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ORIGINAL ARTICLE

Socioeconomic status, social support and self-rated health among lone mothers in South Korea

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Abstract
Objectives This study examined the association of socioeconomic status and social support with the differences in self-rated health between lone and partnered mothers in South Korea.
Method Data came from women living with their children in the baseline survey of Korean Longitudinal Survey of Women and Family ($N = 6{,}370$) that yielded a very high response rate (95.8%).
Results Compared to partnered mothers, lone mothers had a significantly higher risk of poor/fair health after adjusting for mediating factors (living natural parent, emotional support from siblings, social activities, educational attainment, equivalized household income, and subjective economic status). When all factors were individually included in the base model, each factor contributed to this difference. Subjective economic status explained 28.0% of the excess risk of poor/fair health among women in the lone compared to the partnered status. All factors combined accounted for 41.4% of the excess risk among lone mothers.
Conclusions The findings clearly indicate that lone mothers have poorer self-rated health than partnered mothers do, but this detrimental effect cannot be entirely explained by the socioeconomic and social support-mediating factors.

Keywords Self-rated health · Lone mothers · Socioeconomic status · Social support

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Introduction

With the rapid change in social structure in South Korea, the structure and function of the family have undergone tremendous changes. The number of South Korean mothers who are not only widowed but also divorced or separated has increased, particularly since the economic crisis; single-mother families constituted 6.1% of all families in 1995, 6.3% in 2000, and 6.8% in 2005 (Korea National Statistical Office 2005). Moreover, most of them are living in poverty (Choi et al. 2007). However, high barriers to labor force participation for those women who have children—such as occurs in South Korea—is often pointed out as an important factor that worsens the lone mother's socioeconomic condition (Lee 2004). In addition, lone mothers are often faced with low income even though they are engaged in paid work (Lee 2004; Ok et al. 2001) because the wage gap between men and women in South Korea, where women only earn 62% of what men earn, is still the highest among the members of the Organization for Economic Cooperation and Development (OECD 2005) countries. This phenomenon might be attributable to South Korea's traditional Confucian culture, patriarchy and strict division of gender roles. During the decade after the economic crisis, the family support program has improved in

South Korea. However, the target beneficiaries for the program are still limited to single-parent family, which net income is below 120% of the poverty level (Ministry of Gender Equity and Family 2008). Furthermore, in South Korea, the proportion of expenditure for family support among total national expenditure is only 0.9% in 2008, which is much lower than the average of OECD countries (OECD 2008).

Lone mothers have greater physical and mental health problems than do partnered mothers, and researchers have also noted that the health disparity between lone and partnered mothers can be largely attributed to differences in socioeconomic status (Benzeval 1998; Fritzell and Burström 2006; Lipman et al. 1997; Neises and Grüneberg 2005; Wang 2004; Westin and Westerling 2006). For example, lone mothers are not only less educated than are partnered mothers, but also less likely to be employed; furthermore, they are less likely to be of medium or high household economic status, as measured by both objective and subjective criteria, which may lead to poor health. However, the fact that the greater vulnerability to health is greater in lone mothers than in partnered mothers cannot be fully explained by socioeconomic status and is not always true for all countries, because macro social factors may function as mediators between parenting status and health (Curtis 2001; Graham 1994). For example, a comparative study of Canada and Norway demonstrated that lone mothers had lower health status than did partnered mothers in Canada, but not in Norway, where they received more generous social benefits, such as social assistance, social services, and childcare (Curtis and Phipp 2004). Furthermore, social support theory has been often used as an important tool in understanding why health disparity continues to persist in vulnerable populations (Crosier et al. 2007). The theory predicts that as economic autonomy increases through social supports for lone mothers, the health disparity between lone and partnered mothers will decrease. If this is true, we may expect lone mothers with higher levels of social support and socioeconomic status to be lower levels of poor health status.

