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Use of online health information resources by American Indians and Alaska Natives

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Abstract

According to the Office of Minority Health, an estimated 4.9 million people living in the United States consider themselves American Indian or Alaska Native (AIAN), either alone or in combination with one or more races/ethnicities. AIAN are a racial/ethnic group experiencing serious health disparities, with very little if any improvement in health outcomes over the last several decades. This study was designed to explore use of the Internet as a health information source among American Indians in the Central Plains region of the United States. Nine hundred and ninety eight Natives in the region were recruited from May 2008 to December 2009 at pow wows, health fairs, through focus groups, career fairs and conferences, and other social and cultural events, and asked to complete a self-administered survey. Although compared with data from the general population, AIAN from our sample may seem heavier Internet users, their use of modern wireless devices is limited, and their usage of Internet to access health information is lower compared to the adult US population. Natives living in the Central Plains region face generational differences in both general and health-related use of the Internet. Inadequate availability of culturally appropriate health information websites may drive AIAN towards search engines and general information websites.

Keywords

AIAN; health information; online; health disparities; generational divide

Health disparities among racial and ethnic groups in the United States are still a significant reality (Smedley, Stith, & Nelson, 2003). These inequalities are fueled by a multitude of factors, from socioeconomic status to health literacy, and from the lack of culturally competent healthcare workers, to poor access and underutilization of health services and health information (Betancourt, Green, Carrillo, & Ananeh-Firempong, 2003; Lee, Mountain, & Koenig, 2001). Among these factors, the digital divide has been shown to play a significant role in modulating access to and use of healthcare information resources (Geana, Kimminau, & Greiner, 2011; Murray, et al., 2003). The present research explores usage of the Internet as a health information resource among American Indians and Alaska Natives (AIAN) in the Central Plains region of the United States.

There are numerous research studies on minorities' use of the Internet for obtaining health information. Nevertheless, most of these studies limit themselves to analyzing African Americans and Hispanics and tend to aggregate remaining minorities under the "other" label. Even the prestigious PEW Internet and the American Life Project does not address AIAN as a separate group in its research projects on online health information (Jones & Fox, 2009). Health disparities within this population are significant and call for culturally appropriate and community driven health promotion activities (Daley, et al., 2006). An understanding of AIAN as a distinct group with specific health information behaviors and needs will be crucial for any new program development addressing this population.

According to the Office of Minority Health (2009), there were an estimated 4.9 million people living in the United States who considered themselves American Indian or Alaska Native (AIAN), either alone or in combination with one or more races/ethnicities; the majority live in metropolitan areas, while 40% live on reservations or tribal trust land. In 2010, there were 569 federally recognized tribes, and over 100 state recognized tribes. With a median age of 29 years, AIAN represented a younger population than the rest of the nation, with about 26% of them living in poverty (Ogunwole, 2006). According to 2010 Census data (DeNavas-Walt, Proctor, & Smith, 2010), the poorest county in America was South Dakota's Ziebach County, home of the Cheyenne River Indian Reservation. Three other AIAN-dominant counties were included in the list of 10 poorest counties in the United States.

AIAN is a racial/ethnic group experiencing serious health disparities with very little if any improvement in health outcomes over the last several decades. AIAN have lower life expectancy than the U.S. all races population, and significantly higher rates of tuberculosis, alcoholism, diabetes, homicide and suicide (Indian Health Service, 2010). Health and educational assistance to federally recognized tribes is provided by the Indian Health Service (IHS), funded in 1955, with over 2.5 million AIAN benefitting from these services on reservations, in rural communities and in urban areas (Office of Minority Health, 2009). Nevertheless, free health services provided through the IHS vary significantly by geographic location and amount of funding (Zuckerman, Haley, Roubideaux, & Lillie-Blanton, 2004); per capita personal health expenditures for the IHS user population (2010 estimated) is \$2690, compared with \$6820 for the total U.S. population (Indian Health Service, 2010).

Rising rates of chronic diseases in the AIAN population, funding, and personnel challenges (such as availability of Native health workers) at the IHS have stimulated new innovative approaches that aim at decreasing current health disparities and improving the health of

AIAN. Increased focus on public health, health promotion and prevention, community-based interventions, and tribal management of health programs are some of the approaches currently in place (Roubideaux, 2002).

