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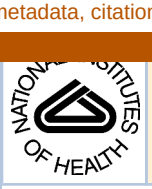

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Variations in Meanings of the Personal Core Value "Health"

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Abstract

Objective—Preventive health behavior patterns and practices are influenced by many factors. Knowledge about a person's core values may improve the ability to predict decisions related to behaviors such as healthy eating.

Methods—In this cross-case comparison study, we illuminate the meanings ascribed to the core value "health" in relationship to fruit and vegetable intake for colorectal cancer survivors and for persons with no cancer history.

Results—We found that both survivors and non-survivors gave three accounts of how the value "health" influenced having a healthy diet. These were: 1) good health was necessary to fulfill/attain other values; 2) health was a manifestation of God's will; and 3) good health was not possible unless one values responsibility.

Conclusion—Understanding a person's core values provides insight about how values may act as motivators for behavior change.

Practice Implications—Practitioners using motivational interviewing techniques should include a values clarification exercise to improve their assessment of how values influence behaviors.

Keywords

Core values; Motivational interviewing; fruit and vegetable intake; cancer

1. Introduction

Low fruit and vegetable (FV) intake is a major risk factor for cancer and several chronic illnesses[1–9]. American adults eat fewer than the minimum recommended daily servings [10–12]. Lifestyle interventions to improve diet have the potential to reduce morbidity, disability, and premature death.

Dietary patterns and practices are influenced by many factors. One promising area of inquiry is the role of people's values in understanding and predicting behavioral decisions [13–17].

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Values are abstract goals (e.g. freedom) that are important guiding principles in people's lives [14,15,17–20]. Values reflect the aspirations of individuals and society, and encompass deeply ingrained standards that can determine future directions and justify past action [15,21]. Rokeach's [20,22] pioneering work showed that values are predictive of behavior. Much research on values and health behavior change has been conducted in the context of motivational interviewing (MI), a patient-centered counseling method that helps individuals explore and resolve behavioral ambivalence [23]. MI has proven effective in revealing deeply held values that are potential sources of behavioral inconsistency [23]. Exploring values via MI can help individuals: 1) define their ideal self; 2) stimulate motivation for change by focusing on inconsistencies between the actual and the ideal self; 3) reduce ambivalence about behavior change, and 4) increase confidence in the ability to change. To date, such use of values in MI has yielded positive results [24–27].

Researchers have examined individuals' core values and value-behavior consistency for physical fitness [28], nutrition [25,29], and smoking cessation [30] promoting understanding of client values in relation to behavior outcomes and of the role the counselor's values play when providing care for clients [23,31]. Additionally, researchers have studied shared cultural values for supporting or deterring health related actions for AIDS prevention [32] end-of-life care [33], mammography initiation and maintenance [34], and mental health [35]. Values may influence behaviors directly by promoting or discouraging behavior [36]or indirectly by influencing the valence assigned to some other factor (e.g. family) that in turn affects the behavior [37]. Cultural values may be more effective for target populations when health programs include values-congruent content [38–40]. Because values have important implications for behavior, it is also necessary to grasp individuals' understandings of their core values and how and whether those interpretations shape health behavior. We investigated the meanings attributed to the core value "health" when individuals discussed FV consumption habits.

Individuals often claim to value their health [20,41]. Patients in a cardiac rehabilitation study rated "health" as one of their most important values [42]. Endorsing the value "health" predicted improved physical activity among firefighters [28]. Similarly individuals who valued their health highly were more successful in smoking fewer cigarettes and maintaining a lower consumption rate over time [43]. Valuing health was also a predictor of behavior that involved a direct risk to health [44]. When health was threatened, the health value was predictive of compliance with medical regimes [45]. "Health" is commonly included in value lists employed as a values clarification strategy in MI [28,46–48] where the goals are to establish any discrepancy between the current behavior and core values and to see if individuals can make any connection between their current behavior (or changing the behavior) and their ability to live out these values. Given this, it is important to ascertain how individuals understand their core values and more specifically, what they understand the value "health" to mean.

2. METHODS

A descriptive study was conducted using cross-case comparison as the primary analytic strategy [49]. The data were collected during 2003–2004, as part of a larger health communications intervention study: North Carolina Strategies for Improving Diet, Exercise, and Screening (NC STRIDES; N=735) [50]. The goal of the present study was to illuminate the meanings ascribed to the core value "health" in relation to FV intake, for colorectal cancer (CRC) survivors and a comparison group with no cancer history.

