

Supplementary material for the following publication:

Backholm, K., & Nordberg, C. (2023). Efficient authority communication in times of crisis: Examining how vulnerable language minorities experienced Covid-19 communication strategies in Finland, Norway, and Sweden. In Johansson, B., Ihlen, Ø., Lindholm, J., & Blach-Ørsten, M. (Eds.), *Communicating a pandemic: Crisis management and Covid-19 in the Nordic countries* (pp. 325–346). <https://doi.org/10.48335/9789188855688-15>

Table S15.1 Documents with empirical data about how vulnerable language minorities experienced authorities’ communication about the pandemic (RQs 1–2)

Document title	Sample origin or main language ^a	Country of residence	Research method and sample size
Brekke, J. P. (2021a). Kartlegging av årsaker til forskjeller i smitte og sykdom i innvandrer-miljøer [Mapping reasons for varying levels of contagion and illness in immigrant areas]. In T. Indseth (Ed.), <i>Covid-19 blant innvandrere i Norge: vurdering av tiltak og erfaringer fra felt</i> [Covid-19 among immigrants in Norway: Evaluation of strategies and experiences in the field] (pp. 46–67). Norwegian Institute of Public Health.	Pakistani; Somali; Tamil	Norway	Interviews (N = 26)
Brekke, J. P. (2021b). Informing hard-to-reach immigrant groups about Covid-19: Reaching the Somali population in Oslo. <i>Journal of Refugee Studies</i> , feab053.	Somali	Norway	Interviews (N = 5)
Ekblad, S., Savlin, P., Albin, M., & Georgelis, A. (2021). Experter inifrån. Trångboddhet i förhållande till covid-19: Information, barriärer och egna strategier. En intervjustudie i Järva [Experts from within: Overcrowding and Covid-19. Information, barriers, and applied strategies. An interview study in Järva]. Online document.	Arabian; Dari; Somali; Swedish; Tigrinja	Sweden	Group interviews (N = 36)

Esaiasson, P., Johansson, B., Ghersetti, M., & Sohlberg, J. (2020). <i>Kriskommunikation och segregation i en pandemi. Hur boende i utsatta områden informerades sig om coronaviruset våren 2020</i> [Crisis communication and segregation in a pandemic. How residents in vulnerable areas informed themselves about the corona virus in the spring of 2020]. Online document.	Arabian; English; Somali; Swedish	Sweden	Interviews (N = 271)
Finell, E., Tiilikainen, M., Jasinskaja-Lahti, I., Hasan, N., & Muthana, F. (2021). Lived experience related to the Covid-19 pandemic among Arabic-, Russian- and Somali-speaking migrants in Finland. <i>International Journal of Environmental Research and Public Health</i> , 18(5), 2601.	Arabian; Russian; Somali	Finland	Interviews (N = 209)
Gele, A., Sheikh, N. S., Kour, P., & Qureshi, S. A. (2021). Uptake of Covid-19 preventive measures among 10 immigrant ethnic groups in Norway. <i>medRxiv</i> .	Afghanistan; Bosnia/Serbia; Eritrea; Iraq; Pakistan; Poland; Somalia; Sri Lanka; Syria; Turkey	Norway	Interviews (N = 88)
Madar, A. A., Benavente, P., Czapka, E., Herrero-Arias, R., Haj-Younes, J., Hasha, W. H. W., Deeb, G., Møen, K. A., Ortiz-Barreda, G., & Diaz, E. (2022). Covid-19: Information access, trust and adherence to health advice among migrants in Norway. <i>Archives of Public Health</i> .	Arabian; Polish; Somali; Spanish; Tamil	Norway	Survey (N = 529)
Ojaranta, A., Ahmadiania, H., & Eskola, E. L. (2020). Preliminary investigation of individuals as information sources among two language minorities during Covid-19 pandemic in Finland. <i>Informaatiotutkimus</i> , 39(2-3), 116–120.	Farsi	Finland	Interviews (N = 18)
Ojwang, F. (2020). Deconstructing socially constructed subtle prejudices during the first wave of Covid-19 Pandemic among immigrant population in Finland. <i>Sociology Study</i> , 10(6), 267–279.	Middle East; Sub-Saharan Africa	Finland	Survey (N = 30)
Sheikh, S. N., Storstein Spilker, R., Nordstrøm, C., Duahle, H., Tsige, S. A., Kour, P., Qureshi, S., Gawad, M., & Gele, A. (2021). Erfaringer fra felt: Perspektiver fra personer med innvandrerbakgrunn [Experiences from the field: Perspectives from people with immigrant backgrounds]. In T. Indseth (Ed.), <i>Koronapandemien og innvandrerbefolkningene, vurderinger og erfaringer</i> [The corona pandemic and immigrant populations, evaluation and experiences] (pp. 107–125). Folkehelseinstituttet.	Afghanistan; Bosnia/Serbia; Eritrea; Iraq; Pakistan; Poland; Somalia; Sri Lanka; Syria; Turkey	Norway	Interviews (N = 88)