Increasing accessibility of AIAN to culturally competent and updated health information is paramount for both increasing health knowledge and for creating appropriate communication channels through which to deliver health promotion campaigns and stimulate social interaction in the health arena. The National Library of Medicine (Rogers & Scott, 2000) has been at the forefront of using the Internet for health information delivery for AIAN, followed by academia and non-profit organizations. These resources were initially geared towards primary care physicians and aimed at providing both updated and culturally relevant health information – such as the Native Health Research database at the University of New Mexico (Buchanan, Morris, & Kauley, 1999).

The widespread adoption of the Internet in the last two decades and the opening of consumer-oriented medical information portals (Gagnon, 1997; Landro, 2001) have exponentially multiplied health information resources available online. In the United States, Internet use is increasing - 146% growth from 2000 to 2010 (Miniwatts Marketing Group, 2010), with broadband leading the adoption curve. A report published in 2009 by the Pew Internet and American Life Project (Jones & Fox, 2009) estimates that 63% of adult Americans used broadband Internet at home in April of 2009, up from about 50% in 2007 and 2008. In the same period of time, dial-up Internet connections have decreased to less than 7% of home Internet users. According to the report, health related use of the Internet (from searching for disease-specific information to ordering prescriptions online), is one of the new drivers of this broadband adoption wave; in 2009, the desire to improve and facilitate communications with health care or medical providers emerged as the most important reason for household broadband adoption [p.33], mainly because senior citizens and low-income Americans have slowly started adopting this technology [p.3], stimulated in part by decreased connectivity costs and Internet availability on mobile devices. Nevertheless, there are no recent studies exploring Internet adoption in general or broadband adoption by AIAN; a 2001 study concluded that cost barriers may still exist for AIAN broadband adoption, mainly because of remote locations and accessibility issues (Prieger, 2003).

Although connectedness (Loges & Jung, 2001) is an important factor modeling Internet use, research has shown that age also does play a major role in Internet and mobile technologies adoption (Rice & Katz, 2003), with Internet use varying according to generational age breaks (Shah, Kwak, & Holbert, 2001). Age has also been found to influence online search skills (Hargittai, 2002), and generational divide can explain patterns of online exploit, with younger audiences being, in general, more active online and more tech savvy, although older adults currently represent the fastest growing segment of Internet users (Jones & Fox, 2009). From a health perspective, generational divide has been show to influence selection of media sources used to retrieve health information (Geana, et al., 2011).

Recent studies have suggested decreased gender disparities in the general population when it comes to accessing and using the Internet. The traditional picture of men more intensely employing search tools and women mainly using communication tools (Fallows, 2005; Jackson, Ervin, Gardner, & Schmitt, 2001), with men being more frequent and more intense Internet users (Ono & Zavodny, 2003) is being challenged (Lenhart, Purcell, Smith, & Zickuhr, 2010). The 2007 HINTS survey reports only minor gender differences in Internet utilization for health-related purposes (National Cancer Institute, 2009). There is no data published on gender differences among AIAN regarding Internet use.

Taking into account that the Internet is an important source of health information for the majority of Americans, and that gender and age may influence how people use Web resources for health information purposes, the present study was designed to specifically explore if and how do AIAN in the Central Plains region of the United States use the Internet as a health information resource, and if there is a gender and age-driven digital divide within this specific population. The study aims to answer the following questions:

RQ1: How do AIAN access the Internet?

RQ2. How important is the Internet as a health information resource for AIAN?

RQ3. Where online do AIAN go for health information?

RQ4. Does gender influence AIAN health Internet usage?

RQ5. Does age influence AIAN health Internet usage?

RQ6. How much do AIAN trust online health information?

Methods

Because there is no comprehensive list of AIAN residents of the Central Plains, we used multiple methods to recruit participants for this study: pow wows, focus groups, health fairs, new student orientation for AIAN students, and other various AIAN events in the region. We recruited 207 participants from pow wows in Kansas and the region, 211 participants were from focus groups, 124 participants were from health fairs and physicals, 275 were from career fairs and conferences, and the remaining 181 participants were from various other events and referrals from other participants. We recruited a total of 998 AIAN in the region from May 2008 to December 2009. Participants were reimbursed with a \$10 gift card for their time and participation in the study. Participants completed an approximately 30 minute self-administered survey.

