



2<sup>nd</sup> ICHMS & 2<sup>nd</sup> LSC

PROCEEDING

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## The 2nd International Conference of Medical and Health Sciences (ICMHS) and The 2nd Life Sciences Conference (LSC) 2016

*"Towards a Better Quality of Life  
through Interdisciplinary Research"*

Yogyakarta, 9<sup>th</sup>-10<sup>th</sup> December 2016  
The Alana Hotel and Convention Center

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**The 2<sup>nd</sup> International Conference of Medical & Health Sciences  
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**Committee of ICMHS & LSC 2016**

Supervisor	dr. Ardi Pramono, Sp.An, M.Kes
Chair	dr Iman Permana, M.Kes, Ph.D
Partner	Dr Zahid Iqbal, Ph.D
Secretary	Winnie Setyonugroho, S.Ked, MT, Ph.D
Secretariat	dr Bramantyas Kusuma H, M.Sc Futuh Hidayat, SEI Elida Tri Grahani, SE
Treasury	dr Hidayatul Kurniawati, M.Sc
Scientific section	Dr dr Ikhlas M Jenie, M.Med, Sc Dr Sri Nabawiyati Nurul Makiyah, S.Si, M.Kes Lia Fitriana, SP
Programme section	dr Ika Setyawati, M.Sc dr Imaniar Ranti, M.Sc dr Ahmad Ikliludin, SpM
Publication and Documentation section	dr April Imam Prabowo Arif Hadiano, ST
Logistic and Transportation	dr Muhammad Kurniawan, M.Sc Aris Nuryanta, SH Muhammad Ma'rifatullah Katiga Putra Dwi Hatmo Budi, S.IP
Fund Raiser	dr Maria Ulfa, MMR dr Akhmad Syaiful Fatah Husein, SpAn



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**Chair person of The 2<sup>nd</sup> International Conference of Medical and  
Health Sciences and The 2<sup>nd</sup> Life Sciences Conference 2016**



Welcome to Jogja, sugeng rawuh!

For the second time, the Faculty of Medicine and Health Sciences Universitas Muhammadiyah Yogyakarta is going to conduct the 2nd International Conference of Medical and Health Sciences (ICMHS) this December in vibrant Yogyakarta, Indonesia. This year we are going to collaborate with the Life Sciences Society of Pakistan for their 2<sup>nd</sup> Life Sciences Conference (LSC) with Dr. Zahid Iqbal as the general secretary.

This year's conference theme "Towards a better quality of life through interdisciplinary research" will be celebrating an era of seamless interdisciplinary integration and collaboration in scientific innovations with the involvement of more extensive topics and disciplines in the conference. We aim to exhibit the products of that kind of approach in solving challenges, improving the quality of life, and creating sustainable developments. We are happy to announce that our conference is filled with Invited speakers from Pakistan, United States of America, Uni Emirates Arab, Malaysia and Indonesia. Presentations will be conducted in oral as well as poster that covers topics from medicine, public health, dentistry, pharmacy, biomedical to agriculture. To put more credibility to the conference we are collaborating with Isra Medical Journal and the Asian Journal of Agriculture and Biology to publish selected papers from the event. Other paper will be published in the ISBN Proceeding book.

The last but not least, enjoy the conference, start networking and sharing ideas, and let immerse yourself to the heritage cultural ambient of Jogja, sumonggo!

Yogyakarta, 1<sup>st</sup> December 2016

dr. Iman Permana, M.Kes, Ph.D.

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**Dean of Faculty of Medicine and Health Sciences,  
Universitas Muhammadiyah Yogyakarta**



Assalamu'alaikum Wr. Wb.

Science, especially in the areas of health and life growing more rapidly. We need to work together in the research of various disciplines to the advancement of science and to provide benefits to human life.

After successfully organized international scientific meeting last year, the Faculty of Medical and Health Sciences Universitas Muhammadiyah Yogyakarta, held the second scientific meeting ICMHS along with "2nd Life Sciences Conference". In this second scientific meeting, FKIK UMY collaborates with various researchers, among others from Pakistan, Malaysia, and the United States. Taking the theme "Towards a better quality of life through interdisciplinary research" we hope to establish cooperation with various parties to be able to contribute ideas to the civilization of human life.

Finally, we congratulate the scientific meeting in the city of Yogyakarta Indonesia. Enjoy the beautiful city of Yogyakarta with priceless historical relics. We hope that this meeting can run smoothly and provide benefits to the advancement of knowledge.

Wassalamu'alaikum Wr. Wb.

Yogyakarta, 1<sup>st</sup> December 2016

dr. Ardi Pramono, M.Kes, Sp.An.

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**Rector of Universitas Muhammadiyah Yogyakarta**



Assalaamu'alaikum Wr. Wb.

Ladies and Gentlemen,

Welcome to the 2<sup>nd</sup> International Conference on Medical and Health Science in conjunction with the 2<sup>nd</sup> Life Sciences Conference 2016

Welcome to Yogyakarta City of Tolerance

Our Faculty of Medicine and Health Sciences has been doing such international conference almost every year for the last ten years. This and other previous conferences are the things that supporting our vision as an excellence and Islamic university, a young and global university. We will always try to keep monitoring the development of science through sending more lecturers to do the sabbatical leave overseas, doing international research collaborations and also the international conference. Each department should do this strategy of internationalization so that each department has its own network. Faculty of medicine and health science is one of the most progressive units in implementing this strategy by inviting international experts on a regular basis. This program will certainly strengthen our vision.

International conference on medicine and health sciences is a smart choice to offer our lecturers access to the most recent development of the subjects. The participants will also gain the same knowledge and latest information on medicine and health sciences. As everyone knows that the development of science and technology are faster today compared to the previous period. Information technology, computer, and other development havefastened the transformation of medicine and health science into the different and more complex stage.

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Cellular technology, for instance, can be used for several functions including those that directly impacts our daily life. There is no long distance call anymore today because cellular phone can do everything we need to contact other people far from where we stand anytime anywhere. People will finally innovate cellular phone for the sake of personal health services. We will in the future using our simple cellular phone to detect our body temperature, blood pressure, even how much fat we have in our body and how much it is supposed to be. We may also be able to check the health of our body without leaving our house and order medicine without going into the drug store. Everything is almost possible as long as we think hard for the better of people in the future. Enjoy the conference and don't forget to visit our rich tourist destinations, mountains, beaches or caves (underground waterways).

Thank you

Wassalaamu'alaikum Wr. Wb.

