

BACKGROUND

- The Arab region, which hosts one of the largest refugee populations globally, has very low COVID-19 vaccine acceptance rates.
- Understanding barriers to vaccine acceptance is essential to achieve COVID-19 herd immunity worldwide. This is essential for refugees who are disproportionately affected.

Aim

To examine the prevalence and predictors of COVID-19 vaccine refusal in older Syrian refugees who are beneficiaries of a humanitarian organization in Lebanon.

METHODS

Design: nested cross-sectional study within a four-wave panel study that aimed to track older Syrian refugees' vulnerability to COVID-19.

Sampling frame: a complete listing of beneficiary households of a humanitarian organization with an adult aged 50 years or older, residing in informal tented settlements (ITS) or localities in the North, South, and Bekaa governorates in Lebanon.

Sample: 3,174 Syrian refugees (50 years and older), were interviewed between January 21 and April 23, 2021; 2,942 were re-interviewed one month later.

Outcome: Intention to be vaccinated against COVID-19 was assessed using the following question: "Now that a safe and effective COVID-19 vaccine arrived to Lebanon and is offered for free, would you take it?"

Analysis: The sample was divided into a development and validation cohort. Multivariable logistic regression models were used to identify predictors for COVID-19 vaccine refusal using STATA/SE 17.0.

RESULTS

- Among beneficiaries, 61% intended to receive the COVID-19 vaccine, 31% had no intention to be vaccinated and 7% were undecided.
- Only 6% were registered on a national platform to receive the COVID-19 vaccine.
- Top three reasons for not registering for the COVID-19 vaccine were: being unsure about how to register (36%), not wanting to receive the vaccine (32.5%), and being unsure whether to take the vaccine (21%).
- In an unadjusted analysis, COVID-19 vaccine refusal was statistically significantly higher among females and those living outside ITS than inside ITS.
- Refugees aged 70 years and older and those reporting chronic conditions did not significantly differ from younger participants or those without chronic conditions in their vaccine acceptance.

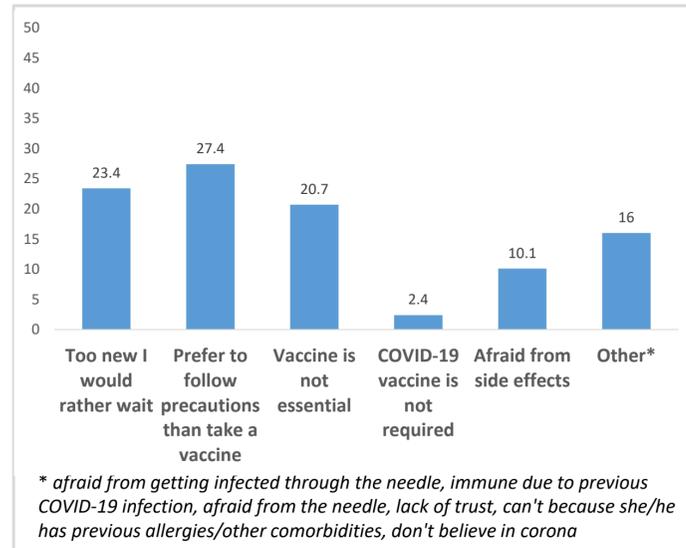


Figure 1. Reasons for COVID-19 vaccine refusal among those who had no intention to be vaccinated (n=994)

