



Improving Health Literacy through the Health Index Score & Health Enhancement Response (HIS&HER) Health Literacy Campaign



Haylee B. Heinsberg, M.Ed.; Brian N. Griffith, Ph.D., Jordan Stroud, OMS-II; Hussein Bazy, OMS-II; Garrett Parsons, OMS-I; Katherine Khazey, OMS-II; Ashley Duff, OMS-II; Sindhu Saba, OMS-II; Adam Stout, OMS-II - West Virginia School of Osteopathic Medicine, Center for Rural and Community Health, Lewisburg, WV 24901

Background

It is well established that the populations of West Virginia (WV), the Appalachian region, and rural America demonstrate the highest prevalence of obesity and chronic diseases in the United States. It is also widely known that these conditions are caused primarily by poor health behaviors. Recognizing that many of these health conditions are modifiable, numerous health promotion programs have been instituted throughout the Appalachian region over the last decade. West Virginia currently ranks 50th out of 50 states in poor health outcomes according to the national rankings which were based on a total of four criteria (health policy, behavior, community environment, and clinical environment). WV ranks 12th out of 50 states in health policy and 1st in public health funding per person which is one measurement within policy; however, WV ranks 48th, 36th, and 44th in behaviors, community and environment, and clinical care, respectively (1). The disparity between health outcomes in WV and the rankings of the four criteria may likely reflect poor health literacy and other poor social determinants of health.

In order to better understand the community health needs of rural Appalachians, the West Virginia School of Osteopathic Medicine (WVSOM) surveyed 1,576 Appalachian adults in 2011 to assess self-perceptions of health status (1). Results revealed subjective perceptions of health status that were incongruent with objective measures of participant health and current health behaviors. Between 57% and 66% of the respondents who considered themselves healthy were characterized by at least two disease conditions or poor health behaviors. Disproportionate health perceptions and understanding of how health behaviors affect one's health present potential primary causes of this disparity. Therefore, the major obstacle (or challenge) to improving health appears to be self-perception of health and limited health literacy.

In response to these data, the WVSOM Center for Rural and Community Health (CRCH) initiated a health literacy campaign called HIS & HER (Health Index Score & Health Enhancement Response). The HIS & HER campaign focuses directly on changing inaccurate health perceptions to improve health literacy and better enable high-risk patients to be more receptive to behavioral changes and preventative health services

Methods

Previous Health Scorecards	New Health Scorecards
Body Weight (January)	
Cholesterol (February)	Blood Pressure (February) (Updated based on JNC Guidelines)
Fat Food Consumption (March)	Sleep (March)
Sexual Activity (April)	Smokeless Tobacco (April) Walking (April)
Blood Pressure (May)	Stroke (May) Osteoporosis (May)
Smoking (June)	HIV (June)
Physical Activity (July)	Hydration (July)
Sugar Drinks (August)	Immunization (August)
Dental and Oral Health (September)	Childhood Obesity (September) Pain Management (September)
Depression (October)	
Diabetes (November)	Skin (November) Antibiotics (November) Dementia (November)
Alcohol Consumption (December)	

Health indicators from Healthy People 2020 and those most relevant to WV were selected. Health indicator score cards were matched with a national health observance month as best as possible.



Methods (continued)

Standardized “scorecards” were designed to help people self-evaluate 3 distinct levels of personal health for each disease or health behavior. The 3 levels are: healthy, health risk, and unhealthy. Each scorecard has the same format, front and back. The front side of the card has a brief description of the condition or behavior, a method for simple and immediate self-assessment, and a resulting health index score (healthy, health risk, unhealthy). The back of the card gives directions and guidance on what to do for each scoring level.

