Experiencing extreme heat influences perceptions about climate change among cancer patients and caregivers.

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INTRODUCTION

- Climate change consequences, such as longer extreme heat periods have increased in recent years, being 2023 the hottest year ever recorded in Puerto Rico (PR).
- Heat events can significantly impact health outcomes among cancer patients.

OBJECTIVE

- Assess perceptions and attitudes towards climate change among cancer patients/survivors and caregivers in PR, and differences by experience with extreme heat events.

METHODS

- A cross-sectional study was conducted (April-August 2023) among cancer patients/survivors and caregivers, aged ≥21 years old and living in PR (n=655).
- Eligible participants completed a survey that collected relevant study variables, including information on having experienced extreme weather events in their community/residence in the past 10 years, as well as perceptions and attitudes towards climate.
- The main predictor variable was impact of extreme heat in your residence, community or both (Yes/No). Descriptive statistics were used to describe the study population.
- Logistic regression model evaluated the association between reported extreme heat impact and specific climate change perceptions and attitudes.

Table 1. Sociodemographic characteristics of the study population (n=655)

Characteristic	n	(%)
Age (years)[a]		
Mean (±SD)	53.83 (±14.75)	------
21-44	143	21.90
45-60	295	45.18
61+	215	32.92
Sex at birth		
Male	117	17.86
Female	538	82.14
Participant [b]		
Patients/Survivor	426	69.84
Caregiver	184	30.16
Education [c]		
Associate degree or lower	244	38.12
Bachelor's degree	215	33.59
Graduate studies and higher	181	28.28
Income [d]		
<$25k	291	50.26
≥$25k	288	49.74
Employment status[e]		
Employed	301	47.03
Unemployed	339	52.97
Health plan [f]		
No	9	1.40
Yes	633	98.60
Chronic disease		
No	139	30.96
Yes	310	69.04
Secondary cancer		
No	335	80.14
Yes	83	19.86

Missing values: [a] 2, [b] 45, [c] 15, [d] 76, [e] 15, [f] 13

RESULTS

Figure 1. Percentage of individuals impacted by extreme heat in their community and/or residence in the past 10 Years

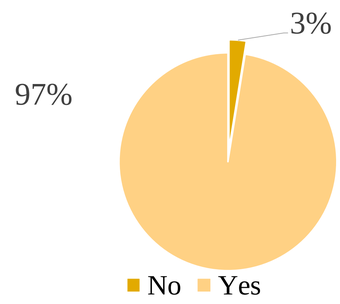

Figure 2. Perception of extreme heat as consequence of climate change among individuals who have been affected by this event.

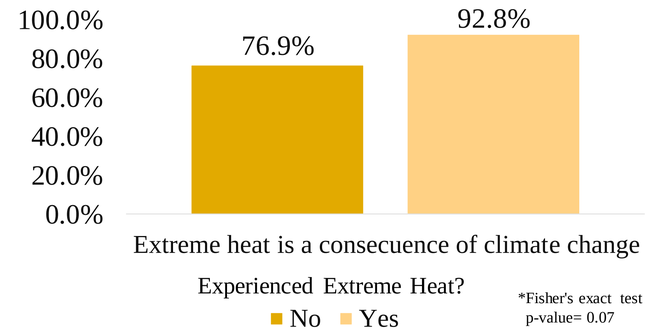

Figure 3. Agreement with the following statements when experiencing extreme heat.

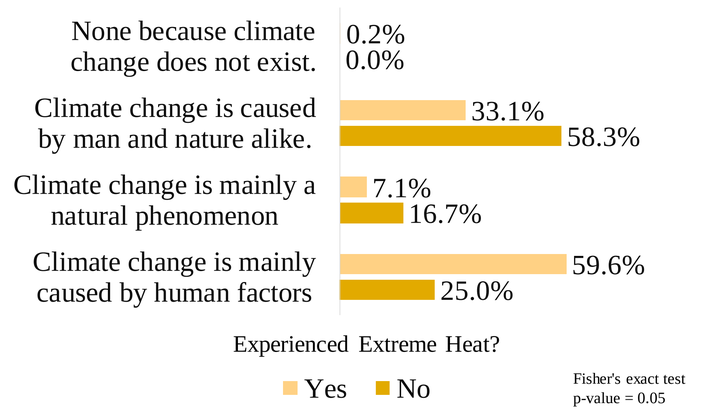

Figure 4. How worried individuals are about climate change and their health in the face of climate change when experiencing extreme heat.

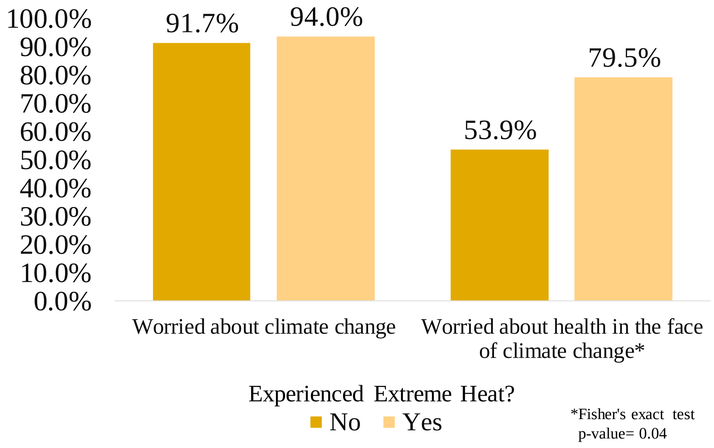

Table 2. Logistic regression model of factors associated with attitudes towards climate change.

	Attitude: I believe that each individual should take action to help reduce the impact of climate change on the population.	
	Crude OR 95% CI	**Adjusted OR* 95% CI**
Extreme Heat		
No	1.00	1.00
Yes	**1.17 (1.10-1.25)**	**1.19 (1.13-1.26)**

*Adjusted by education, age, sex at birth and type of participant.

CONCLUSION

- This is the first study to assess experiences with extreme heat and perceptions towards this phenomenon among cancer patients and caregivers in PR, showing increased burden and concerns with extreme heat in this population.
- Results highlight the need for targeted interventions to increase awareness about climate change and mitigate its impact on the cancer control continuum.

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REFERENCES

HUMAN PAPILLOMAVIRUS INTEREST GROUP
University of Puerto Rico Comprehensive Cancer Center

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