

CIGARETTE SMOKING IN FILIPINO SEXUAL-MINORITY MEN: FURTHER EVIDENCE OF DISPARITIES IN THE PHILIPPINES

Eric Julian Manalastas

University of the Philippines Diliman & George Washington University

Nicolo L. Cabrera

John H. Stroger, Jr. Hospital of Cook County



Empirical studies in lesbian, gay, bisexual, and transgender (LGBT) health have documented significant disparities in risk behaviors and health outcomes across sexual orientation and gender identity. One such disparity lies in tobacco use. Surveys based on representative samples (Jabson, Farmer, & Bowen, 2014; Manalastas, 2012; Tang et al., 2004) as well as meta-analyses (Lee, Griffin & Melvin, 2009; Marshal et al., 2008) indicate that gender and sexual minorities generally have disproportionately higher rates of smoking than heterosexuals. This paper builds on previous research in the Philippines that presented initial evidence for cigarette smoking disparities among sexual-minority youth (Manalastas, 2012). We examine this issue again using a different nationally representative sample of Filipino men. Analysis of archival data from the National Demographic and Health Survey showed evidence for disparities in tobacco use based on sexual-minority status. Current smoking was disproportionately higher among sexual-minority men (67%) than heterosexual men (54%). Filipino sexual-minority men also began smoking significantly earlier—about a year—than heterosexual men.

No differences in smoking volume was found—both sexual-minority and heterosexual Filipino male smokers smoked an average of 10-11 sticks a day. The findings point to one important disparity in Filipino LGBT health risks: the need to address the disproportionately higher uptake of tobacco use, one of the leading preventable causes of morbidity and mortality in the world, among sexual-minority Filipino men.

KEYWORDS: cigarette smoking, tobacco use, health disparities, sexual minority men, LGBT health

RESEARCH ON LESBIAN, gay, bisexual, and transgender (LGBT) health has documented significant disparities in health risk behaviors and outcomes across sexual orientation and gender identity (Bogart, Revenson, Whitfield, & France, 2014; IOM, 2011). One particular disparity lies in what is considered by the World Health Organization as one of the leading preventable causes of morbidity and mortality: cigarette smoking. Robust evidence from the past two decades point to disproportionately higher rates of cigarette smoking among sexual minority men and women in the US and other countries, compared to the heterosexual population (Lee, Griffin, & Melvin, 2009; Lee, Blosnich, & Melvin, 2012).

In this paper we build on prior work in the Philippines that presented first evidence for cigarette smoking disparities among sexual minority young women ages 15 to 24, but not among young men (Manalastas, 2012). We begin with a short review of the current literature in global LGBT health on cigarette smoking, followed by a focus on the tobacco use situation in the Philippines. We present a secondary analysis of archival data for an expanded age range of Filipino men, including young and older adults, to examine disparities in cigarette smoking for sexual minority Filipino men. Implications for global LGBT health and LGBT health in the Philippines in particular are discussed.

Cigarette Smoking in Sexual Minorities

Lesbians, gay men, and bisexual people smoke more than the heterosexual population. Research from 1987 to the 1990s initially documented this disparity, though these earlier studies were limited by a reliance on small convenience samples (Ryan, Wortley,

Easton, Pederson, & Greenwood, 2001). As interest in this aspect of LGBT health grew, more evidence based on larger, representative samples accumulated indicating that higher rates of cigarette smoking could be found among sexual minorities (Jabson et al., 2014). Researchers have documented these findings among sexual minority adolescents (e.g., Corliss et al., 2014; Rosario et al., 2014), emerging adults (e.g., Blosnich & Horn, 2011), and older adults (e.g., Fredriksen-Goldsen, Kim, Barkan, Muraco, & Hoy-Ellis, 2013) as well as across a wide array of research designs and analytic strategies including longitudinal designs (e.g., Corliss et al., 2013; Newcomb, Heinz, Birkett, & Mustanski, 2013), diary methods (Pachankis, Hatzenbuehler, & Starks, 2014), multilevel ecological modelling (Hatzenbuehler, Jun, Corliss, & Austin, 2013), and path analysis (Balsam, Beadnell, & Riggs, 2012). The general pattern also appears to be robust across different measures of cigarette smoking (Lee et al., 2012; Marshal et al., 2008). And although data on gender-minority populations are lacking (IOM, 2011), there is some evidence of similar disparities among transgender and genderqueer individuals (Clarke & Coughlin, 2012).

