

Health status, Urbanward Migration, and Government Policy in Urban Areas in Vietnam

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Abstract

The rapid economic growth after economic reform, known as “*Doi Moi*”, and the growing scope of urbanward migration raise specific questions for social policy, including migration and health policies. This paper explores health status and its determinants for urban temporary migrants in comparison to urban permanent migrants and non-migrants. The analyses utilize multivariate logistic regression and data from the 1997 Vietnam Migration and Health Survey. The results show that guesthouse temporary migrants are most vulnerable to health problems. Though most of them are initially healthier their reported health deteriorates faster than other groups of urban residents. The findings also suggest some important implications for the current migration and health policies in Vietnam: 1) A special attention should be given to guesthouse temporary migrants; 2) Different priorities in health policy should be applied to different groups of migrants and non-migrants; 3) The current population management policy by registration system needs to be revisited; 4) Providing clean water is one of the most important way to improve health of temporary migrants; 5) Targeting educational investments and reducing employment would likely to improve health; 6) A higher priority in health policy to women is therefore strongly recommended; and finally 7) Improving management and collaboration between government offices and interested partners are important to improve health status and reduce inequity.

Introduction

The world's population living in urban areas has more than tripled since 1950, and the rapid pace of urban growth has continued. The predicted estimate of UN said that almost two thirds of the world's population will live in urban areas by the end of 2030 (UN, 1998). A significant proportion of urban population is contributed by migration since world's urban population is increasing and birth rates in urban areas are usually smaller than those in rural areas. Moreover, a major part of the recent rural-urban migration flow is contributed by developing countries since a majority of population in developed countries has already lived in urban areas.

The rapid growth of urbanization and migration brought about some serious consequences for developing countries, including Vietnam, such as high population density, inadequate housing, population diversity, population heterogeneity, income inequality, poverty concentration, and population segregation and stratification. These factors directly or indirectly affect health of urban residents. Health services accessibility, pollution, the spread of disease associated with high population density, and diverse demands to health services of different groups of migrants are some among various concerns on migration and health in urban areas in developing countries.

Despite the fact that migrants usually have good health, they can be considered as a vulnerable group in urban areas regarding health care. Since number of migrants in the cities is hardly predictable and it might increase fast during certain periods, they are usually ignored from master plans of the cities. In addition, lack of information, fewer social networks in urban areas, ignorance or limited knowledge of urban diseases, poor living condition, lack of access to clean water and sanitation are typical characters of migrants that push them further to the vulnerable position. A higher priority in urban health policy, therefore, should be given to migrants in order to achieve 'health for all'.

There is an increasing concern on migration and health policy in developing countries, including Vietnam. However, majority of the efforts have directed to the impacts of migrants in urban areas and much less have given to wellbeing of the migrants. Regardless anxiety of the negative impacts of migrants of some municipal governors, migration is the right of people to persuade a better life as written in Vietnam's Independent Statement, and more over, migrants also contribute to development of the cities as well as the rural areas. Nonetheless, migrants are a part of urban life and their needs, especially needs for health care, must be considered.

Theoretical and Practical Backgrounds

Recent Migration and Health Policy in Vietnam

Different from many other countries, the contemporary population management policies of Vietnam limit urbanward migration flows by a *household registration system* and housing policies. Thanks to a large and effective population-coordinator network at the grassroots (commune) level, the

government is able to control population and mobility through a registration system. Under this system, every citizen has to visit local Police Department or its representative to register place of birth and place of residence, as well as other basic demographic information, such as age, sex, marital status, education, and occupation. All the information is noted in a household registration booklet. If a person moves, s/he has to re-register at both places: origin and destination. Everyone has to *register at current place of residence* as either a *permanent resident* or a *temporary resident*. Usually, children can register as a permanent resident at the place where their mother registered as a permanent resident. Migration is free but it is very limited by strong socioeconomic ties. Residential registration status, permanent or temporary, is closely tied to eligibility for social services at current place of residence, such as health care and school for children.¹ While permanent residents can access these social services for free or at subsidized cost in their registered locality, temporary residents have to pay in full for the costs of the services. Changing registration status is very limited depending on policies of Central Government or, in some cases, local Governments.

