Registered Dietitian Nutritionists' Knowledge, Attitudes, and Beliefs Regarding Nutrition for the Transgender Population in three New England states: A Cross-Sectional Study

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Suggested running head: Registered Dietitians and transgender health

Conflict of interest
The authors declare no conflict of interest pertaining to this study.

Acknowledgement
None

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Abstract

Background: This Study examined the knowledge, attitudes, and beliefs of Registered Dietitian Nutritionists (RDN's) practicing in Maine, New Hampshire, and Vermont, regarding the transgender population.
Methods: 196 RDN's from the Commission of Dietetics Registration registry located in the tri-state area responded to an anonymous online survey. The survey used the Transgender Knowledge, Attitudes and Beliefs (T-KAB) Scale and nine true/false clinically-focused questions. Descriptive statistics and chi-square analysis were used to identify trends and associations in RDN's knowledge, attitudes, and beliefs regarding the transgender population.
Results: Political views ($p<.0001$), years practicing ($p=0.0454$), and religious commitment ($p=0.0429$) were negatively associated, and health disparities awareness ($p<0.0002$) was positively associated, with total T-KAB Score.
Discussion: RDN's surveyed had positive attitudes and beliefs, but a low level of knowledge. Future research should focus on training and education of RDN's, and use of the T-KAB scale to evaluate pre/post-education modules regarding nutrition care for transgender patients.

Keywords
Dietitians; Gender identity; Transgender; sexual and gender minorities

Introduction

Using the Center for Disease Control's Behavioral Risk Factor Surveillance System, a 2016 report published by the Williams Institute estimated that 0.6%, or 1.4 million people, in the United States identify as transgender; a statistic which has roughly doubled in the last decade [1]. Transgender individuals have reported abuse and refusal of care from medical providers and members of the transgender community have reported delaying or postponing medical care due to discrimination [2].

The 2015 U.S. Transgender Survey (USTS) received 27,715 respondents nationwide, making it one of the largest surveys of transgender people to date [3]. Residents of Maine (N=182), Vermont (N=163) and New Hampshire (N=225) reported at least one negative experience with a healthcare provider related to being transgender (43%, 29% and 27%, respectively), that they postponed care due to fear of being mistreated (23%, 12% and 18%, respectively), and that a healthcare professional tried to dissuade them from being a transgender person (12%, 9%, and 13%, respectively) [4]. Negative experiences included verbal harassment, refusal of care, provider lack of awareness or education about transgender people and/or physical or sexual assault [4-6].

In recent years, researchers have identified health disparities which impact the transgender population more prevalently than the cis-gender population. Female-to-male transgender individuals exhibit an increased risk of type 2 diabetes secondary to weight gain, polycythemia and hyperlipidemia; while male-to-female transgender individuals exhibit an increased risk of cardiovascular disease, type 2 diabetes, hypertension, hypertriglyceridemia, and venous thromboembolic disease [7]. A 2016 study found LGBT subgroups, specifically transgender women, are at a substantially increased risk for diet- and behavior-related diseases [8], and

significantly elevated rates of mental health disorders, cancer, acquired immunodeficiency syndrome (AIDS) and human immunodeficiency virus (HIV) have been identified within the queer population [9]. Transgender female-to-male individuals who receive masculinizing hormone replacement therapy are at risk of elevated creatinine, hemoglobin, hematocrit and LDL-cholesterol, increased in body mass index (BMI), lean body mass and prothrombin time, and decreased in HDL-cholesterol and body fat mass [10-13]. Patients who are transitioning male-to-female who receive feminizing hormone replacement therapy have an increased risk of lower or higher blood pressure, decreased creatinine and lean body mass, and increased HDL-cholesterol and body fat mass [11,12,14]. Bone mineral density has been found to be lower in transgender women prior to and during hormone replacement therapy as compared to the age-matched male control group [15-17]. In a recently published retrospective analysis of private health insurance claims from 2001-2019, transgender people were found to be at an elevated risk for almost all chronic conditions with transmasculine and nonbinary individuals having the highest risk of all gender groups analyzed [18].

