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Prevalence and Factors Associated with Adult Smoking Practices in an Adopted Community of Western Visayas Sanitarium and General Hospital

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ABSTRACT

This study examined smoking practices and associated demographic, socioeconomic, household, and behavioral factors among adults in an adopted community of Western Visayas Sanitarium and General Hospital, Santa Barbara, Iloilo. A descriptive cross-sectional survey involved 80 adults aged 19 years or older selected following household screening and random selection of one eligible participant per household. Face-to-face interviews used a modified, validated Hiligaynon Global Adult Tobacco Survey questionnaire; descriptive statistics and binary logistic regression were applied. Of the participants, 67 (83.75%) were current smokers and 13 (16.25%) former smokers; this proportion reflects the recruited sample, not community-wide prevalence. Mean ages at smoking initiation and daily smoking were 16.84 and 17.59 years, respectively. Private employment, previous electronic cigarette use, and permissive household smoking rules were positively associated with current smoking, whereas restrictive household rules, student status, primary education, and previous quit attempts showed negative associations. The model achieved 84% classification accuracy and an area under the receiver operating characteristic curve of 0.86. Findings indicate that smoking status is linked to interrelated social, household, and behavioral characteristics. Strengthening smoke-free homes, prevention education, and primary care cessation counseling is recommended. The single-community, self-reported, cross-sectional sample and imbalance between current and former smokers limit causal inference and generalizability. The findings offer locally relevant guidance for community tobacco control, supporting Sustainable Development Goal 3 through preventive healthcare and potentially sustainable reductions in tobacco-related health risks.

Keywords: *Adult Smoking, Community Health, Logistic Regression, Smoking Cessation, Smoking Practices, Tobacco Control*

1. INTRODUCTION

Tobacco smoking remains a major public health concern because of its association with preventable diseases, premature mortality, and secondhand smoke exposure. Globally, tobacco causes more than seven million deaths annually, including over 1.6 million deaths among nonsmokers exposed to secondhand smoke. Although tobacco use has declined internationally, the World Health Organization (WHO) continues to emphasize the need for effective surveillance, prevention, and cessation interventions. In the Philippines, the Global Adult Tobacco Survey (GATS) reported that 18.5% of adults were current tobacco smokers, reflecting a substantial continuing public health burden. Recent Philippine research has identified early smoking initiation, household smoking rules, socioeconomic circumstances, and tobacco-related behaviors as important considerations in understanding smoking patterns. Community-specific evidence is therefore needed to support targeted tobacco control interventions and strengthen preventive healthcare services.

Research Problem

Despite existing tobacco control policies and public health initiatives in the Philippines, cigarette smoking continues to affect a substantial proportion of the adult population. National surveillance provides valuable information on smoking patterns, but these findings do not fully describe the circumstances of individual communities. Recent research has associated smoking intensity and cessation-related behaviors with age at initiation, household smoking environments, nicotine dependence, and socioeconomic characteristics. Moreover, electronic cigarettes and heated tobacco products have introduced additional concerns regarding nicotine use and smoking-related behaviors. In Purok Sagrada, Barangay Bolong Oeste, Santa Barbara, Iloilo, an adopted community of Western Visayas Sanitarium and General Hospital, localized evidence is needed to characterize adult smoking practices and their associated factors. Specifically, the study examines smoking status, tobacco and electronic cigarette use, smoking initiation, demographic characteristics, employment, household smoking rules, and behavioral factors. Addressing this research problem may provide evidence for developing context-specific smoking prevention, cessation, and health promotion interventions.

Assumptions of the Study

The study proceeds on the methodological assumption that participants' self-reported responses provide usable information regarding smoking practices, tobacco product use, demographic characteristics, household environments, and cessation-related behaviors. The modified Global Adult Tobacco Survey questionnaire, translated into Hiligaynon through forward-backward translation and subjected to validation, serves as the principal instrument for collecting these data. The use of standardized tobacco surveillance indicators is consistent with established approaches to monitoring tobacco-related behaviors. The study further assumes that demographic, socioeconomic, household, and behavioral characteristics can be examined for statistical associations with smoking status. Because the research employs a cross-sectional design, identified associations are interpreted as relationships rather than evidence of causation.

