A Preliminary Study on College Students’ Attitude Regarding Natural Health Remedies
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Abstract: This is a preliminary descriptive study of college students’ attitude toward natural health remedies where the researcher uses captive audience survey to collect data from undergraduate and graduate students attending private and public colleges and universities in the United States. Five factors are especially important in describing college students’ attitude toward natural health remedies: Economics (costs of healthcare), Knowledge (familiarity and understanding of health and healthcare), Relational or Relationship (influence of family, friends or significant others on healthcare choices), Beliefs (perceptions regarding health and healthcare), and Security (concerns about safety regarding healthcare practices and methods) - “EKRBS”. Quality and Satisfaction (Q-S) were also found to be important factors when it comes to attitude toward healthcare and natural health remedies. Overall, Knowledge (familiarity and understanding of health and healthcare) is the most important factor affecting college students’ attitude toward natural health remedies, followed by Economics (costs of healthcare). All these factors are revealed to have varying impact on students’ attitude toward natural health remedies.

Keywords: Attitude, Complementary and Alternative Medicine (CAM), Economics, Knowledge, Relational/Relationships, Beliefs, and Security (EKRBS), Healthcare, Natural Health, Perception.

INTRODUCTION
Changing Attitudes toward Natural Health

The 21st century has seen significant and even tremendous changes in attitudes on many issues and frontiers. One such issue has been healthcare, with policymakers, as well as both practitioners and patients changing how they go about healthcare and their perspectives and attitudes toward healthcare in today’s society. Furthermore, increased skepticism toward modern healthcare owing to costs and political factors has created transforming attitudes where accountability and demands have led to people seeking alternatives [1].

Over the past decades our attitude toward personal (private individual) and community (public) health has changed to become one of concern for quality and improvement. One significant change driver has been the skyrocketing costs of healthcare which has forced and motivated individuals to seek alternatives toward the conventional healthcare system built on synthetic pharmaceutical drug therapies and administration of invasive procedures. As such, we saw a turnaround in the value decade (1990-2000) where significantly more people visited alternative health practitioners seeking natural and herbal remedies than in the past where majority visited conventional medical establishments and practitioners.

In 1997, in the United States, it was reported that an estimated 629 million visits were made to complementary and alternative medicine (CAM) practitioners, which exceeded the total visits to all U.S. primary health care physicians [2, 3]. This number represented a 47.3% increase in total visits from 1990 [4, 2, 3]. While this should have been welcoming and presented increased opportunities for natural health practitioners and greater acceptance of this modality of healthcare, it created increased oppositions and barriers for many natural health specialists from the medical establishment of conventional practitioners (internists) and specialists and their advocates, associations, and defenders including spurious organizations [5].

Purpose of the Study

The purpose of the study was to describe college students’ attitude toward natural health remedies using captive survey design. The study sought to identify and provide a description of the factors that affect students’ attitudes toward natural health remedies. The researcher sought to identify and describe these factors and their moderating influence on students’ attitudes and seeks to describe these attitudes.
using simple descriptive data. This study represents a preliminary research on college students’ attitude toward natural health remedies.

**Rationale for the Study**

College students represent a large and diverse group of consumers and stakeholders in societal and community health as current, prospective, and future leaders and managers, policyholders, decision-makers, politicians, healthcare administrators, entrepreneurs, and other important members and participants in the various institutions - health, health-related, and non-health-related across society [5]. As such, their opinions and attitudes matter when it comes to the status of healthcare, trends in healthcare, and the current and emerging status of natural health remedies and the future. The future regarding the growth, acceptance, and legal practice of natural health will depend highly on this emerging group’s attitude toward the subject. Understanding their attitude toward natural remedies gives natural health practitioners, educators, and advocates knowledge and data they can use to influence and shape the perspectives of this group of important stakeholders concerning natural health remedies [5].

**Conceptual/Theoretical Framework of the Study**

From exploration of the existing literature, the researcher developed a composite of factors that affect general attitude toward health and healthcare. These five composites were used as the basis for developing and administering a survey to research participants in order to obtain the required data for analysis. The conceptual framework for this study was based on composites of factors affecting attitude toward healthcare as drawn from the literature. Five specific factors guided this research: Economics (costs of healthcare), Knowledge (familiarity and understanding of health and healthcare), Relational or Relationship (influence of family, friends or significant others on healthcare choices), Beliefs (perceptions regarding health and healthcare), and Security (concerns about safety regarding healthcare practices and methods) - “EKRBS”. Quality and Satisfaction (Q-S) and attitude as behavioral phenomena were also important attributes of the framework for the study.

