

Supplementary Table 1: Distribution of socio-demographic characteristics of the study population, HCW, DGH Avissawella, 2021

Characteristic	Total population N=779	Total population	
		Vaccine declined n=53	Vaccinated n=726
<b>Age</b>			
21 - 35 years	168 (21.6%)	9 (17.0%)	159 (21.9%)
36 - 55 years	535 (68.7%)	38 (71.7%)	797 (68.5%)
56 - 70 years	76 (9.8%)	6 (11.3%)	70 (9.6%)
<b>Sex</b>			
Female	526 (67.5%)	37 (69.8%)	489 (67.4%)
Male	253 (32.5%)	16 (30.2%)	237 (32.6)
<b>Marital status</b>			
Married	683 (87.7%)	50 (94.3%)	633 (87.2%)
Single <sup>1</sup>	95 (12.3%)	3 (5.7%)	93 (12.8%)
<b>Designation</b>			
Other <sup>2</sup>	116 (14.9%)	4 (7.5%)	112(15.4%)
Health Assistants	142 (18.2%)	20 (37.7%)	122 (16.8%)
Paramedical / PSM <sup>3</sup>	58 (7.4%)	2 (3.8%)	56 (7.7%)
Nursing staff	269 (34.5%)	26 (49.1%)	243 (33.5%)
Medical officers	194 (24.9%)	1 (1.9%)	193 (26.6%)
<b>Education level<sup>4</sup></b>			
Primary	19 (2.4%)	7 (13.2%)	12 (1.7%)
Secondary	174 (22.3%)	11(20.8%)	163 (22.5%)
Tertiary	374 (48%)	34 (64.2%)	340 (46.8%)
Graduate/postgraduate	212 (27%)	1 (1.9%)	211 (29.1%)

<sup>1</sup>Single represents all unmarried (90), widowed (4), and divorced (1) staff members.

<sup>2</sup>Staff working in administration, security services, cleaning, laundry and canteen

<sup>3</sup>Professions Supplementary to Medicine

<sup>4</sup>Primary – Up to GCSE Qualification, Secondary – A/L / Qualification, Tertiary – Diploma or any NVQ (GCSE General Certificate of Secondary Education - , A/L-Advanced Level, NVQ-National Vocational Qualification)

Supplementary Table 2: Comparison of the level of knowledge between the HCW who declined or who were vaccinated for COVID-19 in DGH Avissawella, Sri Lanka 2021

Knowledge factors	Vaccine preference of health HCW (observed) n=779		Univariate analysis		Multivariate analysis <sup>1</sup>	
	Vaccine declined 6.8% (53)	Vaccine accepted 93.2% (726)	Odds ratio (95% CI)	P value	Odds ratio (95% CI)	P value
1. Vaccine manufacturer						
Correct	5.8 % (27)	94.2% (442)	0.7 (0.4, 1.2)	0.179	0.8 (0.4, 1.6)	0.559
Incorrect	8.4% (21)	91.6% (229)	1	Reference	1	Reference
Excluded non-respondents 60 (7.7% from total)						
2. Vaccine inventor						
Correct	4% (21)	96% (501)	0.2 (0.1, 0.5)	<0.001	0.3 (0.1, 0.5)	<0.001
Incorrect	13.6% (27)	86.4% (171)	1	Reference	1	Reference
Excluded non respondents 59 (7.6% from total)						
3. Vaccine producing country						
Correct	5.8% (32)	94.2% (517)	0.5 (0.3, 1.1)	<0.046	0.7 (0.4, 1.6)	0.469
Incorrect	10.3% (18)	89.7% (157)	1	Reference	1	Reference
Excluded non respondents 55 (7.1% from total)						
4. Number of vaccine doses to be administered						
Correct	6.9% (38)	93.1% (516)	1.1 (0.6, 2.3)	0.620	1.6 (0.7, 3.5)	0.225
Incorrect	5.9% (12)	94.1% (193)	1	Reference	1	Reference
Excluded non respondents 20 (2.6% from total)						
5. Duration between vaccine doses						
Correct	4.9% (19)	95.1% (365)	0.3 (0.2, 0.5)	<0.001	0.4 (0.2, 0.7)	<0.003
Incorrect	14.8% (31)	85.2% (178)	1	Reference	1	Reference
Excluded non respondents 186 (23.9% from total)						
<b>Sensitivity analysis</b>						
I Overall response rates for knowledge questions <sup>2</sup>						
Fully responded	6.5% (45)	93.5% (649)	1.5 (0.7, 3.2)	0.315	1.3 (0.5, 2.9)	0.594
Partially/not responded	9.4% (8)	90.6%(77)	1	Reference	1	Reference

<sup>1</sup>Multivariate model was adjusted for the sociodemographic variables. I.e. Age, Sex, Marital status and Education Level. <sup>2</sup>Who answered all 1-4 questions were considered as 'fully responded' and others who responded less /non-respondents were considered as 'partially/not responded', Non-respondents were excluded from analysis of 1-5 factors.