Prof. Dr. Bambang Cipto, MA

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***Keynote Speech***

**by Head of Provincial Health Office Special Region of Yogyakarta  
in International Conference  
of Medical and Health Sciences and Life Sciences Conference**

**The Alana Hotel and Convention Center, Yogyakarta, December 9-10, 2016**

The honorable:

- Rector of Muhammadiyah University of Yogyakarta,
- The Dean of Medical and Health Sciences Muhammadiyah University of Yogyakarta,
- The chairman of organizing committee of the international conference of medical and health,
- Distinguished guests and colleagues.

*Assalamu'alaikum Warahmatullahi Wabarakatuh,*

First of all, we thank God for His blessings that today we may attend the International Conference of Medical Health Towards a Better Quality of Life Through Interdisciplinary Research in Yogyakarta.

My distinguished colleagues,

In Indonesia National Long Term Development Plan (2005-2024), the Indonesian Ministry of Health have determined a paradigm shift that have governed health services in health development plan. There has been a shift from Curative Health Services to Preventive and Promotive Health Services.

Recently, Indonesia suffers from a triple burden of diseases as health development challenges. The triple burden of diseases are: 1) the backlog of common infections, undernutrition, and maternal mortality; 2) the emerging challenges of non-communicable diseases (NCDs), such as cancer, diabetes, heart disease; and 3) mental illness, and the problems directly related to globalization, like pandemics and the health consequences of climate change.

Dear colleagues,

Here are some data that show several health problems in Indonesia:

1. Maternal mortality rate in 2015 is 4,809 cases, infant mortality rate in 2015 is 22,267 cases;
2. Regarding to children under the age of five, the national stunting rate is 37.2% which consists of 18% for very short dan 19.2% for short (Riskesdas 2013);

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3. HIV testing coverage is 14% dan antiretroviral (ARV) therapy coverage is 65.58% (Directorate General of Disease Control and Prevention Ministry of Health, 2015);
4. Tuberculosis (TB) notification rate in 2015 is 73.5% and tuberculosis treatment success rate is 72% (Directorate General of Disease Control and Prevention Ministry of Health, 2015).

Distinguished guests,

Indonesia Health Development Program in 2015-2019 strengths in improving human quality life through Health Indonesia Program with family approach. The Indonesian Ministry of Health issued The Minister of Health Regulation (Permenkes) No. 39 Year 2016 as a Guideline of Implementation of Health Indonesia Program with Family Approach. This program has 12 main indicators as markers of a family health status. Currently, many health programs have been implemented by Indonesian Ministry of Health, Provincial Health Offices, and District Health Offices. However, many health problems, some as mentioned above, still become health burdens. We may ask a question whether the programs that we conducted have answered the health problems we have in Indonesia.

It would be better if all health programs that we implement based on scientific health research, especially interdisciplinary research. The research should be related to detection, prevention, and treatment of diseases or problem solving for better health.

My dear colleagues,

Being a province with speciality, Special Region of Yogyakarta placed Traditional Medicine as one of the priority programs in Provincial Medium Term Development Plan (2017-2022). We still encounter many challenges in developing Traditional Medicine, especially in providing services which are based on scientific evidence.

Distinguished colleagues,

We look forward to results of interdisciplinary research which would support health problem solving, especially by developing traditional medicine in Yogyakarta. We believe that collaboration in interdisciplinary research would improve quality of human life.

Finally,

Thank you for your attention. We wish you a successful conference.

Wassalamu'alaikum Warahmatullahi Wabarakatuh,

On behalf of  
the Head of Provincial Health Office  
Special Region of Yogyakarta

**Drg. Pembajun Setyaningastutie, M.Kes**

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**SPEAKER OF  
INTERNATIONAL CONFERENCE**

**Zahid Iqbal**

Al-Nafees Medical College Isra University Islamabad Campus Islamabad, Pakistan  
*“One Health Program for Public Health Benefit”*

**Prof. Dr. Abdul Khaliq**

Professor, Department of Agronomy, University of Agriculture, Faisalabad  
*“Role of Agriculture in Poverty Alleviation of Rural Areas”*

**Fitri Arofati**

Universitas Muhammadiyah Yogyakarta, Indonesia  
*“Continuing Professional Development of Practicing Nurses in Indonesia”*

**Tri Wahyuliati**

Universitas Muhammadiyah Yogyakarta, Indonesia  
*“Diabetic Neuropathy - A Chance Towards A Better Treatment”*

**Mohammad Khalid Ashfaq**

University of Mississippi, USA  
*“Natural Products –Use or Misuse”*

**Muhammad Mukhtar**

American University of Ras Al Khaimah, United Arab Emirates  
*“Emerging Biotechnologies and Genomic Medicines in Human Health and Well-Being”*

**Muhammad Sasmito Djati**

Brawijaya University Malang, Indonesia  
*“Herbal Medicine a Holistic Approach: in case of food supplement formulation of Sauropusandrogynus and Elephantopuscaberto modulate immune and hormonal system in pregnant Salmonella typhi infected mice”*