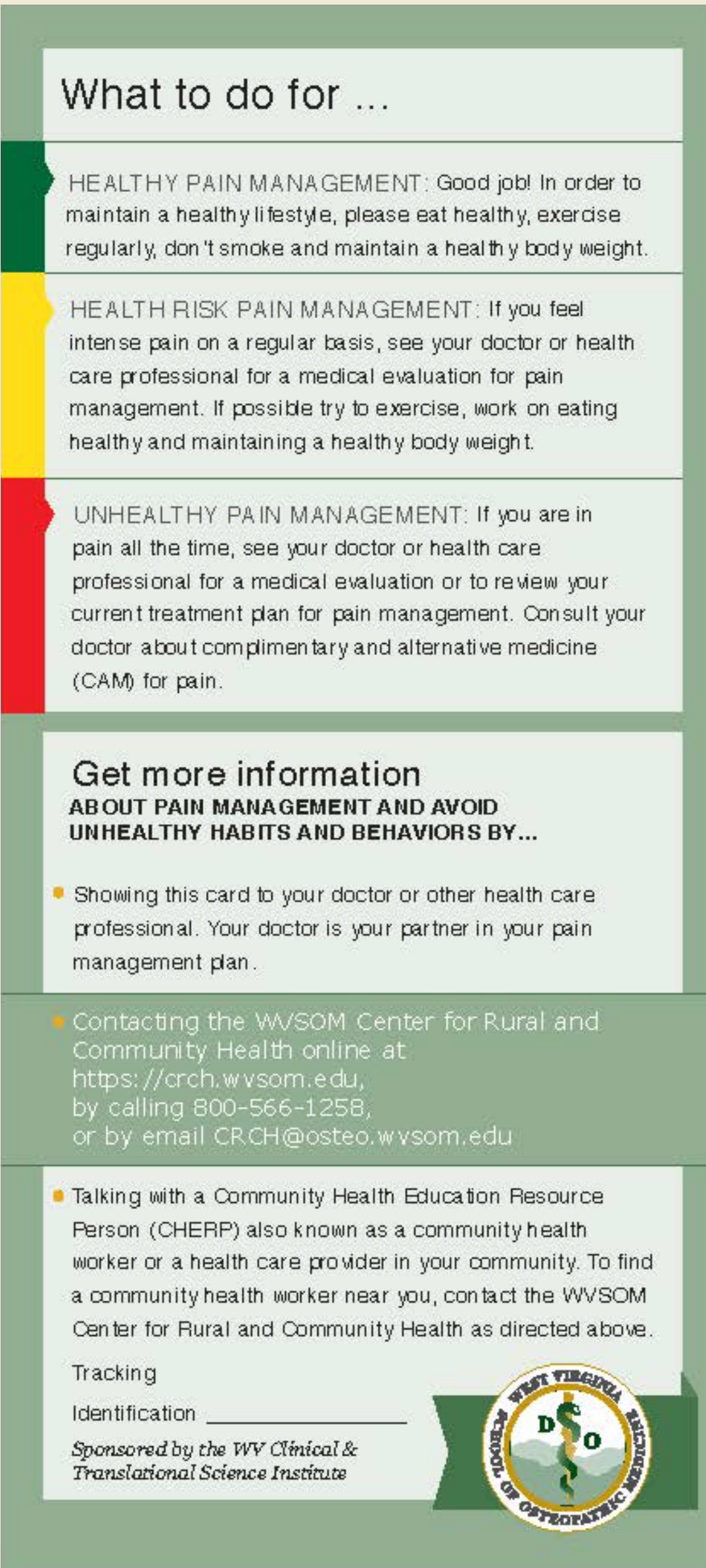