Supplementary Table 3: Comparison of attitudes between HCW who declined the COVID-19 vaccine with the vaccinated HCW attached to DGH Avissawella, Sri Lanka 2021

Factors	Vaccine preference of HCW (observed) n=779		Univariate analysis		Multivariate analysis <sup>1</sup>	
	Vaccine declined 6.8% ( 53)	Vaccine accepted 93.2% (726)	Odds ratio (95% CI)	P value	Odds ratio (95% CI)	P value
1. Hospital is a risky environment.						
Disagree	37.5% (6)	62.5% (10)	9.7 (3.3, 28.2)	<0.001	10.8 (3.2, 36.39)	<0.001
Agree	5.8% (43)	94.2% (701)	1			
(19 non-respondents were excluded)						
2. For self/family protection						
Disagree	70% (7)	30% (3)	33.7 (10.7, 105.6)	<0.001	51.84 (8.9, 301)	<0.001
Agree	5.7% (43)	94.3% (705)	1		1	
(21 non respondents were excluded)						
3. To reduce complications						
Disagree	64.3% (9)	35.7% (5)	33.7 (10.7, 105.6)	<0.001	41.0 (10.4, 160)	<0.001
Agree	5.1% (37)	94.9% (693)	1		1	
(35 non respondents were excluded)						
4. Potency/efficacy of the vaccine is sufficient						
Disagree	13.2% (27)	86.8% (178)	3.7 (2.0 , 6.7)	<0.001	4.8 (2.6, 9.3)	<0.001
Agree	3.9% (20)	96.1% (490)	1		1	
(64 non respondents were excluded)						
5. Safety of the vaccine is sufficient						
Disagree	14.4% (28)	85.6%(166)	3.8 (2.1, 6.8)	<0.001	5.6 (2.9, 10.4)	<0.001
Agree	4.2% (22)	95.8% (501)	1		1	
(62 non respondents were excluded)						
6. Due to positive co-worker encouragement to get vaccinated						
Disagree	0.5% (2)	99.5% (377)	0.03 (0.009, 0.1)	<0.001	0.04 (0.01, 0.2)	<0.001
Agree	12.9% (46)	87.1% (311)	1		1	
(43 non respondents were excluded)						
<b>Sensitivity analysis</b>						
I. Overall response rates <sup>2</sup>						
Fully Responded	6.7% (47)	93.35(659)	1.2 (0.5, 3.0)	0.615	1.0 (0.4, 2.6)	0.938
Partial / non-respondents	8.2% (6)	91.8% (67)	1		1	

<sup>1</sup>Multivariate model was adjusted for the sociodemographic variables. I.e. Age, Sex, Marital status and Education Level. Non-respondents were excluded from analysis.  
<sup>2</sup>Who answered all 1-6 questions were considered as 'fully responded' and others who responded less /non-respondents were considered as 'partially/not responded'.  
P- probability, CI- confidence interval

Supplementary Table 4: The distribution of survey participants to the Self-administered Questionnaire (SAQ) by designation category

Designation	Total No of vaccine eligible staff	Population covered with survey (SAQ)			
		Participated (96%)		Not participated (4%)	
		Vaccine declined	Vaccinated	Vaccine declined	Vaccinated
Medical officers	194	1	193	0	0
Nursing staff	269	26	243	0	0
Paramedical / PSM <sup>1</sup>	58	2	56	0	0
Health assistants	163	20	122	0	21
Other <sup>2</sup>	128	4	112	0	12
<b>Total</b>	<b>812 (100%)</b>	<b>53 (6.6%)</b>	<b>726 (89.4%)</b>	<b>0</b>	<b>33 (4%)</b>

<sup>1</sup>Professions Supplementary to Medicine

<sup>2</sup>Staff work in administration, security services, cleaning, laundry, canteen  
SAQ –Self administrated questionnaire

Supplementary Table 5: Perception of COVID-19 vaccinated HCW\* towards service related attributes

Service related attributes	Responded HCW n=726			Not responded (% from total)
	Satisfied HCW (Strongly agree and Agree) (%)		Unsatisfied HCW (Disagree + Strongly- disagree (%))	
	Strongly agree	Agree		
Place of the vaccination	429 (59.1%)	271 (37.3%)	2 (0.3%)	24 (3.3%)
Medical staff at the vaccination centre	514 (70.8)	187 (25.8%)	1 (0.1%)	24 (3.3%)
Vaccination staff at the vaccination centre	521 (71.8%)	179 (24.7%)	1 (0.1%)	25 (3.4%)
Opening times of the vaccination centre	270 (37.2%)	275 (37.9%)	3 (0.4%)	178 (24.5%)
Post vaccination care provided at the centre	489 (67.4%)	202 (27.8%)	3 (0.4%)	32 (4.4%)

\*This component of the questionnaire was answered by only the vaccinated HCW