The overall theme in this rapidly growing body of literature is that lesbian, gay, bisexual, and likely also transgender individuals are at higher risk for the harmful effects of cigarette smoking. Indeed some studies now show evidence that sexual minority populations may have higher odds of ARIs (acute respiratory illnesses) such as strep throat infection, sinus infection, asthma, and bronchitis (Blosnich, Jarrett, & Horn, 2010) as well as higher CVD (cardiovascular disease) risk (Hatzenbuehler, McLaughlin, & Slopen, 2013), in part due to higher rates of tobacco use.

Intersectionality: Who—and Where—Are These “LGBT” Smokers?

Despite the strong evidence for risk behavior disparities related to cigarette smoking along sexual minority status, one limitation of the current body of literature is its geographic bounds: nearly all the published studies, at least those in peer-reviewed publications, come from LGB and heterosexual samples in the United States. According to the analytic perspective of intersectionality (Cole, 2009), a key question to ask when posing questions about the experiences, including health risk experiences, of social groups such as lesbian, gay, and bisexual people is “Who is included

within this category?” This analytic test, the first of three proposed by Cole (2009) as a means to sensitize researchers interested in addressing intersectional questions, draws attention to diversity within categories, including those subpopulations who may be systematically underrepresented or glossed over in the literature. This raises the question of how well sexual minority youth and adults who live in the USA with its particular sociocultural, historical, and legal contexts represent the health situation for sexual minority youth and adults overall. We argue that this issue is in large part an empirical matter that can be addressed by examining LGBT and other sexual and gender minority populations across different cultures and nation-states, beyond the borders of the USA.

The project of global LGBT health knowledge, especially on cigarette smoking disparities, has begun, led by researchers interested in unpacking the category of “LGB people” beyond “LGB people in the USA.” Researchers internationally have now collected evidence for higher cigarette smoking based on sexual orientation in Canada (Clarke & Coughlin, 2012), Sweden (Lindström, Axelsson, Modén, & Rosvall, 2014), Mexico (Ortiz-Hernández, Gómez Tello, & Valdés, 2009), China (Berg et al., 2011; Yu et al., 2013), and in the Philippines (Manalastas, 2012). This paper contributes to this international body of literature by extending previous findings from the Philippines that show cigarette smoking disparities for sexual minority Filipinos versus the general population.

Cigarette Smoking in the Philippine Context

According to the World Health Organization (2011), tobacco use in its most common form of cigarette smoking is “the gender-linked behavior with the greatest public health significance” (p. 1). In developing countries in Southeast Asia, tobacco use is a highly gendered health risk behavior—men’s rates for smoking are triple or even quadruple the rates for women (Morrow & Barraclough, 2003).

In the Philippines, where the tobacco-farming industry plays a considerable cultural and economic role, cigarette smoking is much higher among men than women. The best available evidence comes from the 2009 Philippines Global Adult Tobacco Survey (GATS), a nationally representative survey of Filipinos ages 15

years and older administered by the government's Department of Health and National Statistics Office, with support from the WHO and the US Centers for Disease Control and Prevention. Data from a multi-stage geographically clustered sample of 9,705 Filipinos indicate large gender disparities: men (48%) smoke more than women (9%). More Filipino men smoked daily (38%) than women (7%). The average age of initiation into cigarette smoking was 17.4 years for men, earlier than for women (19.1 years). And among current smokers, men reported higher average smoking volume (11.3 sticks per day) than women (7.0 sticks per day). Across multiple measures of cigarette smoking, men in the Philippines smoke more.

