

Understanding COVID-19 vaccination intention among healthcare workers in N’Djamena, Chad: insights for enhanced immunization strategies in Africa

Guy Rodrigue Takoudjou Dzomo,¹ Rodrigo López,² Margarita Bernales,² Oumaima Djarma,³ Mbario Edmond,⁴ Ndilbe Steve Soumbatingar,¹ Mouassede Madengar,¹ Franck J.D. Mennechet,⁵ Carlos Gomez-Virseda⁶

¹University Hospital Complex “Le Bon Samaritain”, N’Djamena, Chad; ²Faculty of Medicine, Pontificia Universidad Católica de Chile, Santiago, Chile; ³Republic of Chad, Ministry of Public Health and National Solidarity, N’Djamena, Chad; ⁴Association for the Promotion of Village Health in Chad, Bekamba, Chad; ⁵Pathogenesis and Control of Chronic and Emerging Infections, University of Montpellier, France; ⁶Center for Biomedical Ethics and Law, Department of Public Health and Primary Care, Faculty of Medicine, University KU Leuven, Belgium

doi: 10.4081/sjroh.2025.597

SUPPLEMENTARY MATERIAL

Supplementary Table 1. HCWs’ attitudes, past experiences, and beliefs regarding vaccination.

Question	Answer	n (%)
Do you think that vaccines protect against dangerous diseases?	Always	354 (59.6)
	Frequently	165 (27.78)
	Seldom	40 (6.73)
	Never	17 (2.86)
	Do not know	18 (3.03)
Do you think that most parents in Chad vaccinate children at birth?	Always	238 (40.07)
	Frequently	202 (34.01)
	Seldom	118 (19.87)
	Never	25 (4.21)
	Do not know	11 (1.85)
Do you think that vaccines are dangerous or cause disease?	Always	32 (5.39)
	Frequently	27 (4.55)
	Seldom	160 (26.94)
	Never	324 (54.55)
	Do not know	51 (8.59)

Have you ever hesitated to have yourself or a relative vaccinated?	Always	43 (7.17)
	Frequently	45 (7.5)
	Seldom	87 (14.5)
	Never	405 (67.5)
	Do not know	20 (3.33)
Have you or a relative ever refused to be vaccinated?	Yes	39 (6.41)
	No	568 (94.42)
	Do not know	1 (0.16)
Have you or a relative ever had a bad experience with vaccination?	Yes	85 (14.12)
	No	493 (81.89)
	Do not know	24 (3.99)
Have distance, lack of money or time ever prevented you (or a relative) from getting vaccinated?	Yes	208 (34.49)
	No	387 (64.18)
	Do not know	8 (1.33)
Has someone close to you ever given you negative information about vaccination?	Yes	231 (38.31)
	No	363 (60.18)
	Do not know	9 (1.49)
Have you ever heard negative information about vaccination in the media (radio, television, newspaper)?	Yes	186 (30.74)
	No	407 (67.27)
	Do not know	12 (1.98)
Have you ever heard negative information about vaccination in social networks?	Yes	233 (38.07)
	No	364 (59.48)
	Do not know	15 (2.45)
Do you think that African traditions oppose vaccination?	Yes	163 (26.77)
	No	361 (59.28)
	Do not know	85 (13.96)
Do you think that religion and faith in God oppose vaccination?	Yes	79 (13.01)
	No	461 (75.95)
	Do not know	67 (11.04)
Do you think that Chadian leaders (politicians, religious, traditional) oppose vaccination?	Yes	75 (12.56)
	No	452 (75.71)
	Do not know	70 (11.73)
Do you think that vaccination is an instrument to sterilize people of color?	Yes	43 (7.17)
	No	491 (81.83)
	Do not know	66 (11)
Do you think that vaccination is an instrument to introduce diseases in Africa?	Yes	96 (16.03)
	No	442 (73.79)
	Do not know	61 (10.18)
	Yes	158 (25.86)

Do you think that vaccination is simply a means used by pharmaceutical companies and Western countries to enrich themselves?	No	369 (60.39)
	Do not know	84 (13.75)