

COVID vaccines hesitancy among healthcare workers in Ethiopia

December 2022



Background

- 1st case occurred on March 13, 2020 in Ethiopia.
- Experienced four subsequent waves of COVID-19
- ~500k total cases; ~8k total deaths and ~36million total number of fully vaccinated
- A systematic review of 25 peer reviewed papers in March, 2022 indicated lower vaccine acceptance among healthcare workers than the general population (54% Vs 67%).
 - FMOH needs to identify the reasons
- Breakthrough ACTION Ethiopia conducted an assessment on hesitancy of healthcare workers on COVID vaccines and associated factors in February, 2022.



Objective

To explore the level of hesitancy related to COVID vaccines among healthcare workers and associated factors in Ethiopia.



Methodology

- Interviewed a random sample of 500 healthcare workers including nurses, midwives, pharmacists & doctors etc.
- **Vaccine hesitancy** refers to a **delay in acceptance or refusal** of vaccination despite availability of vaccination services (WHO).
- Hesitancy was measured from unvaccinated or those who didn't complete recommended doses.

Determinants of hesitancy

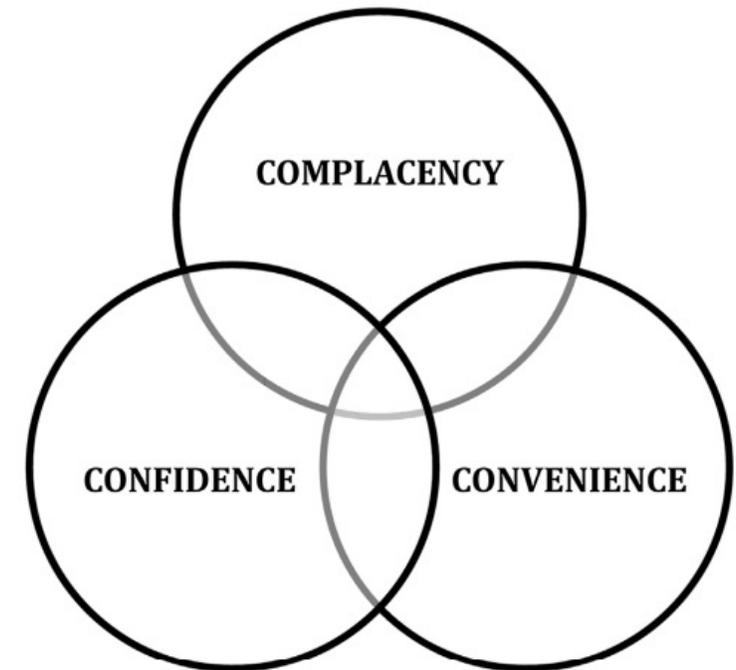
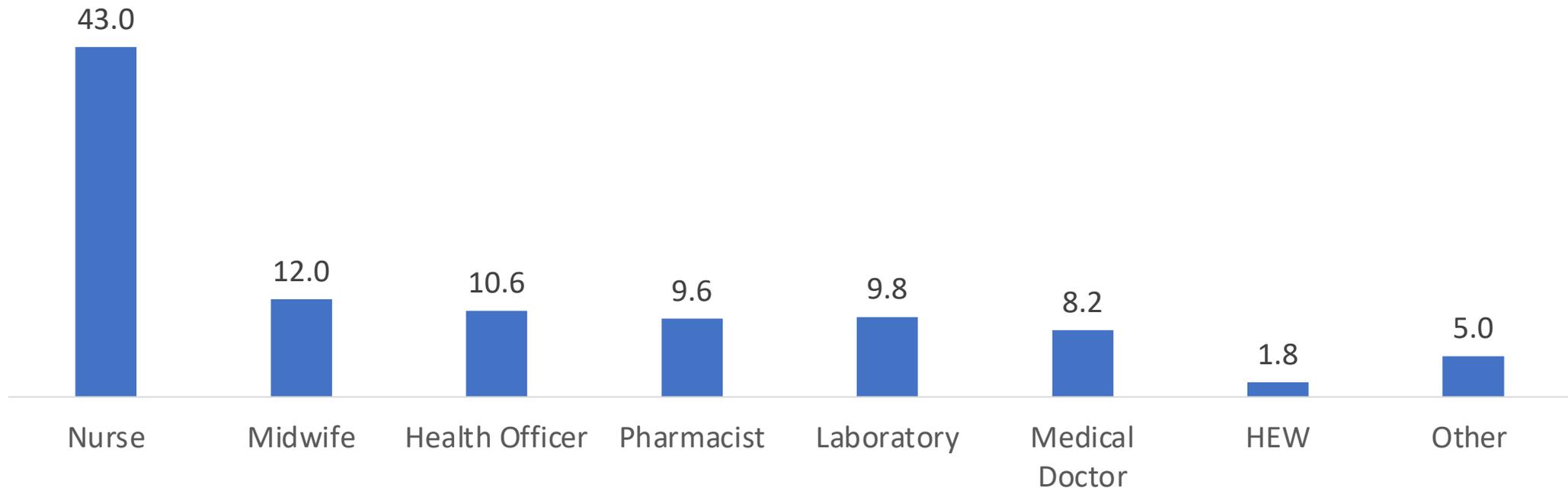
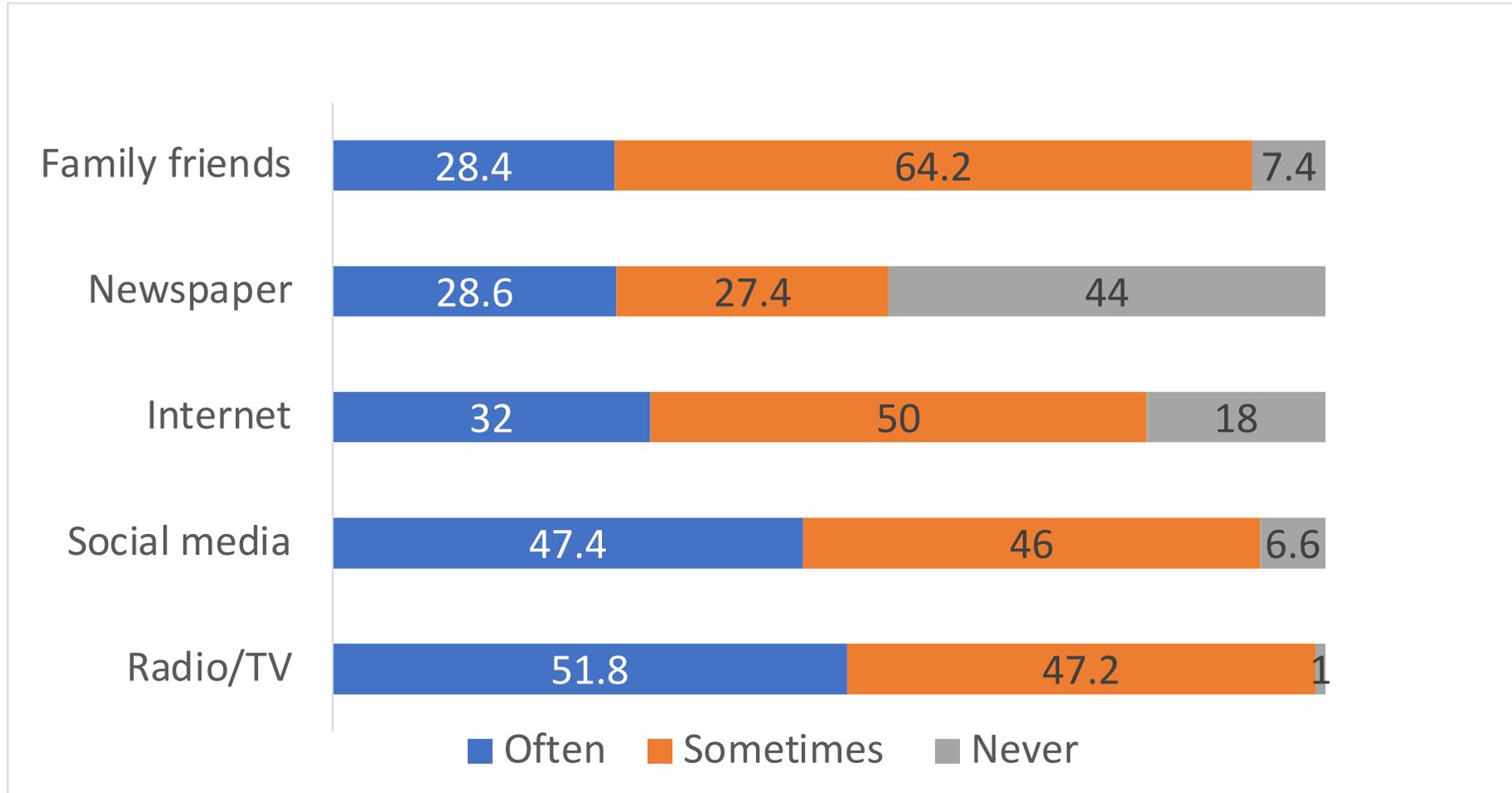


Fig. 2. "Three Cs" model of vaccine hesitancy.

