

## Original Article

# Facial Candling for the Treatment of Allergic Rhinitis in Young Adults: A Qualitative Study

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### ABSTRACT

**Aims:** Facial candling is one of the traditional treatments that is claimed to be able to help in curing or reducing various allergy and inflammation conditions such as allergic rhinitis. We aimed to explore the perceptions of participants with allergic rhinitis toward their disease conditions and facial candling treatment. **Materials and Methods:** The study used a qualitative exploratory design, comprising 12 in-depth interviews. A semi-structured topic guide was used to explore all relevant aspects of the topic, which were audio recorded, transcribed verbatim. All the interviews were conducted in a few beauty salons in purposively selected city areas in the state of Kedah, Malaysia. **Results:** Of the 12 patients, seven (58%) reported a positive experience of facial candling treatment, with improvement in the condition of their allergic rhinitis. Specific themes about the experience of facial candling treatment that were identified within the transcript data included knowledge about facial candling, options for disease treatment, effectiveness of facial candling, sources of information, comparison, application of treatment, treatment budget, and safety. The major strength lies in the fact that reasons for using facial candling were uncovered from the perspectives of people with allergic rhinitis through the in-depth interviews. **Conclusions:** The motives of these participants for using facial candling are mainly due to cultural influence and its low cost of treatment. There were mixed responses from the participants about the usefulness of facial candling. Most of the respondents had not assessed the safety of prolonged use of facial candling and regarded it as a safe procedure as this has been practiced for generations.

**KEYWORDS:** *Complementary medicine, ear nose and throat, face candling, inflammation, nasal blockage, otolaryngology, traditional medicine*

## INTRODUCTION

Allergic rhinitis (AR) is one of the common chronic respiratory system diseases that is characterized by nose inflammation caused by external stimuli, for instance, pollen and dust.<sup>[1,2]</sup> The symptoms of AR include watery nose, frequent sneezing, and nasal blockage.<sup>[3]</sup> In addition, the individual is often seen to rub his or her nose.<sup>[4]</sup> AR can be grouped into two types: perennial and seasonal. Perennial AR happens throughout the year as it is triggered by nonseasonal allergens such as dust and mould, whereas seasonal AR occurs during specific periods of time when seasonal

allergens such as tree pollen and grass trigger reactions in individuals who are sensitive to them.<sup>[5]</sup> The terms used to describe AR based on its occurrence are intermittent, persistent, mild, and moderate to severe.

In Malaysia, it is estimated that 60% to 65% of the population suffers from AR, which is also known as

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*resdung* by the locals.<sup>[6]</sup> A recent study reported that up to 30% of AR patients are from the urban population.<sup>[7]</sup> Behaviorally, AR symptoms result in significant sleep impairment with accompanying fatigue, cognitive and social impairment, as well as productivity losses in school and work.<sup>[8]</sup> A previous study on AR showed that almost 80% of patients seen by ear, nose and throat specialists were prescribed with steroids and vasoconstrictor drugs nasal spray and antihistamines.<sup>[9]</sup> Nonetheless, the use of steroids may result in adverse effects such as increased blood pressure, weight gain, and increased risk of infection.<sup>[10]</sup>

Facial candling, which is one of the traditional treatments mainly used by people of Malay ethnicity, is claimed to be able to help in curing or reducing various allergy and inflammation conditions such as AR which is accompanied by severe sinus pain and pressure. Recently, facial candling appears to be increasingly popular in Malaysia and is frequently practiced with claims that it can reduce flu symptoms, AR, and other general health conditions related to sinus problems. According to American Academy of Audiology (2010), facial candling uses cones that are made of cloth soaked in beeswax or paraffin. The hollow cones are 9 to 10 inches in length and ¼ to ½ inches in diameter.<sup>[11]</sup> The facial candling treatment takes approximately 15 to 20 min per candling depending on type of candles, and the price range depends upon the package chosen by customers. For instance, it costs between RM10 and RM25 (equivalent to USD3 to USD8) for facial candling treatment only, and between RM40 and RM50 (equivalent to USD13 to USD17) for those who prefer facial candling followed by a beauty facial treatment.