Men and women who self-identified as AIAN (only or in combination with another race/ethnicity) and were at least 18 years of age were eligible to participate in the study. The survey included questions about general health, participant demographics, traditional tobacco use, recreational tobacco use, knowledge and attitudes related to cancer, use of the Internet, sources of health information and health care, and other health related behaviors. Results from the groups of questions not addressing using the Internet as a health information resource are reported elsewhere. The dataset used in this study was generated by the "All Nations Breath of Life Internet Health Education Survey", supported by award R24 MD002773 (P.I. Daley, C.) from the national Institute on Minority Health and Health Disparities, and award SB 40588-N (P.I. Daley, C.) from the American Lung Association. The study received Institutional Review Board approval.

Measures

Internet usage

Participants were asked the following questions to determine their current Internet usage: "Have you ever used the Internet?" (Yes/No), "Where do you go online to use the Internet?" (Home/Work/School/Friend's or relative's home/Public library or community center), How do you access the Internet at home?" (Telephone modem/Cable or satellite modem/DSL/Wireless), "For what do you use the Internet most often?" (Email/Social networking/Work/School/Health information/Games/Buying or selling), and "When was the last time you used the Internet?" (Within the last week/Within the last month/Within the last year/Greater than a year). All questions were multiple choice questions, but also provided an open-ended option that the respondent could choose if none of the answer choices applied to his/her

situation. We expected college students to be a significant percentage of our participants, as our research area included the largest AIAN University in the United States, so we also explored if there are any differences in their use of the internet in general and for health information compared with the rest of the sample.

Internet and Health

We asked the following questions to ascertain usage of the Internet for health related purposes: "Have you used the Internet for any of the following in the last 12 months?" (answers included options from "purchase of vitamins" to "look for health information"), "Which of the following Internet sites have you visited to look for information about your health?" (closed-ended and open-ended answers), "What is the first thing you do when you search for health information on the Internet?" (answers included options such as 'going to search engines", "go directly to WebMD", "go directly to a government website", etc.).

Online Health information

In order to estimate attitudes towards online health information, 3- and 5-points Likert scales were used to retrieve answers to questions such as "How easy was to find health information the last time you looked?", "How likely are you to use the Internet to find health information again?", "In general, how much would you trust information about health from the Internet?". We also asked participants if the Internet was helpful in making decisions about their health, and we were also interested to see if there are differences in using online health resources between those who state that "retrieving health information" was one of their primary uses of the internet and the rest of the sample.

Gender and Generational divide

Gender and age were the only demographic variables that were used as independent variables to analyze data from this survey. From a social perspective, researchers have identified generations as distinct cohorts defined by the overwhelming influence of collective facts and concrete social groups (Mannheim, 1970; Soule, 2001). Multiple studies from a variety of disciplines have highlighted the commonalities binding representatives of a given generation and the social, political, economic, attitudinal and behavioral differences between generations (Alwin & McCammon, 2003). The soundness of the "generation" concept has been validated by statistical models that addressed the impact of age on social change (Carlsson & Karlsson, 1970). In order to assess if the generational divide has some impact on AIAN use of the Internet and online health information, we divided respondents in four categories: Generation Y (born 1977-1990), Generation X (born 1965-1976), Baby Boomers (born 1946-1964) and seniors (born before 1946). Although research has suggested that a certain degree of generational overlap exists, due to education, cultural and socioeconomic variables, age still remains one of the major variables explaining media addressability and usage, and the digital divide (Geana, et al., 2011; Hargittai, 2002). Generational labels used in this study were adapted from Strauss and Howe's book "Generations: The History of America's Future" (Strauss & Howe, 1992).

Data Analysis

The analyses used descriptive statistics and nonparametric tests only (Chi-Square, nominal levels of measurement employed in the study). In part, this was due to the relatively small size of the senior group as well as their unique make-up. This means, technically, neither normality nor homoscedastacity nor between group variance was assumed. Statistically significant associations and effects were identified by p values of less than 0.05, and all data analysis was conducted using SPSS version 17.

Results

The data collection provided a diverse sample of 998 Great Plains AIAN. To ensure accuracy in reporting nominal demographic categories, deletions were list-wise (not casewise). Demographic characteristics of the sample are presented in Table 1.

Home was the primary place from where AIAN in our sample accessed the Internet, followed by school, and work. Over one fourth of our respondents used Internet resources provided by a library or community center. Detailed information about AIAN Internet access and use is presented in Table 2.

