The Influence of Toxic Masculinity on the Smoking Behavior Among Young Indonesian Fathers

Nur Rohmah[1]*, Mark S. Felix[1], Darunee Phukao[1], and Francois R. Lamy[1]

[1] Department of Society and Health, Faculty of Social Sciences and Humanities, Mahidol University, Salaya, Thailand
* Nur Rohmah, corresponding author. Email: rohmah_inung@yahoo.co.id
Submitted: 23 April 2022. Accepted: 17 March 2023. Published: 12 April 2023
Volume 31, 2023. pp. 652–671. http://doi.org/10.25133/JPSSv312023.036

Abstract

Domestic secondhand smoke endangers the health of children. Nevertheless, this behavior persists in Indonesia, where up to 72% of men smoke in homes despite national intervention efforts to reduce such behavior. This qualitative exploratory research focused on why young Indonesian fathers continue to smoke cigarettes at home despite knowing about the dangers of secondhand smoke by investigating the influence of masculinity on their choices. Thirty young fathers, all active smokers, were recruited for semi-structured in-depth qualitative interviews. The process of coding data from grounded theory was used to interpret collected data, although grounded theory itself was not the theoretical framework used by this research. Findings indicate that smoking is essential to Indonesia's socially constructed image of masculinity. Toxic masculinity was observed throughout the participants' smoking trajectory, expressing itself through the stigmatization of non-smokers, display of financial success through expensive cigarettes, and health risk-taking. Low trust in official health messages and the use of neutralization techniques to justify their smoking behavior drive young fathers to continue smoking. Participants appear to have adopted a variation of toxic masculinity by creating strategies to conciliate the role of a caring father and the part of a man who smokes cigarettes. By being able to legitimize their smoking continuation, participants unintentionally maintain the cycle of male smoking in which children witness older men smoking and link tobacco smoking with masculinity.

Keywords

Fatherhood; Indonesia; smoking; tobacco; toxic masculinity

Introduction

Tobacco use is a significant risk factor for non-communicable diseases (WHO, 2011), including lung cancer, pulmonary diseases, myeloid leukemia (Eng et al., 2014; Park et al., 2015; Warren et al., 2014), and cardiovascular disease (WHO, 2011). According to the World Health Organization (WHO), tobacco smoking is responsible for approximately 7 million deaths per year (WHO, 2022c). The majority of these deaths happen in low- and middle-income nations (WHO, 2012b), and cigarette smoking is responsible for 1.2 million premature deaths in the WHO South-East Asia Region (SEAR) (WHO, 2018, 2020, 2022c). This observation is especially true in Indonesia, where smoking tobacco is the fourth most significant risk factor associated with avoidable deaths (WHO, 2019). In 2016, tobacco was responsible for 7% of cancer-related deaths. Additionally, 33,970 people died from secondhand smoke (Ritchie & Roser, 2018).

Males are the primary tobacco users in Indonesia, with 64.7% of males being active smokers (WHO, 2022b) compared to 2.3% of females. In Indonesia, male smoking is seen as a sign of strength and respect (Nichter et al., 2009). Smoking is seen as confirmation of being a true man (Ng et al., 2006). Smoking tobacco cigarettes aids in gaining acceptance as a "straight" man rather than a "sissy" (i.e., effeminate man) who refuses to smoke (Nichter et al., 2009). Furthermore, offering cigarettes to friends is a well-accepted social practice that prompts social exchange during a meeting with men (Hanusz, 2000), as are cigarettes offered during professional sessions (Budiarsih & Ngah, 2017). This practice starts young, with teenagers smoking to fit in with their classmates (Nichter et al., 2009). Interestingly, Kendrich (2021) suggested that nearly 90% of Indonesian respondents had a favorable attitude toward the dangers of smoking and that 64.8% of women had higher positive attitudes than men (59.9%) (Mukuan, 2012), while both males and females are aware of the possible risks associated with tobacco use (Kendrich, 2021; Kuntara, 2012; Mukuan, 2012).

Although becoming a father is considered to be an excellent transformational experience that changes the new-father perception of various risk behaviors (Kwon et al., 2014), only a small percentage of expectant fathers quit smoking during or after their wives' pregnancies, and even fewer definitively quit (Bottorff et al., 2006; Chen et al., 2004). Additionally, 72% of young Indonesian fathers (age 20–39 years) smoke tobacco (Statistics Indonesia et al., 2013) and tend to smoke while caring for their children, increasing the number of newborn infants with acute respiratory infections (Junita P, 2017). Nevertheless, through secondhand smoke, these young fathers impact the health of other members of their household, particularly newborn infants (Agency of Health Research and Development, 2019; WHO, 2012a).

Despite numerous research on parenting, masculine values, and smoking based on gender-specific explanations, studies on the socially constructed concepts of masculinity and how these discourses influence fathers' smoking decisions are lacking (Bottorff et al., 2009). Overall, there is a lack of research studying how tobacco smoking, masculinity, and parenting are intertwined and influence each other and why young Indonesian fathers continue smoking tobacco after the birth of a child. This manuscript presents the results of exploratory qualitative research investigating the combined influence of fatherhood and masculinity on young Indonesian fathers' attitudes, choices, and beliefs.

Method

Process of recruitment

As exploration is the aim of this study, a qualitative research approach was used. Purposive sampling is biased, but it is appropriate for this study because the targeted young parents are confirmed tobacco smokers. When populations are unknown or scarce, and selecting participants for study samples is problematic, the network/snowball sampling method is extensively utilized (Lavrakas, 2008). Furthermore, the network/snowball sampling method is appropriate for this study because using tobacco necessitates multiple social encounters with other smokers (Bush et al., 2003; Clark & Loheac, 2007; Lakon & Valente, 2012; Seo & Huang, 2012). To participate in this study, the researcher contacted acquaintances, colleagues, and associates who work in the child development and postpartum midwifery units at the Public Health Center (PUSKESMAS) in Samarinda City to introduce the lead researcher to possible interviewees who met the inclusion criteria.

Process of data collection

The in-depth interview is a face-to-face interaction between the researcher and the informant to understand their perspective on their life, experience, or situation (Taylor et al., 2015). Because of the subjective nature of this method, the lead researcher used interpersonal skills to conduct the research, beginning with gaining access to possible participants. Once the researcher accessed the informants, special attention was paid to establishing and maintaining research connections (Taylor et al., 2015). After receiving information from the Public Health Center, the researcher connected with gatekeepers such as health cadres who live in the study field. The researcher scheduled three sessions to gather data. The first established confidence by providing explicit information about the study and setting up an appointment between the lead researcher and informants. The researcher conducted the first interview with the informant at the second encounter, followed by a final meeting for clarification and termination.

The in-depth interview questions focused on the smoking experience related to parenting. The researcher performed a semi-structured, face-to-face, one-on-one in-depth interview after a brief presentation of the informed consent. A Fagerström Test, which includes several variables (i.e., morning smoking habit, difficulty abstaining from smoking in banned areas, daily cigarette intake, constant thoughts of cigarettes, and challenges they face when attempting to quit smoking), was also used to determine the extent of nicotine dependence for each participant (Heatherton et al., 1991). Each interview lasted between 30 and 60 minutes. Interviews were digitally recorded and transcribed verbatim, and data accuracy was checked. Informants were offered an honorarium of 140,000 Indonesian Rupiah (US$10) in cash.