**LITERATURE REVIEW**

**Natural Remedies Gaining Popularity**

In a study aimed at assessing national usage patterns, reasons for use, and the perceived efficacy of herbal products and dietary supplements in the United States, Kennedy [6], found that an estimated 38.2 million adults in the United States used herbs and supplements in 2002, and that more than half of all users reported using herbs and natural products because they felt such were important to their health and well-being. Furthermore, consistent with the findings of Tuffs [7] and Hanssen, Grimsgaard, Launsø, Fønnebø, Falkenberg, and Rasmussen [8], Kennedy [6], report that use rates were higher for women than men (21.0% vs 16.7%). Kennedy [6] also reports that usage rates of herbal remedies in the U.S. population based on representative sampling shows that college graduates represented 25.3% vs 10.4% among those who did not graduate high school.

While we are fascinated with the increased use of natural remedies using plant and animal materials in developed and wealthy countries, Verma and Singh [9] state that about 80% of people in developing countries still rely on traditional medicine based largely on species of plants and animals for their primary health care, and that, “80% of the world population depends on plant-derived medicine for the first line of primary health care for human alleviation because it has no side effects” (p. 347).

In answering the question, “What are the reasons for natural remedies gaining popularity?” Messerer, Johansson, and Wolk [10] state that there are several explanations as to why people use these preparations, pointing out that data from a survey conducted in 1997 in the USA, showed that 58% of all respondents reported use of alternative medicine in part to prevent future illness from occurring or to maintain health and vitality. As Verma and Singh [9] note, “In the western world, as the people are becoming aware of the potency and side effect of synthetic drugs, there is an increasing interest in the natural product remedies with a basic approach towards nature” (p. 347). Others have pointed out reasons such as the increased distrust for the medical profession [11, 12]. As Blendon, Benson, and Hero [12] note, the United States is tied for 24th place when it comes to the percentage of American adults agreeing with the statement, “All things considered, doctors in [your country] can be trusted” (p. 1571). Results of survey shows that only about 6 in 10 U.S. adults (58%) agree with this statement, as compared with more than three fourths in Switzerland (83%), Denmark (79%), the Netherlands (78%), and Britain (76%). With a healthcare system characterized by high patient dissatisfaction and low overall trust [12], Americans are increasingly turning towards alternatives for health care and health. One such alternative is natural remedies, which are perceived to be safer and more trustworthy in terms of impact and side effects. As a result of this, the number of doctors and paramedical professionals using natural remedies or complementary and alternative medicines has also increased significantly [7].

The trend with regards to increasing usage of and visitation to natural remedies or natural health practitioners as a mode of alternative medicine in the United States is not unique, since it is established that three quarters of the German population over the age of 16 has had some experience of natural or complementary remedies, or that three out of four Germans have used complementary or natural remedies [7]. In a study investigating attitudes towards

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complementary medicine and its applications, Tuffs [7] discovered that 90% of individuals who have used a natural remedy would recommend the treatment to others, and that users are most likely to be women, older than 45 years, with higher education, and with a chronic disease (p. 990). In their studies in the Scandinavian countries of Norway and Denmark, Hanssen, Grimsgaard, Launsø, Fønnebø, Falkenberg, and Rasmussen [8] also found that more women than men, and more with higher education reported use of complementary and alternative medicine (CAM) such as herbs. However, there is a situational factor that affects attitudes toward or use of complementary medicines including natural remedies since the study found that 80% of the population would not use complementary medicine for treating an acute illness.

Consumers’ Attitudes Toward Healthcare

An important factor affecting choice of healthcare or healthcare modality is consumers’ attitude [5]. Linder-Pelz [13] states that among the various probable determinants of a patient’s satisfaction with health care are his/her attitudes and perceptions prior to experiencing that care. Patients’ attitudes and perceptions are shaped by as many personal as external factors. While there are many factors that determine choice of healthcare, much depends on the perspectives of users and their attitudes and behaviors [14]. While consumers’ knowledge and understanding of health and healthcare affect their attitude toward healthcare, skepticism toward medical care and health care utilization is identified as a major factor shaping how consumers think about and what type of healthcare they value [1]. For example, in a nationally representative sample from the United States comprising 18,240 persons 25 years and older, a survey was administered, and in which, “Skepticism” was defined as “doubts about the ability of conventional medical care to appreciably alter one’s health status” (p. 180), and skepticism toward medical and healthcare was associated with younger age, white race, lower income, less education, and higher health perceptions, as well as less healthy behavior, not having health insurance, not having a personal doctor or healthcare provider, choice of a physician, fewer physician and emergency department visits, less frequent hospitalizations, lower annual health care expenditures, and less prevention compliance [1]. Attitude toward healthcare and choice of healthcare modalities will be shaped by prior and current levels of satisfaction. According to Pascoe [15] patient satisfaction information can provide a dependent measure of service quality and serves as a predictor of health-related behavior including choice of healthcare, whether alternative or mainstream focus.