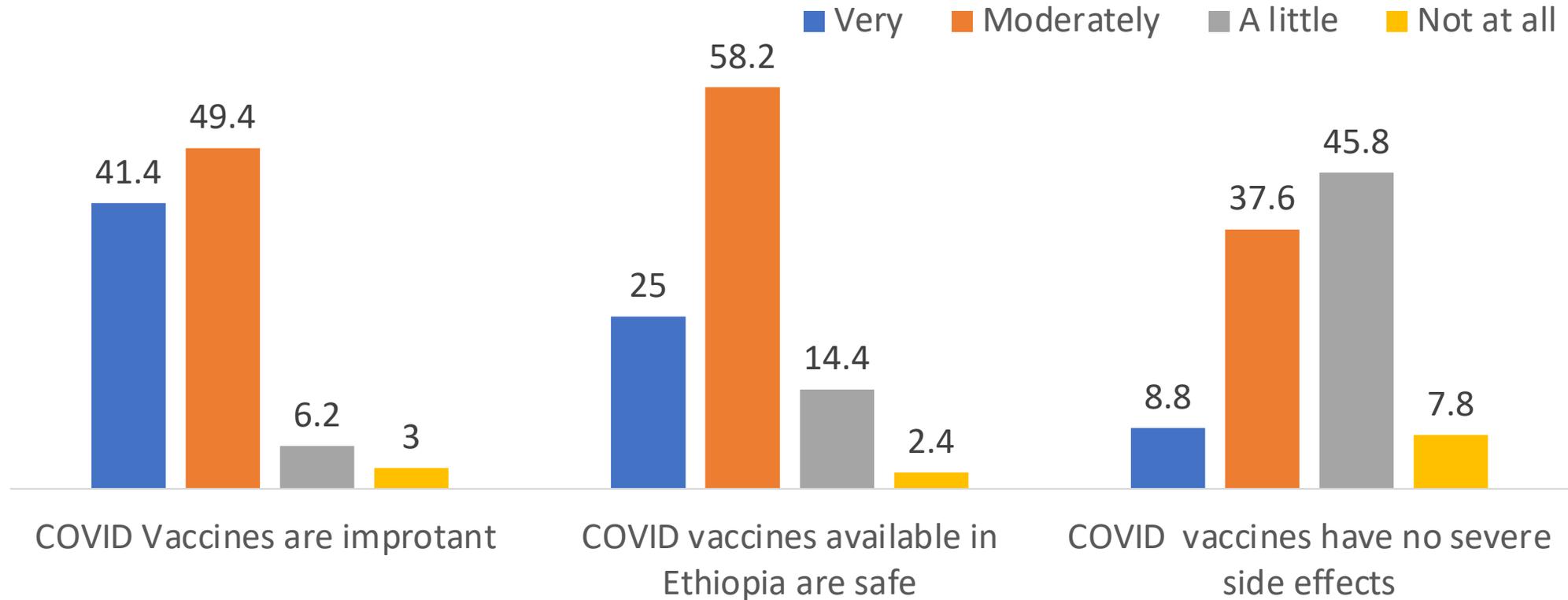
Percent distribution of sample by role (N=500)



