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# Promotive and Preventive Health Education: The Effects of Active and Passive Smoking in The Elderly at Yayasan Budi Sosial Batam

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#### **ABSTRACT**

**Background.** Smoking is one of the main risk factors for the health of the elderly. The use of cigarettes in the elderly can cause various health problems. The risks posed by smoking need to be minimized through promotive and preventive efforts. So education is very important because it can increase knowledge for the elderly in achieving a healthy life.

**Purpose.** The purpose of providing health education is to increase the knowledge of the elderly about the dangers and effects of smoking for active and passive smokers.

Method. The method of this activity was a lecture.

**Results.** This activity was attended by 10 participants who were willing and by the inclusion criteria made by the activity implementers and carried out on April 17, 2023.

**Conclusion**. This activity is expected to be useful for the elderly and can certainly increase the knowledge of the elderly about the dangers and effects of smoking for active and passive smokers, and of course can improve the health of the elderly in the Batam social welfare foundation.

#### **KEYWORDS**

Active and passive smokers, Cigarettes, Elderly, Impact, Gerontology, Nursing Homes

#### INTRODUCTION

Smoking is one of the main risk factors for the health of the elderly. The use of cigarettes in the elderly can cause various health problems (23andMe Research Team dkk., 2019; Cosentino dkk., 2020). Smoking can increase the risk of heart disease in the elderly, such as heart attack, stroke, and atherosclerosis (blockage of blood vessels).

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In addition, smoking can also cause lung diseases such as emphysema (damage to the lungs that causes narrowing of the airways) and lung cancer. According to data from the World Health Organization (WHO), the prevalence of active smokers in the world in 2018 is around 20% (Dharmage dkk., 2019; Kuderer dkk., 2020; Lenis dkk., 2020). The prevalence of active smokers in each country is different. Some countries with a high prevalence of active smokers include Indonesia and are expected to increase gradually every year. Smoking behavior among Indonesian people has become part of everyday life, where smoking behavior is influenced by the existence of mass media that advertise smoking people as men (Babjuk dkk., 2019; Murray dkk., 2020). True, it is also influenced by peers and even affected by seeing their parents smoking at home.

There are various reasons why the elderly may continue to smoke, including habits, lack of information about the dangers of smoking, and social factors (Hermansyah dkk., 2023). The elderly are not fully aware of the dangers of smoking to health and are not sure that stopping smoking will provide significant health benefits. The elderly smoke because they feel forced to adjust to their social environment (Crook dkk., 2021; Ghouri dkk., 2006; Sasmito dkk., 2019). Smoking behavior is very risky to health, even the risk from cigarette smoke is greater for people who do not smoke but are exposed to cigarette smoke (passive smokers). One cigarette contains more than 4,000 poisons such as nicotine, formaldehyde, cadmium, and hydrogen cyanide where these substances are addictive and carcinogenic and can cause atherosclerosis, COPD (Chronic Obstructive Pulmonary Disease), increased oxidative stress, and reduced antioxidants in the body (Gillison dkk., 2019; Libby, 2021; Nguyen dkk., 2020). Smoking habits occur outside the home and in the home where people have children under five, pregnant women, and nursing mothers who have a greater risk when inhaling cigarette smoke. This is very concerning because of the risks that will be suffered by these communities.

The risks posed by smoking need to be minimized through promotive and preventive efforts. The promotive effort that needs to be done is education (health promotion) to people who smoke or don't smoke because of the risk (Batchelor dkk., 2019; Genchi dkk., 2020). The effects caused by smoking are not only for those who smoke, but people who do not smoke also need to be educated regarding the risks of inhaling cigarette smoke from the environment (Putra dkk., 2022). This education is very important because it adds knowledge to the community to achieve a healthy life by influencing behavior both individually and in groups with messages conveyed to the community.

#### RESEARCH METHODOLOGY

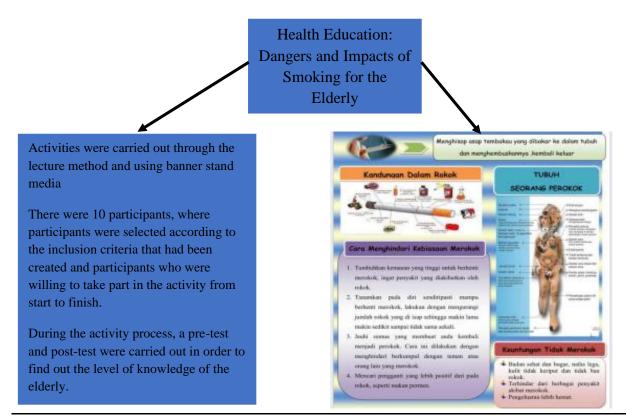
In this activity, the executor uses the lecture method. The media used isstand banner. The material giver will convey what smoking is, the substances contained in cigarettes, the dangers of smoking for active and passive smokers, as well as ways to avoid smoking (Auliani dkk., 2023; Mustafiyanti dkk., 2023; Wanti dkk., 2023). Before being given the material, we conducted a pretest regarding the material to be delivered to the elderly. After giving the material we did a post-test again to the elderly, with the hope that there would be a change in the knowledge that the elderly had received during the process of providing the material.

