narraj

Short Communication

Striving for smoke-free families: Wives' role in Gayo Lues, Aceh-Indonesia

Hasrizal Saffutra[1], Mustanir Yahya[2*], Rizanna Rosemary[3], Rosaria Indah[4] and Dedy Syahrizal[5]

[1]Doctoral Program, Faculty of Medicine, Universitas Syiah Kuala, Banda Aceh, Indonesia; [2]Department of Chemistry, Faculty of Science, Universitas Syiah Kuala, Banda Aceh, Indonesia; [3]Faculty of Social and Political Sciences, Universitas Syiah Kuala, Banda Aceh, Indonesia; [4]Department of Medical Education, Faculty of Medicine, Universitas Syiah Kuala, Banda Aceh, Indonesia; [5]Department of Biochemistry, Faculty of Medicine, Universitas Syiah Kuala, Banda Aceh, Indonesia

*Corresponding author: mustanir_yahya@usk.ac.id

Abstract

Smoking remains a prevalent habit in many households, particularly in regions where cultural norms strongly accept tobacco use. The aim of this study was to examine the influential role of wives in Gayo Lues, Aceh, Indonesia, in promoting smoking cessation within their families. Amidst cultural norms that widely accept smoking, these wives employed both persuasive and, occasionally, coercive methods to encourage healthier behaviors among family members. Utilizing a qualitative approach with Participatory Action Research (PAR), data were collected through in-depth interviews with seven wives who have firsthand experience with smoking behaviors in their families. The findings revealed that wives in Gayo Lues act as both health monitors and guardians, balancing emotional support with firm boundaries to foster a smoke-free home environment. Their roles extended beyond traditional caregiving, as they actively shape family health outcomes. In conclusion, this study underscored the importance of empowering wives as health advocates in public health efforts, particularly in culturally conservative settings. Future research could further explore the broader socio-cultural dynamics influencing wives' health advocacy roles and assess the sustainability of these behaviors over time.

Keywords: Family health, health advocacy, qualitative research, rural health, smoking cessation

Introduction

Smoking is a deeply rooted habit worldwide, affecting not only individual health but also family well-being, and the issue grows each year. The number of global smokers has surged to approximately 1.3 billion people. According to the 2021 Global Adult Tobacco Survey (GATS), an increase in adult smokers was reported from 60.3 million in 2011 to 69.1 million in 2021 [1]. Men represent a substantial majority of smokers, consisting of 32–56.6% of the world's one billion tobacco users [2,3]. This trend is reflected in Indonesia, where the 2018 Basic Health Research *(Riset Kesehatan Dasar)* study found that 28.9% of the population smokers are male, comprising 55.8% of the population [4].

In Aceh, the westernmost province of Indonesia, the percentage of male smokers reached 28.66%, making it the sixth-highest among provinces in Sumatra and the twelfth-highest among 34 provinces across Indonesia [5]. This high figure is supported by the government's permissive stance, as the *Qanun* (a regional regulation based on Islamic law) on smoking and *fatwa* (an Islamic legal opinion) given by Ulama Consultive Council (also known as *Majelis Permusyawaratan Ulama-MPU*) only regulate specified smoking areas without prohibiting the

Received: December 21, 2024 - Accepted: April 25, 2025 - Published online: April 30, 2025

activity itself [6]. Consequently, smoking is considered an integral part of Acehnese culture, symbolizing interaction and friendship in social events, but is considered culturally inappropriate and against Islamic principles for women [7]. These laws and cultural views have made smoking common among men, who often see it as a normal part of life and only quit for personal or family reasons [8].

Gayo Lues, one of the districts in Aceh, presents a unique context for this study due to two significant factors. First, it is one of the poorest regions in Aceh, where socio-economic challenges are often linked to limited awareness of health risks and higher smoking prevalence [9]. While the smoking rate dropped from 37.88% in 2019 to 33.90% in 2021, it slightly rebounded to 34.59% in 2022 [4], which highlighted the difficulty of reducing smoking behavior in the region. Although specific studies on local beliefs in Gayo Lues are limited, qualitative findings suggested that smoking is often normalized among men and associated with social bonding in daily activities [10,11]. Second, as a highland area with a cooler climate, Gayo Lues offers a distinct setting where environmental conditions may influence lifestyle choices, including smoking behavior [12]. Despite these challenges, wives in Gayo Lues play an important role in helping their families quit smoking. Women in rural communities often take a central role in health-related decision-making within the family, particularly in tobacco control efforts [13]. Smoking is associated with serious health problems, including respiratory infections, tuberculosis, and cardiovascular diseases, which place a significant burden on families and the healthcare system [14]. Even though cultural acceptance of smoking and limited resources make it challenging to quit [7], these women use emotional support, clear rules, and encouragement to help their families make healthier choices [15]. This study assessed how their efforts are not only improving health within their families but also challenging the local culture around smoking in rural Aceh.

