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Original article

Social inclusion and length of stay as determinants of health among North Korean refugees in South Korea

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Abstract

Objectives: Although the number of North Koreans seeking asylum in South Korea has increased notably in recent years, studies on the health of North Koreans residing in South Korea are rare. This study examined the roles of social inclusion and the length of stay on refugees' self-rated health.

Methods: Employing a data set (n = 1,111) created by the South Korean government, we conduct multivariate logistic regression analyses.

Results: We found that degree of familiarity with South Koreans, employed as an indicator of social inclusion, was significantly associated with North Korean refugees' self-rated health status. Further, self-rated health seemed to be poorest when the duration of stay in South Korea reached about 2–4 years. Self-rated health outcomes improved after this time period.

Conclusions: Social inclusion through close contacts with South Koreans and overcoming an arduous adaptation period, as well as addressing economic deprivation, are important in promoting the health of North Korean refugees in South Korea. These findings should be considered in crafting better resettlement and training programs for this population.

Keywords: North Korean refugees – Refugee health – Social inclusion – Adaptation.

Introduction

For over 1 000 years there was a united country on the Korean Peninsula. When Korea achieved independence from Japanese colonialists in 1945, the nation was divided into southern and northern political states as a byproduct of ideologically-driven international politics. Since then, for over a half-century two opposing political systems and a four kilometer-wide demilitarized zone have stymied civilian contacts, communications, and exchanges between the two Koreas.

Recently, the number of North Koreans seeking permanent residence in South Korea has gradually increased, although the stringent political climate and the military confrontation between the two countries have barely altered. A decade ago, the number of North Koreans moving into South Korea was approximately 10 annually, but since then the rate has rapidly increased and by February 2007, the number of North Koreans residing in South Korea numbered roughly 10 000 persons [1]. Various factors within North Korea have contributed to this increase in migration to South Korea, including poor economic conditions due to the collapse of communism in Eastern European countries, international economic isolation due to the development of nuclear weapons, severe hunger and famine due to continued natural disasters, and an aggravated human rights situation due to weakened social controls. These many factors are known to cause civilian defections from North Korea, despite the risk of severe penalties and punishment if one is caught by North Korean border patrols[2]. Although only a rough figure, it is estimated that over 100,000 North Koreans are currently residing within various third countries (e.g., China, Russia, and Mongolia) waiting for an opportunity to seek asylum in South Korea[3].

North Korean refugees are known to have poor physical, emotional, and social health status due to their exposure to unusual and unhealthy conditions while residing in North Korea and during any interim periods of residency within third countries[4]. The South Korean government and several non-governmental organizations have provided financial, social, medical, and psycho-emotional support and resources to this population. However, these resources may not be comprehensive enough to assist in the promotion and maintenance of refugees' health while residing in South Korea. There remains a general lack of research and knowledge regarding the adverse risk factors and the extent to which these factors affect the ability of North Korean refugees to achieve a healthy standard of living in the South.

Thus, the purpose of this study was to examine social risk factors that affect the general health of North Korean refugees in South Korea, paying particular attention to social inclusion and the duration of residence in the South for two reasons: (1) these two variables are unique to North Korean refugees and are not applicable to South Koreans, which renders them useful in better understanding the specific needs of this population; and (2) these factors are known to be important predictors of refugee health within a host society[5, 6].

Methods

Study population

Survey data generated by the Korean Ministry of Unification was used in this study. The Korean Ministry of Unification surveyed 1,663 North Korean refugees in 2005 to examine the lives of this population and to craft policies accordingly[3]. This data set represented a sample of the population of 5,177 North Koreans who entered South Korea between January 1, 1997, and December 31, 2004, and were aged 13 years or older at the time of the interview. This population of 5,177 includes 90 % of all North Koreans who entered South Korea until December 31, 2004. Participants were selected according to gender, age, and region; the sample was 32.1 % of the full population. No information regarding personal identity was retained in the final data set used in this study. The survey was conducted by trained interviewers from July to September, 2005. This study is based on 1,111 respondents remaining after excluding cases with missing basic demographic information (325 cases), no responses to core questions (200 cases), and respondents aged 20 or less (27 cases).