Facial candling can be performed by beauticians, alternative therapists, or patients themselves at home using kits that are purchased at the salons where a client has gone for an initial treatment.<sup>[12]</sup> For a salon treatment, the client lies face up on a padded massage table, resting with his or her head supported by a pillow. A candle is then lit and held over the client's face while it slowly finishes burning. For safety, the client's eyes are covered with a damp cotton pad to prevent any dripping of candle wax into the eyes. Then the practitioner passes the smoke that is released by the candle around the client's face. To relieve pressure in the head and sinuses, and to draw out impurities, the candle is also passed through both ears of the patient as this is believed to promote great relaxation and reduce pressure in the ears and sinuses, hence providing some relief. During the treatment, patients will hear a hissing or crackling sound. Lastly, the practitioner cleanses and massages the patient's face using a cleanser and lotion to make sure all dirt is removed from the face.

Facial candling is believed to give various impacts to the patients. The main purpose of this treatment is to release the so-called "toxic substances" from the body, reduce stress as it promotes relaxation, and reduce headache, ear infection, throat infection, and also hearing problem. Besides, the facial candling technique is also said to improve the blood circulation throughout the body and reduce symptoms of AR or "*resdung*." In term of beauty, facial candling helps in preventing the acne and smoothing the face. Usually, the effect can be said come from the facial massage given before and after the candling treatment. However, in terms of efficacy, there is no evidence that shows that facial candling helps in reducing AR, similar to the ear candling treatment that is also traditionally used to relieve sinus pressure and pain.<sup>[13]</sup> In fact, scientifically, there is no link between so called dust mites and AR or sinus infection. Moreover, there is no scientific proof encouraging the use of facial candling for such conditions, and the research on this topic is limited.<sup>[4]</sup> From studies that have been conducted on ear candling, it has been shown that there is no substance removed from the patient's ears when they use candle, and that the material deposited during candling does not come from the human body but instead they are the residues of the burnt candle.<sup>[11,14,15]</sup> Likewise, it is claimed that facial candling can kill the worms at the sinus cavity. Usually after treatment, the patient realized that there was whitish powder on their face, and most of the practitioners insisted that the powder was evidence of facial candling reducing symptoms of "*resdung*."<sup>[13]</sup>

To the authors' best knowledge, no documented literature has been reported on the use of facial candling or its effect on AR. Therefore, we conducted this exploratory qualitative study to describe the facial candling treatment from the perspective of people diagnosed with AR and who had tried this treatment. The outcome of this study, for the first time, reveals the perspective of people in Malaysia on facial candling as a treatment for AR. The study provides an in-depth understanding of people's attitudes and behaviors with regard to facial candling treatment. Furthermore, a better understanding of the patients' perception toward their disease conditions and facial candling treatment could help the health care professional in guiding the available treatment and providing targeted counseling.

## MATERIALS AND METHODS

### Study design

The interviewees were selected through purposive sampling. Patients who had been diagnosed by a medical doctor with a confirmed diagnosis of perennial AR and who had also been treated previously using

facial candling were invited to participate in this study. Data were collected using face-to-face semistructured interviews. Ethical approval of this study was obtained from the Universiti Teknologi MARA (UiTM) Research Ethics Committee [600-RMI(5/1/6)]. All participants provided written consent to participation. At the beginning of the interview process, the participants were briefed on the purpose, procedure, and expected benefits of the research and assured of the protection of their confidentiality. Participants' demographic information was also recorded using a standardized form. The interview guide focuses on actions taken regarding illnesses (short- and long-term) that had been experienced by the participants, perceptions of facial candling, and experiences associated with facial candling. Data collection and analysis were conducted concurrently, and recruitment was stopped when saturation had been reached, whereby no new themes emerged from the interviews.<sup>[16]</sup> Interviews were conducted at a time and location convenient for the participants. For instance, 7 out of the 12 interviews were held in salons after participants had just finished their facial candling treatments. For the remaining participants, the interviews were held at cafes as suggested by participants. Interviews were conducted individually in a private room or corner using a semistructured interview guide to ensure consistency.

