Self-Rated Health of South Asians in Hong Kong: A Pilot Study

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Citation

Abstract

Background: Self-rated health (SRH) is recognized as a global measure of general health status. In Hong Kong, health conditions of the South Asians have never received much attention. This absence of information on health status of the South Asians limits the knowledge about the burden of poor health of the minority groups. Objectives: The aims of the current study were to examine the SRH of the South Asian ethnic minorities in Hong Kong and its relationship with their socio-demographic status. Methods: This was a cross-sectional survey using a structured questionnaire to obtain information on SRH, number of physical illnesses, health behaviors including smoking and alcohol consumption, and demographic variables. A total of 125 South Asians completed the questionnaires via face-to-face interviews in autumn 2009. Logistic regression analyses were conducted to investigate the association of SRH and respondents' socio-demographic status and physical health conditions. Results: Of the 125 respondents, 19 were born in Hong Kong and the remaining 106 were non-Hong Kong-Born. Housing type and presence/absence of physical illnesses were discovered to be significant predictors of good SRH in both logistic regression models for all respondents and the non-HK-Born. Gender was also a predictor of SRH in the non-HK-Born model despite its statistical insignificance.

INTRODUCTION

Self-rated health (SRH) is a widely used measure of perceived general health status and has been increasingly used in health service and social science research. It is a strong predictor of morbidity and mortality [1, 2, 3, 4]. Individuals who rate their health as fair or poor have a higher mortality and morbidity risk compared to those who rate their health as good or very good [4].

Some previous research suggests that ethnic minority groups rate their health worse than the native counterparts [5, 6, 7]. However, contradictory results are uncovered by some other studies [8, 9]. Despite these inconclusive findings, it is crucial to have the general health status of ethnic minority groups, which is useful information for formulating comprehensive health care policies.

Recent studies reveal that socioeconomic status (SES) is associated with SRH of ethnic minority groups. Farmer and Ferraro [10] found that the black adults had poorer SRH than that of the white adults in the US, and education and employment were the major determinants of this disparity. Kómár et al. [11] stated that poor SRH of ethnic minorities in Hungary was associated with age and education level. Daoud et al. [12] also discovered that education was significantly related to SRH of the Arabs in Israel.

In Hong Kong, South Asian ethnic groups, including Indians, Nepalese, Pakistanis, Bangladeshi and Sri Lankans, comprise only 0.7% of the total population of about 7 million [13]. Both the government and non-government organizations provide diversified social services that include language classes, translation services and various kinds of employment training to the South Asians. These support programs aim at facilitating social integration of the South Asians into the local community. However their health status has never received much attention. This absence limits the knowledge about the burden of poor health of the minority groups.

The present study attempts to examine the SRH of the South Asians and its relationship with their socio-demographic status. The study is the first exploratory investigation of the health status of South Asians in Hong Kong. The findings provide imperative information for the planning of medical services and appropriate primary intervention programs for these ethnic minorities and the formulation of

comprehensive health care policies.

METHODS

This was a cross-sectional study using a structured questionnaire. The target subjects were the South Asians, who attended the social service centers for South Asian ethnic minorities organized by the Hong Kong Christian Service, the Caritas, the Mongkok Kai Fong Association Limited and the Southern Democratic Alliance in Hong Kong. In the process of conducting the survey, a trained interviewer, with the assistance of the personnel at these social service centers who helped translate the questionnaire into native South Asian languages, invited a total of 149 South Asian adults to participate the survey. The target population was informed about the survey's objective, methods and confidentiality. A total of 125 (83.9%) agreed to participate in the study and completed the questionnaires via face-to-face interviews in autumn 2009.

SURVEY INSTRUMENT

The survey instrument was an anonymous questionnaire that consisted of two main domains. The first part sought information on subjective rating of SRH, health behaviors and physical health condition of the participants. The second section focused on their demographic and socioeconomic characteristics. All questions were close-ended.

SRH was assessed by the question "How would you rate your overall health at the present time?" Respondents were asked to rate their overall health on a five-point Likert scale, on which 1 indicated "excellent" and 5 indicated "very poor". The SRH responses were collapsed into a dichotomous variable, with good health (the rating of "excellent", "very good" and "fair" health) and poor health (the rating of "poor" and "very poor").

Respondents were asked if they were a smoker (subdivided into 2 groups: smokers and non-smokers), and if they consumed alcohol. A single question measured the frequency of drinking: "How often do you drink alcohol?" Responses were divided into "never", "once a week", "twice a week", and "≥3 times a week".

Interviewees were requested to respond "yes" or "no" to 7 physical diseases diagnosed by a doctor in the past six months, including high blood pressure, heart disease, diabetes, chronic lung, liver and kidney diseases, and arthritis. Responses to each item were summed to produce a score indicating the overall physical health conditions. The scores were further dichotomized as good physical health if

the score equaled zero and poor physical health if the score was 1 and above.