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**REVIEWER**

1. Dr. Zahid Iqbal, Ph.D (Isra University, Islamabad, Pakistan)
2. Prof. Dr. Abdul Khaliq (University of Agriculture, Faisalabad)
3. Dr. Mohammad Khalid Ashfaq, DVM, DTVM, MS, Ph.D (University of Mississippi, USA)
4. Dr. Muhammad Mukhtar, Ph.D (American University of Ras Al Khaimah, United Arab Emirates)
5. Dr. Ir. Muhammad Sasmito Djati, MS. (Brawijaya University Malang, Indonesia)
6. Fitri Arofiati, S.Kep., Ns., MAN., Ph.D (Universitas Muhammadiyah Yogyakarta, Indonesia)
7. Dr. SN Nurul Makiyah, S.Si., M.Kes (Universitas Muhammadiyah Yogyakarta, Indonesia)
8. dr. Iman Permana, M.Kes, Ph.D (Universitas Muhammadiyah Yogyakarta, Indonesia)
9. Dr. dr. Ikhlas M. Jenie, M.Med, Sc (Universitas Muhammadiyah Yogyakarta, Indonesia)
10. Dr. dr. Arlina Dewi, M.Kes, AAK (Universitas Muhammadiyah Yogyakarta, Indonesia)
11. dr. Oryzati Hilman, M.Sc, CMFM (Universitas Muhammadiyah Yogyakarta, Indonesia)
12. Dr. Dra. Yoni Astuti, M.Kes, Ph.D (Universitas Muhammadiyah Yogyakarta, Indonesia)
13. Dr. drg. Tita Ratya Utari, Sp. Ort (Universitas Muhammadiyah Yogyakarta, Indonesia)
14. Dr. dr. Tri Wahyuliati, Sp.S, M.Kes (Universitas Muhammadiyah Yogyakarta, Indonesia)
15. Dr. Elsy Maria Rosa, M.Kep (Universitas Muhammadiyah Yogyakarta, Indonesia)
16. Dr. dr. Titiek Hidayati, M.Kes (Universitas Muhammadiyah Yogyakarta, Indonesia)
17. Dr. Shanti Wardaningsih, M.Kep., Ns., Sp.Kep.J., Ph.D. (Universitas Muhammadiyah Yogyakarta, Indonesia)
18. Dr. dr. Sri Sundari, M.Ke (Universitas Muhammadiyah Yogyakarta, Indonesia)
19. Dra. Lilis Suryani, M.Kes (Universitas Muhammadiyah Yogyakarta, Indonesia)
20. Drh. Tri Wulandari K, M.Kes (Universitas Muhammadiyah Yogyakarta, Indonesia)
21. Dr. dr. Wiwik Kusumawati, M.Kes (Universitas Muhammadiyah Yogyakarta, Indonesia)
22. Sabtanti Harimurti, S.Si., M.Sc., Ph.D., Apt. (Universitas Muhammadiyah Yogyakarta, Indonesia)



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**SPEAKER OF  
INTERNATIONAL CONFERENCE**

ICMHS-O-2-21

**Increasing Family Involvement to Reduce of Cigarette  
Consumption with Participatory Learning Action (PLA) Approach  
(Cases on Poverty Families in Urban and Rural Areas in  
Yogyakarta Provinces)**

**Tri Hastuti Nur Rochimah<sup>1\*</sup> and Salmah Orbayinah<sup>2</sup>**

Communication Department, University of Muhammadiyah Yogyakarta

<sup>2</sup>Pharmacy Department, University of Muhammadiyah Yogyakarta

\*Email : [trihastuti.aisiyah@gmail.com](mailto:trihastuti.aisiyah@gmail.com)

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**Abstract**

Indonesia is one of countries with high cigarette consumption and production (Risksdas,2010). Impact of cigarette consumption are burden of health, social, economic and environment. Every year death cases of smoker increasing. Many strategies already arrange for decreasing cigarette consumption. Participatory Learning Action (PLA) is a approach to socialize and communicate for handling social and health problems in communities. This research goals are to explore and mapping of smoking behavior and factors which influence cigarette consumption. Research method is phenomenology. Data collection techniques are in-depth interviews and FGD. Subjects research are active and passive smokers in poverty families in Yogyakarta provinces. Results showed that most of smokers consumed cigarette both in and outside their house. Their family as passive smokers interpret smoking behavior as normal activities; although all of them desire their husband stop for smoking and they understand that consume cigarettes broke of health. Active smokers define cigarettes as their second wife. Without smoking cigarettes, they feel their life hard and they lack spirit to work. Smoking didn't disturb their health or didn't relate their health. Factors active smokers to keep smoking cigarettes are smoking as spirit to earn money and convenience of buying cigarettes even debt. PLA involve the society in process of deciding program suitable for their needs, their social and cultural condition, and their environment.

*Keywords: cigarettes consumption, Participatory Learning Action, poverty families*

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## INTRODUCTION

World Health Organization launched MPOWER program. MPOWER program aimed to handle the effects of cigarette are monitor tobacco use and prevention policies, offer help to quit tobacco use, protect people from tobacco smoke, enforce bans on tobacco advertising, promotion and sponsorship and raise taxes on tobacco. Cigarette has averagely killed 6 million people every year, 5 million of which are smokers and ex-smokers while over 600 thousands are passive smokers. The death caused of cigarette consumption should smoking habit continues would estimatedly reached 8 million in 2030, and 80% of it take place in developing countries across the world.<sup>1</sup> Based on research of Basic Health (2010) Indonesia is among the developing countries with high consumption and production of cigarette, while the number of smokers in Indonesia is ranking third following China and Indi.<sup>2,3</sup> Tobacco Control Support Center (TCSC)- Consortium of Public Health Experts (IAKMI) (2007) stated that in 2005 the consumption of cigarette in Indonesia reached 214 billion sticks and increased up to 240 billion in 2008.<sup>4</sup>

As many as 91 million people in Indonesia were exposed to smoke at home and 40 million of which are children, almost half of the whole domestic passive smokers.<sup>5</sup> The fume is as dangerous as doing smoking, both for the passive smokers and the active ones Riskesdas, (2007). The smoke contains over 4000 poisonous substances, of which 69 are carcinogenic. It is estimated that in one inhalation there are 1014 free radicale molecules. In addition, the smoke could also trigger the formation of free radical in human body (TCSC-IAKMI, 2009). Cigarette produces 2 kinds of smoke current, namely the main current and the side curent. The smoke of side current contains higher nicotine level compared to that of the main one. In other word, the nicotine released to the environment is 4-6 times higher than the nicotine inhaled by the smokers. The difference is is due to the formation process, in addition to the fact that the burning tip keeps on producing fumes eventhough the cigarette is not inhaled by the smokers (Yuniwati & Mulyohadi, 2004). Active smokers are defined as those who smoke cigarette, while passive smokers are the people surrounding him or her. It could be inferred from the research that passive smokers are in fact prone to higher risk of developing illnesses caused by cigarette.

In Indonesia, smokers usually start their habits in teen age. WHO data showed that 24.10% teenaged boy has already started their smoking habit and this outnumbers world average of smoking in teenaged boys, that is 21,44%.<sup>1</sup> It is also reported that 54.1% of male above 15 years old smoke and 43.3 of the total smokers started their smoking habit in 14-19 age (Sussana *et al* , 2003). Smoking is a learned behaviour. The learning process starts in their childhood, while smoking process takes place in teenage. The learning process or socialization might take place through a vertical transmission,

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that is family environment and goes more specifically to permissiveness of parents to smoking habit of their teenagers. The other method, horizontal transmission, is through peer group. It is found that the biggest contributing factors in this case are relating to satisfaction gained after smoking. This emotional factors are found to be more dominant than logical considerations (Kompas.com, Senin 14 November 2011).