METHODOLOGY

This study uses the Descriptive Method. The study uses descriptive statistics to describe the basic features of the data in the study. Using descriptive statistics, the researcher provides simple summaries about the sample and the measures used, along with simple graphics analysis in an effort to present a simple quantitative analysis of data from survey [16]. This study does not use inferential statistics which would reach conclusions that extend beyond the immediate data from the survey [16].

Design of the Study

This research employed a quantitative descriptive design. Descriptive studies are focused on finding out “what is” and the use of survey method is frequently used to collect descriptive data [17]. In descriptive research the researcher collects or gathers data that describe events and then organizes, tabulates, depicts, and describes the data collection [18]. Additionally, the researcher uses visual aids such as graphs and charts to aid the reader in understanding the data distribution [18]. According to Krathwohl [19], three main purposes of research are to describe, explain, and validate findings. This study aims to describe and explain the factors affecting college students’ attitudes toward natural health remedies, and validate the findings using descriptive data and their analysis. The descriptive method of research is a type of quantitative research that involves making careful descriptions of educational phenomena [20]. Descriptive research is used to describe situations and events [21], and it is “the accumulation of data base that is solely descriptive [and] does not necessarily seek or explain relationships, test hypotheses, make predictions, or get at meanings and implications” (p. 46).

Procedures

A captive audience survey containing twenty (20) questions and/or statements was electronically distributed to 238 undergraduate and graduate students in four higher educational institutions (colleges and universities) in the United States. These institutions consisted of two large private universities offering programs in a variety of fields from certificate to doctoral level, and two public institutions; a large state university offering certificate to doctoral levels of study in various fields, and a large four-year state college offering certificate to bachelor’s level programs in a variety of fields. A letter of participation delivered electronically to participants identified the principal investigator, the nature and purpose of the study, what is required of participants, the voluntary nature of the survey, and provided institutional contact via IRB board in case further issues or concerns not addressed by the researcher should surface during the study. Before students were asked to complete the survey, they were presented with Informed Consent via electronic means (Survey Monkey), and which required them to indicate acceptance of terms and understanding of the nature and purpose of the study and agreement to complete the survey.
Participants responded to the twenty (20) questions/statements in Survey Monkey; an online survey software, by clicking on a link that was emailed to participants. The link was an open Internet link that did not require password access or provision of any personal identifiable information including name, date of birth, phone number, or any other. This assured confidentiality to the participants and that responses were anonymous. The survey instrument was estimated to take no more than 7 minutes to complete. Data for the survey was stored online in SurveyMonkey behind a secure window requiring username and password. The researcher was the only one with a unique access to the collected data.

Sample for the Study
The population for this study was college students in the United States. The sample for this study was undergraduate and graduate college students from four higher institutions of education in the United States; two large private universities offering programs up to doctoral level of study, and two public institutions; a large state-run university offering studies up to the doctoral level, and a four-year state-run college offering certificates, associates and bachelor’s degrees in various disciplines. The sample consisted of 238 undergraduate and graduate students across four institutions of higher education (colleges and universities) and from various ethnic, racial, and socio-economic backgrounds with a variety of college majors.

Data Analysis Procedures
Data for the study was analyzed using SurveyMonkey. Through SurveyMonkey, the researcher clicked on “Analyze Results” after data collection ended, and this provided statement-by-statement/question-by-question analysis of data including numbers, percentages, and charts, which the researcher describes and presents in the Findings of the study. Demographic data was analyzed as a collective in the study describing the characteristics of the population sample or participants.