Data analysis

The authors used the coding process by Glaser et al. (1968) and Corbin and Strauss (1990) to analyze the collected data. The steps used in the coding process included pre-coding, axial coding, coding, and core categories. The manuscript stops short of developing a new theory

as this is not the authors' focus. The data analysis method based on grounded theory coding was employed for this study since it is more robust and traceable. The researcher systematically pre-coded the data for each informant transcript, then sorted and selected potential and relevant data for the research issue. A code was created by combining pre-codes that were similar and related. Open coding refers to the interpretive process of breaking down data analytically.

Coding aims to help the analyst acquire new insights into the data by dismantling standard thinking methods (interpreting) data events (Charmaz, 2006; Corbin & Strauss, 1990). The researcher created axial codes to enhance the argument by creating a core category to identify codes. The link between events, time, reasons, and actions from the informants' data creates axial coding. The relationships between categories and subcategories are validated against data in axial coding. There is also further category development, and one continues to look for indicators of it (Charmaz, 2006; Corbin & Strauss, 1990). The researcher examined each initial phase after creating axial coding. The researcher started with pre-code and axial codes to reanalyze, generalize, and map the acquired data. The axial codes were classified into key categories after they were rechecked. The core category represents the investigation's central phenomenon (Corbin & Strauss, 1990).

This study was approved by the Mahidol University Social Sciences Institutional Review Board (MUSSIRB) with Certificate of Approval No.2019/252.0612.

Findings

The informant's characteristics

In total, 30 young fathers met the study's inclusion criteria and agreed to be interviewed. The informants in this study ranged in age from 22 to 39 years old, with an average age of 32. The majority of the informants' education is at the high school level. On average, informants have two children. Most of the participants in this study were Javanese, Buginese, and Banjarnese, with six interviewees from the Dayaks and Kutais ethnicities. Almost all informants indicated they were the only person smoking in their home, although some stated that other people smoked, such as the informant's father-in-law, brother, and friend. Most interviewees worked in the informal sector, including traders, motorcycle/taxi drivers, and laborers. Only a few work in the formal sector, such as teachers, employees, and security guards (Table 1).

Table 1: The Socio-Demographics Characteristics of Informants

Characteristics	***N* = 30 (%)**
Age	
22–29	7 (23.3)
30–39	23 (76.6)
Ethnicity	
Javanese	10 (33.3)
Buginese	8 (26.7)
Banjarnese	6 (20.0)
Kutai	3 (10.0)
Dayaknese	3 (10.0)

Characteristics	*N* = 30 (%)
Education	
Elementary school	3 (10.0)
Junior High School	3 (10.0)
Senior high School	16 (53.3)
College or higher	8 (26.7)
Marital Status	
Married	30 (100)
Number of people smoking at home	
Only informant	24 (80.0)
others	6 (20.0)
Number of children in the home	
1–2	26 (86.7)
3–5	4 (13.3)
Age of children (N = 56)	
0–12 months	5 (8.9)
1–5 years	34 (60.7)
6–10 years	9 (16.1)
11–15 years	8 (14.3)
Employment	
Formal (teacher, security, finance, civil servant, temporary employees in government and private offices)	10 (33.3)
Informal (traders, motorcycle/taxi drivers, laborers, farmers, handyman craft, shopkeepers)	18 (60.0)
Odd jobs	2 (6.7)

Trajectories of tobacco smoking behavior

The findings of this study are consistent with those of prior studies that looked at the trajectory of cigarette smokers: preparatory, initiation, becoming active smokers, and maintenance were the four stages of participants' smoking trajectory (Leventhal & Cleary, 1980). These different stages will be detailed in the following subsections.

Preparatory stage

At the preparatory stage, the type of belief associated with tobacco smoking and the curiosity toward cigarettes were the two main codes emerging from the interviews. These two aspects developed through regular interactions with tobacco smokers within and outside their homes. Throughout their infancy and primary socialization (Berger & Luckmann, 1991; Hacking, 1999), the participants were regularly exposed to male figures smoking cigarettes. This influence created a social reality in which males smoke, influencing children's perceptions about tobacco cigarettes and, as a result, their desire to try smoking. Indeed, participants tended to acquire their initial belief about tobacco by watching significant individuals (i.e., friends and family members such as their fathers, brothers, uncles, and grandparents), as smoking is an anticipated habit among men, and smoking is "normal" and "what men do."

Before being initiated to cigarettes, only five interviewees negatively perceived tobacco cigarettes. In contrast, nine had a neutral opinion about tobacco smoking. Most interviewees (11 informants) considered tobacco smoking a normal behavior, frequently occurring during

social interactions, or were curious about smoking and interested in trying. Several also indicated that their interactions with peers who were trying cigarettes at that time made cigarettes look stylish, potentially increasing their curiosity and interest in trying cigarettes:

> *"Just normal; seeing friends smoking looked delicious and stylish."*
>
> (P15, age 31)

> *"Yes, no need to go far to meet smokers because I easily find people smoking around the house, with neighbors, on the streets, and at that time, I observed that smokers are people who like to share; they share their cigarettes with their friends."*
>
> (P7, age 35)

> *"From my father, I see my father smoking. Sometimes in the afternoon, sitting on the terrace. I am looking. But it is normal."*
>
> (P23, aged 29)

The pre-teens need to be accepted among their peers will later enhance this process (Mausner & Platt, 2013).

Initiation stage

Data analysis indicated that peer social approval was crucial in initiating tobacco smoking. Participants appeared to be motivated to start smoking because of their closeness and friendship, which began to dominate children's lives when their interests changed from household to peer group activities (Hurlock, 2001; Mausner & Platt, 2013). They also explained what smoking meant to be a part of a group:

> *"That was happy. I was glad that we both shared cigarettes. Smoking is a symbol of friendship. If we meet someone unknown, a smoker will offer cigarettes, "want cigarettes, bro?"*
>
> (P29, age 34)

Those who had already begun smoking introduced newcomers to tobacco smoking by teaching them how to smoke and providing or exchanging cigarettes. Furthermore, smoking was usually initiated at school with friends in secret locations such as their backyard or the school toilet. Smoking cigarettes during a break at school becomes an "event," cementing friendships and solidifying their male identity, even if it remains disguised either because cigarette smoking is forbidden in the school environment or because parents forbade their children to smoke cigarettes:

> *"We went to the toilet [at school], and there was half a cigarette. Then we went to the toilet, where we smoked. We got caught smoking, and we ended up being scolded."*
>
> (P26, age 39)

> *"At first, there was a desire to try smoking, and friends were pressured to smoke like this. How come men do not smoke? Then it looks like it is different. If men cannot smoke, that is like funny. Yes, sometimes we are said to be banci first, and friends make fun of it like that, so finally*

> *embarrassed when being ridiculed as being said to be a banci. I finally smoked until now."*
>
> (P12, aged 39)

As stated by the previous participant, this form of "peer pressure" is expressed through verbal expressions such as *banci* [an Indonesian term used to describe men who behave and dress like a woman] or by asking, "How come men do not smoke?" On the other hand, three informants said they were the ones who pressured their friends to smoke. Those subjected to pressure are more likely to start smoking and become members of the smoking community, eventually becoming those who apply pressure on non-smoking peers, ensuring the continuation of this social process.