The economical and social cost of tobacco consumption keeps raising and most of this increasing cost is shared by poor people. The total loss per year reaches 200 million USD. In Indonesia, this cost covering the direct loss in domestic scope, and the indirect loss due to the loss of productivity caused by early death, disability and illnesses that reach 18,5 million USD or 16,7 billion rupiahs (Komalasari, 2000). This number is 5 times bigger than customs income; that is 32.6 trillion or 3.62 billion US dollars (Kosen, 2007).

Smoking does not only cause problem of health, social, economical and environment for smokers themselves, but also for other people. The rights of non-smokers, particularly babies and children, need to be protected. In addition, government should pay attention to poor families that has no power to oppose dependant effect, and cut of daily expenses in family to buy cigarette. Both government and family share burden of health fee, early death, and loss of income source and productivity caused by tobacco related diseases.

Motivation is found to be one of influencing factor for someone's decision to ban smoking. Desire to stop smoking might raise due to one's knowledge on the dangers of smoke accompanied with high commitment to stop (TCSC-IAKMI, Profil Tembakau Indonesia, 2007). However, why did strategy to raise the price of cigarette, ban selling of cigarette to children under 18, ban of advertisements seem ineffective to cut the increasing numbers of smokers? Embarking from background above, this reasearch is focused on how the smoking behaviour of active smokers and passive smokers toward smoking and smoking behaviour, factors affecting the active smokers to smoke continuously, values held by paasive smokers in dealing with healthy family and contribution to family's economical status and relation between passive and active smokers. To collect data, this research used PLA (Participatory Learning Action) based on family. It is expected that by using PLA method all family members would engage in effort of reducing dependence to cigarette.

PLA is a new approach in socialization to handle social and health problems in Indonesia, including in Yogyakarta province. Socialization process of certain social or health message could result in a social product. However, this method is not effective because it could not significantly affect change of behaviour in society as expected through message. This might be due to the inappropriate usage of method, that is top and down; hence message could not reach needs, the interests or characteristics

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of socio-cultural values and environment in specific way, while it should be helpful to process of change in order to create desired condition.

## RESEARCH QUESTION

Based on background, research question are how is family involvement to decrease of cigarette consumption; how did active and passive smokers define smoking and smoking behavior and what are the factors endorsing active smokers to persist smoking at poor families?

## MATERIALS AND METHODS

The method in this research is phenomenology. The theoretical foundation of qualitative research is based on phenomenology.<sup>8</sup> The focus of the research with phenomenology are (1) textural description on what the research subjects experience about a phenomenon (2) structural description on how the research subjects experience and define his or her experience. In this research, the subjects are individuals in family, including the active smoker (father), mother, children, relatives living together with the active smokers. By using phenomenology, data on what subjects experience as active smokers, and other family members as passive smokers would be dig out. Next, how each subjects experience and define the experience as either active or passive smokers would be studied.

Data collection is carried out through are in-depth interview. Informant are active smokers and passive smokers family. Others techniques for data collection are observation, focus group discussion (FGD) to explore more information on a certain topic both for active and passive smokers group and document data collection. This research was conducted in Bantul district and Yogyakarta city particularly in poverty families.

## RESULTS AND DISCUSSION

This research is focused on poor community since this group spends much money for smoking. Demographic Economics of Indonesian University (UI) mentioned that 60% of 34 million household in poverty allocates their money to buy cigarette. Number of smokers from poor community scores to 12 million or 30% out of 34 million people. Cigarette consumption is 3 times bigger than allocation for education (3.2%) and almost 4 times (2.7%) bigger than than health spending (<http://news.detik.com/read/2010/11/12/233406/1493398/10/wapres-dukung-bungkus-rokok-diberi-gambar-bahaya-merokok>).

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In this section, I will describe behavior of active smokers and passive smokers, meaning of smoking, factors influencing smokers to reduce or ban cigarette consumption, values held by active and passive smokers concerning on smoking .

**Smoking Behavior of Smokers.** Cigarette is second rank in list of family's spendings after rice. This number is far higher than the amount to buy meat, dairy, and health care (Kompas, 21 Juli 2012). These active smokers are mostly the head of family in the poor family. This means that number of smokers in poor families is bigger than rich families. Based on Susenas data was reported that prevalence of smokers among adult male in poor family is 63%, and it is indicated that 2/3 smokers are head of family. Data in national level becomes more contextually relevant in this research as it is found that group of poor community work in informal sector with non-fixed income. In this research most of informants both in Yogyakarta city and Bantul distric work in informal labour as like vegetable seller, shop assistant and builder assistant.

Smoking behavior is defined as activity of subjects that relates with their smoking behavior, measured through smoking intensity, smoking place, smoking time and smoking function in daily life.<sup>10</sup> Most of smokers consumed cigarette since teen age, before getting married. The illustration in table 1 and 2 presents here:

**Table 1. Duration of Cigarettee Consumption Urban Community**

NO	Name	Age	Duration of Cigarettee Consumption
1.	Puji Artanto	43 years old	11 years
2	Handoyo	58 years old	43 years
3	Azro Junaedi	28 years old	11 years
4	Dendy	27 years old	11 years
5	Mbendil	30 years old	16 years
6	Yanto	35 years old	14 years
7	Yudi	38 years old	24 years
		<i>Average</i>	18,5 years

Sources : FGD on active smokers, in-depth interview, July 2013

**Table 2. Duration of Cigarettee Consumption in Rural Community**

No	Name	Age	Years of Smoking
1.	Tumin	34 years old	17 years
2	Suardi	32 years old	11 years
3	Ngatijo Hadi Warsito	54 years old	33 years
4	Dedi	25 years old	9 years
5	Purwadi	38 years old	17 years
6	Sarpan	45 years old	20 years

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No	Name	Age	Years of Smoking
7	Sarmadi	56 years old	37 years
8	Tugiman	54 years old	25 years
9	Mbah Mardi	79 years old	50 years
		Average	20 years

Sources : FGD on active smoker, in-depth interview in Sedayu, August 2013

Table 1. and Table 2. showed that smokers started cigarette consumption in teen age even childhood, averagely before 20 , although some start it above 20 age. Hence, most informants start smoking at young age. This makes them addicted to cigarette, thus stop smoking is hard challenging for them. This is reflected in the informants' statements :