Objectives of the Study

This study aims to determine the smoking practices and associated factors among adult participants in an adopted community of Western Visayas Sanitarium and General Hospital. Specifically, it seeks to describe the respondents' sociodemographic characteristics and smoking behaviors, including smoking status, tobacco product use, age at smoking initiation, duration and frequency of smoking, and household smoking practices. It also aims to determine the frequency and patterns of conventional tobacco and electronic cigarette use and identify

demographic, socioeconomic, household, and behavioral factors associated with smoking status. The findings are intended to provide baseline evidence for the development of targeted community-based tobacco prevention, smoking cessation, and health promotion initiatives.

Theoretical or Conceptual Basis

The study adopts a multivariable conceptual approach that considers smoking behavior in relation to individual, socioeconomic, household, and behavioral characteristics. At the individual level, age, sex, educational attainment, employment status, age at smoking initiation, and previous smoking experiences represent characteristics potentially associated with tobacco use. Philippine research indicates that earlier smoking initiation is associated with greater smoking intensity during adulthood, while household smoking rules also demonstrate significant associations with smoking behavior. At the socioeconomic and behavioral levels, employment circumstances, tobacco-related decisions, previous quit attempts, and use of alternative nicotine products provide additional dimensions for understanding smoking practices. Cheng and Estrada demonstrated that tobacco-related decisions in the Philippines differ according to smokers' responses to cigarette taxation and nicotine dependence. Similarly, Sreeramareddy et al. identified demographic and tobacco control-related factors associated with electronic cigarette and heated tobacco product use, while Zaman et al. examined reasons Filipino adults who smoke also use electronic cigarettes. The household environment represents another important dimension. Recent Philippine evidence associates permissive household smoking rules with greater cigarette consumption, whereas restrictive household environments are associated with increased likelihood of quit attempts. These findings support examining smoking behavior through interconnected individual and household characteristics. Accordingly, the study uses smoking status as the dependent variable and selected demographic, socioeconomic, household, and behavioral characteristics as independent variables. Binary logistic regression is employed to determine statistical associations between these variables. This conceptual approach supports the identification of factors associated with smoking practices without establishing causal relationships.

The study primarily aligns with Sustainable Development Goal 3: Good Health and Well-Being, particularly Target 3.4, which seeks to reduce premature mortality from noncommunicable diseases through prevention and treatment, and Target 3.a, which promotes stronger implementation of the WHO Framework Convention on Tobacco Control. Tobacco smoking is associated with cardiovascular disease, respiratory illness, cancer, and other preventable health conditions. By examining smoking practices, early initiation, household smoking restrictions, and cessation-related behaviors, the study contributes community-level evidence relevant to preventive healthcare, health education, and tobacco control. The WHO emphasizes that smoke-free environments, health warnings, smoking cessation services, and evidence-based tobacco control policies are essential components of comprehensive public health protection. From a sustainability perspective, the study contributes primarily to public health and community sustainability by generating information that may support the long-term reduction of smoking-related health risks and secondhand smoke exposure. It also has implications for institutional healthcare sustainability, as the findings may assist Western Visayas Sanitarium and General Hospital, family physicians, community health practitioners, and local government units in planning responsive prevention and cessation interventions. Recent evidence from the Philippines further supports combining community-level interventions with effective tobacco control policies to promote sustained smoking reduction. The study therefore supports the broader objective of improving community well-being through evidence-informed health promotion, preventive healthcare, and locally responsive tobacco control strategies.

2. METHODOLOGY

Research Design

A descriptive, community-based cross-sectional research design was employed to determine smoking practices and associated factors among adults aged 19 years and above. The design enabled the collection and analysis of information on smoking status, tobacco product use, smoking initiation, household smoking practices, and relevant demographic and behavioral characteristics. Data collection was conducted from November 2024 to March 2026, following the necessary administrative and ethical approvals.

2.2 Research Locale or Study Setting

The study was conducted in Purok Sagrada, Barangay Bolong Oeste, Santa Barbara, Iloilo, Philippines, an adopted community of Western Visayas Sanitarium and General Hospital. The community served as the setting for assessing adult smoking practices and identifying factors associated with tobacco use to provide baseline information for community-based smoking prevention and cessation interventions.

Participants or Data Sources

The study involved 80 adult participants aged 19 years and above, selected from a sampling frame of 101 eligible individuals identified through community records. Eligible participants included permanent residents who had lived in the community for at least one year or temporary residents available during data collection, who used inhaled tobacco products, including conventional cigarettes and electronic cigarettes, and voluntarily provided written informed consent. Individuals who were unwilling or unable to complete the questionnaire, planned to permanently relocate during the study, or were physically or mentally incapable of participating were excluded. The required sample size was determined using Epi Info™, with a 90% confidence level, 50% expected frequency, and 5% confidence limits. Participant recruitment involved household screening followed by the random selection of one eligible respondent per household using the fishbowl technique to minimize multiple participation within households.