Overall, AIAN were frequent users of the Internet, with only 10% stating that they were online less than once a month. Email, social networking and school activities dominated our sample's primary use of the Internet. Controlling for Internet usage for school related activities (to account for the proportion of college students in our sample) did not change the two primary uses of the Internet by our AIAN respondents: email and social networking; work related use came in third at 24%.

Fifty nine percent of our sample reported using the Internet to look for health information about their health, and 23% of our sample state that retrieval of health information has been their most important online activity.

There were significant differences in Internet use for health related activities between those who state they used the Internet primarily for health information and other users (Table 3). For both groups, looking for health information and help with weight control were predominant uses of the Internet. This comparison is important as it showcases how those Natives primarily using the Internet for health information search have embraced it for other health-related activities.

Search engines (62%), WebMD (29%) and Wikipedia (24%) were the most frequent destinations of AIAN when searching for health information. Native specific websites, health organization websites, government websites, and university or hospital websites each accounted for less than 10% of sites visited by AIAN. Only about 2% state they will go first to a blog or chat page they trust when searching for health information online.

Gender proved to be a driver of the digital divide observed in our AIAN sample for overall Internet use and specific Internet use for health-related activities (Table 5).

There was a statistically significant difference among generations in terms of Internet use $(\chi^2(3,888)=108.98,\,p<.05)$, with Gen Y using it the most (99%) and Seniors the least (Table 6). Seniors and baby boomers were using more traditional access systems (such as telephone modem and cable modem), compared with younger generations who opted largely for wireless Internet access $(\chi^2(15,672)=46.69,\,p<.05)$. With the exception of online commerce $(\chi^2(3,894)=2.72,\,p>.05)$, all other online activities explored in our survey showed statistically significant generational differences.

Specific to health information, younger generations tended to favor more diverse information sources, and were less likely to go directly to a specific website - Gen Y relied more heavily on collective health knowledge (31% said Wikipedia was their main source of health information), while Gen X were the predominant users of sites containing information from expert sources such as WebMD (37%); all age groups almost completely bypass health organizations websites, Native-specific websites and government websites. Although all ages usde university or hospital websites to a similar degree ($\chi^2(3,894)=0.76$, p>.05), usage

is below 10% for all generational categories, suggesting a dichotomy between curative and informational outlets.

Seniors and Gen X seemed to have the most difficulties in finding health information online compared to Gen Y and Baby Boomers ($\chi^2(6,779)=16.37$, p<.05). Eighty percent of respondents agreed that the Internet was helpful in making decisions about their health, but those from Gen Y were less likely to use the Internet again to search for health information compared to older generations ($\chi^2(6,813)=39.14$, p<.05), and were less likely to trust online health information ($\chi^2(6,826)=36.07$, p<.05).

Discussion

The first research question addressed Internet use by AIAN. By contrast with data from a national survey conducted between November 30 and December 27, 2009 (Rainie, 2010), our sample had a higher percentage of Internet users, more use of broadband, and less use of wireless devices to connect to the Internet. Email and social networking were the main uses, even when controlling for the higher percentage of younger people in the sample. Being in contact with family and friends and information exchange may be the drivers behind this observed use of the Internet, as suggested by a 2004 study (Ridings & Gefen, 2004).

The second research inquiry questioned the importance of the Internet as a health information resource. Although AIAN from the Greater Plains seemed to use the Internet in larger proportions than the general population, only 59% of our sample reported using the Internet to search for health information, compared with 61% of adults in the general US population (Fox & Jones, 2009), and only 23% stated that this was their main online activity. This shows that using the Internet as a tool to maintain and improve health was not one of the major concerns of AIAN. Nevertheless, our data shows statistical significant differences in health-related Internet usage between those who declare primarily using the Internet for health information and the rest of the sample, thus strengthening the idea that once Internet is be perceived as useful, it will be used intensively for health-related activities.

General health information and weight control information were the two main health-related uses of the Internet within our sample. AIAN showed a slightly increased interest in weight control information compared to data from a 2009 national sample of adults, probably because their obesity rates exceed those of the general population (Broussard, et al., 1991; Wang & Beydoun, 2007). Rates of information search for healthcare providers were lower than those calculated for all US adults (Fox & Jones, 2009), findings that could be explained by the preponderant younger respondents in our sample, but also by a possible degree of mistrust in allopathic medicine, existent within this population (Dworkin, 2001). For AIAN, online support group participation was more than double the estimated US adult participation of 3 to 4% (van Uden-Kraan, et al., 2008). Using the Internet to communicate with a healthcare provider was similar to the percentage observed in the general population in the 2007 HINTS study (National Cancer Institute, 2007). Search engines were the first destination of AIAN when searching for health information, followed by WebMD and Wikipedia; this pattern was similar to that encountered in the general population (Fox & Jones, 2009).