Unfortunately data on sexual orientation were not collected in the GATS, so analysis of LGB disparities was not possible. Applying the first heuristic intersectional question of who are included in this category of "Filipino men," an analysis was conducted using data from the 2003 Young Adult Fertility and Sexuality Survey (YAFS3), a nationally representative survey of Filipino young adults ages 15 to 24 (Manalastas, 2012). Because YAFS3 included items on sexual behavior and romantic relationships, disaggregation on sexual minority status was possible. Findings from this study indicated that young sexual minority women in the Philippines were more likely to be smokers (24%) than their heterosexual counterparts (17%) and to smoke at higher volumes (5.2 versus 3.9 sticks per day). Smoking prevalence was much higher among Filipino gay, bisexual, and other young men who had sex with men (71%), though not significantly different from heterosexual men (69%). No differences in smoking volume was found (sexual minority men and their heterosexual counterparts smoked averages of 7.8 and 7.6 sticks per day, respectively). On the other hand, Filipino sexual minority men reported having their first cigarette at a younger age (mean of 15.8 years), significantly earlier than their heterosexual male counterparts (mean of 16.2 years). Overall, this initial investigation into cigarette smoking among LGB youth in the Philippines indicated similar disparities as found in the US literature and elsewhere, especially for sexual minority young women.

Problem

The present study aimed to replicate and extend the previous

findings on sexual minority cigarette smoking in the Philippines using a different, but likewise nationally representative, dataset with an expanded age sample of Filipino men. In particular, we sought to determine whether gay, bisexual, and other men who have sex with men in the Philippines have disproportionately higher rates of cigarette smoking than their heterosexual counterparts.

METHOD

Dataset

The National Demographic and Health Survey (NDHS) is an interview-based structured survey conducted by the Philippine National Statistics Office (NSO). The NDHS is a survey whose original intent is to collect national data for calculating demographic rates, analyze factors and trends in fertility, measure levels of contraceptive knowledge and practice, collect data on knowledge of sexually transmitted infections including HIV/AIDS, and provide information on overall Filipino physical and sexual health. For this paper, we used the publicly accessible archived men's data from the 2003 NDHS; this is the first and last time data collected from Filipino men (subsequent NDHS surveys in 2008 and in 2012 were focused exclusively on women respondents, with no data on sexual orientation collected). The men's questionnaire was administered to 5,009 Filipino men ages 15 to 54 years old eligible for interview, with 4,776 successfully surveyed (response rate of 95%).

Variables

Sexual orientation was assessed in the NDHS dataset using a one-item sexual behavior measure that asked respondents if they had ever had sex with another man (yes or no). Filipino men who answered yes to this question were classified as sexual minority men (5.16% of the total analytic sample); this sexual behavior measure is the second most common operationalization of sexual minority status in the health literature after self-identification (Blosnich, Lee, & Horn, 2013; Young & Meyer, 2005) and is the only available one in the NDHS dataset. Three items assessed

tobacco use among respondents: (1) self-identification as a current cigarette smoker, (2) number of sticks smoked in the past 24 hours, and (3) age of initiation into cigarette smoking.

RESULTS

About half of Filipino men (54.6%) reported being cigarette smokers. Contrary to what was previously found in a young adult sample from the Philippines but consistent with the global LGBT health literature, there was a significant disparity in smoking prevalence along sexual orientation. Disproportionately more sexual minority men reported smoking (66.7%) than their heterosexual counterparts (53.9%), $\chi^2(1) = 15.3, p < .001$.

In terms of early initiation into smoking, Filipino sexual minority men began smoking cigarettes about one year earlier than heterosexual men, a finding consistent with previous results in the young adult study. Age of initiation into smoking for gay, bisexual, and other men who have sex with men was 16.32 years, $SD = 3.69$ (95% CI = 15.82 - 17.01) while heterosexual counterparts first tried cigarettes at mean age of 17.32 years, $SD = 4.12$ (95% CI = 17.22 - 17.54), $t(3928) = 3.36, p < .001$.

No differences in smoking volume was found, as in the previous study. Both sexual-minority and heterosexual Filipino male smokers smoked an average of 10 to 11 sticks, or about half a pack, in the past 24 hours preceding data collection.

