Local and regional politicians' considerations of newly arrived migrants' health in political decision-making: a public health study in northern Sweden

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Abstract

Background and aim Early action is important for promoting newly arrived migrants' health. Politicians are major actors in decision-making that affects health outcomes in the population. Therefore, the aim of this study was to explore local and regional politicians' considerations of newly arrived migrants' health in political decision-making: whether politicians reflect on or discuss the effects of decision-making specifically on newly arrived migrants' health, whether considerations differ between municipality and regional politicians, and how knowledge and attitudes are associated with such considerations.

Subject and methods A cross-sectional quantitative study was conducted. A total of 667 municipality and regional politicians from northern Sweden responded to a questionnaire developed based on interviews with politicians. Bivariate analyses were performed using χ^2 tests, the independent samples *t*-test, and the Wilcoxon signed-rank test. Multivariate analysis was performed using binary logistic regression.

Results Politicians considered the effects on newly arrived migrants' health significantly less frequently than those on the total population's health. Regional politicians discussed such effects more often than municipality politicians. Knowledge (odds ratio [OR] = 1.343), attitude (OR = 5.962), previous experience working on public health issues (OR = 1.784), and female gender (OR = 1.787) were positively associated with considering effects on newly arrived migrants' health in decision-making.

Conclusion Politicians play important roles in health promotion, and most consider health-related effects in their decision-making. However, about a third do not consider such effects. General health-related knowledge and attitude are important factors that could be affected or changed during political assignments.

Keywords Cross-sectional study · Health promotion · Integration · Newly arrived migrants · Politicians · Questionnaire development

Background

Research shows a burden of both communicable and non-communicable diseases on newly arrived migrants and refugees in Europe (Pavli and Maltezou 2017). Some health

disparities only become apparent after migrants have settled in European countries (Rechel et al. 2013). Migrants in Scandinavia have a higher risk of reporting ill health than the majority populations as early as 5 to 6 years after their arrival in the country of destination (Helgesson et al. 2019; Norredam et al. 2014). They also have a higher risk of unfavorable outcomes due to inequities in social determinants of health and variables such as income, employment conditions, housing quality, discrimination, and education level (Hollander 2013; Hynie 2018). Early health promotion aimed at migrants is therefore of particular importance (Norredam et al. 2014). Moreover, migrant integration policies are important for achieving health equity (Giannoni et al. 2016; Juárez et al. 2019).

In Sweden, migrants arriving as refugees or persons of subsidiary protection and their family members arriving

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through family reunification are considered newly arrived migrants for 2 years after they have received residence permits. During that time, they have the right to participate in integration activities. In these integration activities, municipalities are major actors, while regions are involved on a case-by-case basis (Government Offices of Sweden 2017). Integration activities mainly include civic orientation and language training but also other activities mainly aimed at promoting employability (Swedish Public Employment Service 2020).

Between 2014 and 2016, Sweden received more asylum seekers than usually. Since then, the numbers have dropped below the average of the last 2 decades (Swedish Migration Agency 2020a). During the design of this study in 2018, there were 52,547 asylum seekers waiting to have their claims assessed (Swedish Migration Agency 2019), and 42,014 former asylum seekers and individuals arriving through family reunification were granted residence permits (Swedish Migration Agency 2020b).

Northern Sweden comprises 44 municipalities and four regions. Common characteristics throughout this region are large but sparsely populated areas (Swedish Association of Local Authorities and Regions 2016) and close collaboration in public health-related issues (Norra sjukvårdsregionförbundet 2021). Another common characteristic throughout the area is that many municipalities have received relatively high numbers of asylum seekers and newly arrived migrants with respect to their population sizes (Swedish Migration Agency 2017).

Health is affected by several sectors other than the health care sector, e.g., the so-called social determinants of health, such as education and welfare (Dahlgren and Whitehead 2007; de Leeuw 2017). In the Swedish context, municipalities and regions play important roles. Municipalities' responsibilities include education, social welfare, housing, environmental and health protection, and community planning (Swedish Association of Local Authorities and Regions 2020a). Regions' main responsibility is the health care system and regional development. The two entities are jointly responsible for public transportation (Swedish Association of Local Authorities and Regions 2020c). Final decision-making in municipalities and regions is the authority of publicly elected politicians (Swedish Association of Local Authorities and Regions 2020b). The political context is therefore important in health promotion (Catford 2006; Greer et al. 2017; Sparks 2009).