The pre-test and post-test questions related to smoking education materials:

- 1. Diseases that can be caused by cigarettes are?
  - a. Give
  - b. Nausea and vomiting
  - c. Fever
  - d. Lung cancer

- 2. What are the contents of cigarettes?
  - a. Madu
  - b. Jahe
  - c. Turmeric
  - d. Nicotine
- 3. People who inhale smoke from smokers are called smokers?
  - a. Beginners
  - b. Indirectly
  - c. Direct
  - d. Passive
- 4. How to avoid the dangers of smoking?
  - a. Being a smoker
  - b. Stay away from cigarette smoke and cigarettes themselves
  - c. Get together with smokers
  - d. Inhaling cigarette smoke itself
- 5. Why should we avoid cigarettes and smoking?
  - a. Can cause blindness
  - b. Can cause lung disease
  - c. Because smoking can calm
  - d. There is no right answer
- 6. How to stop smoking?
  - a. Adhere that smoking is dangerous
  - b. Instill in yourself that you must be able to quit smoking
  - c. Looking for a more positive substitute than smoking
  - d. All of the answers are correct

The scheme of activities can be seen below.



## **RESULT AND DISCUSSION**

The following are the results of the pre-test and post-test before and after the activity was carried out:

NO	Initials	1	2	3	4	5	6	Pre- test	1	2	3	4	5	6	Post- test
1	Tan. USA	$\sqrt{}$	√	X	√	X	V	4	<b>V</b>	√	V	√	X	1	5
2	Tan. H	$\sqrt{}$	X	X	$\sqrt{}$	X	X	2	$\sqrt{}$	$\sqrt{}$	X	$\sqrt{}$	$\sqrt{}$	X	4
3	Tan. A	$\sqrt{}$	٧	X	$\sqrt{}$	X	$\sqrt{}$	4	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	6
4	Tan. BILLIO N	$\sqrt{}$	٧	X	X	$\sqrt{}$	$\sqrt{}$	4	$\sqrt{}$	X	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$		5
5	Tn. K	٧	٧	X	X	$\sqrt{}$	X	3	$\sqrt{}$	X	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	5
6	Tn. R	٧	X	$\sqrt{}$	X	$\sqrt{}$	X	3	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	6
7	Tan. REMOV E	X	X	$\checkmark$	$\checkmark$	X	X	2	$\checkmark$	$\checkmark$	X	$\sqrt{}$	$\sqrt{}$		5
8	Tn. E	Χ	$\sqrt{}$	X	X	X	$\sqrt{}$	2	$\sqrt{}$	X	$\sqrt{}$	X	$\sqrt{}$		4
9	Tn. G	٧	X	$\sqrt{}$	X	X	$\sqrt{}$	2	$\sqrt{}$	$\sqrt{}$	X	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	5
10	Tn. S	٧	$\sqrt{}$	$\sqrt{}$	X	X	X	3	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	X	$\sqrt{}$	$\sqrt{}$	5

Frequency distribution of Pre-test results:

	No	Correct 1	Right 2	Correct 3	Correct 4	True 5	Correct 6
-	1-10	-	4	3	3	-	-
	%	0 %	40 %	30 %	30 %	0 %	0 %

Post-test result frequency distribution:

No	Correct 1	Right 2	Correct 3	Correct 4	True 5	Correct 6
1-10	-	-	-	2	6	2
%	0 %	0 %	0 %	20 %	60 %	20 %

Based on the results of the activity, it was found that the level of knowledge before and after providing health education about smoking to the elderly obtained significant results. The level of knowledge of the elderly increases after being given education. During the activity process, the elderly can follow the activity process calmly and well (Al Maarif dkk., 2023; Mulyasari dkk., 2023; Noer dkk., 2023). The elderly can play an active role during the Question and Answer session. The elderly can be cooperative with the education provided. The elderly are also aware that their smoking habit can be harmful to their health status. They promised to reduce smoking habits. However, to completely let go of the smoking habit is still not possible (Fadiyah dkk., 2023; Ranal dkk., 2023; Utami dkk., 2023). They will get used to not smoking by doing positive activities so that their smoking habit will slowly disappear.

This education is expected to be an additional knowledge for the elderly and the foundation (Fiqih dkk., 2023; Pamuji & Limei, 2023). We, as executors of the activity, hope for cooperation from the foundation, to always monitor the smoking habits of the elderly.

## **Activity documentation**





## **CONCLUSION**

Based on the results of the implementation of health education on the dangers and effects of smoking for the elderly at social charity foundations, the following conclusions can be drawn: 1. Health education needs to be carried out at social charity foundations, especially the smoking habits of the elderly. Where most of the elderly (men) smoke cigarettes in large quantities every day.

- 1. The elderly know the dangers and effects of smoking, but they have not been able to give up their smoking habit. So we need a way to eliminate the smoking habit to achieve the health of the elderly. Art therapy can also be their alternative to expressing emotional feelings through pictures and colors.
- 2. The foundation has always reminded the elderly to stop smoking. But still neglected by the elderly.
- 3. During the process of providing health education, the elderly can participate in activities cooperatively, and be active in the room, and the elderly can follow activities until they are finished.

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### **AUTHORS' CONTRIBUTION**

Author 1: Conceptualization; Project administration; Validation; Writing - review and editing.

Author 2: Conceptualization; Data curation; In-vestigation.

Author 3: Data curation; Investigation.

Author 4: Formal analysis; Methodology; Writing - original draft.

Author 5-7: Supervision; Validation.

Author 8-9: Other contribution; Resources; Visuali-zation; Writing - original draft.

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