All informants started smoking tobacco with their friends, mostly at school. School as a place of socialization favors regular and frequent interactions of young individuals during which beliefs, attitudes, and behaviors are shared, learned, and copied (Grusec & Hastings, 2014). Although smoking cigarettes is forbidden in schools, some informants indicated that their parents would allow them to smoke if they had their own money to purchase their cigarettes and have a source of income:

> *"My parents were unhappy the first time I smoked because I wasn't working. My parents became upset when I tried to smoke at school since the school allowance was used to buy cigarettes. It's fine for me to smoke once I get a job. My parents aren't upset."*
>
> (P2, 26 years old)

Despite the interdiction from their parents, Indonesian teenagers can easily buy cigarettes from retailers who sell tobacco to non-adult individuals and facilitate the purchase of tobacco by selling cigarettes by the unit:

> *"When I have passed 6th grade, buy one "bar" (cigarette) at the stall."*
>
> (P26, age 39)

> *"My friend came in the shop, ate, then bought a cigarette; no one forbade it ... That is, maybe people around are ignorant of seeing high school students smoking. Maybe it is normal."*
>
> (P 30, age 30)

In Indonesia, the lack of real sanctions for retailers selling cigarettes to youngsters constitutes a risk factor for initiating and continuing tobacco cigarettes among this age group. Moreover, the young men can purchase or obtain cigarettes is reinforced by the ease with which they can make them. Participants described how they were able to craft their cigarettes by using the leftovers to make "new cigarettes" or by "stealing" cigarettes from older men in the household:

> *"My father smoked… Then I tried my father's cigarette, which was still burning that was left in the ashtray. Gosh, at first, I dabbled in it ... finally got used to it."*
>
> (P23, age 29)

> *"As I recall, I took the remnants of a cigarette and added a drop of eucalyptus oil to the end of the cigarette to give it a minty flavor."*
>
> (P8, age 37)

The risk, as mentioned earlier factors did not appear to be offset by any protective factors, even when adequate health knowledge about the dangers of tobacco smoking was present such as knowledge regarding the potential health risk due to smoking (e.g., lung cancer, cardiovascular disease, respiratory disease, impotence) or impact of smoking on passive smokers. Furthermore, when questioned about their first few experiences with cigarettes and the negative consequences they experienced, participants regarded the potential health problems they experienced as "normal," therefore neutralizing the possible influence of tobacco prevention:

> *"The first time, I felt a bit dizzy, and the smoke was too painful to the eyes, but over time I got used to it because I got used to it. Finally, I just felt comfortable."*
>
> (P1, age 34)

The fact that participants engaged in rebellious behavior (smoking) in a forbidden place (school) and experienced effects regarded as dangerous are an example of the construction of their male identities. This construction occurs through the toxic elements of masculinity in the behavior engaged in and in the social context in which it happens.

Following these initial cigarettes, participants transitioned to active smokers relatively quickly, depending on several risk factors detailed in the next section.

Becoming active smokers

The most important factors associated with becoming an active smoker were the participant's ability to pay for their cigarettes. This objective is attained with the money they earn once participants achieve financial stability through permanent employment:

> *"Well, the first time I smoked, my parents were angry because I smoked without having a job to pay for cigarettes. I am employed now, and I am smoking, and my parents are no longer angry because I work and use my own money to pay for my cigarettes."*
>
> (P2, age 26)

Participants explained that they experienced joy and a sense of freedom while buying cigarettes with their own money.

At that stage, participants were not smoking cigarettes out of curiosity but because they wanted specific effects from tobacco, such as feeling relaxed, relieving stress, or enjoying the taste of cigarettes. Furthermore, many believed that smoking could help during their daily life (e.g., when facing much work, stress from school, or boredom):

> *"Smoking helps to get rid of boredom. I am tired; I am resting by smoking. The pleasure of smoking is not the same that is felt from one person to another. Sometimes some people are looking for inspiration by smoking; some want to get rid of the stress of office work. So, it is not the same between one person and another."*
>
> (P21, age 34)

The socially constructed perception of smoking as "what a guy should do" in the early stage of their trajectory tends to evolve into a phase in which cigarettes are used to relieve work-

related stress or demonstrate social standing. Better employment allowed the interviewees to purchase expensive cigarette brands, with some interviewees stating that they display their cigarettes to impress other men:

> *"Cigarettes for young people can be seen from the more attractive packaging, and also because of the price. For example, if I hang out with friends and coworkers, if my cigarette is the most expensive and tastes good, I will put it on the table or show it in front of my friends. However, if my cigarettes are cheaper than the price of their cigarette brand, then I will keep them in the bag."*
>
> (P22, age 39)

Through the lens of toxic masculinity, smokers can dominate other male smokers through their economic success by exhibiting expensive cigarettes to their immediate social environment.

Tobacco smoking maintenance

All participants were still active smokers at the time of the interview. This stage of their trajectory was linked to three primary factors: perceived nicotine addiction, failure to quit, and a conflict between personal perspective and information about the dangers of cigarettes.

Several participants said they could not stop smoking because of their nicotine addiction. The results from the Fagerström Test tend to indicate that the majority of participants (21 informants) had low nicotine dependency, with the remainder falling into the low to moderate (six informants) and moderate (three informants) categories. The argument of tobacco addiction seems frequently used by the participants as a reason to legitimate the continuation of their smoking behavior, as none of the participants exhibit a high level of addiction to nicotine.

Despite the participants' relatively low level of dependence, failure to quit smoking was the second leading factor linked to participants' tobacco maintenance. Before the interview, fifteen individuals attempted to quit smoking but failed. When asked about the main reasons they could not quit smoking, participants gave various explanations, such as they need cigarettes to release daily stress because smoking has become a daily routine. After all, it brings social acceptance or releases boredom (Twyman et al., 2014).

The remaining 15 participants answered that they had never attempted to quit smoking because they did not believe smoking cigarettes could affect their health. Although participants mentioned respiratory issues, cardiovascular illness, dental disease, and other health risks when asked about tobacco-related risks and appeared to be well aware of the negative impacts of secondhand smoke, they continued smoking because of the discrepancies between the official information and their life experiences:

> *"I looked on YouTube about the dangers of smoking, but it does not seem like it. Also, some doctors told me about the dangers of smoking, but on the other hand, the reasons do not make sense too. The proof is that my grandfather was a heavy smoker who remains healthy."*
>
> (P22, age 39)

> *"People around me are saying "I am a smoker and still alive until now" ... And I also feel fine until now."*
>
> (P17, aged 26)

Although some individuals claimed that smoking did not affect their health, the majority of participants believed that cigarette exposure could harm their family members' health:

> *"I do not know specifically what diseases are caused by cigarette smoking. I only heard that cigarette smoke is very dangerous, especially for passive smokers."*
>
> (P30, age 30)

Furthermore, some interviewees also believe that a father who smokes while carrying his child risks his child's health and that such fathers are selfish. This discrepancy between their belief that cigarette smoking does not cause them any harm but can negatively impact the health of other family members, especially children, is at the core of a dilemma between the duties of a father and the need to remain masculine according to Indonesian standards.