The public health policy initiative of the World Health Organization (WHO) is aimed at placing health high on the agenda of policy-makers to create the conditions necessary to support health (WHO 1988). However, little research on politicians' role in health promotion has been conducted to date. Moreover, the focus has often been on priority setting and resource allocation (Garpenby and Nedlund 2016; Rosén et al. 2014) or on the implementation of evidence-based

practice (Bäck et al. 2016). Although political ideology and political will have been suggested as important factors for achieving health equity (Bryant 2010), they have not been investigated as systematically as other health-promoting factors (Catford 2006). Therefore, the purpose of this study was to explore local and regional politicians' considerations of newly arrived migrants' health in political decision-making: whether politicians reflect on or discuss the effects of decision-making specifically on newly arrived migrants' health, whether considerations differ between municipality and regional politicians, and how knowledge and attitudes are associated with such considerations.

Method

A quantitative approach was adopted to study participants with diverse backgrounds. As no fitting questionnaire was identified, the decision to develop a new questionnaire was made. To capture the relevant constructs of politicians' role in health promotion, a subject with no conceptual basis, an inductive approach to item construction was chosen, with qualitative interviews as the first step (Hinkin 1998).

Questionnaire development

For the initial interviews, six politicians were randomly chosen from a list of available politicians in two municipalities. The politicians had been divided into pre-determined groups to facilitate the invitations to participate to be based on the aim to include participants with diverse backgrounds in terms of political party representation, representation from both majority and opposition parties, and gender representation. The included participants satisfied these criteria: four were female, and three were under the age of 45 years; their political experience ranged from four to more than 30 years, and they represented both majority and opposition parties and the entire political spectrum.

The interviews were semi-structured and followed an interview guide (see supplemental information — interview guide). The questions centered on the politicians' views on health and health promotion and on their roles, responsibility, and possibility to promote health. A dual focus on the general population and newly arrived migrants was adopted. The interviews lasted 20–62 min and were recorded using a smart phone and transcribed verbatim.

The data were analyzed using inductive (Patton 2015) manifest qualitative content analysis according to Graneheim and Lundman's (2004) description of the method. The data were divided into meaning units and coded. The codes were grouped into categories and subcategories. The categories, which later constituted the different parts of the questionnaire, were politicians' views on health and health promotion,

affecting health as a politician, collaboration between actors, the politics of health, and municipality and regional organization and their prerequisites (see supplemental information — qualitative results). A battery of self-rated questions were constructed from the categories and subcategories (Grant and Ferris 2012).

The final version of the questionnaire consisted of 49 items, all derived from the interview data and judged to be of relevance to the research projects' aims. Three of the questions were open-ended questions, and another three were aimed at clarifying open questions, offering respondents the opportunity to provide examples to illustrate their answers. Eight background questions related to age, gender, political affiliation, and political and public health experience were also added to the questionnaire. When a 5-point Likert scale was not fitting for an item, other logical answers discussed by the politicians in the interviews were used (such as having experience as a politician, other experience, or no experience).

To test the face validity of the final version, the previously interviewed politicians completed the questionnaire (Rattray and Jones 2007), thinking aloud as they proceeded (Streiner et al. 2015, p. 123). Minor adjustments to the instructions and wording were subsequently made. The questionnaire was then reviewed by experienced health promotion researchers (Rattray and Jones 2007). A few more minor adjustments were made.

Data collection and participants

The questionnaire was electronic and was emailed to politicians who were members of the 44 municipality councils or the four regional councils of northern Sweden. The politicians' email addresses were collected from the municipalities and regions. Politicians with seats in both municipality and regional councils were asked to choose one and respond to the questionnaire as such. The questionnaire was sent to a total of 2744 politicians and was open for 6 weeks during April–May 2019.

A total of 667 politicians (24.3%) responded to the questionnaire and were included in the study. Their background characteristics are displayed in Table 1. For the analysis of nonresponse bias, official data on the ordinary members of municipality and regional councils were used (data were only available for ordinary members). In this study, alternates were also included and were listed with ordinary members. The nonresponse bias analysis was therefore performed by comparing both the included ordinary members and the total sample to the official data.

