

**Supplementary Table S1.** Intention to receive vaccine by HBM domains, social norms and vaccine knowledge in univariate analysis.

	<b>Survey 1</b>		<b>Survey 2</b>	
	<b>OR (95% CI)</b>	<b>p</b>	<b>OR (95% CI)</b>	<b>p</b>
<b>Gender</b>		0.189		0.032
Female	Ref		Ref	
Male	1.10 (0.95-1.28)		1.14 (1.0-1.29)	
<b>Age Category</b>		0.175		0.004
18-30 years	Ref		Ref	
31-50 years	1.07 (0.91-1.27)		1.25 (1.07-1.45)	
≥51 years	1.20 (0.99-1.45)		1.97 (1.68-2.32)	
<b>Nationality</b>		0.043		<0.001
Lebanese	Ref		Ref	
Refugees	0.86 (0.74-1.00)		0.36 (0.32-0.41)	
<b>Perceived Susceptibility</b>	1.80 (1.70-1.91)	<0.001	2.25 (2.13-2.37)	<0.001
<b>Perceived Severity</b>	2.66 (2.27-3.10)	<0.001	5.34 (4.60-6.21)	<0.001
<b>Perceived Benefits</b>	5.85 (5.17-6.63)	<0.001	4.47 (4.10-4.87)	<0.001
<b>Perceived Barriers</b>	0.51 (0.49-0.54)	<0.001	0.47 (0.45-0.49)	<0.001
<b>Cues to Action</b>	5.77 (5.00-6.65)	<0.001	5.96 (5.27-6.74)	<0.001
<b>Social Norms</b>	4.06 (3.60-4.59)	<0.001	3.28 (2.96-3.63)	<0.001
<b>Knowledge</b>	1.23 (1.18-1.27)	<0.001	1.54 (1.47-1.62)	<0.001

**Supplementary Table S2.** Participant responses to HBM domain questions, stratified by nationality (Lebanese vs. refugees) in survey 1 (February 2021).

	Lebanese n(%) N=1,850			Refugees n(%) N=2,077			p
Domain	Yes	Unsure	No	Yes	Unsure	No	
<b>Perceived Susceptibility</b>							
I do not need to receive the vaccine because I have good health	713 (38.5)	467 (25.2)	670 (36.2)	1068 (51.4)	467 (22.5)	542 (26.1)	<0.001
I do not need to receive the vaccine if had been infected with COVID-19 and recovered	521 (28.2)	595 (32.2)	734 (39.7)	729 (35.1)	677 (32.6)	671 (32.3)	<0.001
<b>Perceived Severity</b>							
I am not at risk of severe complications of COVID-19 so I will not take the vaccine	783 (42.3)	-	1067 (57.7)	1114 (53.6)	-	963 (46.4)	<0.001
<b>Perceived Benefit</b>							
I think the COVID-19 vaccine is safe	291 (15.7)	924 (50.0)	635 (34.3)	317 (15.3)	994 (47.9)	766 (36.9)	0.246
I think the COVID-19 vaccine is effective	311 (16.8)	1005 (54.3)	534 (28.9)	307 (14.8)	1130 (54.4)	640 (30.8)	0.149
<b>Perceived Barrier</b>							
I don't trust COVID-19 vaccine because it was developed in a short period of time	1206 (65.2)	-	644 (34.8)	1418 (68.3)	-	659 (31.7)	0.041
I think COVID-19 vaccine would change your DNA	522 (28.2)	894 (48.2)	434 (23.5)	465 (22.4)	1227 (59.1)	385 (18.5)	<0.001
I am concerned about side effects or risks of the vaccine	1307 (70.7)	351 (19.0)	192 (10.4)	1497 (72.1)	376 (18.1)	204 (9.8)	0.613
I think the side effects of the COVID-19 vaccine are very serious/could lead to death	758 (41.0)	792 (42.8)	300 (16.2)	900 (43.3)	873 (42.0)	304 (14.6)	0.221
The COVID-19 vaccine will not succeed because the virus keeps changing	891 (48.2)	691 (37.4)	268 (14.5)	996 (48.0)	814 (39.2)	267 (12.9)	0.249
<b>Cues to Action</b>							
I would be more comfortable getting the vaccine if I saw neighbors, community leaders, religious leaders, doctors, celebrities, politicians receive the vaccine	727 (39.3)	552 (29.8)	571 (30.9)	896 (43.1)	563 (27.1)	618 (29.8)	0.039
<b>Social Norms</b>							
Most people I know are going to receive the vaccine	230 (12.4)	766 (41.4)	854 (46.2)	263 (12.7)	951 (45.8)	863 (41.6)	0.011

**Supplementary Table S3.** Participant responses to HBM domain questions, stratified by nationality (Lebanese vs. refugees) in survey 2 (June 2021).

	<b>Lebanese n(%) N=1,950</b>			<b>Refugees n(%) N=2,224</b>			
<b>Domain</b>	<b>Yes</b>	<b>Unsure</b>	<b>No</b>	<b>Yes</b>	<b>Unsure</b>	<b>No</b>	
<b>Perceived Susceptibility</b>							
I do not need to receive the vaccine because I have good health	466 (23.9)	285 (14.6)	1199 (61.5)	938 (42.2)	357 (16.1)	929 (41.8)	<0.001
I do not need to receive the vaccine if had been infected with COVID-19 and recovered	356 (18.3)	394 (20.2)	1200 (61.5)	601 (27.0)	572 (25.7)	1051 (47.3)	<0.001
<b>Perceived Severity</b>							
I am not at risk of severe complications of COVID-19 so I will not take the vaccine	494 (25.3)	-	1456 (74.7)	920 (41.4)	-	1304 (58.6)	<0.001
<b>Perceived Benefit</b>							
I think the COVID-19 vaccine is safe	907 (46.5)	802 (41.1)	241 (12.4)	691 (31.1)	1113 (50.0)	420 (18.9)	<0.001
I think the COVID-19 vaccine is effective	837 (42.9)	884 (45.3)	229 (11.7)	652 (29.3)	1181 (53.1)	391 (17.6)	<0.001
<b>Perceived Barrier</b>							
I don't trust COVID-19 vaccine because it was developed in a short period of time	718 (36.8)	-	1232 (63.2)	1177 (52.9)	-	1047 (47.1)	<0.001
I think COVID-19 vaccine would change your DNA	199 (10.2)	940 (43.1)	911 (46.7)	323 (14.5)	1059 (47.6)	842 (37.9)	<0.001
I am concerned about side effects or risks of the vaccine	768 (39.4)	565 (29.0)	617 (31.6)	1366 (61.4)	482 (21.7)	376 (16.9)	<0.001
I think the side effects of the COVID-19 vaccine are very serious/could lead to death	342 (17.5)	835 (42.8)	773 (39.6)	656 (29.5)	931 (41.9)	637 (28.6)	<0.001
The COVID-19 vaccine will not succeed because the virus keeps changing	401 (20.6)	875 (44.9)	674 (34.6)	605 (27.2)	1055 (47.4)	564 (25.4)	<0.001
<b>Cues to Action</b>							
I would be more comfortable getting the vaccine if I saw neighbors, community leaders, religious leaders, doctors, celebrities, politicians receive the vaccine	1205 (61.8)	414 (21.2)	331 (17.0)	1148 (51.6)	581 (26.1)	495 (22.3)	<0.001
<b>Social Norms</b>							
Most people I know are going to receive the vaccine	595 (30.5)	921 (47.2)	434 (22.3)	325 (14.6)	1162 (52.3)	737 (33.1)	<0.001