Skogberg, N., Koponen, P., Lilja, E., Austero, S., Achame, S., & Castaneda, A. E. (2021). <i>Access to information, preventive measures and working conditions during the coronavirus epidemic – Findings of the population-based MigCOVID Survey among persons who have migrated to Finland</i> . Online document.	Africa (excl. North Africa); Central/South Asia; East Asia; Estonia; Latin America and others; Middle East, North Africa; Rest of Europe, North America, Oceania; Russia/former Soviet Union; Southeast Asia	Finland	Survey (N = 3,668)
Skogheim, S., Orderud, G., Ekne Ruud, M., & Søholt, S. (2021). <i>Informasjon og tiltak rettet mot innvandrerbefolkningen i forbindelse med Covid-19. Delrapport 3 [Information and actions taken towards the minority population during Covid-19. Interim report 3]</i> .	Arabian; English; Norwegian; Polish; Somali; Urdu / Afghanistan; Eastern Europe; North Africa; Pakistan; Sri Lanka; Somalia	Norway	Survey (N = 602); interviews (N = 15)
Storstein Spilker, R., Tsige, S. A., Nordstrøm, C., Duahle, H., Mohammed, N. S., Qureshi, S., Gawad, M., & Gele, A. (2021). <i>Erfaringer fra felt: Målgruppene, foreløpige funn fra intervjuer med informanter i seks ulike innvandringsgrupper [Experiences from the field: Target groups, results to date from interviews with informants in six groups of immigrants]</i> . In T. Indseth (Ed.), <i>Covid-19 blant innvandrere i Norge: vurdering av tiltak og erfaringer fra felt, delrapport 1 [Covid-19 among immigrants in Norway: Evaluation of strategies and experiences in the field. Interim report 1]</i> (pp. 68–75).	Afghan; Eritrean; Iraki/Iraki-Kurdi; Pakistani; Polish; Somali	Norway	Interviews (N = 35)
Swedish Red Cross Skellefteå. (2021). <i>”Det är inte pandemin som är problemet, det är segregationen och de ojämlika villkoren”: Coronapandemins påverkan på personer med begränsad svenskkunskap och förankring i lokalsamhället i Skellefteå kommun. [It’s not the pandemic that is the problem, it’s the segregation and the unequal opportunities”: The effect of the Corona pandemic on individuals with limited knowledge in Swedish and relation to the local society in the Skellefteå region]</i> . Online document	Not provided	Sweden	Interviews (N not provided)

^a In some cases, minority as well as country main languages and/or English language were included in the sample.

Table S15.2 Documents with best practices recommendations for communicating the pandemic to vulnerable language minorities (RQ 3)