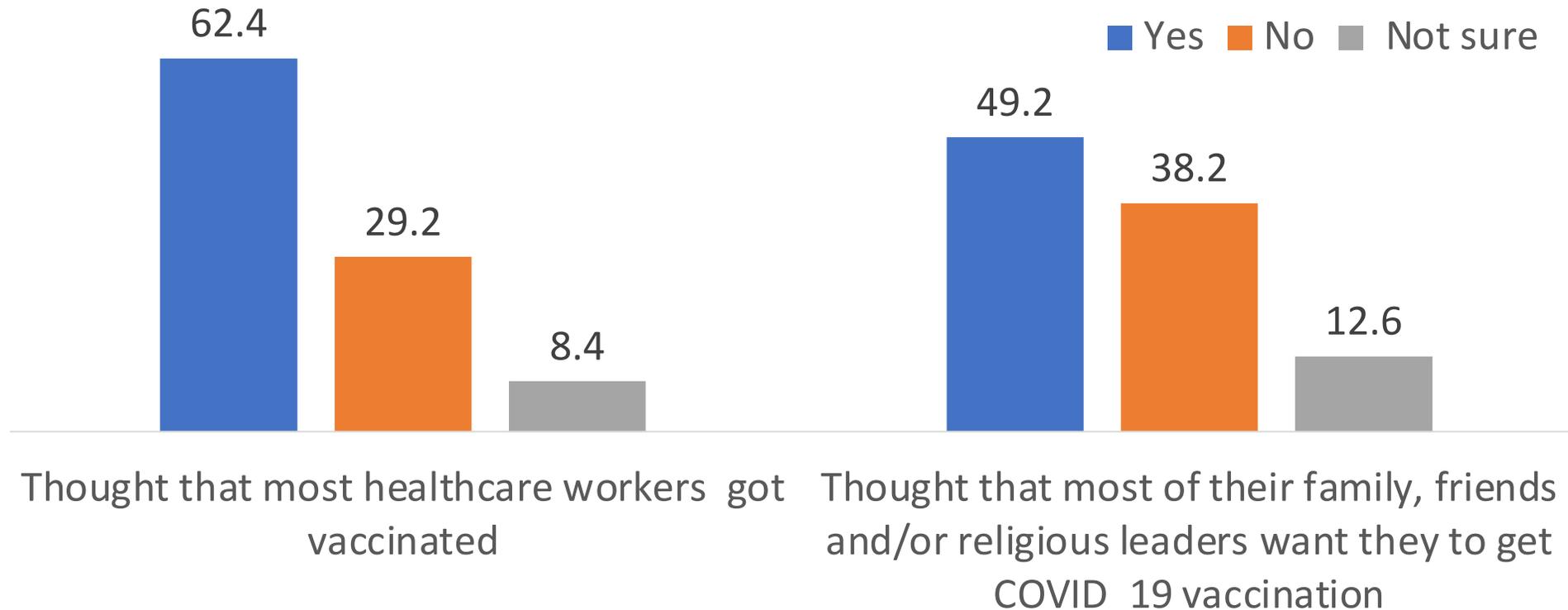
Percent exposure to information on COVID Vaccine (N=500)



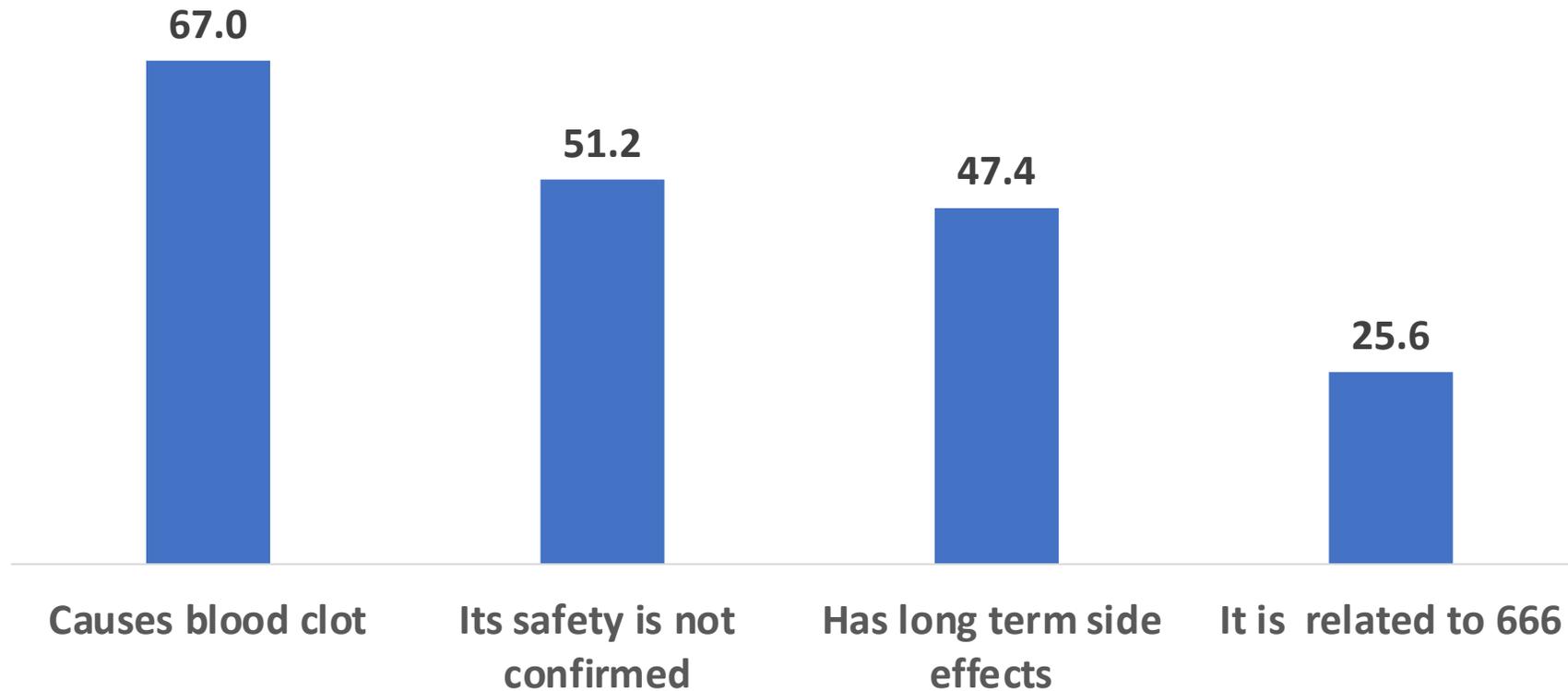
Percent perception of healthcare providers on COVID vaccine (N=500)



