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INTRODUCTION

People susceptible to kidney disease are prone to heart failure and other negative health events that can be detrimental to living long and healthy lives. Persons living with HIV are even more at risk of these effects, especially as some ART treatments are known to cause kidney disease as a sided effect.

AIM

The aim of this study is to investigate demographic associations to elevated creatinine levels and the different levels of frequency by key populations in order to explore and if possible, identify this sub-group within the HIV population.

METHODS

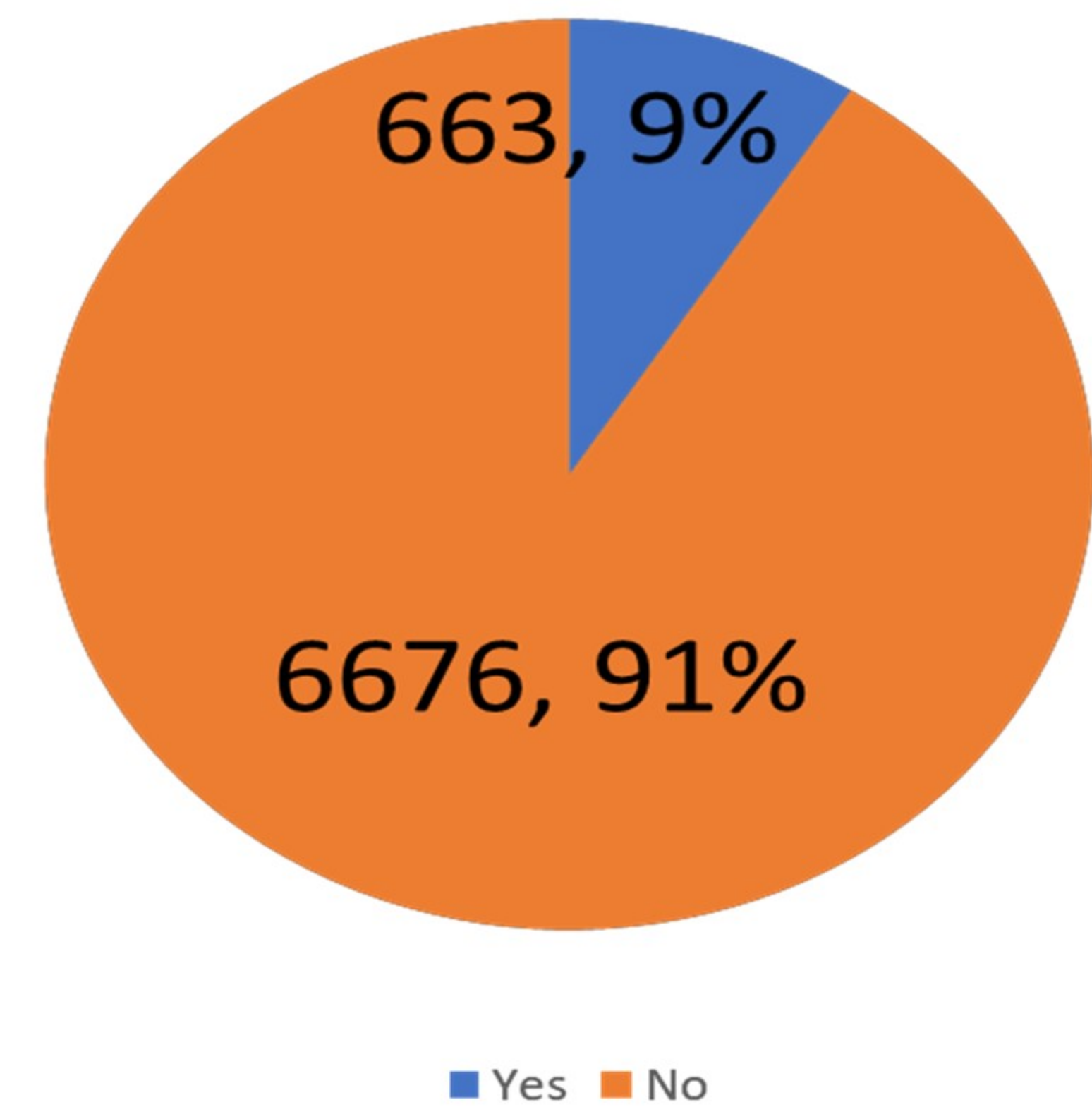
A sample of 6676 patients who had creatinine results within the last 10 years were chosen from the Medical Research Foundation of Trinidad and Tobago database.

Bivariate correlations of creatinine levels outside the normal range were carried out using chi-square tests of independence against the demographic characteristic variables.