The influence of women in promoting smoke-free homes is underscored by studies that identify wives as primary social controllers who support their husbands in quitting smoking [8,13,16,17]. Women, both smokers and non-smokers—play crucial roles as agents of change, promoting behavioral shifts among family members [7,18,19]. Socially, women are responsible for caregiving within the family. Although many decisions are not in their hands (gender inequality), women play a role in controlling healthy behaviors [20], with men being the ones who are controlled within the marital relationship. However, women often face challenges in helping family members quit smoking. Their role is usually limited to setting rules to restrict it, like creating designated smoking areas or asking guests not to smoke at home. Cultural norms and societal expectations may prevent them from exerting more direct influence on their husbands' smoking cessation efforts [21,22]. While their ability to directly influence quitting may be constrained, women remain key supporters in promoting a smoke-free home environment through encouragement and rule enforcement [8,23].

Despite the significant role women play in fostering smoke-free environments [24], particularly in the culturally rooted setting of Gayo Lues, limited research has focused specifically on how their attitudes, social control mechanisms, and family roles contribute to smoking cessation efforts within their family. Understanding the ways women influence family members' smoking behaviors—whether through support, boundary-setting, or advocacy—can provide valuable insights into the family-level dynamics of health behavior change. This study, therefore, seeks to explore the attitudes, social control strategies, and overall roles of women in Gayo Lues as they work to encourage their family members to quit smoking. By examining these aspects, the aim of this study was to develop a deeper understanding of how women's efforts impact family health and offer a framework that can inform public health initiatives focused on smoking cessation within similar socio-cultural contexts.

Methods

Research design

This was a qualitative study using the Participatory Action Research (PAR) approach, aiming for active collaboration with participants to explore family dynamics and the role of wives in supporting smoking cessation within their families. PAR is particularly suited for this research context, as it emphasized community involvement in identifying solutions to behavioral

challenges, in this case, the encouragement of smoking cessation within families. The study followed the key phases of PAR: Planning, Action, Observation, and Reflection. In addition to in-depth interviews, the research process included participatory discussions and collaborative reflections with the wives to understand their strategies, challenges, and involvement in supporting their husbands' smoking cessation.

Setting and participant

The research was conducted in Gayo Lues, one of the poorest regencies in Aceh, Indonesia [4]. The study began from March to July 2023, allowing sufficient time for researchers to build trust with the community, a vital aspect of effective data collection in a setting where personal and familial matters are often regarded as private. Given the challenges in finding participants who met the study's criteria, the final sample consisted of seven wives who were natives of Gayo Lues. Participants were selected based on specific inclusion criteria: they had to be women who had a family member who had successfully quit smoking, had lived in the same family for at least one year, were between 18 and 50 years old, were married, in good health, and resided in the designated research area.

A purposive sampling technique was employed to ensure participants met key criteria, focusing on familiarity with family smoking habits and cessation efforts. However, due to the difficulty in identifying eligible participants, snowball sampling was also utilized. In this approach, initial interviewees who met the inclusion criteria were asked to refer other women with similar experiences. This method was particularly effective in Gayo Lues, where strong social networks and close-knit community ties made it easier to reach potential participants who might not have been easily identified through conventional recruitment methods. The decision to use seven participants was based on the nature of qualitative research, where smaller sample sizes allow researchers to delve deeper into the particular experiences and perspectives of participants [25]. In this case, the sample size was sufficient to provide rich, detailed insights into the role of wives in smoking cessation within their families. After interviewing the seven participants, data saturation was reached, as no new themes or significant insights emerged from subsequent interviews, confirming that the sample size was adequate for the study's goals.

Data collection

Data collection was carried out through in-depth interviews [26], aimed at eliciting detailed personal accounts from wives regarding their experiences with smoking behaviors within their families, the obstacles they encounter in encouraging cessation, and the strategies they find effective in persuading family members to stop smoking. Key themes explored in the interviews included participants' socio-demographic characteristics, their attitudes toward smoking among family members, the social control to encourage cessation, and the role of the wives in the husbands' smoking cessation process.

The first author conducted all interviews, which were carried out in either Indonesian or the local language, depending on the participants' preferences. Each session lasted approximately 45–60 minutes and was repeated when necessary to ensure data accuracy and completeness. To enhance the credibility of the findings, data triangulation was applied by cross-referencing interview data with observational notes and relevant documents. The interviews were transcribed and then given to the participants for member-checking [27].

Analytical approach

Before analyzing the data, the researcher prepared all interview transcripts in text form to make the coding process easier. The coding framework for this study was based on a literature-driven approach for a theoretical background and data-driven to capture specific details. The coding was done by a single researcher using NVivo Version 15 software to organize the data. The analysis followed a two-cycle coding process [28,29].

In the first cycle, the researcher read through the transcripts several times to understand the content and identify key ideas. This resulted in eight codes, six categories, and three main themes: attitudes, social control, and roles. In the second cycle, the data were read again to ensure everything was accurate and complete. The researcher went back to review and adjust the codes and categories, making sure they matched the aims of the study. This method helped the

researcher in reducing complicated data into different themes, demonstrating how women in Gayo Lues assist their family members in quitting smoking.

