

Strengthening Primary Healthcare in China: Role of Community Health Centers and “Service Agreements”

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Background

- A robust primary healthcare system is a strong predictor of good population health and studies suggest that having a primary care provider (PCP) is linked to less chronic disease.^{1,2}
- Thus, the Chinese government has recently begun to promote new healthcare reforms that strengthen primary care.^{5,6}
- One recent government initiative has encouraged patients to sign “service agreements” that establish stable relationships between patients and primary care providers (PCP).⁷
- However, few studies have examined this new initiative or the sociodemographic and disease factors potentially associated with having a service agreement (relationship with a PCP).

Study Objective

To provide information on the determinants of service agreement initiation in a large community health center system in Beijing, China and identify populations most likely to not have a PCP.

Specific Aims

- (1) Identify which demographic and health-related features are associated with service agreement initiation.
- (2) Determine if there are socioeconomic disparities in service agreement initiation.

Hypothesis:

Being non-local, an ethnic minority, unmarried, or having a chronic disease is associated with lower rates of service agreement initiation.

Methods

Our study population is made up of 76,090 patients who received care at Yuetan Health Center or Yuetan Clinics from 2015-2018.

Measures

Main Outcome: patient having a service agreement with a PCP

Main Exposure: chronic health conditions, including hypertension (HTN), type II diabetes (T2D), heart disease, and chronic kidney disease (CKD)

Secondary Exposures: demographic features, including being born locally, educational level, marital status, ethnicity and sex

Data Analyses

Chi-square analyses and logistic regression were used to determine associations between exposure and outcome variables

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Results

Figure 1: Percentage of Patients with a Service Agreements By Demographic Features At Yuetan Community Health Center

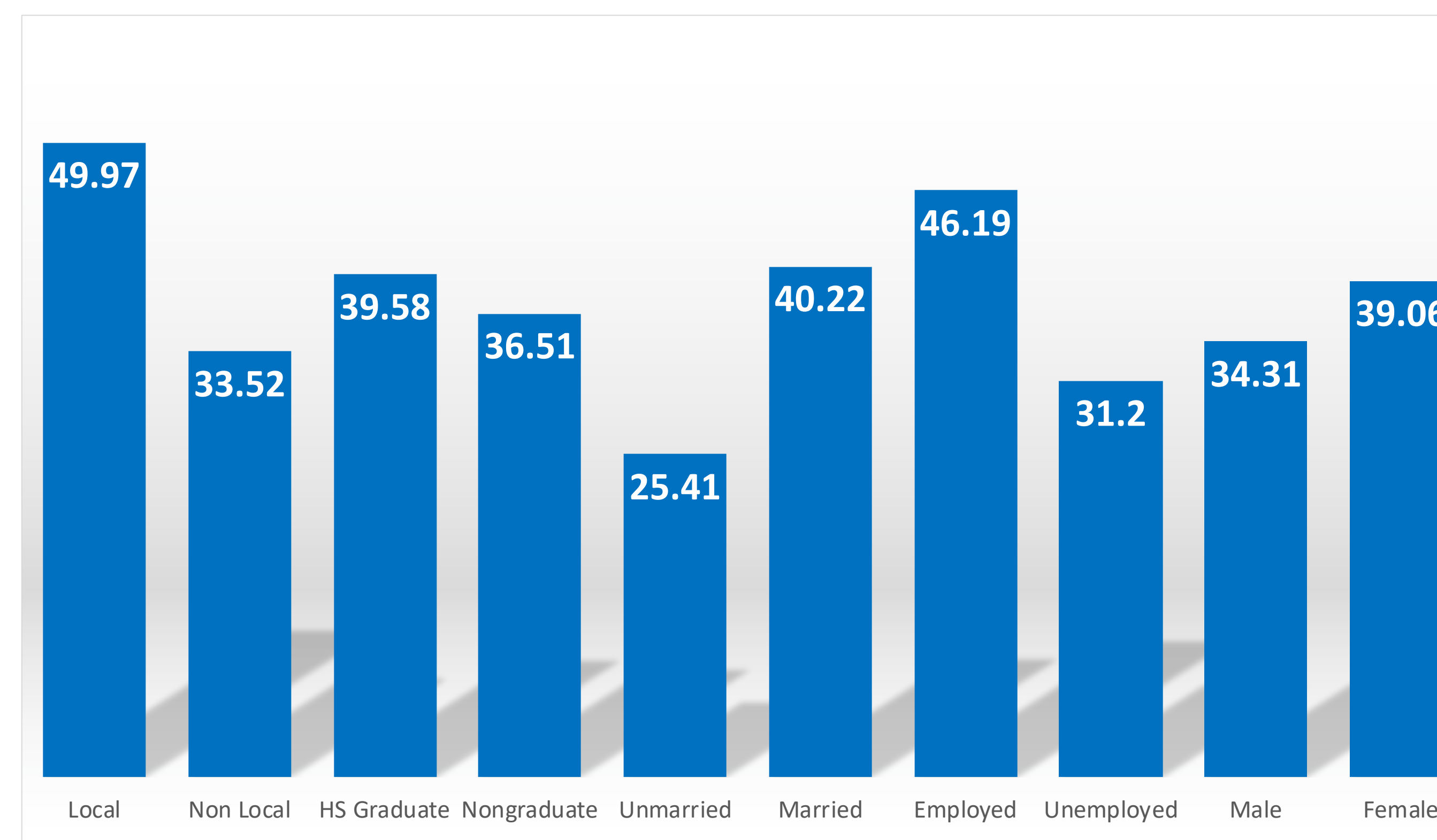


Figure 2: Percentage of Yuetan Health Center Patients without a PCP by Chronic Disease Status

