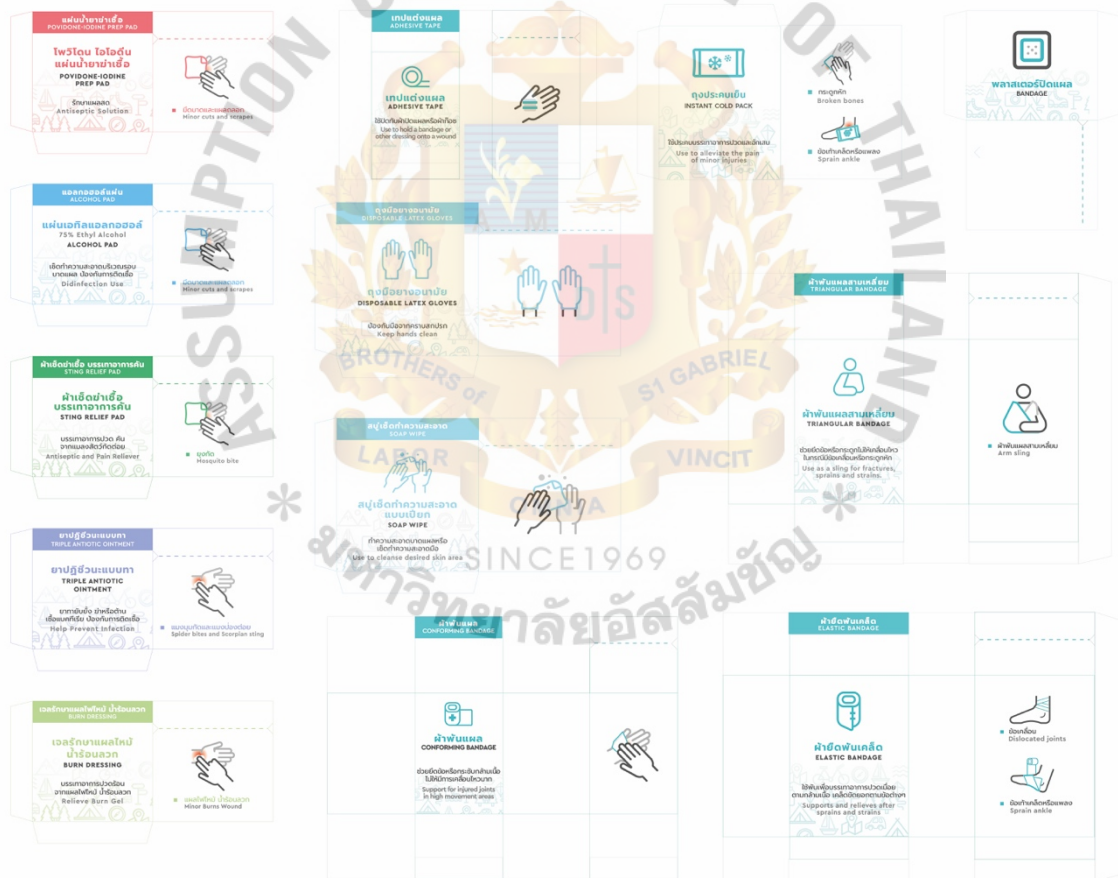




Type: Package design

Detail: 11 cm x 14 cm / Dark blue / Nylon fabric

Technique: Sewing machine



Type: Medication supplies package design

Detail: Information of how to use medication supplies

Technique: Adobe Illustrator program



Type: Medication supplies package design
Detail: Information of how to use medication supplies
Technique: Adobe Illustrator program

Type: Folding brochure design
Detail: 7.5 cm x 7.5 cm / Infographic for first aid kid
Technique: Adobe Illustrator program



Type: Folding brochure design
Detail: 7.5 cm x 7.5 cm / Infographic for first aid kid
Technique: Adobe Illustrator program



Type: Folding brochure design
Detail: 7.5 cm x 7.5 cm / Infographic for first aid kid
Technique: Adobe Illustrator program



Type: Pictogram

Detail: Pictograms for First Aid treatment

Technique: Adobe Illustrator program

4.2 Conclusion

The result of this project was to end up with the experimental packaging design. To illustrate, the first aid kit provides infographic about how to use First Aid treatment clearly. Moreover, the kit storage and classification or separation of the external medicine and medical supplies is clear and can help users to render first aid treatment correctly and safety.

This project gives me an opportunity to express the imaginative vision of design packaging, brochure, infographic and pictogram. This project not only helps me to improve my design skill but also helps me in working as a system and to gain more responsibility on works which gives me a lot of experience out of it.