Limitations and Delimitations of Study
This study focused on factors affecting college students’ attitudes toward natural health remedies. The study limited its method and design to using descriptive statistics. The study did not use inferential statistics that could reach beyond the data to potentially uncover important relationships or correlations between and among variables in the composite used in the conceptual framework of the study. Furthermore, accuracy of the instrument was not tested against any available alternative in the field, and accuracy was based highly on the honesty of respondents. In this study, the results may not be wholly generalizable to a larger population without further testing, research, and variable considerations. Limitations were inherent in the focus of the study and self-reporting by participants upon whom data depended.
FINDINGS

Demographic Results
The sample for this study consisted of 238 college students including 32 females and 105 males for a total of 237 participants, as 1 participant declined to identify his or her gender. This accounts for the 238 participants in the study. The participants for the study ranged in age from 18 to over 50 years old, with the majority of participants, approximately 45% or 108 participants being between ages 18 and 23; 28% of participants or 66 participants between the ages of 24 and 30; 16% of participants or 38 participants being between ages 31 and 39; 8% of participants or 19 participants between the ages of 40 and 49; and 3% of participants or 7 participants over the age of 50. This accounts for the 238 participants in the study. Based on the results of data analysis, the least represented group of participants in the sample of college students was over 50 years old.

Analysis of Composites: ERKBS
Based on extensive survey of the literature on factors affecting attitudes toward healthcare, the researcher had identified major factors that generally affect attitude toward health and healthcare, and from this, designed a survey reflecting a composite of the five most important factors: Economics (costs of healthcare), Knowledge (familiarity and understanding of health and healthcare), Relationships (influence of family, friends or significant others on healthcare choices), Beliefs (perceptions regarding health and understanding natural health), and Security (concerns about safety regarding healthcare practices and methods). The acronym “ERKBS” was used to describe these five composites (Economics, Knowledge, Relationships, Beliefs, Security – ERKBS). Several questions in the survey were specifically designed to reflect and collect data on each of these composites as analyzed and presented below.

Economics Composite (E)

How do college students view the costs of natural health remedies?
Economics (costs of healthcare) was seen as one factor affecting people’s attitude toward healthcare. Thus, the survey included a question on college students’ (participants’) perception to match this composite. Participants reflected on the perceived costs of natural health remedies compared to conventional (medical-health) remedies and the results were quite mixed. Of the 238 participants surveyed, 2 did not respond to this question. Approximately 57% of participants or 134 participants reported or believed that natural health remedies are less costly than mainstream medicine or conventional medical remedies Twenty-five (25%) of participants who responded, or 59 participants believed that it is just as costly, and approximately 18% of participants or 43 participants from among the 236 who responded believed that natural health remedies are more costly than mainstream or conventional medical or health remedies (Figure-1).

<table>
<thead>
<tr>
<th>I believe that natural health remedies are:</th>
<th>Response Percent</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Just as costly as mainstream (medical-health) remedies</td>
<td>25.0%</td>
<td>59</td>
</tr>
<tr>
<td>Less costly than mainstream (medical-health) remedies</td>
<td>56.8%</td>
<td>134</td>
</tr>
<tr>
<td>More costly than mainstream (medical-health) remedies</td>
<td>18.2%</td>
<td>43</td>
</tr>
</tbody>
</table>

Fig-1: Costs of Natural Health Remedies

Knowledge Composite (K)

How knowledgeable are college students about general healthcare?
Participants in the study were asked to rate their knowledge of general health care (as a precursor to understanding natural health). Results from data analysis shows that college students have average knowledge of general health care with approximately 56% or 131 of the participants from the 233 of out 238 participants who responded, indicating that they have
‘average knowledge’. Approximately 27% of the participants or 63 participants who responded reported having above knowledge about general healthcare, and 11% or 26 participants among those who responded having ‘below average’ knowledge of general healthcare (Figure 2). Approximately 8% or 9 of the respondents reported as being ‘extremely knowledgeable’ about general healthcare, and 1.7% or 4 participants reported as having expertise about general healthcare. College students on average are not knowledgeable about the general healthcare system.

| My knowledge of general health care can be rated as: |
|-----------------|-----------------|------------------|
| Answer Options  | Response Percent | Response Count   |
| Below average   | 11.2%            | 26               |
| Average         | 56.2%            | 131              |
| Above average   | 27.0%            | 63               |
| Extremely knowledgeable | 3.9% | 9               |
| Expertise       | 1.7%             | 4                |

Fig-2: Participants’ Knowledge of General Health Care

How knowledgeable are college students about natural health remedies?