All the interviews were conducted by a trained researcher who is fluent in both English and the Malay language. All the interviews were conducted face-to-face in the Malay language according to the preference of the interviewees, and lasted from 25–30 min. With the participants' permission, the interview sessions were audio recorded. Besides, the researcher also took handwritten notes during the interview to highlight key words from the participants' stories. The Malay interviews were translated largely word for word into English by the interviewer, which later were rechecked by a language translator.

#### Data analysis

Audio recordings were transcribed verbatim and transcripts anonymized to ensure confidentiality. Two researchers individually coded segments of the data from the first five interviews. The coded data were then reviewed independently to determine interrater agreement. All disagreements were discussed until a consensus was reached. Following agreement with the general codes, one researcher coded each interview using the agreed coding scheme. After analysis, the codes were sorted into categories. The categories were

then grouped into themes. To ensure accuracy and to eliminate transcription errors, a third independent researcher reviewed each transcript while listening to the tape recording to ensure transcript accuracy. All the transcripts were coded manually. All the data that referred to the same theme were grouped together under the same code. To increase their familiarity with the data prior to coding, multiple readings of the interviews were done by the researchers. The analytical process and the findings were reviewed by another qualitative researcher before responses relating to different themes were located in each of the interviews and a coding frame was developed. For each theme, the relevant data enabled a description of the range of views and experiences.

Thematic analysis is one of the qualitative methods that require original data to be organized under particular clusters and themes. In this study, thematic analysis method was used, and themes were identified based on the information data gathered. The themes were identified by comparing the extracts within and between coding categories.

## RESULTS

A total of 12 participants were interviewed [Table 1]. All participants who were interviewed were Malays, of whom 8 were female and 4 were male. The participants' ages ranged between 20 and 26 years, with a mean ( $\pm$ standard deviation) age of  $22.3 \pm 1.67$  years. Three of the participants were married whereas the others were still single. Four out of 12 were working, and the rest were still studying. In this study, eight themes were identified within the transcript data: (a) knowledge about facial candling, (b) effectiveness of facial candling, (c) option for disease treatment, (d) sources of information, (e) comparison, (f) application of treatment, (g) treatment budget, and (h) safety.

#### Knowledge about facial candling

According to majority of the participants who participated in this study, facial candling is considered a physical treatment originating from traditional Malay treatment. "Facial candling is actually a treatment which I can say is a traditional treatment" (Participant 3). "In my opinion, facial candling treatment is one of the Malay traditional methods which is used to remove 'hama', also known as dirt, on our face" (Participant 5). "From what I know, facial candling is one of the alternative methods that we can use to reduce *resdung* instead of taking medicine. It is also known as a traditional method" (Participant 7). "It is one of the traditional methods which people of Malay

**Table 1: Demographics and AR treatment practices of participants**

Participant#	Age	Sex	Marital status	Occupation	Started using facial candling since	Have AR since	Current treatment
1	23	Male	Single	Engineer	2007	2005	Antihistamines bought from pharmacy
2	23	Male	Married	Executive	2009	2006	No
3	21	Female	Single	Student	2011	2010	No
4	23	Male	Single	Student	2009	2005	No
5	23	Female	Single	Businessman	2010	2007	No
6	22	Female	Single	Student	2011	2007	Antihistamines bought from pharmacy
7	23	Female	Married	Student	2012	2006	Antihistamines bought from pharmacy
8	20	Female	Single	Student	2008	2005	No
9	23	Male	Single	Engineer	2014	2011	No
10	26	Female	Married	Housewife	2013	2010	Traditional medicines
11	21	Female	Single	Student	2014	2011	Antihistamines bought from pharmacy
12	20	Female	Single	Student	2011	2009	No

AR = allergic rhinitis

ethnicity usually practise" (Participant 10). "It is a traditional method that Malay people usually practise" (Participant 8). "I think facial candling is a traditional method that is done by Malay people to cure *resdung*" (Participant 9).