Research Instruments or Materials

Data were collected using a modified Global Adult Tobacco Survey (GATS) questionnaire consisting of household screening and individual questionnaires. The instrument gathered information on sociodemographic characteristics, smoking status, tobacco and electronic cigarette use, smoking initiation, frequency and duration of smoking, household smoking rules, secondhand smoke exposure, and awareness of smoking-related health risks. The original English questionnaire was translated into Hiligaynon through a forward-backward translation process and validated to ensure linguistic accuracy and cultural appropriateness for the study population.

Data Gathering Procedure

Data collection was conducted through household visits and face-to-face interviews from November 2024 to March 2026. Following administrative and ethical approval, households were screened to identify eligible participants. One qualified respondent from each household was randomly selected using the fishbowl technique. The principal investigator explained the study objectives, obtained written informed consent, and administered the modified Hiligaynon-translated GATS questionnaire. Completed questionnaires were reviewed for completeness, coded, and encoded into Microsoft Excel before statistical analysis. Participant information was anonymized using unique identification codes, and research records were securely maintained with access restricted to the principal investigator.

Data Analysis

Data were cleaned, processed, and analyzed using Python. Descriptive statistics, including frequencies, percentages, and means, were used to summarize participants' sociodemographic characteristics and smoking practices. The primary outcome variable was smoking status, categorized as current or former smoker, while independent variables included demographic, socioeconomic, household, and behavioral characteristics. Secondary measures included tobacco and electronic cigarette use, smoking initiation, smoking duration and frequency, household smoking restrictions, and awareness of smoking-related health risks. Binary logistic regression was performed to identify factors associated with smoking status. Statistical significance was established at a p-value of less than 0.05. Model performance was evaluated using classification accuracy and the area under the receiver operating characteristic (ROC) curve to assess its ability to distinguish between current and former smokers.

Ethical Consideration

The study was conducted following approval from the Western Visayas Sanitarium and General Hospital administration and its Research Ethics Review Committee. Ethical procedures complied with the principles of the Declaration of Helsinki and the Philippine Data Privacy Act of 2012. Written informed consent was obtained from all participants after explaining the study's objectives, procedures, and voluntary nature. Respondents were informed of their right to withdraw at any time without penalty. Confidentiality and anonymity were maintained through coded identifiers, secure storage of research records, and restricted access to collected information, which was used exclusively for research purposes.

3. RESULTS AND DISCUSSION

3.1 Smoking Practices and Sociodemographic Characteristics

3.1.1 Smoking Status and Participant Characteristics

Among the 80 participants, 67 (83.75%) were current smokers, while 13 (16.25%) were former smokers. The majority were male (83.75%), and the mean age was 40.61 years. The largest age group was 28–37 years (36.25%), followed by 19–27 years (26.25%). Most participants had completed secondary education (42.50%), while 25.00% had attained primary education and 22.50% tertiary education. Private employees constituted the largest occupational group (43.75%), followed by self-employed individuals (18.75%). Most respondents (77.50%) reported no known illness, and the average household size was 5.57 members. The predominance of current smokers among participants highlights the continuing need for smoking cessation interventions within the study population. However, this percentage represents smoking status among recruited participants rather than population-wide smoking prevalence. The predominance of male and working-age participants is consistent with Philippine tobacco surveillance showing differences in smoking patterns across demographic groups. Cheng and Estrada (2022) also identified socioeconomic characteristics and nicotine dependence as relevant factors in understanding smoking-related behavior. These findings emphasize the importance of considering individual and socioeconomic circumstances when designing community-based tobacco control programs.

3.1.2 Age of Smoking Initiation and Smoking Duration

Smoking initiation occurred at a mean age of 16.84 years, while regular daily smoking began at 17.59 years. Participants reported smoking durations averaging approximately 18.65–20.69 years, indicating prolonged exposure to tobacco. Daily smoking was concentrated among younger and middle-aged adults, and respondents who smoked shortly after waking demonstrated stronger indicators of nicotine dependence. These findings highlight adolescence

as an important period in the development of smoking behavior. Piamonte (2024), using Philippine Global Adult Tobacco Survey data, found that earlier smoking initiation was associated with greater smoking intensity in adulthood. Similarly, Cheng and Estrada (2022) emphasized the importance of nicotine dependence in understanding smoking cessation behavior. The findings reinforce the relevance of early smoking prevention and continued cessation support for adults with established smoking habits.