Although these socioeconomic status and social support factors are important to lone mothers' health, we do not yet know how or to what extent these factors contribute to the health disparity between lone and partnered mothers. Few studies have examined and compared the explained fraction of socioeconomic status and social support as mediating factors for the health disparity between lone and partnered mothers. Moreover, these previous studies were mostly conducted in Western societies. Given strong Confucian patriarchal norms of South Korea, remarriage after divorce or widowed has been less generous for women than for men, indicating that chastity is a virtue for Korean lone mothers, even though remarriage can be an important way of building better socioeconomic status and social support (Ko et al. 2003; Kim and Han 1996). Therefore, Korean lone mothers may be more likely than Korean partnered mothers to suffer from the unfavorable conditions in both socioeconomic disadvantage and poor social support.

This study had two objectives: to assess the difference in health between lone and partnered mothers in South Korea, and to examine the extent to which socioeconomic status and social support account for the relationship between lone motherhood and health. This study would be expected to conclude which factors primarily drive health disparity between lone mothers and partnered mothers in South Korean context.

Methods

Data and participants

Data were derived from the 2007 Korean Longitudinal Survey of Women and Family (KLoWF) conducted by the Korean Women's Development Institute and officially approved by the Korea National Statistical Office (KNSO Certificate Number: 33801). The KLoWF was a cross-sectional and nationally representative study that used a stratified multistage sampling design to survey 9,084 households in all urban and rural areas of Korea, excluding Jeju and the other islands. A total of 10,013 adult women aged 19–64 participated in the survey (response rate = 95.8%). After obtaining informed consent, trained interviewers made house-to-house visits and conducted face-to-face interviews with participants using computer-assisted personal interview (CAPI) from 1 September 2007 to 21 February 2008. Further details of the survey design and methods have been given elsewhere (Park et al. 2008).

Of the total sample of women, those who were unmarried and either <19 or ≥65 years of age and who had no child aged <20 years at the time of the interview were excluded from the analysis because motherhood without marrying is very rare in South Korea. Of the remaining study population, those who had missing data on important questions, such as self-rated health, parenting status, social support, and demographic/socioeconomic characteristics, were omitted from the analysis. Consequently, information from 6,370 mothers (mean age 42.0 years ± 9.1) with one or more children was available for analysis.

Measures

We used self-rated health as a dependent variable for assessing participants' state of global health using a five-point scale ranging from "very good" to "very poor." No

consensus exists as to whether self-rated health should be dichotomized, or whether the "fair (neither good nor bad health)" category should be regarded as "good health" when creating a dichotomous variable. However, in the present study, the self-rated health responses were classified into a dummy variable in which "good" health included "very good" and "good" responses, and "poor/fair" health included all other responses. This made possible direct comparisons with prior studies that employed the same analysis used here (Bassani 2008; Benzeval 1998; Westin and Westerling 2006).

As a past study suggested (Crosier et al. 2007), parenting status, a main independent variable in this study, was divided into lone and partnered mothers with one or more children younger than 20 years of age living at home. Women who were not living with their partners, such as those separated, divorced, or widowed, were defined as lone mothers ($N = 496$), and those who were living with their partners were classified as partnered mothers ($N = 5{,}874$).

In this study, the three variables "living natural parent," "emotional support from sibling(s)," and "social activities" were considered to represent social support. The living natural parent variable was classified into three categories: both natural parents alive, either father or mother alive, and neither father nor mother alive. Participants were also asked to indicate on a 4-point scale how often they had an open conversation about their concerns and/or worries with their sibling(s): never, hardly ever, sometimes, or often. To create dichotomous variables, "often" and "sometimes" were merged into "Yes (emotional support)," and the other responses were combined into "No (non-emotional support)." In addition to these two response categories, the "no siblings" category was taken into account in the analysis. Furthermore, participants were asked to describe how often they had participated in the following five social activities during the past 30 days: hobbies and leisure activity, learning and self-developmental activity in a cultural center, friendship activity, local community volunteer activity, and religious activity using a 6-point scale (always, two to three times a week, once a week, two to three times a month, once a month, and never). The responses for each activity were dichotomized into "Yes" if they had done so at least once a month and "No" if they had never engaged in the activity. A "Yes" answer was counted as "one activity participation," and the total counts ranged from zero to five activities. The answers were then dichotomized into either low participation (zero to two activities) or high participation (three to five activities).