Several participants believed that facial candling has to do with microorganisms. "They will remove 'ulat *resdung*' by this method" (Participant 12). "*Resdung* is a disease where there are yellowish bits which is known as bacteria" (Participant 1). "It is a treatment to remove 'hama' from our face" (Participant 2). "The objective of the treatment is to get rid of 'hama' situated all around our face" (Participant 3). "What I know about facial candling is that it is one of the treatments that is used to get rid of bacteria, microorganisms and dirt which are some of the causes of *resdung*" (Participant 6). When asked to define "hama," Participant 2 said, "Hama is like a type of insect or bacteria which is usually found in poultry. It is considered as a very small insect," whereas Participant 3 said, "Hama is a microorganism that usually lives in animal dander that causes sinus in a person."

Some participants also described their knowledge of facial candling based on the method of the treatment that they had experienced. For example, "it is just simply passing the candle around the face to spread the candle's smoke" (Participant 8). Others mentioned "it is just placing the candle around the face of the participant" (Participant 2), "it is to distribute smoke from the candle all around the face which is like a dynamic treatment" (Participant 3), and another

stressed that "it is simply placing the candles at fixed positions around the face" (Participant 3). Although the next participant had no idea initially about facial candling treatment, she still tried it: "Honestly, I have no idea about this treatment but it's okay for me to have a try" (Participant 4).

### Effectiveness of facial candling

Based on the study, it would appear that the treatment of facial candling has much impact on patient comfort. Of the 12 patients who were interviewed, 7 claimed that they were fully satisfied with the treatment that was given to them. For instance, "After the treatment, I experienced relief. It gives good result" (Patient 1), "So far I haven't experienced any bad effect from facial candling. It is effective" (Patient 3), "The result was good" (Patient 6). "It reduced my *resdung* problem, my skin feels soft, I feel fresh and I find it easy to breathe after the treatment" (Patient 6). "The treatment gives a good result to me" (Patient 8). "I think the treatment is effective for me" (Patient 9). "My face feels soft and less itchy especially around my nose" (Patient 9). "I think the treatment is effective for me as it gives me a bit of relief" (Patient 12).

The other five participants gave negative feedback about the treatment. "Honestly, I don't like the treatment and it is not effective for me" (Participant 7), "For me, the treatment didn't give any good effect as they (the practitioners) said it can improve our breathing, reduce the *resdung* and so on. I just feel the same as usual" (Participant 4), "In my opinion, facial candling is not effective for me" (Participant 5).

Although some participants felt that facial candling had good effect and some did not, a few of them did experience difficulties in breathing. For example, “The only thing is the dynamic method seems to give discomfort to the participant as breathing can be hard because they use smoke” (Participant 3), “The smoke was really hot on my face and I couldn’t breathe when they started to spread the smoke all around my face” (Participant 4), “I couldn’t really breathe when the smoke accumulated around my nose” (Participant 5), “It is difficult to breathe” (Participant 7), “I had a hard time trying to breathe” (Participant 8), “I had a hard time trying to breathe especially when the practitioner spread the smoke around my nose” (Participant 10), “I felt a little bit uneasy to breathe because of the smoke” (Participant 12), “I couldn’t breathe when they started to release the smoke” (Participant 11).

#### Option for disease treatment

For this theme, there are five subthemes that contributed to the participants trying out this facial candling treatment. These subthemes are cost, cultural influence, recommendation, safety, and new method. Overall, the majority of participants tend to try facial candling treatment because it is affordable. “The reason I choose facial candling is because, try to imagine that if we go to hospital, the approximate cost is much higher” (Participant 1). “Secondly the cost is much lower compared to medical treatment which sometimes is not effective” (Participant 3), “The cost of the treatment also much lower than modern treatment” (Participant 5), “The price offer is affordable” (Participant 8), “I think the cost is much lower compared to medical treatment” (Participant 9), “The cost of the treatment is lower” (Participant 10), “The treatment is quite cheap compared to modern treatment” (Participant 11), “So, instead of spending that amount of money to go to the hospital, why don’t we try facial candling which costs less?” (Participant 12).