3.2 Household and Behavioral Factors Associated with Smoking

3.2.1 Household Smoking Practices

Smoking was more commonly observed among participants from households where smoking was permitted. Respondents living in permissive household environments also tended to initiate smoking at younger ages than those residing in households with smoking restrictions. Larger household sizes were observed among participants with established smoking behaviors, while stricter household smoking rules were associated with reduced likelihood of current smoking in the regression analysis. These findings suggest that household smoking environments are relevant to smoking-related behavior. Piamonte (2024) reported greater smoking intensity among Filipino smokers living in households where smoking was permitted. Piamonte (2026) likewise identified household smoking rules as a factor associated with attempts to quit smoking. The World Health Organization (2023) emphasizes smoke-free environments as an essential measure for protecting individuals from secondhand tobacco exposure. Accordingly, family-centered health education and the promotion of smoke-free homes are relevant considerations for community tobacco control.

3.2.2 Electronic Cigarette Use and Smoking Behavior

Previous electronic cigarette or vape use was positively associated with current smoking status in the regression analysis. Electronic cigarette use was therefore identified as a relevant behavioral characteristic among participants. However, the available results did not establish whether vaping preceded cigarette smoking or whether both products were used simultaneously. Recent research provides context for this association. Sreeramareddy et al. (2025) identified relationships between electronic cigarette use, demographic characteristics, and conventional smoking status across several countries, including the Philippines. Lacaza and Udaundo (2026) also documented patterns of electronic cigarette awareness and use among Filipino adults. Furthermore, Zaman et al. (2026) reported that Filipino adults use electronic cigarettes for several reasons, including reducing or quitting conventional cigarette smoking. Hamoud et al. (2025) found that sustained dual use may present challenges to complete smoking cessation. These findings support the inclusion of electronic cigarette use in community smoking assessments without implying that vaping caused continued cigarette smoking in the present study.

3.2.3 Smoking Cessation and Health Awareness

Previous attempts to quit smoking were negatively associated with current smoking status in the regression analysis. Younger participants were also described as having lower awareness of the harmful effects of smoking and secondhand smoke. Smoking shortly after waking was identified as a behavioral indicator consistent with greater nicotine dependence. These findings demonstrate differences in cessation-related behaviors and tobacco risk awareness among participants. Piamonte (2026) identified healthcare visits, smoking restrictions at home, exposure to anti-smoking information, and age at smoking initiation as factors associated with quit attempts among Filipino daily smokers. Cheng and Estrada (2022) further highlighted differences between smokers who may be responsive to cessation-related policies and those with greater nicotine dependence. The World Health Organization (2024) recommends

behavioral counseling, appropriate pharmacological treatment, and systematic cessation support. These findings support integrating smoking assessment, health education, and cessation counseling into community-based primary healthcare services.

3.3 Factors Associated with Current Smoking Status

3.3.1 Demographic, Socioeconomic, Household, and Behavioral Predictors

Binary logistic regression identified private employment, previous electronic cigarette use, and permissive household smoking environments as positive predictors of current smoking status. Conversely, stricter household smoking restrictions, primary educational attainment, student status, and previous quit attempts demonstrated negative associations with current smoking. The reported predictor directions suggest that smoking practices were associated with a combination of demographic, socioeconomic, household, and behavioral characteristics. The findings are consistent with research recognizing smoking behavior as multidimensional. Cheng and Estrada (2022) demonstrated that smoking-related decisions differ according to socioeconomic conditions and nicotine dependence, while Piamonte (2024, 2026) identified smoking initiation and household smoking rules as relevant factors in smoking intensity and cessation attempts. However, the protective direction reported for primary education should be interpreted within the study's fitted model rather than as evidence that lower educational attainment generally prevents smoking. Moreover, without reported regression coefficients, odds ratios, confidence intervals, or individual p-values, the magnitude and statistical significance of these associations cannot be independently evaluated.

3.3.2 Predictive Performance of the Logistic Regression Model

The binary logistic regression model achieved an overall classification accuracy of 84% and an area under the receiver operating characteristic curve (AUC) of 0.86. These results indicate that the model demonstrated good apparent discrimination between current and former smokers within the analyzed sample. Although the reported AUC indicates promising discriminative performance, the findings require cautious interpretation because the dataset contained substantially more current smokers than former smokers. Furthermore, the original manuscript did not report external validation or other validation procedures. Consequently, model performance should be regarded as preliminary and sample-specific rather than evidence of reliable prediction in other communities. Larger studies with balanced outcome groups and appropriate validation procedures are needed to determine the reproducibility and practical usefulness of the model.