Educational attainment was classified as middle school or less, high school graduate, and college or more. In this study, we used equivalized household income, which is highly correlated with health (Rahkonen et al. 2000). Equivalized household income (total household income divided by the square root of the number of household members) was calculated and divided into tertiles to detect a nonlinear relationship. We also included a category for missing values to offset the reduction in cases due to missing data on household income (9.5%). Participants were also asked to assess their subjective economic status, which reflects how stressful the current economic condition is, using a 5-point scale: very rich, rich, neither rich nor poor, poor, and very poor. To avoid the possible problem of multicollinearity with equivalized household income, we created a trichotomous category for subjective economic status: rich, neither rich nor poor, and poor.

Age (19–39, 40–49, and 50–64) and number of children (1, 2, and $\geq$3 children) were included as covariates. The proportion of women who became lone mothers at a young age was relatively small (0.1%) due to the delay in marriage among young adults. Thus, we combined lone mothers in their 20 s with those in their 30 s. In addition, employment status (employed or unemployed) was considered an important covariate in this study, even though it was not significantly associated with fair/poor health.

Statistical analysis

We descriptively examined the different percentage distributions of the variables of interest between lone and partnered mothers, and then calculated the differences in poor/fair health between the two populations according to each variable (i.e., age, number of children, employment status, living natural parent, emotional support from siblings, social activities, educational attainment, equivalized household income, and subjective economic status) using chi-square tests. We also analyzed whether there was any relative difference in the risk of poor/fair health for lone mothers compared to partnered mothers according to social support and socioeconomic status. Furthermore, the explained fraction (XF) estimated the proportion of the excess risk of poor/fair health explained by each variable, except for age, number of children, and employment status used as control variables in the analyses. The XF was calculated from the odds ratios among lone mothers, with partnered mothers as reference group, before adjustment (OR) and after adjustment for potential mediating factors (OR*) using the following formula: $XF = ((OR - 1) - (OR^* - 1))/(OR - 1)$. All analyses were performed using SAS statistical software, version 9.1.

Results

Table 1 shows the descriptive differences in poor/fair self-rated health (right-hand panel), as well as the percentage

Table 1 Percentage distributions of Korean women aged 19–64 who are either lone mothers ($N = 496$) or couple mothers ($N = 5{,}874$) having one or more children under age 20, reporting 'poor/fair' self-reported health by demographic and socioeconomic characteristics and social support

	Parenting status				Self-reported health as 'poor/fair'		
	Lone mothers		Couple mothers		Lone mothers (%)	Couple mothers (%)	All (%)
	%	*N*	%	*N*			
Age							
19–39	17.5	87	48.0	2,819	43.8*	18.2	19.0
40–49	31.7	157	33.0	1,938	50.3*	28.8	60.5
50–64	50.8	252	19.0	1,117	71.4*	55.0	58.0
p value							**
Number of children							
One child	19.6	97	17.4	1,020	50.5*	20.8	23.4
Two children	38.1	189	57.1	3,351	55.0*	25.6	27.2
>Three children	42.3	210	25.5	1,503	69.1*	41.0	44.4
p value							**
Employment status							
Employed	56.7	281	37.2	2,185	69.6*	30.4	33.0
Unemployed	43.3	215	62.8	3,689	69.3*	27.7	30.0
p value							**
Living natural parent alive							
Both parents alive	21.0	104	44.6	2,620	51.0*	20.3	21.5
Either a father or a mother alive	36.5	181	35.7	2,097	71.4*	28.5	30.5
Neither a father nor a mother alive	42.5	211	19.7	1,157	70.1*	48.1	51.5
p value							**
Emotional support from sibling(s)							
Yes	70.8	351	85.0	4,995	72.7*	27.4	29.3
No	26.6	132	13.5	793	68.9*	36.8	41.4
No siblings	2.6	13	1.5	86	69.2*	33.7	39.4
p value							**
Social activity							
High participation	14.3	71	26.1	1,534	47.9*	25.9	26.9
Low participation	85.7	425	73.9	4,340	62.1*	29.7	32.6
p value							**
Educational attainment							
College graduate or more	30.2	150	54.1	3,178	48.7*	22.0	23.2
High school graduate	38.3	190	34.9	2,048	55.3*	28.6	30.8
Middle school or less	31.5	156	11.0	648	76.9*	62.4	65.2
p value							**
Equivalized household income							
Q3 (high)	9.1	45	25.1	1,475	55.6*	25.4	26.3
Q2 (middle)	25.4	126	50.7	2,981	45.2*	23.9	24.8
Q1 (low)	39.7	197	17.3	1,014	65.5*	42.7	46.4
Missing	25.8	128	6.9	404	68.0*	41.1	47.6
p value							**
Subjective economic status							
Rich	4.2	21	11.3	663	33.3	23.7	24.0
Neither rich nor poor	28.6	142	52.8	3,104	54.9*	23.8	25.2
Poor	67.2	333	35.9	2,107	64.0*	37.5	41.2
p value							**
% and N	7.8	496	92.2	5,874	60.1*	28.7	31.2