Questions on the respondents' demographic and socio-economic characteristics included gender, age, marital status, education, income, housing type, ethnicity and HK-born (born in Hong Kong). Respondents, who were not born in Hong Kong (non-HK-born), had to state their length of residence in Hong Kong.

DATA ANALYSIS

Descriptive statistics were employed to describe the socio-demographic characteristics and health conditions of the respondents. Fisher exact tests were utilized to detect the differences among the socio-demographic variables and health conditions, because some expected cell frequencies were fewer than required assumptions to satisfy criteria for the use of Pearson's χ^2. To evaluate the association of SRH and respondents' socio-demographic status and physical health conditions, logistic regression analyses were conducted. All relationships were determined to be statistically significant at 95% confidence levels.

RESULTS
DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

Table 1 presents the socio-demographic characteristic of the respondents. Of the total of 125 participants, 40.8% were male. Over half (64.0%) of the respondents were aged between 21 and 40 years. The majority was married (73.6%) and lived in private housing with independent tenancy (72.0%). Over 60% had attained secondary education. Over 70% had monthly income below HK$10,000. Only 19 were born in Hong Kong (15.2%). The majority were Nepalese (55.2%), followed by Pakistanis (29.6%) and Indians (9.6%). The remaining 5.6% were Sri Lankans and Bangladeshis. Over 90% were non-smokers and about 80% never consumed alcohol.

Figure 1

Table 1. Demographic characteristics of respondents

	Total (N=125)	Percentage	Non-HK-Born (N=106)	Percentage
Gender				
Male	51	40.8	47	44.3
Female	74	59.2	59	55.7
Age (years)				
≤20	15	12.0	10	9.4
21-30	37	29.6	27	25.5
31-40	43	34.4	39	36.8
41-50	21	16.8	21	19.8
≥51	9	7.2	9	8.5
Marital Status				
Single	33	26.4	24	22.6
Married	92	73.6	82	77.4
Education				
Primary or below	17	13.6	12	11.3
Secondary	79	63.2	69	65.1
Tertiary and/or above	29	23.2	25	23.6
Income (monthly)				
HK$ ≤5000	39	31.2	33	31.1
HK$ 5001-10000	50	40.0	40	37.7
HK$ 10001-15000	16	12.8	15	14.2
HK$ 15001-20000	12	9.6	11	10.4
HK$ ≥20001	8	6.4	7	6.6
Housing type				
Private: independent tenancy	90	72.0	80	75.5
Private: shared tenancy	13	10.4	9	8.5
Public housing	22	17.6	17	16.0
Ethnicity				
Nepalese	69	55.2	62	58.5
Pakistani	37	29.6	26	24.5
Indian	12	9.6	12	11.3
Others	7	5.6	6	5.7
Smoking				
Yes	6	4.8	5	4.7
No	119	95.2	101	95.3
Alcohol consumption				
None	101	80.8	82	77.4
1 time per week	18	14.4	18	17.0
2 times per week	5	4.0	5	4.7
≥3 times per week	1	0.8	1	0.9
HK-Born				
Yes	19	15.2		
No	106	84.8		
Residence length				
< 5 years			10	9.4
5-10 years			27	25.5
11-15 years			39	36.8
16-20 years			21	19.8
>20 years			9	8.5

HEALTH CONDITIONS OF RESPONDENTS

Table 2 presents the health conditions of respondents. Over three-fourth (76.8%) of the respondents rated their health as "good" or "excellent", while a 16.0% rated their health as "fair" and the remaining 7.2% as "poor" or "very poor". SRH was found to be insignificant among socio-demographic characteristics. For the non-HK-born participants, similar SRH status was reported. Respondents, who had attainted secondary education (p<0.010) and lived in private housing (p<0.030), rated their health as "good".

The mean number of physical illnesses diagnosed was 0.20, ranging from 0 to 3. Over 80% of the respondents reported no physical diseases diagnosed. About 6% of the respondents suffered from high blood pressure (5.6% for both all respondents and non-HK born) and arthritis (4.8% for all participants and 5.6% for non-HK-born). Respondents, who aged below 30 (p<0.003 for all

participants; p<0.002 for non-HK-born), and had tertiary education (p<0.001 for all respondents; p<0.001 for non-HK-born), had less physical illnesses.

Figure 2

Table 2. Health conditions of respondents

	Total (N=125)	%	Non-HK-Born (N=106)	%
Self-rated health (SRH)				
Excellent	24	19.2	20	18.9
Good	72	57.6	63	59.4
Fair	20	16.0	14	13.2
Poor	6	4.8	6	2.7
Very poor	3	2.4	3	2.8
No. of physical diseases diagnosed by doctor				
0	108	86.4	91	85.8
1	12	9.6	11	10.4
≥2	5	4.0	4	3.8

RELATIONSHIP BETWEEN SRH AND SOCIO-DEMOGRAPHIC CHARACTERISTICS

Table 3 presents results of the logistic regressions. For all respondents (N=125), those who lived in private housing with independent tenancy had greater odds to have good SRH (OR=8.03; CI= 1.54-41.82). However, the odds for respondents living in private housing with shared tenancy were not statistically significant related to good SRH. The presence or absence of physical illnesses was also significantly associated with SRH. Respondents with no physical illness had better SRH (OR=10.56; CI= 2.21-50.44).