2.1. Data Collection

Participants received four calls from trained interviewers who followed the four principles outlined by Miller and Rollnick [51]: expressing empathy, developing discrepancy, rolling

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with resistance, and supporting self-efficacy. The calls also included a values-clarification exercise in which participants selected their top three values from a list of eighteen (Table 2). The list of values was a modified version of the Miller, C'de Baca, & Matthews' (1999) Personal Values Card Sort. The original 72 values were reduced to eighteen by the NC STRIDES staff based on formative research to adapt them for a population of CRC survivors and non-affected persons. Participants could also choose values not on the list. They then described each value selected, its importance and relation to FV intake ("You've indicated that _____(value) is very important to you. How does this affect your decisions about eating FV?"). Additionally, participants rated on a scale of 0–10 (0=not at all, 10=extremely) the importance of and their confidence level for eating the recommended FV servings. The first three calls focused on FV intake, physical activity, and CRC screening. Participants decided the order of topics for each call. A fourth call served as a process evaluation call. Data for the present study were obtained from the FV calls only. Each call lasted approximately 20–30 minutes and generated about eight pages of text. All calls were transcribed verbatim and proofed for accuracy by the first author. The study protocol was approved by the Institutional Review Board at the University of North Carolina at Chapel Hill.

2.2. Sample

Of the 366 participants randomized to the MI intervention (four counseling calls with or without tailored print intervention) only 82 were eligible for this study. Those ineligible included 41 participants who did not complete a FV call, 91 participants who completed a FV call but not the ratings for values, importance and confidence, 149 with partial information, and three participants whose audiotapes were inaudible.

A stratified purposeful sampling approach was used to select cases from the pool of 82 participants. The aim was to examine how individuals describe the core value "health" in relation to their current dietary habits. Chosen cases represented the types of variation relevant to understanding the phenomena under study [52]. Differences in dietary patterns between African Americans (AA) and whites have been reported [53,54] indicating AA consume less FV. Cancer status was also a factor as the cancer experience can be a "teachable" moment directing survivors to live in more meaningful ways [55,56]. Satia and colleagues [57] found significant increases in survivors' vegetable intake two years post diagnosis. Gender was an additional level of variation considered. Studies have indicated that FV intake is especially lower for men [58–60]. Thus the parameters used to select cases were: intervention group, CRC status, FV intake level, sex, and race (Black or white). Given the pre-selected parameters, there were 32 possible variations. Potentially there could be several cases in each cell, but some cells did not contain a case. For each variation that had multiple cases, one case was selected at random for analysis. After one case had been selected for each available variation, a total of 24 cases were included (see Table 1).

2.3. Analysis

Cross-case comparison was the primary analytical strategy [49]. First, visual displays were created to organize participants based on key variables (intervention group, CRC status, FV intake, sex, race, FV importance rating, FV confidence rating, and FV connection). Second, coding categories were created and re-defined, and different parts of the transcript text were assigned to the coding categories. Examples of coding categories included whether the core value described was consistent with the behavior or discrepant, FV intake knowledge (and lack of), and motivation for change. Next, text segment codes were compared using tables and summarized based on the emergent themes. Comparisons were done separately within each group (e.g., cancer status, sex) and were then repeated with the combined data. Transcripts were read multiple times by the first author throughout the analysis process. Word files were maintained to manage the verbal and visual displays of the data. To optimize descriptive,

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interpretive, and theoretical validity [61], an audit trail to identify the speaker and context of the data [62] was kept to document and explain any procedural and analytic decisions made.

3. Results

3.1. Sample Characteristics

Of the purposeful stratified sample of 24 cases (see Table 1), the mean age of participants was 66 years (SD=10.28), with ages ranging from 44 to 82 years. Fourteen participants were CRC survivors and ten never had CRC. Half the sample followed the FV guidelines, that is, five of more servings daily. The four top values chosen by participants were “family”, “God’s will”, “health”, and “spirituality”. Almost equal numbers of survivors and non-affected persons selected the most frequently endorsed values. Notably, more people who were not eating FV at the recommended level (n=5) selected “health” as a top value, whereas only three individuals eating at or above the recommended level included “health” as a top value.

3.2. “Health” as a Value

“Health” was almost universally endorsed as a value regardless of the participants’ cancer status or adherence to accepted nutritional guidelines. Their descriptions of “health” defined diet as a key component. According to participants, individuals cannot enjoy life’s benefits without good health. A white male participant eating below the recommended level indicated:

> A lot of people stress money and wealth. The important thing is health. No matter how much money you’ve got, if you don’t have health, you can’t enjoy anything.