DISCUSSION

Analysis of nationally representative Philippine archival data showed evidence for disparities in men's cigarette smoking along sexual-minority status. Disproportionately more Filipino sexual minority men were currently smoking than heterosexual men. They also began smoking significantly earlier—about a year into their teenage years—than heterosexual counterparts. No differences in smoking volume was found; both sexual minority and heterosexual Filipino male smokers smoked about half a pack of cigarettes in the past day before the survey.

These results corroborate and extend previous findings in both the global LGBT health literature and in a previous study

of young adults in the Philippines—that significant disparities exist for sexual minorities in cigarette smoking, one of the leading preventable causes of morbidity and mortality in the world (Bogart et al., 2014; IOM, 2011; Manalastas, 2012). More specifically, the findings in this analysis contribute to the body of empirical evidence that gay and bisexual men and other men who have sex with men are at higher risk for cigarette smoking—in the United States, Canada, Sweden, Mexico, China, and the Philippines.

The next step after establishing the prevalence of LGBT health problems like tobacco use and the existence of LGBT health disparities is to investigate the causal pathways that lead to such disparities (Blosnich et al., 2013). A number of factors have been proposed by US researchers for LGBT disparities in cigarette smoking. These include: [1] anti-LGBT stigma, both at structural and individual levels (Hatzenbuehler et al., 2013; Pachankis, Hatzenbuehler, & Starks, 2014), [2] social norms in LGBT social spaces that promote cigarette smoking (Holloway et al., 2012), [3] distress and mental health problems that are mistakenly perceived to be alleviated by tobacco use (Jabson et al., 2014; Newcomb et al., 2013; Rosario, Schrimshaw, & Hunter, 2011), and [4] targeted marketing of LGBT communities by the tobacco industry (Balsam et al., 2012). Future investigations in the Philippines and other developing countries can look into these potential factors, in order to tease out cross-culturally shared as well as culturally specific pathways to LGBT smoking disparities. In particular, examining the cultural contexts of anti-LGBT stigma in the Philippines and its possible links to risk behaviors like cigarette smoking may be a fruitful starting point. Though being gay is not criminalized in the Philippines as in neighboring Southeast Asian countries like Singapore or Malaysia, no national laws exist that protect sexual minority Filipinos from anti-LGBT discrimination in education, employment, housing, or health care (UNDP, USAID 2014). There is no legal recognition of same-sex partnerships, and moral exclusion of LGBT individuals, communities, and families is not uncommon in this predominantly Roman Catholic developing country.

Limitations

As with all secondary analysis of archival data, there are a number of limitations in the current paper; here we identify four. First,

sexual minority status was measured using only a single item sexual behavior question that asked respondents if they have sex with other men. Such single-indicator measures tap only into one aspect of sexual orientation and may not fully capture sexual minority respondents, including those who are not sexually active (Korchmaros, Powell, & Stevens, 2013). Second, the current data did not differentiate between gay and bisexual men, nor look into more culturally indigenous conceptualizations of sexual orientation in Philippines society like the category of *bakla* (Garcia, 2013). Third, current cigarette smoking was measured using a relatively straightforward self-report item that asked if a respondent currently smoked or not, without specifying what “current smoker” means; future researchers should consider adopting standardized definitions of current smoking for greater comparability, such as the US Centers for Disease Control and Prevention definition (*i.e.*, having smoked at least 100 cigarettes in one’s lifetime and smokes every day or on most days). Fourth, it is unknown how smoking disparities have increased, decreased or remained the same in the years following the original NDHS data collection; an important next step is to integrate sexual orientation data collection tool in current research on cigarette smoking in the Philippines.

Implications for Practice and Policy

Evidence for higher prevalence of cigarette smoking among Filipino gay, bisexual, and other men who have sex with men should prompt medical practitioners working with sexual minority male patients to include routine screening for cigarette smoking and its associated cardiovascular, respiratory, and other consequent diseases. This is especially important as research elsewhere suggests that gay men themselves may not perceive cigarette smoking to be a significant health concern, especially compared to HIV infection and sexual health (Groves, Ventuneac, Rendina, Jimenez, & Parsons, 2013).