The survey sought to identify college students’ knowledge of natural health remedies as participants were asked to rate their knowledge as follow: below average, average, above average, extremely knowledgeable, expertise. Approximately 49% of participants or 116 participants rated their knowledge of natural health remedies as ‘average’, 29.4% of participants or 70 participants rated their knowledge as ‘below average’, 15% of participants or 36 participants reported having ‘above average’ knowledge, and 6.3% of participants or 15 participants as ‘extremely knowledgeable’ (Figure-3). Only 0.4% of participant, or 1 participant reported having ‘expert’ knowledge of natural health remedies.

| My knowledge of natural health remedies can be rated as: |
|-----------------|-----------------|------------------|
| Answer Options  | Response Percent | Response Count   |
| Below average   | 29.4%            | 70               |
| Average         | 48.7%            | 116              |
| Above Average   | 15.1%            | 36               |
| Extremely knowledgeable | 6.3% | 15               |
| Expert          | 0.4%             | 1                |

Relational or Relationship Composite (R)

Trust is an important factor between healthcare providers and healthcare recipients that affect relationships including communication and interaction. The trustworthiness factor is measured by perceived trust regarding healthcare providers and/or practitioners or professionals. A question on the survey sought to ascertain data regarding this composite. Among the 238 participants, 3 participants declined answering this question or skipped the question. There were 235 responses as follow: on trustworthiness factor as the foundation or provider-patient relationship, approximately 62% of the respondents or 145 respondents reported that natural health practitioners are just as trustworthy as mainstream medical practitioners and professionals, while approximately 28% of respondents or 66 respondents for some reason unknown reported that natural health practitioners are less trustworthy than mainstream medical practitioners and professionals. Only approximately 10% or 24 respondents view natural health practitioners as more trustworthy than mainstream medical practitioners and professionals (Figure-4). Because trust initiates and
builds relationship, it is important to understand the level of trust in healthcare.

![Knowledge of Natural Health Remedies](image)

**Fig-3: Participants’ Knowledge of General**

<table>
<thead>
<tr>
<th>Answer Options</th>
<th>Response Percent</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less trustworthy than mainstream medical practitioners</td>
<td>28.1%</td>
<td>66</td>
</tr>
<tr>
<td>Just as trustworthy as mainstream medical practitioners</td>
<td>61.7%</td>
<td>145</td>
</tr>
<tr>
<td>More trustworthy than mainstream medical practitioners</td>
<td>10.2%</td>
<td>24</td>
</tr>
</tbody>
</table>

I believe that natural health practitioners are:

![Trustworthiness of Natural Health Practitioners](image)

**Fig-4: Participants’ Rating of Trustworthiness of Health Practitioners**

**Beliefs Composite (B)**

Individuals’ beliefs regarding various aspects of healthcare affect their attitude toward healthcare. When it comes to natural health remedies as with conventional or mainstream healthcare practices, individuals’ beliefs affect healthcare choices and decisions and shape how factors considered part of healthcare are prioritized. In designing the survey, the researcher specifically included two statements/questions regarding this. The resulting data analysis for each follows as findings are presented.

**What is the most important factor to college students when it comes to choice and type of healthcare?**

The researcher sought to identify the most important factor for college students when deciding on choice and type of healthcare. Among the 238 participants in the study, 2 did not provide a response. From the 236 participants who responded, Knowledge (understanding and awareness about healthcare systems and processes) was ranked as the most important. Approximately 35% of respondents or 82 respondents indicated that Knowledge was most important. This was followed by Economics (costs and price/affordability), as approximately 33% of the respondents or 78 respondents indicated that Economics was the most important factor when deciding on choice and type of healthcare (Figure 5). Security (concerns about safety and risks associated with specific healthcare) was ranked third as approximately 13% of the respondents or 31 respondents indicated that it was the most important factor when deciding on choice and type of healthcare. Beliefs (personal beliefs and perceptions regarding healthcare choices) was ranked fourth with 9.75% of respondents or 23 respondents indicating this factor was most important, and 9.32% of respondents or 22 respondents indicating that Relationships (influence of family and friends or significant others) was most

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important when deciding on choice and type of healthcare (Figure-5).

<table>
<thead>
<tr>
<th>When deciding on choice and type of healthcare the most important factor is:</th>
<th>Response Percent</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economics (costs and price/affordability)</td>
<td>33.1%</td>
<td>78</td>
</tr>
<tr>
<td>Knowledge (understanding and awareness about healthcare systems and processes)</td>
<td>34.7%</td>
<td>82</td>
</tr>
<tr>
<td>Relational (influence of family and friends or significant others)</td>
<td>9.3%</td>
<td>22</td>
</tr>
<tr>
<td>Personal Beliefs (personal beliefs and perceptions regarding healthcare choices)</td>
<td>9.7%</td>
<td>23</td>
</tr>
<tr>
<td>Security (concerns about safety and risks associated with specific health care)</td>
<td>13.1%</td>
<td>31</td>
</tr>
</tbody>
</table>

Fig-5: Most Important Factor When Deciding Choice and Type of Healthcare

What factor has the most influence on college students’ attitude toward natural health remedies?