**Table 3. Reasoning of Smoker Didn't Stop Cigarette Consumption**

Name	Statement
Yanto, informal worker	I can not stop of smoking, it feels limp if I do not smoke and can not even work. So it should be smoke to work.
Dendy, painting tutor	So do I. I feel dizzy if I do not smoke, can not work and bitter tongue. Smoking for me to inspire, he...he... If I was asked to stop smoking, I will say that I can't.
Ngatijo, informal labour	I have smoke very long time, it very hard to stops. I've been addictive
Sarpan, informal worker	Well , for me smoking can relieve stress, and smoking is my second wife

Source : FGD in Yogyakarta and Bantul, 2013

The statements of informants, linked to psychological health perceived by informants, prove that smoking causes addiction; as a result, they could not perform normal activity without smoking. This means that smokers are addicted to nicotine contained in cigarette. The table above also shows that average length of smoking time are over 17.5 years for informants from Yogyakarta and 20 years in Bantul. The similar story is also shared who state that they start smoking in teenage, unmarried; as recorded from the following informants *...I smoked long, about 10 years, since I was in high school. Before I got married. After marriage I still smoke (Dendy, drawing teacher).* Ms. Mimin (Bumijo) also states that her husband has been smoking long before they get married.

*My husband smoked since I was not familiar with, and now continues to smoke, and more. But I have to do, since before marriage also have been smoking. (Mimin, food vendors)*

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For some people, smoking is a must. They prefer not to have meal rather than not smoking when they have only few money left, as stated by other informant from Yogyakarta

*What should I do? Smoking has become a necessity that can not be left out, has become part of life, part of their daily activities. For me it is better not to eat than non-smokers. If I do not smoke my mind less fresh and less energetically (Yanto, informal worker).*

Nicotine contained in cigarette has seductive effect that gives pleasant feeling. This is a reason why those who have been smoking for over 10 years find it very difficult to stop of smoking. Nicotine inhaled everyday in fact makes smokers addicted to it and they cannot concentrate if they do not smoke. Regarding with daily consumption, most of them are medium smokers that smoke 1 pack or 12 sticks; and heavy smokers that consume 1.5 – 2 packs per day. The category is based on the following criteria:

- 1). Light smoker, those who smoke less than 10 sticks per day.
- 2). Medium smokers, those who smoke 10-20 stick per day.
- 3). Heavy smokers, those who smoke more than 20 sticks per day. (Bustan, M.N., 2000)

Based on category, average amount of cigarette consumed is 10-18 sticks per day. The amount of consumption increases when they do not have much work to do. This fact is stated by most research informants in Bumijo Yogyakarta as a sample of poor urban community, as quoted below :

*I smoked 12 cigarettes a day, morning and night, does not smoke only during sleep, when we do not have the activity and not a job. If we do not have activity, we can smoked 2 packs a day. We smoked at eating out, in the toilet, hanging around the house, watching TV. (Mbendil, active smokers FGD)*

Similar to Mbendil, who consume more cigarette when unoccupied; meaning that they use their spare time to smoke; Yanto as quoted below:

*I smoked 12 cigarettes per day. If my free time I smoke more. Times where I smoke among other things, that while watching TV at home, after dinner, get together with my friends (Yanto, Active Smokers FGD).*

Other informant, Tumin (Sedayu) has slightly different habit in smoking as he smokes while working as a *tukang batu* (informal worker). He said that smoking while working helped him to concentrate. He said:

*I smoke at work, doing something carefully, eg ceramic plug, smoke more, smoking for concentration. when fitting unemployed do not smoke. Smoking in the morning after breakfast and dinner., If any of my friends come from smoking again (Tumin, Sedayu, Stone Masonry)*



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The statements of informants shows that smoking is done anytime, particularly after meal. Almost all informants stated that they have to smoke after meals and when they wake up in the morning:

If asked whenever I smoke include waking up, and drinking coffee, after breakfast, after eating lunch, going to bed. Anyway, every time. When finished eating it was mandatory, he, he. (Puji Artanto, 43 years)

Azro Junaedi (Pogos) 28 years, said that smoking after meal is a ritual and it is impossible to stop it:

*I was smoking after a meal. If the mouth taste sour, I must smoke, then again with friends, just smoked a little and hold discarded. The time is not necessarily, certainly after eating, after brushing teeth, and after bathing (Azro Junaed, 28 years)*

Another habit done by active smokers is that they smoke when meeting friends. Smoking is a means of “communication” as Mbendhil said:

*With the smoke we could get a friend, for example, ask for a match, ask for cigarettes or otherwise. With smoking, we can communicate even with strangers. (Mbendil, FGD Active Smokers in Bumijo)*

Some informants said that smoking is a good and flexible media to communicate with friends and coworkers in the community. It sometimes become an “entrance gate” to access social circle or to make friends.

Related with location of cigarette consumption, most of them smoke around or in their house although they have children at home. Mbendil has 2 children aged 1 and 7.5 years old. He smokes at home, inside and outside the house. And so did Pak Yudi, who has 3 children aged 12, 6 and 3 years old. He smokes in their house but not in bed room, while some informants smoke at all places including bedroom. When the wife, who was carrying their first child, asked him to smoke outside, Dendy replied “if you don’t want to get the smoke, then get some air outside, don’t say in the room”. The wife then opened the window, or turned on fan and put on mask to avoid smoke. He has been smoking since he was young, unmarried. This research also found some active smokers smoke outside the house because they do not want children being exposed to smoke, eventhough some others smoke inside or outside house, and move after his wives asked them. And if their wives did not ask them, they will stay in.

The profile of smoking location shows that some smokers deliberately did their smoking activities outside their house because they don’t want children to inhale cigarette although some others ignore risk that children and wife will suffer as passive

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smokers. In addition, some informants lacked of knowledge that smoking could endanger health of active smokers. This appears when a set of pictures of illnesses suffered by passive smokers, they said that they did not know about it and asked researcher to disseminate info on danger of smoking to smokers.

The fact that almost all informants start smoking at young age, 15-17 years old, shows that addiction experienced by active smokers is also caused by accumulation of multiple years of smoking and almost all have been smoker for over 10 years. Most of them stated that it began with peer gathering, and they were offered to smoke and they took the offer, and ended up in being smokers, as like belowe :

I started smoking because often stayed up late (fitting school), it feels good,. Finally buy a pack, rather than purchasing retail. One day I bought two packs of contents 12. (Hayono, a former bank employee, in-depth interviews)

However, another informant said that his smoking habit began when he got a lot of problems with his job and he though that smoking is one of the way out. Then, he decided to smoke and was unable to stop until now:

I work in the field, many problems facing labor-supervisors-office, now there I smoke, just to thinking ... I could take the initiative if you smoke I smoke .... If no trouble, stuck. (Praise Artanto, in-depth interviews)

Meanwhile, Puji Artanto stated that he started smoking when he was in Junior High School and smoking began as an experimental experience, yet he finally made smoking as a habit:

I smoked since junior high. At first I saw my friends more likely to smoke, I tried, for a long time really tasty and continuity to date. There is a desire to stop smoking if his wife gave birth , but I do not know later . (Praise Artanto, vegetable sellers)

Based on the experience and confession of the informants above, it can be seen that smokers started their habit in a very young age, and it began with experimental experience as they were offered by their friends. This shows that environment factor is quite dominant in influencing way of smokers start smoking.