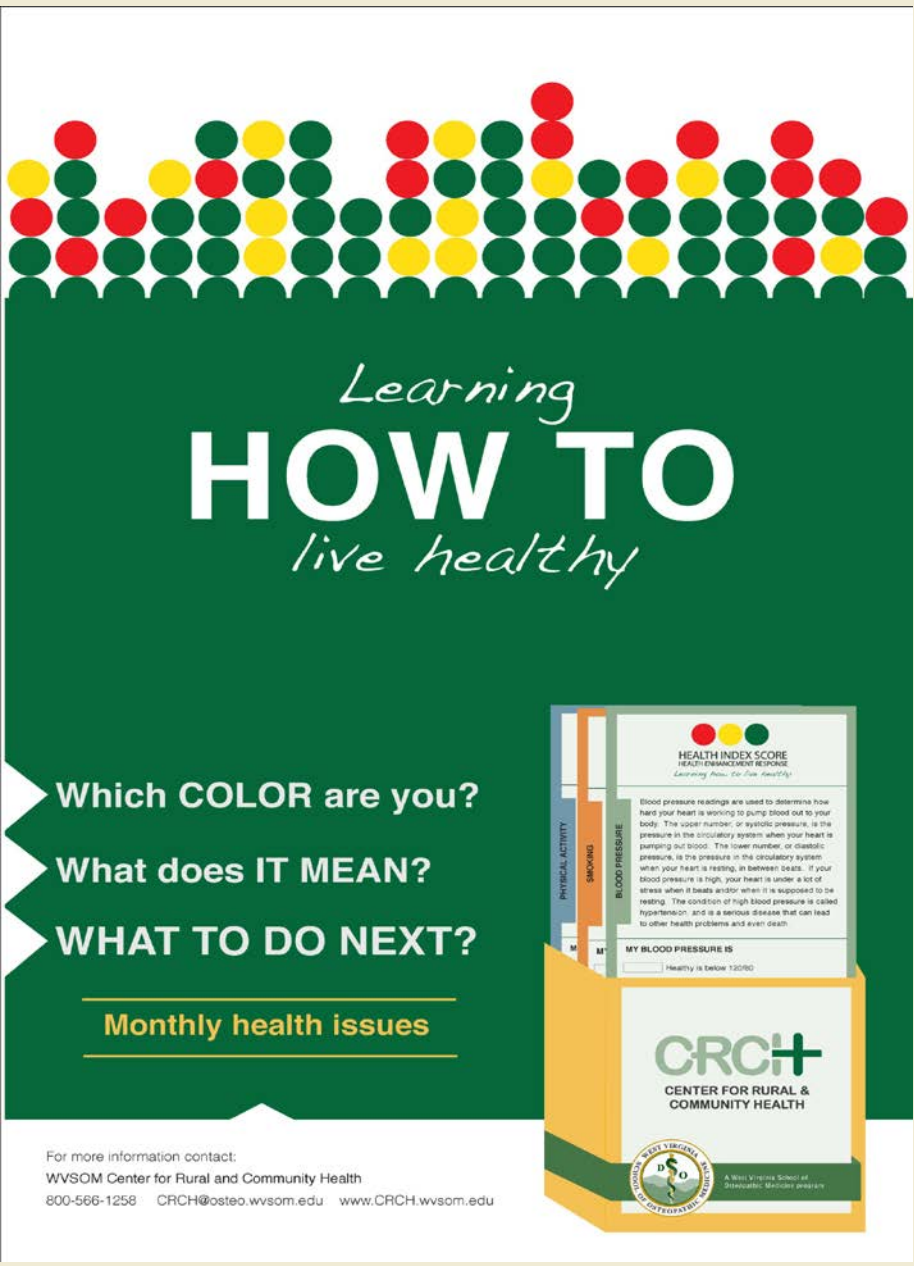
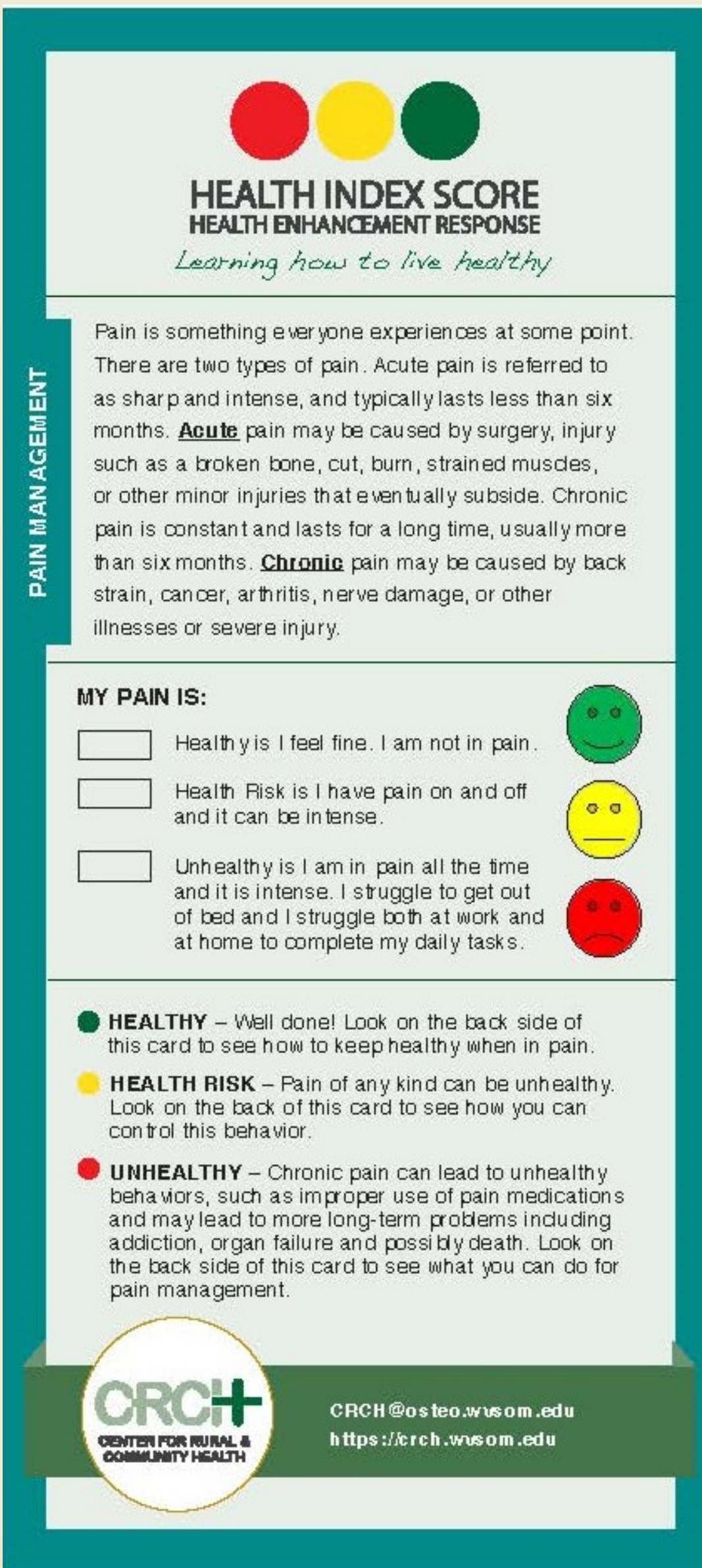