Variables

Unfortunately, the survey was not rich in information regarding health. We employed self-rated health (SRH) status as a measure of global health. SRH has been used for North Korean refugees in previous studies[3, 7]. Respondents were asked the question, "What do you think about your present health status?" They chose a response from the following scale: excellent, very well, well, poor, and very poor. To assess the extent of this population's inclusion in South Korean society, the degree of familiarity with South Korean people was measured. Social inclusion is a multifaceted concept that can be measured at different levels and by different indices[8]. Although there has been no one strong definition, social inclusion could be defined as a social and physical life not excluded from the dignified resources such as an active labor market, quality health care, or integration in the networks of civic life[9]. Here, we focus on the interpersonal link with people in the host society because this is a way for this population to connect with resources in South Korean society. The survey question for familiarity was "What would you say about your relationship with South Korean people in general?" Possible responses were "very close and familiar, like family members," "friendly enough to ask for help when in need," "no more than simple greetings," and "barely have a relationship." Because the level of familiarity with South Koreans is embedded within these response categories, we renamed them, "very familiar," "familiar," "somewhat familiar," and "not familiar," respectively, to reflect the degree of familiarity. Duration of residence has often been used as a proxy variable for acculturation, which may affect the health of immigrant or refugee populations[10,11]. Duration of residence was measured in months using information drawn from the original questionnaire. As the history of North Korean refugees in South Korea is fairly short, their adaptation to South Korea may change year by year. Thus, we stratified respondents' residential duration in South Korea by number of years of residence.

Because defection from North Korea and flight into various third countries requires physical strength, this population is generally young. Accordingly, we used the following age classifications in this study: 20–25, 26–35, 36–45, and 46 or older. We used three socioeconomic indicators: self-evaluated living status in North Korea, educational attainment, and current family income. Living status in North Korea is an interesting variable because it may indicate a long-term effect of socioeconomic status on health even when there is a sharp disconnect between past (in the North) and present (in the South) socioeconomic status. To measure educational attainment, we collapsed educational experiences in the North and South together and used three categories: elementary or less, middle or high school, and college or higher. The North Korean educational system is not well-respected in South Korea, and academic degrees obtained in North Korea may not be accordingly treated in South Korean society. However, the

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Table 1. Descriptive statistics of self-rated health status by independent variables.

Variables	N (%)	%, poor SRH	Unadjusted OR for poorSRH (95 % CI)
Degree of familiarity			
(very familiar)	191 (17.2)	45.5	1
familiar	212 (19.1)	43.4	0.92 (0.62–1.36)
somewhat	534 (48.1)	50.7	1.23 (0.88–1.72)
not familiar	174 (15.7)	59.2	1.73** (1.14–2.63)
Duration of residence			
(61 or more months)	82 (7.4)	31.7	1
49–60 months	103 (9.3)	36.9	1.26 (0.68–2.33)
37–48 months	162 (14.6)	54.9	2.63** (1.50–4.59)
25–36 months	254 (22.9)	51.6	2.29** (1.36–3.88)
13–24 months	360 (32.4)	55.6	2.69** (1.62–4.48)
0–12 months	150 (13.5)	46.0	1.83* (1.04–3.23)
Living arrangement			
(Spouse)	423 (38.1)	48.0	1
Not-spouse, but family	296 (26.6)	52.0	1.18 (0.87–1.58)
Not-family or alone	392 (35.3)	50.0	1.08 (0.82–1.43)
Age			
(20–25)	151 (13.6)	36.4	1
26–35	377 (33.9)	41.6	1.25 (0.84–1.84)
36–45	338 (30.4)	55.0	2.14** (1.44–3.17)
46 or more years	245 (22.1)	63.3	3.01** (1.97–4.58)
Sex			
(Male)	425 (38.3)	43.5	1
Female	686 (61.7)	53.6	1.50** (1.18–1.92)
Living status in North Korea			
(High)	127 (11.4)	44.1	1
Middle	610 (54.9)	48.0	1.17 (0.80–1.72)
Low	374 (33.7)	54.5	1.52* (1.01–2.28)
Educational attainment			
(College or more)	393 (35.4)	44.5	1
Middle or high	676 (60.8)	51.8	1.34* (1.04–1.72)
Elementary or less	42 (3.8)	66.7	2.49* (1.27–4.88)
Income			
(Over 1M KRW)	201 (18.1)	38.3	1
0.76–1M KRW	217 (19.5)	48.8	1.54* (1.04–2.27)
0.51–0.75M KRW	195 (17.6)	55.4	2.00** (1.34–2.98)
0.5M KRW or less	268 (24.1)	54.5	1.93** (1.33–2.80)
Missing data	230 (20.7)	50.4	1.64* (1.12–2.41)
Previous traumatic experiences			
(No)	322 (29.0)	44.4	1
Yes	682 (61.4)	52.8	1.40* (1.07–1.83)
Missing data	107 (9.6)	46.7	1.10 (0.71–1.70)
Duration of residence in the routing countries			
(0–12 months)	344 (31.0)	44.8	1
13–24 months	90 (8.1)	51.1	1.29 (0.81–2.05)
25–36 months	104 (9.4)	47.1	1.10 (0.71–1.71)
37–48 months	147 (13.2)	51.0	1.29 (0.87–1.89)
49–60 months	178 (16.0)	51.7	1.32 (0.92–1.90)
61 or more months	248 (22.3)	55.2	1.52* (1.10–2.11)
Total N (%)	1,111 (100)	50.0	