The majority of the listed health complications can be directly impacted by appropriate nutrition care, however, systematic and metanalysis reviews concluded nutrition research relating to transgender and non-binary population is lacking and struggles to overcome the traditional sex binary used in many nutrition standards and surveillance tools [19,20]. In a recent clinical application review by Linsenmeyer et al [21], it was determined best nutrition care practices include, (1) if a patient has not medically transitioned, clinicians should use nutrition values that are consistent with a patient's sex assigned at birth, (2) if a patient has medically transitioned, a clinician should use highly individualized nutrition assessments to interpret nutrition references and laboratory values as it relates to the timeline of the individual's medical transition, and (3)

lastly, for transgender and gender diverse patients some nutrition reference values should by expressed as a range taking into account the female and male reference values. While there are no widely accepted nutrition protocols for this population, it is generally understood a multidisciplinary approach is the most effective treatment, and continued research and development of evidence-based nutrition care could reduce behavior-related diseases and promote wellbeing for this population [22]. Experienced nutrition professionals play a key role in healthcare for transgender patients, as most of the health risks stated above can be prevented and/or managed with medical nutrition therapy [23-27].

The aim of this study was to evaluate the knowledge, attitudes, and beliefs towards nutrition care for the transgender population among Registered Dietitian Nutritionists in Maine, New Hampshire, and Vermont. The objectives of this study were (1) to assess whether RDNs in the tri-state area are receiving training regarding this specific population, (2) to evaluate the current knowledge level of RDNs in the tri-state area as it relates to the transgender population, and (3) to examine RDNs' attitudes while treating clients within this population.

Methods

Survey Development

This cross-sectional study was questionnaire-based and adapted and combined two pre-existing instruments. The first questionnaire was used to examine RDNs' knowledge, attitude, and beliefs regarding the gender spectrum, contact and comfortability, and social tolerance regarding transgender people. The Transgender Knowledge, Attitudes, and Beliefs (T-KAB) Scale tool was designed and validated by Clark et al (2020), in a two-phase process which included (1) an in-depth literature review, feedback from experts in research and healthcare, and a review of

interviews with healthcare providers, transgender patients and the public and (2) a diverse convenience sample testing of 195 subjects [28].

An unvalidated tool was also administered to assess evidence-based nutrition knowledge. This tool was adapted from a thesis by Pauline Douglass from Bastyr University entitled *Assessing Different Communities' Current Knowledge and Confidence Regarding Nutrition and Health Care for Transgender and Gender Non-Binary (TGGNB) Clients*, which examined participants current nutrition and health disparities knowledge, and prior training regarding the transgender and gender non-binary population [29]. Three questions about prior training and awareness of health disparities and terminology were also assessed.

The adapted survey used in this research contained multiple choice, true/false, Likert scale and open-ended questions. The questions included 16 general non-identifiable demographic questions, one open-ended question to explore the participants ideas on health disparities in the transgender population, 22-item 4-point Likert scale and 9 true/false questions which examined the participants current knowledge on this population. The Likert scale questions assessed the RDNs' acceptance and knowledge of the gender spectrum, comfortability interacting with transgender people, beliefs regarding transgender people and social tolerance.

The 4-point Likert scale included answers ranging from "strongly agree", "agree", "disagree", or "strongly disagree" and for statistical analysis were enumerated with scores 1-4, with 1 being strongly disagree and 4 being strongly agree. Survey answers for age, level of religious commitment, political views, years practicing, area of practice and level of education were also enumerated prior to data analysis. Age ranges were scored from 1 to 5, 1 being the youngest. Level of religious commitment was scored 1 to 4, 4 being very religious and 1 being not religious. Political views were scored 1 to 6, 6 being very conservative and 1 being very liberal.

Years practicing were scored 1 to 4, 1 being the least number of years practicing. Area of practice was scored 1 to 3, 1 being urban and 3 being rural. Highest level of education was scored 1 to 3, 1 being a bachelor's level of education and 3 being a doctoral level of education.

Participant Recruitment

Participants were recruited from the Commission of Dietetic Registration registry list of Registered Dietitian Nutritionists registered in the state of Maine, New Hampshire, and Vermont. Using a G-Power calculation and data collected from previous research [29], the minimum number of study participants for sufficient power was 50.

Administering the Survey

A link to the Google Forms survey was sent to each participant via email. Participants were given a month to complete the survey with two reminder emails sent prior to the survey closing.

