



Research Article

Public Perception of the Affordable Care Act in the United States: Does Knowledge of the Law Make a Difference?

Su D^{1*}, Wani R² and Chen LW²

¹Department of Health Promotion, College of Public Health, University of Nebraska Medical Center, USA

²Department of Health Services Research and Administration, College of Public Health, University of Nebraska Medical Center, USA

Abstract

This study assessed whether misperceptions of the Affordable Care Act (ACA) contributed to its disapproval in the American public. Based on survey data collected from Nebraska in 2013 (n=480), multivariate logistic regressions were estimated to identify predictors of misperceptions of the ACA and how the misperceptions were associated with public opinion of the law. Misperceptions of the ACA were fairly common in the public. Having misperceptions of the ACA was associated with higher odds of disapproval of the law (OR=1.73, 95% C.I. (1.09, 2.75)). Improving public support for the ACA calls for serious educational effort to correct misperceptions of the law in the public, especially among females, Hispanics, and people with fair or poor self-rated health.

Keywords: Patient Protection and Affordable Care Act (ACA); Public opinion; Misperceptions; Public support; Health care reform; United States

Introduction

Eight years after its passage by Congress, the Patient Protection and Affordable Care Act (ACA) has dramatically altered the U.S. health care landscape. It was estimated that 20 million previously uninsured adults obtained coverage between October 2013 and early 2016, out of which African Americans, Hispanics, and women made the greatest gains [1]. By August 2016, thirty-two states (including DC) have chosen to expand Medicaid under the law to provide insurance coverage for adults with incomes that are at or below 138% of the federal poverty level [2]. The uninsurance rate among U.S. adults declined from 16% in 2010 to 11% in early 2016 [3].

Despite these changes, public opinion over the ACA has been persistently divided since its enactment. According to results from the Kaiser Health Tracking Poll, 44% of adult Americans had an unfavorable perception of the ACA whereas 41% expressed a favorable opinion back in May 2010. The corresponding percentages in July 2016 were 46% and 40%, respectively, virtually no change since 2010 in consideration of margins of error in the polls [4].

Such a divide in public opinion and its persistence over time is concerning for the future of the ACA, especially after the Republicans won the presidency and retained control of both chambers of Congress in 2016. The ACA has been under constant threat of repeals by President Donald Trump and Republican members of Congress. Despite the 2012 and 2015 rulings by the U.S. Supreme Court, which largely upheld the constitutionality of the individual mandate and the law's

subsidies to help individuals pay for health insurance, a Republican-controlled Congress would still have ample opportunities to slow or block full ACA implementation [5]. With partisanship and political animosity reaching historic highs in the U.S., a divided public might exert additional headwinds to the implementation of the ACA [6].

Besides partisanship, part of the divide in public opinion over ACA could be related to a lack of awareness and knowledge of what the law is really about. Findings from a national survey conducted in 2013 suggested that most respondents had heard little about the coverage provisions under the ACA, and only a quarter had heard about Medicaid expansion to low-income adults [7]. There was evidence that relative to the general public, uninsured Americans had even poorer knowledge of the ACA [8]. Despite these findings, there has been limited investigation into how knowledge of the ACA is related to public opinion of the law.

In this study, we assessed the public's knowledge of the ACA and examined the extent to which misperceptions of the ACA were associated with public perception of the law in Nebraska, a state that has not yet opted for Medicaid Expansion. Our hypothesis was that compared to those with better understanding of the ACA, people who had misperceptions of the law were more likely to express disapproval of the law. We also identified correlates of misperceptions of the ACA in the hope that some of the findings could help inform and focus future educational efforts to correct common misperceptions of the ACA.