In terms of policy and programs, the present findings join more general evidence in the Philippines that public health interventions for cigarette smoking would do well to incorporate both a gender and a sexuality lens. Cigarette smoking is higher for Filipino men than women and highest for Filipino sexual minority men. Public health messaging by the Philippine Department of Health

and curricular inclusion of lessons on the problem of tobacco use by the Department of Education can include information about how cigarette smoking disproportionately affects some Filipinos more than others, including sexual minorities. Inclusion of sexual orientation and gender identity items in the Philippines Global Adult Tobacco Survey is likewise critical in order to provide more nuanced data on Filipino LGBT smoking (including tobacco-related expenditures, second-hand smoke exposure, and quitting). Finally, reduction and cessation interventions that specifically target LGBT communities and are tailored to their needs, contexts, and concerns have been found to be useful and more effective than one-size-fits-all approaches (Dickson-Spillmann, Sullivan, Zahno, & Schaub, 2014); such interventions may compliment broader government-led initiatives to address the serious but neglected problem of cigarette smoking by LGBT and non-LGBT people in the Philippines.

AUTHORS' NOTE

A previous version of this paper was presented at the 2014 Annual Scientific Conference of the Philippine Population Association. We thank Alyssa Zucker of George Washington University’s LGBT Health Policy and Practice Programme as well as an anonymous reviewer for comments and feedback. Correspondence may be sent to Eric Manalastas, Department of Psychology, Lagmay Hall, University of the Philippines Diliman, Quezon City, Philippines 1101, or email: ejmanalastas@kssp.upd.edu.ph

REFERENCES

- Balsam, K. F., Beadnell, B., & Riggs, K. R. (2012). Understanding sexual orientation health disparities in smoking: A population-based analysis. *American Journal of Orthopsychiatry*, 82(4), 482-493.
- Berg, C. J., Nehl, E. J., Wong, F. Y., He, N., Huang, Z. J., Ahluwalia, J. S., & Zheng, T. (2011). Prevalence and correlates of tobacco use among a sample of MSM in Shanghai, China. *Nicotine & Tobacco Research*, 13(1), 22-28.
- Blosnich, J. R., & Horn, K. (2011). Associations of discrimination and violence with smoking among emerging adults: Differences by gender and sexual orientation. *Nicotine & Tobacco Research*, 13(12), 1284-1295.
- Blosnich, J., Jarrett, T., & Horn, K. (2010). Disparities in smoking and acute respiratory illnesses among sexual minority young adults. *Lung*, 188, 401-

407.

Blosnich, J., Lee, J. G. L., & Horn, K. (2013). A systematic review of the aetiology of tobacco disparities for sexual minorities. *Tobacco Control, 22*, 66-73.

Bogart, L. M., Revenson, T. A., Whitfield, K. E., & France, C. R. (2014). Introduction to the special section on lesbian, gay, bisexual, and transgender (LGBT) health disparities: Where we are and where we're going. *Annals of Behavioral Medicine, 47*, 1-4.

Clarke, M. P., & Coughlin, J. R. (2012). Prevalence of smoking among the lesbian, gay, bisexual, transsexual, transgender and queer (LGBTQ) subpopulations in Toronto—The Toronto Rainbow Tobacco Survey (TRTS). *Canadian Journal of Public Health, 103*(2), 132-136.

Cole, E. R. (2009). Intersectionality and research in psychology. *American Psychologist, 64*(3), 170-180.

Corliss, H. L., Rosario, M., Birkett, M. A., Newcomb, M. E., Buchting, F. O., & Matthews, A. K. (2014). Sexual orientation disparities in adolescent cigarette smoking: intersections with race/ethnicity, gender, and age. *American Journal of Public Health, 104*(6), 1137-1147.

Corliss, H. L., Wadler, B. M., Jun, H., Rosario, M., Wypij, D., Frazier, A. L., & Austin, S. B. (2013). Sexual-orientation disparities in cigarette smoking in a longitudinal cohort study of adolescents. *Nicotine & Tobacco Research, 15*(1), 213-222.