Participant 2 claimed that she tried facial candling treatment due to cultural influence as facial candling is a common treatment for the Malays. “If we look at the Malays who usually go for traditional treatment, facial candling has been a common treatment for *resdung* since a long time ago” (Participant 2). Both Participants 4 and 11 expressed that recommendation is also a factor that caused them to do facial candling treatment: “Well, actually, my parents recommended this to me as they claim the treatment helps them to reduce *resdung*” (Participant 4), “My friend asked me to join her to do facial candling” (Participant 11).

Participant 5 felt that safety contributed to her decision to try this treatment: “I like to try a traditional

treatment as I think it is safe.” Participant 7 and 8 said they wanted to try a new method of treatment, so they went for facial candling: “I tried facial candling because I have taken medicine before, but the result was not improving” (Participant 7), “Maybe I was not exposed to any other treatment and facial candling is the only treatment I know, so I wanted to give it a shot” (Participant 8).

#### Sources of information

Six participants stated that they received most of the information about facial candling from their family members. “My mother. Because she is one of the regular customers to a salon where my mother goes for her facial treatment” (Participant 1), “The one who recommended this treatment is my aunt” (Participant 2), “My mother recommended it to me” (Participant 5), “My mother’s friend who works at a salon recommended it to me because she know I have *resdung* and my condition is quite chronic” (Participant 7), “The salon also provides the facial candling treatment so she asked me to give it a try” (Participant 12).

Four participants claimed that they gained information regarding facial candling from their friends. “My friend recommended it to me because he told me there was a positive effect on him after the treatment” (Participant 3), “My friend who works at a salon recommended it to me” (Participant 6), “One of my best friends recommended it to me as it had a positive effect on him after the treatment” (Participant 9), “Most of my friends said the treatment gives a good result. So, they recommended it to me” (Participant 11). Besides that, two participants said that they received information from advertisements: “I read an advertisement about facial candling treatment in a magazine a few years ago” (Participant 8), “I read on the Internet about this treatment” (Participant 10).

#### Comparison between modern medical treatment and facial candling

This theme gives a comparison between modern medical treatment and facial candling treatment in terms of cost, effect, and perception. In terms of cost, three participants were uncertain about the cost of both treatments: “Well, if you think it is worth it to invest in something which won’t give you negative side effect, then I think it’s better to try facial candling” (Participant 3), “If the medical treatment is proven to be very effective, the amount of money spent will not be a problem” (Participant 12), “So, it is not wise to spend money on something you don’t even know the effectiveness of as compared to medical treatment which has already been studied and researched” (Participant 10).

Furthermore, five participants indicated that they are cautious with respect to both treatments: “For me, it is better to go to a medical professional because it involves our health” (Participant 4), “It is better to go for medical treatment if you have a serious *resdung* problem because I am afraid that traditional treatment may cause bad effects” (Participant 5), “If the condition is too chronic then it is better to go for medical treatment because we can find out what our problem actually is, there may be different methods for different problems, and we can also get advice from a specialist” (Participant 6), “... better to go for medical treatment if you have serious *resdung* because we are afraid facial candling may have a bad effect” (Participant 11).

#### Application of treatment

This theme is about how the participants received the treatment, and whether they were willing to take the risk of self-administration. Participant 1 claimed that she does not dare to do the treatment for herself as she believes that the treatment requires proper techniques: “Honestly, I don’t dare to do the treatment all by my own since this treatment requires special and proper techniques” (Participant 1). Similarly, Participant 7 mentioned that “Because I’m afraid to do at a salon; that’s why I prefer to do the facial candling treatment at home” (Participant 7).

There are five participants who claimed that they do not do facial candling treatment because they do not have any idea about it: “I have no idea how to use the facial candling and since I’m the only daughter in my family, there are a lot of things I don’t really know, especially about beauty care” (Participant 4), “Never, because I don’t know the procedure of conducting the treatment” (Participant 8), “I do not know how the treatment procedure is conducted” (Participant 2), “I don’t think I can do the treatment by myself” (Participant 11), “This treatment requires proper techniques, so, I don’t dare to do it on my own” (Participant 12).