Results

Socio-demographic data

The participants in this study were women from Gayo Lues, aged between 28 and 43 years, with the majority (86%) falling in the 26–33 age range and the remaining 14% in the 42–50 age range. These women live with family members who have been former active smokers, with all participants having a husband who previously smoked. Of these husbands, 57% quit smoking within the past year, while 29% quit over a year ago, and 14% quit less than a year ago. The participants' experiences reflected their significant role in the process of supporting smoking cessation within their households.

The participants' educational backgrounds ranged from elementary school to bachelor's degrees. Fourteen percent of respondents completed elementary school, while the rest have completed high school, an associate degree, or a bachelor's degree, each representing 29%. This diverse educational background contributed to different approaches in understanding and managing smoking cessation efforts within the family context. Occupationally, the participants hold a variety of jobs. While 43% were employed as contract workers, 29% were farmers, 14% are housewives, and 14% were civil servants. These different occupations suggested a mix of formal and informal work environments, which may influence how each participant interacts with family members and supports their efforts to stop smoking (**Table 1**).

Table 1. Socio-demographic summary of participants included in the study (n=7)

Characteristic	Frequency	Percentage
Age (years)		
26–33	6	86
34–41	0	0
42–50	1	14
Education		
Elementary	1	14
Middle school	0	0
High school	2	29
Associate degree (diploma)	2	29
Bachelor's degree	2	29
Master's degree	0	0
Occupation		
Housewife	1	14
Farmer	2	29
Civil servant	1	14
Contract worker	3	43
A family member who was a smoker		
Father	0	0
Husband	7	100
Child	0	0
Duration of family member's smoking cessation		
<1 year	1	14
1 year	4	57
>1 year	2	29

Attitude in controlling smoking behavior

The study found that wives in Gayo Lues, Aceh, Indonesia, exhibited high levels of "valuing" and "responsibility" attitudes in controlling smoking behavior. These wives not only responded emotionally but also took personal responsibility for family health, demonstrating a commitment to creating a healthier home environment.

Valuing

The attitude of "valuing" emerged among most participants, reflecting their respect for the importance of smoking cessation efforts. Five participants expressed this attitude, indicating concern for the impact of smoking on family finances and well-being. For example, one

participant shared her sadness about her husband's smoking, particularly due to the financial burden it created: *"It saddens me to see my husband smoking because cigarettes are expensive, and our child needs the money more." (P5)*

This sentiment reflected a shift from passive acceptance to a more proactive, health-conscious mindset, where women recognize the broader implications of smoking on family finances and prioritize health and family welfare.

Responsibility

Furthermore, two participants displayed a "responsibility" attitude by setting clear boundaries and communicating their concerns to family members who smoked. For example, one participant expressed her determination to limit her husband's smoking: *"I don't like it when my husband smokes, and I told him so, even gave him an ultimatum to stop smoking." (P3)*

This statement highlighted the active stance taken by wives, moving beyond emotional response to assert boundaries in a bid to protect family health. Another participant said that *"I am very disturbed, sir, because there's a small child at home who is affected by the cigarettes. The baby is still very young, and I'm worried about the baby's health being affected." (P4)*

The statement indicated a sense of responsibility because she acknowledged the detrimental consequences of cigarette smoke on the health of the baby at home. The expressed discomfort indicates care for family members' well-being.

Social control approach in controlling family smoking behavior

Persuasive

Most wives used persuasive methods, emphasizing health risks to encourage family members to quit smoking. One participant shared her approach, reminding her husband of his health condition: *"My husband has a stomach ache condition, so I told him smoking would only make it worse, and that it would be hard for me if he gets sick, especially since our child is still young." (P5)*. This compelling strategy encouraged quitting smoking by highlighting health issues and the emotional strain on family members. Women effectively framed the issue by linking smoking with potential health complications, adding an emotional dimension that motivated family members to consider quitting. Additionally, a participant uses a persuasive approach by educating her husband about the dangers of smoking, as illustrated in the following statement: "*I work in a hospital, so I see many patients with lung tuberculosis, and I often try to scare him a little because he's already started coughing. If he doesn't stop smoking, he could end up as a patient in the hospital." (P3)*

The woman convinced her husband to stop smoking by telling him that a large number of patients at the hospital where she worked, have lung tuberculosis as a result of smoking. Another woman highlighted the financial burden that smoking imposed on her family, emphasizing that the money spent on cigarettes could be better allocated to more meaningful purposes. *"I just get angry, sir. The money at home is already tight, yet he still buys cigarettes. And those cigarettes are expensive—35,000 rupiahs! Imagine that, sir. In just two days, it's already 70,000 rupiahs, while we have so many other expenses and needs." (P1)*

In some cases, the persuasive approach fostered mutual understanding between the woman and her husband. For instance, when the woman discussed the importance of quitting smoking, her husband listened attentively without any conflict. *"...my husband is willing to listen to what I say to him about quitting smoking." (P5)*. This constructive dialogue reflected a strong foundation of respect and shared concern for their family's well-being. Another example of social control used by the woman is through building affection between partners. One participant shared: *"I love my husband even more now." (P3)*. By expressing her growing affection, the woman used emotional connection as a tool to influence her husband's behavior.