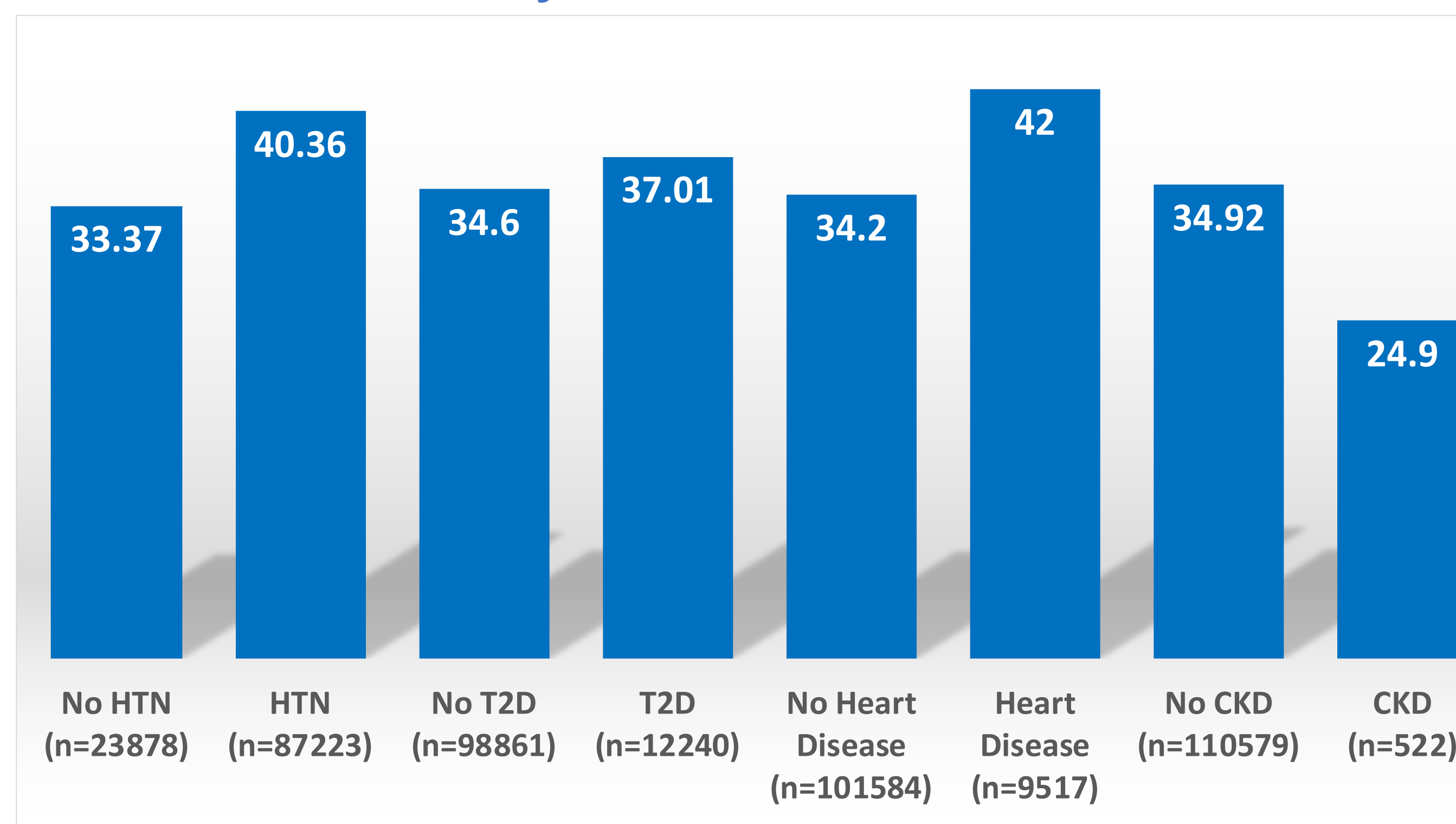


Table 1: Logistic Regression: Association between Sociodemographic Features and Likelihood of Having a PCP

Variables	OR	95% Confidence Interval	p-value	
Age (Years)	1.017	1.016	1.018	<.0001
Local	1.447	1.409	1.487	<.0001
HS Graduate	1.014	0.987	1.041	0.3803
Han Ethnicity	1.305	1.222	1.394	<.0001
Married	0.585	0.566	0.604	<.0001
Employed	1.151	1.12	1.183	<.0001
Male	1.185	1.157	1.214	<.0001

Table 1: Logistic Regression: Association between Various Chronic Diseases and Likelihood of Having a PCP

Variables	OR	95% Confidence Interval	p-value	
Primary Hypertension	1.473	1.428	1.519	<0.0001*
Type 2 Diabetes Mellitus	1.279	1.228	1.331	<0.0001*
Heart Disease	1.576	1.508	1.647	<0.0001*
Chronic Kidney Disease (CKD)	0.722	0.592	0.881	0.0013

Conclusions

- Bivariate analysis revealed that having any chronic disease (except CKD), being unemployed, non-local, male or having low education were associated with not having a PCP.
- These findings reveal that there are socioeconomic disparities in service agreement initiation in our sample.
- Multinomial logistic regression indicated that HTN, T2D, and heart disease increased the odds of having a PCP, whereas CKD decreased the odds.
- These findings reveal that many Yuetan patients with chronic diseases are establishing relationships with PCPs.

Public Health Significance

- These results demonstrate disparities by sociodemographic features. This reveals that sometimes those who could most benefit from having a PCP are also least likely to have one.
- Findings from this study are limited by being from a non population based sample and may not be generalizable to other clinics and hospitals in China.
- More study to better understand the implications of these findings is indicated.
- Nonetheless, this study can provide useful direction for future study as primary healthcare in China continues to improve.

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