* $p < 0.01$ for difference between single and partnered mothers

** $p < 0.01$ for difference among different levels of each variable

distributions of variables of interest for each parenting status (left-hand panel). Nearly 8.0% of the participants were lone mothers living with one or more children under age 20. Compared to the partnered mothers, lone mothers reported significantly lower levels of educational attainment, equivalized household income, and subjective economic status. Even the number of those who did not give information on household income ('missing' category) more appeared in lone mothers than in partnered mothers. Indeed, lone mothers also appeared less likely than did partnered mothers to have both parents alive, to have emotional support from their sibling(s), and to participate in social activities.

Regarding global health, shown in the right-hand panel of Table 1, 31.2% of the participants assessed their own health as poor or fair. As expected, lone mothers (60.1%) were at considerably higher risk of poor/fair self-rated health than were partnered mothers (28.7%) ($p < 0.01$). In particular, significant differences were found between lone and partnered mothers in the descriptively examined poor/fair self-rating of health with the same levels of social support and socioeconomic status. That is, in all categories of the variables of interest, lone mothers were more likely to assess their global health as poor or fair than were their partnered counterparts. Meanwhile, being older, living with three or more children, having low education, having low equivalized household income and subjective economic status, having lost both parents, not having emotional support from one's sibling(s), and participating less in social activities were significantly correlated with an elevated risk of poor/fair health among South Korean adult women ($p < 0.01$).

Table 2 presents the results of the multivariate logistic regression analysis, as odds ratios (ORs) and 95% confidence intervals (CIs), assessing the association between lone motherhood and poor/fair health, along with the compounding and mediating factors. Model 1 contained parenting status and compounding factors (age, number of children, and employment status) only as a baseline model. As shown in the descriptive analysis, parenting status was significantly associated with poor/fair health, i.e., lone mothers were at much higher risk of a poor/fair self-rating of health than were their partnered counterparts (OR = 2.57, 95% CI = 2.10–3.15). The magnitude of the association between lone mothers and poor/fair health decreased slightly but remained significant in Model 2, which included living natural parent (OR = 2.52, 95% CI = 2.05–3.09). Living natural parent was also independently associated with poor/fair health. From the results of this model, living natural parent accounted for 3.18% of the difference between lone and partnered mothers in the prevalence of poor/fair health. In Models 3 and 4, the odds ratio (OR = 2.48, 95% CI = 2.02–3.04 in Model 3; OR = 2.52, 95% CI = 2.05–3.08 in Model 4) for the association between parenting status and self-rated health was also slightly mitigated when emotional support from sibling(s) (5.73% in Model 3) and social activities (3.18% in Model 4) were included in Model 1; the two variables were also independently associated with poor/fair health. Models 5 through 7 successively added each of the three socioeconomic status to Model 1; educational attainment, equivalized household income, and subjective economic status accounted for 2.55, 21.66, and 28.03%, respectively. The odds ratios for these variables in each model were all statistically significant and greater than unity, indicating that socioeconomic disadvantage increased the risk of poor/fair health among South Korean women. In Models 2 through 7, all variables of social support and socioeconomic status, especially subjective economic status, functioned as partial mediators between lone mothers and poor/fair health. In particular, the odds ratio for lone mothers in relation to poor/fair health decreased considerably, from 2.57 to 1.92, when all the variables were simultaneously included in Model 8, with the exception of the non-significant role of social activities and equivalized household income. These variables thus accounted for 41.4% of the association between lone mothers and poor/fair health. However, both social support and socioeconomic status were not found to moderate significantly the effect of parenting status on poor/fair health (results not shown).