**How Active Smokers and Passive Smokers Define Smoking Behavior.** How individuals and community define of smokers' behavior is a critical factor in constructing individuals and community's view toward smoking behavior of other people, family or husband. How an individual perceive smoking behavior will highly depend on internal and external factors (environment), such as values of culture toward a certain behavior,

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individual experience and knowledge, individual needs, and individual motivation relating to the behavior. For example, those who have high motivation to live healthy would define smoking behaviour in different way from individuals with low motivation.

Definition of smoking behavior among active and passive smokers quite varies, and it depend on how the factor influence them and, in turn, influence the way they see other people regarding with their smoking behavior and their motivation to smoking behavior. Passive smokers perceive that smoking behavior of their husbands is a proper thing to do by adult male. Almost all passive smokers, both the double burden (breadwinner and house wives) and house wives taking care of the family, gave similar answers when asked whether their husbands' smoking proper thing to do or not (FGD, active and passive smokers, 2013) All passive smokers, stated that smoking is a proper thing to do by a man, as Supariyah said that man who are smoking are normal and if man did not smoking, he does not look masculine:

I think a man that smoking is normal, if not smoking seem effeminate, so it's only natural. (Supariyah, housewives, Passive Smokers Bumijo FGD)

Similar statement is expressed by Ibu Mimin, a food seller with a smoker husband. She said that non smoking adult male lacked masculinity:

I think the same as bu Supariyah, if men do not smoke look effeminate, but still I do not like smoking around me. (Mimin, food vendors, Passive Smokers Bumijo FGD).

Based on Ms Mimin's statement, there is an ambiguous definition toward smoking behavior conducted by other people. On one side, smoking behavior is deemed proper and normally done by adult male to promote their masculinity, but on the other side, they did not want to be exposed to smoke inhaled by active smokers. This ambiguous opinion is also shown by Ibu Siti that smoking is a proper activity to do by adult male, yet for health reason, she suggested to stop smoking. Meanwhile, Ibu Anti argued that smoking is proper for adult male and her husband does not need to stop smoking. She just wanted him to reduce the amount of cigarette consumed, as she said:

In my opinion, naturally a man smoking. For my husband is okay continue smoking, which is important reduce the number of cigarettes smoked each day, do one pack a day, at least half of it, I also remember his health (Anti, housewives, Passive Smokers Bumijo FGD)

Observation on how wife woman as define active smokers, particularly their husbands, found almost all informants stated that smoking is a proper activity done by adult male. This is based on their experience in daily life, in which most of adult males

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in their family, community and society in poor group, are smokers with various intensity. Their daily life showed that smoking is a part of life of adult males.

Passive smokers informants are highly exposed to media, TV advertisements in particular, leaving them a concept of genuine male, that is smoking man. This knowledge interpretation becomes the foundation of defining the smoking behavior among adult males. The knowledge left by advertisement surpasses understanding to concept proposed through socialization program and campaigns promoting danger of smoking. The informants lacked of comprehensive and detailed information on danger of smoking for both active and passive smokers.

Active smokers, on the other hand, define smoking in various concept, as stated by Dendy – a drawing teacher, and Mbendhil, a informal worker, who said that that smoking is constituted as the second wife. Life is hard without smoking and once they stop, they lost motivation to work:

Cigarette that has become part of my life, if not bitter smoke, smoking is the proverbial second wife, if there is no cigarette can not, have any cigarettes per day (Dendy, painting tutor, active smokers FGD)

Referring to Dendy and Mbendhil's statement that smoking is second wife, smoking such an important role in their life and hard to separate them from their life. Another informant stated that smoking could bring him inner peace. Smoking is an important activity in his life and even, banning smoking would impact to his psychological health status, as Handoyo – an ex bank officer – said.

I'm confused if I do not see the cigarette, if I look at cigarette, I feels peaceful. Even just put smoked yet, my heart is at peace. Smoking has made peace, my mind and my heart. If I have found cigarette, my heart peace, as no loans. I have no money, but I had a cigarette, it's like having a sack of money. (Handoyo, in-depth interviews, 2013)

The strong bounding to smoking and how informants place smoking in their life become the driving factors to do anything to get cigarette, to make cigarette available for them, everyday. Some informants confirmed that they prefer to skip meals rather than skip smoking. When an informant does not have money to buy cigarette, he borrowed it from others to buy some because he does not feel comfortable without cigarette.

In addition of definitions, another informant argued that smoking does not correlate with nor does it bring any detrimental effect to his health. He stated that he is healthy and instead, he will feel unwell and not productive if not smoking. Pak Puji, long-time smoker, smoking is a common thing for males. When asked whether he would permit his son to smoke, he confidently replied that he would providing the son

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could earn money (puji Artanto, Indepth Interview, July 2012). An individual's definition toward smoking behavior in relation with their beliefs is reflected through their attitude and behavior toward smoking behavior. These active smokers have not experienced, or, seen how heavy smokers fall ill, suffer serious diseases, develop cancer or sudden death because of smoking, is stated as following:

I do not believe, in case of a heavy smoker for example, someone smokes continuously when their bodies are healthy but when they feel sick, they also feel that the cigarettes are bad. By smoking people can measure their own health as when they are fit, smoking feels nice but when their bodies are sick, smoking also feels bad. I believe in the warnings on cigarette packages, but not the cause. I think the eighty thousand rupiahs cigarette is more tasty (Yanto, informal worker, FGD, 2013)

Beside experience, knowledge also becomes determinant factor in this case. Active smokers has never received any comprehensive information or socialization program concerning on danger of smoking. The only information they get comes from the warning label at on the pack of cigarette.