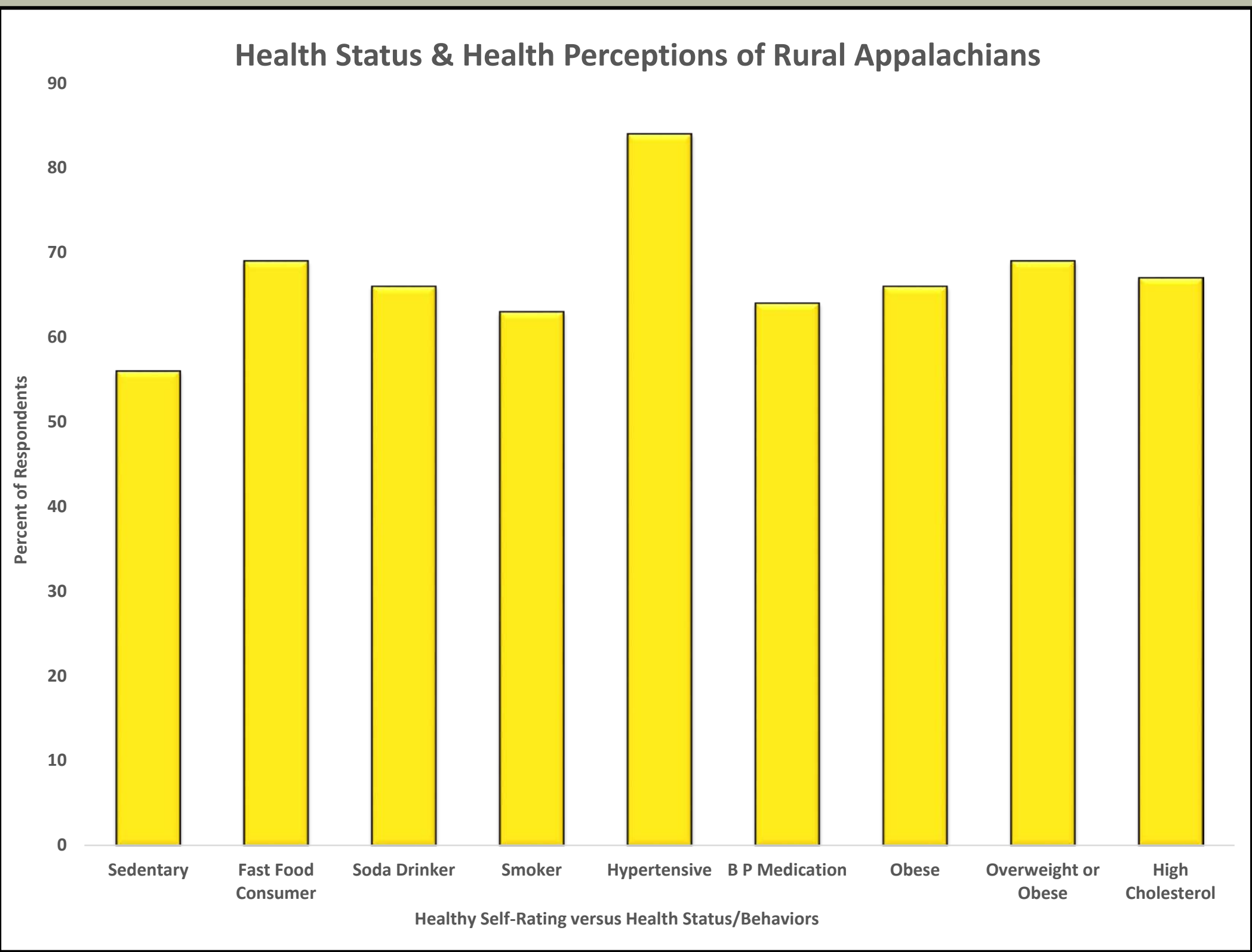