* p <0.05; ** p <0.01; SRH: Self-rated health status; OR: Odds ratio; CI: Condidence interval; M; Million; KRW: Korean KRW

Table 2. Results of logistic regression on the North Korean refugees' self-rated health.

	Model 1		Model 2		Model 3		Model 4	
	OR	(95 % CI)	OR	(95 % CI)	OR	(95 % CI)	OR	(95 % CI)
Degree of familiarity (very familiar)								
familiar			0.97	(0.64–1.47)			0.96	(0.63–1.46)
somewhat			1.21	(0.85–1.72)			1.20	(0.84–1.71)
not familiar			1.70*	(1.09–2.64)			1.68*	(1.07–2.63)
Duration of residence (61 or more months)								
49–60 months					1.22	(0.67–2.33)	1.17	(0.61–2.24)
37–48 months					2.33**	(1.28–4.25)	2.32**	(1.27–4.25)
25–36 months					2.06*	(1.16–3.65)	2.04*	(1.15–3.62)
13–24 months					2.45**	(1.39–4.31)	2.29**	(1.30–4.04)
0–12 months					1.62	(0.86–3.05)	1.51	(0.80–2.85)
Living arrangement (Spouse)								
Not-spouse, but family	1.15	(0.83–1.60)	1.17	(0.84–1.62)	1.20	(0.86–1.67)	1.22	(0.87–1.70)
Not-family or alone	1.01	(0.74–1.38)	1.03	(0.75–1.42)	1.00	(0.72–1.37)	1.03	(0.74–1.43)
Age (20–25)								
26–35	1.16	(0.76–1.74)	1.18	(0.78–1.79)	1.24	(0.81–1.87)	1.26	(0.83–1.91)
36–45	2.29**	(1.51–3.48)	2.32**	(1.52–3.53)	2.41**	(1.58–3.68)	2.41**	(1.58–3.70)
46 or more years	3.15**	(2.01–4.93)	3.22**	(2.05–5.05)	3.45**	(2.19–5.44)	3.50**	(2.21–5.53)
Sex (Male)								
Female	1.47**	(1.13–1.92)	1.48**	(1.13–1.93)	1.41*	(1.08–1.84)	1.42*	(1.08–1.86)
Living status in North Korea (High)								
Middle	1.29	(0.86–1.93)	1.25	(0.83–1.88)	1.29	(0.85–1.95)	1.26	(0.83–1.91)
Low	1.44	(0.93–2.22)	1.37	(0.89–2.12)	1.42	(0.92–2.20)	1.37	(0.88–2.12)
Educational attainment (College or more)								
Middle or high school	1.36*	(1.03–1.78)	1.31	(0.99–1.72)	1.28	(0.96–1.69)	1.24	(0.94–1.65)
Elementary school or less	1.49	(0.73–3.06)	1.45	(0.71–2.98)	1.37	(0.66–2.84)	1.34	(0.65–2.79)
Income (Over 1M KRW)								
0.76–1M KRW	1.50*	(1.00–2.26)	1.5	(0.99–2.25)	1.45	(0.96–2.19)	1.45	(0.96–2.20)
0.51–0.75M KRW	1.85**	(1.21–2.84)	1.80**	(1.18–2.78)	1.76*	(1.14–2.71)	1.73*	(1.12–2.67)
0.5M KRW or less	1.99**	(1.32–2.99)	1.89**	(1.25–2.86)	1.91**	(1.26–2.89)	1.82**	(1.19–2.76)
Missing data	1.76**	(1.16–2.68)	1.70*	(1.12–2.65)	1.73*	(1.13–2.65)	1.68*	(1.09–2.57)
Previous traumatic experiences (No)								
Yes	1.35*	(1.02–1.79)	1.37*	(1.03–1.82)	1.33*	(1.00–1.77)	1.35*	(1.01–1.80)
Missing data	1.00	(0.63–1.58)	0.98	(0.62–1.56)	1.00	(0.62–1.59)	0.98	(0.61–1.57)
Duration of residence in the third countries (0–12 months)								
13–24 months	1.45	(0.89–2.37)	1.51	(0.92–2.48)	1.59	(0.96–2.63)	1.64	(0.98–2.72)
25–36 months	1.17	(0.74–1.86)	1.23	(0.77–1.95)	1.20	(0.74–1.94)	1.24	(0.77–2.01)
37–48 months	1.31	(0.87–1.98)	1.35	(0.89–2.03)	1.23	(0.81–1.88)	1.25	(0.82–1.91)
49–60 months	1.32	(0.90–1.93)	1.35	(0.92–1.99)	1.15	(0.77–1.71)	1.17	(0.78–1.74)
61 or more months	1.50*	(1.06–2.11)	1.51*	(1.06–2.13)	1.30	(0.91–1.85)	1.32	(0.92–1.89)
Intercept	0.11		0.10		0.06		0.06	
-2LL(d.f.)	1445.192 (21)		1437.281 (24)		1427.925 (26)		1420.473 (29)	