Role dilemma between "smoking is what a man should do" and "smoking is harmful to my children."

As aforementioned, participants related smoking with "what a man should do" throughout their smoking trajectory, with most of the men in the interviewees' social environment being active smokers at all stages of their smoking trajectory. In addition to smoking, participants also considered that a man should be responsible, mature, healthy or strong, and able to take risks. Data analysis demonstrated the relevance of social acceptance and the various social rituals associated with sharing cigarettes among men, which contribute to and influence tobacco smoking continuation and maintenance.

Nonetheless, the participants discussed their responsibilities toward their children. These responsibilities compel Indonesian men to preserve their children's health, which directly opposes the continuation of their tobacco smoking behavior. For example, participants tended to display a negative attitude toward smokers who smoked near children and tried to safeguard their children from secondhand smoke and early tobacco exposure:

> *"I am a smoker, but I never smoke in front of children; if there are children, I will put out the cigarette because I also have children. My attitude is to not smoke in front of children because I have small children too. I do not want my child to be hit by cigarettes like that, so that is what I take care of."*
>
> (P30, aged 30)

Overall, participants tend to exhibit two behaviors to safeguard their children's health: storing their cigarettes away from their children and restricting their smoking behavior to protect their family members. Concerning the former, the participants were careful in keeping the packs of cigarettes out of the reach of the children, so they not "steal" cigarettes or for the children do not imitate their father's smoking behavior:

> *"I keep smokes on the table, in the closet, and in the trouser pocket at different times. My child can't get to it since it's out of reach."*
>
> (P18, 39 years old)

Concerning the latter, participants felt obligated to protect children from cigarette smoke and keep their distance from children when smoking or not smoking in front of them:

> *"I rarely smoke in my house because my family is the most anti-cigarette, so at least I have to smoke on the terrace or balcony."*
>
> (P30, aged 30)

By doing so, young fathers limit their "male territoriality" to preserve the health and well-being of their family members. Before fatherhood, participants used to be able to smoke anywhere and at any time, imposing the dominance inherent in masculinity:

> *"Well, in the past, I usually did not care about people, but now I have to be more careful, especially about these cigarettes and the smoke."*
>
> (P7, age 35)

> *"I smoke beside my wife, even beside my child; in the bedroom, I smoke, but there must be a fan so that the smoke does get stuck in the room. Sometimes I blow the smoke through the window, but I feel unwell for our newborn child. If I smoke next to my child, I will put the fan on or smoke in the direction of the wind so that my child does not inhale the smoke."*
>
> (P26, age 39)

Participants tended to further change their smoking habits after the birth of their infant by reducing the number of cigarettes they smoke per day, buying cheaper cigarettes, and even planning to stop smoking in the future:

> *"I was still smoking freely when my first child was born. Since the birth of my second child, I've cut down on my smoking. Because I have had no health problems, and my wife does not stop me from smoking. Now, and in the future, I want to stop smoking for three reasons: first, because of my age; second, because my child is a boy, and I am worried he will mimic me; and third, because many of my smoking friends have health problems."*
>
> (P6, 37 years old)

More importantly, participants expressed concern about their children—especially boys—replicating their smoking behavior in a similar way that they used to replicate the behavior of the older men smoking in their households during the preparatory stage of their smoking trajectory.

These "strategies" enable participants to balance their responsibility as a father by protecting their children's health (limiting secondhand smoke exposure) with their male identity by continuing to smoke cigarettes. These methods help the participants overcome role conflict by justifying their usage of socially and personally acceptable conduct (Horton & Hunt, 1984).

Discussion

Overall, this study suggests that for young Indonesian fathers, smoking cigarettes is associated with masculinity because masculinity is a socially constructed identity in a social environment dominated by male tobacco smokers (Grusec & Hastings, 2014). During their socialization, Indonesian boys appeared to be constrained by their social environment to become smokers because tobacco cigarettes and masculinity are inseparable, and "smoking cigarettes is what a man should do." This association is reinforced during the early stage of their career as smoking is also perceived as a way to bind friendships and be integrated into a peer group.

Young males tend to exhibit behaviors similar to their peers in a situation where those who do not smoke are not considered men but banci (i.e., effeminate men) and are ostracized by their peers, consistent with a prior study of Javanese teenagers (Ng et al., 2006). Cigarettes are later used to relax or socialize and as proof of financial freedom, allowing young men to exhibit their status as independent men. In the latter stage, young fathers seem to experience a dilemma between their role as a father who has to protect their children and their role as a man who has to smoke. Young fathers circumvent this contradiction by using several strategies, such as smoking outside/away from their children or keeping their cigarettes out of the reach of their infants.

Kaptein and van Helvoort (2019) stated that the neutralization theory seeks to explain the paradox of norm-breaking perpetrators who temporarily appear to have little or no guilt. Participants in this study also utilize several neutralization techniques to legitimate why they continue to smoke tobacco cigarettes while being a father. In this study, informants use fact distortion techniques, which consist in misrepresenting facts directly to themselves or others so that their behaviors do not appear to violate certain norms, rules, or injunctions. By looking only at specific points (e.g., their health and the health of a selected number of smokers), they distort the reality to justify their smoking continuation. Another neutralization technique the participants used was hiding behind themselves (Kaptein & van Helvoort, 2019). Participants stated that they had a ritual after smoking to minimize exposure to cigarette smoke for themselves and their family members to reduce their guilt. Finally, several participants hide behind imperfect capabilities explaining that they are addicted to cigarettes. Therefore, they cannot control their smoking behavior (Kaptein & van Helvoort, 2019), reducing their likelihood of successfully quitting or reducing tobacco usage.

According to our findings, participants used cigarettes to develop their male identity during adolescence. This finding is consistent with Courtenay's (2009) conclusion that dominant masculinity norms – the most traditional views about manhood held by young men – predict the highest level of risk-taking and involvement in behaviors such as cigarette smoking. This study also revealed the participants' rebellious nature when they began smoking, using their school pocket money to purchase cigarettes despite their parents' smoking ban. Friends' influence, social acceptance, and recognition of their maleness, as well as the insecurity of teenagers who want to try something new, such as smoking, are all factors that motivate participants.

These factors can be explained through the prism of toxic masculinity. The link between toxic masculinity and cigarette smoking has been established by past research (Frąckowiak-Sochańska, 2021; Pachankis et al., 2011). Smoking has been closely tied to expressions of

masculinity (Kirby & Kirby, 2019) and is seen as synonymous and compatible with fatherhood (Bottorff et al., 2010). Toxic masculinity refers to detrimental behaviors and attitudes widely linked with some males, such as the desire to suppress emotions during difficult situations and act aggressively dominantly (Addis & Cohane, 2005; Braff & Nelson, 2022; Kupers, 2005; Lund et al., 2019). Toxic masculinity promotes and reproduces itself by requiring males to adhere to specific societal standards to be recognized as "real" men (Bowleg et al., 2011).

