USABILITY AND ACCEPTABILITY OF HCV SELF-TESTING IN THE GENERAL POPULATION FROM BRAZIL

PRESENTATION NUMBER 592

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BACKGROUND

Hepatitis C virus self-testing (HCVST) has been recommended by the World Health Organization (WHO). However, data on the feasibility of HCVST in Latin America remain scarce

AIM

To assess the usability and acceptability of HCVST among the general population in the Primary Health Care (PHC) in Rio de Janeiro (Brazil)

METHODS

Study design and population: cross-sectional study conducted in a Basic Health Unit in Rio de Janeiro from 04-Jul-2022 to 13-Sep-2022

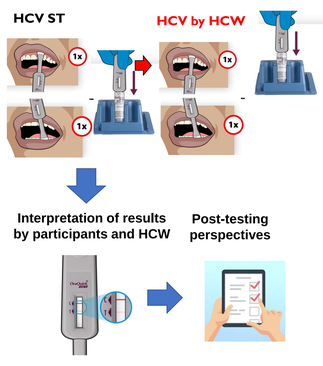
HCVST kit: OraQuick® HCV Rapid Antibody Test (OraSure Technologies Inc, USA)

Steps for HCVST: Participants had access to written instructions for use and a video with a step-by-step oral fluid HCVST kit

Video 

Written instructions 

HCVST: A trained healthcare worker (HCW) observed the participant performing the test. After HCVST, the HCW performed a second HCV testing using the same kit.



If positive HCV anti-body:
HCV-RNA (GeneXpert)
Transient elastography (FibroScan)
Linked for treatment

ANALYSES

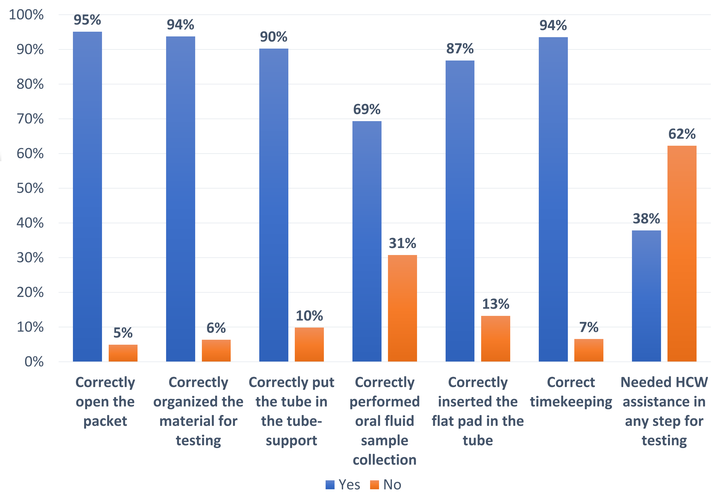
Usability was assessed by observing errors made and difficulties faced by participants. A post-testing questionnaire assessed the acceptability of HCV self-testing. Inter-reader (re-reading) and inter-operator (re-testing) concordance were assessed.

RESULTS

Characteristics of the participants of the study (n=553)

	All (n=553)
Socio-demographic and clinical characteristics	
Female sex at birth	416 (75.2%)
Age, Years – median (IQR)	52.0 (39.0-61.0)
Skin colour	
White	138 (25.0%)
Black	139 (25.1%)
Mixed ("parda")	272 (49.2%)
Other	4 (0.7%)
Schooling < 10 years	286 (51.7%)
Type-2 diabetes	93 (16.8%)
Hypertension	233 (42.1%)
HIV infection	7 (1.3%)
HCV risk factors	
Blood transfusion	32 (5.8%)
Injection drug use	5 (0.9%)
Tattoo or piercing	150 (27.1%)
Hemodialysis	3 (0.5%)
Sexual intercourse in the last 6 months	321 (58.0%)
Did you or your partner use preservative during sexual intercourse ?	
No	237 (42.9%)
Yes, for all sexual intercourses	54 (9.8%)
Yes, but not for all sexual intercourses	30 (5.4%)
Not applicable	232 (42.0%)
Number of sexual partners in the last 6 months	
< 2 sexual partners	305 (55.2%)
3 - 5 sexual partners	12 (2.2%)
≥ 6 sexual partners	4 (0.7%)
Not applicable	232 (42.0%)