Dickson-Spillmann, M., Sullivan, R., Zahno, B., & Schaub, M. P. (2014). Queer quit: A pilot study of a smoking cessation programme tailored to gay men. *BMC Public Health, 14*, 126-133.

Fredriksen-Goldsen, K. I., Kim, H., Barkan, S. E., Muraco, A., & Hoy-Ellis, C. P. (2013). Health disparities among lesbian, gay, and bisexual older adults: Results from a population-based study. *American Journal of Public Health, 103*(10), 1802-1809.

Garcia, J. N. (2013). Nativism or universalism: Situating LGBT discourse in the Philippines. *Kritika Kultura, 20*, 48-68.

Grov, C., Ventuneac, A., Rendina, H. J., Jimenez, R. H., & Parsons, J. T. (2013). Perceived importance of five different health issues for gay and bisexual men: Implications for new directions in health education and prevention. *American Journal of Men's Health, 7*, 274-284.

Hatzenbuehler, M. L., Jun, H., Corliss, H. L., & Austin, S. B. (2013). Structural stigma and cigarette smoking in a prospective cohort study of sexual minority and heterosexual youth. *Annals of Behavioral Medicine, 47*, 48-56.

Hatzenbuehler, M. L., McLaughlin, K. A., & Slopen, N. (2013). Sexual orientation

in cardiovascular biomarkers among young adults. *American Journal of Preventive Medicine, 44*(6), 612-621.

Holloway, I. W., Traube, D. E., Rice, E., Schragger, S. M., Palinkas, L. A., Richardson, J., & Kipke, M. D. (2012). Community and individual factors associated with cigarette smoking among young men who have sex with men. *Journal of Research on Adolescence, 22*(2), 199-205.

IOM (Institute of Medicine). (2011). *The health of lesbian, gay, bisexual, and transgender people: Building a foundation for better understanding*. Washington, DC: The National Academies Press.

Jabson, J., M., Farmer, G. W., & Bowen, D. J. (2014). Stress mediates the relationship between sexual orientation and behavioral risk disparities. *BMC Public Health, 14*, 401-409.

Korchmaros, J. D., Powell, C., & Stevens, S. (2013). Chasing sexual orientation: A comparison of commonly used single-indicator measures of sexual orientation. *Journal of Homosexuality, 60*, 596-614.

Lee, J. G. L., Griffin, G. K., & Melvin, C. L. (2009). Tobacco use among sexual minorities in the USA, 1987 to May 2007: A systematic review. *Tobacco Control, 18*, 275-282.

Lee, J. G. L., Blosnich, J. R., & Melvin, C. L. (2012). Up in smoke: Vanishing evidence of tobacco disparities in the Institute of Medicine's report on sexual and gender minority health. *American Journal of Public Health, 102*(11), 2041-2043.

Lindström, M., Axelsson, J., Modén, B., & Rosvall, M. (2014). Sexual orientation, social capital and daily tobacco smoking: A population-based study. *BMC Public Health, 14*, 565-574.

Manalastas, E.J. (2012). Cigarette smoking among lesbian, gay and bisexual Filipino youth: Findings from a national sample. *Silliman Journal, 53*(1), 71-87.

Marshal, M. P., Friedman, M. S., Stall, R., King, K. M., Miles, J., Gold, M. A., Bukstein, O. G., & Morse, J. Q. (2008). Sexual orientation and adolescent substance use: A meta-analysis and methodological review. *Addiction, 103*(4), 546-556.

Morrow, M., & Barraclough, S. (2003). Tobacco control and gender in Southeast Asia. Part 1: Malaysia and the Philippines. *Health Promotion International, 18*(3), 255-264.

Newcomb, M. E., Heinz, A. J., Birkett, M., & Mustanski, B. (2013). A longitudinal examination of risk and protective factors for cigarette smoking among lesbian, gay, bisexual, and transgender youth. *Journal of Adolescent Health, 54*, 558-564.