Coercive

In addition to persuasion, some participants also incorporated coercive elements to reinforce their stance. For instance, one participant used emotional pressure by expressing her disapproval and frustration: *"Before he quit, I would get angry, and when he got sick and had to stay in the hospital for a week, he finally decided to quit smoking for good." (P6)*. This participant's

approach combined persuasive reminders of health risks with a more coercive response, using emotional boundaries to push her husband toward quitting. The experience of hospitalization served as a turning point, reinforcing the wife's influence in motivating her husband to stop smoking. Coercive expressions accompanied by emotional threats were also found in this study. One woman shared, *"...I told him that if he still cares about himself and loves his wife, then he shouldn't smoke." (P3)*. This statement combined a sense of emotional appeal with a form of coercion, as the woman connects her husband's smoking habit with his love and responsibility toward her. By framing the issue in such personal terms, she effectively pressured him to reconsider his behavior, emphasizing the emotional consequences of continuing to smoke in their relationship. The most common coercive approach used by women in this study is forbidding smoking inside the house. For example, one participant stated: *"...I also forbid him from smoking in my house, or he can just go outside. My husband just stays quiet, although he gets a little upset, that's normal in a marriage." (P1)*. This approach showed the woman's firm decision to keep the house free from smoke for her family's health. Even though her husband might not agree, her clear rules highlighted her effort to make their home a healthier place.

The wives in Gayo Lues used different strategies to encourage their husbands to stop smoking, combining persuasion with some elements of coercion. All seven participants relied on persuasive approaches, with health concerns being the most common reason they used to encourage their husbands to quit. Three wives also emphasized mutual understanding, two highlighted financial difficulties, three focused on educating their husbands about the dangers of smoking, and one used emotional connection to strengthen their message. Meanwhile, six participants incorporated coercive measures, with five prohibiting smoking inside the house, three expressing anger, and one issuing an emotional ultimatum. While persuasion was the dominant approach, the combination of persuasion and coercion—particularly through enforcing household rules—seemed to strengthen their influence, especially when persuasion alone was not enough. These findings highlighted how women balance care and authority in influencing family smoking behavior, using emotional appeals, financial reasoning, and assertive boundaries to create a healthier home environment.

Wife's roles in family smoking control

Health monitor

As health monitors, the wives took active actions to help their husbands quit smoking, including close monitoring and checking for the smell of cigarettes on their husbands' clothing when they came home. One participant shared: *"It seems like my husband doesn't smoke anymore because every time he comes home, I smell his clothes to check if they smell like cigarettes. If he does smoke, I'll know. But thank God, his clothes never smell like cigarettes anymore." (P2).* This strategy demonstrated the woman's attention and dedication to assisting her husband's attempts to quit smoking. By utilizing her sense of smell to monitor her husband's behavior, she exhibited a personal commitment to his health and reinforces his success toward quitting smoking.

Health guardian

As health guardians, wives played a significant role in ensuring that their husbands quit smoking. Each participant approached this task in her own way, reflecting personal strategies and levels of persistence. For example, one participant shared her experience: *"I made sure my husband stopped smoking, sir. At first, I gave him candy to replace cigarettes, and over time, he stopped smoking altogether." (P6).* This approach highlighted the woman's proactive role in managing her husband's smoking behavior. By offering an alternative, such as candy, she helped her husband gradually reduce his smoking habit, demonstrating a patient and supportive strategy aimed at long-term behavior change. This reflected the care and dedication women put into promoting better health within their families, using creative and compassionate methods to achieve their goals.

In overview, these women exhibited a high level of engagement in controlling smoking behaviors among family members, with their roles evolving from passive acceptance to active responsibility. By combining persuasive and, at times, coercive approaches, they created a balanced framework of support and boundaries, which proves effective in encouraging smoking

cessation. This dual approach highlighted women's ability to navigate family health dynamics and supported the view that women play a key role in motivating changes in family health behaviors. To provide a clearer overview of the findings from this study, please refer to the following mind-mapping diagram (**Figure 1**). These findings affirmed the critical role of wives in Gayo Lues as agents of health behavior change, illustrating their capacity to influence and foster smoke-free environments within their families.