4.3 Suggestions for Future Study

According to creating something for universal design, the visual and communication are the important things to be concerned. During working on the design process, icon and layout in brochure design should be in consistent so as to make it look as one project and universal design by people will know the meaning and visualize it easily. Moreover, because it is an experimental design in order to make the user willingly use this kit easily then during working on the process I have to be concerned about the system inside of the package. How to manage and arrange all stuff in order to use it easily? Everything that I worked hard today, helped me a lot in both designing and being productive to create new design in the future.

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Appendix 1: Interview 1

Interview Questions and Answers – Ms. Sukanda Maieam Experimental package design for First Aid Kit

Personal Information

1. Name & Surname: Ms. Sukanda Maieam
2. Gender & Age: Female, 28
3. Income & Social status: Pharmacist at drug store in Bang Phli District, Samut Prakarn Province
4. Education & Profession: Doctor of Pharmacy Program, Silapakorn University
5. Contact information: mamkapi1989@gmail.com

Introduction Question

6. How important is the Medicine kit and First Aid kit?
 - a. For Medicine kit, everyone should have it at their house because whenever we get sick or have an accident at night as an emergency case then to go to see a doctor it quite hard so Medicine kit can help for treatment and first aid.

In-depth Question

7. What are your problems about using Medicine kit and First Aid kit?
 - a. Expired date of medicines. I do not observe or check about medicine kit and when I want to use a medical inside of the kit then, I cannot use it due to the expired date.
8. What are the problems of your patient about using medicine or medical supplies? And what about an affect?
 - a. Using medicine like when user bought the medicine after I had explain about dosage, administration and properties, the problem is they do not understand and know how to use medicine incorrectly.

Closing Question

9. What do you think about the Medicine kit that provides necessary medicine and medical supplies moreover, gives a brochure which contains information about each medicine and how to use it?
 - a. In my opinion, I think this packaging is good. And it will look more interesting if the kit provides how to use each medicine and it should be something that is clearly able to visualize or just look at it and it can tell the user what type medicine it is.

Appendix 2: Interview 2

Interview Questions and Answers – Ms. Tawanrat Lertwanichkitkul Experimental package design for First Aid Kit

Personal Information

1. Name & Surname: Ms. Tawanrat Lertwanichkitkul
2. Gender & Age: Female, 26
3. Income & Social status: Pharmacist at drug store at Market Village
4. Education & Profession: Doctor of Pharmacy, Huachiew University
5. Contact information: today-ying@hotmail.com

Introduction Question

6. How important is the Medicine kit and First Aid kit?
 - a. Medicine kit is important and provides convenience when we face with emergency situation inside our house or outside the house but not in serious case. When we have this kit, we do not need to waste out time to go to pharmacy then if we have it then we can use it immediately.

In-depth Question

7. What are your problems about using Medicine kit and First Aid kit?
 - a. When I really need to use some medicine due to keeping medicine for a long time in the kit and I did not have time to check the Expiry date of medicine as a result I cannot use it.
8. What are the problems of your patient about using medicine or medical supplies? And what about an affect?
 - a. Mostly, they do not know how to use the medicine correctly and did not take a pill of medicine incomplete dose such as antibiotic because of the drug resistant. They have to continue to take the pill until complete all dosage then their symptom will relieve and be better. Some patients bought medicine by pharmacist as ordered or provided to them but some they have their specific medicine which they use it as usual, then they just buy the medicine which they are familiar with.

Closing Question

9. What do you think if this Medicine kit provides a necessary medicine and medical supplies moreover, gives a brochure which contains information about each medicine and how to use it?
 - a. I think it looks nice and I think that this medicine kit should provide an information about medicine because some patients do not know how to use the medicine or dosage which will be a benefit for them.

Appendix 3: Interview 3

Interview Questions and Answers – Mr. Kasipat Pattanabovornwut Experimental package design for First Aid Kit

Personal Information

1. Name & Surname: Mr. Kasipat Pattanabovornwut
2. Gender & Age: Male, 41
3. Income & Social status: Pharmacist and business owner at Health drug(pharmacy)
4. Education & Profession: Bachelor's Degree in Pharmaceutical Science
5. Contact information: 02-0047946, kasipat.diovan@gmail.com

Introduction Question

6. How important is this Medicine kit and First Aid kit?
 - a. Medicine kit is important, when people get sick or meet with an accident. First aid is an easy way to help in emergency situation. Like Medicine kit is use for emergency case.

In-depth Question

7. What are your problems about using Medicine kit and First Aid kit?
 - a. I do not have any problem of using Medicine kit or First aid kit.
8. What are the problems of your patient about using medicine or medical supplies? And what about an affect?
 - a. They using medicine overdose such as Paracetamol. Thai people like to take 2 pills of Paracetamol but actually, people who weight less than 50 kilograms and take 2 pills is too much for them. 2 pills is for people whose weight is more than 100 kilograms. For half of pill, for people who weigh about 75 kilograms. And some labeling does not tell. It is kind of misunderstanding of Thai people using the medicine. Whenever you get sick then just that 2 pills wshich affect our liver. Taking medicine for a long time is not good for your health and also our liver. Moreover, people who have liver disease should not take the medicine. Sometime, for Alcohol solution many people understand that it for cleaning our wound. Actually we use this for washing medical equipment and but not used for cleaning the wound directly, you have to use it for cleaning around your wound. If you need to clean your wound, you should use Saline solution instead. Some patient looking at drugstore or pharmacy which having pharmacist for buying a medicine.