Where online do AIAN go in search of health information was the third research question that this study tried to address. Overall, AIAN manifested similar health information search patterns as those identified in the general population. Surprisingly, Native-specific websites were scarcely used as sources of health information by AIAN. It should be noted, however, that there was very few Native-specific health sites and those that existed were not widely

publicized. It is possible (and likely based on preliminary analysis of recent qualitative work by our own research group) that if were more Native-specific health sites and people knew about them, they would be far more likely to use and trust those sites.

The fourth research question explored the role that gender has in modulating AIAN utilization of the Internet and their use of online health-related resources. Similar to recent data from the general population, both AIAN men and women in the sample used the Internet in similar proportions; nevertheless, women overwhelmingly used the Internet for health-related activities, compared to AIAN men. This could be explained by women being more health-conscious than men, and by the predominant caregiver role that women have in families (Mincer & Polachek, 1974). These results suggest that health communication campaigns employing the Internet may be more effective in reaching AIAN women.

Influence of age on AIAN health Internet usage is the subject of the fifth research question. There are no statistically significant differences among ages in their acknowledgment that online health information has been beneficial in making decisions about their health. Furthermore, these agreement levels (78-83%) surpass levels (60%) observed in the general e-patients population (Fox & Jones, 2009). Baby boomers were the most intense users of the Internet to search for health information, communicate with providers or search for providers, while seniors were the foremost users of the Internet to order medications online, participate in support groups or keeping track of personal health information. Gen Y, although main Internet users, did not consider it as a major avenue for health-related activities; this can be explained by their younger age and decreased health needs compared with older generations.

The sixth research question addresses AIAN trust in online health information. Overall, there is a significant amount of trust in health information from the Internet. As a paradox, although they were the most intense Internet users, younger AIAN did seem more reluctant in using the Internet again as a source for health information compared to other age groups. This may be partially driven by an increased distrust among younger generations about online health information compared to older AIAN. This dichotomy suggests that while the Internet is the proper channel to reach younger audiences, when it comes to health campaigns, interpersonal communication or using peer networks may be more effective to reach younger AIAN.

Because there is no comprehensive list of AIAN in the Greater Plains region that would allow drawing a representative sample, the convenience sample used in the present study is its main limitation; 58% of our sample are from Gen Y, with the majority of them being college students, due to the proximity of Haskell Indian Nations University. As mentioned earlier, caution must be employed when trying to generalize our findings to the larger AIAN population. The limited distributional make-up observed in this study is a common occurrence in research dealing with special populations and groups. Caution is advised, however, to not extrapolate from our findings to generalizations about a (theoretical) population of all AIAN. As we noted, the sample is from a convenience group, the data is self-reported, and the sample size is relatively small (especially for seniors). Due to the skewed age distribution, but also before of prior research in the area, it was decided to use the generational divide instead of using age as a ratio variable, which did decrease the specificity of our analysis, as generations span ages that may have diverse uses of the Internet. Regardless, our findings are important in-and-of themselves and they are useful in showcasing this unexplored area of how AIAN use the Internet for health information, and for planning health communication work with AIAN.

Conclusion

AIAN living in the Central Plains region of the United States face gender and generational differences in both general and health-related use of the Internet. This implies a need for accurate gender and age tailoring for programs that utilize Internet resources or that address health knowledge and education among these groups. Although compared with data from studies conducted on the general population, the studied sample of AIAN may seem heavier Internet users, their exploit of modern wireless devices is limited, and their usage of Internet to access health information is lower compared to the adult US population. Minimal awareness and availability of culturally appropriate health information online resources drive AIAN towards search engines or general information websites. A certain degree of mistrust in the information retrieved from the Internet and low knowledge about available resources may contribute to the lower utilization observed for health-related activities. Hope is given by the finding that AIAN who decided to primarily use the Internet for health information are intensive users, have an easier time finding information and have increased levels of trust while employing online resources for a multitude of health-related activities.