### **Factors influencing active smokers in poor families to sustain smoking.**

Duration of smoking period is one of factors that makes it hard for smokers to stop their smoking habit. Sue Armstrong in Sihombing (2007), states that there are several factors that cause adult people smoke and make it a habit: 1. The pleasant feeling they get during smoking activity; they could not resist smoking even though it would endanger their health, 2. The presence of addictive substances due to nicotine in cigarette, 3. Myth and this is totally accepted by active smokers so that they feel relaxed when they do smoke, 4. Smoking is a ritual for active smokers, and it gives them comfort while enjoying every single process starting from lighting, inhaling and breathing out the smoke, 5. Smoking functions as the media to build self confidence when interacting with other people in the society.

Sue's research and analysis is supported by Conrad and Miller in Sitepoe (2000), on the driving factors of active smoking: 1. Psychological drive, that smoking is similar to sexual stimulation, as a ritual, expression of masculinity (self pride), eliminate anxiety, and shows adulthood, 2. Physiological drive, the presence of nicotine that cause addiction so that the smokers always want to desire to smoke.

Data showed that urban and rural areas reveals fact that economical condition does not hamper smokers to continue smoking. The affordable price of cigarette makes active smokers to purchase at least 1 pack per day. In list of family's daily spending,

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cigarette purchase is already allocated in budgeting scheme as this informant said, when asked whether he would buy rice or cigarette when money is tight:

When to buy cigarettes already provided budget. So there respective budgets. For the needs of family , already provided budget, to buy cigarettes is too,so it will not disturb other family needs. (Yanto, working in the workshop, active smokers FGD)

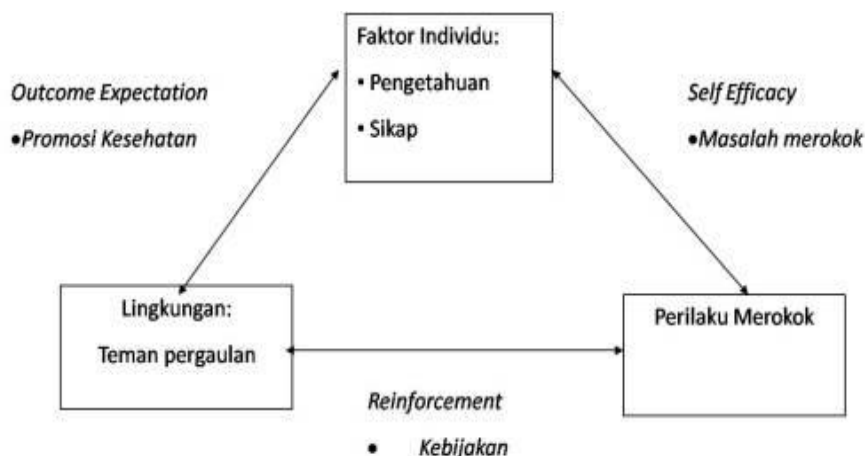
The statement above shows that cigarette is a basic need for active smokers, and a ritual. Economical problem would never hamper active smokers to smoke as it has become part of their life, particularly on those who have been smoking over 10 years and addicted to nicotine. Active smokers find that purchasing cigarette and daily spendings for basic need in life do not correlate each other. Even, informants clearly stated that smoking becomes a stimulating activity to work harder, as quoted below:

For me smoking is actually encouraging me to work. With the smoke I can be productive work, and the results of the work is the money for the needs of my family life every day. (Yudi, construction workers, FGD Smoker Active, 2013)

Besides psychological and physiological factors, the easy access to get cigarette is another factor that makes poor families sustain their smoking habit despite financial difficulties. In the area of Bumijo, for example, cigarette of any brands could be easily found in any stalls. Shops in the neighborhood mostly provides cigarette and buyers do not have to buy the whole pack, but they could also buy cigarette per stick. Even, if they do not have any money, they can take cigarette first and buy later. These all make poor groups sustain their smoking habit.

In addition, environment also becomes a driving factor for smokers to continue smoking. A teenager usually start smoking when interacting with his friends, and become one of means to interact and communicate in his community. The same pattern is seen among adult, that smoking becomes a means of interaction. This condition supports argument that environment influence and even strengthen smoking behavior among teenagers and adult male groups in their community. Some informants said that to state their attachment to group, they smoke when they interact in the group.

There is an adagium stating that a non smoker living and working together with a smoker, he or she will be influenced and potentially adopt the habit. The process is done in expectation that they will be welcomed in their social environment. This condition shows that environment does influence and support smoking habit. The following chart shows relation between various factors and smoking behavior and it is seen that environment and individual factors are correlated, so that it drives people to smoke or continue their smoking habit.



**Figure 7. Relation between Various Factors and Smoking Behavior**

The chart shows that reinforcement becomes an important factor to persuade people to smoke or not; and or retain smoking behavior or not. Reinforcement also helps to regulate how a smoker should behave – knowing that they should be more considerate and not smoke at any place. Hence, the government should implement a regulation to limit and regulate the locations where smoking is allowed. This is also stated by informants because so far they did not get any information about smoking regulation. They said that they would obey the regulation, as stated by informant below:

Actually if there is a rule made by the community, I will obey. So far, for example in hospitals, there is no prohibition to smoke, I also obedient, will not the existing smoking ban in place. I think the government should make the rules so that people do not smoke arbitrary, because it is sometimes difficult if start from myself. (Hayono, in-depth interview, 2013)

According to informant, to reduce the consumption of cigarette the government first needs to regulate cigarette factory and develop regulation that need to be informed to public, as quoted below:

Active smokers recommendation to reduce or quit smoking is that government should not establish cigarette factory or create firm regulation in public places, where people are allowed and are not allowed to smoke. (FGD Smokers Active in Yogyakarta, 2013).

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Based on regulation, community could make an agreement on regulation, reward and punishment in case there is no official regulation about smoking. Thus, reinforcement does not only come from government but it could also be developed by community. It should be highlighted that reinforcement should be consistently implemented. Community regulation might develop regulation such as requiring smokers to smoke at open place like near the railway or other open space and trashes should be placed in trash bin. Children should be kept away from smoking. The regulation might come with punishment system, such as fine for violators, while amount of fine is based on the community's agreement.

**Values held by active and passive smokers on healthy family and economical contribution to the poor family.** In general, in line with findings of previous researches smoking is considered as a proper activity for adult male. This fact is also accepted by passive smoker (second hand smokers) that smoking confirms their masculinity; and for the smokers themselves, smoking is a daily ritual and an inseparable part of life. Smoking also become a means of communication with other people in a community and become media to state their attachment to the group when they meet.