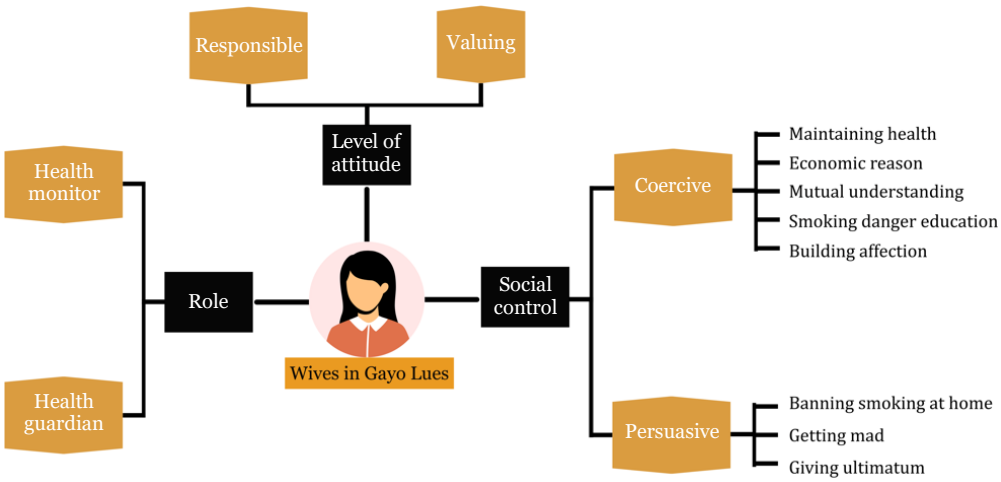

Figure 1. Mind-Mapping of wives' attitudes, social control, and role towards family smoking cessation in Gayo Lues.

Discussion

The results of this study offer valuable insights into the critical role that wives play in helping their husbands stop smoking, particularly within the socio-cultural and economic context of Gayo Lues. In addition to sociodemographic traits, the discussion relies on three primary themes: the attitudes that women adopt (valuing and responsibility), social control strategies (persuasive and coercive), and the roles that women play (health monitoring and guardianship) as reinforcing factors that can encourage family members to quit smoking.

The socio-demographic characteristics of participants revealed a pattern that aligned with their active roles in smoking cessation. The age range of participants (28–43 years) suggested a mature understanding of the consequences of smoking and its impact on family health and finances [30]. This awareness often strengthens their resolve to encourage smoking cessation within their families, as they are likely more concerned about the long-term health implications for their loved ones [31]. The education levels ranging from high school to undergraduate degrees may contribute to their informed attitudes and approaches toward addressing smoking behaviors. Higher educational attainment was generally associated with better health literacy, which can foster more informed attitudes and proactive approaches to smoking cessation efforts [32]. Additionally, the occupations of these women, including farming, contract work, and public service, highlighted their active participation in both the domestic and economic spheres.

The fact that all participants are married and dealing with smoking cessation among husbands underscores the study's focus on the dynamics of spousal influence in health-related behaviors. Research indicated that husbands are more likely to quit smoking if their wives support their efforts or are non-smokers themselves [20,33]. The duration of smoking cessation, predominantly within the last year, suggested that these women are engaging in timely interventions that have contributed to reduced smoking frequency or cessation among family members, driven by their concern for immediate and long-term family well-being. This period is critical as it reflects both immediate and long-term health concerns for the family. The urgency of addressing smoking behaviors can be attributed to the awareness of the health risks associated with smoking, which often motivates spouses to take action [17,34].

Gayo Lues is a region known for its Islamic values and patriarchal social structures, where men traditionally hold decision-making authority within the families [35]. Despite this, women have found ways to exert influence over their husbands' smoking behaviors through both

persuasive and coercive strategies [36]. Economically, Gayo Lues is one of the poorest regions in Aceh, with many families relying on agriculture and informal labor [37]. In low-income communities, economic hardship is a significant factor influencing smoking cessation, as families prioritize essential expenses over discretionary spending like tobacco [38]. Some wives in this study mentioned financial concerns as a reason for encouraging their husbands to quit smoking, arguing that cigarette expenses could be better allocated to necessities such as food, education, and healthcare. Previous studies have highlighted that financial arguments are among the most effective motivators for smoking cessation in resource-limited settings [39]. However, economic reasons were not the primary motivation for most respondents.

The attitudes toward family smoking behavior exhibited by women in this study indicate a significant shift from passive acceptance to active engagement in promoting family health. The high levels of "valuing" and "responsibility" reflected a proactive approach to addressing smoking within the household. The "valuing" attitude is characterized by emotional and financial concerns regarding smoking. Women expressed a broader understanding of the adverse effects of smoking that extend beyond physical health, encompassing economic stability and emotional welfare. This perspective highlighted the recognition that smoking not only impacts health but also places a financial burden on families, affecting their overall quality of life. Such insights align with findings that indicate the importance of understanding the multiple consequences of smoking, which can motivate individuals to advocate for cessation efforts within their families [40,41].

The "responsibility" attitude was demonstrated through actions such as setting boundaries around smoking and effectively communicating concerns to family members. This behavior showcased a commitment to safeguarding the family environment from the harmful effects of smoking. By establishing clear expectations and discussing the implications of smoking, these women take on a protective role, emphasizing their dedication to fostering a healthier living space for their loved ones. This is in line with social and health behavior change theories, which argue that individual responsibility and emotional connection are important components of successful interventions [42]. Women play a crucial role in promoting healthier living conditions in their homes [31,43], and their capacity to express their concerns, such as the financial cost of smoking and its negative health effects.

Furthermore, the study highlighted the dual strategies adopted by women: persuasive and coercive approaches. Persuasion, often involving emotional appeals and education about the risks of smoking, emerged as the primary strategy. Women frequently use their knowledge of health risks and financial restraints to make compelling arguments for preventing smoking, demonstrating a holistic approach to smoking cessation [17,33,44]. Their understanding of the specific health hazards connected with smoking, such as lung cancer and chronic obstructive pulmonary disease (COPD), enabled them to communicate the dangers not just to themselves but also to their families, particularly children and spouses [45]. This knowledge enabled wives to make powerful emotional arguments, tying smoking to significant health concerns and instilling a sense of urgency that can drive cessation efforts [36].