Data Collection, Analysis and Statistical Testing

Data was collected and stored in Google Forms. Data was extracted from google forms into Excel and analyzed using 2021 SAS OnDemand for Academics and Excel version 16.59. Cases with incomplete data and those that did not fully complete the survey were removed from the dataset. Fifteen of the 22 questions on the T-KAB scale were reverse scored during analysis. This resulted in the higher T-KAB scores indicating more acceptable and open beliefs and attitudes. For example, the question was posed "A person with a vagina cannot be a man." The answers were reverse scored to indicate more acceptance with higher scores and less acceptance with lower scores.

Using descriptive statistics, frequencies, percentages, and means of the demographic survey were identified. Chi-square analysis was used to find relationships between the demographics and T-KAB and True/False results. Relationships were considered significant at $p<.05$. Pearson correlation was used to determine the strength and direction of any associations. Moderate positive and negative relationships were described at >.5 and <-.5, respectively. Cronbach's alpha was assessed to determine the internal consistency and scale reliability of the adapted tools. Internal consistency was high at $\alpha>.70$.

IRB Approval

This study protocol received IRB approval from the University of New England (IRB# 0721-14) and the IRB protocol and survey were approved by the Commission on Dietetic Registration prior to receiving the registry list of RDNs.

Results

Demographics

After we removed cases with missing data, 196 responses were included in the data analysis. Demographic data (Table 1) indicated most of the participants identified their biological sex as female (95.41%), many of the participants were older than 34 years (57.66%), but the largest age range represented was 25-34 years old (40.82%), the majority of the participants were white/European American (96.43%), and one hundred twenty-seven participants held a master's degree (64.80%). The majority of the population study expressed their gender identity as female (95.41%) and 177 participants identified as heterosexual/straight (90.31%) (Table 2).

Demographics of the population of this study vary slightly from the national average within the dietetic community and are reported in Tables 3 and 4 and elaborated on in the discussion. Seventy participants reported practicing in Maine, with 78 participants practicing in New Hampshire, and 38 participants practicing in Vermont. Ten participants identified their state of practice as "other" but were still registered in Maine, New Hampshire or Vermont with the CDR.

Health Disparities & Prior Training

Most participants did not receive prior training regarding terminology or health disparities (48.98% and 78.06%, respectively) but most were aware health disparities existed (65.82%).

Transgender Knowledge, Attitudes, and Beliefs (T-KAB) Scale

The average total T-KAB score was 74.75 (SD 16.01) with a range of 47 to 88. Higher scores indicate more accepting attitudes, and beliefs, and increased knowledge regarding this population. The average per question score (ranging from 1-4) was 3.39 indicating a moderate to high level of transgender acceptance and more open beliefs.

The T-KAB Scale can also be broken down into subcategories. The subcategory in which respondents scored the highest was Social Tolerance (M 3.52, SD 0.67) while the lowest scores were in Comfort and Contact (M 3.26, SD .53). When the scale was tested in the public, the highest scores were in the subcategory for Social Tolerance (3.13) and the lowest scores were in the category for Acceptance of the Gender Spectrum (2.66) [28]. This study population showed higher scores in all subcategories, as compared to the general population, which indicates a high level of acceptance, tolerance, and comfort. The subcategory T-KAB scores for each state were

very similar. New Hampshire had the two lowest scores of 3.20 on Comfort and Contact and 3.28 on Acceptance of the Gender Spectrum.

True/False Knowledge Test

The average score on the True/False section was 60.60% correct. The mean number of correct answers was 5.4 (SD 3.6). By state, the average score was 63.81% for Maine participants, 57.12% for New Hampshire participants, and 61.11% for Vermont participants (Table 5). Three questions related to acceptance and tolerance scored higher, between 85.71% to 91.33% correct. The questions most participants answered incorrectly (below 80% correctly answered) related to the effects of hormone replacement therapy on cholesterol, bone density, body fat and triglycerides.

Comparing T-KAB and Knowledge Test to Demographics

Using the Cochran-Mantel-Haenszel statistical test to compare the total T-KAB scores against the demographics, two relationships were found to have a significant association. Political views ($p<.0001$) and self-identified knowledge of health disparities awareness ($p=0.0002$) were strongly associated with total T-KAB Score. Using Pearson coefficient, political views and total T-KAB score were found to have moderate negative correlation (-0.5194). As political views became more liberal, acceptance, attitudes, and tolerance of transgender individuals increased. Additionally, religion ($p=0.0422$), religious commitment ($p=0.0429$), and years practicing ($p=0.0454$) were found to have a moderate association with total T-KAB scores. Religious commitment and years practicing were found to have negative associations. As religious commitment decreased and years practicing decreased attitudes and beliefs were more open.

