#1938: COVID-19 Vaccine Hesitancy among Pregnant Women and Non-Pregnant Adults Who Rely on Social Media for Health Care Information in Cameroon, Africa

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Background

- Uptake of COVID-19 vaccine is limited by accessibility and vaccine hesitancy
- VH is multifactorial but influences include disinformation through social media

Study Goal

To test our hypothesis that frequent users of social media would have higher vaccine hesitancy due to exposure to disinformation in Cameroon in Central Africa.

Methods

- A survey study was conducted at urban and suburban hospital facilities in four of the ten regions of Cameroon between June 1st and July 31st 2021.
- Participants were randomly selected from a convenience sample of pregnant and non-pregnant adults in outpatient clinical settings
- Participants self-reported socio-demographics, perceptions of COVID-19 infection, and interest in vaccination.
- Participants ranked their top two sources of health care information, including social media.
- Bivariate analysis was used to explore the perceptions of infection and vaccination stratified by social media preference with statistical significance set at $p<0.05$.

Table 1: Participant Characteristics (n=835)

Question	Social Media Top Info Source n=151 n (%) or median [IQR]	Other Top Info Sources n=684 n (%) or median [IQR]	Total n=835 n (%) or median [IQR]	p-value
Median Age in years [IQR]	30 [26-35]	29 [25-35]	29 [25, 35]	0.77
Age Categories				0.346
17-29	73 (48.3)	363 (53.1)	436 (52.2)	
30-39	52 (34.4)	222 (32.5)	274 (32.8)	
40-49	17 (11.3)	61 (8.9)	78 (9.3)	
50+	9 (6.0)	38 (5.6)	47 (5.6)	
Female Gender	118 (78.1)	587 (85.8)	705 (84.4)	0.561
Educational Level				<0.001
None/Primary	24 (15.9)	127 (18.6)	151 (18.1)	
Secondary	56 (37.1)	306 (44.9)	362 (43.4)	
University	71 (47)	248 (36.4)	319 (38.2)	
Region and Facility Location				0.51
Northwest - suburban	28 (18.5)	122 (17.8)	150 (18.0)	
Southwest - suburban	36 (23.8)	139 (20.3)	175 (21.0)	
Littoral - urban	50 (33.1)	202 (29.5)	252 (30.2)	
Center - urban	37 (24.5)	221 (32.3)	258 (30.9)	
Underlying Medical Condition	19 (12.6)	58 (8.5)		
Ever heard of COVID-19	145 (96.0)	647 (94.6)	792 (94.9)	0.423
Have tested for COVID-19?				0.363
Results Pending	2 (4.3)	7 (3.8)	9 (3.9)	
Negative	39 (84.8)	158 (86.3)	197 (86.0)	
Positive	5 (10.9)	18 (9.8)	23 (10.0)	
Know anyone with COVID-19?	49 (32.5)	170 (24.9)	219 (26.3)	0.03
Have you heard of any risks of the COVID-19 vaccine?	50 (39.4)	165 (32.4)	215 (33.8)	0.498
If offered a COVID-19 vaccine today, would you take it?	40 (26.5)	217 (31.7)	257 (30.8)	0.12
If the COVID-19 vaccine was produced in Africa, would you be more likely to take it?	81 (53.6)	360 (52.6)	441 (52.8)	0.541
Would more information on vaccine safety encourage people to be vaccinated? (Yes/Maybe)	70 (53.0)	249 (43.0)	319 (44.9)	0.046

Results

- 18% (151/835) of participants cited social media (SM) as a top source of health care information.
- Health care professionals were cited by 82% as the most trusted source for health information (n=681).
- 31% (257/835) of participants were interested in vaccination
  - Rates did not differ by SM preferences
- More people in the social media group, 53% vs 43% (p=0.046) stated that more information about vaccine safety may help reduce hesitancy.
- Perceived risks of COVID-19 vaccination:
  - death (33%)
  - fetal harm (31%)
  - supernatural reactions (1.4%)
- The SM group was not more likely to site perceived risks of the vaccine (p=0.244).

Conclusions

- Adults who prefer to get health information from social media were not more likely to express vaccine hesitancy.
- Public education campaigns led by healthcare professionals may have the greatest impact on vaccine acceptability based on trusted information sources cited by participants.

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