For the non-HK-born respondents, similar results were observed. Respondents who lived in private housing with independent tenancy (OR=12.52; CI=1.89-82.67), and had no physical illnesses (OR=12.88; CI=2.10-78.85), had better SRH. Gender was also a predictor of SRH despite its statistical insignificance. Males were detected to rate their SRH better than females (OR=9.11; CI=0.73-113.22).

Figure 3

Table 3. Predictors of good SRH: results of logistic regression

	All Respondents (N=125)			Non-HK-Born (N=106)		
	OR	CI (95%)	p	OR	CI (95%)	p
Gender						
Male	-----	-----	----	9.11	0.73-113.22	0.086
Female	-----	-----	----	1.00		
Housing type			0.047			0.028
Private: individual tenancy	8.03	1.54-41.82	0.013	12.52	1.89-82.67	0.009
Private: shared tenancy	2.47	0.22-28.21	0.468	1.25	0.09-16.94	0.867
Public housing	1.00			1.00		
Physical illness						
Yes	1.00			1.00		
No	10.56	2.21-50.44	0.003	12.88	2.10-78.85	0.006
Nagelkerke's pseudo R²	0.303			0.422		

DISCUSSION

It is supposed that people who migrate from their birth

country to another country are generally healthier than those who do not emigrate [14]. This effect of healthy immigrants contributes to the high percentage of good SRH and few numbers of reported physical illnesses in the present study since 84.8% of the respondents were non-HK-born, of whom 71.7% aged below 40. This large number of young interviewees also accounts for the high rating of good SRH.

Further, rating of SRH among various ethnic minority groups can be affected by their cultural and linguistic elucidation of describing health [15]. It is also proposed that some ethnic minorities would refer to their original culture when evaluating their health conditions even if they have experienced some degree of acculturation [16]. Arab Americans, both Christians and Muslims, were discovered to perceive health as a gift because of their cultural or religious values, encouraging them to be humble in reporting their health status [17] and thus they tended to report fair or good health [18].

Findings of the current study revealed that demographic variables, including age, marital status, education, income and ethnicity, were not associated with SRH. These exclusions contradict results of previous studies [10, 12, 19].

Instead, housing type that could be a proximal measure of socio-economic status was a significant predictor of SRH. In Hong Kong, apart from public housing, people live in private housing. Some either own or rent the whole apartment that is referred to as independent tenancy. However, some share an apartment with other individuals or a family, which is referred to as shared tenancy. Thus it can be inferred that, in the present study, respondents living in private housing with independent tenancy were financially better off than those living in the other housing types; and had greater odds to good SRH.

Absence of physical illnesses was also significantly related to good SRH. This finding is concurrent with the study by Chandola and Jenkinson [20] that chronic diseases such as hypertension or cardiovascular diseases were significant predictors of poor SRH.

It is evident that people living a healthier life have a better SRH. However, smoking and alcohol consumption were not predictors of SRH in this study. These findings agreed with the multivariate model in the previous study by Kómár et al. [11]. In addition, majority respondents of the current study neither smoked nor consumed alcohol; and this could instigate the non-significant association of these lifestyle behaviors and SRH. Conversely, Mackenbach et al. [21] discovered moderate alcohol consumption was positively associated with good SRH. Impacts of these health behaviors on SRH should require further investigation.

Females are noted to rate their health status lower than that of males. This gender difference was also detected in non-HK-born model of the current study. It is argued that women were more likely to compare their health with their sick peers [22].

This study has a number of limitations that need to be considered. This was a cross-sectional research. Findings could only provide information on the associations between variables; and thus causal relationship between the dependent and independent variables could not be established. Another limitation was selection bias. Only South Asians attending the social service centers were interviewed. This selection and responder bias was reflected in the sample population that majority was Nepalese and Pakistani and younger in age. Hence, the sample was not representative; and the results might not have been generalized to South Asian ethnic minorities in Hong Kong and should be interpreted with caution.

CONCLUSION

This was a pilot study that explored the SRH of the South Asian minorities in Hong Kong. Housing type and absence of physical illnesses were discovered being significant determinants of SRH. Gender had an effect on SRH only in the non-HK-born model. In contrast to some previous literatures, demographic characteristics (such as age, education, marital status, income and ethnicity) and health behaviors (smoking and alcohol intake) were not related to SRH. This discrepancy in findings might have attributed to the small sample and limitations of the present study. Future large population-based surveys of ethnic minority groups would be required to acquire SRH and health status of minorities in Hong Kong.

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