In addition to health concerns, women emphasized the financial burden of smoking, which includes both the direct costs of cigarettes and potential healthcare expenses related to smoking-related illnesses. By highlighting the economic impact of smoking, they presented a powerful motivator for both themselves and their partners to quit [46]. This perspective underscored the long-term savings associated with cessation, making a clear case for the financial benefits of quitting. The combination of health awareness and financial considerations enhances the persuasiveness of women's arguments. By addressing both the emotional and economic aspects of smoking, they create a more robust case for cessation that resonates on multiple levels. This dual approach not only emphasizes immediate health benefits but also the potential for improved financial stability, supporting healthier lifestyle choices within their families [47,48].

Coercive approaches, while less frequent, provided an additional layer of influence. Emotional boundaries, ultimatums, and setting house rules against smoking were effective in reinforcing the message of smoking cessation. Non-smoking wives often employ strategies such as setting emotional boundaries and establishing house rules against smoking, which not only protect family health but also signify a firm commitment to maintaining a smoke-free environment [49]. For instance, forbidding smoking inside the home not only protects family

health but also symbolizes the women's firm stance on maintaining a smoke-free environment [22,50]. The combination of persuasion and coercion demonstrates a balanced approach, ensuring both emotional support and accountability.

The dual roles of health monitors and guardians highlight women's diverse contributions to smoking cessation. As health monitors, women actively observed and recorded their husbands' habits, employing techniques such as smelling for the smell of cigarettes. This monitoring indicates a dedication to supporting their spouses' efforts to quit smoking [33]. As health guardians, women adopted proactive measures such as providing alternatives, like candy, to replace cigarettes [48,51]. This creative method demonstrated their adaptability and creativity in encouraging habit change. The combination of monitoring and guardian duties demonstrated their capacity to successfully manage family health behavior, creating a supportive but firm environment suitable for quitting tobacco use [31,48,52].

Overall, this study showed how important women are as health supporters and change-makers in their families. By giving support and setting clear rules, these women have helped create an environment that encourages family members to stop smoking, showing their ability to manage family health even with social and cultural challenges**.** These findings were connected to Sustainable Development Goal (SDG) 3 (good health and well-being), which focuses on reducing smoking and improving health. The study also relates to SDG 5 (gender equality), as it highlighted how women can lead positive changes, even in cultures where men traditionally make decisions. Also, by showing the financial burden of smoking, this study tied to SDG 1 (no poverty), because quitting smoking can help families save money for other important needs like healthcare and education. By supporting women as leaders in health, this research can help communities improve their health and reach long-term goals for better living.

This study provides valuable insights into the role of wives in influencing smoking cessation within families; however, it has certain limitations. First, the small number of participants may limit the generalization of the findings beyond the specific community studied. While the study offers a deep understanding of the experiences of wives in Gayo Lues, the results may not fully capture the diverse socio-cultural and economic factors influencing smoking cessation across other regions in Indonesia. Second, the selection of participants, wives who were actively involved in encouraging their husbands to quit smoking, may introduce a bias, as it excludes perspectives from wives who may have taken a more passive role or from families where no cessation efforts were made. Future research could benefit from a larger, more diverse sample to better explore variations in smoking cessation strategies across different cultural contexts.

Conclusion

Wives in Gayo Lues play a critical role in supporting smoking cessation within their households by employing both persuasive and coercive strategies. While health concerns were the primary motivator, some women also emphasized the financial burden of smoking. Their proactive involvement, including setting household rules and offering emotional support, demonstrates their capacity as key agents of change. These findings underscored the need for targeted interventions that empower women with resources and support to enhance their influence in smoking cessation efforts. Public health initiatives should incorporate culturally sensitive strategies that leverage women's roles in households to drive sustainable behavioral change.

Ethics approval

This study was approved by the ethical committee, Faculty of Medicine, Universitas Syiah Kuala, Banda Aceh, Indonesia, number 102/EA/FK/2023 on July 13, 2023.

Acknowledgments

We would like to express our gratitude to all participants in this study.

Competing interests

All the authors declare that there are no conflicts of interest.

Funding

This study received no external funding.

Underlying data

Derived data supporting the findings of this study are available from the corresponding author on request.

Declaration of artificial intelligence use

This study utilized AI-based tools to support various stages of the research and writing process. ChatGPT and Quillbot were employed for manuscript writing support, specifically for language refinement, content summarization, and improving the clarity and structure of technical descriptions. We confirm that all AI-assisted processes were critically reviewed by the authors to ensure the integrity and reliability of the results. The final decisions and interpretations presented in this article were solely made by the authors.

How to cite

Saffutra H, Mustanir Y, Rosemary R, *et al*. Striving for smoke-free families: Wives' role in Gayo Lues, Aceh-Indonesia. Narra J 2025; 5 (2): e1960 - http://doi.org/10.52225/narra.v5i2.1960.