Discussion

This study shows that lone mothers had a higher level of poor/fair health than did partnered mothers, and the strong association between lone motherhood and poor/fair health was attenuated when social support and socioeconomic factors were included in the models, in agreement with previous studies based on Western countries (Benzeval 1998; Curtis 2001; Fritzell and Burström 2006; Fritzell et al. 2007; Reeves et al. 1994; Westin and Westerling 2006, 2007; Young et al. 2005). Of interest is that the magnitude of the odds ratio (1.9) in the present study was more than that (approximately 1.5) in most previous studies. Although it is hard to tell that Korean lone mothers are more likely than Western lone mothers to have poor health by simply comparing the different odds ratios between them, the following explanations should be carefully considered to understand the difference in poor self-rated health between Korean and Western lone mothers. The reference point to define self-rated health as "fair/poor" is different in different cultural environments, even though it is an excellent predictor of mortality and morbidity in all individuals (Braun 2007). In addition, Family

Table 2 Explained fraction (XF) of the social support and socioeconomic status in odds ratios (95% confidence intervals) of poor/fair health for lone and couple mothers in Korea

	Model 1 OR (95% CI)	Model 2 OR (95% CI)	Model 3 OR (95% CI)	Model 4 OR (95% CI)	Model 5 OR (95% CI)	Model 6 OR (95% CI)	Model 7 OR (95% CI)	Model 8 OR (95% CI)
Parenting status (couple mothers)								
Lone mothers	2.57** (2.10–3.15)	2.52** (2.05–3.09)	2.48** (2.02–3.04)	2.52** (2.05–3.08)	2.53** (2.06–3.11)	2.23** (1.81–2.74)	2.13** (1.74–2.62)	1.92** (1.55–2.37)
Living natural parent (both natural parents alive)								
Either father or mother alive		1.15* (1.01–1.33)						1.12 (0.97–1.29)
Neither father nor mother alive		1.63** (1.37–1.94)						1.47** (1.22–1.77)
Emotional support from sibling(s) (yes)								
No			1.40** (1.20–1.64)					1.24** (1.06–1.46)
No siblings			1.46 (0.94–2.26)					1.29 (0.82–2.01)
Social activities (high participation)								
Low participation				1.26** (1.10–1.44)				1.07 (0.93–1.23)
Educational attainment (college graduate or more)								
High school graduate					1.20** (1.06–1.36)			1.04 (0.91–1.19)
Middle school or less					2.71** (2.17–3.39)			2.09** (1.65–2.64)
Equivalized household income[a] (Q3, high)								
Q2 (middle)						0.95 (0.82–1.10)		0.86 (0.73–1.00)
Q1 (low)						1.58** (1.32–1.89)		1.14 (0.93–1.40)
Missing						1.49** (1.19–1.87)		1.18 (0.93–1.50)
Subjective economic status (rich)								
Neither rich nor poor							1.02 (0.84–1.25)	1.01 (0.81–1.23)
Poor							1.97** (1.61–2.42)	1.79** (1.44–2.22)
XF[b]		3.18	5.73	3.18	2.55	21.66	28.03	41.40

