

TrE-C



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An Innovation of Tepid Sponging

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Problem Statement

Babies and children who have high fever above 40°C may develop febrile seizure if the body temperature is not reduced quickly. Prolong febrile seizure may lead to other complications such as brain hypoxia. The current available products in the market offer reduction of body temperature is a small surface area.

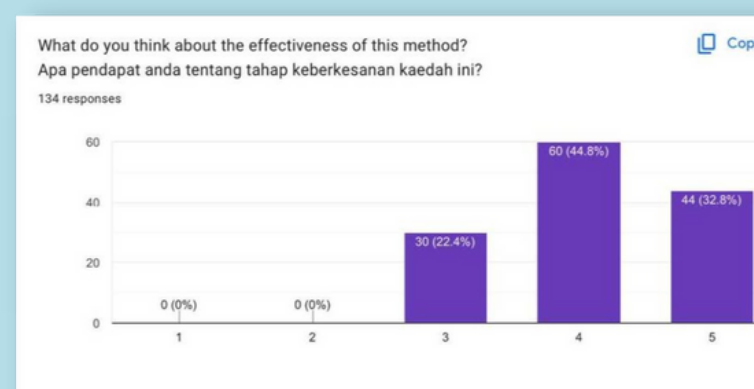
Background

A product that can replace traditional method of tepid sponging by wiping the body with wet towel manually when having fever. It also can be use for children while playing outdoor to prevent heat stroke. TrE-C is a specilized clothing made to help reduce increased body temperature. This product is in two types: washable and disposable.

Findings / Results

- Tepid sponging was found to be more effective in lowering body temperature than plaster compress, which concentrated on one spot and had small effects on human skin.
- Based on our survey among parents, most of them would prefer washable product than disposable.

Elvira, M. (2019). Effect of Tepid Sponge on changes in body temperature in children under five who have fever in Dr. Achmad Mochtar Bukittinggi Hospital. *Enfermería Clínica*, 29, 91-93.



Disposable Vest



Cap



Baby Binder



Washable Vest

Objective

- To reduce baby temperature in short time
- To ease the parents in handling fever baby

Methodology

- Library research
- Interviews
- Survey

Discussion

- cover large surface area
- ease the parents to measure the temperature directly (temperature strip slot)
- longer cooling, comforting and calming effect (up to 6 hours due to presence of aloe vera)
- cooling agent is made from natural product and hypoallergenic
- has waterproof layer

Contribution to The Society

- Easy to Use : TrE-C is designed to be user-friendly and convenient.
- Safe for Kids : It's safe for children to use.
- Saves Time : Helps save time when managing fever or recovering from activities.
- Promotes Community Health : Supports overall health in the community.
- Versatile Use : Not just for fevers; can help after sports, in hot weather, or during recovery.
- Educational Tool : Can be used for health education in communities.
- Boosts Local Manufacturing : Helps local manufacturing and the economy.
- Eco-Friendly Option : A disposable version can be made with environmentally friendly materials to reduce its impact on the environment.

Potential Customer

- GP Clinic
- Policlinic
- Pharmacies

How to use TrE-C



1. Insert temperature strip



2. Spray aloe vera on surface of vest



3. Put the vest on baby

Specialty of Our Product

- adjustable sizes
- washable or disposable options
- temperature strip slot
- use aloe vera (cooling agent)
- cost effective
- hypoallergenic

Marketing Price

Product Type	Item	Price (RM)
WASHABLE PRODUCT	CAP	RM 3
	VEST	RM 10
	BABY BINDER	RM 7
DISPOSABLE PRODUCT	TEMPERATURE STRIP	RM 3
	ALOE VERA INFUSED VEST	RM 5
200ML ALOE VERA		RM 5
SET A: Cap + Vest + aloe vera + temperature strip		
SET B: Baby binder + aloe vera + temperature strip		