*p<0.05; **p<0.01; OR: Odds ratio; CI: Confidence interval; M: Million; KRW: Korean KRW;
-2LL: -2 log likelihood (degree of freedom); Reference categories in parenthesis

schooling systems of both countries are sufficiently comparable that refugees who have graduated from North Korean high schools can currently apply for admission to South Korean colleges and universities. Regarding living arrangements, we grouped responses into three categories: living with spouse, spouse absent but living with family members, and no family members present or living alone. One's living arrangement may be closely related to the social inclusion process for this

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population, because having a South Korean spouse may expand the scope and accelerate the speed of inclusion. Unfortunately, no information on the timing of marriage to the current spouse was available. We also included previous traumatic experiences (either in North Korea or in a third country before entering South Korea) and duration of flight in our analysis. A recent study[7] reported that these variables were important in determining the self-rated health of North Koreans who had just entered the South and been under a two-month long custody at *Hanawon*, a governmental shelter facility where they are provided with resettlement training programs.

Analysis

To identify correlates of self-rated health status, we conducted multivariate logistic regression analyses. For the dependant variable, we combined the three SRH responses (excellent, very well, well) to denote good health and the remaining two (poor, very poor) to denote poor health. The predictor variables of interest, social inclusion and the duration of residence, were included step-by-step to assess the model's fitness. The model's fitness was examined by comparing the log likelihood. The analysis was conducted using SPSS (v. 12.0).

Results

Table 1 shows the unadjusted relationships between self-rated health status and control variables. Exactly half of North Korean refugee respondents rated their own health as poor. Refugees whose familiarity with South Koreans was low showed a higher proportion of poor SRH ratings. Regarding the duration of residence in the South, refugees' SRH became worse as the duration of their stay reached about four years, but improved noticeably thereafter. Living arrangement did not vary in relationship to poor health ratings. Older age and being female significantly increased the probability of poor SRH. Note that living status reflected the previous socioeconomic status before leaving North Korea. Traumatic experiences in North Korea or during flight and the duration of flight in third countries were also associated with higher proportions of poor SRH.