Another important question on which data was sought in the study was regarding what factor weighed most heavily on college students’ attitude toward natural health remedies. Among the 238 participants in the study, only 1 participant did not furnish an answer or response to this survey question/statement. Among the 237 respondents, Knowledge (understanding and awareness about healthcare systems and processes) was cited as the most important factor affecting attitude toward natural health remedies with approximately 41% of total respondents or 98 respondents assigning highest importance to that factor (Figure 6). Approximately 21% of respondents or 49 respondents cited Beliefs (personal beliefs and perceptions regarding healthcare choices) as the most important factor affecting attitude toward natural health. From the remaining 38% percent of respondents, 16.5% of respondents or 39 respondents cited Economics (costs and price/affordability), 13.5% or 32 respondents cited Security (concerns about safety and risks associated with specific healthcare) as most important, and 8% or 19 respondents cited Relationships or Relational factors (influence of family and friends or significant others) as exerting the greatest influence on their attitude toward natural health remedies (Figure-6).

<table>
<thead>
<tr>
<th>The factor that most affects my attitude toward natural health remedies is:</th>
<th>Response Percent</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economics (costs and price/affordability)</td>
<td>16.5%</td>
<td>39</td>
</tr>
<tr>
<td>Knowledge (understanding and awareness about healthcare systems and processes)</td>
<td>41.4%</td>
<td>98</td>
</tr>
<tr>
<td>Relational (influence of family and friends or significant others)</td>
<td>8.0%</td>
<td>19</td>
</tr>
<tr>
<td>Personal Beliefs (personal beliefs and perceptions regarding healthcare choices)</td>
<td>20.7%</td>
<td>49</td>
</tr>
<tr>
<td>Security (concerns about safety and risks associated with specific health care)</td>
<td>13.5%</td>
<td>32</td>
</tr>
</tbody>
</table>
When it comes to healthcare, whether conventional or mainstream medical care or natural health practice, safety is a major concern for individuals. The researcher sought to describe college students’ attitude toward natural health remedies and therefore included question/statement on the survey toward that end. Among the 238 participants in the research, 236 responded to this question/statement, while 2 declined to give a response. Approximately 42% of the respondents or 99 respondents indicated that they believe that natural remedies are safer than mainstream medicine and health practices, while approximately 40% of respondents or 95 respondents expressed belief that natural health remedies are just as risky as mainstream medicines and health practices (Figure-7). Only about 7% of respondents believed that natural health remedies were less safe than mainstream medicine and health practices, while approximately 10% or 23 respondents view natural health remedies as completely safe, and 1% or 3 respondents as not safe at all (Figure-7).

<table>
<thead>
<tr>
<th>I believe that natural health remedies are:</th>
<th>Response Percent</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safer than mainstream medicines and health practices</td>
<td>41.9%</td>
<td>99</td>
</tr>
<tr>
<td>Just as risky as mainstream medicines and health practices</td>
<td>40.3%</td>
<td>95</td>
</tr>
<tr>
<td>Less safe than mainstream medicines and health practices</td>
<td>6.8%</td>
<td>16</td>
</tr>
<tr>
<td>Completely safe</td>
<td>9.7%</td>
<td>23</td>
</tr>
<tr>
<td>Not at all safe</td>
<td>1.3%</td>
<td>3</td>
</tr>
</tbody>
</table>

Fig-6: Most Important Factor Affecting Attitude toward Natural Health

Fig-7: Participants’ Beliefs’ Regarding Safety of Natural Health Remedies

Quality and Satisfaction with Healthcare Services

Healthcare seekers are looking for health practices that meet and exceed their needs. Patient-based determinants of quality and satisfaction play an important role in choosing healthcare type or modality and providers (Swan & Koehler, 1994). In recognizing this important fact, and while quality and satisfaction (Q-S) were not used as a composite in the survey, it was well-established in the literature as important in shaping or affecting individuals’ attitude toward healthcare. Quality-Satisfaction (Q-S) refers to the degree to which current healthcare services or systems are meeting college students’ expectations. Thus, a question/statement was included on the survey to collect data on satisfaction with current healthcare.
How satisfied are college students with current healthcare?