Another five participants took the treatment because of its affordable price and also the possibility of self-application: “If you do it at home, you won’t spend that much money, including on transportation” (Participant 3), “Because the cost is reasonable, which is RM3 for one candle” (Participant 5), “When you do it at home, the cost is less than RM10 compared to doing it at a salon” (Participant 6), “The cost of the treatment is quite cheap” (Participant 7), “The price is affordable” (Participant 9), “Actually this facial candling treatment is practicable and applicable” (Participant 2).

#### Treatment budget

This theme is about the perception of the participants in terms of the budget required for facial candling treatment. Most participants stated that the price of facial candling treatments are inconsistent and vary in different places. “Each packet of facial candling candles is about RM3 to RM4” (Participant 2), “Well, it is usually sold in packets which cost about RM5” (Participant 3), “Since I have done the treatment just one time, the cost is RM10” (Participant 4), “The total cost is around RM80” (Participant 5), “The cost of facial candling treatment is about RM25 per session. The total cost from the beginning of my treatment until now was around RM80” (Participant 8), “Around RM40” (Participant 8), “So far I have done twice, so, the total was around RM30” (Participant 9), “Around RM50” (Participant 10), “The cost of treatment is RM20 per session. But I included the facial session so the total was RM30” (Participant 11).

#### Safety

This theme is about the safety aspect of facial candling treatment as well as the countereffect of the treatment. About seven participants claimed that they experienced pain and itchiness during treatment. “During the treatment, the face experiences pain” (Participant 1), “Severe pain around the face, then my nose and face started to feel itchy and after the treatment, a lot of pimples start to grow” (Participant 2), “During the first time, I felt a little bit itchy on my face” (Participant 5), “...eyes stinging, itchy nose and I don’t really like the smell” (Participant 7), “...itchiness on my face stressed me up” (Participant 8), “My whole face felt like it was swelling, and the itchiness on my face was killing me” (Participant 10), “I felt uncomfortable when my face got itchy and I was sneezing all the time” (Participant 11). Participant 4 stated that she was traumatized by the treatment, “Seriously, it was an unforgettable experience for me.”

Uncertainties about the treatment created a safety concern for three participants: “I think maybe there is a side effect since they use smoke” (Participant 4), “Facial candling treatment may have side effects but I cannot say what they are” (Participant 5), “I’m not really sure of the side effects of facial candling treatment on the human body” (Participant 8). One participant did not have any safety concerns: “I am confident about the treatment” (Participant 1).

One participant believed that it would affect the respiratory system: “Physically maybe not, but it may have an effect on our respiratory system such as it might cause asthma” (Participant 7), whereas another

participant had no idea: “Sorry, I have no idea about this” (Participant 11). The remaining four participants did not have issues in terms of safety based on their experience: “No side effect experienced” (Participants 2, 3, and 6), “I do not suffer from any bad physical changes as the treatment and its effect is focused on the face” (Participant 8).

## DISCUSSION

Facial candling is practiced and tried by some people in Malaysia especially Malays as they perceive it as an economical, safe, and effective treatment for their nasal conditions. It is also promoted via online social media such as blogs with unsubstantiated claims. The mechanism of actions and real clinical benefits have not been fully understood and tested. There is no conclusive claims on its positive clinical effect at this stage as it is yet to be proven and it could be associated with considerable risk. In this study, the background of the respondents, patients’ perception toward AR condition and facial candling treatment as well as understanding of the respondents on the AR and facial candling treatment were investigated. This study addressed critical issues pertaining to the knowledge about facial candling, its effect and cost, and motivation toward use of facial candling, which have not been studied before, hence providing an important insight into the treatment.

Based on the current study, most participants do have some knowledge about facial candling treatment. Majority of female participants could explain more regarding what they know about facial candling. It concurred with other studies that women’s knowledge, beliefs, and attitudes affect their behavior.<sup>[17,18]</sup> Some might not have adequate knowledge regarding facial candling due to the lack of exposure. From the study, we noticed that the first perception of participants about facial candling is that it is a traditional treatment, which means the treatment is an old-fashioned treatment that has been practiced for generations. The participants also believe that there is a connection between the treatment and microorganisms. Some of the participants only got to learn about this treatment after experiencing it.