A comparison between the study participants and the total study population revealed significant differences in party representation ($p = 0.028$) and age groups ($p < 0.001$) but not in gender ($p = 0.862$) and municipality or regional council membership ($p = 0.139$). However, the effect sizes were small:

Table 1 Participants' background data

	Frequency	Valid percentage
Political affiliation		
Left party	80	12.0%
Social Democrats	251	37.6%
Green party	20	3.0%
Centre party	113	16.9%
Liberals	27	4.0%
Moderate party	65	9.7%
Christian Democrats	27	4.0%
Sweden Democrats	26	3.9%
Feminist Initiative	3	0.4%
Other local parties	53	7.9%
Gender		
Female	307	46.3%
Male	356	53.7%
Age		
18–24	7	1.0%
25–34	51	7.6%
35–44	89	13.3%
45–54	150	22.5%
55–64	197	29.5%
65–74	155	23.2%
≥ 75	17	2.5%
Council membership		
Municipality	546	83.3%
Regional	110	16.8%
Number of inhabitants in municipality of residence		
< 3000	39	6%
3000–4999	35	5.4%
5000–6499	55	8.5%
6500–8999	60	9.3%
9000–15,999	129	19.9%
16,000–19,999	70	10.8%
20,000–29,999	57	8.8%
30,000–74,999	112	17.3%
≥ 75,000	90	13.9%

Cramér's V was 0.093 for party representation and 0.110 for age group, indicating small differences between the groups. A post-hoc analysis of adjusted residuals showed that only a difference regarding the Sweden Democrats party was statistically significant (adjusted $Z = -3.30$, $\chi^2 = 10.89$, $p = 0.00097$), and it was only significant for the entire sample and not between ordinary members, indicating that politicians from the Sweden Democrats party were underrepresented in the study in relation to their representation in municipalities and regions. A comparison between age groups showed that all age groups below 55 years were underrepresented and older age groups were overrepresented in the study.

However, a post-hoc analysis showed no statistically significant differences in any age groups when analyzing the adjusted residuals.

Quantitative data analysis

The data extracted from the questionnaires (Table 2) were exported from Netigate to IBM SPSS Statistics 25 for statistical analysis. Univariate data were presented in frequencies and percentages. Bivariate analyses were performed using χ^2 tests, the independent samples *t*-test, and the Wilcoxon signed-rank test. The significance level was set to $p < 0.05$. For post-hoc analyses, Bonferroni adjustment was used for the α level (Pallant 2016, p. 240). To assess the effect size, Cramér's *V* (Pallant 2016, pp. 221–222) and Cohen's coefficient were used (Cohen 1988, cited in Pallant 2016, p. 137).

For multivariate analyses, binary logistic regression was used to evaluate associations between predictor variables (knowledge, attitude, and general health-related knowledge) and outcome variables. Ordinal and categorical variables were dichotomized before entered into the analysis (Table 2). The analysis was performed in three steps of variable entry, and adjusted odds ratios (OR) and 95% confidence intervals (CI) were calculated. Cox and Snell's R^2 and Nagelkerke's R^2 were calculated for the model explanation degree. Omnibus tests of model coefficients were performed for model and step significance. The Hosmer–Lemeshow test was used to evaluate the goodness of fit (Hosmer et al. 2013; Pallant 2016, pp. 169–181).

Two indexes were created for the analysis. An index called General Health Knowledge was composed of five items measured on a 5-point Likert scale, which was reversed to where 1 represented *fully disagree* and 5 represented *fully agree*. The items included were “I consider myself to have enough knowledge to judge whether a political decision that I make affects the population's health,” “I consider myself to have enough knowledge to judge how a political decision that I make affects the population's health,” “I understand the differences between health promotion and disease prevention,” “I understand the municipality's/region's responsibility for the population's health according to the new national public health political goals established in 2018,” and “I consider myself to have a clear picture of the health status of the general population in the municipality/region where I am a politician.” The index had a Cronbach's α of 0.741 and ranged from 1 to 18, where 18 was the highest-rated knowledge.