3.4 Implications for Community-Based Smoking Prevention and Cessation

3.4.1 Implications for Primary Healthcare and Tobacco Control

The findings identified early smoking initiation, prolonged smoking duration, permissive household smoking environments, previous electronic cigarette use, and employment-related characteristics as relevant considerations in addressing smoking among participants. Previous quit attempts and household smoking restrictions were associated with lower likelihood of current smoking. Collectively, these findings provide community-level information that may assist healthcare providers in identifying groups requiring targeted assessment and cessation support. The World Health Organization (2024) recommends integrating evidence-based cessation interventions into routine healthcare. Ackary et al. (2026) identified limitations in the capacity of Philippine health facilities to provide comprehensive smoking cessation services, highlighting the need to strengthen available resources and provider training. Similarly, van Westen-Lagerweij et al. (2023) demonstrated the potential value of proactive referrals to behavioral cessation services. These findings support strengthening family physician involvement, routine smoking assessment, cessation counseling, and referral pathways within

community healthcare programs. Arda et al. (2024) and Czaplicki et al. (2026) further provide Philippine evidence on the importance of tobacco-related health warnings and policy measures that may complement community-level interventions.

3.5 Study Limitations

The study employed a cross-sectional design and relied on self-reported smoking information, making the findings susceptible to recall and reporting biases. Data were collected from a single adopted community involving 80 participants, and the sample consisted predominantly of current smokers. These characteristics limit the generalizability of the findings and prevent causal interpretation of the identified associations. Furthermore, the imbalance between current and former smokers may have influenced the logistic regression model's performance. These limitations indicate that the findings should be interpreted as preliminary community-specific evidence. Future studies involving larger and more diverse populations, improved representation of smoking-status categories, and validated predictive models may provide a stronger basis for identifying factors associated with smoking. Longitudinal and intervention-based investigations may also help clarify smoking trajectories and assess the effectiveness of community-based prevention and cessation programs.

4. CONCLUSIONS AND RECOMMENDATIONS

This study determined the smoking practices and associated factors among 80 adult participants in an adopted community of Western Visayas Sanitarium and General Hospital. The findings revealed that current smoking was common among the recruited participants, particularly males and working-age adults, with smoking initiation frequently occurring during adolescence and continuing into adulthood. Smoking status was associated with demographic, socioeconomic, household, and behavioral characteristics. Private employment, previous electronic cigarette use, and permissive household smoking environments demonstrated positive associations with current smoking, whereas household smoking restrictions and previous quit attempts showed negative associations. The logistic regression model demonstrated good discriminative performance within the study sample, indicating the relevance of the examined characteristics in distinguishing current from former smokers. Overall, the findings emphasize the importance of household environments, smoking initiation, and cessation-related behaviors in understanding tobacco use. The study provides community-specific evidence that may support targeted smoking prevention, cessation counseling, and family-centered health promotion initiatives.

Based on the findings, Western Visayas Sanitarium and General Hospital, in collaboration with local government units and community healthcare providers, should strengthen targeted smoking prevention and cessation programs. Priority should be given to working-age adults, individuals with prolonged smoking histories, and households where smoking is permitted. Family physicians and primary healthcare personnel should routinely assess smoking status, provide brief cessation counseling, and encourage individuals who have previously attempted to quit to pursue continued cessation support. Community health education should emphasize the risks associated with conventional cigarettes, electronic cigarettes, and secondhand smoke exposure while promoting smoke-free household environments. Preventive educational activities should also address early smoking initiation among adolescents and young adults. Local government units should reinforce existing tobacco control policies and encourage household participation in smoking prevention initiatives. Future research should involve larger and more diverse populations to further examine smoking-related factors and evaluate the effectiveness of community-based cessation programs.

The study was limited by its cross-sectional design, which prevented the establishment of causal relationships between smoking status and its associated factors. Data were obtained through self-reported interviews, making the findings susceptible to recall and reporting biases. The investigation involved only 80 participants from a single adopted community, limiting the generalizability of the findings. Furthermore, the predominance of current smokers created an imbalanced dataset that may have affected the logistic regression model's predictive performance. Future studies should consider larger, more representative samples, additional study settings, and longitudinal or intervention-based designs to strengthen the evidence regarding smoking behaviors and associated factors.

