

The habit of indiscriminate spitting in betel chewing

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Abstract

Betel nut consumption is a customary practice in Simalungun society and is frequently observed during typical and routine events. Nevertheless, there persists a group of individuals who are inclined towards crude expectoration behavior, depositing residual betel within various locations, including public domains such as markets. The focus of this investigation is to conduct an in-depth inquiry into the antecedents of such indiscriminate spitting tendencies exhibited among traders of betel nuts within the Saribudolok Traditional Market, located within the jurisdiction of the Simalungun Regency. This qualitative investigation utilized a phenomenological strategy. Seven informants were interviewed. These include betel nut sellers, visitors or purchasers, healthcare practitioners, and market managers. Observations were also made by the researchers throughout the data collection process. The triangulation technique was employed to verify all the data collected through the interviews and observations. Additionally, the researcher utilized a matrix to categorize the data based on the research objectives and questions. The data analysis followed the Miles and Huberman model, revealing that the practice of carelessly spitting betel residue among traders who consume betel is due to inadequate knowledge of healthy and hygienic living habits as well as unawareness of the dangers associated with spitting betel residue. The lack of education provided by health workers on the hazards of careless spitting and the consequent risk of disease transmission also contributes to this behavior.

Keywords: betel nut eating habits, indiscriminate spitting, public area, traders

Introduction

The habit of indiscriminate spitting is associated with the risk of infection transmission, as knowledge about communicable diseases continues to evolve. If an individual who is infected engages in indiscriminate spitting, it may leave pathogens that can potentially survive in the air or on the surface where the spitting occurs.¹ One literature suggests that regulating the habit of spitting is crucial in the efforts to combat tuberculosis.² Previous research indicates that personal hygiene practices, such as the habit of spitting, coughing, and smoking, significantly influence the incidence of pulmonary tuberculosis.³ Indiscriminate spitting is also found in communities that have a betel-chewing habit.⁴

In many regions of Indonesia, communities still practice betel chewing. They believe that consuming betel or chewing betel quid can strengthen teeth, treat toothaches, heal small mouth wounds, and eliminate bad breath.⁵ Betel chewing involves chewing a mixture of betel leaves, areca nut, gambier, and lime, resulting in red-colored saliva due to a chemical reaction during chewing. Each time someone chews betel, they may spit 5-6 times, and betel chewing is usually performed up to 15 times a day. Uncontrolled spitting of betel residue can lead to environmental pollution and pose risks for the transmission of various diseases.⁶

Betel chewing is an integral part of the tradition of the Simalungun tribe in North Sumatra, especially during ceremonies such as weddings and funerals. This habit is predominantly practiced by the elderly in the community.⁷ Initial observations conducted at the Saribudolok Traditional Market in the Simalungun Regency indicate that many traders and visitors who chew betel spit indiscriminately. Red betel saliva

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discarded carelessly results in a dirty market environment, causing discomfort and disgust among others due to the presence of residual betel spit. This habit increases the risk of disease transmission if the saliva contains viruses, germs, or bacteria. Interviews with several traders revealed that betel chewing is a habitual practice, serving as a pastime while waiting for buyers, a stress reliever, and a means to stay awake in cold weather. This study aimed to provide an in-depth analysis of the phenomenon of indiscriminate spitting among betel chewers and identify the factors influencing this habit.

Method

This study employed a qualitative approach with a phenomenological design. This design was chosen to gain an in-depth understanding of the phenomena under investigation. Phenomenological research aims to interpret and describe the experiences of individuals in their lives, including their experiences when interacting with others and their surroundings. The research was conducted at the Saribudolok Traditional Market in Simalungun Regency from early July to August 2023.