Multivariate logistic regression analyses results, in the form of odds ratios, are shown in Table 2. There are four models. Model 1 included control variables only to show multivariate relationships between these variables and SRH. Models 2 and 3 added the variables of particular interest, degree of familiarity with South Koreans and residential duration in South Korea, to the model 1 controls. Model 4 is a full model, including all of the aforementioned variables. After comparing each model's log likelihood, we could say that model 4 was the best-fitting model. According to model 4, the adjusted relationships between the control variables and SRH were not very different from those of the descriptive analyses, although some became statistically insignificant. Further, refugees whose level of familiarity was the lowest were at a significantly increased risk of poor SRH compared with those with a high level of familiarity, and refugees who had lived in the South for 2–4 years were significantly more likely to assess their own health as poor than were their counterparts with a longer residential duration.

Discussion

While the number of North Korean refugees in South Korea has increased markedly in recent years, the health of this population has been understudied. The current study sought to uncover which and to what extent social and cultural risk factors adversely affect health outcomes in this population. Because these people are immigrants and socially isolated, we paid particular attention to the roles of social inclusion in the South and residential duration in determining the overall level of their health. Among the numerous findings, three are particularly worthy of further discussion.

First, our descriptive and multivariate analyses results show that the level of relationship with South Koreans is substantially and significantly associated with the global health status of North Korean refugees. We conceptualized the degree of familiarity with South Koreans as a proxy measure for social inclusion in terms of interpersonal relationships. The fact that a North Korean refugee feels familiar with South Koreans indicates that this person is included in the host society and has at least some sources of social support in South Korea[12]. We considered only an individual- level indicator, although there are several dimensions of social inclusion: individual, community, and national levels[9]. The reason for this was that it was hard to find proper indicators that represented community-level social inclusion because there was a small population size of North Korean refugees and because the data set employed here did not include information regarding residence because of confidentiality concerns. It is well recognized from a number of previous studies that social inclusion (particularly interpersonal relationships) is an important predictor of both mental and physical health [13,14]. For refugees or asylum seekers who are already isolated from their host society by citizenship, legal status, or economic resources, making on-going friendships, links, or frequent contacts with people in the host society is a key to maintaining and fostering mental health and health service utilization[13, 15].

Ostensibly, North Korean refugees are institutionally and emotionally isolated in South Korea. As noted earlier, support provisions from the South Korean government have not been sufficient to actually help this population adapt to South Korean society because of the political relationship with the North. The South Korean government has crafted and implemented a "Sunshine Policy" as the major policy and focus towards North Korea for over a decade, a policy which emphasizes peaceful cooperation and short-term reconciliation as a prelude to eventual reunification[16]. Due to this doctrine, the South Korean government must remain cautious and limit their support for those defecting from North Korea in an effort to prevent any retaliation by the North Korean government. This caution has contributed to the institutional isolation of North Korean refugees in the South. Although North Korean refugees speak Korean and look the same as South Koreans, over 50 years of disconnection has created a culture, a value system, and an accent that clearly distinguish North from South Koreans. Because the number of North Korean refugees is not yet large enough to draw special attention, there has been no reported systematic discrimination against this population in the South. However, it has been reported that South Koreans consider North Korean refugees as "others," with a stereotypical impression of them as conservative, competitive, defiant, and egotistical, which has increased the emotional alienation of North Korean refugees[17]. It is obvious that the process of naming or marking a group of people as being different from the majority of the population, the so-called "othering" phenomenon[18], is a process of marginalization, disempowerment, and social exclusion, and a critical risk to refugee health[5, 19]. Our results empirically show that the feeling of social inclusion through interpersonal relationships with South Koreans is positively associated with better self reported health among North Korean refugees. A meta-analytic study indicated that greater intergroup contact was generally associated with lower levels of prejudice[20]. Our results suggest the need for a policy direction that promotes and supports systematic, frequent, and extensive contacts between this population and South Koreans, particularly if more resources cannot be allocated through institutional support programs.