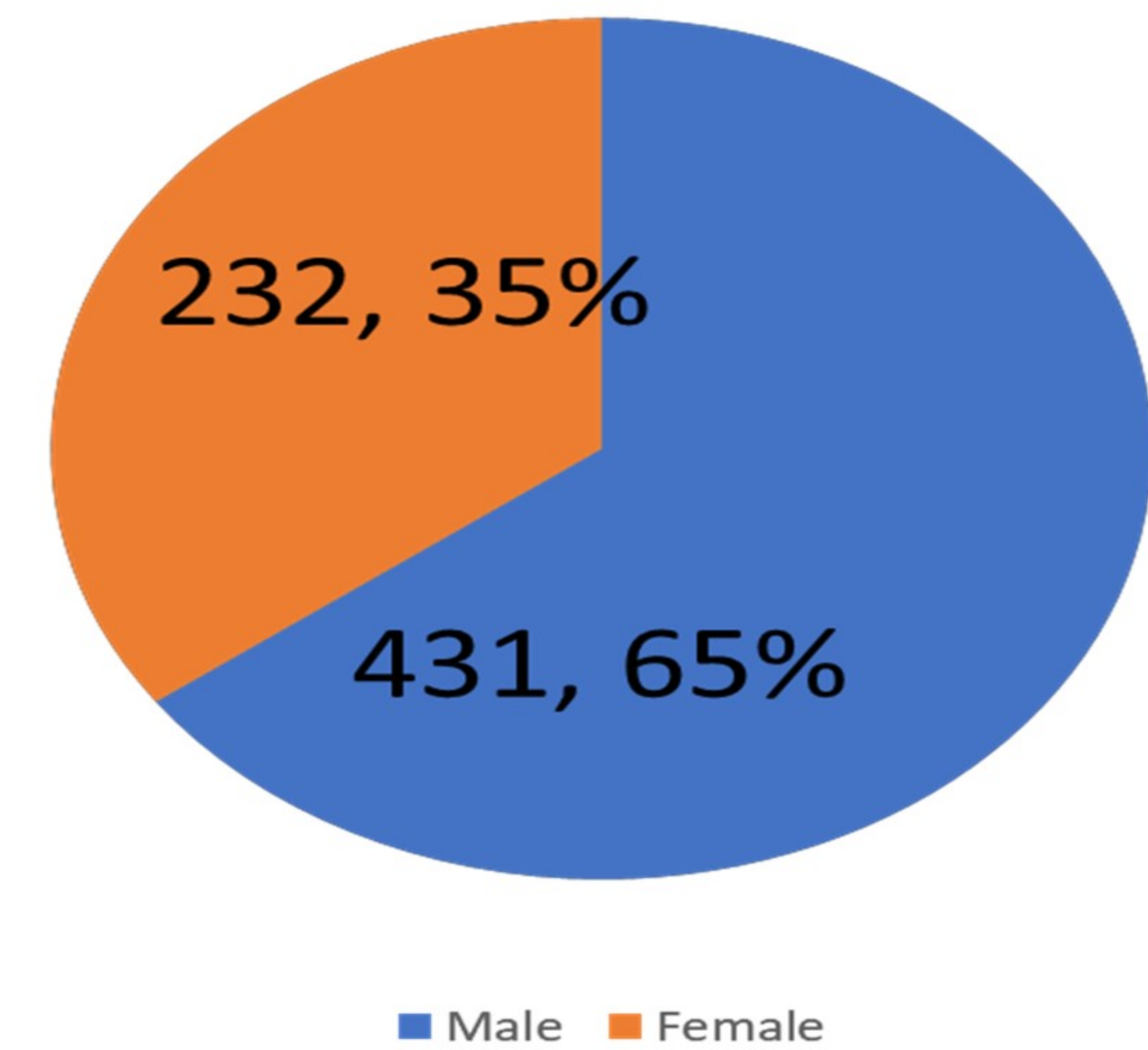
Secondly a binominal logistic regression model was utilized to predict the impact of statistically significant demographic characteristics on patients with elevated creatinine levels.

Calculations were carried out using the Statistical Package for the Social Sciences (SPSS) software.