In 1986, the National Assembly of Vietnam decided to revise the 1980 Constitution and make a renewal named '*Doi Moi*'. The renovation caused an important change of economic policy from central planning to market-oriented economy. One noticeable consequence of this political and economic renovation is the rapid growth of urbanward migration: more and more people have been moving to urban places to seek employment and a better chance for their life as the consequence of an unequal investment between rural and urban areas and the relaxation of the population management policy. Concerns about urbanward temporary migrants were not posed in the past, but they are getting more attention recently. Municipal governments are facing question of the 'floating' population: who are they; how the government manage them; how do they affect local services (education, health, housing, sanitation, etc.); to what extent do they contribute economically to the city; how do they affect crime rate in the city; and so on. Therefore, it is necessary to have better understands of urbanward migration and migrants, and revision in migration policy is expected.

The liberalization of '*Doi Moi*' also has a strong implication to health and health policy. The health care system in Vietnam has long been cited as successful and well designed. The basis of the social service system was developed was equity (MOH, 1992). The result of this orientation was very positive: Vietnam had made impressive gains in improving health status, health infrastructure had extended throughout the country, including remote rural areas, and free health care was provided to the entire population (Ladinsky and Levine, 1985; Nguyen et al., 1995). These health achievement and condition has changed substantially after the political and economic renew. The new economic policies privatize health services and encourage free trade in medicines and drugs. Though '*Doi Moi*' might give people a higher ability to access health care by increased income, this positive impact is doubtful since health cost also increased substantially. Health practices have shifted from

¹ Before *Doi Moi*, due to the scarcity of resources, foods and other essential groceries are also distributed on the basic of the registration system. Consequently, the registration system is much more important during that period.

public toward private and self-medication. One of the most important effects of the 'Doi Moi' to health is inequity. Though several categories of people, such as the very poor, remain exempt from health service charges, a widening gap between people of different categories can be observed. Urban-rural and rich-poor differences are reinforced and aggravated in the new system (Nguyen et al., 1995; Bloom, 1998; Naterop and Wol, 1999; Johansson et al., 2000). Nguyen et al. (1995) argued that the underline causes of this inequality are the decreasing in financial support for the state health system and management capacity in new health system.

Temporary Migration – the Major Trend of Recent Migration in Vietnam

Typical of developing countries, Vietnam has a high proportion of rural population (76.52 percent - CCSC, 2000), but urbanization is increasing. As noted by Dang et al. (1997), as a result of economic reform (known as '*Doi Moi*'), the growth of the regional differences in income and opportunities and the decrease of the Government's management of the economy have created an increase in rural-urban migration. Results from other studies in Vietnam (Guest, 1998; Doan and Trinh, 1998; Do and Trinh, 1999) also show that migration to urban areas is increasing after *Doi Moi*. In HaNoi, the capital of the country with more than 1.5 million urban residents (CCSC, 1999), population on average has increased by 55,000 persons every year since 1986, of which migration accounted for about 40 percent (about 22,000 people). Three-fourth of those migrants settled in the central of the city and the immigrant population is about five times greater than the out-migrant population. HoChiMinh City, the biggest city of the country with more than 4 million urban residents (CCSC, 1999), received on average 100,000 migrants every year from 1997 to 1999 (Do and Trinh, 1999). Some other official data, such as Census 1989, ICDS 1994,² and Census 1999 have also noted the increase of migration to urban areas. As the result of Census 1999, 23.5 percent of the population lives in urban areas, up from 19.4 percent in 1989 (result of Census 1989). Between 1989 and 1999, the urban population expanded at an annual rate of 3.63 percent while the rural growth rate equaled 1.18 percent (CCSC, 1999).

Another consequence of the Reform has been the change in forms of migration or the emergence of temporary migration (Truong, 1996; Dang, 2000; Djamba et al. 2000). The economic development, which accompanied further relaxations of restrictions on migration, is likely to result in a much larger-scale urbanward movement (Dang et al., 1997). It is even more important to know about temporary migrants in Vietnam because they are becoming a significant part of the urban life but little is known about them.