Methods

Data

Data for this study come from the Douglas County Community Health Survey (DCCH), a population-based telephone survey conducted in the summer of 2013. The target population included residents aged 18 years or older with an oversampling of minority and rural residents in Douglas County, the largest county in Nebraska. The sampling frame for the survey was based on telephone numbers generated through the GENESYS Sampling system [9], providing comprehensive coverage of both landline and cellular telephones eligible for the survey. The use of standard Random Digit Dialing (RDD) and Computer Assisted Telephone Interviewing technique made it possible for the survey to generate a probability sample in which analytical results can be generalized to the study area. Non-sampling errors were controlled by conducting a pretest of the survey components and through training telephone interviewers prior to the implementation of the survey. The overall response rate, combining both landline and cellular telephone interviews, was 39.8%. The data were weighted using a 3-step process of calculating design weights, adjusting for nonresponse, and then raking to match the sample to population totals in Nebraska [10,11]. This study was approved by the Institutional Review Board of the University of Nebraska Medical Center. Informed consent was obtained from each participant before administering the survey. The working sample used in this study consisted of 480 respondents who reported awareness of the ACA and who provided a clear answer to each of the four questions used to test respondents' knowledge of the ACA.

Measures

Misperceptions of the ACA were assessed based on participants' responses to four questions: (1) Will the ACA prevent denial of coverage for pre-existing conditions? (2) Will ACA require all businesses to provide coverage for employees? (3) Will ACA create a new government-run insurance plan? (4) Will ACA allow undocumented immigrants to get financial help? These four questions were asked in the survey in consideration of their importance to the ACA and the publicity they received. For each question, respondents were provided the following options: 'Yes', 'No', 'Don't know/Not sure', and 'Refused to answer'. Respondents who answered no more than one question right were considered to have more misperceptions of the ACA, whereas those who answered at least two questions correctly were considered to have less misperceptions of ACA.

Perception of the ACA was based on the question: "Overall, do you think the new health care law is a positive or negative step in addressing issues in health care?" Respondents can answer the question by selecting one out of these options: 'Positive', 'Negative', 'Don't know/Not sure', and 'Refused to answer'.

Demographics used in the analysis included age, gender (male vs. female), marriage (married vs. unmarried), race and ethnicity (non-Hispanic Whites, non-Hispanic Blacks,

Hispanics, and other), and country of birth (U.S. vs. foreign countries). Variables on socioeconomic status (SES) included education (high school or less, some college, and college or above), and annual household income (\leq \$75,000 or \geq \$75,000). Self-rated health (excellent/very good/good, or fair/poor) was used as a proxy for a respondent's overall health condition at the time of the survey. Health insurance coverage was dichotomized as either having health insurance coverage or not. Data on all these variables were based on self-report.

Statistical analysis

We started the analysis by calculating percentages or means of all the variables used in this study. This was followed by a multivariate logistic regression in which we examined how misperceptions of the ACA were linked to selected covariates on demographics, SES, health insurance coverage, and self-rated health. These variables were selected based on variables included in related previous studies [10,12]. We then ran another logistic regression to assess the relationship between misperceptions of the ACA and negative perception of the law after adjusting for the effect of selected covariates. To test the robustness of our findings, we then replicated this regression analysis by replacing misperception of the ACA, defined as answering no more than one question correctly, with the original variable denoting the number of ACA questions answered correctly. All analyses were conducted based on the weighted sample using SPSS Version 21 (IBM Corp., 2012).

Results

As indicated in Table 1, about half of the sample (50.2%) correctly answered the question "Will ACA prevent denial of coverage for pre-existing conditions?", whereas the other half did not answer the question correctly. For the second question "Will ACA require all businesses to provide coverage for employees?", over 36% of the respondents were able to answer this question correctly. This percentage became the lowest when it came to the question "Will ACA create a new government-run insurance plan?" for which only 27% of the respondents gave the correct answer. As for the fourth question "Will ACA allow undocumented immigrants to get financial help?", 31.3% of the respondents answered it correctly.

For the four aforementioned questions, the average number of correct answers in the sample is 1.44. If having more misperceptions of the ACA can be defined as answering correctly to no more than one question, 56.7% of the respondents had more misperceptions of the ACA whereas the remaining 43.4% can be regarded as having less misperceptions of the law.

More respondents had a negative perception of the ACA than those otherwise. Over half of the sample (55.7%) thought that the ACA was a negative step in addressing health care issues, as compared to 44.3% who thought of the ACA as a positive step in addressing health care issues.