Model 1 is adjusted for age, number of children, and employment status; Model 2 is adjusted for model 1 and nature parent alive; Model 3 is adjusted for model 1 and emotional support from sibling(s); Model 4 is adjusted for model 1 and social activities; Model 5 is adjusted for educational attainment; Model 6 is adjusted for equivalized household income; Model 7 is adjusted for subjective economic status; and Model 8 is adjusted for all variables

[a] Monthly household income was divided by the square root of the number of household members and equivalized household income was calculated into tertiles; each reference category is in a parenthesis

[b] Explained fraction (XF) of the social support and socioeconomic status differential in odds ratio of 'poor/fair' health for lone and couple mothers was calculated by $((OR_{model\ 1} - 1) - (OR_{model\ 2,3,4,5,6,7,\ 8} - 1))/(OR_{model\ 1} - 1)$

* $p < 0.05$; ** $p < 0.01$

Policy Package that supports mother-headed families is differently operated in different countries (Curtis and Phipp 2004). Regarding this package, in Western countries, it is not only extensive, covering three domains, namely home, work, and school, but also costs between 2 and 5% of the GDP (Kamerman et al. 2003). In contrast, in South Korea, the package does not cover a broad range of needs in these three spheres, and remains limited to those whose net income is lower than 120% of the poverty level among lone mothers (Ministry of Gender Equity and Family 2008). Meanwhile, the harmful consequences of lone motherhood in South Korea might be linked to social stigma and to social policies that favor male breadwinners (Kim 2005; UNRISD 2009). Like China and Japan, South Korea has been deeply infused with Confucianism, which holds to a high ideal of distinct gender roles (men as decision makers, breadwinners and protectors; women as supporters and caretakers), and it is still maintained and embraced in South Korean society, even though many changes have occurred due to economic development (Jung 2003). Given the strong ideal of Confucianism, lone mothers find it much more difficult than do partnered mothers to raise their children, and as a result, they are, to some extent, forced to become breadwinners, which imposes another burden and may lead to poor health (Jung 2003; Kim 2005).

Our result also reports what causes mainly the health disparity between lone and partnered mothers. Low socioeconomic status and poor social support accounted for 41.4% of the difference in self-rated health between lone and partnered mothers. In particular, poor subjective evaluation of one's economic condition explained a considerable proportion (28.03%) of poor/fair health for lone mothers compared to partnered mothers; indeed, it was a better predictor than was the objective assessment of poor economic condition (21.66%). This finding is congruent with traditional wisdom, which holds that economic strain and financial stress, assessed by a subjective measure, function to a great extent as mediators in the association between lone mothers and poor/fair health, relative to such other characteristics as objective household income and social support (Fritzell and Burström 2006; Singh-Manoux et al. 2005; Westin and Westerling 2007). From the findings of this study, it appears that subjective socioeconomic status may be an important factor in health status and may largely account for the association between mothers' marital status and self-rated health because lone mothers' assessment of their own socioeconomic status may allow them to explain their unique situations, which reflect their current socioeconomic strain along with future prospects (Singh-Manoux et al. 2005).

Compared to partnered mothers, lone mothers had lower levels of education and household incomes, perceived their economic status to be poor, and were less likely to have both natural parents alive, to have emotional support from their sibling(s), and to participate in social activities. Such phenomena, which the present study found in South Korea, are in line with previous studies in Western countries (Benzeval 1998; Neises and Grüneberg 2005; Westin and Westerling 2006, 2007; Young et al. 2005), suggesting that lone mothers seem to be more vulnerable to socioeconomic disadvantages and poor social support than are their partnered counterparts.