The second index, Considering Health Effects (Cronbach's $\alpha = 0.771$), was composed of two items: “In the last 3 months, have you, on your own, reflected on how political decisions that you make affect newly arrived migrants' health?” and “In the last 3 months, have you, in your council, discussed how decisions that you make affect newly arrived migrants' health?” The coding was 1 = *Yes, in a large proportion of*

the decisions, 2 = *Yes, a few times*, and 3 = *No*, yielding a range of 2–6. In the logistic regression analysis, the coding was expressed as 0 = 4–6 (not considering health effects) and 1 = 2–3 (considering health effects).

Exploratory Factor Analysis was then used to further explore the indexes. The variables were subjected to principal component analysis (PCA) and varimax rotation. The minimum factor loading was set to 0.5. First, the suitability for a factor analysis was examined. The Kaiser–Meyer–Olkin measure of sampling adequacy was 0.764 and the Bartlett's test of sphericity was significant ($< .001$), indicating a fit of using factor analysis (Pallant 2016, pp. 182–203). Two components with eigenvalues exceeding 1 was present, explaining 44.01% and 15.78% of variance respectively. In total, the two dimensions explained 59.79% of variance among the items in the study. The two factors identified in this exploratory factor analysis align with the assumptions made in the item and questionnaire construction. Factor 1 refers to the index named General Health Knowledge (including five items) and Factor 2 refers to the index named Considering Health Effects (including two items). Factor loadings are presented in Table 3.

Results

Of the 667 respondents, approximately 45% were under the age of 55 years, 46% were female, and 83% were municipality politicians (Table 1). The participants had diverse experience: approximately 60% had experience working on public health in some capacity, and 62% had experience working on integration. Seventy percent of the respondents had served one or more terms in their councils (Table 4).

Most respondents stated that they reflected on or discussed the effects of their decision-making on newly arrived migrants' health. In terms of discussing health effects, 13.7% did so in a large proportion of their decision-making, while 51.5% did so in a few decisions (Table 5). The reported frequency was significantly lower than that of discussions about the effects of politicians' decision-making on the general population's health ($z = -9.251$, $p < 0.001$, $r = 0.256$). In terms of reflecting on the effects on newly arrived migrants' health, 29% of the respondents stated that they did so in a large proportion of their decision-making, 50.5% reported that they did so in a few of their decisions, and 20.5% stated that they did not do so at all (Table 5). The frequency was significantly lower than that of reflections on the effects of decision-making on the general population's health ($z = -9.006$, $p < 0.001$, $r = 0.249$).

In terms of discussing health-related effects in decision-making, there was a statistically significant difference between municipality and regional politicians (Table 6). Significantly more regional than municipality politicians reported that discussions took place in regard to a large part of

Table 2 Variables, index, and coding

Variable	Questionnaire item	Coding	Binary logistic regression coding
Reflection	In the last 3 months, have you, on your own, reflected on how political decisions that you make affect newly arrived migrants' health?	1 = Yes, in a large part of the decisions; 2 = Yes, a few times; 3 = No	
Discussion	In the last 3 months, have you, in your council, discussed how decisions that you make affect newly arrived migrants' health?	1 = Yes, in a large part of the decisions; 2 = Yes, a few times; 3 = No	
Knowledge	I consider myself to have a clear picture of newly arrived migrants' health status in the municipality/region where I am a politician.	5-point Likert scale ^a	0 = 3–5, No knowledge; 1 = 1–2, Knowledge
Attitudes	Effects on newly arrived migrants' health are important for how I make political decisions.	5-point Likert scale ^a	0 = 3–5, Not important; 1 = 1–2, Important
Experience in public health issues	Do you have previous experience working on public health issues?	1 = Yes, as a politician; 2 = Yes, in other capacity; 3 = No	0 = 3, No experience; 1 = 1–2, Experience
Experience in integration issues	Do you have previous experience working on integration issues?	1 = Yes, as a politician; 2 = Yes, in other capacity; 3 = No	0 = 3, No experience; 1 = 1–2, Experience
Experience in politics	What is your previous experience as a politician in the municipality/regional council?	1 = None, first term; 2 = One term; 3 = Two terms; 4 = Three or more terms	0 = 1–2, Little experience; 1 = 3–4, Considerable experience
Interest in public health	I am personally interested in public health as a political issue.	5-point Likert scale ^a	0 = 3–5, Not interested; 1 = 1–2, Interested
Interest in integration	I am personally interested in integration as a political issue.	5-point Likert scale ^a	0 = 3–5, Not interested; 1 = 1–2, Interested
Age	Age?	1 = 18–24; 2 = 25–34; 3 = 35–44; 4 = 45–54; 5 = 55–64; 6 = 65–74; 7 = ≥ 75	0 = 1–4, < 55 years; 1 = 5–7, ≥ 55 years
Population in municipality of residence	How many inhabitants are there in the municipality in which you live?	1 = < 3 000; 2 = 3000–4999; 3 = 5000–6499; 4 = 6500–8999; 5 = 9000–15,999; 6 = 16,000–19,999; 7 = 20,000–29,999; 8 = 30,000–74,999; 9 = ≥ 75,000	0 = 1–7, < 30,000; 1 = 8–9, ≥ 30,000
Council membership	What is your current political role/assignment?	1 = Ordinary member of municipality council; 2 = Alternate municipality council; 3 = Ordinary member of regional council; 4 = Alternate regional council	0 = 3–4, Municipality politician; 1 = 1–2, Regional politician
Gender	What gender do you identify with?	1 = Female; 2 = Male; 3 = Other	0 = 2, Male; 1 = 1, Female