Variables	Number of Cases	Mean or Percentage
Will ACA prevent denial of coverage for pre-existing conditions?		
Yes (correct answer)	214	50.2
No	239	49.8
Will ACA require all businesses to provide coverage for employees?		
Yes	305	63.7
No (correct answer)	174	36.6
Will ACA create a new government-run insurance plan?		
Yes	350	73.0
No (correct answer)	130	27.0
Will ACA allow undocumented immigrants to get financial help?		
Yes	329	68.7
No (correct answer)	150	31.3
Number of Questions Answered Correctly	480	1.44(mean)
Misperception of ACA		
Yes (answered no more than 1 question correctly)	272	56.7
No (answered at least 2 questions correctly)	207	43.3
Whether ACA is a positive or negative step in addressing health care issues in health care?		
Positive	192	44.3
Negative	241	55.7
Age	473	44.5(mean)
Gender		
Male	242	50.4
Female	238	49.6
Marital Status		
Unmarried	204	42.6
Married	275	57.4
Race and Ethnicity		
Non-Hispanic Whites	381	79.5
Non-Hispanic Blacks	39	8.1
Hispanics	41	8.5
Others	19	3.9
Country of birth		
United States	445	92.9
Foreign countries	34	7.1
Annual Household Income		
< \$75,000	243	54.7
≥ \$75,000	201	45.3
Education		
High school or less	118	24.7
Some college	153	32.0
College or above	207	43.3
Health Insurance Coverage		
Insured	451	94.1
Uninsured	28	5.9
Self-rated Health		
Excellent/Very Good/Good	430	89.7
Fair/Poor	49	10.3

Regarding the demographics of the sample, the average age was 44.5 years old with half of the sample being males and the other half being females. 57.4% of the respondents were married. Close to 80% of the sample were non-Hispanic Whites and the percentages for non-Hispanic Blacks and Hispanics were 8.1 and 8.5, respectively. In terms of nativity, close to 93% were born in the U.S, and 7.1% were born in a foreign country.

There were variations in SES, health insurance coverage, and self-rated health in the sample. Close to 55% of the respondents reported an annual household income of less than \$75,000 with the rest of the sample reporting a household income of at or above \$75,000. About a quarter of the respondents reported having a high school or lower education as compared to 32% for some college and 43.3% for college or higher education. Close to 6% reported having no insurance coverage and about 10% said they had fair/poor health.

Given the high prevalence of misperceptions of the ACA in the sample, we then examined correlates of the misperceptions based on results from a logit model (Table 2). Relative to male respondents, female respondents were more likely to have misperceptions of the ACA (OR=1.89, P<0.01) after adjusting for the effect of selected covariates in the model. Hispanic respondents were found to have higher odds of developing misperceptions of the ACA than White respondents (OR=4.54, P<0.01). Respondents with college or higher education on average had lower odds of misperceptions of the ACA when compared to those with high school or less education (OR=0.49, p<0.05). Relative to having excellent, very good, or good health, having fair or poor self-rated health was associated with higher odds of misperceptions of the ACA (OR=2.96, p<0.01). Having no health insurance coverage was associated with lower odds of misperceptions of the ACA (OR=0.35, p<0.05).

Results based on a bivariate analysis as reflected in Figure 1 revealed a patterned association between knowledge of the ACA and its perception by the public. In general, better knowledge of the ACA was associated with a more favorable perception of the law.

For example, among respondents who did not answer any question correctly, 64.7% reported a negative perception of the ACA. The corresponding percentages for those who answered three or four questions correctly were 39.1% and 27.8%, respectively.

To further verify findings reflected in Figure 1, we ran a series of logit models with or without controlling for selected covariates on demographics, SES, health insurance coverage, and self-rated health (Table 3). Relative to respondents who had less misperceptions of the ACA, the odds of reporting an unfavorable perception of the law for those who had more misperceptions were 47% higher based on the unadjusted odds ratio (OR=1.47, p<0.05). The corresponding odds became substantially higher when adjusting for the effect of selected covariates in the model (OR=1.73, p<0.05).

Table 1: Description of variables used.