Of interest is whether having both natural parents alive is not only significantly associated with an elevated risk of poor/fair health, but also partially mediates the association. Before explaining the direct and indirect mediating effects of this variable, it is important to examine the different social relationships between married women and their mother-in-law and their mother in South Korean society. Married women provide emotional, economic, and instrumental support to their mothers-in-law, whereas they receive such support from their natural mothers (Kim and Yoo 1994). This suggests that the mothers of married women are major providers of social resources for them. Notably, such parental support, especially instrumental support, is positively related to better self-acceptance and lower levels of depression after becoming single (Park and Han 2006). Although these types of supports were not taken into account in this study, and living parents are not always an unequivocally positive influence, we believe that the existence of parent(s), especially when a lone mother has no one else, may be a powerful but hidden factor, regardless of the parent's age and illness. In this study, having parents still alive thus functioned as a mediator between lone mothers and health, albeit one that has not yet been fully explained.

In the present study, in addition to the mediating effect, we also tried to determine whether social support and socioeconomic status buffer the association between parenting status and self-rated health, but we did not find any moderating effects. From the result of a strong association between social support and self-rated health, and between socioeconomic status and self-rated health, we believe that social support and socioeconomic status may be better characterized as mediators than moderators. However, it is difficult to confirm this result because they may be possibly different according to which variables related to social support and socioeconomic characteristics researchers use and to how researchers code them to analyze.

This study has several limitations. First, self-reported information was utilized to calculate global (or general) health. Although a number of studies have reported that this measure is not only a valid measure of mental and physical health status, but is also highly correlated with future morbidity and mortality in various demographic and social contexts (Westin and Westerling 2007),

reporting and recall biases may have occurred. Second, we did not include several important variables associated with poorer health, such as unhealthy behaviors (e.g., smoking tobacco, drinking alcohol, irregular exercise/eating habits, and taking pain-killers/psychotropic drugs), body mass index, physical/mental problems, and low social capital, because these factors were not available for assessment (Curtis 2001; Wang 2004; Westin and Westerling 2007; Young et al. 2005). Neises and Grüneberg (2005) performed a structured literature review across the European Union and reported that lone mothers suffer more frequently from these risk behaviors and problems. Therefore, the findings of this study cannot be interpreted directly in terms of the association between lone mothers and 'poor/fair' health. Third, the KLoWF asked participants about their most recent marital status, but not about any previous marital status. Thus, those who had remarried were grouped as partnered mothers, and consequently, the KLoWF cannot clarify the net health difference between lone and partnered mothers. Indeed, in this study, we paid attention to only one side of the meaning of becoming a lone mother, although this may be either a good or a bad experience. Previous studies have reported that, even if some women have few resources after divorce or separation, lone parenthood gives them independence in their finances and lives, self-esteem, and confidence (Choi et al. 2007; Graham 1994; Shaw 1991). Curtis (2001) pointed out that lone mothers' global health may be better than that of partnered mothers because, in some cases, lone mothers who are divorced or separated have escaped from abusive relationships with their partners. On the other hand, Lorenz et al. (2006) reported that divorced women seem to be lower levels of physical and mental health. Using information regarding the different meanings of life after divorce, further research should be needed to better understand about these different health effects of divorce as a life-event. Finally, the drawing of inferences about (even reverse) causal pathways between low socioeconomic status and poor social support and 'poor/fair' health among adult South Korean women is difficult due to the cross-sectional nature of the data. To identify the underlying causal mechanisms, future research should consider the construction of longitudinal data sets that would be useful in preparing public health policies for this population.

Despite these and other limitations, the major strength of this study is our use of a nationally representative sample, which may enable the generalization of our findings to the actual population of South Korean lone and partnered mothers. Moreover, to our knowledge, this study is the first to confirm the health disparity between lone and partnered mothers, which may, to a great extent, be attributed to the uneven distribution of socioeconomic resources and social support in Asian countries. In particular, this study underscores that both the objective and subjective evaluation of the current economic condition are important in the development of 'poor/fair' health. In view of the increasing trend for South Korean lone mothers to live in poverty, the global health of this population may remain poor, and this in turn may promote adverse physical and mental health in their children. Therefore, effective public health policies that target lone mothers living in poverty, such as economic management interventions, should be developed to reduce the potential risk of poor health for these women and their children.

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