

Estimating the prevalence of chronic infections among migrants in Catalonia, Spain: results of a multicentric systematic screening programme

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BACKGROUND

- Around 281 million migrants globally
- Usually healthy individuals
- Disproportionally affected by infectious diseases
- Risk varies within migrant groups
- Evidence-based prevention strategies

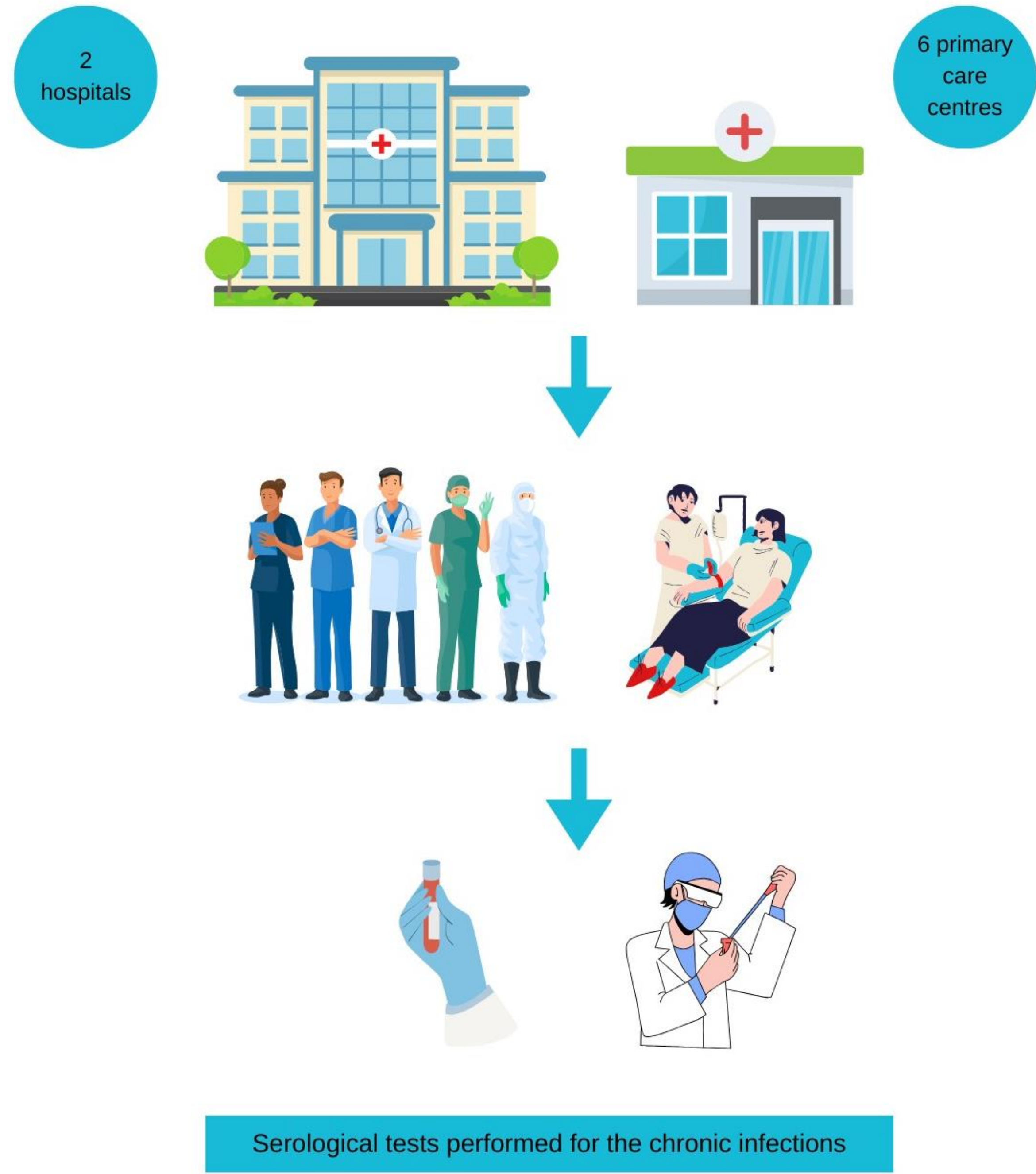


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AIM

To estimate the prevalence of six chronic infections in the migrant population.

METHODS



A multicentric cross-sectional study conducted from December 2019 to July 2020 at six primary care centres and two hospitals in Catalonia Spain.

The screening programme included:

- Human immunodeficiency virus (HIV)
- Hepatitis b virus (HBV)
- Hepatitis C virus (HCV)
- *S.stercoralis* infection
- *Schistosoma spp.* infection
- *T.cruzi* infection

Questionnaire:

- Socio-demographic factors
- Behavioural factors
- Medical history

RESULTS

- No cases of *Schistosoma spp.* infection were reported.
- A higher prevalence of HIV, HBV, and HCV was reported in migrants born in the area of Sub-Saharan Africa .
- A higher prevalence of *S.stercoralis* and *T.cruzi* infections was reported in migrants born in Latin-America.
- Lower educational levels were associated with presenting a chronic infection for all, except for HIV and HCV.
- Living in both rural and urban areas in the country of birth was associated with the diagnosis of imported infections.

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RESULTS

Table 1. Prevalence of chronic infections

	Total	Latin America and the Caribbean	Sub-Saharan Africa	Northern Africa	Other areas of birth	p-value*
	n/N (%, 95% CI)	n/N (%, 95% CI)	n/N (%, 95% CI)	n/N (%, 95% CI)	n/N (%, 95% CI)	
<i>T.cruzi</i> infection[†]	14/192 (7.3, 3.6-11.0)	14/192 (7.3, 3.6-11.0)	-	-	-	-
<i>S.stercoralis</i> infection	7/271 (2.6, 0.7-4.5)	6/198 (3.0, 0.6-5.4)	1/38 (2.6, 0.0-8.0)	0/9 -	0/26 -	1.000
HIV	5/281 (1.8, 0.2-3.3)	2/204 (1.0, 0.0-2.3)	2/40 (5.0, 0.0-12.1)	0/9 -	1/28 (3.6, 0.0-10.9)	0.157
Chronic HBV (HBsAg +, HBe +)	5/281 (1.8, 0.2-3.3)	0/205 -	4/39 (10.3, 0.3-20.2)	0/9 -	1/28 (3.6, 0.0-10.9)	0.001
Exposure to HBV (HBsAg +/-, HBe +)	40/284 (14.1, 10.0-18.2)	4/207 (1.9, 0.0-3.8)	30/41 (73.2, 59.0-87.3)	0/8 -	6/28 (21.4, 5.2-37.6)	<0.001
HCV	1/284 (0.4, 0.0-1.0)	0/207 -	1/41 (2.4, 0.0-7.4)	0/9 -	0/27 -	0.271

HIV: Human immunodeficiency virus; HBV: Hepatitis B virus; HBsAg: Australian antigen; HCV: Hepatitis C virus; [†]Only people from endemic areas of Latin-America were tested for *T.cruzi*; *p-values of the bivariate analysis with Pearson's chi-square test or Fisher's exact test; Schistosomiasis was not included since it did not have any cases.

CONCLUSIONS

Findings suggest that the prevalence of the chronic infections was high in the migrant population, varying between areas of birth, with a higher burden in migrants coming from Sub-Saharan Africa and Latin-America.