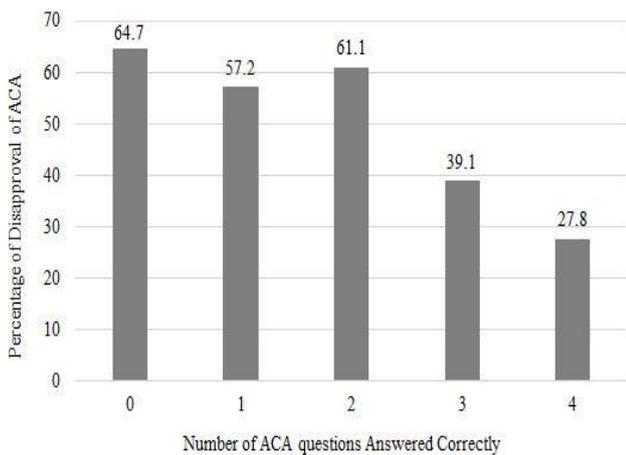


Figure 1: The association between knowledge and disapproval of the ACA.

Explanatory Variables	Odds	95% CI
Age	1.01	(1.00, 1.02)
Gender		
Male	Reference	
Female	1.89**	(1.22, 2.91)
Marital Status		
Unmarried	Reference	
Married	0.77	(0.46, 1.30)
Race and Ethnicity		
Non-Hispanic Whites	Reference	
Blacks	1.93	(0.81, 4.61)
Hispanics	4.54**	(1.57, 13.11)
Others	1.79	(0.53, 6.01)
Country of Birth		
United States	Reference	
Foreign countries	1.88	(0.65, 5.39)
Annual Household Income		
< \$75,000	Reference	
≥ \$75,000	1.41	(0.84, 2.38)
Education		
High school or less	Reference	
Some college	0.66	(0.38, 1.18)
College or above	0.49*	(0.28, 0.89)
Self-Rated Health		
Excellent/very good/good	Reference	
Fair or poor	2.96**	(1.42, 6.20)
Health Insurance Coverage		
Insured	Reference	
Uninsured	0.35*	(0.13, 0.96)

Note: * p<0.05; ** p<0.01

Table 2: Correlates of misperceptions about ACA based on logistic regression results.

Explanatory Variables	Unadjusted Odds Ratios	Adjusted Odds Ratios
Misperceptions of the ACA		
No	Reference	Reference
Yes	1.47*(1.00, 2.16)	1.73*(1.09, 2.75)
Number of ACA Questions Answered Correctly	0.73***(0.61, 0.88)	0.62***(0.50, 0.77)

Note: * p<0.05; *** p<0.001. Adjusted odds ratios indicated odds ratios after adjusting for the effect of age, gender race and ethnicity, country of birth, marital status, education, household income, health insurance coverage, and self-rated health.

Table 3: Misperceptions of the ACA and odds of disapproval of the law.

Similar findings were observed when the number of ACA questions answered correctly was used as the key explanatory variable. Based on unadjusted odds ratio estimates, for each additional question answered correctly, the odds of having an unfavorable perception of the ACA declined by 27% (OR=0.73, p<0.001). This effect was even more pronounced based on the adjusted odds ratio (OR=0.62, p<0.001). These findings corroborated the results based on logit models in that the association between knowledge of the ACA and opinion over the law was not contingent upon the threshold we selected for defining more or less misperceptions of the law.

Discussion

The ACA represents the most profound reform to the U.S. health care system since the initiation of Medicare and Medicaid in 1965 [13]. Based on survey data from the largest county in Nebraska, this study assessed public’s knowledge of the ACA and how misperceptions of the ACA were linked to unfavorable perceptions of the law. Our findings suggested that the public’s understanding of the ACA was far from adequate. About 57% of the respondents in our sample answered correctly to no more than one out of the four questions used to test respondents’ knowledge about the ACA. This is consistent with similar findings based on national surveys that highlighted the American public’s lack of understanding of the ACA [14] and a significant body of literature in political science documenting the prevalent lack of factual knowledge of political matters in the American public [12,15-18].

Results from this study revealed a close association between knowledge of the ACA and subjective perception of the law: poor understanding or misperceptions of the law was found to be associated with higher odds of reporting an unfavorable perception of the law. Two important implications can be derived here. One is that for many Americans, they were not evaluating or making a judgment call about the ACA based on a factual understanding of what the law is about. Related findings from a previous study suggested that party affiliation turned out to be the dominant

predictor of attitudes towards the ACA [19]. With growing polarization of American politics over the last two decades [6], partisan antipathies could easily discourage many Americans from knowing or learning about the ACA, which in turn would make it difficult for them to make informed, unbiased evaluations of law.