As noted by Guest (1998), the available data on the urban population might not be comprehensive because there are a considerable number of unregistered temporary migrants in urban areas. Surveys on migration to HoChiMinh City estimated that there are about 200,000 seasonal migrants or short-term visitors. The seasonal migrant population in HaNoi was around 40,000 to 60,000 in the 1990s (Do and Trinh, 1999). Whereas migration to

² ICDS: Inter-censal Demographic Survey.

urban areas is increasing, we still have little data, knowledge, and social policies about temporary migrants in urban areas of Vietnam. Realizing this situation, the Government approved a guideline for urban management and development in 1998.³ This guideline is based on the estimation that level of urbanization will increase from 20 percent (presently) to 45 percent in 2020, and that the urban growth rate is about 5 percent per year. However, this guideline is still a very first step to manage and develop urban areas.

Nonetheless, the number of studies on temporary migration in Vietnam is still limited. This limitation is mainly due to the lack of accurate data. The last two National Censuses (1989 and 1999) as well as other surveys have very simple questions about place of birth and place of residence. Based on these data sources, we can only estimate migration flows and have little information about temporary migrants at very macro level. Lack of adequate and accurate data is one of the major constraints of recent migration studies in Vietnam.

Migration and Health

Most of the available evidence leads to the inference that migrants are usually young people who are healthier than the population they left and it is a result of the selective nature of migration. Freedman (1947), however, pointed out that there are contradict evidences about the hypothesis that migrants are healthier than population they join. He also pointed out age and income as important variables affecting health differences between migrants and non-migrants.

The discussion about urbanward migration and health can be found at length in previous studies (Fillenbaum, 1979; Evan, 1987; Craig, 1990; Wessen et al., 1992). The association between urbanward migration and health is mixed. A number of studies highlight the benefits of access to health services, information, education, safe drinking water, and cash incomes afforded by urban living. Other studies found that poverty, housing and living environments, inadequate water services and waste disposal limit the benefits of urban environments and exacerbate health problems (McDade and Adair, 2001). Three general findings are: migrants and non-migrants tend to have different health status; socioeconomic factors, such as age, sex, income, education, race, housing, population density, and labor force status, determine health status of both migrants and non-migrants but at different levels; and finally qualifications regarding adequacy of migrant, especially migrant status, should be considered.

Though most of the studies on migration and health have looked at health comparison between migrants and non-migrants at a certain point in time, none of them have looked at health of the migrants over time. Since migration is rather a process, health of the migrants should also be considered as a process. In fact, this limitation is hard to overcome as it is hard to track migration process or define migrants.

The relaxation of migration, the increase of rural-urban temporary migration, and the new health system in Vietnam are all originated and

³ Decision 10/1998/QĐ-TTg, dated January 23, 1998.

interacted through the same root: the political and economic reform. The reform has accelerated urbanward temporary migration, brought about economic growth, but also inequality and problems with health access and utilization for migrants. Along with the poor, temporary migrants are negatively influenced regarding health care access. Those temporary migrants may be even worse off than the urban poor since they are neither belonging to any categories that remain exempt from health charges nor receive free health insurance plan in urban areas.

Determinants of Health

Various studies have done to investigate socioeconomic determinants of health. Among health determinants, sex and age have been acknowledged as important factors in understanding patterns of disease as well as being recognized by investors and policy makers as providing insight into the control of infectious diseases (Johansson et al., 2000). Gilmore et al. (2001) found that physical health declined with age and worse in women than men and the sex differentials increasing with age. Johansson et al. (2000) has reviewed several mechanisms for the higher health risks of women: 1) Women have less access to information and therefore fail to recognize early symptoms; 2) Women tend to wait longer to seek treatment when ill and less likely than men to consult modern health services; 3) Women hesitate to seek health treatment because of inferior treat of health staffs; 4) Women's productive and reproductive works are unlikely to be fully replaced by other members in the family.

The employment and health relationship has reviewed and discussed in length somewhere; unemployment is consistency associated with poor health for individuals (Gilmore et al., 2001; Beland et al., 2001). Most of studies found that beside selection effect, healthier people are more likely to be employed, employment protects and fosters health (Ross and Mirowsky, 1995; Beland et al., 2001).

