

Long distances for STI care.

The case of the an ambulatory service in Bari.

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Results

We included 134 cisgender patients (2 female, 132 male) with a median age of 37 years (IQR: 31.25-43.75).

The majority of them lived in Bari (37, 27.61%), Barletta (7, 5.22%) and Bisceglie (6, 4.47%).

Introduction

Sexually transmitted infection (STI) clinics play a crucial role in providing a safety net, ensuring patients have access to STI care.

Availability, cost, quality of services and distance are important barriers to accessing.

Our aim is to assess the geographical proximity of people accessing the STI ambulatory care service at the Policlinico of Bari by evaluating the straight-line distances from their residences.

Methods

We collected addresses of individuals accessing the STI service in Apulia anonymously, converting them to latitude and longitude data.

Euclidean distance to the Policlinico of Bari was calculated.

The spatial point pattern was analyzed by a non-parametric evaluation of the intensity and by the Ripley's K functions for homogeneous and inhomogeneous processes.

Univariate analysis was performed by Kruskal-Wallis's test.

Statistical analysis was performed by the open source statistical environment R (version 4.3.1) with the package *statspat*.

Conclusion

The majority of people has a long way from home (>10 Km, 63.43%).

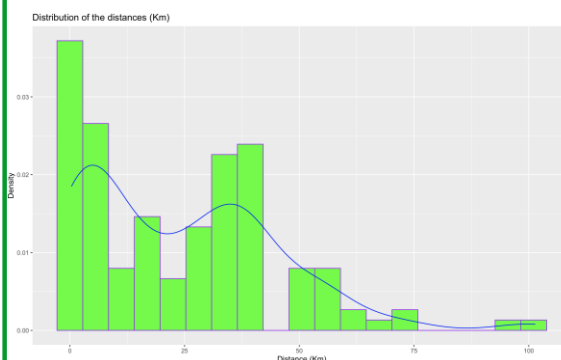
The ambulatory likely fill an important need of well-being of a specific population.

The meshes of the safety net in Apulia are likely loose and they need to be reinforced.

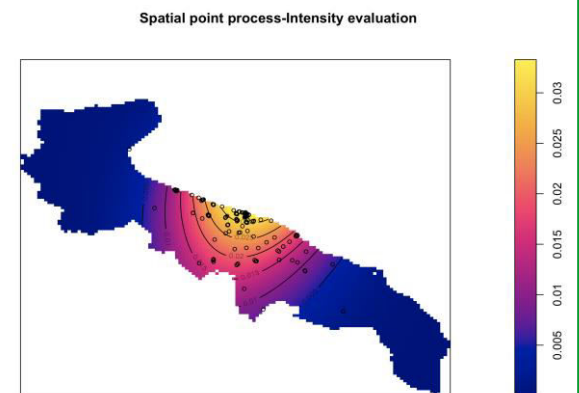
Table 1 Demographics and characteristics of patients admitted to the STI ambulatory.

* P value was calculated on the t-statistic of the Pearson's correlation index (-0.061).

Variable	Statistic	P-value
Age, median	37.00	*0.483
Absence of a stable relationship	61.72%	0.800
Chem-sex	9.67%	0.624
Condom use	Absent-32.78% Continuous-29.51% Occasional-37.71%	0.204
High-level education	50.8%	0.641
MSM	84.21%	0.990
People who live with HIV	31.06%	0.933
One or more previous STIs	52.98%	0.499
Smoking	43.65%	0.474
Suspected STI (signs or symptoms)	37.5%	0.937

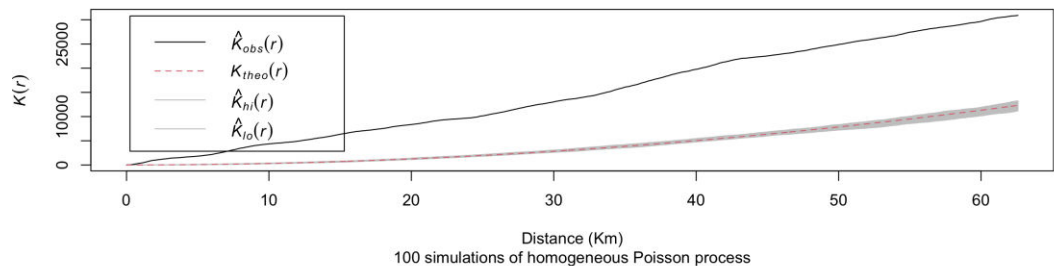


The distribution of the distances from the ambulatory displays a bimodal pattern with a long right tail. Median distance is 24.32 Km (IQR:5.66-37.52, minimum: 0.34, maximum: 101.43).

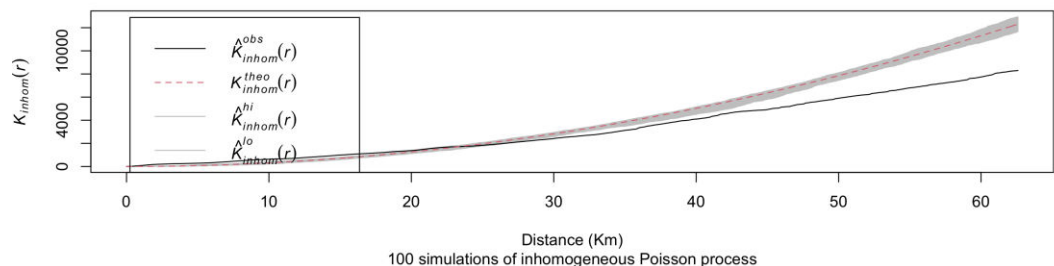


Kernel estimate of the intensity function confirms an inhomogeneous point process.

Evaluation of the spatial point process by Ripley's K function



Evaluation of the spatial point process by Ripley's K function for inhomogeneous processes



Spatial process exhibits clustering at short distances (<18 km) and dispersion at distances >30 km.