The total score on the True/False Knowledge Test did not show any significant association with any demographics (Table 6).

Discussion

The aim of this study was to evaluate the knowledge levels, beliefs, and attitudes towards the transgender population among Registered Dietitian Nutritionists in Maine, New Hampshire, and Vermont. Findings from this data show RDNs have positive attitudes and beliefs towards transgender patients but lower levels of transgender-specific health information and knowledge. Prior training regarding appropriate terminology was almost evenly split (44.4% did have prior training, 49.0% did not have prior training). While most participants did not receive health disparities training (78.1%), most were aware health disparities existed (68.9%). Although this indicates the essential need to develop training for RDNs on best practice for this population, these data also highlight that training on health disparities in general would be useful for RDN's. Similar population-specific training and awareness were assessed in medical students, while the majority of the participants were confident treating LGBT patients and believed their orientation and gender diversity were a natural expression of human nature, 69% of survey participants had not received LGBT-specific care training, 85% were interested in receiving future training, and the majority of participants did not know where to get population-specific evidence-based health services [31]. An integrative review analyzing 40 years of research regarding nursing students attitudes towards LGBT patients indicated attitudes are becoming more positive, with the majority of the research indicating negative attitudes was published prior to 2000 [32].

When comparing participant demographics to RDN subjects in a similar national study, this sample showed similar age ranges (sample 58% were over 35 years old vs. previous study 52.5%

over 40 years old), although more participants were white (sample 96.43% vs. previous study 80.7%), a similar proportion of participants identified as female (sample 95.4% vs. previous study 93.8%), more held a master's degree (sample 64.8% vs. previous study 56%), and fewer worked in a clinical setting (sample 40.8% vs. previous study 46.9%) and had 10+ years of work experience (sample 50.5 % vs. previous study 55%) [29]. Nationally, 92% of Registered Dietitians active with the CDR are female and 80% are white, both slightly lower than the average of this study population[30]. Further, religious affiliation was varied with most participants identifying as "other" (24.49%) and Catholic (22.96%), religious commitment also varied with 38.78% identifying as "not religious", and the majority of the participants identified themselves as somewhat liberal to very liberal (76.53%) (Table 3). Most of the study population work in the clinical healthcare setting (40.82%), had been practicing for 10+ years (50.51%) and worked in Suburban communities (42.86%) (Table 4).

For the total T-KAB scale, compared to previous testing on the public (M 2.84) [28], this study population's mean score was higher and shows a moderate to high level of transgender acceptance and more open beliefs. Previous research using the T-KAB survey within the general population had similar high internal consistency, within the full survey and the three sub-categories, and lower mean scores in social tolerance (sample M=3.53 vs. previous study M=2.55), acceptance of the gender spectrum (sample M=3.35 vs. previous study M=3.12), and comfort and contact (sample M=3.26 vs. previous study M=2.84) [28].

The survey and analysis concluded RDNs' political views had a moderate negative association with their knowledge, attitudes, and beliefs regarding the transgender patients. As political views became more liberal, attitudes and beliefs regarding transgender patients become more accepting

and positive. Comparison cannot be made to other studies because political views were not examined in the prior study which built and tested this tool. There was a slight positive association between an RDN's awareness of health disparities and their attitude towards transgender people. RDNs who identified they were aware health disparities existed were more likely to have positive attitudes and beliefs towards transgender people. This aspect was not assessed in prior research. The data also showed moderate associations between religion, religious commitment, and years practicing to their knowledge, attitudes, and beliefs regarding transgender patients. Because data on age and years practicing were categorical, it should be noted that these differences could also be a function of age. The number of years practicing, and religious commitment had a slightly negative association with the total T-KAB survey. This indicates the more time practicing or higher degree of religiosity, the lower the T-KAB score and less accepting beliefs and attitudes. In previous studies, religion was not found to be associated with T-KAB scores, and religious commitment and years practicing in the dietetics field were not assessed [28].