Income and poverty have consistently found an important determinant of health status (Hoffman et al., 1997). Regardless health knowledge, the poor have much less ability to access good health care; they cannot afford expensive cost of various health cares, especially private medical practitioners, medicines, as well as side expenses, such as transportation. Gilmore et al. (2001) found material deprivation was an important health determinant whilst income from principal employment was not. The lack of association with income is expected given the importance of the informal economy (in Ukraine), illustrated by the disproportionately low average official income, high unemployment rate, and the frequent delays in payment of salaries. This finding suggests that indirect income measurements should be used when income does not reflect the real living conditions of people.

Most studies found education as an important determinant of health and diseases. Hoffman et al. (1997) found education as the main predictor of chronic disease. Gilmore et al. (2001) found that lack of education had a negative impact on health in both males and females. Indirectly, education is linked to other socioeconomic variables, such as income, that are more direct determinants of health. Education also affects health directly by its association

with awareness of illness and diseases, use of modern health services, and favorable behaviors.

Living conditions and environment pollution has been proposed as cause of poor health. The relationship between water, sanitation, hygiene and diseases have discussed widely in public health and health transition studies. Besides, housing and population density are also basic essentials for public health. Shears and Lusty (1987) for instance has showed that inadequate water and sanitation and crowding result in high transmission rates of most communicable diseases.

Type of Migrants

In countries where registration system is available, such as Vietnam and China, classification of migrant status is usually based on two traditional criteria, time and space, and registration status. Definitions of migrants used in the current study, as well as other works published on the same data source, derive from intensive discussion between Brown University researchers and their colleagues in Vietnam (White et al., 2001). *Non-migrants* are defined as people who were born and registered as permanent residents in the place of interview, and never spent more than six months continuously outside that place since age 13. A place here means a district or town. *Permanent migrants* are those who registered at the place of interview as permanent residents, but a) born elsewhere or b) born there but away from that place for at least six months since age 13. Finally, *temporary migrants* are defined as people who are neither born nor permanently registered at the place of residence at time of interview.

For the purpose of this study, *guesthouse temporary migrants* are termed for temporary migrants who lived in the guesthouse at the time of interview. Among different groups of migrants in the city, guesthouse temporary migrants are the focus of this study because their number is growing fast but few is known about them. Two key factors explaining for this rapid increase are the ease of population registration and the new economic policy after the '*Doi Moi*'. Both of them encourage migration by freeing people from ties to the local social services. This circumstance leads to the increase in number of unregistered and seasonal migrants, especially the rural-urban migration population. Clearly, most of these seasonal migrants are living in guesthouses because of their temporary status.

Objectives of the current study

The current study is an effort to explore health status of different types of migrants and non-migrants who are living in urban areas. Though the current approach cannot show the rural-urban differences, the approach utilized in most studies, it shows specific aspects of urban environments that are causally related to health outcomes and overcomes the ignorance of the rural-urban approach to the heterogeneity within urban areas.

The major questions are whether health status varies across migrants of different types and non-migrants, and how. In the common senses, guesthouse

temporary migrants are strong and healthy workers. It is true at the time when they are actual temporary migrants. Yet that might not hold in the long run since most of them are low skill labors with two typical characters: hard work and poor living conditions. In short, the argument is that guesthouse temporary migrants might have a temporary better health they might lose it faster than any other groups of migrants and non-migrants. In other words, guesthouse temporary migrants are worse off in the long run.

The study also examines comparative differentials in health determinants among the four groups under the study. The argument is different groups of migrants have different socioeconomic backgrounds and experience urban life differently. Hence, their health is affected in a different way; beside common determinants, some factors that are strong health determinants to one group might have no effect on the others. Consequently, health policy might have to be flexible; Health policy makers might want to give a higher or different priority to certain groups of migrants.

Data and Methods

The current study uses data from 'Vietnam Migration and Health Survey'. It is the first survey in Vietnam that provides information on different types of migrants and sophisticated details of migration process. Utilize this data, the current study, therefore, is expected to open up unknowns from previous limited studies and provide significant insights to migration policies.

This survey was carried out by the Institute of Sociology (Vietnam) and the Brown Population Studies and Training Center (USA) in 1997 in two rural and four urban areas of Vietnam. The four urban sites were selected based on their representative by regions: Ha Noi – the capital city in the north; Da Nang – the biggest city in the central; Dak Lak – a smaller city in the Central Highland; and Binh Duong – a small but developing city in the south.