References

1. World Health Organization. The global adult tobacco survey (GATS) atlas. Available from: https://www.afro.who.int/publications/global-adult-tobacco-survey-gats-atlas. Accessed: 24 February 2024.
2. Sreeramareddy CT, Pradhan PMS, Mir IA, *et al.* Smoking and smokeless tobacco use in nine South and Southeast Asian countries: Prevalence estimates and social determinants from Demographic and Health Surveys. Popul Health Metr 2014;12(1):22.
3. Peacock A, Leung J, Larney S, *et al.* Global statistics on alcohol, tobacco and illicit drug use: 2017 status report. Addiction 2018;113(10):1905-1926.
4. Badan Penelitian dan Pengembangan Kesehatan (Balitbangkes). Laporan Provinsi Aceh riskesdas 2018. Jakarta: Kemeterian Kesehatan RI; 2018.
5. Direktorat Statistik Kesejahteraan Rakyat. Profil statistik kesehatan 2023. Jakarta: Badan Pusat Statistik; 2023.
6. Pemerintah Provinsi Nanggroe Aceh Darussalam. Qanun Aceh no.4 tahun 2020 tentang kawasan tanpa rokok. Banda Aceh: Pemerintah Provinsi Nanggroe Aceh Darussalam; 2020.
7. Rosemary R. Forbidden smoke 2018. Available from: https://www.insideindonesia.org/archive/articles/forbidden-smoke. Accessed: 18 November 2024.
8. Ayuningtyas D, Tuinman M, Prabandari YS, *et al.* Smoking-related social control in Indonesian single-smoker couples. Int J Behav Med 2021;28(4):455.
9. Huang MZ, Liu TY, Zhang ZM, *et al.* Trends in the distribution of socioeconomic inequalities in smoking and cessation: Evidence among adults aged 18–59 from China family panel studies data. Int J Equity Health 2023;22(1):1-8.
10. Kodriati N, Rosemary R. A Qualitative analysis of smoking behavior from a gender perspective in Indonesia. J Promkes Indones J Health Promot Health Educ 2025;13(1 SE-literature review):122-130.
11. Kodriati N, Pursell L, Hayati EN. A scoping review of men, masculinities, and smoking behavior: The importance of settings. Glob Health Action 2018;11(Suppl 3):1589763.
12. Widiyaningsih D, Suharyanta D. Pengaruh sosial budaya dan geografis terhadap perilaku merokok lansia perempuan di Dataran Tinggi Dieng. J Manaj Kesehat Yayasan RS Dr Soetomo 2017;6(2):244-254.
13. Ibnu IF, Nasir S, Saleh U. Pengaruh komunikasi asertif sebagai dukungan sosial ibu terhadap intensi merokok ayah didalam rumah. J Kesehat Masy Marit 2019;1(1):14-21.
14. Office of the Surgeon General (US); Office on Smoking and Health (US). The health consequences of smoking: A report of the surgeon general. Atlanta: Centers for Disease Control and Prevention (US); 2004.
15. Widiyaningsih D, Setyowati R. Peran tenaga kesehatan dan dukungan keluarga terhadap pengendalian perilaku merokok pada lansia perempuan Di Dataran Tinggi Dieng. J Manaj Kesehat Yayasan RS Dr Soetomo 2021;7(1):20-29.
16. Effendi DE, Ardani I, Handayani S, *et al.* Factors associated with quitting smoking among males: Findings from Indonesian national health survey. Clin Epidemiol Glob Health 2024;28:101672.