Observation by a health-care worker of steps of HCV ST (n=553)



Re-reading and re-testing agreement of oral fluid HCVST

	Re-reading by HCW			
Participant assessment	Negative	Positive	Invalid	Total
Negative	501	2	1	504
Positive	0	2	0	2
Invalid	28	0	16	44
Total	529	4	17	550

Agreement= 94.4% / Cohen's Kappa=0.52

	Re-testing by HCW		
Participant assessment	Negative	Positive	Total
Negative	496	2	498
Positive	0	2	2
Total	496	4	500

Excluding invalid tests

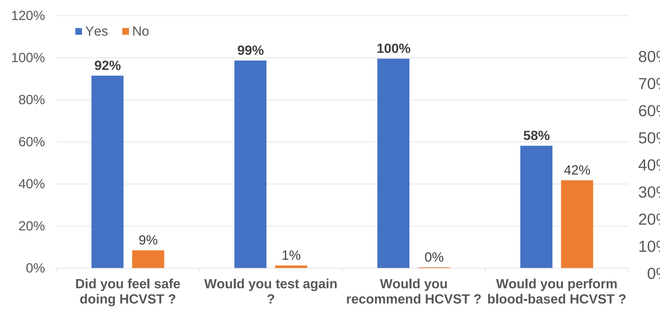
Agreement= 99.6% / Cohen's Kappa=0.67

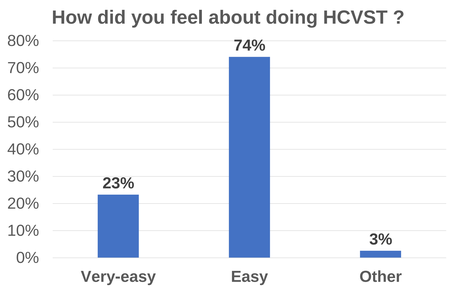
Sensitivity analysis of re-reading and re-testing agreement of oral fluid HCVST

			Agreement	Cohen's kappa
Inter-reader concordance (re-reading) §	Stratified by age	< 60 years (n=386)	94.8%	0.52
		≥ 60 years (n=164)	93.3%	0.50
	Stratified by schooling	< 10 years (n=285)	94.7%	0.49
		≥ 10 years (n=265)	93.9%	0.53
			Agreement	Cohen's kappa
Inter-operator concordance (re-testing)* §	Stratified by age	< 60 years (n=351)	No discordance	
		≥ 60 years (n=149)	98.7%	0.66
	Stratified by schooling	< 10 years (n=262)	99.2%	0.50
		≥ 10 years (n=238)	99.1%	0.50

N=553
Re-testing: HCVST result informed by participants compared to administered by HCW
§ three participants refused to inform HCVST result
* excluding invalid tests informed by participants (n=44) or by HCW (n=3); three participants refused to be tested by HCW

Post-testing participant's perspectives of oral fluid HCVST (n=553)





CONCLUSIONS

We demonstrated high usability and acceptability of oral fluid HCVST in a large sample of the population in a Primary Care Health Unit in Rio de Janeiro (Brazil)

ADDITIONAL KEY INFORMATION

The authors have nothing to disclosure. This work was supported by funding from Fundação de Amparo a Pesquisa do Estado do Rio de Janeiro (FAPERJ) [grant number E-26/201.351/2021); and Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq) [grant number 445957/2020-4]. The oral fluid OraQuick® HCV Rapid Antibody Test kits were donated by the Brazilian Ministry of Health. The funders or suporters had no role in study design, data collection and analysis, decision to publish or preparation of this poster

FUNDING

CNPq grant number 445957/2020-4

FAPERJ Fundação Carlos Chagas Filho de Amparo à Pesquisa do Estado do Rio de Janeiro grant number E-26/201.351/2021

SUPPORT

SUS | Ministério da Saúde | Pátria Amada Brasil Governo Federal

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