Toxic masculinity is also used to describe male cultural norms that are destructive to individuals and society (Kirby & Kirby, 2019) and is characterized by misogyny, homophobia, and violence (Haider, 2016; Wamoyi et al., 2022). Inculcation of toxic masculinity in men may occur as early as adolescence (Davis et al., 2019) and is not restricted to geographic location (Bhana et al., 2021; Turnock, 2021). Smoking tobacco cigarettes is one of the toxic facets of Indonesian hegemonic masculinity, as the dominant expression of masculinity is accepted as a social reality based on socially approved interactions (Bottorff et al., 2010). Changing such a toxic aspect of masculinity in the Indonesian context is challenging, as tobacco cigarette is used among men to perpetuate rituals and values ingrained in Indonesian society and culture. It expressed itself through territoriality, a desire to appear manly, and to demonstrate financial success. Our findings echo the aspects mentioned above.

However, traditional male norms, which minimize self-care and concern for one's health, are mixed with prevailing discourses about fathering, which extol similar parenting responsibilities as cultural impacts on men. Being a father is viewed as the polar opposite of toxic masculinity in the Indonesian context. According to Kerr et al. (2011), risky behaviors such as nicotine use and alcohol consumption tend to decline dramatically after young men become fathers. This change in toxic masculinity is also consistent with the findings of this study. The fathers altered their smoking habits by reducing their cigarette consumption, refraining from smoking in or near children, and expressing a desire to quit smoking. Although participants stated that men in the family must be mature, responsible, healthy, and strong, this shift leads to a new, non-toxic type of masculinity.

According to role theory, these changes are related to a person's social status/position (Biddle, 2013). Transitioning from being single to becoming a father brings new expectations from the current role behaviors. According to Courtenay (2000) and Kupers (2005), the father's role is a turning point for toxic masculinity, specifically toward a less toxic aspect. However, although young fathers are less likely to identify smoking with masculinity, they unknowingly continue the cycle of young boys seeing older male figures smoking and associating nicotine cigarettes with manhood. From the standpoint of socialization in sociology (Otten et al., 2008), this then is a perpetuation of the aforementioned risky health behaviors from one generation to the next (Morioka, 2014; Torres-Quintero et al., 2019) within a societal context where tobacco consumption begins as early as childhood or adolescence (Davis et al., 2019).

Being cognizant of the health risks associated with smoking, the respondents have developed ways of minimizing the impact of it on their families, but they have seemed less forthcoming about the health impacts on themselves (Dawood et al., 2016; Kovac et al., 2015; Pesch et al., 2012; Sundar et al., 2014; Verze et al., 2015). As young fathers who have expressed concern for their families (and possible future progeny), the health risks of smoking do not seem to be their ultimate concern at the time of the interview. This realization could indicate a new variation of toxic masculinity, where part of being masculine includes selectively choosing which facets of health, health risk-taking, and family health to be aware of and to focus on. This indication suggests three exciting possibilities: first, that cultural contexts play a more

prominent role in the development of masculinity than presently determined in the literature; second, masculinity is so much more malleable than previously thought by the authors; and third, cultural contexts and masculinities may both be shaped to better manage health interventions for reducing smoking among young Indonesian fathers.

Finally, certain aspects of toxic masculinity are unique to Indonesia. While young and single, Indonesian men identify smoking cigarettes as enhancing masculinity. However, this perception changes after becoming a father, when smoking is no longer associated with masculine identity. Furthermore, fathers are responsible for the well-being of their families. Thus, they are involved in domestic chores such as assisting wives at home or caring for children, which may be viewed as unmanly behavior from a Western perspective. This duality between a male figure who smokes tobacco cigarettes and a father who does domestic chores may appear paradoxical in Western literature. However, it fits the characteristics of masculinity from an Indonesian perspective. This focus calls for more research into the specificities of masculinity and toxic masculinity in the Southeast Asian context.

To address the suggestion mentioned in the previous paragraph, the authors would like to offer, based on the data found, an explanation of the phenomenon that has been found regarding young fathers, smoking cigarettes, and toxic masculinity. First, young fatherhood in Indonesia is changing from the traditional view of *Bapakisme* [loyalty to a hierarchical authority structure]. This concept is changing based on the realization of the risks of smoking, societal acceptance of the dangers of smoking, and the awareness of young fathers of the risks of smoking to themselves and their families. Second, smoking cigarettes is changing from a valued symbol of masculinity to a symbol of possible irresponsibility of a young father towards his family and himself. Third, toxic masculinity has cultural dimensions not necessarily recognized within mainstream western academic discourse. When combined, the concept of toxic masculinity seems to morph with changes wrought by changes in social perceptions and cultural expectations of masculinity.

Within Indonesian society, men are still expected to be men and providers and protectors (Suryani, 2014). However, with the knowledge that smoking threatens the actions of provision and protection, men in Indonesia are forced to navigate the terrain of masculinity by balancing nurturing behavior with accepted norms of the male fraternity. Additionally, the continuing movement of societal change towards health literacy in Indonesia has motivated men to rethink their views of smoking and fatherhood. Therefore, the indication of this phenomenon is a concept of masculinity in a state of flux. This state of flux may produce concepts and practices of masculinity that are uniquely Indonesian. With that, Indonesian stakeholders (where smoking, health, and fatherhood are concerned) need to keep abreast of these continuously changing concepts and practices to stem concerns regarding men and smoking in Indonesia, including the trajectory of their smoking behavior.

Limitations and future research

In addition to the lack of generalizability, information bias could have influenced the study findings. Two significant biases could have influenced this study. The first is the "social desirability" bias, which is defined as a process in which participants refuse to admit wrongdoing or illegal activities and feel compelled to provide false information to make a better impression. The second "self-serving" bias occurs when participants do not want to report the truth to make them feel better about their actions and themselves. The study's

findings suggest that these information biases could have influenced the participants' responses. Future research could overcome these limitations by conducting external validation, such as interviews with the participants' wives (Althubaiti, 2016). More research into the context of socialization and toxic masculinity in shaping the social construction of masculinity in a non-toxic way through a combination of family and school education on how to be a man without engaging in risky behavior is required. This program should include both parents and teachers.

Because our study was limited to tobacco cigarette smokers, the potential influence of e-cigarette usage on the decisions of young Indonesian fathers has not been examined. In Indonesia, e-cigarette usage continues to increase. According to the Global Adult Tobacco Survey's (GATS) data sheet, Indonesia's percentage of e-cigarette users increased from 0.5% in 2011 to 5.5% in 2021 (WHO, 2022a). Previous research by Bullen et al. (2010) suggested that using e-cigarettes can reduce the duration of tobacco smoking. However, there is no evidence that this applies to the Indonesian context. This focus calls for more research to understand how e-cigarette usage affects young fathers' smoking behavior and how this emerging form of smoking impacts the socially constructed concept of masculinity in Indonesia.

Most of the respondents have reached the secondary school level in terms of education, and most were working in the informal sector at the time of their interview. These two factors may explain, at least partially, the smoking behavior of the interviewees. Evidence suggests that a lower level of education and working in manual labor increase the chance of being a smoker (Tomioka et al., 2020). Tobacco-related harms are not consistently taught during secondary school. In addition, smoking bans are less likely to be applied to workers employed in the informal sector or working manually, which suggests a greater likelihood to continue smoking tobacco cigarettes (Nazira et al., 2022). However, the exact influence of these two factors on the smoking behaviors of young Indonesian fathers remains unknown and requires additional research.