Passive smokers aware that smoking could disturb the health of their husband, who are active smokers and they felt breath difficulties when sitting near smokers. Ibu Anti, one of FGD participants, stated that many people in Bumijo Yogyakarta suffer from TBC because of smoking. They worried their husbands, who are active smokers, as stated below:

Well I do think about my husband's health when he gets older. Probably he is still healthy now, but if he keeps smoking continuously, he probably gets sick when he's old. If so, how, who is gonna bear about that? He's gonna be the one who is feels it. But he never listens what I said. (Sri Budiayah)

Passive smokers stated that if the husbands stop or reduce smoking then the money could be allocated for useful things. They stated that smoking habit 'disturb' the family's budgeting. They said that beside disturbing health, smoking also gives problem to the family's financial. Family's spending will increase, as stated by Ibu Anti, the wife of Mbendil, and if the husband continuously smoke the family spend more money as a consequence.

Based on economic calculation, one poor family could spend 22 thousand rupiahs to buy cigarette, while other family might waste 12.000 or at least 8000 rupiahs. In one year, the money spend for cigarette is displayed in this chart:



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**Table 4. Estimation of Spendings for Cigarette**

No	Amount of Cigarette	Price rate	Total per year
1	2 packs per days	Rp 22.000	Rp 8.030.000
2	1 packs per day mild cigarette	Rp 11.000	Rp 4.015.000
3	1 packs per day kretek cigarette	Rp 8.000	Rp 2.920.000

Sources : FGD, July 2013

Husbands generally objected claim that their smoking habit has not disturbed family's financial. In their opinion, purchasing cigarette has been allocated in the budget and it should not disturb the family's financial (FGD, Active Smokers, July 2013). The husbands even stated that by smoking, they would easily interact with other people in the community. This means that the need of smoking to establish communication within the community ranks higher than family needs; and if smoking is done at home, this activity is considered more important than health care need in a family. When discussing religious values concerning with smoking, informants stated that smoking is allowed by their religion. They argued that many religious leaders also smokes.

**Relation Between Active and Passive Smokers (Dominant or Equal).**

The different job assignment between male's and female's job in household in fact describes relation between man and woman, equal or unequal. Eny Susanti in her book, *Gender Unequality and Women's Being Powerless in Poor Urban Community* (2010), describes how structure of poor society influence way of thinking and social action of man and woman, and at the end, result in gender enequality that sustains in society. Woman in family plays multiple roles, as breadwinner and as household; however they do not receive any reward as much as teh effort they have done. The relation between man and woman in poor family is relatively unequal, like what happen in many families in Indonesia. Women, as backbone of family always have double burden in daily life. Often her husband ignores his wife especially if they financially depends on husband. Women are socially constructed as submissive and obedient to man even if the husband makes mistakes.

Almost all informants admitted that they have persuaded their husbands to reduce smoking. Although they feel disturbed physically and economically, wives did not insist their husbands to stop smoking; they only asked to their husbands reduce smoking for health reasons. Yet, almost all requests are ignored by husbands, as stated by the woman :

Once, I told my husband even often I told him to reduce smoking, but he just said 'Just let me, I don't even reduce your shopping budget'. (Tiur, housewife)

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Ms Anti said that her husband smokes 2 packs per day. She tried to persuade him to reduce smoking, but she was ignored. This happened frequently and she was tired of it. It could be seen from this fact that concerning on smoking behavior. Wife's warning is ignored. This means that the relation between husband and wife is unequal. Ms Tiur position even worse because she did not work in public sector to get money, whereas she has a lot of things to do to take care the house. Ms Anti, who runs a shop at home and make money of it, did not have the power to persuade the husband to ban smoking. As well as Ms Mimin, who work both domestic and public sector, did not have any power nor did she have bargaining power concerning on husband's smoking habit. Ms Mimin accept of gender construction that woman should be obedient, and she thought that money to buy cigarette comes from her husband who work as corn seller. She has no idea how to persuade her husband to reduce cigarette consumption. From informants' responses that dominant role of husband is clearly seen, and their wife do not have any bargaining power to complain the husband.

It is seen that their wives in fact did not strictly asked their husband to stop smoking as they knew that it is very difficult for their husband to do so. They addicted to cigarette, and they felt that their husband who work to get money to buy cigarette. Hence, strategies adopted by wives are: 1) reduce daily consumption of cigarette, 2) keep children and the wives themselves away from smoke.

The two approaches, however, were not successfully executed due to unequal relation between husband and wife in that husband tend to ignore the wife's advices. Roughly calculated, assuming that one pack of cigarette costs 11 thousands, every family spend almost 4 million rupiahs to buy cigarete. It is a big number, yet active and passive smokers give defferent response to that calculation. Passive smokers stated that their husbands should decrease consumption of cigarette so that money could be saved for family needs; however, husbands on one side thought that all the expenditures have been budgeted according to posts. Another important finding is that husbands did not think about the saving for their children's education in the future.

Dealing with how to overcome problem of smoking in poor family, active smokers said that intention to stop smoking should be a self-driven motivation. One of recommendation that government should make a regulation for selling of cigarette and banning smoking. There is an idea that children might do some help to remind their father, but husband would only move to find other place to smoke. It means that smoking people will stay away from their children but not reducing amount of cigarette consumed.

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## CONCLUSION

Based on the number of cigarette smoked, most of the smokers were in the category of moderate smokers with the number of cigarette between 10-18 cigarettes per day, and they smoked the cigarettes in certain times such as when they were not at work, after meals, and in rendezvous with friends. They smoked the cigarette inside and outside the house. Passive smokers define smoking behavior done by their husbands as normal conducts for a man, although in fact, some of them add, that for the sake of health, it is better to not smoke. Meanwhile, active smokers define cigarettes as their second wife. Without smoking cigarettes, they feel their life hard and they lack spirit to work. In their opinion, smoking cigarettes does not disturb their health or does not relate to health.

Factors causing smokers to keep smoking cigarettes, among others, are the idea that smoking gives them the spirit to earn money, the convenience of buying cigarettes in retail and debt, and the environment where smoking cigarettes becomes a social means. Concerning health, passive smokers state that smoking cigarettes can disturb their actively smoking husband's health. Meanwhile, concerning the economy, passive smokers also state that if their husbands do not smoke or smoke fewer cigarettes, their money can be saved for fulfilling other needs that are more useful for the family. These passive smokers state that if their husbands smoke cigarettes, they will disrupt family finance. They believe that smoking cigarettes disturb both health and family finance.

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