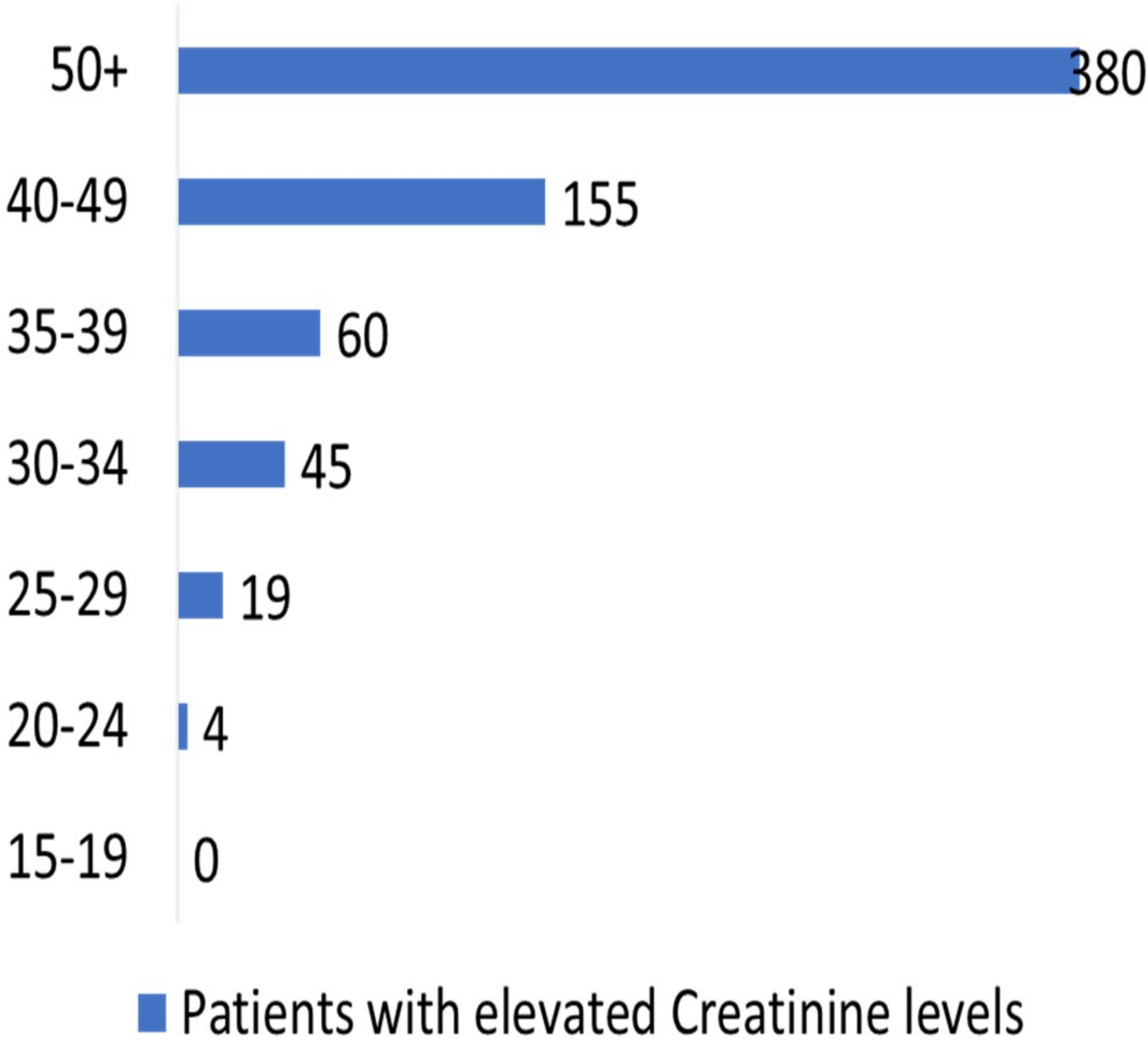
MRFTT PATIENTS WITH ELEVATED CREATININE



Gender Disaggregate of Patients with Elevated Creatinine Levels



Age Groups of Patients with Elevated Creatinine levels



Variable	n	%
Males	431	65
Females	232	35
1519	0	0
2024	4	0.6
2529	19	2.9
3034	45	6.8
3539	60	9
4049	155	23.4
50+	380	57.3
Total	663	100

Variable	OR	LCI	HCI
Males	1.471	1.227	1.765
50+	2.118	1.736	2.582

RESULTS

Of the initial sample size of 6676, 663 were found to have an average elevated creatinine level outside of the normal range (prevalence rate, 9%). Persons with elevated creatinine levels were significantly associated with gender, age group, sexual orientation, and prisoner status.

Among patients, males were found to be more susceptible to elevated creatinine levels (OR = 1.471; 95% confidence interval (CI) 1.227, 1.765) than females. Patients over 50 years old were twice as likely (OR = 2.118; 95% confidence interval (CI) 1.736, 2.583) to have elevated creatinine levels than younger patients.

DISCUSSION

Persons with elevated creatinine levels had a statistically significant bivariate association with gender, age group, sexual orientation, and prisoner status variables.

Among patients, males were found to be more susceptible to elevated creatinine levels than females, while Patients over 50 years old were twice as likely to have elevated creatinine levels than younger patients.

CONCLUSION

Approximately 9 percent of patients within the sample were reported to have elevated creatinine levels. Of these patients, the data analyzed encourages the need to assess older male patients for elevated creatinine levels within the clinic.

Further research for this sub group is emphasized as utilizing baseline CD4 and viral load results can be used to identify how the initial diagnosis of a patient impacts their risk of kidney disease.