^a 1 = *fully agree*, 2 = *partly agree*, 3 = *neither agree nor disagree*, 4 = *partly disagree*, 5 = *fully disagree*

their decision-making ($p = 0.01$, Cramér's $V = 0.12$). Conversely, no statistically significant difference was found in terms of reflecting on such effects ($p = 0.383$).

Approximately half of the respondents stated that they had knowledge of newly arrived migrants' health status ("knowledge"), and approximately four out of five stated that the effects of their decisions on newly arrived migrants' health were important for their decision-making ("attitude"). Significant differences in self-rated knowledge and attitude were observed between politicians who considered health-related effects and those who did not (both $p < 0.001$). A significant difference was also found in terms of reported general health-related knowledge: politicians who considered effects on newly arrived migrants' health had a significantly higher

level of reported general health-related knowledge (mean score = 14.41) than those who did not (mean score = 12.12 ± 0.19; $t(633) = -11.72$, $p < 0.001$).

Individually, all three variables [knowledge of newly arrived migrants' health status (OR = 3.75, 95% CI: 2.589–5.441), attitude (OR = 12.353, 95% CI: 4.956–30.794), and general health-related knowledge (OR = 1.504, 95% CI: 1.372–1.647)] were significantly associated with considering effects on newly arrived migrants' health (Table 7). However, when modeled together, only attitude (OR = 7.488, 95% CI: 2.630–21.316) and general health-related knowledge (OR = 1.425, 95% CI: 1.276–1.592) remained significantly associated. Their significance remained when controlling first for previous experience (in public health, integration, and politics)

Table 3 Exploratory Factor Analysis results

Items	Factor 1	Factor 2
General Health Knowledge		
I consider myself to have enough knowledge to judge whether a political decision that I make affects the population's health	.833	
I consider myself to have enough knowledge to judge how a political decision that I make affects the population's health	.782	
I understand the differences between health promotion and disease prevention	.603	
I understand the municipality's/region's responsibility for the population's health according to the new national public health political goals established in 2018	.522	
I consider myself to have a clear picture of the health status of the general population in the municipality/region where I am a politician	.629	
Considering Health Effects		
In the last 3 months, have you, on your own, reflected on how political decisions that you make affect newly arrived migrants' health?		.863
In the last 3 months, have you, in your council, discussed how decisions that you make affect newly arrived migrants' health?		.886

Extraction method: principal component analysis. Rotation method: Varimax with Kaiser normalization. Rotation converged in three iterations

and then for personal characteristics (gender, age, population in municipality of residence, and municipality/regional council membership). The final model ($\chi^2 = 152.691$ [df = 12, $p < 0.001$]) explained approximately 23–33% (Cox and Snell's $R^2 = 0.233$; Nagelkerke's $R^2 = 0.332$) and showed that attitude was the most significant factor for

considering effects on newly arrived migrants' health (OR = 5.962, 95% CI: 2.021–17.587). General health-related knowledge also remained significant (OR = 1.343, 95% CI: 1.198–1.506). Female gender (OR = 1.787, 95% CI: 1.170–2.731) and experience working on public health issues as a politician or in another