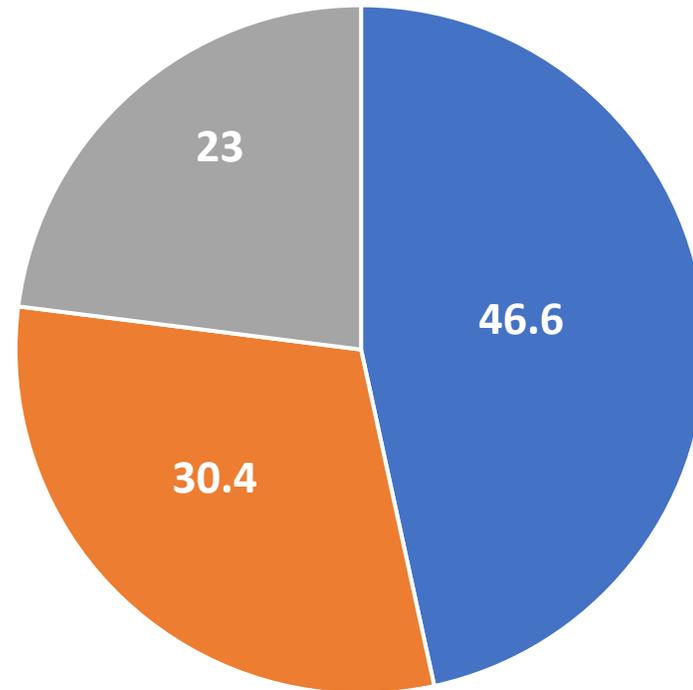
Percent family and community support on COVID Vaccine (N=500)



Percent of misperception on COVID vaccine among HCWs (N=500)

