

Table C. Aggregation topics into determinants concepts

Topic Number	Short Label of Determinants	Description of Determinants	Access	Affordability	Awareness	Acceptance	Activation	Assurance
1	<i>Fear caused by the increased number of deaths after vaccination</i>	Increased deaths after vaccination and a lot of side effects			x			
2	<i>Weak access to the immunization</i>	Unsuitable methods and approaches that have been used to access vaccination uptake; e.g. lack of departure vaccination points or unsuccessful prioritization of vaccinations.	x					
3	<i>Mistrust of vaccination</i>	Mistrust of vaccination associated with severe effects and mortality after vaccination.				x		
4	<i>Organization of the vaccination process - problems with planning and long queues</i>	Lack of information and poor organization of vaccination, problems with planning and long queues.	x					
5	<i>Insufficient knowledge</i>	Insufficient knowledge about the necessity of vaccines in the population causing declining interest in vaccination.				x		
6	<i>Discrimination against people, who are not vaccinated</i>	Discrimination against people, who are not vaccinated e.g. at the workplace or in social life						Assurance
7	<i>Lack of openness and transparency policy</i>	Lack of detailed and uniform information on the government side, which caused low awareness of citizens in terms of e.g. safety and side effects of the vaccine.			x			
8	<i>Lack of clear rules for the vaccination procedure</i>	The desire of people from risk groups to get vaccinated.	x	x				
9	<i>The idea of compulsory vaccination</i>	Discussions about pros and cons of compulsory vaccination and encouragement of vaccination.					x	
10	<i>Detailed knowledge about the effectiveness of vaccines</i>	Lack of reliable and in-depth knowledge about the effectiveness of vaccines.			x			
11	<i>Lack of insurance for the severe vaccine adverse reactions</i>	Lack of insurance for the severe vaccine adverse reactions.						Assurance
12	<i>Lottery and covid certificates</i>	Creating incentives for vaccination as an indirect vaccination benefit, e.g. lottery and covid certificates.					x	
13	<i>Mobile home vaccination teams</i>	The organisation of the vaccination process - the need for mobile home	x	x				

		vaccination teams.						
14	Assistance with registration and getting to the vaccination points	Need to create social assistance groups for seniors, e.g. bring them to the car, help to get through, register for vaccination.	x	x				
15	Low quality of statistical data	Low quality of shared statistical data posted on the government portal.			x			
16	Delays in vaccine deliveries	Delays in vaccine deliveries	x					
17	Lack of relevant information Covid-19 mutations	Low awareness about Covid-19 mutations.			x			
18	Direct (or telephone) contact with seniors for vaccination	The need for direct (or telephone) contact with seniors for vaccination.					x	
19	The need to collect and study data on vaccine side effects	The need to collect data on vaccine side effects and investigate them to guarantee vaccination safety to the population.			x			
20	Extended information about vaccines - production	Lack of reliable and in-depth knowledge about the production process.			x			
21	The need for preliminary medical tests before vaccination	The need for preliminary medical tests before vaccination in order to reduce the negative consequences.						Assurance
22	Vaccinations scheduling issues	Problems with scheduling vaccinations and queues (people do not want AstraZeneka).	x					
23	Partially disabled people vaccinations	Organization of vaccinations for partially disabled citizens.	x					
24	Vaccine logistic issues	Logistic issues of moving vaccines between vaccination points.	x					
25	Incentive measures for people engagement to vaccination	Development of incentive measures for vaccination, e.g. discounts on Uber travel in two directions.					x	
26	Lack of contextualization advertising	Unsuitable advertising and lack of contextualization advertising policy.					x	
27	Lack of trust in the vaccine due to the short testing period	Lack of trust in the vaccine due to the short testing period.				x		
28	Low awareness of people of rural and remote areas	Low awareness and consciousness of people of rural and remote areas.			x			
29	Fear of health risks vs. usefulness of vaccination	Lack of significant arguments regarding the risks and benefits of vaccination.			x			
30	Fake medical news and disinformation on Covid-19 vaccines	The difficulty of controlling fake medical and political news that negatively affects				x		

		people and decreases vaccine acceptance.						
31	<i>Fearing about long-term effects after vaccination</i>	Adverse vaccine reactions and mortality among vaccinated people.			x	x		
32	<i>Volatility and inconsistency of information</i>	Constantly changing information harms awareness of safety and the need for vaccination.			x			
33	<i>Lack of awareness about vaccine adverse reactions</i>	Lack of awareness about vaccine adverse reactions.			x			