Document title	Countries in focus
Bjørnbæk, M., Hussaini, L., & Fretheim, A. (2021). Kartlegging av kommuners tiltak for å få innvandrere til å teste seg: en kvalitativ studie av et utvalg norske kommuner [Mapping community strategies for increasing testing among immigrants: A qualitative study among a selection of Norwegian communities]. In T. Indseth (Ed.), <i>Covid-19 blant innvandrere i Norge: vurdering av tiltak og erfaringer fra felt, delrapport 1</i> [Covid-19 among immigrants in Norway: Evaluation of strategies and experiences in the field. Interim report 1] (pp. 37–45).	Norway
Brekke, J. P. (2021a). Kartlegging av årsaker til forskjeller i smitte og sykdom i innvandrermiljøer [Mapping reasons for varying levels of contagion and illness in immigrant areas]. In T. Indseth (Ed.), <i>Covid-19 blant innvandrere i Norge: vurdering av tiltak og erfaringer fra felt, delrapport 1</i> [Covid-19 among immigrants in Norway: Evaluation of strategies and experiences in the field. Interim report 1] (pp. 46–67).	Norway
Brekke, J. P. (2021b). Informing hard-to-reach immigrant groups about Covid-19 – Reaching the Somali population in Oslo. <i>Journal of Refugee Studies</i> , feab053.	Norway
Council of Europe. (2021). <i>Responses to the Covid-19 pandemic in the fields of nondiscrimination, diversity and inclusion</i> . Online document.	Member states of the Council of Europe
Diaz, E., Norredam, M., Aradhya, S., Benfield, T., Krasnik, A., Madar, A., Juarez, S. P., & Rostila, M. (2020). <i>Situational brief: Migration and Covid-19 in Scandinavian countries</i> . Lancet Migration.	Scandinavia
Ekblad, S., Savlin, P., Albin, M., & Georgelis, A. (2021). <i>Experter inifrån. Trångboddhet i förhållande till covid-19. Information, barriärer och egna strategier. En intervjustudie i Järva</i> [Experts from within. Overcrowding and Covid-19. Information, barriers, and applied strategies. An interview study in Järva]. Online document	Sweden
Esaiasson, P., Johansson, B., Ghersetti, M., & Sohlberg, J. (2020). <i>Kriskommunikation och segregation i en pandemi: Hur boende i utsatta områden informerade sig om coronaviruset våren 2020</i> [Crisis communication and segregation in a pandemic: How residents in vulnerable areas informed themselves about the corona virus in the spring of 2020]. Online document.	Sweden
Finell, E., Tiilikainen, M., Jasinskaja-Lahti, I., Hasan, N., & Muthana, F. (2021). Lived experience related to the Covid-19 pandemic among Arabic-, Russian- and Somali-speaking migrants in Finland. <i>International Journal of Environmental Research and Public Health</i> , 18(5), 2601.	Finland
Fretheim, A., Elgersma, I., Vinjerui, K. H., Flatø, M., & Indseth, T. (2021). Virkningene av tiltak rettet mot innvandrere [The effects of actions taken among immigrants]. In T. Indseth (Ed.), <i>Covid-19 blant innvandrere i Norge: vurdering av tiltak og erfaringer fra felt, delrapport 1</i> [Covid-19 among immigrants in Norway: Evaluation of strategies and experiences in the field. Interim report 1].	Norway