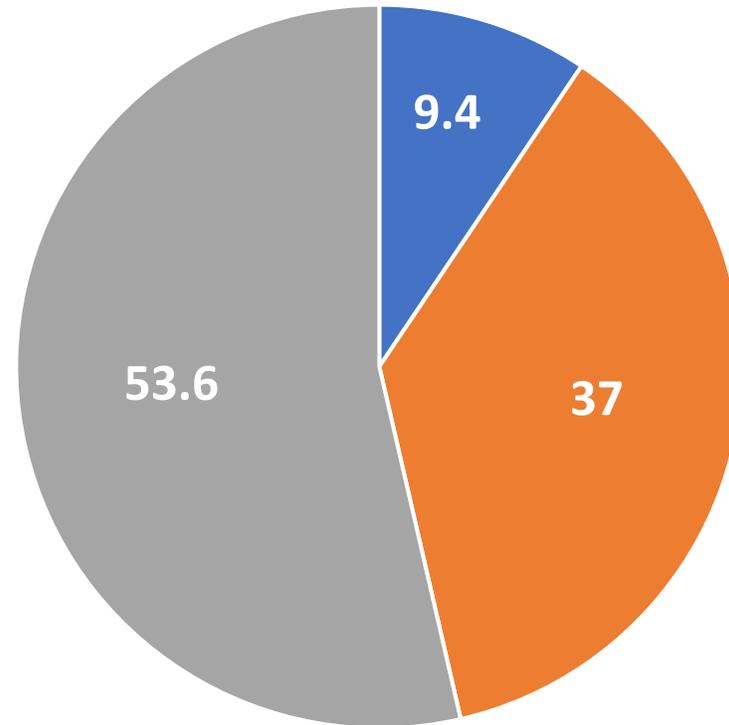


Percent Risk of getting infected with COVID 19 (N=500)



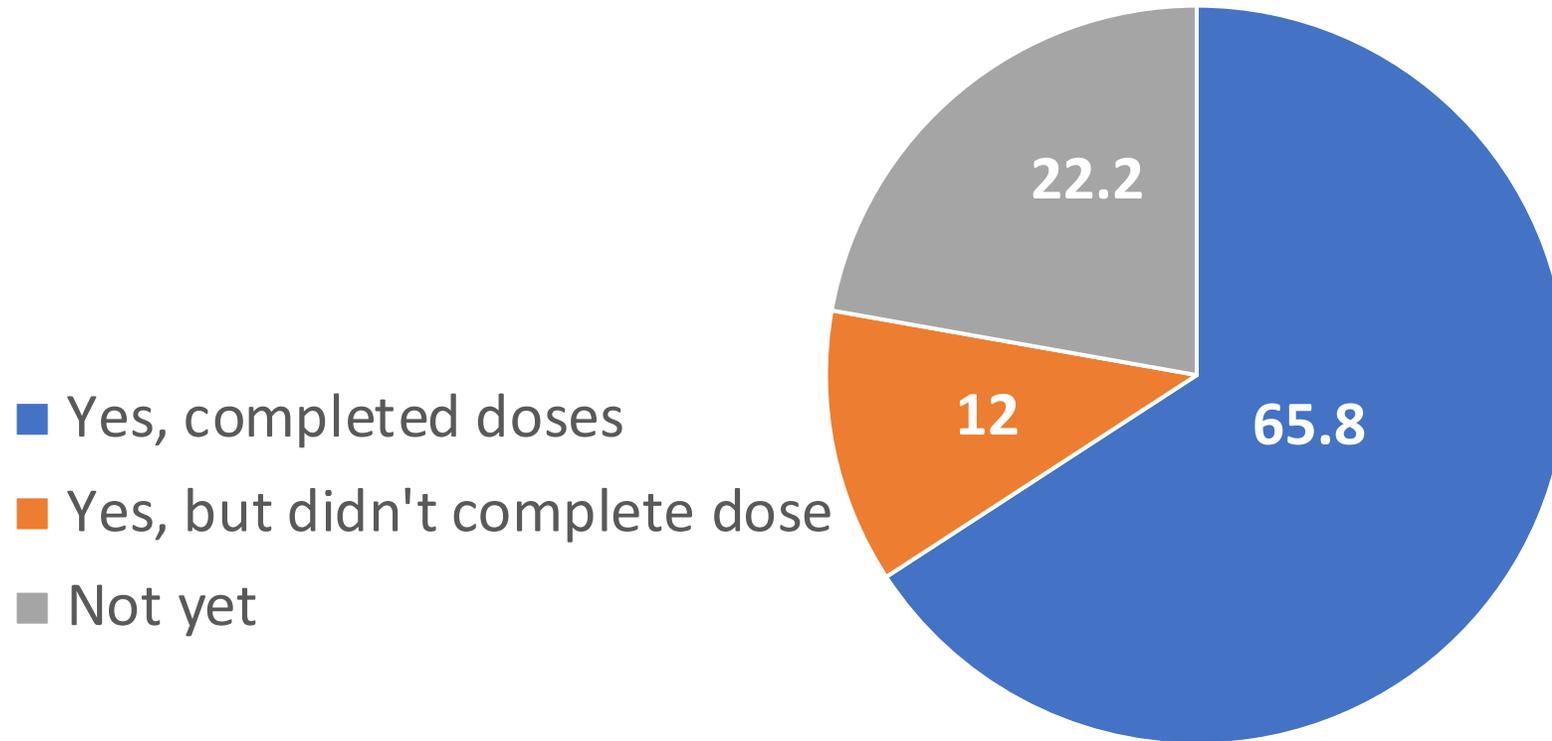
■ Very high ■ High ■ Low/v.low

Percent perceived severity of COVID 19 (N=500)