The sample includes non-migrants and two groups of migrants: permanent and temporary. In each group, the respondents were selected randomly, but with certain quotas in mind to insure an adequate number in each category to allow meaningful comparisons. Among 1,695 respondents in urban areas, 599 are non-migrants, 508 are permanent migrants, 588 are temporary migrants, and 237 (of the 588) are guesthouse temporary migrants. Multi-level questionnaires were constructed to cover a wide range of background characteristics of non-migrants and migrants as well as the mobility experiences of the migrants.

The variable of primary interest in the analysis is health status, which is ascertained by a self-reported question: 'When was the last time you got sick?' Four response categories were constructed: 'Within the last 3 months', 'From 3 months to a year ago', 'More than a year ago', and 'Never'.

Simple techniques of analyses, i.e. frequency and cross-tabulation, are utilized to identify health status of migrants and non-migrants since direct questions of health status are available. Logistic regression is used to analyze health determinants given the fact that health status, the outcome variable, is dichotomized. Those who get sick within three months prior to the time of

survey are considered having worse health, and the rest are considered having better health. Health status during the last three months is used in logistic regression analysis to avoid temporal dimension problem (causal effects). In addition, it might increase the accuracy of the responses since people are likely to remember recent events better than events happened long time ago. Since the study looks at health status and health care in urban areas, only those who never got sick and who got sick after the last move to urban areas are selected for analyses.

Major findings

Health status

Figure 1 shows probabilities of getting sick during the three months, twelve months, and more than twelve months prior to the time of the survey. Those who never sick are included in the last group. The figure shows a significant difference between different groups of migrants. Though permanent migrants and non-migrants are more likely to get sick than temporary migrants at any time points, the differences in probabilities of getting sick is largest at 'more than twelve months', smaller at 'twelve months or less', and smallest at 'three months or less'.

The most fascinating difference is between guesthouse temporary migrants and others. Although guesthouse temporary migrants have a smaller probability of getting sick ever than either non-migrants (0.68 vs. 0.77) or permanent migrants (0.68 vs. 0.78), their probability of getting sick during the twelve months prior to the time of survey (0.46) is almost similar to non-migrants (0.44) and permanent migrants (0.45), and their probability of getting sick during the three months prior to the time of survey (0.35) is higher than non-migrants (0.25) and permanent migrants (0.28).

The results suggest that guesthouse temporary migrants may be the most vulnerable group in the city regarding health problems. Though most of them are initially healthier, which is a result of selectivity, their reported health deteriorates faster in relative to other groups of urban residents.

Determinants of health – multivariate analysis

Table 1 presents the result of logistic regressions. The dependent variable is sick status, which is sick versus non-sick, within the three months prior to the time of interview. Age is used as a control variable since it is closely related to health status. Moreover, temporary migrants tend to be younger than permanent migrants and non-migrants. Therefore, they might have different health risks and health status. The result shows that sex differential in health status is not different from previous studies in different settings; females are significantly more likely to get sick than males regardless of their migrant status. Table 1 shows that female non-migrants, temporary and guesthouse temporary migrants are accordingly 1.4, 1.5 and 1.8 times more likely to get sick than their male counterparts. Although no significant relation found for permanent

migrants, there is also a tendency that females in this group are more likely to get sick than males.

Education has a significant effect on health status of the non-migrants: spending one more year in school might decrease likelihood of getting sick by 6.3 percent for non-migrants. Note that the coefficient look small, but the effect is large since education is treated as a continuous variable. For instance, non-migrants who spend three and five years more in school respectively reduce the likelihood of getting sick by 18 and 28 percent. This relation, however, is not significant for any group of migrants though the coefficients show a negative relationship for those with higher education. This result is not very surprising as we have pointed out earlier that education might have indirect effects through other socioeconomic variables. Moreover, we should also note the small sample sizes, especially for guesthouse temporary migrants. In such conditions, coefficients might play a more important role than significant levels. Nonetheless, education is still an important determinant of health status for both non-migrants and migrants and the effect seems greatest for guesthouse temporary migrants.