As previously mentioned, several factors potentially influencing the behaviors and decisions of the interviewees were not explored due to the qualitative nature of the research. A quantitative investigation aiming at identifying how several sociodemographic variables (e.g., income, education, ethnicity/tribe) affect the smoking behavior of young Indonesian fathers would provide further insights for prevention efforts. Finally, concerning the intergenerational adoption of tobacco smoking behavior, future studies should investigate how the age at which boys witnessed their father smoking affects their potential initiation and initiation age.

Conclusion

Toxic masculinity can be found at each stage of the participant trajectory and their knowledge of health, past and present. The outcomes of this study demonstrated that smoking cigarettes are an essential feature of the socially created image of masculinity in Indonesia, based on the participants' smoking behavior trajectory. However, once they became fathers, the belief that smoking is "what a man should do" appeared to fade. Even though young fathers tend to stop associating smoking cigarettes with masculinity, they unconsciously perpetuate the cycle in which young boys see older male figures smoking and associate tobacco cigarettes with masculinity. Therefore, the father's role is critical because he is the only person who can break the cycle of children imitating their parents' cigarette smoking. Future research on how toxic

masculinity influences young men's social construction of reality is needed to understand better how socialization may be manipulated to lessen the chance of these young men adopting toxic masculine characteristics.

References

Addis, M. E., & Cohane, G. H. (2005). Social scientific paradigms of masculinity and their implications for research and practice in men's mental health. *Journal of Clinical Psychology*, *61*(6), 633–647. https://doi.org/10.1002/jclp.20099

Agency of Health Research and Development. (2019). *Laporan Nasional Riskesdas 2018 [Riskesdas National Report 2018]*. http://repository.bkpk.kemkes.go.id/3514/1/Laporan%20Riskesdas%202018%20Nasional.pdf

Althubaiti, A. (2016). Information bias in health research: Definition, pitfalls, and adjustment methods. *Journal of Multidisciplinary Healthcare*, *2016*(9), 211–217. https://doi.org/10.2147/jmdh.s104807

Berger, P. L., & Luckmann, T. (1991). *The social construction of reality: A treatise in the sociology of knowledge*. Penguin UK.

Bhana, A., Kreniske, P., Pather, A., Abas, M., & Mellins, C. A. (2021). Interventions to address the mental health of adolescents and young adults living with or affected by HIV: State of the evidence. *Journal of the International AIDS Society*, *24*(S2), Article e25713. https://doi.org/10.1002/jia2.25713

Biddle, B. J. (2013). *Role theory: Expectations, identities, and behaviors*. Academic Press.

Bottorff, J. L., Kelly, M. T., Oliffe, J. L., Johnson, J. L., Greaves, L., & Chan, A. (2010). Tobacco use patterns in traditional and shared parenting families: A gender perspective. *BMC Public Health*, *10*(1), Article 239. https://doi.org/10.1186/1471-2458-10-239

Bottorff, J. L., Oliffe, J. L., Kalaw, C., Carey, J., & Mroz, L. (2006). Men's constructions of smoking in the context of women's tobacco reduction during pregnancy and postpartum. *Social Science & Medicine*, *62*(12), 3096–3108. https://doi.org/10.1016/j.socscimed.2005.11.058

Bottorff, J. L., Radsma, J., Kelly, M. T., & Oliffe, J. L. (2009). Fathers' narratives of reducing and quitting smoking. *Sociology of Health and Illness*, *31*(2), 185–200. https://doi.org/10.1111/j.1467-9566.2008.01126.x

Bowleg, L., Teti, M., Massie, J. S., Patel, A., Malebranche, D. J., & Tschann, J. M. (2011). 'What does it take to be a man? What is a real man?': Ideologies of masculinity and HIV sexual risk among black heterosexual men. *Culture, Health & Sexuality*, *13*(5), 545–559. https://doi.org/10.1080/13691058.2011.556201

Braff, L., & Nelson, K. (2022). The Global North: Introducing the region. In N. Fernandez & K. Nelson (Eds.), *Gendered lives: Global issues* (pp. 289–307). SUNY Press. https://soar.suny.edu/handle/20.500.12648/7026

Budiarsih, B., & Ngah, A. (2017). Role of law influences on modern lifestyle issues in Indonesia and Malaysia. *Scientific Journal of PPI - UKM,* *4*(1), 18–25. https://www.kemalapublisher.com/index.php/ppi-ukm/article/view/277

Bullen, C., McRobbie, H., Thornley, S., Glover, M., Lin, R., & Laugesen, M. (2010). Effect of an electronic nicotine delivery device (e cigarette) on desire to smoke and withdrawal, user preferences and nicotine delivery: Randomised cross-over trial. *Tobacco Control*, *19*(2), 98–103. https://doi.org/10.1136/tc.2009.031567

Bush, J., White, M., Kai, J., Rankin, J., & Bhopal, R. (2003). Understanding influences on smoking in Bangladeshi and Pakistani adults: Community based, qualitative study. *BMJ*, *326*(7396), Article 962. https://doi.org/10.1136/bmj.326.7396.962

Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis*. SAGE.

Chen, L., Shih, S.-F., & Chang, H.-C. (2004, April 23–24). *The arrival of a new life and smoking cessation: How fathers and mothers stop smoking for their babies*. Annual Meeting of Population Association

of Taiwan. http://www.psc.ntu.edu.tw/C2004paper/陳麗光%20施淑芳%20張華志--The%20arrival%20of%20a%20new%20life%20and%20smoki….pdf

Clark, A. G., & Loheac, Y. (2007). "It wasn't me, it was them!" Social influence in risky behavior by adolescents. *Journal of Health Economics*, *26*(4), 763–784. https://doi.org/10.1016/j.jhealeco.2006.11.005

Corbin, J., & Strauss, A. L. (1990). Grounded theory research: Procedures, canons, and evaluative criteria. *Qualitative Sociology*, *13*(1), 3–21. https://doi.org/10.1007/bf00988593

Courtenay, W. (2009). Theorising masculinity and men's health. In A. Broom & P. Tovey (Eds.), *Men's Health: Body, identity and social context* (pp. 9–32). John Wiley & Sons, Inc.

Courtenay, W. H. (2000). Constructions of masculinity and their influence on men's well-being: A theory of gender and health. *Social Science & Medicine*, *50*(10), 1385–1401. https://doi.org/10.1016/s0277-9536(99)00390-1

Dawood, O. T., Rashan, M. a. A., Hassali, M. A., & Saleem, F. (2016). Knowledge and perception about health risks of cigarette smoking among Iraqi smokers. *Journal of Pharmacy and Bioallied Sciences*, *8*(2), 146–151. https://doi.org/10.4103/0975-7406.171738

Davis, J. P., Merrin, G. J., Ingram, K. H., Espelage, D. L., Valido, A., & Sheikh, A. J. E. (2019). Examining pathways between bully victimization, depression, & school belonging among early adolescents. *Journal of Child and Family Studies*, *28*(9), 2365–2378. https://doi.org/10.1007/s10826-019-01340-9

Eng, L., Su, J., Qiu, X., Palepu, P. R., Hon, H., Fadhel, E., Harland, L., La Delfa, A., Habbous, S., Kashigar, A., Cuffe, S., Shepherd, F. A., Leighl, N. B., Pierre, A. J., Selby, P., Goldstein, D., Xu, W., & Liu, G. (2014). Second-hand smoke as a predictor of smoking cessation among lung cancer survivors. *Journal of Clinical Oncology*, *32*(6), 564–570. https://doi.org/10.1200/jco.2013.50.9695

Frąckowiak-Sochańska, M. (2021). Men and social trauma of COVID-19 pandemic. The maladaptiveness of toxic masculinity. *Society Register*, *5*(1), 73–94. https://doi.org/10.14746/sr.2021.5.1.04

Glaser, B. G., & Strauss, A. L. (1968). The discovery of grounded theory: Strategies for qualitative research. *Nursing Research*, *17*(4), 364. https://doi.org/10.1097/00006199-196807000-00014

Grusec, J. E., & Hastings, P. D. (2014). *Handbook of socialization: Theory and research* (2nd ed.). Guilford Publications.