Participants included betel nut traders, visitors or buyers, healthcare workers, and market administrators. The research instrument collecting primary data is the researcher themselves, who is actively involved in observing the subjects' behavior and conducting interviews in the field. Primary data included observations and interview results, recorded as observation notes and interview transcripts. Secondary data, which involve nonhuman elements, include documents, audio recordings, photos, and videos. In-depth interviews were conducted to obtain information about the study. Observations were carried out to directly observe the habits of betel nut traders in spitting betel saliva in the traditional market. Participatory observations in this study utilized observation sheets (checklist forms) and a photovoice.

All the data obtained through observations and interviews were confirmed using triangulation methods. In this study, triangulation was achieved through time extension (the researcher extended the data collection by conducting repeated interviews and observations), source triangulation (more than one primary informant and key informant were consulted), and method triangulation (data collection was performed using more than one method). Data processing involves classifying the data based on comparable features to facilitate data interpretation. Subsequently, the researcher summarized the data in matrix form to categorize them based on research questions and objectives. The data were then analyzed using the Miles-Huberman model.

Results

This research was conducted at the Saribudolok Market, Simalungun Regency, for two months. In-depth interviews were conducted with informants, including employees from the Simalungun Health Department, betel nut traders, non-betel nut traders, and market administrators. Prior to the interviews, the informants were briefed on the research procedure and asked to sign a consent form. Interviews were conducted using a set of questions. The interview results revealed that the three main informants had been practicing betel nut chewing for more than 5 years. Informant 1 had been chewing betel nut for 7 years, informant 2 for 20 years, and informant 3 for 15 years. Informants 2 and 3 had developed the habit of betel

Code	Age	Education	Occupation
IF01	48 years	Junior High	Betel nut trader
IF02	35 years	Senior High	Betel nut trader
IF03	30 years	Vocational	Fish trader
IT01	53 years	Junior High	Buyer
IT02	37 years	Senior High	Buyer
IT03	55 years	Senior High	Market manager
IT04	40 years	Bachelor	Health worker

nut chewing since their teenagers. The informants stated that the reason for the habit of indiscriminate spitting was because it is more practical, there are no restrictions/regulations binding them, and there is no designated place to dispose of betel nut residues.

The researcher delved deeper into information regarding the behavior of indiscriminate spitting, focusing on the informants' knowledge, attitudes, su

porting factors, and traditions. The interview results indicated that the informants had limited knowledge of the impact of the habit of indiscriminate spitting on disease transmission. Therefore, informants believed that this habit only led to public spaces becoming dirty.

"...because spitting betel nut carelessly is unsightly, but causing disease transmission? No way, I'm healthy." (IF01)

"...really? I only knew just now that it could lead to disease transmission." (IF03)

In essence, the informants agree that residual betel nut saliva should be placed in a designated container with a lid. However, in practice, the informants find it inconvenient to carry such containers when selling in the market or other public areas. Instead, they use plastic bags as an alternative container, and afterwards, the residue is disposed of in the toilet.

"...too lazy to bring the container; I've brought enough stuff to the market many times." (IF02)

"...use a plastic bag as a container, and after that, when there's a lot, I throw it in the toilet." (IF03)

Interview results with market administrators indicate that awareness campaigns about the dangers of indiscriminate disposal of betel nut saliva residue have been conducted. Additionally, they state that waste disposal facilities are available, but specific containers for betel nut residue are not provided. Market administrators advise betel nut traders to dispose of the residue in designated containers or plastic bags and then deposit it in the common waste bins available in the market.

"...trash bins are provided in every alley, although it's not enough as this market is getting busier. There's no specific container for betel nut saliva yet; they usually put it in plastic bags and dispose of it in the trash or toilet. Indeed, many dispose of it indiscriminately; we can't monitor everyone." (IT03)

From the interviews with healthcare workers, it is revealed that education about the dangers of indiscriminate spitting has not been conducted among betel nut traders in the market.

"...education and prohibition of spitting in public places like the market have not been implemented, but during the pandemic, we frequently advised students and at events to maintain cleanliness and avoid spitting indiscriminately." (IT04)

The researcher also explored the cultural and traditional meaning of betel nut chewing and whether there is a tradition of indiscriminate spitting of betel nut saliva. Informants state that "mardemban" or betel nut chewing has been a tradition deeply ingrained in the customs of the Simalungun tribe since ancient times.