Table 4 Participants' characteristics

	Frequency	Valid percentage
Experience working on public health		
Experience as a politician	180	27.5%
Experience in another capacity	136	12.8%
Experience both as a politician and in other capacities	74	11.3%
No experience	265	40.5%
Experience working on integration		
Experience as a politician	180	27.5%
Experience in another capacity	160	24.4%
Experience both as a politician and in other capacities	67	10.2%
No experience	248	37.9%
Interest in public health		
Not interested	131	19.9%
Interested	526	80.1%
Interest in integration		
Not interested	122	18.6%
Interested	534	81.4%
Experience in the council		
None, first term	202	30.3%
One term	123	18.5%
Two terms	100	15.5%
Three or more terms	241	36.2%

Table 5 Reported frequencies of discussing and reflecting on the effects of respondents' decision-making on the health of newly arrived migrants and the general population

		Newly arrived migrants	Population
Discussing effects on health ^a	Yes, a large proportion	89 (13.7%)	141 (21.7%)
	Yes, a few times	335 (51.5%)	380 (58.4%)
	No	227 (34.9%)	130 (20%)
	Total	651 (100%)	651 (100%)
Reflecting on effects on health ^b	Yes, a large proportion	188 (29%)	269 (41.1%)
	Yes, a few times	328 (50.5%)	314 (48%)
	No	133 (20.5%)	71 (10.9%)
	Total	649 (100%)	654 (100%)

Differences between newly arrived migrants and the general population were assessed using the Wilcoxon signed-rank test

^a $z = -9.251$, $p < 0.001$, $r = 0.256$

^b $z = -9.006$, $p < 0.001$, $r = 0.249$

capacity (OR = 1.784, 95% CI: 1.060–3.004) were also significant factors.

Discussion

In exploring politicians' decision-making, this study found that politicians more often reflected on and discussed effects on the general population's health than on newly arrived migrants' health. Regional politicians discussed effects on newly arrived migrants' health more often than municipality politicians, but there was no significant difference in reflecting on such effects. Politicians' attitudes and general health-related knowledge were found to be significant factors for considering health-related effects in decision-making, whereas specific knowledge of newly arrived migrants' health was not. Being female and having previous experience working on public health issues were also significant factors.

Since the regions are responsible for health care (Swedish Association of Local Authorities and Regions 2020c), it may not seem surprising that regional politicians reflect on and discuss health-related effects more often than municipality

politicians. However, municipalities have several responsibilities closely associated with health, such as education, housing, city planning, and care for elderly people and people in assisted living (Swedish Association of Local Authorities and Regions 2020a). As significant differences were found only in the frequency of discussing health-related effects in respondents' councils, this may indicate a lack of official structures promoting discussions on health-related effects at the municipal level, suggesting that such considerations are limited to individual reflections. Research on Norwegian municipalities has shown that in health promotion, political leadership is needed on all administrative levels (Hofstad 2016). Therefore, this is an area where improvement is needed.

This study suggests that when politicians do consider health-related effects, they do so more often with respect to the general population than newly arrived migrants specifically. Previous research suggests that it is necessary for politicians to consider population subgroups. Frohlich and Potvin (2008) note that in addition to general population approaches, a focus on vulnerable groups is a necessary complement for addressing inequities. The authors define vulnerable groups as "groups who, because of their position in the social strata, are

Table 6 Cross-tabulation with χ^2 tests evaluating differences in considering the effects of decision-making on newly arrived migrants' health between municipality and regional politicians

		Municipality	Regional	Total
Discussing effects on newly arrived migrants' health ^a	Yes, a large proportion	63 (11.8%)	24 (22.2%)	87 (13.6%)
	Yes, a few times	274 (51.5%)	54 (50.0%)	328 (51.2%)
	No	195 (36.7%)	30 (27.8%)	225 (35.2%)
	Total	532 (100%)	108 (100%)	640 (100%)
Reflecting on effects on newly arrived migrants' health ^b	Yes, a large proportion	145 (27.5%)	37 (33.6%)	182 (28.6%)
	Yes, a few times	273 (51.7%)	50 (45.5%)	323 (50.6%)
	No	110 (20.8%)	23 (20.9%)	133 (20.8%)
	Total	528 (100%)	110 (100%)	638 (100%)