- Ortiz-Hernández, L., Gómez Tello, B. L., & Valdés, J. (2009). The association of sexual orientation with self-rated health, and cigarette and alcohol use in Mexican adolescents and youths. *Social Science & Medicine*, 69, 85-93.
- Pachankis, J. E., Hatzenbuehler, M. L., & Starks, T. J. (2014). The influence of structural stigma and rejection sensitivity on young sexual minority men's daily tobacco and alcohol use. *Social Science & Medicine*, 103, 67-75.
- Rosario, M., Corliss, H. L., Everett, B. G., Reisner, S. L., Austin, S. B., Buchting, F. O., & Birkett, M. (2014). Sexual orientation disparities in cancer-related risk behaviors of tobacco, alcohol, sexual behaviors, and diet and physical activity: Pooled Youth Risk Behavior Surveys. *American Journal of Public Health*, 104(2), 245-254.
- Rosario, M., Schrimshaw, E. W., & Hunter, J. (2011). Cigarette smoking as a coping strategy: Negative implications for subsequent psychological distress among lesbian, gay, and bisexual youth. *Journal of Pediatric Psychology*, 36(7), 731-742.
- Ryan, H., Wortley, P. M., Easton, A., Pederson, L., & Greenwood, G. (2001). Smoking among lesbians, gays, and bisexuals: A review of the literature. *American Journal of Preventive Medicine*, 21(2), 142-149.
- Tang, H., Greenwood, G. L., Cowling, D. W., Lloyd, J. C., Roeseler, A. G., & Bal, D. G. (2004). Cigarette smoking among lesbians, gays, and bisexual: How serious a problem? (United States). *Cancer Causes and Control*, 15, 797-803.
- UNDP, USAID. (2014). *Being LGBT in Asia: The Philippines country report*. Bangkok: United Nations Development Programme.
- Young, R. M., & Meyer, I. H. (2005). The trouble with "MSM" and "WSW": Erasure of the sexual-minority person in public health discourse. *American Journal of Public Health*, 95, 1144-1149.
- Yu, F., Nehl, E. J., Zheng, T., He, N., Berg, C. J., Lemieux, A., Lin, L., Tran, A., Sullivan, P. S., & Wong, F. Y. (2013). A syndemic including cigarette smoking and sexual risk behaviors among a sample of MSM in Shanghai, China. *Drug and Alcohol Dependence*, 132, 265-270.
- World Health Organization (2009). *2009 Philippines Global Adult Tobacco Survey Country Report*. Retrieved from http://www.who.int/tobacco/surveillance/2009_gats_report_philippines.pdf
- World Health Organization. (2011). *Gender, health, tobacco, and equity*. Retrieved from <http://www.who.int/tobacco/publications/gender>

THE DAILY LIFE OF POST-STROKE PATIENTS IN TOMOHON CITY, NORTH CELEBES, INDONESIA

Rosiana E. Rayanti

Nursing Science Program, Faculty of Health Sciences, Satya Wacana Christian University
Salatiga, Central Java Indonesia

Juliana D. Karwur

Department Head of Education, Tomohon City, North Celebes, Indonesia

Ferry F. Karwur

Faculty of Health Sciences, Satya Wacana Christian University
Salatiga, Central Java Indonesia



Stroke, in this case paralytic stroke, is a sudden paralysis caused by a brain injury. As a result of paralysis, post-stroke patients will have physical, psychological and social limitations that affect their quality of life. As a consequence, patients need help from others, especially from their family to go through their daily activities. This study aimed to show the prevalence and characteristics of post-stroke patients and describe their daily life pattern of activities in Tomohon City, Indonesia. Data were collected through in-depth interviews with observations from five participants of family members who had experienced stroke. Results of this study indicated changes in the life of post-stroke patients in terms of their daily activities, eating habits, and family communication patterns. As a result of physical weakness the daily life of the five participants was limited only to home activities. Food preference and consumption were also affected. Both participants and caregivers perceived that the emotional sensitivity they had developed and the changes in terms of family roles frequently led to misunderstandings between the patients and the caregivers.

KEYWORDS: daily living pattern, stroke, Indonesia