The second implication based on findings from this study is that there could potentially have been more public support for the ACA if Americans can have a better understanding of the law. It was estimated that if the public had a perfect understanding of the ACA, the proportion of Americans favoring the bill would increase from 32% to 70% [12]. Mass media has become the primary source of information about the ACA for Americans. There has been a tendency for mass media to present information in partisan and polarizing ways, making it difficult for Americans to discern credible information from biased propaganda [20]. Additionally, Americans generally follow media channels and political discourses that align with their own political ideology and beliefs. Therefore, efforts to verify information from mass media are crucial for Americans to develop a greater personal and factual understanding of the ACA. There is evidence that fact-checking political elites could help make their discourses more grounded on factual evidence than on unfounded myths [21]. The same strategy could be applied to improve the objectivity of U.S. news reports on the ACA.

As of September 14, 2018, seventeen states, including Nebraska, have not yet opted for Medicaid Expansion [22]. Despite a dwindling share of federal government in covering Medicaid costs for newly eligible individuals after 2016, these states can still choose to expand Medicaid under the law anytime they want. Lack of public support for the ACA in these states, as exemplified by findings from this study, remains a significant barrier. Addressing prevalent misperceptions of the ACA is critical for the law to gain more awareness and support in the American public. With the oversampling of minorities and rural residents, we found that females, Hispanics, and those with fair or poor self-rated health, or having lower education, were more likely to have poor understanding of the law. Educational efforts aiming to alter the public's misconception of the ACA might be more cost effective if more attention can be paid to these groups of people. Incorporating the voice of those who are underserved and creating widespread dissemination of community-created messages about the ACA through grassroots outreach is essential for building trust and engaging those needing enrollment and services under the law [23,24].

Steps to correct misperceptions of the ACA are crucial given the uncertainty of the ACA under both a Republican presidency and a Republican majority in the U.S. Congress. A full repeal of the ACA would not be easy since it usually requires 60 votes in the Senate to circumvent a filibuster [25]; however, the Trump administration can still block the implementation of key ACA components, as indicated by the repeal of the individual mandate in the tax reform bill passed in the Senate on December 2, 2017. It is likely that health care reform under the Trump Administration will still retain some components of the ACA, such as prohibiting insurance companies from denying coverage because of preexisting conditions and allowing children to stay on their parents'

insurance plan until age 26. Even so, public perception and opinion are still important in future reforms that will shape the U.S. health care landscape.

Our study has several noteworthy limitations. First, the use of survey data from Nebraska calls for cautions before our findings can be generalized to other regions and the whole U.S. This limitation is also compounded by the lack of data on party affiliation. Second, our use of cross-sectional, quantitative data has made it difficult to infer causality, that is, whether poor understanding of the ACA was leading to an unfavorable perception of the law or vice versa. The current study can be enriched and strengthened by collecting qualitative data to understand why people were expressing favorable or unfavorable opinions of the ACA. There is evidence that when people were asked about their opinions of the ACA, the wording of the questions can make a significant difference in the responses [26]. Finally, the ACA is a complex legislation with close to 1,000 pages in its official documentation [27]. Our use of four questions could only serve as a partial test of knowledge of the law. Future studies along this line can assess the robustness of our findings based on more comprehensive tests of public understanding of the ACA.

Conclusions

Misperceptions of the ACA were common in the American public, but they were not evenly distributed. Our results indicated that females, Hispanics, and those with fair or poor self-rated health were more likely to have a poor understanding of the law. Educational efforts aiming to correct the public's misperceptions of the ACA might be more cost effective if more attention can be paid to these groups of people. Increasing the public's support for the ACA calls for serious efforts to correct prevalent misperceptions of the law. These efforts would enable Americans to know more about the ACA, assess the law's merit and limitations based on a factual understanding of what the law is really about, make informed decisions about the options they have under the law, and decide whether they intend to change the law through their votes and voices.

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***Corresponding author:** Dejun Su, PhD, Department of Health Promotion, College of Public Health, University of Nebraska Medical Center, 984340 Nebraska Medical Center, Omaha, NE 68198-4340, USA, Tel: (402) 552-2359, Fax: (402) 559-6493; Email: dejun.su@unmc.edu

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