Occupation is classified into four groups; currently not-working people (including students, pensioners/retired, unemployed, homemakers, and disabled), commercial and service workers, skilled workers and professional (including skilled workers, technicians, managers, office workers, and other professionals), and the last group includes the rest. Number of people in the last group is actually very small in relative to the other groups. Commercial and service workers among non-migrants and permanent migrants are correspondingly 30 and 33 percent less likely to get sick than their non-working counterparts. However, all of the relations between occupation and health status are not significant. This result suggests either the current categorization is not really appropriate or a larger sample size is desired for a better understanding of this relationship. Yet there is a tendency that working people are less likely to get sick than non-working people.

Data are not available to measure directly the effect of income to health for all migrant groups. However, its effect is measured indirectly through roof condition of the house. Roof types are classified into three categories: cement roof, titled roof, and other, which is used as reference group. Those who live in cement roof house are considered richer than those live in titled roof house, and the rest are usually the poorest. This assumption is made based on the fact that different roof type houses cost differently. *The results show that roof types have a significant relation to health status for all types of migrants and those with more expensive roof are less likely to get sick within the three months prior to the time of survey.* Non-migrants, permanent migrants, temporary migrants and guesthouse temporary migrants who live in cement roof house are respectively 0.31, 0.41, 0.32, and 0.17 times as likely to get sick as those in the reference group. Clearly, health status of the guesthouse temporary migrants is most affected by this factor. Non-migrants and temporary migrants who live in titled roof houses are 0.5 and 0.59 times respectively as likely to get sick as their counterparts in the reference group.

The hypothesis that population density is a strong factor negatively related to health through the spread of communicable diseases is also tested in

the current study. Population density is measured by number of people in the household per square meter. The results show a strong and significant relation between population density and health for temporary migrants; temporary migrants who live in the household of one more person per square meter is 3.2 times more likely to get sick. Though no significant relation found for non-migrants and guesthouse temporary migrants, the coefficients of the relations also show a tendency that population density is positively related to sickness or, in other words, negatively to health. Surprisingly, permanent migrants who live in the household of one more person per square meter is 0.06 times as likely to get sick.

Access to clean water appears as one of the important determinants of health; Results in Table 1 consistently shows that those who have access to piped water, including piped water in compound and from the public tap, regardless their migrant status, are less likely to get sick than others. However, its effect is different for different type of migrants: though the coefficient shows that permanent migrants who have access to piped water are less likely to get sick, the relation is not significant. For non-migrants, those who have access to piped water are 30 percent less likely to get sick than those who are accessing to other sources of water, such as well, rain, river, and lake. The effect of piped water accessibility is a little bit bigger for temporary migrants: those who have access to piped water are 35 percent less likely to get sick than those who have no access to this source of water. *This effect is much stronger for guesthouse temporary migrants: within this group, those who have access to piped water are 65 percent less likely to get sick than those who do not have the access.*

Results from the model for temporary migrants show that guesthouse temporary migrants are significantly 1.8 times more likely to get sick than non-guesthouse temporary migrants. This result again supports the hypothesis that guesthouse temporary migrants are vulnerable regardless the fact that they are usually healthier people.

Adjustments for Selection Effect

For the temporary migrants, duration of residence has added to the model (results not shown) under the hypothesis that the longer duration of residence the better knowledge migrants have on the availability of health services and facilities in the urban areas. Consequently, migrants have higher accessibility to health services, which also mean better health. However, duration of residence neither improves the explanatory power of the model nor has significant effect on health. In fact, most of the temporary migrants, especially guesthouse temporary migrants, are poor and they cannot afford for the expensive health services in the urban areas and their health insurance, if available, does not cover in the place of residence. Once they get sick, they need to come back home for treatment. The result poses the question that duration of residence might increase awareness of the availability but it does not increase accessibility to health services of the temporary migrants.

Using some simple mathematical tool to adjust for the selection effect, temporary migrants returned home for treatment and they were not captured in the sample while a lower rate of permanent migrants returned when they get

sick and all non-migrants were captured, we come to two adjustments for the picture in Figure 1. First, if we take selection effect into account and presume that all returned sick people are included in the sample, the inference curve for non-migrants does not change since all of the non-migrants are captured in the sample. The inference curve for temporary migrants, however, shifts up. The inference curve for permanent migrants also shifts up but at a lower level. Secondly, the more interesting finding is that while the inference curves shift up they are getting less steep. Finally, adjustment was made for age effect by looking at every five year age interval and the results show that age does not have a strong effect to the presented patterns of health transition. In summary, findings from these adjustments even further support for the findings from the Figure 1 that show the vulnerability of temporary migrants in urban areas.