All 238 participants responded to the question of satisfaction with general healthcare, with 42% or 100 respondents indicating that they were ‘satisfied’ with current healthcare. Approximately 29.4% of respondents or 70 participants indicated being ‘somewhat satisfied’ with current healthcare, while 11.34% or 27 participants responded as both ‘satisfied’ and ‘very satisfied’ (Figure 8). Alarmingly, only 6% of respondents or participants, that is, 14 out of 238 participants indicated they were ‘very satisfied’ with current healthcare. Overall, satisfaction with current healthcare among college students can be characterized as fair given the 42% satisfaction rate indicated. Perhaps this high level of satisfaction stems from many college students having health insurance as a requirement of many colleges, especially for undergraduate students.

<table>
<thead>
<tr>
<th>Answer Options</th>
<th>Response Percent</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Satisfied</td>
<td>11.3%</td>
<td>27</td>
</tr>
<tr>
<td>Somewhat Satisfied</td>
<td>29.4%</td>
<td>70</td>
</tr>
<tr>
<td>Satisfied</td>
<td>42.0%</td>
<td>100</td>
</tr>
<tr>
<td>Very Satisfied</td>
<td>11.3%</td>
<td>27</td>
</tr>
<tr>
<td>Extremely Satisfied</td>
<td>5.9%</td>
<td>14</td>
</tr>
</tbody>
</table>

The above results of administered survey to identify and describe factors affecting college students’ attitude toward natural health remedies come with several important findings and implications that will be discussed in the next section of this study. The researcher will make recommendations for future studies regarding the phenomenon under investigation in subsequent section.

CONCLUSION AND RECOMMENDATIONS

CONCLUSION

The nature and attitude toward healthcare modalities is changing. When it comes to the use of natural health remedies individuals are motivated by concerns for costs (economic), perceptions regarding security and safety, relationships - especially significant others - their current knowledge and understanding of natural remedies, their beliefs regarding natural health practice and remedies, and are also driven by quality and satisfaction attributes. As Verma and Singh [9] note, Medicinal herbs as potential source of therapeutics aids has attained a significant role in health system all over the world for both humans and animals not only in the diseased condition but also as potential material for maintaining proper health (p. 350).

However, development and more rapid adaptation to this trend is hampered by economic, natural and physical, legal, and political factors, and of course science and the medical and pharmaceutical professions and establishments who see a drift away from modern medicine and synthetic drugs including invasive techniques as a threat to professional and financial well-being. Furthermore, prevailing attitudes and misunderstandings regarding natural remedies continue to be a barrier for many, especially in developed and wealthy countries and regions where individuals regard the use of tribal, herbal, and alternative medical and health techniques as archaic hocus-pocus and with deep skepticism. Lack of understanding and knowledge about natural remedies and the lack of availability of such remedies in urban areas result in unfamiliarity and dismissal.
The nature of healthcare is changing as individuals become more knowledgeable about what is taking place in the healthcare as well as related industries. In addition, exposure and access to vast amount of data and information on various aspects of healthcare including costs, safety challenges, illness and disease, and political and legal actions and policies on healthcare have created increased interest from consumers or citizens who are searching for affordable and proven methods to maintain and improve health. Natural health practitioners have had an opportunity over the past two decades to increase both their presence and membership in the collective healthcare system, and this continues to be the case as people are becoming increasingly health-conscious and are focusing more on well-being.

RECOMMENDATIONS

This study was a preliminary study on factors affecting college students’ attitudes toward natural health remedies, and as such, was limited to simple descriptive method in which the researcher only attempted to describe the phenomenon under investigation. While the study yielded extremely rich data that could have been analyzed in several ways using various statistical methods and methods of analysis including inferential statistics, limitations and delimitations of the research did not incline the study to such ends. Therefore, it is recommended that for future research, others interested in this subject could use the collected data or their own data to investigate the relationship among the various variables identified in the literature and findings of this research. For example, a future researcher on attitudes toward natural health remedies or health practice could use correlation as a means to establish the relationship among the five composites used in this research. Furthermore, future studies can investigate if there are any relationships between attitudes and demographic factors or characteristics identified in this study (age, ethnicity, income level, level of education, etc.) when it comes to natural health remedies. Finally, future research could use the data gathered in this study, or gather its own data and examine whether there are differences or no differences between the attitudes of college students and the general population or any other groups when it comes to natural health remedies.

