# Social Determinant of Health for Smoke-Free Homes to Protecting Children Become Smoker (Passive or Active)

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Abstract: This article is a literature review to design how smoking behavior prevention programs in children who will become passive smokers or active smokers in the future with a compressive approach from the individual level, organizational level, and community level. The social, physical, and economic situations in which people are born, live, work, and age are social determinants of health. Infectious and non-communicable diseases are affected by social determinants. This article aims to explain why we need to establish a smoke-free home, as seen from the social determinants of health for smoking, to protect children from becoming active or passive smokers. The meaning of social determinants and health inequity, based on own knowledge of smoke-free homes, determines social determinants of health not only from social and health factors but also from other factors including biology, psychology, economy, and politics. Therefore, social determinants of health can be determined comprehensively from the environment in which people are born, live, work, and age.

## 1 INTRODUCTION

Social determinant of health: a condition in the social, physical, and economic environment in which people are born, live, work, and age. Social determinants are relevant to communicable and non-communicable diseases. As smoking is an acknowledged risk factor for a range of chronic diseases, developing approaches to reduce tobacco use is critical. Identification of factors associated both with smoking initiation and cessation may help to underpin strategies for smoke-free homes.

Various efforts have been made to reduce smoking behavior, such as the failure to implement indoor smoking bans (Abramova, Sami, & Huh, 2017), media campaigns (Been et al., 2014), smoking restriction legislation, and tobacco taxation is among policies implemented to reduce cigarette smoking rates. Various factors include the influence of media, parents, family, friends, and stress (Rohmah, 2013; Rohman & Psi, 2010; WHO, 2010). Cigarette initiation is associated with parental smoking and low levels of maternal education (Conwell et al., 2003).

Why do we care about passive smokers? Because there is still high smoking at home, the impacts of cigarette smoke are not only for smokers but also those around them as passive smokers. The First effect to physic as second-hand smoke such as lung cancer (Eng et al., 2014), leukemia (Lee et al., 2009), malnutrition (Best et al., 2008), asthma, and ear infection (Hawkins & Berkman, 2011; Wakefield et al., 2000), increased risk of infant and under-5 child mortality (Semba et al., 2008), low birth weight (Been et al., 2014) and allergic (Thacher et al., 2014). The second effect is psychological, such as depression or stress (WHO, 2010). The third effect, social norms, was more important than perceived parental involvement in explaining cigarette consumption (Olds & Thombs, 2001). Fathers' warmth and hostility were the best predictors of heavy smoking by sons (White, Johnson, & Buyske, 2000). Social pressure from peers or older siblings has been considered a prime factor for initial experimentation (Leventhal & Cleary, 1980).

The meaning of the social determinants and health inequity is based on knowledge of smoke-free homes and the determination of social determinants of health not only from social and health factors but also from other factors like biology, psychology, economy, and politics. There comprehensively social determinants of health can be determined from the environment in which people are born, live, work, and age.



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This article aims to explain why we need to establish a home free from cigarette smoke as seen from the social determinants of health for smoking, to protect children from active or passive smokers.

# 2 LITERATURE STUDY

## 2.1 Theories Conceptual Framework Social Determinants of Health

The three primary theoretical directions invoked by current social epidemiologists, are not mutually exclusive, can be designated as follows: (1) psychosocial approaches; (2) social production of disease/political economy of health; and (3) Eco-social theory and related multi-level frameworks. These structural determinants are what we include when referring to the "*social determinants of health inequities*." This concept corresponds to Graham's notion of the "social processes shaping the distribution" of downstream social determinants. A comprehensive SDH framework should achieve the following: (1) Identify the social determinants of health and the social determinants of inequities in health; (2) Show how major determinants relate to each other; (3) Clarify the mechanisms by which social determinants generate health inequities; (4) Provide a framework for evaluating which SDH are the most important to address and (5) Map specific levels of intervention and policy entry points for action on SDH. Health inequities flow from patterns of social stratification—that is, from the systematically unequal distribution of power, prestige, and resources among groups in society (WHO, 2010).

## 2.2 Application of the Framework to Smoke-Free Homes in Indonesia First Section

### 2.2.1 Socioeconomic and Political Context (Macro Level)

Socioeconomic approach: smoking is the most significant avoidable cause of inequalities in health. Socio-economically disadvantaged people are more likely to smoke and have started smoking younger and smoke more heavily than their less disadvantaged peers. Uptake may also be higher among those with low socioeconomic status (SES), and quit attempts are less likely to succeed. Raising the price of tobacco products appears to be the tobacco control intervention with the most potential to reduce health inequalities from tobacco (Hiscock, Bauld, Amos, Fidler, & Munafò, 2012). The policies of private and public entities that limit the opportunities of underprivileged groups are referred to as structural discrimination. Restriction occurs as a result of regulations' intentional or unforeseen repercussions, with examples of structural discrimination emerging in the context of the tobacco epidemic (Stuber, Galea, & Link, 2008). The policies of private and public entities that limit the opportunities of underprivileged groups are referred to as structural discrimination. Restriction occurs as a result of regulations' intentional or unforeseen repercussions, with examples of structural discrimination emerging in the context of the tobacco epidemic (WHO, 2010).