Second, we found that SRH lowered as the duration of residence in the South reached 2–4 years, but substantially recovered thereafter. North Korean refugees may have somewhat better health just after they enter the South because of the expectation and hope of a new society and opportunities therein, a phenomenon also known as the "honeymoon period"[21]. Further, there is a self-selection mechanism in play that favors healthy refugees, given the arduous migrant journey that requires crossing the borders of at least two different countries (North Korea to a third country and then into South Korea). However, when the bulk of the adaptation period (second to fourth years) in the South occurs, these people may encounter feelings of hopelessness and lower their expectations due to the lack of resources and because of cultural barriers. This process may reduce physical and emotional health, culminating in poor SRH. When these refugees overcome the adaptation period and become more adjusted to South Korean social and economic systems, culture, and norms, their health seems to recover, although this does not mean that their health is as good as that of the average South Korean. This result supports a recent perspective on the relationship between the adaptation or acculturation process and the health of migrant populations, which is multidirectional and structural[22]. In fact, we believe that it is probable that this adaptation process and social inclusion are interrelated and that an interaction effect should be considered in refugee health research. Despite such a belief, the interaction between the degree of familiarity with South Koreans and residential duration was not included in our final model because our preliminary research did not show a significant or substantial interaction effect.

Finally, health disparities related to the socioeconomic status of the North Korean refugees were substantial. Although the statistical significance of the effects of living status in North Korea and educational attainment disappeared when other covariates were included, the gradient of health by socioeconomic status remained clear. Indeed, the odds ratios and confidence intervals of these variables indicated that they would likely be statistically significant (and remain substantively important) if the sample size were bigger. Also of interest is the effect of living status in North Korea. Defecting from North Korea and seeking asylum in South Korea may mean complete disconnection from one's former social status, given the political and military relationship of the two nations. At least two explanations are possible. First, refugees may possess invisible or hidden connections/signifiers to socioeconomic resources enjoyed in North Korea while being residents of South Korea. Second, the influence of socioeconomic status on health is a lifelong process, in that earlier socioeconomic status may have lasting health impacts in later years, as the general life course perspective on health suggests.

Although this research focused on social inclusion and residential duration as determinants of North Korean refugees' health status, the importance of socioeconomic structural factors should not be ignored. For example, the average family income of this population in 2005 was 0.89 million Korean KRW, markedly lower than that of South Koreans in the same year, 2.92 million Korean KRW[23]. In Table 1, half of the respondents rated their own health to be poor. Although SRH is subject to culturally imbedded perceptions of health[24,25] that often make it difficult to compare this health measure across

populations not sharing a common culture, the proportion of refugees reporting poor SRH (50 %) is still very high when compared with 15 % found in a national survey of South Koreans in the same year[26]. A recent study reported that economic deprivation was the major factor eroding community relations and giving diversity a negative connotation[27]. Thus, the socioeconomic structural conditions that this population experience in South Korea may be a precondition in determining their health status.

This study has several limitations. First, because the data set employed in this research was cross-sectional, we do not know the time sequence of important and salient events. For instance, it is possible that some subjects entered South Korea with serious mental or physical conditions that may stymie the social inclusion process. Second, due to data limitations, we were only able to employ a single health measure in this study. Although SRH is known to be a useful measure of global health and has been used for North Korean refugees previously, we do not know which aspects of health SRH most reflects. It is also possible that the perspective on general health may be different in North Korea. However, because the relationships between socioeconomic characteristics and poor SRH were consistent with general expectations, the analysis of the North Korean refugees' population would likely not result in a major error. Third, because of data limitations, we were not able to analyze other very important variables in refugee health research, such as stress and social support. These variables would make the findings of this research more robust. Fourth, the main variables of this study, SRH and the degree of familiarity, are subjective. Thus, these data are more suggestive than conclusive. Finally, again because of data limitations, we used an individually measured variable of social inclusion, although social inclusion is commonly considered a contextual variable. Despite these and other limitations, we believe the current research provides meaningful and contributory information on the health of North Korean refugees. We expect the number of North Koreans crossing the border to seek asylum in South Korea will continue to increase. Although their legal status has not yet been fully resolved because of the political relationship between the two Koreas, it is clear from this study that much of this population suffers from poor health status. Thus, more governmental and academic attention should be paid to the health of this population, and in particular to those with a lower level of social inclusion and those who are and continue to be socioeconomically disadvantaged. Societal efforts are also necessary to foster the structural conditions that actually improve the extent of social inclusion and socioeconomic status of this population.

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