REFERENCES

SURVEY
Factors Affecting College Students’ Attitude toward Natural Health Remedies

Voluntary Consent by Participant:
By agreeing below, you indicate that: (a) This study has been explained to you, (b) You have read this document or it has been read to you, (c) Your questions about this research study have been answered, (d) You have been told that you may ask the researchers any study related questions in the future or contact the researcher in the event of a research-related issues or concerns, (e) You have been told that you may ask the Institutional Review Board (IRB) personnel questions about your study rights, (f) You are entitled to a copy of this form after you have read and signed it, and (g) You voluntarily agree to complete this survey.

☐ Yes
☐ No

1. What is your gender?
☐ Female
☐ Male

2. What is your age?
☐ 18-23
☐ 24-30
☐ 31-39
☐ 40-49
☐ Over 50

3. What is your ethnicity?
☐ White/Caucasian
☐ African American
☐ Hispanic/ Latino
☐ American Indian or Alaskan Native
☐ Asian
☐ Arabic
☐ Other

4. My current level in college/university is:
☐ Undergraduate
☐ Graduate

Notes: This article represents excerpts from a dissertation written and submitted by its author to Trinity School of Natural Health in Warsaw, Indiana-USA, as part of studies for the Doctor of Naturopathy (N.D.) degree in May 2016.
5. What is the highest degree that you have earned?
   ☐ Some college credit, no degree
   ☐ Associate Degree
   ☐ Bachelor's Degree
   ☐ Master's Degree
   ☐ PhD or Doctorate Degree

6. What is your current major?
   ☐ Business Studies
   ☐ Psychology
   ☐ Education
   ☐ Medicine
   ☐ Pharmacy
   ☐ Health Care/ Nursing
   ☐ Other

7. What is your employment status?
   ☐ Employed
   ☐ Self-employed
   ☐ Unemployed
   ☐ Homemaker
   ☐ Student
   ☐ Military
   ☐ Retired

8. What is your marital status?
   ☐ Single
   ☐ Married
   ☐ Separated
   ☐ Divorced
   ☐ Widowed

9. What is your current income level?
   ☐ 0-10,000 dollars
   ☐ 11,000 – 20,000 dollars
   ☐ 21,000 – 30,000 dollars
   ☐ 31,000 – 40,000 dollars
   ☐ 41,000 – 50,000 dollars
10. My knowledge of general health care can be rated as:
   - Below average
   - Average
   - Above average
   - Extremely knowledgeable
   - Expertise

11. How satisfied are you with your current health care?
   - Not Satisfied
   - Somewhat Satisfied
   - Satisfied
   - Very Satisfied
   - Extremely Satisfied

12. Have you ever used natural health remedies?
   - Yes
   - No

13. How likely are you to try natural health remedies for health issues?
   - Not likely
   - Somewhat likely
   - Likely
   - Very likely
   - Extremely likely

14. My knowledge of natural health remedies can be rated as:
   - Below average
   - Average
   - Above Average
   - Extremely knowledgeable
   - Expert

15. When deciding on choice and type of healthcare the most important factor is:
   - Economics (costs and price/affordability)
   - Knowledge (understanding and awareness about healthcare systems and processes)
   - Relational (influence of family and friends or significant others)
   - Personal Beliefs (personal beliefs and perceptions regarding healthcare choices)
16. The factor that most affects my attitude toward natural health remedies is:
- Security (concerns about safety and risks associated with specific healthcare)
- Economics (costs and price/affordability)
- Knowledge (understanding and awareness about healthcare systems and processes)
- Relational (influence of family and friends or significant others)
- Personal Beliefs (personal beliefs and perceptions regarding healthcare choices)
- Security (concerns about safety and risks associated with specific healthcare)

17. My attitude toward natural health remedies can best be described overall as:
- Negative
- Positive
- Neutral
- Mixed (both negative and positive)
- Undecided

18. I believe that natural health remedies are:
- Safer than mainstream medicines and health practices
- Just as risky as mainstream medicines and health practices
- Less safe than mainstream medicines and health practices
- Completely safe
- Not at all safe

19. I believe that natural health remedies are:
- Just as costly as mainstream (medical-health) remedies
- Less costly than mainstream (medical-health) remedies
- Costlier than mainstream (medical-health) remedies

20. I believe that natural health practitioners are:
- Less trustworthy than mainstream medical practitioners and professionals
- Just as trustworthy as mainstream medical practitioners and professionals
- More trustworthy than mainstream medical practitioners and professionals

Administered via SurveyMonkey.com