"...it's been a tradition, like in ceremonial events such as weddings or funerals, we always use 'demban' or betel nut leaves." (IF03)

Market administrators also assert that betel nut is inseparable from Simalungun customs. In every traditional event, giving "demban" or betel nut leaves is a customary practice. The event starts with presenting "demban" or betel nut leaves, in line with the philosophy: "*Demban mulani hata, demban mulani sise*." Indiscriminate spitting of betel nut saliva is not a tradition; it is a habit of individuals who are less concerned about environmental cleanliness and health.

"...no, there's none of that. The tradition is betel nut chewing, and spitting indiscriminately is just a wrong habit; it's not part of our tradition." (IT04)

Discussion

The research findings indicate that the habit of indiscriminate spitting among the informants is a result of a lack of knowledge about healthy living behaviors and the dangers of disposing betel nut saliva residue. Additionally, the informants have not received education from healthcare workers regarding the hazards of indiscriminate spitting and the potential risks of disease transmission. Existing literature does emphasize the crucial role of health knowledge in promoting healthy lifestyles.⁸ However, it is essential to consider that an individual's level of education serves as a significant parameter in health literacy and the

formation of healthy lifestyles.^{9,10} Cognitive skills acquired through education help individuals process information effectively, translating it into actionable behavior. Prior evidence has also shown the positive effects of accurate health knowledge among the general population in health promotion and disease prevention.^{11,12} Health education is not confined to formal education institutions; it can also be implemented in communities through community-based education. A study concludes that community-based health education is quite effective in changing health behaviors within communities. Literature also offers community-based health program approaches as one of the problem-solving methods for health issues within communities, involving community health workers, NGOs, stakeholders, and government participation.^{13,14}

Negative attitudes toward an issue, including health issues, will impact individual behavior change. Indifference to a clean market environment and the lack of supporting sanitation facilities are issues encountered in this study. Consequently, individuals who chew betel nut tend to dispose of betel nut saliva residue indiscriminately in the market and perceive it as commonplace or normal. Attitude is not solely the primary factor shaping behavior; many factors influence these attitudes, including personal experiences, culture, influential figures, mass media, educational institutions, religious institutions, and emotional factors within individuals.¹⁵ Community attitudes that are not open to new things or innovations will face obstacles in information absorption, and the knowledge possessed will have limited impact on their lives. Behavioral changes in maintaining environmental cleanliness require community commitment accompanied by health information dissemination.¹⁶ Facility availability triggers behaviors that allow motivation or actions to be implemented.^{17,18}

While betel nut chewing is part of the tradition in the Simalungun community, the study results show that the behavior of disposing betel nut saliva indiscriminately is not part of the tradition. Therefore, it can be concluded that this behavior emerges due to a lack of knowledge and negative attitudes among betel nut traders. Support from healthcare workers is crucial in efforts to prevent and discourage indiscriminate spitting behavior among betel nut chewers in public areas. Information dissemination is essential, as communication is beneficial for addressing the lack of knowledge and attitudes of the community in adopting healthy behaviors.¹⁹ Healthcare workers should also evaluate the community's understanding of the information provided and convey the potential impacts of unhealthy behavior.²⁰

Conclusion

The habit of indiscriminate spitting by betel nut traders is caused by a lack of knowledge about healthy living behaviors and the dangers of disposing betel nut saliva residue. The absence of education from healthcare workers regarding the hazards of indiscriminate spitting and the potential risks of disease transmission also contributes to this risky behavior. Market administrators need to provide additional waste disposal facilities in market areas for the proper disposal of betel nut saliva residue. Healthcare workers should conduct regular health education to stimulate behavioral changes regarding indiscriminate spitting in public areas.

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