Hacking, I. (1999). *The social construction of what?* Harvard University Press.

Haider, S. (2016). The shooting in Orlando, terrorism or toxic masculinity (or both?). *Men and Masculinities*, *19*(5), 555–565. https://doi.org/10.1177/1097184x16664952.

Hanusz, M. (2000). *Kretek: The culture and heritage of Indonesia's clove cigarettes*. Equinox Publisher.

Heatherton, T. F., Kozlowski, L. T., Frecker, R. C., & Fagerström, K. O. (1991). The Fagerstrom Test for Nicotine Dependence: A revision of the Fagerstrom Tolerance Questionnaire. *Addiction*, *86*(9), 1119–1127. https://doi.org/10.1111/j.1360-0443.1991.tb01879.x

Horton, P. B., & Hunt, C. L. (1984). *Sociology*. McGraw-Hill College.

Hurlock, E. B. (2001). *Developmental psychology*. Tata McGraw-Hill Education.

Junita P, H. (2017). Hubungan antara status merokok anggota keluarga dengan status ISPA pada balita di Kelurahan Pahandut [Relationship between smoking status of family members and ISPA status in toddlers in Pahandut Village]. *Jurnal Publikasi Kesehatan Masyarakat Indonesia*, *2*(2), 94–97. https://doi.org/10.20527/jpkmi.v2i2.2721

Kaptein, M., & van Helvoort, M. (2019). A model of neutralization techniques. *Deviant Behavior*, *40*(10), 1260–1285. https://doi.org/10.1080/01639625.2018.1491696

Kendrich, I. (2021). *Gambaran pengetahuan, sikap dan Perilaku Mahasiswa Fakultas Kedokteran Universitas Sumatera Utara terhadap merokok [Description of the knowledge, attitudes and behavior of students of the Faculty of Medicine, the University of North Sumatra towards smoking]* (Masters thesis, University of Sumatera Utara). Repositori Institusi Universitas Sumatera Utara. https://repositori.usu.ac.id/handle/123456789/30619

Kerr, D. J., Capaldi, D. M., Owen, L. D., Wiesner, M., & Pears, K. C. (2011). Changes in at-risk American men's crime and substance use trajectories following fatherhood. *Journal of Marriage and Family*, *73*(5), 1101–1116. https://doi.org/10.1111/j.1741-3737.2011.00864.x

Kirby, R., & Kirby, M. (2019). The perils of toxic masculinity: Four case studies. *Trends in Urology and Men's Health*, *10*(5), 18–20. https://doi.org/10.1002/tre.712.

Kovac, J. R., Labbate, C., Ramasamy, R., Tang, D., & Lipshultz, L. I. (2015). Effects of cigarette smoking on erectile dysfunction. *Andrologia*, *47*(10), 1087–1092. https://doi.org/10.1111/and.12393

Kuntara, W. (2012). *Hubungan antara tingkat pengetahuan penyakit akibat merokok dengan perilaku 1 merokok pada usia dewasa awal di desa Kacangan Kecamatan Andong Kabupaten Boyolali [The relationship between the level of knowledge of diseases caused by smoking with the behavior of 1 smoking in early adulthood in Kacangan Village, Andong Regency District Boyolali]* [Bachelor thesis]. Muhammadiyah University of Surakarta. http://eprints.ums.ac.id/20422/17/NASKAH_PUBLIKASI.pdf

Kupers, T. A. (2005). Toxic masculinity as a barrier to mental health treatment in prison. *Journal of Clinical Psychology*, *61*(6), 713–724. https://doi.org/10.1002/jclp.20105

Kwon, J., Oliffe, J. L., Bottorff, J. L., & Kelly, M. T. (2014). Heterosexual gender relations and masculinity in fathers who smoke. *Research in Nursing & Health*, *37*(5), 391–398. https://doi.org/10.1002/nur.21614

Lakon, C. M., & Valente, T. W. (2012). Social integration in friendship networks: The synergy of network structure and peer influence in relation to cigarette smoking among high risk adolescents. *Social Science & Medicine*, *74*(9), 1407–1417. https://doi.org/10.1016/j.socscimed.2012.01.011

Lavrakas, P. J. (2008). *Encyclopedia of survey research methods*. SAGE Publications.

Leventhal, H., & Cleary, P. D. (1980). The smoking problem: A review of the research and theory in behavioral risk modification. *Psychological Bulletin*, *88*(2), 370–405. https://doi.org/10.1037/0033-2909.88.2.370

Lund, R., Meriläinen, S., & Tienari, J. (2019). New masculinities in universities? Discourses, ambivalence and potential change. *Gender, Work and Organization*, *26*(10), 1376–1397. https://doi.org/10.1111/gwao.12383

Mausner, B., & Platt, E. S. (2013). *Smoking: A behavioral analysis*. Elsevier.

Morioka, R. (2014). Gender difference in the health risk perception of radiation from Fukushima in Japan: The role of hegemonic masculinity. *Social Science & Medicine*, *107*, 105–112. https://doi.org/10.1016/j.socscimed.2014.02.014

Mukuan, S. (2012). *Hubungan antara pengetahuan dan sikap tentang bahaya merokok bagi kesehatan dengan tindakan merokok pelajar SMK Kristen Kawangkoan [The relationship between knowledge and attitudes about the dangers of smoking to health with the smoking acts of Kawangkoan Christian Vocational School students]* [Master thesis]. University of Sam Ratulangi.