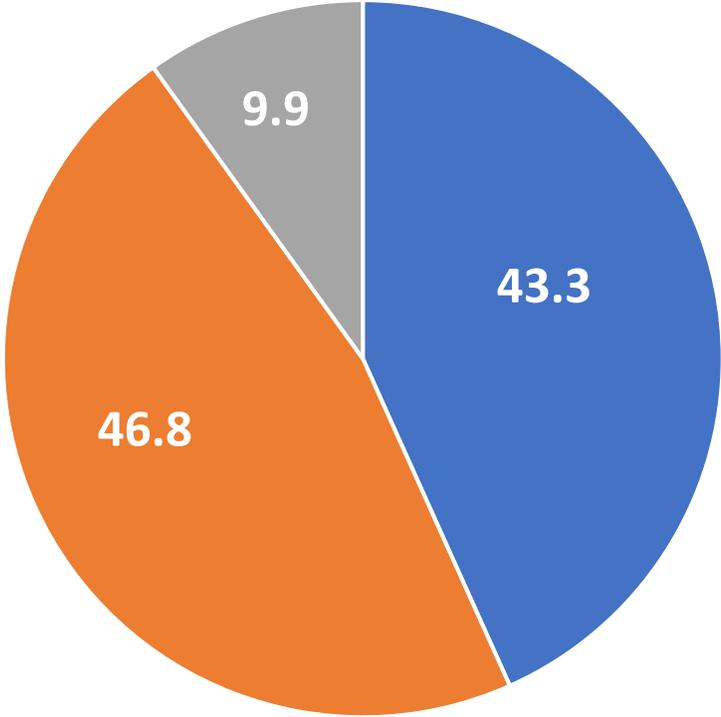


■ Low ■ Moderate ■ High

Percent experiences on COVID vaccination before (N=500)

