

Research Article

Nasal Care Herbal Face Mask for Sinus Therapy

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Abstract: Acute sinusitis is mostly caused by mites which are commonly found in home environments. Chronic sinus infection will cause the illness to move to the eyes and brain. In this research, nasal care face mask is introduced as one of the ways to reduce sinus infection. This nasal care face mask added herbs as their main ingredients. The ingredients include cinnamon, garlic, turmeric, ginger, cloves, and lemongrass. The herbs can act as a natural antibiotic that helps relieve the symptoms of the sinusitis. The nasal care face mask aims to provide a therapy option for people who suffer from sinusitis and allergies. This product brought a new insight to the user as the integration between the necessities of current condition with remediation is being incorporated. The niche market of the consumer is users who have sinus and allergic problems. A hedonic test is conducted on 30 respondents by using Google Form comprising of five characteristics which are fragrance, convenience, effectiveness, affordability, and overall product acceptance. Each respondent is served with the usual face mask and nasal care face mask. The questionnaires are analyzed and as a result, scores above average are obtained for convenience, effectiveness, and affordability characteristics. The result shows that the respondents feel comfortable, and the product has potential for sinus therapy.

Keywords: sinus therapy; herbal patch; nasal care face mask.



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1. INTRODUCTION

Acute sinusitis (sinus infection) is mostly caused by the mites *Dermatophagoides pteronyssinus* (DP) and *Dermatophagoides farinae* (DF), which are commonly found in home environments (Dokic et al., 1991). Chronic acute infection will cause the illness to move to the eyes and brain.

Nasal care face mask is one of the ways to reduce sinus infection. This nasal care face mask added herbs as their main ingredients. The ingredients include cinnamon, garlic, turmeric, ginger, and cloves. Lemongrass is added for aromatherapy. These herbs act as a natural antibiotic that helps kill germs and relieve the itching of the nasal and relieves shortness of breath and reduce allergies (Grogan, 2018). Furthermore, the ingredients will act as an anti-inflammatory that relieves inflammation and pain naturally and dries sinus mucus naturally without removing mucus (Green, 2013). Currently, the

available treatments for sinusitis include pain medication, decongestant, and nasal sprays (Khalil et al., 2011; Columbia Asia, 2020).

For people who suffer from sinusitis and allergies, the nasal care face mask has provided a therapy option. This product brought a new insight to the user as the integration between the necessities of current condition with remediation is being incorporated. The niche market of the consumer is users who have sinus and allergic problems. Every medication supplied to sinus patients contains steroids either clinically or traditionally. Therefore, by using natural ingredients, users can reduce dependence on drugs.

2. METHOD & MATERIAL

2.1 Materials

The basic ingredients prepared for patch of nasal care face mask are cinnamon, garlic, turmeric, ginger, cloves, and lemongrass.

2.2 Methodology

2.2.1 Preparation of Powdered Herbs



1. The ingredients are measured and prepared accordingly



2. All ingredients are grinded by using grinder for fine texture.

2.2.3 *The Making of Nasal Care Face Mask*

1. Prepare all ingredients cinnamon, garlic, turmeric, ginger, cloves, and lemongrass in fine texture.



2. The herbs are inserted into the face mask patch



2.2.3 *Sensory Evaluation*

A sensory evaluation is conducted to validate that the patch is aromatic and suited for health therapy. The survey was completed by 30 respondents, including students from Universiti Teknologi MARA (UiTM) Cawangan, Johor, and local community. Each of them received a standard face mask as well as a nasal care face mask. All samples were evaluated using a 5-point Hedonic Scale, with 1 representing strongly dislike and 5 representing extremely like. In consumer research, a Hedonic Scale is used to collect liking data (Stone and Siddel, 1985). The obtained data is analyzed to determine the efficiency of the nasal herbs patch.

3. FINDINGS

Based on the findings, it is proven that the herbs patch can be used as a treatment for nasal care. Below is the example of packaging:



Figure 2. Packaging specification

4. DISCUSSION

A hedonic test is conducted by 30 respondents by using Google Form comprising of five characteristics which are fragrance, convenience, effectiveness, affordability, and overall product acceptance. Each of them is served with the usual face mask and nasal care face mask.

Table 2. Hedonic Test Result.

Fragrance	Convenience	Effectiveness	Affordability	Overall Product
2.4	3.93	3.87	4.27	3.5

Table 2 displays the average score of 30 respondents, with fragrance scoring the lowest of all five characteristics, with 2.4 on average. Because the product comprises natural ingredients, the herbs may be overpowering for some of the respondents. As the patch is used for 30 minutes as therapy when needed and can be carried anywhere, the product scored above average for convenience. Respondents feel comfort in breathing and less irritation in the nose, which can induce sneezing when using this product to treat acute sinusitis. Furthermore, most respondents believe the product is affordable as a sinus therapy, as existing sinus care on the market is costly.

5. CONCLUSION

In this research, nasal care face mask is invented as an alternative way to reduce sinus infection. The patch of the mask is filled with herbal powder made up from natural ingredients. These herbs have been proven to be remedies for sinusitis and allergies symptoms. The addition of herbal patch in a face mask is an innovative approach that aims to provide therapy option for people who suffer from sinusitis and allergies. A hedonic test is conducted to measure the reliability, acceptance, and effectiveness of the product. The data is analysed and the result show that most respondents agreed and believed that the product is comfortable, convenient, and able to reduce and relieve the symptoms of the sinusitis infections. Furthermore, the nasal care face mask is affordable and thus has the potential to become one of the alternative treatments and therapy for sinusitis and allergies.

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