Figure 1: A chart of participants and the frequency of self-reporting healthy status versus unhealthy behaviors and/or unhealthy status. The study evaluated individual life-style, consumption of fast food and soda, smoking status, blood pressure (BP), BP medications, body mass index (BMI) and total cholesterol level.



Methods (continued)



Results

To date, a total of 25 HIS & HER Health Literacy Scorecards have been created. Distribution sites include:

- Healthcare and medical facilities
- Churches, Libraries, Schools, and community health fairs
- Other social services and educational supported agencies
- WVSOM blood pressure booth at the State Fair of West Virginia
- A total of 135+ regular distribution sites within Greenbrier, Monroe, and Pocahontas counties and ~100,000 scorecards have been distributed since 2011 throughout the State of West Virginia and at state and national conferences.

Conclusions

The HIS & HER campaign will provide evidence of factors driving prevention behaviors in a high-risk population. The campaign will give insight into how simple self-assessment tools can be used by the lay person to promote healthy behavioral change. The HIS & HER campaign will help empower patients to take responsibility for their health, while improving health literacy and health outcomes. As a result, this study aims to tailor and initiate interventions that will be better received within at-risk Appalachian communities to enhance health and wellness self-perception and health literacy.

References

1. Americas Health Rankings annual report 2017. United Health Foundation. www.AmericasHealthRankings.org. Date accessed: 2019 April 1.
2. Griffith BN, Lovett GD, Pyle DN II, Miller WC. Self-rated health in rural Appalachia: health perceptions are incongruent with health status and health behaviors. *BMC Public Health* 2011;11:229.
3. Miller WC, Griffith BN, Bikman TJ, Meyer CM. Misconceptions about health and disease prevention behaviors of rural Appalachian Americans. *Int J Med (Dubai)*. 2014;2(2):71-75. Epub 2014 Oct 2.

Project Support

This publication was supported by the West Virginia School of Osteopathic Medicine and the National Institute of General Medical Sciences of the National Institutes of Health under Award Number 5U54GM104942-03. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.