Although he was not meeting the FV recommendations, his belief echoed those of others: that health was of utmost importance if one is to enjoy life. Good health meant that other goals and pleasures would have richer meanings. The implication was that individuals may aspire to live long, productive, enjoyable lives, but can only do so if their health is intact. As a white non-affected male eating at the recommended level stated:

> [My] plan is to live until 92. I’m now 60 years [old], so I need to be healthy to get to live that long. FV are key ingredients to being healthy.

Other participants confirmed the idea that “health” as a value has to take precedence because poor health is limiting in many ways.

For CRC survivors and non-affected individuals, “health” signified more that just diet. A white, non-affected male suggested:

> At least two-thirds of the key to being healthy is eating properly. Eating FV, less meat, and balancing out with the right kind of carbohydrates is how you do it. You also need a little bit of exercise.

From participants’ perspectives, *health* was not salient merely due to age or having survived cancer. The benefits of being in good health included enhanced mental and spiritual wellness. An African-American woman eating above the recommended FV amount shared:

> A person who eats FV [is] taking care of his body mentally and spiritually. When you take care of your body, you’re mentally and physically alert.

This triangulated sense of health and wellness (physical, mental, and spiritual) allows a richer and more rewarding life. For CRC survivors, surviving cancer meant re-prioritizing goals and deciding how to prevent a recurrence. A male survivor said he “*Never thought about how easy it is to pick up an apple instead of a bag of potato chips.*” Only after battling cancer and the birth of his grandchild during the same time period did he realize that family was more important than the day-to-day worries.

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Eating FV was a way to control against cancer recurrence and other diseases. For example, another cancer survivor responded that, having survived cancer, he did not want to succumb to another illness because of unhealthy eating habits. He explained:

> If you are going to be healthy and physically fit and have the energy, you have to eat the right foods. You just can't eat junk all the time. You can't eat hamburgers and stuff like that because there's too much saturated fat. I survived cancer and I don't want to die from a heart attack.

Because health is vulnerable to diseases and the aging process, there is a need to protect oneself. Some respondents endorsed building up one's immunity by eating well. Another survivor explained that, because of her belief that cancer was hereditary, she needed to include FV in her family's diet as a weapon to ward off cancer. She explained:

> I hate to think that I passed this thing [cancer] on down to one of them. But if they do [get it], they are already eating the stuff they are supposed to be eating. They stand a better chance of fighting it off.

3.3. Health as necessary to fulfill other values

Participants' holistic explanations of "health" as a value revealed the connection of health to other values. With good health it becomes possible to realize other values deemed important. Being healthy allows (1) *independence*, the ability to meet one's own needs (2) *strength*, to maintain the demands of daily function, (3) the ability to do *God's will* and serve God to the fullest, (4) spending quality time with *family*, and (5) *helpfulness* to others. For example, in poor health, one's independence was threatened, compromised, and hindered. A male participant not meeting the FV recommendation, but who considered himself to be in good health, said:

> There are so many people dependent on others because they're unhealthy. You're dependent on somebody else to do some minor task you should be able to perform yourself. Health is so important. I couldn't imagine what would happen if for some reason I was confined to bed. That would be the end of me. I've been in the hospital once in my life. And to be stuck in bed for any amount of time drives me nuts.

To have one's health intact meant freedom from imposing on others and the ability to perform day-to-day activities. *Health* as linked to *independence* was viewed as functional: the ability to carry out a given task. An African American female CRC survivor related how the loss of her health also translated to the loss of her independence:

> I wish I could walk like other people. I see a lot of people get out early in the morning and walk. But I can't walk like that. I'm not strong enough. I used to but I can't. My health won't let me now.

Diminished health translated into dependency that was perceived as burdensome to others. A male, non-CRC-affected participant not meeting the FV recommendation said, "When living alone, one needs to be able to take care of oneself so as not to be a burden to anyone else." A female CRC survivor related her frustrations about being perceived as incapable and an emotional burden:

> I got mad with my friends because I was sick. I knew I was sick, but I wanted to go on. By them feeling sorry for me they made me feel like I'm not capable of doing for myself. So I need my independence. I don't want to feel sorry for myself. And I don't want nobody else to feel sorry for me, either.

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3.4. Health as a manifestation of "*God's will*"

In this explanation of "health", participants' conception of "God's will" determined what health actions should be taken. Following God's will places everything into perspective, including health. A white female not eating the recommended FV stressed, "…when you're taking care of your body you're pleasing God." "God's will" was described as the dominant value that dictated all decisions, preferences, and values. Even evaluating the likelihood of success to improve FV intake was framed by beliefs about God's will. An African American male not meeting the FV recommendations explained:

> I don't think that by doing all the physical things [like eating FV] on your own will be that beneficial. You put God first-that's where you put your confidence.