Effectiveness of treatment may also vary from individual to individual, as different people may react differently to facial candling. As five participants complained that they did not experience any positive effect from the treatment, there are a lot of other factors that may contribute toward the effectiveness of the treatment. For instance, conducting the treatment following incorrect procedures could contribute toward the ineffectiveness of the treatment. Besides, no clinical research has been

conducted on facial candling to prove its effectiveness. Therefore, more scientific research needs to be done to demonstrate the efficacy of facial candling treatment for AR.

All participants claimed that they had undergone this treatment due to its affordable price. As facial candling is a traditional treatment, this means that it does not require high-tech machines or much manpower. Therefore, the cost for this treatment is very reasonable. One participant stated the influence of Malay culture triggered the participant to try this treatment. This is because has been in the culture of Malay people to practise this treatment since a long time ago. Thus, it has become a habit for some Malays to treat AR with facial candling as a first line treatment. Information with regard to this treatment can be easily disseminated amongst closed family members. On the other hand, friends who have prior positive experience or knowledge of facial candling will explain the benefits of the treatment. This will also encourage people to try the treatment. Besides that, social media is fast becoming one of the main sources of information for general public on cosmetic and self-care.<sup>[19,20]</sup> A simple treatment like facial candling is perceived as being very safe. Hence, more people will be encouraged to try it. In addition, curiosity is also a contributing factor for newbies to try this treatment.

Although facial candling involves no high-tech medical machines, many people believe that the treatment requires proper techniques and procedures. Facial candling cannot simply be carried out without sufficient knowledge about it. It should be made illegal for a person to claim that they are practitioners without having any proper accreditation or certification related to it. Besides, facial candling is known to be cheap because currently no proper training or license is required to practise facial candling. Cost plays an important role in utilizing the treatment. In this case, all participants mentioned that they experienced inconsistent pricing depending on the place where they underwent the treatment. There seems to be no standard price for the treatment. However, no matter how much it costs, the treatment is relatively cheaper than modern treatment.

Nevertheless, safety is one of the most important elements that needs to be considered while deciding to try the facial candling treatment. The knowledge that facial candling is a traditional treatment gives an impression to some people that the treatment is safe. As participants inhale the smoke when the practitioner passes the candle around the face, there is a possibility for local irritation, and as the smoke enters the lungs,

it may affect the respiratory system. A previous study by Rafferty *et al.*<sup>[21]</sup> using candles as the main item for treatment resulted in adverse effects such as burns, and this might occur in facial candling.<sup>[21]</sup> Some did not have any issue in terms of safety while undergoing the treatment. Facial candling that has been done correctly may reduce the chances of negative side effects on the participants.

## LIMITATIONS

Participants from other ethnicities were not included because the customers who visited the beauty salons used for recruiting participants were Malays. The sampling method is purposive sampling: We included participants who had tried facial candling, and we did not impose restrictions on the number of times or the frequency of the participants' exposure to facial candling. All the interviews were conducted in the Malay language, audio recorded, and then transcribed. The transcribed text was then translated into English by a researcher proficient in both languages. The meaning of some terms, especially specific slang words used in the local dialect, might be difficult to be accurately translated into the English language.

## CONCLUSION

As there are limited scientific evidences to support the effectiveness of facial candling, this study provides feedback of facial candling on symptoms relief among patients with AR. There were mixed responses from the participants about the effects of facial candling. Some participants claimed that the treatment did not help and that they suffered from breathing problems during the treatment. The motive of using facial candling is mainly cultural influence and its low cost. Most of the participants had not assessed the safety of prolonged use of facial candling and regarded it is as safe as the practice has been passed down for generations. Nonetheless, further experimental study is required to provide necessary evidence to use facial candling as a complementary and alternative treatment for AR.

## Ethical approval

Ethical approval was obtained from the UiTM Research Ethics Committee [600-RMI(5/1/6)]. All participants provided written consent to participation.

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## Conflicts of interest

There are no conflicts of interest.

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