When comparing T-KAB subcategories by state of practice, survey results were very similar. New Hampshire had the two lower scores in the categories of acceptance of the gender spectrum, and comfort and contact. In previous studies, comparisons by state were not reported [28]. In the 2015 U.S. Transgender Survey (USTS), Maine was found to have a higher rate of transgender patients with at least one negative experience with a medical provider (43% of survey participants from Maine, 27% from New Hampshire, and 29% from Vermont) and a slightly higher rate of postponing medical care due to fear of mistreatment (23% of survey participants from Maine, 18% from New Hampshire, and 12% from Vermont). New Hampshire survey data from the 2015 U.S. Transgender Survey (USTS) showed a slightly higher rate of transgender

patients experiencing a medical provider dissuading them from being transgender as compared to Maine and Vermont (13% of survey participants from New Hampshire, 12% from Maine, 9% from Vermont) [4-6]. These comparisons show similar knowledge, attitudes, and beliefs across the three states involved in this research.

Similar to this study population, prior testing of the T-KAB scale in the general public did not find any significant difference in scoring when compared to sex, race, age, or level of education [28], which suggests the validity of the sampling, assessment tool and survey methods.

This data set demonstrated high internal consistencies of the full T-KAB scale and subcategories of acceptance of the gender spectrum, comfort and contact related to transgender people and social tolerance with Cronbach's alphas of 0.91, 0.95, 0.75, and 0.87, respectively. Previous research also demonstrated high internal consistencies for the full T-KAB scale and subcategories listed above with Cronbach's alphas of 0.97, 0.95, 0.91, and 0.93, respectively [28].

Conclusion

The knowledge gained from this research continues to advance the evidence-based nutrition and health guidelines for this emerging field of nutrition. The implication of this data shows RDNs are interested and eager to treat these patients but have low knowledge about population specific information. The lowest scoring questions (below 80%) in the True/False knowledge sections of the survey pertained to body fat, cholesterol, triglycerides, and bone density, and by improving the skills and knowledge to address this gap, there are practice implications that RDNs can help this population through early screening and treatment. Based on the low scores on the nutrition specific knowledge section of the survey, there is a need for

education on appropriate knowledge and skills improvement for RDN treatment of the transgender population. These findings indicate that specialized training on screening and treatment in this population could improve nutrition related health outcomes, particularly related to hormone therapy and the prevention and treatment of co-related disease states such as type II diabetes, hypertension, and dyslipidemias. Training should include standardized early screen biometrics and treatment protocols, which could improve nutrition care for this population. The T-KAB scale, with nutrition-focused adaptations, could also be used to indicate targeted subcategories of RDN participants who need further education or training.

This research was limited by several factors. The study population self-selected to participate in this study. Sample bias may exist due to the likeliness of RDNs who have more negative attitudes and beliefs towards transgender individuals opting out. All the data was self-reported and could be limited by the perspective of the subject. Due to cultural bias, participants may answer questions in a culturally acceptable way instead of reflecting their own beliefs. The data was also limited by the gaps in prior research. This emerging field of nutrition and research is lacking validated nutrition-based questionnaires to examine patients and nutrition professionals. Other limits to this survey are the demographic restrictions of the surveyed population. The study results were also limited by the lack of diversity in the sample population. Nationally, 92% of Registered Dietitians active with the CDR are female and 80% are white, both lower than the average of this study population[30]. The majority of the sample were white/European American, with biological sex and gender identity indicated as female, sexual orientation reported as heterosexual/straight and holding more liberal political beliefs. In addition, the New England states included in this study are in general more politically liberal states, and further research in less politically liberal states should be conducted to confirm these findings and

determine the best approaches to training and educating RDN's on best practice with the Transgender population.

Future research should identify sub-populations with a higher need for training and education and use the T-KAB scale to evaluate pre/post-education modules regarding nutrition care for transgender patients. There is current on-going research which seeks to develop transgender-specific nutrition guidelines, assessment tools, and reference values, as well as establish research protocol to involve a more inclusive approach to gender [20,21,33-35]. For example, the Sex and Gender Equality in Research (SAGER) guidelines is an easy two-step method used to standardize reporting gender and sex in research [34]. In addition to identifying the need for enhanced education on health disparities in general in the RDN's surveyed, it is expected that similar findings would suggest that health professionals in general could benefit from additional training on health disparities. Future research can also apply this methodology and tools to other geographical regions and health professions.