Conclusion

After 'Doi Moi', rural urban migration became a major trend of migration under the effect of economic and political factors. Fewer ties to local services give people more freedom of movement. Economic development gives them resources to turn their intention into action, and increasing income inequality between rural and urban areas motivates them to move. The dilemma of urban bias investment in the new market oriented economy and the more rapidly increase of rural population also augments rural urban migration. Such movements were mostly temporary, which migrants working in low-paid jobs often rejected by native workers (Dang, 1998; White et al., 2001). Concerns to urban temporary migrants have raised in recent migration conferences in Vietnam. However, little is known about this group. Temporary migrants are usually ignored from the master plan of the cities regardless the fact that they are a necessary part of the cities. This ignorance partly came from the lack of adequate data on migrants.

The current study one of the first efforts to explore health status and its comparative differentials of permanent migrants, temporary migrants, and non-migrants in urban areas of Vietnam. The current study suggests that time dimension should be considered to have a comprehensive picture of health status. A group of migrants might be healthier than other groups of migrants or non-migrants at one point in time but they might also be less healthy at another period. In the current study in Vietnam, regardless of the young advantage of the migrants, non-migrants in urban destination are the healthiest at the time of survey: and guesthouse temporary migrants are the least healthy. Moreover, the findings support the argument that although guesthouse temporary migrants are usually young, they are relatively worse off than other groups of urban residents in the long run: their reported health deteriorates faster than the others. This result suggests that different priorities in health policy should be given to different groups of migrants and non-migrants.

The wide gap between guesthouse temporary migrants and other temporary migrants suggest that the current population management policy by registration system needs to be revisited. Though both groups are in the same category, temporary residents, they are very different in many ways. Some of

the temporary residents in fact have settled in urban areas for a very long time but they are still temporary since they cannot or do not want to register in their place of residence. While making the sampling frame, we also found that registration booklets cannot help much to separate migrants from non-migrants. Many people had moved for months before the time of survey but they did not register for their long absence. The registration booklets in urban areas also could not capture temporary migrants. Regardless of this limitation, we found that registration system does help a lot to provide accurate vital statistics on majority of the non-migrants and permanent migrants, who contribute most to the population of the locality. The final line is that registration system should be remained but amendments are expected. One solution would be dual registration system in which non-temporary and temporary migrants are registered separately to the same office.

Results of the multivariate analysis suggest that providing clean water is one of the most important approaches to improve health of the temporary migrants. Guesthouse temporary migrants tend to segregate in certain areas of the cities and these places are usually poor in water and sanitation. In Hanoi for instance, most of the migrants and temporary residents live along the Red River and suburb areas where water supply is poorer. Furthermore, since guesthouse owners have to pay for in-compound piped water, they do not want renters to use it and also renters are not willing to pay for that. Therefore, lower quality water, such as water from river and well, are used alternatively. Guesthouse temporary migrants in the urban areas seem to be trapped in a circle from low income to poor living condition, poor hygiene and sanitation, poor health, and low income in the long run. Findings from the effects of income further support this argument: regardless migrant status, the rich are less likely to get sick than the poor. Providing water at subsidized prices and providing more public tap water stands in such poorer areas would be the solution to improve health and income of the migrants and also the non-migrant poor.

In the course of the last a half century, though Vietnamese women status has documentally improved considerably, the results provide evidence that female temporary migrants are more likely to get sick than their male counterparts after controlling for other socioeconomic variables. The significant effect also holds for non-migrants and guesthouse temporary migrants. A higher priority in health policy to women is therefore strongly recommended.

Finally, in order to improve health of migrants as well as non-migrants, the results also suggest that health policy makers may want to have a good collaboration with their counterparts in other departments. Promoting education and reducing unemployment rate also mitigate health problems in urban areas. Lack of effective coordination and cooperation among different health investment partners including the government has discussed somewhere (Nguyen et al., 1995). The results in this paper again suggest that management and collaboration between government offices as well as interested partners are important to improve health status.

