

### BACKGROUND

- Shingles is expected to affect nearly 1 out of 3 people living in the United States.
- With the availability of the Shingrix vaccine, the incidence rate is expected to decline; however, hesitancy and reluctance to obtain the vaccine are still prevalent issues.
- Low shingles vaccination rates is a significant problem that needs to be addressed through better education.
- While shingles information is disseminated in a variety of ways, there is no assessment of which format patients perceive as best.

### OBJECTIVE

- To compare the effect of different educational formats on the following: 1) knowledge about shingles, 2) ease of readability and understanding, 3) consumer preferences, and 4) intention to obtain the shingles vaccination.

### METHODS

#### Study Design

- Cross sectional survey using Amazon MTurk.
- 2 batches of surveys were set up to assess the use of an infographic, TV ad, or web-based text. Participants were randomly assigned to view 1 of the 3 formats. The first batch was sent to those between 45 and 50 years, and the second batch to those over the age of 50 years.

#### Inclusion Criteria

- Residents of the United States, age  $\geq 45$ , and with access to an MTurk account.

#### Study Measures

- A survey consisting of the following sections was designed: a) pre- and post-knowledge test about shingles and shingles vaccination, b) perceptions of ease of readability and satisfaction, c) intention to obtain shingles vaccine, and d) demographics. It was pilot tested on five volunteers and modified.
- Participants with M Turk accounts meeting study criteria (n=500) were incentivized for their study participation.
- IRB approval was obtained.

### RESULTS

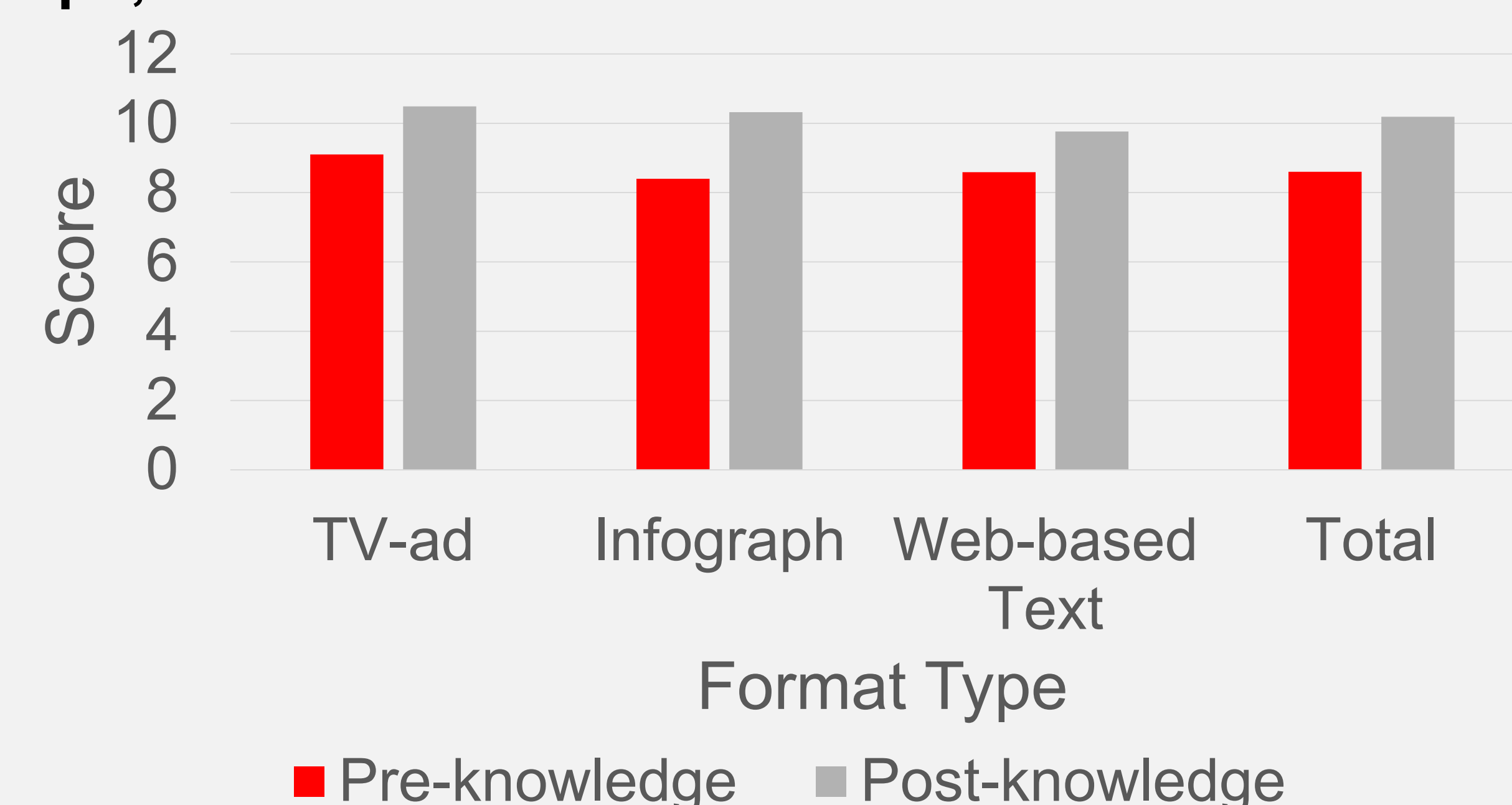
#### Enrollment and Characteristics.