5. REFERENCES

Arda, J. R. Y., Amul, G. G. H., Mallari, E. U., & Santiago, A. J. A. (2024). Opportunities for plain packaging of tobacco products in the Philippines: Results of a nationwide online survey. *Frontiers in Public Health, 12*, Article 1405062. https://doi.org/10.3389/fpubh.2024.1405062

Cheng, K. J. G., & Estrada, M. A. G. (2022). A dichotomy of smokers in the Philippines following sin tax reform: Distinguishing potential quitters from those unlikely to quit. *PLOS ONE, 17*(10), Article e0275840. https://doi.org/10.1371/journal.pone.0275840

Czaplicki, L., Crespi, E., Zaman, R., Islam, F., Cohen, J. E., Mayor, A. M. F. G., Dayagbil, F. T., & Welding, K. (2026). Tobacco control policies that influence Filipino adults who smoke: Results from a discrete choice experiment. *Tobacco Induced Diseases, 24*, Article 34. https://doi.org/10.18332/tid/217005

Department of Health, & Philippine Statistics Authority. (2023). *Global Adult Tobacco Survey: Philippines country report, 2021*. https://drupal.gtssacademy.org/sites/default/files/country_docs/2021-GATS-Country-Report.pdf

Hamoud, J., Hanewinkel, R., Andreas, S., Ammous, O., Saalfrank, M., Sussman, S., Unger, J. B., Pisinger, C., & Mathes, T. (2025). A systematic review investigating the impact of dual use of e-cigarettes and conventional cigarettes on smoking cessation. *ERJ Open Research, 11*(3), Article 00902-2024. https://doi.org/10.1183/23120541.00902-2024

Lacaza, R. M., & Udaundo, E. Y. (2026). Awareness and use of e-cigarettes among Filipino adults: Evidence from the 2015 and 2021 Global Adult Tobacco Surveys. *BMJ Public Health, 4*(2), Article e004394. https://doi.org/10.1136/bmjph-2025-004394

Piamonte, S. B. H. (2024). Greater smoking intensity may be linked to early smoking initiation among Filipinos: Evidence from the 2021 Global Adult Tobacco Survey Philippines. *Tobacco Prevention & Cessation, 10*, Article 54. https://doi.org/10.18332/tpc/194485

Piamonte, S. B. H. (2026). Factors associated with attempt to quit smoking among Filipino daily smokers: A secondary analysis of the 2021 Global Adult Tobacco Survey Philippines. *Population Medicine, 8*(2), Article 6. https://doi.org/10.18332/popmed/220083

Santiago, A. J. A., Ackary, S. J., Cabrera, P. J. D. L., & Domingo, G. D. P. (2026). Exploring the capacity of smoking cessation services in the Philippines. *Tobacco Prevention & Cessation, 12*, Article 5. https://doi.org/10.18332/tpc/214732

Sreeramareddy, C. T., Ooi Shu Syuen, M., Hon, M. I., & Daher, A. M. (2025). Electronic cigarette and heated tobacco product use and their association with tobacco control factors among adults in Indonesia, Kazakhstan, and the Philippines. *Nicotine & Tobacco Research, 27*(2), 254–261. https://doi.org/10.1093/ntr/ntae187

van Westen-Lagerweij, N. A., Hipple Walters, B. J., Potyka, F., Croes, E. A., & Willemsen, M. C. (2023). Proactive referral to behavioral smoking cessation programs by healthcare staff: A systematic review. *Nicotine & Tobacco Research, 25*(5), 849–858. https://doi.org/10.1093/ntr/ntac262

World Health Organization. (2023). *WHO report on the global tobacco epidemic, 2023: Protect people from tobacco smoke*. https://www.who.int/southeastasia/publications/i/item/9789240077164

World Health Organization. (2024). *WHO clinical treatment guideline for tobacco cessation in adults*. https://www.who.int/publications/i/item/9789240096431

World Health Organization. (2025). *WHO global report on trends in prevalence of tobacco use 2000–2024 and projections 2025–2030* (6th ed.). https://www.who.int/publications/i/item/9789240116276

World Health Organization. (2026). *Tobacco and nicotine*. https://www.who.int/news-room/fact-sheets/detail/tobacco

Zaman, R., Czaplicki, L., Crespi, E., Cohen, J. E., Dorotheo, E. U., Valera, M., Mayor, A., Dayagbil, F. T., & Welding, K. (2026). Characterizing reasons for e-cigarette use among Filipino adults who smoke: A cross-sectional study. *Tobacco Prevention & Cessation, 12*, Article 44. https://doi.org/10.18332/tpc/221661