Indseth, T., Brekke, J. P., Gele, A., Ezzati, R. T., Elgersma, I., Kjøllesdal, M., Vold, L., & Fretheim, A. (2021). Sammendrag og læringspunkter [Summary and learning points]. In T. Indseth (Ed.), <i>Koronapandemien og innvandrerbefolkningene, vurderinger og erfaringer</i> [The corona pandemic and immigrant populations, evaluation and experiences] (pp. 5–12). Folkehelseinstituttet.	Norway
Jakobsson, K., Al-Nahar, L., Jakobsson, E., Hansson, E., Magnusson, M., Frey, B., & Albin, M. (2020). <i>Underlag för information om Covid-19 vid trångboddhet och flergenerationsboende: Ett underlag för framställning av riktad kommunikation på olika språk</i> [Documentation on Covid-19 information, overcrowding, and multigenerational living: Documentation on specifically aimed multilingual communication]. Online document.	Sweden
Jauhiainen, J. S., & Tedeschi, M. (2021). Healthcare of undocumented migrants. In J. S. Jauhiainen, & M. Tedeschi (Eds.), <i>Undocumented migrants and their everyday lives – the case of Finland</i> (pp. 131–148). Springer Publishing.	Finland
Madar, A. A., Benavente, P., Czapka, E., Herrero-Arias, R., Haj-Younes, J., Hasha, W. H. W., Deeb, G., Møen, K. A., Ortiz-Barreda, G., & Diaz, E. (2022). Covid-19: Access to information access, level of trust and adherence to health advice among migrants in Norway. <i>Archives of Public Health</i> .	Norway
Mangrio, E., Paul-Satyaseela, M., & Strange, M. (2020). Refugees in Sweden during the Covid-19 pandemic – the need for a new perspective on health and integration. <i>Frontiers in Public Health</i> , 8.	Sweden
Norges offentlige utredninger. (2021). <i>Myndighetenes håndtering av koronapandemien: Rapport fra Koronakommisjonen</i> [How authorities handled the corona pandemic: A report by the Corona Commission]. Online document.	Norway
Orderud, G. I., Ekne Ruud, M., Wiig, H., & Rose Tronstad, K. (2021). Covid-19: informasjon, etterlevelse og vaksinasjon blant innvandrere – en kunnskapsoppsummering [Covid-19: Information, compliance, and vaccination among immigrants – a summary of the state of knowledge]. Online document.	Norway
Rapport fra ekspertgruppe. (2020). <i>Forslag til tiltak for å redusere Covid-19-smitte blant innvandrere</i> [Suggestions for actions to diminish Covid-19 infections among immigrants]. Online document.	Norway
Rolig, L. (2021). <i>Viranomaisviestintää terveyskriisissä: Espoon kaupungin toteuttama monikielinen kriisiviestintä koronapandemian aikana</i> [Authority communication in a health crisis: Multilanguage crisis communication in Espoo city during the corona pandemic]. [Unpublished master's thesis].	Finland
Sigurjónsdóttir, H. R., Sigvardsson, D., & Oliveira e Costa, S. (n.d.). <i>Who is left behind? The impact of place on the possibility to follow Covid-19 restrictions</i> . Online document.	Nordic countries
Skogberg, N., Koponen, P., Lilja, E., Austero, S., Achame, S., & Castaneda, A. E. (2021). <i>Access to information, preventive measures and working conditions during the coronavirus epidemic – Findings of the population-based MigCOVID Survey among persons who have migrated to Finland</i> . Online document.	Finland

Skogheim, S., Orderud, G., & Ekne Ruud, M. (2020). <i>Informasjon og tiltak rettet mot innvandrerbefolkningen i forbindelse med Covid-19. Delrapport 1</i> [Information and actions taken towards the minority population during Covid-19. Interim report 1]. Online document.	Norway
Skogheim, S., Orderud, G., Ekne Ruud, M., & Søholt, S. (2020). <i>Informasjon og tiltak rettet mot innvandrerbefolkningen i forbindelse med Covid-19. Delrapport 2</i> . [Information and actions taken towards the minority population during Covid-19. Interim report 2]. Online document.	Norway
Svenonius, O. (2020). Vi talar men vem lyssnar? Kriskommunikation under pandemin [We speak, but who is listening? Crisis communication during the pandemic]. In E. Mittermaier, N. Granholm, & E. Veibäck (Eds.), <i>Perspektiv på pandemin: Inledande analys och diskussion av beredskapsfrågor i ljuset av coronakrisen</i> [Perspectives on the pandemic: Preliminary analysis and discussion on preparedness issues in light of the corona pandemic] (pp. 46–52).	Sweden
Swedish Red Cross Skellefteå. (2021). "Det är inte pandemin som är problemet, det är segregationen och de ojämlika villkoren": Coronapandemins påverkan på personer med begränsad svenskunskap och förankring i lokalsamhället i Skellefteå kommun [It's not the pandemic that is the problem, it's the segregation and the unequal opportunities": The effect of the Corona pandemic on individuals with limited knowledge in Swedish and relation to the local society in the Skellefteå region]. Online document.	Sweden
Ursin, G., Skjesol, I., & Tritter, J. (2020). The Covid-19 pandemic in Norway: The dominance of social implications in framing the policy response. <i>Health Policy and Technology</i> , 9(4), 663–672.	Norway
Valeriani, G., Sarajlic Vukovic, I., Lindegaard, T., Felizia, R., Mollica, R., & Andersson, G. (2020). Addressing healthcare gaps in Sweden during the Covid-19 outbreak: On community outreach and empowering ethnic minority groups in a digitalized context. <i>Healthcare</i> , 8(4), 445.	Sweden