- A total of 482 respondents participated in the study.
- 39 respondents were excluded for the following reasons: surveys completed in < 4 mins or incomplete and invalid surveys.
- From 443 respondents: 130 participants viewed a TV ad, 170 participants viewed an infographic, and 143 participants viewed a web-based text.
- There was no difference in demographic characteristics among the groups.
- Mean increase in knowledge scores:
  - TV ad = 1.39 (95% CI: [1.07 to 1.71])
  - Infograph = 1.92 (95% CI: [1.58 to 2.26])
  - Web-based text = 1.17 (95% CI: [0.85 to 1.49])
- Knowledge scores increased the highest for the infographic compared to the other formats (mean increase TV ad=1.39).

Table 1: Demographics of Study Sample

		Total (%) (n=443)
Gender	Male	35.5
	Female	64.5
Age	45-50 years	9.5
	51-54 years	6.8
	55 years	5.9
	56-65 years	47.0
	66-75 years	28.4
	>75 years	2.5
Race	Caucasian	86.0
	African American	5.4
	Asian	1.8
	Hispanic	3.2
	Native American	1.8
	Bi-racial	0.9
	Multiracial	0.2
	Other*	0.7

Figure 1: Average Pre- and Post-knowledge Scores between TV ad, Infograph, and Web-based Text

