

## Theoretically Planned Intervention for Head Lice Infestation Prevention among Students: An Integrated Health Belief Model Approach

### Supplementary file 1

#### Development of Educational Content

Following the pre-test and analysis of results in the intervention group, participants' status in various questionnaire sections was identified, and educational needs were assessed accordingly. This assessment determined the academic content and the number of sessions for each proposed construct.

The educational content was designed by considering the available teaching methods and materials, the participants' literacy levels and capabilities, and the educational domains (affective, cognitive, and psychomotor). It was developed using books and resources related to pediculosis and its preventive behaviors. The finalized educational content was presented in the form of PowerPoint slides, pamphlets, and posters.

#### Educational Objectives

##### Main Objective

To enhance students' awareness of pediculosis and to improve and strengthen their attitudes and behaviors regarding preventive measures against pediculosis.

##### Specific Objectives

The objectives have been developed across three cognitive, affective, and behavioral domains.

##### Behavioral Educational Objectives – Cognitive Domain

After the educational intervention based on the Integrated Health Belief Model, participating students are expected to:

1. Identify the most common age group for the occurrence of pediculosis.
2. Describe at least two modes of transmission for pediculosis.
3. List at least three symptoms associated with pediculosis.
4. Explain at least four preventive behaviors to avoid pediculosis.

### **Behavioral Educational Objectives – Affective Domain**

A primary goal of this program is to establish and reinforce accurate health beliefs regarding pediculosis and its preventive behaviors, while also correcting any misconceptions. The specific objectives are as follows:

- Students should understand that they face a possibility of contracting pediculosis in the future.
- Students should recognize that pediculosis can disrupt their schoolwork.
- Students should be aware that contracting pediculosis can lead to prolonged issues for both themselves and their parents.
- Students should agree on the benefits of adopting preventive behaviors against pediculosis.
- Students should acknowledge and accept the existing barriers to implementing these preventive behaviors.
- Students should agree that practicing preventive measures can significantly reduce their risk of infestation.
- Students should believe that if pediculosis goes untreated, it can spread to family members and friends.
- Students should feel that their parents support their efforts to engage in preventive behaviors against pediculosis.
- Students should feel that their family members encourage and assist them in adopting these preventive behaviors.
- Students should recognize their ability to take preventive actions, accept this capability, and express confidence in their ability to do so.

### **Behavioral Educational Objectives – Behavioral Domain**

Participating students should be able to plan and implement preventive measures against pediculosis.

In this study, the following educational methods were utilized, each briefly described below:

1. Lecture Method– Information was presented through structured lectures to provide students with essential knowledge about pediculosis and preventive behaviors.
2. Question and Answer – This interactive approach allowed students to clarify their doubts, reinforce their learning, and engage in meaningful discussions.
  1. Group Discussion – Students were encouraged to share their experiences, exchange ideas, and
  2. enhance their understanding through collaborative learning.

**Table S1:** Session 1 Activity Plan for the First Educational Session

Duration	Educational Materials and Media	Teaching Method	Target Construct	Educational Domain	Educational Objectives
10 minutes	—	Lecture & Q&A	—	Cognitive (Affective)	Familiarizing students with the course and explaining session objectives.
5 minutes	Pamphlet, poster, PowerPoint slides, video projector	Lecture & Q&A	Awareness	Cognitive	Students recognize pediculosis and define it.
5 minutes	Pamphlet, poster, PowerPoint slides, video projector	Lecture & Q&A	Awareness	Cognitive	Students identify the symptoms and complications of pediculosis.
5 minutes	Pamphlet, poster, PowerPoint slides, video projector	Lecture & Q&A	Awareness	Cognitive	Students name behaviors that prevent pediculosis.
5 minutes	Pamphlet, poster, PowerPoint slides, video projector	Lecture & Q&A	Perceived Susceptibility	Affective	Students believe that they are at risk of pediculosis in the future.

**Table S2:** Session 2 Educational Activities Program, Target Constructs: Perceived Severity, Perceived Benefits, Perceived Barriers

Duration	Educational Materials and Media	Teaching Method	Target Construct	Educational Domain	Educational Objectives
10 minutes	Pamphlet, slides, PowerPoint, video projector	Lecture & Q&A	—	Cognitive (Affective)	Reviewing previous session content.
5 minutes	Pamphlet, slides, PowerPoint, video projector	Lecture & Q&A	Perceived Severity	Affective	Students believe that pediculosis can cause itching, restlessness, and social discomfort.
5 minutes	Pamphlet, slides, PowerPoint, video projector	Lecture & Q&A	Perceived Severity	Affective	Students recognize that infestation can lead to

					complications affecting their well-being.
5 minutes	—	Lecture & Q&A	Perceived Severity	Affective	Students believe that untreated pediculosis can increase the risk of infestation among family and friends.
5 minutes	Pamphlet, slides, PowerPoint, video projector	Lecture & Q&A	Perceived Benefits	Affective	Students understand that taking a shower reduces the likelihood of infestation.
10 minutes	Pamphlet, slides, PowerPoint, video projector	Lecture + Motivational Discussion	Perceived Barriers	Affective	Students believe that lack of showering and hygiene leads to a higher risk of infestation.
5 minutes	—	Student Q&A	—	Cognitive / Affective	Summarizing session content and addressing students' questions.

**Table S3:** Session 3 Educational Activities Program, Target Constructs: Perceived Barriers and Self-Efficacy

Duration	Educational Materials and Media	Teaching Method	Target Construct	Educational Domain	Educational Objectives
10 minutes	Pamphlet, slides, PowerPoint, video projector	Lecture & Q&A	—	Cognitive (Affective)	Reviewing previous session content.
5-10 minutes	Written scenarios, market role-play	Lecture & Group Discussion	Perceived Barriers	Affective	Students believe that the barriers to performing preventive behaviors are solvable.
5 minutes	Pamphlet	Lecture & Practical Demonstration	Self-Efficacy	Behavioral	Students can name multiple ways to overcome barriers.
5 minutes	Pamphlet, slides, PowerPoint, video projector	Lecture & Practice	Self-Efficacy	Behavioral	Students believe they can separate their personal items from others.
5 minutes	Slides, PowerPoint, pamphlet	Lecture & Practice	Self-Efficacy	Behavioral	Students believe they can regularly check their hair and scalp for lice.

**Table S4:** Educational Session Activities for Mothers, Target Constructs: Awareness, Perceived Reinforcement, Perceived Social Support

Duration	Educational Materials and Media	Teaching Method	Target Construct	Educational Domain	Educational Objectives
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5 minutes	—	Lecture	—	Cognitive	Introducing mothers and stating session objectives.
5 minutes	Educational slides + pamphlets	Lecture + Q&A	Awareness	Cognitive	Mothers recognize pediculosis.
10 minutes	Educational slides + pamphlets	Lecture + Q&A	Awareness	Cognitive	Mothers explain the symptoms and complications of pediculosis.
10 minutes	Educational slides + pamphlets	Lecture + Q&A	Perceived Reinforcement, Perceived Social Support	Affective	Mothers believe that encouraging the purchase of personal hygiene items (such as personal combs, towels, etc.) and family discussions as well as support about lice prevention behaviors help control and prevent the spread of infestation.