Participants conveyed a sense of obligation when talking about eating well because they believed that their bodies were considered temples of God. This is a Biblical reference about being a good steward of one's body: "What? Know ye not that your body is the temple of the Holy Ghost which is in you, which ye have of God, and ye are not your own?" (1 Corinthians 6:19). A female participant affirmed, "Our bodies are the temple of the Holy Spirit and I am sure God is pleased when we take care of it." Because one's body was considered in this spiritual way, it ought to be treated well. Another participant admitted:

> When you stop and think about your body being a temple you want to keep it holy. That in itself is a reminder of some of the things you need to do on a daily basis.

3.5. "Responsibility" as a Co-requisite for "Health"

The third way "health" as a value was viewed was through its connection to "responsibility". Participants suggested that to value "health" inherently meant valuing "responsibility", making "responsibility" a co-requisite for "health". Possessing good health was akin to being responsible. An African American male not meeting the diet recommendation explained:

> If you are responsible, you're not going to do things that jeopardize your health, like alcohol and drugs. Part of growing older is growing wiser. You should be able to make better health decisions. If you're healthy, there are some diseases that you are likely to avoid. I have never seen anyone who has lived to be 100 and obese.

If the intent is to live longer, then one needs to be healthy. To be in good health, as reflected by longevity, requires acting in responsible ways. A female CRC survivor not meeting the recommendation also claimed:

> I need to be responsible for myself because where other people don't care then I need to be responsible. You can't depend on people to be responsible for you. For me to take care of myself, I have to be responsible for myself.

A white male CRC survivor eating above the recommended amount also suggested:

> If you don't help yourself, no one's going to help you. There's only one way it's going to happen. To get better, you got to do it yourself. There's no one to do it for you.

To endorse "health" as a value meant being responsible for making wise choices. Good health is not a static state but rather an active condition, requiring one to exercise responsibility in caring for oneself. Table 3 shows which participants' views corresponded to the three variations in the meanings of "health".

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4. Discussion and Conclusion

4.1. Discussion

Diet influences many disease outcomes. Thus there is a growing need to understand how best to promote healthy practices. Counseling using MI has proven useful for health promotion efforts [25]. Incorporating a values clarification exercise as part of the counseling encounter may highlight motivations, barriers, and beliefs about engaging in healthy behaviors. A wealth of knowledge may be gained about how the meanings individuals ascribe to their core values, such as “health”, influence health behavior.

4.2. Conclusion

The main findings were: (1) participants perceived “health” value as influencing all of life, and (2) participants gave three distinct nuances of “health”. Meanings ascribed to the value “health” reflected concepts previously described in the literature. Smith [63] concluded that there are four general conceptions for defining health. These are: (1) clinical, in which health is the absence of disease/symptoms; (2) role performance, in which health is the ability to fulfill socially defined roles; (3) adaptive, in which health is a flexible adjustment to changing circumstances; and (4) eudaimonistic, in which health is exuberant well-being, the full development of the individual’s potential. In this study, participants described each of these variations. However, the predominant conception mirrored the eudaimonistic model. Participants perceived health as including physical, mental, and spiritual wellness, and constituting much more than the foods consumed.

It is paramount that the meanings of health be clearly understood. How one envisions health may be related to health behaviors. For example, in a study of normal and overweight individuals, Laffrey [64] found that health-promoting behaviors were associated with the eudaimonistic health conception, while illness-preventing behaviors were associated with a clinical health conception. The author concluded that conception of health may be a more significant factor than one’s perceived health status for assessing health behavior. Other studies point to the importance of individuals’ health beliefs in relation to their behaviors [65–68].

“Health” was one of the most frequently endorsed values among both CRC survivors and non-affected persons. Other studies have found that *health* became less important over time to cancer patients [69,70]. Participants in this study were on average two years beyond their diagnosis and previously enrolled in a cancer case-controlled study. Such participants may have had increased attention to their health. In any case, participants were highly reflective about the meanings they ascribed to core values.

When the meaning of “health” was discussed several other values (“independence”, “strength”, “family”, and “helpfulness”) were mentioned. “Health” was considered a necessary component for these other values. One practice implication for health promotion efforts is to explore with clients/patients in greater depth the potential array of benefits a particular value might hold, apart from its definition. By allowing multiple linkages to be explored, previously unacknowledged benefits may surface, providing patients greater motivation to pursue the health promotion effort.