Political approach: The regulator of tobacco in Indonesia was passed in early 2003. The dates during which it was debated and signed coincided with a meeting in Geneva of the Intergovernmental Negotiating Body (INB) of the Framework Convention on Tobacco Control (FCTC). Thus, senior Ministry of Health and Food and Drug Administration representatives involved in tobacco control issues were not present (Achadi, Soerojo, & Barber, 2005). Indonesia is the only country in Asia that refused and did not sign FCTC (Sarvika & Aditama, 2016). Determination of Non-Smoking Areas should be held in service facilities for health, place of the learning process, place child play, place of worship, public transport, workplace, public places, and other places designated (Indonesia, 2009). According to Government Regulation (PP) number 109 2012, The No Smoking Area (KTR) in areas declared prohibited for activities smoking or activities producing, selling advertising an promoting products tobacco (RI, 20Indonesia'snesia tobacco control regulation passed in 1999, succeeded by amendments in 2000 and 2003. Today, few restrictions exist on tobacco industry conduct, advertising, and promotion in Indonesia (Achadi et al., 2005).

Cultural and societal Values approach: Cultural belief, tolerance in indoor smoking (Abramova et al., 2017), socially unacceptable colludes with patriarchy (Annandale & Clark, 2000), senior family men's smoking (Mao, 2014), social acceptance, social bonding, and tradition (Bush, White, Kai, Rankin, & Bhopal, 2003) and parental value system (Emory, Saquib, Gilpin, & Pierce, 2010). Widely cultivated across Java Indonesia, tobacco was added to the long-established social habit of chewing betel (Achadi et al., 2005).

### 2.2.2 Socioeconomic Situation and Structural Determinants (*Meso* Level)

a. Increased smoking prevention efforts are needed in low-SES areas, and limiting adolescents' pocket money may be an effective strategy for preventing smoking (Unger, Sun, & Johnson, 2007). Indonesia's cigarette expenditure spending in 2017 amounts to Rp.65,586.00 per day (BPS, 2017). Meanwhile, the cost of cigarette expenditure on low-income families in the Samarinda City of Indonesia amounts to 27.45% (Rp.15,759.00) of household expenses (Rohmah Nur, 2016).

b. Education
In general, low education makes them lack the correct health information and information about the dangers of smoking. Adolescent cigarette smoking was associated with low school achievement (Conwell et al., 2003). The proportion of the population in Indonesia at the education level of 28,7 % active smoking for senior high school, no educated 22.8% (RI, 2013).

c. Occupation
in smoker groups mainly from the informal sector, although not denied from the formal and professional sector many also become smokers. However, it is related to family expenditure in the informal sector because almost 25% is spent on cigarettes. By type of work, farmers/fishermen/laborers are the most significant proportion of active smokers each day in Indonesia; around 44.5%, 9.9 % of smokers in the group did not work (RI, 2013).

d. Social class
Widening social class inequalities in smoking prevalence that members of lower social classes are increasingly more likely to take up smoking and less likely to quit (London, 1974). Smoking behavior spreads through close and distant social ties. The extent to which smoking depends on how people are embedded in a social network and how smoking behavior transcends direct dyadic ties are not known (Christakis & Fowler, 2008).

e. Gender and Age
The proportion of the population in Indonesia aged ≥15 years of male smokers is 67.0% in 2011, to 64.9 % in 2013. More men than female smokers (47.5% and 1.1%). Similarly, according to GATS (Global Adult Tobacco Surveys), female smokers are 2,7% in 2011 and 2.1 % (RI, 2013). The most significant proportion of active smokers in Indonesia every day is 30-34 years old, 33.4 %, age 35-39 years 32.2% (RI, 2013). Since starting to smoke at an early age increases the number of cigarettes smoked per day in adult life, it is likely to enhance the risk of tobacco-related diseases. In Samarinda city Indonesia, early ag start smoking at four years (Rohmah, 2013).