Nazira, N., Wuni, C., & Parman, P. (2022). Faktor-faktor yang berhubungan dengan kapasita paru pada pekerja batu bata di desa Talang Belido tahun 2022 [Factors associated with lung capacity in brick workers in Talang Belido Village in 2022]. *Jurnal Cakrawala Ilmiah*, *2*(4), 1321–1328. https://bajangjournal.com/index.php/JCI/article/view/4320

Ng, N., Weinehall, L., & Öhman, A. (2006). "If I don't smoke, I'm not a real man" Indonesian teenage boys' views about smoking. *Health Education Research*, *22*(6), 794–804. https://doi.org/10.1093/her/cyl104

Nichter, M., Padmawati, S., Danardono, M., Ng, N., Prabandari, Y. S., & Nichter, M. (2009). Reading culture from tobacco advertisements in Indonesia. *Tobacco Control*, *18*(2), 98–107. https://doi.org/10.1136/tc.2008.025809

Otten, R., Engels, R. C. M. E., & Van Den Eijnden, R. J. J. M. (2008). Smoking behavior in asthmatic and non-asthmatic adolescents: The role of smoking models and personality. *Substance Use & Misuse*, *43*(3–4), 341–360. https://doi.org/10.1080/10826080701202833

Pachankis, J. E., Westmaas, J. L., & Dougherty, L. R. (2011). The influence of sexual orientation and masculinity on young men's tobacco smoking. *Journal of Consulting and Clinical Psychology*, *79*(2), 142–152. https://doi.org/10.1037/a0022917

Park, S. L., Carmella, S. G., Chen, M., Patel, Y., Stram, D. O., Haiman, C. A., Marchand, L. L., & Hecht, S. S. (2015). Mercapturic acids derived from the toxicants acrolein and crotonaldehyde in the urine of cigarette smokers from five ethnic groups with differing risks for lung cancer. *PLOS ONE*, *10*(6), Article e0124841. https://doi.org/10.1371/journal.pone.0124841

Pesch, B., Kendzia, B., Gustavsson, P., Jöckel, K., Johnen, G., Pohlabeln, H., Olsson, A., Ahrens, W., Gross, I., Brüske, I., Wichmann, H. E., Merletti, F., Richiardi, L., Simonato, L., Fortes, C., Siemiatycki, J., Parent, M., Consonni, D., Landi, M. T., . . . Brüning, T. (2012). Cigarette smoking and lung cancer-relative risk estimates for the major histological types from a pooled analysis

of case-control studies. *International Journal of Cancer*, *131*(5), 1210–1219. https://doi.org/10.1002/ijc.27339

Ritchie, H., & Roser, M. (2013, May 23). *Smoking*. Our World in Data. https://ourworldindata.org/smoking

Seo, D.-C., & Huang, Y. (2012). Systematic review of social network analysis in adolescent cigarette smoking behavior. *Journal of School Health*, *82*(1), 21–27. https://doi.org/10.1111/j.1746-1561.2011.00663.x

Statistics Indonesia, National Population and Family Planning Board, Kementerian Kesehatan, & ICF International. (2013, August). *Indonesia Demographic and Health Survey 2012*. https://dhsprogram.com/pubs/pdf/fr275/fr275.pdf

Sundar, I. K., Yao, H., Huang, Y., Lyda, E., Sime, P. J., Sellix, M. T., & Rahman, I. (2014). Serotonin and corticosterone rhythms in mice exposed to cigarette smoke and in patients with COPD: Implication for COPD-associated neuropathogenesis. *PLOS ONE*, *9*(2), Article e87999. https://doi.org/10.1371/journal.pone.0087999

Suryani, A. (2014). *Leadership styles in Indonesia* [Doctoral thesis]. Tilburg University. https://pure.uvt.nl/ws/portalfiles/portal/3205046/Suryani_Leadership_19_05_2014.pdf

Taylor, S. J., Bogdan, R., & DeVault, M. (2015). *Introduction to qualitative research methods: A guidebook and resource*. John Wiley & Sons.

Tomioka, K., Kurumatani, N., & Saeki, K. (2020). The association between education and smoking prevalence, independent of occupation: A nationally representative survey in Japan. *Journal of Epidemiology*, *30*(3), 136–142. https://doi.org/10.2188/jea.je20180195

Torres-Quintero, A., Palacios-Doncel, D. L., Dominguez, M. T., Gafaro-Barrera, M. E., & Burbano-Valente, J. (2019). Masculinities at play. A sociocultural approach to the practices of risky riding among male motorcyclists in Valledupar, Colombia. *Journal of Transport and Health*, *14*, Article 100599. https://doi.org/10.1016/j.jth.2019.100599

Turnock, L. A. (2021). Polydrug use and drug market intersections within powerlifting cultures in remote South-West England. *Performance Enhancement and Health*, *8*(4), Article 100186. https://doi.org/10.1016/j.peh.2021.100186

Twyman, L., Bonevski, B., Paul, C., & Bryant, J. (2014). Perceived barriers to smoking cessation in selected vulnerable groups: A systematic review of the qualitative and quantitative literature. *BMJ Open*, *4*(12), Article e006414. https://doi.org/10.1136/bmjopen-2014-006414

Verze, P., Margreiter, M., Esposito, K., Montorsi, P., & Mulhall, J. P. (2015). The link between cigarette smoking and erectile dysfunction: A systematic review. *European Urology Focus*, *1*(1), 39–46. https://doi.org/10.1016/j.euf.2015.01.003

Wamoyi, J., Ranganathan, M., Mugunga, S., & Stöckl, H. (2022). "It gives you a feeling of pride when you touch her": The role of masculinity in sexual harassment of adolescent schoolgirls in Tanzania. *Journal of Interpersonal Violence*, *38*(1–2), 108–127. https://doi.org/10.1177/08862605221080957

Warren, G. W., Alberg, A. J., Kraft, A. S., & Cummings, K. M. (2014). The 2014 Surgeon General's report: "The Health Consequences of Smoking-50 Years of Progress": A paradigm shift in cancer care. *Cancer*, *120*(13), 1914–1916. https://doi.org/10.1002/cncr.28695

World Health Organization (WHO). (2011). *WHO report on the global tobacco epidemic, 2011: Warning about the dangers of tobacco*. https://apps.who.int/iris/handle/10665/44616

World Health Organization (WHO). (2012a). *Global adult tobacco survey: Indonesia report 2011*. WHO Regional Office for South-East Asia. https://apps.who.int/iris/handle/10665/205137

World Health Organization (WHO). (2012b, June 16). *WHO global report: Mortality attributable to tobacco*. https://www.who.int/publications/i/item/9789241564434.

World Health Organization (WHO). (2018). *Indonesia Factsheet 2018: Heart disease and stroke are the commonest ways by which tobacco kills people*. https://apps.who.int/iris/bitstream/handle/10665/272673/wntd_2018_indonesia_fs.pdf

World Health Organization (WHO). (2019, December 18). *WHO global report on trends in prevalence of tobacco use 2000-2025, third edition*. https://www.who.int/publications/i/item/who-global-report-on-trends-in-prevalence-of-tobacco-use-2000-2025-third-edition

World Health Organization (WHO). (2020, May 22). *SEAR Tobacco Atlas: Perspectives from the South-East Asia Region*. https://www.who.int/southeastasia/publications-detail/sear-tobacco-atlas

World Health Organization (WHO). (2022a, May 17). *Global Adult Tobacco Survey (GATS): Comparison Fact Sheet Indonesia 2011 & 2021*. https://cdn.who.int/media/docs/default-source/ncds/ncd-surveillance/data-reporting/indonesia/indonesia-national-2021----2011-comparison-factsheet.pdf?sfvrsn=46869411_1

World Health Organization (WHO). (2022b, May 17). *Global Adult Tobacco Survey (GATS): Fact Sheet Indonesia 2021*. https://cdn.who.int/media/docs/default-source/ncds/ncd-surveillance/data-reporting/indonesia/indonesia-national-2021-factsheet.pdf?sfvrsn=53eac4fd_1

World Health Organization (WHO). (2022c, May 24). *Tobacco*. https://www.who.int/news-room/fact-sheets/detail/tobacco