The religion-health connection needs further exploration. Beliefs about *God’s will* dictated participants’ notions of health. The idea of the body as God’s temple was cited as a scriptural basis for healthy behavior. Even those not meeting the recommendations purported treating the body well to please God. Previous research suggests that scriptural teachings might be the basis for encouraging people to engage in healthy behaviors and avoid unhealthy ones [71–73 Others [74] have found that spiritual beliefs can influence health beliefs and behaviors in both positive and negative directions.

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Some participants believed valuing "health" meant also embracing "responsibility" as a value. This example raises the question about the nature and function of values. Are some values interlinked, whereby endorsing one value means accepting the other, if one is to act in a value-congruent manner? Values have been conceptualized as existing within a hierarchy [20] which may suggest that actualizing one value may mean blocking another [75]. These findings raise questions about the overlapping nature of values.

There are some study limitations to acknowledge. The population under study was enrolled in another cancer study prior to the parent study. As such, participants may represent highly motivated individuals who may not be representative of the general population. Involvement in a previous study may also have primed these individuals to be more health conscious. Second, some additional questions might have provided a broader understanding of the relationship between values and diet. For example, survivors were not asked to describe their values prior to diagnosis. Nor were non-affected individuals asked to discuss their values prior to a major illness or reference point.

4.3. Practice Implications

This study highlighted variations in participants' perceptions of the value "health". It is important to understand the meanings attributed to values. For example, participants considered health in a more holistic sense than simply being physically well. This broad conceptualization of "health" may explain why participants discussed other values within the framework of diet. There was not one unifying theme regarding how "health" as a value was conceptualized, but three variations. The ways participants understood "health" were pivotal in their accounts about their rationalizations, beliefs, and attitudes about eating healthfully. Additionally, the perception of "health" as necessary for other values suggests that other values are contingent upon "health" being actualized. A combination of value preferences may influence a specific behavior. For example, as participants pointed out, when in poor health then other values like independence can be compromised. Therefore, improving/maintaining a healthy diet may be influenced not only by having "health" as a core value, but also by other values that relate to health. The choice of a behavior (e.g., increasing FV intake) may be guided by the interplay of the influences of the activated values [76]. Further research is needed to understand how clusters of health-related values impact health behaviors. Understanding how and which values influence health behavior practices can impact the design of interventions to promote healthy behaviors.

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I confirm all patient/personal identifiers have been removed or disguised so the patient/person(s) described are not identifiable and cannot be identified through the details of the story.

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Table 1
Characteristics of Study Participants (N=24)

Characteristics	Colorectal Cancer Survivors	Non-Affected Persons
Total	**10**	**14**
Age in Years (range 44–82)		
40–50	1	0
50–59	3	4
60–69	3	4
70–79	2	5
80–89	1	1
Sex		
Male	5	6
Female	5	8
Education		
<High school education	1	2
≥High school education	9	11
Income		
<$30,000/yr	5	4
≥$30,000/yr	5	10
Marital Status		
Married/living with a partner	7	9
Widowed	2	4
Divorced	0	1
Never Married	1	0
Race/ethnicity		
Black	4	6
White	6	8
Baseline Fruit/vegetable Servings		
< 5 servings/day	6	6
≥5 servings/day	4	8

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Table 2

List of values

VALUES
Responsibility, to do what I said I would do
Purpose, to have meaning and direction in my life
Helpfulness, to reach out to others
Inner peace, to find a sense of quiet/calmness
Justice, to promote fair and equal treatment for all
Hope, to see what happens in life in a positive way
Independence, to be able to meet my own needs
God's will, to follow God's plan for me
Loving, to give and receive
Family, to have a happy, loving family
Spirituality, to grow and mature spiritually
Forgiveness, to be forgiving of others
Strength, to be physically fit and capable
Mental Strength, to be mentally alert
Humor, to see the funny side of life
Friendship, to have close, supportive friends
Growth, to keep changing and growing
Health, to be physically well
Other_____

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Table 3

Variations of Health as a Value by Participant Characteristics

	Total Number of Participants (N=21)*	Number of CRC Survivors	Number of CRC Non-affected	Number Eating 5 FV Daily	Number Eating 5 FV Daily	Number of African Americans	Number of Whites	Number of Males	Number of Females
***Health* as a necessary component for other values**	12	4	8	7	5	3	9	6	6
Health* as a manifestation of *God's will	6	2	4	0	6	4	2	2	4
Responsibility* as a co-requisite for *Health	3	2	1	1	2	2	1	1	2

*Note: 3 participants did not fit the above models due to insufficient data from their calls regarding health and other values. Key: FV=fruit and vegetables

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