The differences in each variable between municipality and regional politicians were evaluated using χ^2 tests

^a $\chi^2 = 9.167$ (df = 2), $p = 0.01$

^b $\chi^2 = 1.919$ (df = 2), $p = 0.383$

Table 7 Logistic regression analysis of the predictors of considering effects on newly arrived migrants' health in decision-making

Variable	Crude ^a			Step 1 ^b			Step 2 ^c			Step 3 ^d		
	95% CI for Exp (B)			95% CI for Exp (B)			95% CI for Exp (B)			95% CI for Exp (B)		
	OR	Lower	Upper	OR	Lower	Upper	OR	Lower	Upper	OR	Lower	Upper
Knowledge	3.75*	2.59	5.44	1.513	0.963	2.378	1.401	0.876	2.239	1.463	0.907	2.359
Attitude	12.35*	4.96	30.79	7.488*	2.630	21.316	5.837*	2.001	17.025	5.962*	2.021	17.587
General health knowledge	1.50*	1.37	1.65	1.425*	1.276	1.592	1.373*	1.226	1.539	1.343*	1.198	1.506
Interest in public health							1.848	0.805	4.241	1.885	0.804	4.421
Interest in integration							1.146	0.508	2.585	1.021	0.446	2.336
Experience in public health issues							1.696*	1.023	2.810	1.784*	1.060	3.004
Experience in integration issues							1.197	0.725	1.976	1.211	0.725	2.022
Experience in politics							0.846	0.552	1.297	0.811	0.515	1.277
Gender										1.787*	1.170	2.731
Age										1.557	0.994	2.438
Population in municipality of residence										0.902	0.451	1.806
Council membership										1.199	0.687	2.092

1.696^a Correct classification = 70.9%

^b Omnibus test of model coefficients model $\chi^2 = 131.628$ (degrees of freedom [df] = 3, $p < 0.001$). Cox and Snell's $R^2 = 0.204$; Nagelkerke's $R^2 = 0.291$; Hosmer–Lemeshow $\chi^2 = 8.089$ (df = 7, $p = 0.325$). Correct classifications = 74.4%

^c Omnibus test of the coefficients model $\chi^2 = 142.204$ (df = 8, $p < 0.001$), step $\chi^2 = 10.576$ (df = 5, $p = 0.060$). Cox and Snell's $R^2 = 0.218$; Nagelkerke's $R^2 = 0.312$; Hosmer–Lemeshow $\chi^2 = 7.971$ (df = 8, $p = 0.436$). Correct classifications = 75.4%

^d Omnibus test of the coefficients model $\chi^2 = 152.691$ (df = 12, $p < 0.001$), step $\chi^2 = 10.487$ (df = 4, $p = 0.033$). Cox and Snell's $R^2 = 0.233$; Nagelkerke's $R^2 = 0.332$; Hosmer–Lemeshow $\chi^2 = 4.130$ (df = 8, $p = 0.845$). Correct classifications = 75.4%

CI confidence interval; OR odds ratio

* indicates statistical significance

commonly exposed to contextual conditions that distinguish them from the rest of the population” (Frohlich and Potvin 2008, p. 218). Migrants are at risk of facing health-related inequities, as well as inequities in many social determinants of health (Helgesson et al. 2019; Hollander 2013; Hynie 2018; Norredam et al. 2014; Public Health Agency of Sweden 2019; Rechel et al. 2013). This makes them a vulnerable group, necessitating a specific focus on the part of politicians. A focus on health specifically in migration and integration policies is important for health equity outcomes (Giannoni et al. 2016; Juárez et al. 2019).

The results of this study also indicate that general health-related knowledge is a more important factor for considering effects on newly arrived migrants' health than specific knowledge of migrants' health. Similarly, previous experience working on public health issues is more important than experience working on integration. This suggests that although slightly more respondents reported a personal interest in integration, it is public health rather than the migration track that contributes to the consideration of effects on newly arrived migrants' health. A study in New Zealand reported that a personal interest is an important factor for politicians' active involvement in health promotion (Zalmanovitch and Cohen

2015). Conversely, in the current study, while experience working on public health issues was a significant factor for considering health-related effects, a personal interest was not.