Closing Question

9. What do you think, if it has a Medicine kit that provides necessary medicine and medical supplies moreover, gives a brochure which contains information about each medicine and how to use it?
 - a. I think is good. And if it has more details of usage it is better. In my point of view or pharmacist, this is a good idea and it can help pharmacist from their work. Pharmacist will not tell much about information of using medicine.

Appendix 4: Questionnaire (Online)

Questionnaire about using and buying First Aid Kit

This questionnaire is a part of an Art Thesis of Bachelor of Visual Communication Design, Assumption University. The purpose of this questionnaire is to collect information about problem and factor for using and buying Medicine kit and First Aid Kit to collect all information for design packaging of Medicine and First Aid Kit. All the information will be used for educational purposes only.

Part 1: Profile and general information

Gender:

- ☐ Male
- ☐ Female

Age:

- ☐ Under 25 year-old
- ☐ 26 – 35 year-old
- ☐ 36 – 45 year-old
- ☐ 46 – 55 year-old
- ☐ Above 55 year-old

Career

- ☐ Student
- ☐ Officer
- ☐ Office worker
- ☐ Own business
- ☐ Housewife/Husband
- ☐ Freelance
- ☐ Other. _____

Revenue

- ☐ Under 10,000 Baht
- ☐ 10,001 – 20,000 Baht
- ☐ 20,001 – 30,000 Baht
- ☐ 30,001 – 40,000 Baht
- ☐ 40,001 – 50,000 Baht
- ☐ Above 50,000 Baht

Do you have Medicine kit and First Aid kit or not?

- ☐ Yes
- ☐ No

Part 2: General information of using Medicine kit and First Aid kit

1. What kind of your Medicine kit and First Aid kit look like?

- ☐ Medicine cabinet
- ☐ First Aid Kit Bag with shoulder-strap
- ☐ Plastic box
- ☐ Cloth bag with portable size
- ☐ Other. _____

2. Where did you buy your Medicine kit and First Aid kit?

- ☐ Drugstore
- ☐ Pharmacy in department store
- ☐ Retail store such as Tesco Lotus, Big C
- ☐ Online

- Other. _____
- 3. How much did you pay for Medicine kit and First Aid kit?
 - Less than 200 Baht
 - 201 – 400 Baht
 - 401 – 600 Baht
 - 601 – 800 Baht
 - 801 – 1,000 Baht
 - More than 1,000 Baht
- 4. What are your problems about using Medicine kit and First Aid kit? (can answer more than one)
 - Size is too big or too heavy
 - Cannot portable or hard to carry
 - Does not separate Internal and External medicine and Medical supplies
 - All medicines are together and hard to find out
 - Hard to cleaning packaging
 - Other. _____
- 5. What are your problem about using medicine and medical supplies? (can answer more than one)
 - Does not know properties
 - Does not know dosage and administration
 - Cannot read labeling or the pharmaceutical documentation because of text size is small.
 - Cannot read properties, dosage and administration because of text size is small.
 - Cannot read Manufacturing date and Expiration date because of text size is small
 - Cannot read Manufacturing date and Expiration date with arrange as international date such as Exp. Date 02082002
 - Position of Manufacturing date and Expiration date is hard to find
 - Using medicine by do not know Manufacturing date and Expiration date
 - When labeling of medicine gone then cannot identify the medicine
 - Using wrong medicine because medicine shape looks similar
 - Other. _____

Part 3: General information of buying Medicine kit and First Aid kit

1. If there are Medicine kit that provides a necessary medicines and medical supplies. Moreover, gives a brochure with content information about each medicine and how to use it. Would you be interested or not?
 - a. Yes
 - b. No
2. What are the factors that affect you to purchasing of packaging?
 - Brand
 - Price
 - Quality
 - Packaging
 - Other. _____

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Nationality: Thai

Academic Recoad:

2004-2013 Satit Bangna School
Diploma in major Arts – Math
Samutprakarn, Thailand
2016-2019 Assumption University
Visual Communication Arts
Major in Graphic Design
Bangkok, Thailand

Working Experience

May – Jun 2017 : Uppercuz Creative (Internship)
as a graphic designer

Skill and Expertise

- Adobe Illustrator
- Adobe Photoshop
- Graphic Design
- Package Design

CD / DVD

Inside CD/DVD

- Sketches
- Final Works
- Book Files