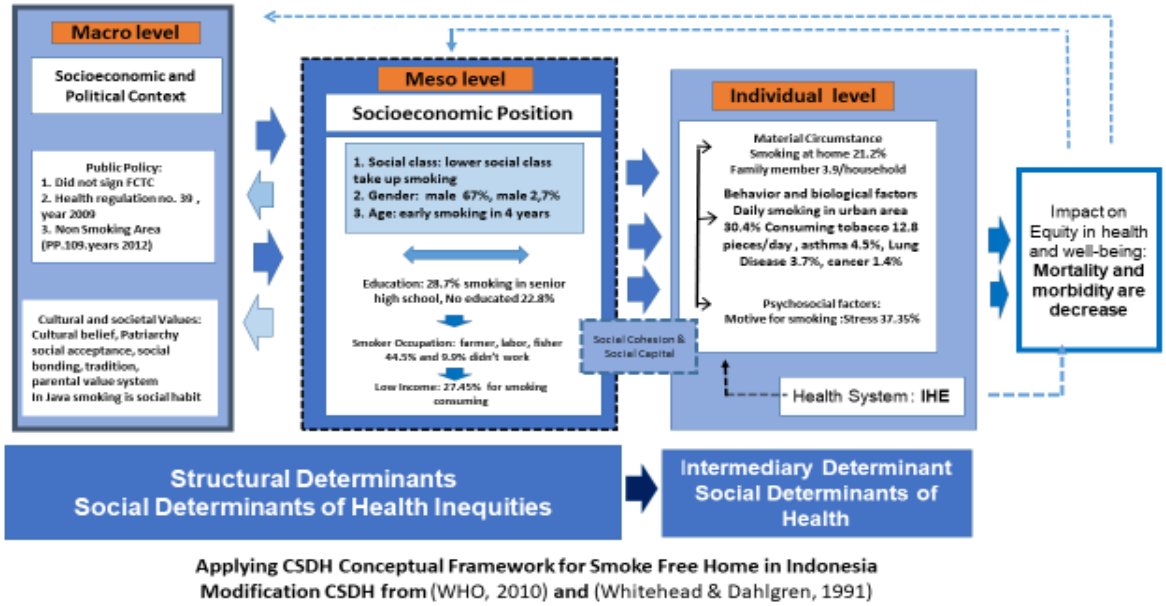
### 2.2.3 An Intermediary Determinant (Individual Level)

Social position determines health through intermediate factors. Material circumstances, behavioral and biological variables, and psychological issues are all intermediate determinants.

a. Material Circumstances
If a family member (like a father, or grandfather) smokes at home will result in other family members becoming passive smokers. This condition is exacerbated if family members risks, such as infants, toddlers, pregnant women, and the elderly.
Data on smoking behavior at home in Indonesia is 21.2% (RI, 2013), the average family member stays at home 3.9 persons per household in 2015 (BPS, 2017), and smoking is a lifestyle in Indonesia (Budiarsih & Ngah, 2017).

b. Behavior and biological factors
Behavior factors such as smoking is an essential determinant of health. Smoking is generally prevalent among the lower socioeconomic group. Risk factors tend to cluster in socially patterned ways. For example, those living in adverse childhood social circumstances are more likely to be low weight and be exposed to poor diet, childhood infections, and passive smoking (WHO, 2010).
In Indonesia, daily smokers in urban areas outnumber those in rural areas by 30.4 percent and 28.3 percent, respectively. Consuming tobacco 12.8 pieces per day. Asthma 4.5%, lung disease 3.7% and cancer 1.4% (RI, 2013).

c. Psychosocial Factors
Psychosocial factors are highlighted by the psychosocial theory described above. Relevant factors include stressors (e.g., adverse life events), stressful living circumstances, and lack of social support (WHO, 2010). Psychosocial




**Applying CSDH Conceptual Framework for Smoke Free Home in Indonesia**
**Modification CSDH from** (WHO, 2010) **and** (Whitehead & Dahlgren, 1991)

Figure 1: Applying CSDH Conceptual Framework for Smoke-Free Home in Indonesia Modification CSDH from (WHO, 2010) and (Whitehead & Dahlgren, 1991).

variables from adolescence and young adulthood were significantly distinguished among empirically identified four trajectory groups (early stable smokers, late stable smokers, experimenters, and quitters) (Chassin, Presson, Pitts, & Sherman, 2000).

Data Smoking in Indonesian motives relieves tension and stress occupy the highest order, which is an average of 37,35 % (Rohman & Psi, 2010).

d. Health System

Indonesia's Ministry of Health has a program. Individual health efforts are any activities undertaken by the government, society, and the private sector. To maintain and improve health and prevent and cure disease and restore health, individuals include health promotion efforts, disease prevention, outpatient treatment, treatment of hospitalization, restriction, and recovery defects directed against individuals (Adisasmito, 2007).

e. Impact on equity in health and well-being

Impact on equity in health and well-being, in particular, moving away from a focus on physical health status as measured by mortality and morbidity to encompass, wherever possible, many other dimensions of health and well-being (Whitehead, 1991).