17. Takagi D, Kondo N, Takada M, *et al.* Differences in spousal influence on smoking cessation by gender and education among Japanese couples. BMC Public Health 2014;14:1184.
18. Rosemary R. Women's interpretation of anti-smoking messages in Indonesia: An audience analysis. Camperdown: University of Sydney; 2020.
19. Rizanna R, Pertiwi P, Denna I. Inside Indonesia: The peoples and cultures of Indonesia. Available from: https://www.insideindonesia.org/editions/edition-134-oct-dec-2018/stayalive. Accessed: 16 September 2024.
20. Umberson D. Gender, marital status and the social control of health behavior. Soc Sci Med 1982 1992;34(8):907-917.
21. Mao A. Space and power: Young mothers' management of smoking in extended families in China. Health Place 2013;21:102-109.
22. Nichter M, Nichter M, Padmawati RS, *et al.* Developing a smoke free household initiative: An Indonesian case study. Acta Obstet Gynecol Scand 2010;89(4):578-581.
23. Britton M, Haddad S, Derrick JL. Perceived partner responsiveness predicts smoking cessation in single-smoker couples. Addict Behav 2019;88:122.
24. Padmawati RS, Prabandari YS, Istiyani T, *et al.* Establishing a community-based smoke-free homes movement in Indonesia. Tob Prev Cessat 2018;4:36.
25. Hennink M, Kaiser BN. Sample sizes for saturation in qualitative research: A systematic review of empirical tests. Soc Sci Med 2022;292:114523.
26. Yin RK. Qualitative research from start to finish, second edition. New York: The Guilford Press; 2016.
27. Mckim C. Meaningful member-checking: A structured approach to member-checking. Am J Qual Res 2023;2023(2):41-52.
28. Priharsari D, Indah R. Coding untuk menganalisis data pada penelitian kualitatif di bidang kesehatan. J Kedokt Syiah Kuala 2021;21(2):130-135.
29. Lungu M. The coding manual for qualitative researchers. Am J Qual Res 2022;6(1):232-237.
30. Santrock JW. Life span development fifth edition: Perkembangan masa hidup, 5th edition. Jakarta: Erlangga; 2002.
31. Hayati Z, Sulami N. Peran ibu rumah tangga dalam pencegahan perilaku merokok keluarga di dalam rumah. J Kebidanan Dan Kesehat 2018;5(2):1-5.
32. Zainel AA, Al Mujalli H, Yfakhroo AI, *et al.* Investigating the socio-demographic characteristics and smoking cessation incidence among smokers accessing smoking cessation services in primary care settings of Qatar, a historical cohort study. Discov Public Health 2024;21:3.
33. Homish GG, Leonard KE. Spousal influence on smoking behaviors in a US community sample of newly married couples. Soc Sci Med 2005;61(12):2557-2567.
34. Jackson SE, Steptoe A, Wardle J. The influence of partner's behavior on health behavior change. JAMA Intern Med 2015;175(3):385.
35. Bowen JR. Muslims through discourse. New Jersey: Princeton University Press; 1993.
36. Mahardika, . The housewife behavior in the implementation indicators PHBS no smoking in the house (a qualitative study in Puskesmas Digital Repository Universitas Jember. e-J Pustaka Kesehat 2017;5(3).
37. Pemerintah Kabupaten Gayo Lues PemkabGL. Demografi Daerah. Available from: https://www.gayolueskab.go.id/halaman/demografi-daerah#:~:text=Gayo. Accessed: 22 May 2022.
38. Nargis N, Yong HH, Driezen P, *et al.* Socioeconomic patterns of smoking cessation behavior in low and middle-income countries: Emerging evidence from the Global Adult Tobacco Surveys and International Tobacco Control Surveys. PLoS One 2019;14(9):e0220223.
39. Sindelar JL, O'Malley SS. Financial versus health motivation to quit smoking: A randomized field study. Prev Med 2014;59:1-4.
40. Wilkinson A V, Shete S, Prokhorov A V. The moderating role of parental smoking on their children's attitudes toward smoking among a predominantly minority sample: A cross-sectional analysis. Subst Abuse Treat Prev Policy 2008;3(1):18.
41. Siburian, Sari TD, Yustina I, *et al.* Faktor-faktor yang berhubungan dengan perilaku merokok di dalam rumah pada petani sawah di Kabupaten Deli Serdang. Medan: Universitas Sumatera Utara; 2021.
42. Resen HM. Impact of parents and peers smoking on Tobacco consumption behavior of University Students. Asian Pac J Cancer Prev 2018;19(3):677-681.

43. Rokom. Peran Ibu Tentukan Kesehatan Keluarga 2019. Kementerian Kesehatan RI. Available from: https://sehatnegeriku.kemkes.go.id/baca/umum/20190920/2231751/peran-ibu-tentukan-kesehatan-keluarga/. Accessed: 23 November 2024.
44. McGeary KA. Spousal effects in smoking cessation: Matching, learning, or bargaining? East Econ J 2015;41(1):40-50.
45. Bottorff JL, Haines-Saah R, Kelly MT, *et al.* Gender, smoking and tobacco reduction and cessation: A scoping review. Int J Equity Health 2014;13(1):1-15.
46. Rahmanian SD, Diaz PT, Wewers ME. Tobacco use and cessation among women: Research and treatment-related issues. J Womens Health 2011;20(3):349-357.
47. Rohayatun, Saptiko, R.S.A SNY. Faktor-faktor yang mendukung dan menghambat perokok untuk berhenti merokok di Klinik Berhenti Merokok Puskesmas Kampung Bali Pontianak. J Cerebellum 2015;1(4):26-276.
48. Suri SI. Studi fenomenologi: Pengalaman psikologis mantan perokok dalam menghentikan kebiasaan merokok di Kota Bukittinggi. Menara Ilmu 2018;XII(8):149-157.
49. Ayuningtyas DA, Tuinman MA, Prabandari YS, *et al.* Smoking cessation experience in Indonesia: Does the non-smoking wife play a role? Front Psychol 2021;12(6):1-12.
50. Zamani A, Golshiri P, Moqtader B. The study protocol of women's education to create smoke-free home on the basis of family ties in Isfahan, Iran. Int J Prev Med 2013;4(11):1312-1317.
51. Fawzani N, Triratnawati A. Terapi berhenti merokok (studi kasus 3 perokok berat). Makara J Health Res 2005;9(1):15-22.
52. Reskiaddin LO, Supriyati. Proses perubahan perilaku berhenti merokok: Studi kualitatif mengenai motif, dukungan sosial dan mekanisme coping. Perilaku Promosi Kesehat Indones J Health Promot Behav 2021;3(1):58-70.