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Table 1

Demographic characteristics of the AIAN sample

Demographic	Categories	Values (%)
Gender	Male	42
	Female	58
Age group (generation)	Gen Y	58
	Gen X	17
	Baby Boomers	20
	Seniors	5
Highest school grade completed	Some high school	4
	High school/GED	26
	Post HS certification	3
	Some college	34
	2 year college	18
	4 year college	10
	Graduate degree	4
	Other	1
Employment status	Full-time	32
	Part-time	10
	Self employed	3
	Homemaker	3
	Retired	4
	Student	42
	Other (disabled, unemployed)	4
Current living situation	Married/Partner	33
	Divorced/Widow	14
	Never married	43
	Other	11
Have children		50
Place growing up*	Reservation	40
	Rural area (off reservation)	23
	Suburban area (off reservation)	16
	Tribal trust land	5
	Urban area (off reservation)	26
Health insurance*	No insurance	28
	Private insurance	34
	HIS	30
	Tribal insurance	10

Demographic	Categories	Values (%)
	Medicaid	6

Table 2

Internet access and primary use by AIAN

Variable	Categories	Percentage (%)
Internet access *	Home	63
	Work	33
	School	46
	Friend's or relative's home	26
	Library or community center	28
Home access	Telephone modem	19
	Cable modem	26
	DSL modem	24
	Wireless device	27
	Other	3
Internet use previous 12 months	To buy medicines or vitamins	9
1	To participate in support group	13
	Email or communicate with provider	19
	Help with diet, weight control	44
	Look for healthcare provider	26
	Keep track of personal health info	15
	Look for information about your health	59
Most often Internet use *	Email	78
	Health information	23
	Social networking	46
	Online games	24
	Work	23
	E-commerce	19
	School	42
	Other activities	9

^{*} multiple answers allowed

Table 3

Health-related uses of the Internet by AIAN

Variable	Categories	Percentage (%)			
		Entire AIAN sample	Occasional use of the Internet for health- related activities	Primary use of the Internet for health information	
Health-related uses	Buy medicine or vitamins	8	5	17 ^{**}	
	Participate in a support group	11	8	21**	
	Communicate with healthcare provider	16	12	29**	
	Help with diet, weight or physical activity	36	31	69**	
	Search for a healthcare provider	20	15	35**	
	Keep track of personal health information	12	8	26**	
	Look for health information	48	36	85 **	

** p<.001

Table 4

Where do AIAN go online for health information

Variable	Categories	Percentage (%)			
		Entire AIAN sample	Occasional use of the Internet for health- related activities	Primary use of the Internet for health information	
Internet websites visited for health information	Search engines	62	57	77 **	
	Web MD	29	22	53**	
	Wikipedia	24	20	37 ^{**}	
	Health organization website	7	4	17**	
	Native specific website	8	7	12*	
	Government website	9	7	17**	
	University of hospital website	9	7	16**	
	Other websites	8	8	7	
First website visited when searching for health information	Search engines	78	78	76	
	Web MD	13	12	19**	
	Wikipedia	3	3	3	
	University of hospital website	2	3	1	
	Government website	1	2	1	
	Chat/Blog	2	3	1	
	Other (Native specific, health organization)	1	-	-	

^{*} p<.05

^{**} p<.001

 $\label{eq:Table 5}$ Overall AIAN use of the Internet and use for health-related activities based on gender.

	Male (%)	Female (%)
Internet use	95	97
Overall Internet use:		
Email	72	82 **
Look for health information	14	30 ***
Social networking	47	46
Online games	30	20**
Work	20	26
E-commerce	22	16**
School	38	44
Online health use:		
Overall use for health-related activities	48	68**
Buy medicines or vitamins	7	9
Participate in support groups	9	12
Communicate with provider	14	17
Get help with diet and weight loss	34	43*
Look for healthcare provider	15	23*
Keep track of personal health info	9	14

^{**} p<.001

^{*} p<.05

 Table 6

 Generational use of the Internet for health-related activities by the AIAN sample.

	Gen Y	Gen X	Baby Boomers	Seniors
Internet use (%)	99	97	94	69
Look for health information (%)	41	57	66	48
Buy medicines or vitamins (%)	5	5	14	29
Participate in support groups (%)	5	17	19	26
Communicate with provider (%)	13	18	24	14
Get help with diet and weight loss (%)	38	38	54	33
Look for healthcare provider (%)	15	26	30	14
Keep track of personal health info (%)	9	12	16	28