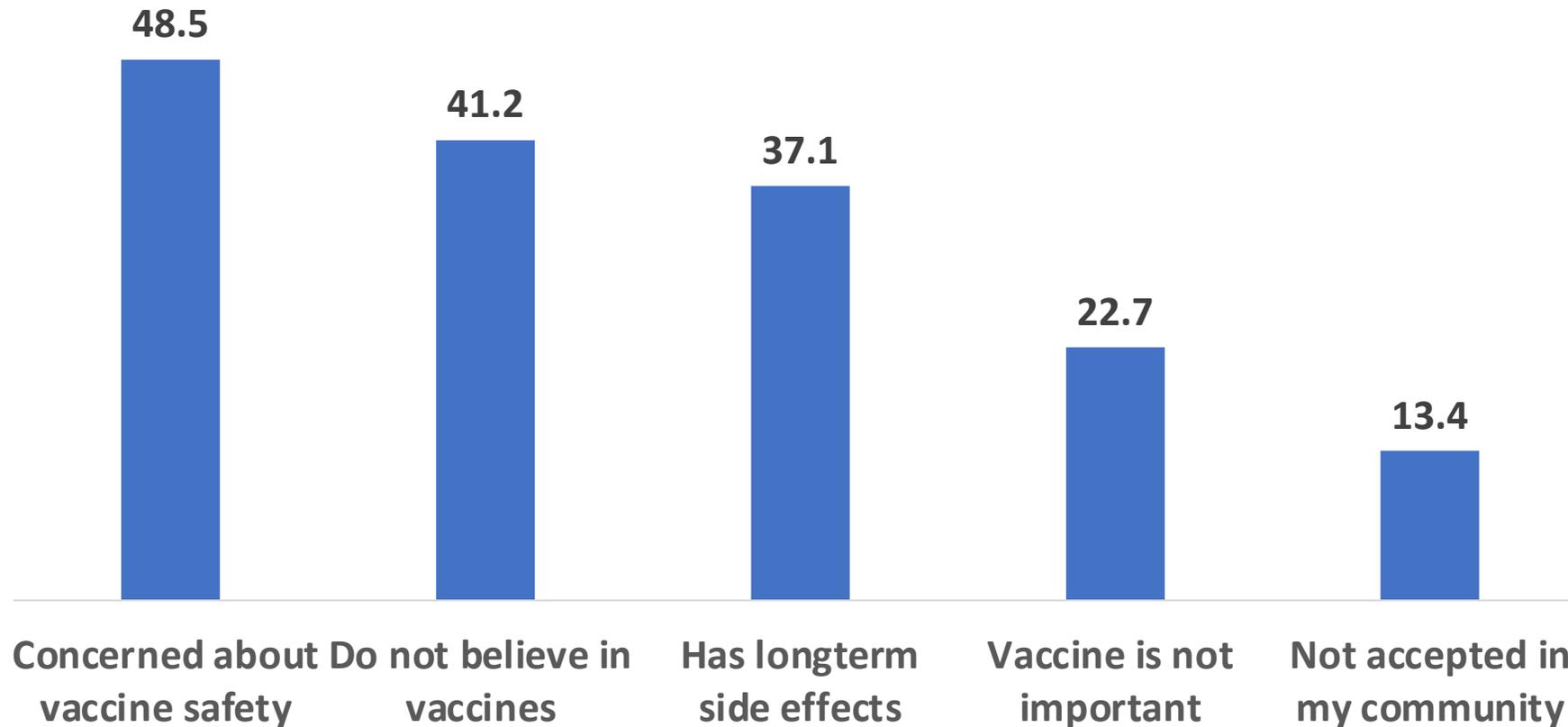


Willingness to receive vaccine among those who didn't take or complete dose (N=171)



■ Yes ■ No ■ Not sure

Percent reasons for hesitancy on COVID vaccine (N=97)



Logistic regression: factors significantly associated with willingness to receive vaccine (N=171)

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)	
								Lower	Upper
Step 1 ^a	1.4 What is your gender? (1)	.754	.372	4.107	1	.043	2.125	1.025	4.404
	Education in two category (1)	-.466	.426	1.196	1	.274	.628	.273	1.446
	Age in 2 category(1)	.082	.375	.048	1	.827	1.085	.521	2.262
	Risk of getting COVID 19			.718	2	.699			
	Risk of getting COVID 19 (1)	.412	.493	.698	1	.404	1.510	.574	3.968
	Risk of getting COVID 19 (2)	.310	.486	.406	1	.524	1.363	.526	3.536
	Do you think that most healthcare providers (nurses & doctors) got vaccinated(1)	.211	.393	.288	1	.592	1.235	.571	2.670
	Having chronic illness(1)	-.663	.969	.468	1	.494	.515	.077	3.442
	has longterm side effect (1)	.602	.390	2.389	1	.122	1.826	.851	3.918
	Its safety not confirmed(1)	1.004	.401	6.283	1	.012	2.729	1.245	5.983
	Causes blood clot(1)	.611	.443	1.902	1	.168	1.843	.773	4.393
	related to 666(1)	.949	.421	5.076	1	.024	2.582	1.131	5.895
	Constant	-2.108	.583	13.087	1	<.001	.121		

a. Variable(s) entered on step 1: 1.4 What is your gender?, Education in two category, Age in 2 category, Risk of getting COVID 19, Do you think that most healthcare providers (nurses & doctors) got vaccinated, Having chronic illness, has longterm side effect, Its safety not confirmed, Causes blood clot, related to 666.

Rumors on COVID 19 and COVID 19 vaccine

COVID 19

- There is no COVID-19 at all; it is to shift political agenda
- COVID is just like a common cold

COVID 19 Vaccines

- It causes severe side effects:
 - Infertility,
 - Blood clot,
 - Organ failure (kidney, heart, & liver),
 - Sexual dysfunction
 - Menopause,
 - Abortion
- The vaccine itself is a virus
- It has microchips to track and monitor people
- It is 666 spirit

Recommendation

- Explore reasons why willingness significantly varies by geography
- Facilitate dialogue among health workers on vaccines safety
- Use mix of channels radio/TV and social media to educate health care providers

Implication

- The findings were widely disseminated for FMOH and partners
- The findings informed the third-round national vaccination campaign which resulted over 23 million total vaccinations
- The evidence was used to facilitate health facility-based dialogues, training sessions for healthcare workers and media campaigns
- The findings increased FMOH's interest to do similar assessment on community health workers: **health extension workers and women development army.**

Note: brief reports of both assessments (healthcare worker & community health worker) were uploaded on CCN
<https://covid19communicationnetwork.org/>

Thank You

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