In line with this study, previous research has shown that both knowledge and attitudes are important for practices and behaviors. A study on Swedish local politicians' views on their role in the implementation of evidenced-based practice in social care in municipalities found that a personal interest and knowledge were important for how they viewed their roles and what actions they took (Bäck et al. 2016). A study on municipalities in Finland in the 1990s questioned the association between politicians' attitudes and outcomes in priority setting and resource allocation within health care (Lammintakanen and Kinnunen 2004). Overall, political will is important for achieving health equity (Bryant 2010). Nevertheless, Swedish regional politicians have been shown to consider their influence on decision-making rather weak in comparison to that of other actors, such as administrators and physicians (Rosén et al. 2014).

In this study, gender was found to be an important factor for considering effects on newly arrived migrants' health in political decision-making. This is in line with Campbell and Winters (2008), who showed that women tend to be interested

in so-called domestic politics (such as health care and education) more often than men. Similar patterns can be identified in female politicians' areas of responsibilities as ministers: they often work on issues related to social care, education, and health care (Bergqvist et al. 2008, pp. 37–38). To eliminate such gender-based differences, it is important to raise awareness of the fact that female politicians consider newly arrived migrants' health in their decision-making more often than male politicians.

Limitations

As a questionnaire appropriate for investigating politicians' views on their roles in health promotion could not be identified, a new questionnaire was developed for the purposes of this study. Since the questionnaire is new and no similar questionnaires were found, a point-by-point comparison of this study's results to those of other studies is not possible. To ensure a thorough understanding of the respondents' answers, several open-ended questions and opportunities to clarify answers were offered in the questionnaire. None of the free-text answers indicated that respondents misunderstood the questions.

Research suggests that electoral success is an important motive for politicians and political parties. To that end, taking credit for success and avoiding blame for mistakes are important (Greer et al. 2017). Therefore, socially desirable responses to questionnaire items cannot be ruled out (Streiner et al. 2015, pp. 106–111). To minimize the possibility of such bias, the general population and newly arrived migrants were not juxtaposed in the same questions but were queried in separate questions. Although the initial interviews indicated no significant tendency toward socially desirable responding, the responses to the questionnaire were mostly positively skewed, which is common in social science research (Streiner et al. 2015, pp. 106–111). This also shows that the questionnaire requires further refinement to ensure that it can capture nuances and variance in politicians' responses (Hinkin 1998).

Although politicians are easy to reach due to their public position, the interview participants cited a constant lack of time, and reported frequently receiving invitations for surveys in which they felt that they did not have the time to participate. Due to this risk of a low response rate, which is a known problem in health research (Galea and Tracy 2007), a decision was made to include all possible respondents in the study sample. This would ensure enough responses to allow statistical analyses even if the response rate was low. Although previous research has indicated that a low response rate does not necessarily increase nonresponse bias (Hendra and Hill 2018), since the questionnaire concerned health and migration there was a risk that politicians with a

special interest in either or both of these would respond, and politicians with no particular interest would not, which could result in bias. In light of these limitations, caution is required in any attempt to generalize the results.

Conclusions

This study shows that although politicians state that they consider health-related effects in their decision-making, they do so to a lesser degree for newly arrived migrants than for the general population. Regional politicians tend to consider effects on newly arrived migrants' health more often than municipality politicians. A higher self-rated level of general knowledge of health and a reported interest in newly arrived migrants' health are also important factors for politicians' considerations in decision-making. Both are factors that could be affected or changed during political assignments. On the other hand, it is not possible to affect other factors, such as gender and previous experience working on public health issues; it is, however, possible to raise awareness of such factors.

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Availability of data and material Upon request, the authors can send relevant data in order to verify the validity of the results presented. Such requests should be sent to the corresponding author.

Code availability Not applicable

Declarations

Ethics approval This study and its components were designed in accordance with the ethical standards of the Swedish National Research Committee (Swedish Research Council 2017) and the 1964 Helsinki Declaration and its later amendments. The Ethics Committee of Mid Sweden University approved the initial interviews for the questionnaire development (MIUN 2018/6) and the full study (MIUN 2019/6). All participants were informed of the aim of the study and the intent to publish its results, and were assured that confidentiality would be safeguarded.

Consent to participate and publish Informed consent was obtained from all individual participants included in the study.

Conflicts of interest/competing interests The authors have no conflicts of interest to declare that are relevant to the content of this article.

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