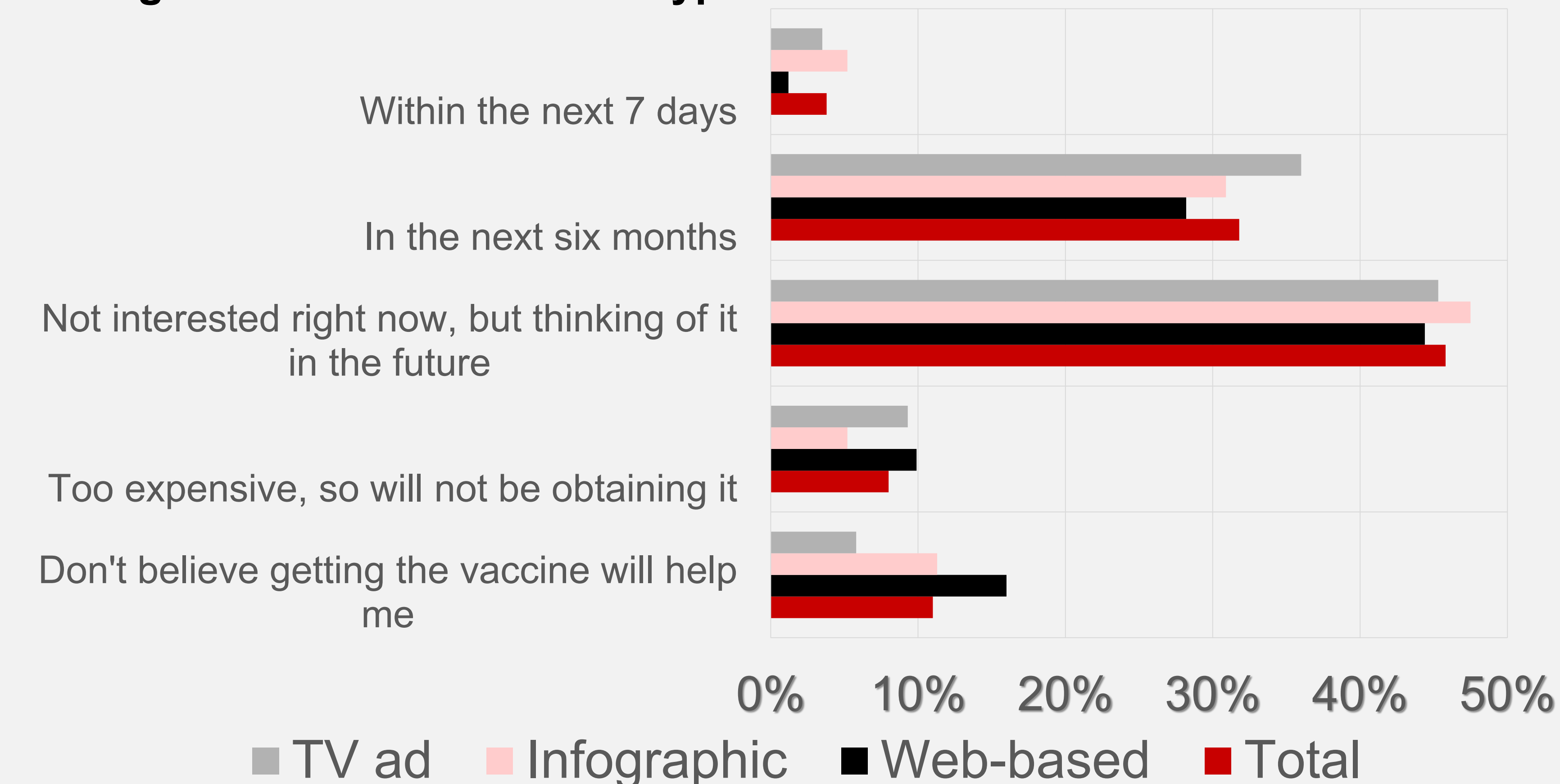


### RESULTS

Table 2: Consumer Preferences and Perceptions of Shingles Information Formats

	TV ad (n=130) Mean(SD)	Infographic (n=170) Mean (SD)	Web-based Text (n=143) Mean (SD)	Totals (n=443) Mean (SD)	P-Value
The SIF that I viewed was easy to read (or listen to for video format).	1.41 (0.631)	1.56 (0.821)	1.71 (0.700)	1.56 (0.738)	0.004
The SIF that I viewed was difficult to understand.	4.52 (0.874)	4.24 (1.100)	4.12 (1.058)	4.28 (1.035)	0.004
The SIF that I viewed made it easy to remember the information.	1.88 (0.877)	1.88 (0.855)	2.13 (0.789)	1.96 (0.847)	0.015
I like this format better than other ways of sharing information about shingles vaccinations.	1.98 (0.944)	2.07 (0.933)	2.29 (0.828)	2.11 (0.910)	0.014

Figure 2: Consumer Intention to Obtain Shingles Vaccine Based on Shingles Information Format Type



### CONCLUSION

- Visual formats such as infographic and TV ad showed the highest improvement in knowledge scores.
- Participants perceived the TV ad and infographic as the most preferred formats for sharing information about shingles vaccinations.
- A greater percent of those who viewed the TV ad planned to get the vaccine in the next 6 months compared to other formats.
- Although not statistically significant, visual formats seemed to increase the likelihood to obtain the vaccine as well as increase the perception that vaccines provide a benefit.