## 3 DISCUSSIONS

Suppose these children, mostly from minority groups and impoverished families, had no hope for the future and difference. Would it make if they smoked or used drugs, missed school, or engaged in violent behavior? Among smoking households, restriction types varied according to the number and gender of parents who smoke. In both smoking and non-smoking households, children's SHS exposure was directly related to the type of home smoking restriction, with the lowest exposures among those reporting full restrictions (Akhtar, Haw, Currie, Zachary, & Currie, 2009). Although the primary preventive goal should be to achieve a smoke-free environment, the finding of an association between early age at the start of smoking and heavy subsequent cigarette consumption suggests that additional efforts should be made to postpone the beginning of smoking among youngsters (Taioli & Wynder, 1991). By adopting strong home smoking bans, parents can reduce some of the influence friends' smoking can have on the smoking behavior of their adolescents (Szabo, White, & Hayman, 2006).

Smokers were indistinguishable from non-smokers in terms of integration in their social networks. Nevertheless, three decades later, reflecting significant shifts in societal views of smoking, smokers were at the periphery of social

networks and aligned with other smokers (Bainbridge, Smith, & Barker, 2008).

Based on these cases caused by smoke pollution cigarettes at homes, need for guidance and supervision of non-smoking areas in Indonesia. The need for a set of rules that can support the creation of a good environment, healthy and free from tobacco smoke, and the need for guidance and supervision of a limited region of cigarettes conducted by the City Health Office Indonesia.

The government is expected to implement KTR starting from government offices, including the DPR by giving sanctions to employees who do not comply with the rules. Smoking is their right, but they also have to respect the rules for the crowd, that means in a non-smoking area there is absolutely no smoke, no cigarette advertisements and no one sells cigarettes, if it is still fulfilled then sanctions must be imposed, considering the sanctions this will deter violators. The scope of the tobacco-free area is regulated in Law No. 36 of 2009 and Government Regulation No. 109 of 2012, among others, the government stipulates that facilities that are not allowed to smoke are health service facilities, places of study, places of worship, public places and other places where smoking is not permitted. set.

The Ministry of Health (2014) explained that tobacco product advertisements are targeted at teenagers, explained that 80% of Indonesian smokers start smoking before the age of 19 years, the tobacco industry aggressively targets young people, both directly and indirectly. Tobacco advertising increases consumption among children and youth by creating an environment in which tobacco use is considered good and regular.

Studies in 102 countries show that a limited ban on cigarette advertising has little or no effect on reducing tobacco consumption. Tobacco Control Support Center Public Health Association of Indonesia (TCSC-IAKMI) In collaboration with the Southeast Asia Tobacco Control Alliance (SEATCA) and the World Health Organization (WHO) Indonesia reported the four best policy alternatives for tobacco control, namely raising taxes (65% from retail prices), prohibiting all forms of cigarette advertising, implementing 100% non-smoking areas in public places, workplaces, places of education, as well as enlarging smoking warnings and adding images due to smoking habits on cigarette packs.

For the suggested intervention, we will use the structural intervention to tackle smoke-free homes in Indonesia can be explained (*see.* Table 1).

# 4 CONCLUSION AND SUGGESTIONS

A summary that the social determinant of health should be comprehensively determined from various levels of macro level, *meso* level, and individual level so we can determine the determinants of health, especially for smoking problems at home.

The biased advice presented in this article is that there needs to be a holistic strategy for protecting children from exposure to cigarette smoke in the home environment, institutes, organizations, and policymakers.

Table 1: Framework to Structural Intervention for smoke-free homes.

| Intervention target | | | |
|---|---|---|---|
| Source of problem | Individual-level | Organization level | Environment level |
| Availability | Knowledge about smoking and health, perceived risk of smoking-related disease, self-efficacy to refuse a cigarette | Local ordinances require smoke-free homes. | Regulation selling cigarettes by retail and not selling cigarettes for child |
| Acceptability | Picture by sticker do not smoke at home | Tobacco product advertising must have a visual health warning on the package. | Regulation on violence in the media such as TV does not show cigarette advertisements on primetime and limits billboards on the street |
| Accessibility | to smoke-free homes | Zoning and timing regulation to sell cigarettes. Prohibition of single cigarette sales | Community-based initiation by health volunteers to reduce smoking at home |

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