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Figure 1. Reported Health by Migration Status

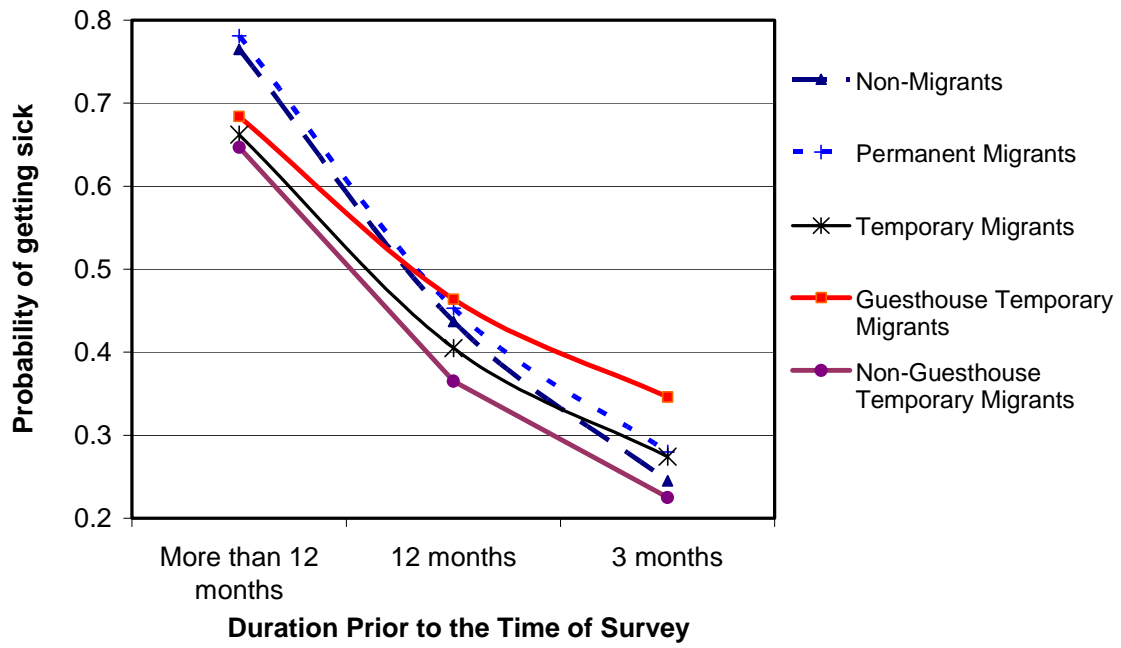


Table 1: Results of Logistic Regression Analyses: Determinants of Sick Status during Three Months Prior to the Time of Survey

Variable	Non-migrants		Permanent-migrants		Temporary-migrants		Guesthouse-temporary migrants	
	Odd ratio	P	Odd ratio	P	Odd ratio	P	Odd ratio	P
Constant	0.790	.687	1.420	.634	0.331	.071	2.416	.415
Age in year	1.009	.291	0.998	.845	1.010	.279	0.987	.591
Female	1.436	.081	1.025	.912	1.543	.044	1.785	.083
Years in school	0.937	.051	0.956	.165	0.966	.278	0.924	.159
Occupation: Non-working	Ref.		Ref.		Ref.		Ref.	
Other occup.	0.768	.471	0.461	.049	0.591	.258	5.683	.169
Commercial and Service	0.701	.141	0.674	.162	0.928	.796	0.817	.719
Worker and Professional	1.102	.737	0.733	.293	1.342	.308	0.851	.746
Roof: Other	Ref.		Ref.		Ref.		Ref.	
Tiled Roof	0.501	.002	1.172	.500	0.592	.017	0.705	.301
Cement Roof	0.312	.000	0.414	.005	0.324	.002	0.168	.027
Pop. Density	1.855	.651	0.060	.077	3.206	.081	2.362	.280
Piped water	0.697	.125	0.984	.946	0.654	.073	0.351	.003
Guesthouse Temp. Migrants					1.808	.009		
N	599		508		588		237	
Chi-square	53.73		31.70		56.71		45.89	
-2 Loglikelihood	611.0		570.3		629.8		258.1	
Cox & Snell R square	0.086		0.060		0.093		0.177	

Note: Ref. = Reference group