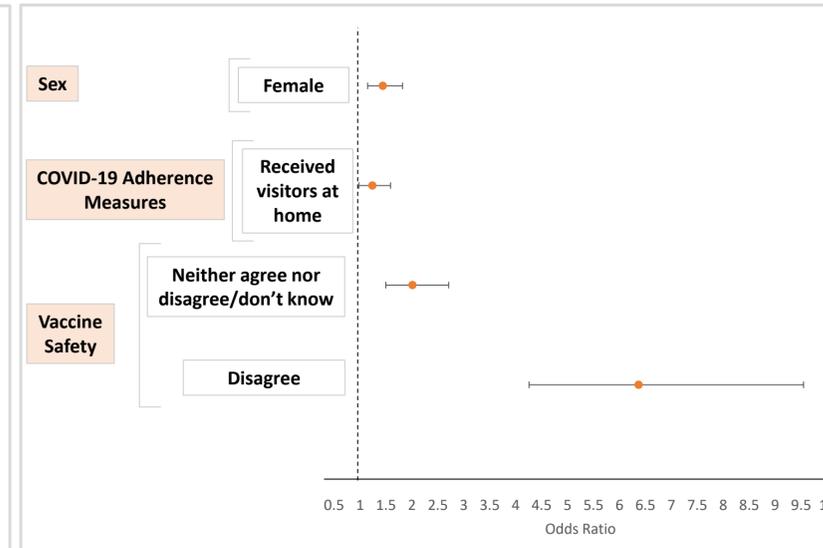


Figure 2. Multivariable model for predicting COVID-19 vaccine refusal in the development sample based on Bayesian information criteria (BIC)

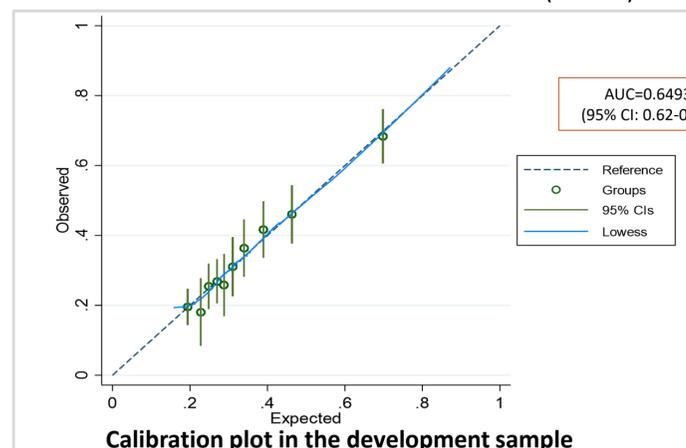
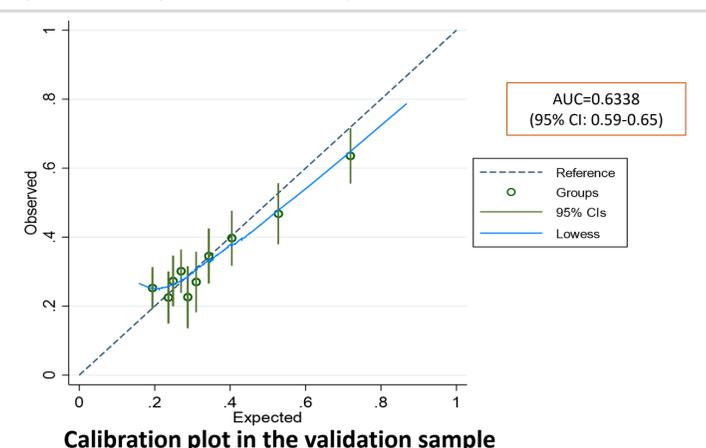


Figure 3. Model performance in development and validation samples



CONCLUSION

- Enhancing vaccine acceptance and registration among Syrian refugees is needed for equitable vaccination.
- This model, which shows a reasonably good model performance, identified significant predictors of vaccine refusal among refugees.
- These included: female gender, not adhering to COVID-19 preventive measures particularly receiving visitors at home, and perceiving vaccines as not safe.
- In Lebanon, where Syrian refugees experience security, mobility, and healthcare access barriers, delivery of immunization services to older refugees inside and outside ITS is paramount.
- Disseminating accurate, accessible, and culturally appropriate information about vaccine safety and effectiveness is essential.
- Removing barriers to registration and access is required.

FUNDING SOURCE



For comments and questions email: ne61@aub.edu.lb