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Table 1. Demographic Characteristics of RDN's In Maine, New Hampshire, And Vermont (N=196)

Demographic characteristics		
	Frequency	Percent (%)
Biological sex		
Female	187	95.41
Male	8	4.08
Prefer not to answer	1	0.51
Age		
18-24	3	1.53
25-34	80	40.82
35-44	39	19.9
45-54	32	16.33
55+	42	21.43
Race/ethnicity		
White/European American	189	95.43
Asian American	3	1.53
Bi-racial/Multi-racial	1	0.51
Hispanic/Latino/Chicano	1	0.51
Native American/Alaskan Native	1	0.51
Prefer not to answer	1	0.51
Highest level of education		
Masters	127	64.80
Bachelors	66	33.67
Doctorate	3	1.53

Table 2. Gender Identity and Sexual Orientation Of RDN's In Maine, New Hampshire, And Vermont (N=196)

	Frequency	Percent (%)
Gender Identity		
Female	187	95.41
Male	9	4.59
Sexual Orientation		
Heterosexual/Straight	177	90.31
Bisexual	7	3.57
Queer	4	2.04
Lesbian	2	1.02
Pansexual	2	1.02
Questioning	2	1.02
Gay	1	0.51
Prefer not to answer	1	0.51

Table 3. Religious and Political identities Of RDN's In Maine, New Hampshire, And Vermont (N=196)

	Frequency	Percent (%)
Religion		
Other	48	24.49
Catholic	45	22.96
Atheist	30	15.31
Protestant	27	13.78
Agnostic	24	12.24
Prefer not to answer	15	7.65
Orthodox church	7	2.04
Jewish	3	1.53
Degree of Religiosity		
Not religious	76	38.78
Somewhat religious	39	19.90
Not very religious	35	17.86
Neutral	27	13.78
Very Religious	17	8.67
Prefer not to answer	2	1.02
Political Views		
Somewhat liberal	76	40.31
Very liberal	69	35.20
Neutral	21	10.71
Somewhat conservative	16	8.16
Very conservative	6	3.06
Prefer not to answer	2	1.02
Radical liberal	2	1.02
Other	1	0.51

Table 4. Characteristics Of Employment Of RDN's In Maine, New Hampshire, And Vermont (N=196)

Employment characteristics		
	Frequency	Percent (%)
Area of Employment		
Clinical healthcare	80	40.82
Private practice	32	16.33
Community and Public Health	26	13.27
Other	24	12.24
Business and Industry	12	6.12
Education (school dietitian)	8	4.08
Government agency	7	3.57
Education (instructor)	5	2.55
Research	2	1.02
Years in practice		
0-2	21	10.71
3-5	33	16.84
6-10	43	21.94
10+	99	50.51
State of practice		
New Hampshire	78	39.80
Maine	70	35.71
Vermont	38	19.39
Other	10	5.10
Type of community		
Suburban	84	42.86
Rural	68	34.86
Urban	37	18.88
Prefer not to answer	7	3.57

Table 5. True/False knowledge questions and percent correct answers

Question (answer)	Percent Correct (%)
Transgender persons who choose to receive estrogen hormone therapy may experience a decrease in triglycerides as a result of estrogen hormone therapy (false)+	17.26*
Transgender persons who choose to receive testosterone hormone therapy may have a redistribution of body fat to the visceral area as a result of testosterone hormone therapy (true)+	26.02*
Transgender persons who choose to receive testosterone hormone therapy may experience an increase in low-density lipoproteins (LDL) and decrease in high-density lipoproteins (HDL) as a result of testosterone hormone therapy (true)+	29.08*
If young persons choose to be on puberty blockers (A GNRH analogue), they may affect bone density (true)+	55.10*
Transgender persons who choose to receive estrogen hormone may experience an increase in lean body mass (LBM) as a result of estrogen therapy (false)+	75.00*
Weight gain may be a common side effect during hormone therapy for transgender persons who choose to receive hormone therapy (true)+	78.57*
An individual who chooses to receive hormone therapy to become more feminized would be prescribed testosterone (false)	85.71
To identify as a transgender person, hormone therapy is necessary (false)	86.73
Gender Identity and sexual orientation are terms that express the same concept (false)	91.33

+ indicates question related specifically to dietetics scope of practice

* items that less than 80% of RDN's scored correct on are areas for proposed continuing education opportunities

Table 6. Cochran-Mantel-Haenszel comparison of total T-KAB score and demographic variable

Demographic	Value	*p*	*r**
Religion	14.55	0.04*	
How Religious	11.46	0.04*	-0.21
Political Views	63.50	<0.0001*	-0.52
Years Practicing	8.03	0.04*	-0.15
Health Disparity Awareness	16.68	0.0002*	.29

**Pearson Coefficient*