Know Your Prostate (Knowledge and Burden of Prostate Cancer), Klamath Falls 2022 - 2023

Best Health Consults (BHC)

BHC

Acknowledgements

- OHSU and Knight Cancer Institute
  - Funding for this project was provided in part by the OHSU Knight Cancer Institute Community Partnership Program, a grant program that supports communities across Oregon in addressing local cancer-related needs.
  - Blanca Cisneros (OHSU Community Outreach Specialist)
  - OHSU Monitoring and Evaluation Team
  - Lynda Crocker Daniel (OHSU Community Liaison, Klamath)
- **Partners**
  - Klamath Public Health Department
  - Klamath Christian Center
  - HealthyKlamath
  - Klamath Chamber of Commerce
  - The Helpers Excellent Ministry (THEM) International
 - Refuge City Church

BHC

Our WHY

- While the life expectancy of males are lower than that of females, most health programs focus on women and children with little or no emphasis on men's health.

- While more females are likely to seek medical attention for their health conditions, men are very unlikely to seek health care until it is very late.

- Men are major victims of the commonest causes of death in our state.

BHC

Background Information

- Cancer is a major public health and economic issue and its burden is set to spiral.
- Worldwide, there were an estimated **18.1 million** cases and **9.6 million cancer deaths in 2018.**
- **One in four men** and one in five women will develop cancer, and one in **eight men** and one in eleven women will die from it worldwide.
- Prostate cancer is the most common cancer among men (after skin cancer), with an estimated prevalence of about **268,490 new cases of prostate cancer and 34,500 deaths from prostate cancer per year in the United States**.
- About **1 man in 8** American men will be diagnosed with prostate cancer during their lifetime.

BHC

The Prostate Gland

Prostate

Bladder
Prostate
Urethra
Penis
Testicle
Rectum

Cleveland Clinic ©2022
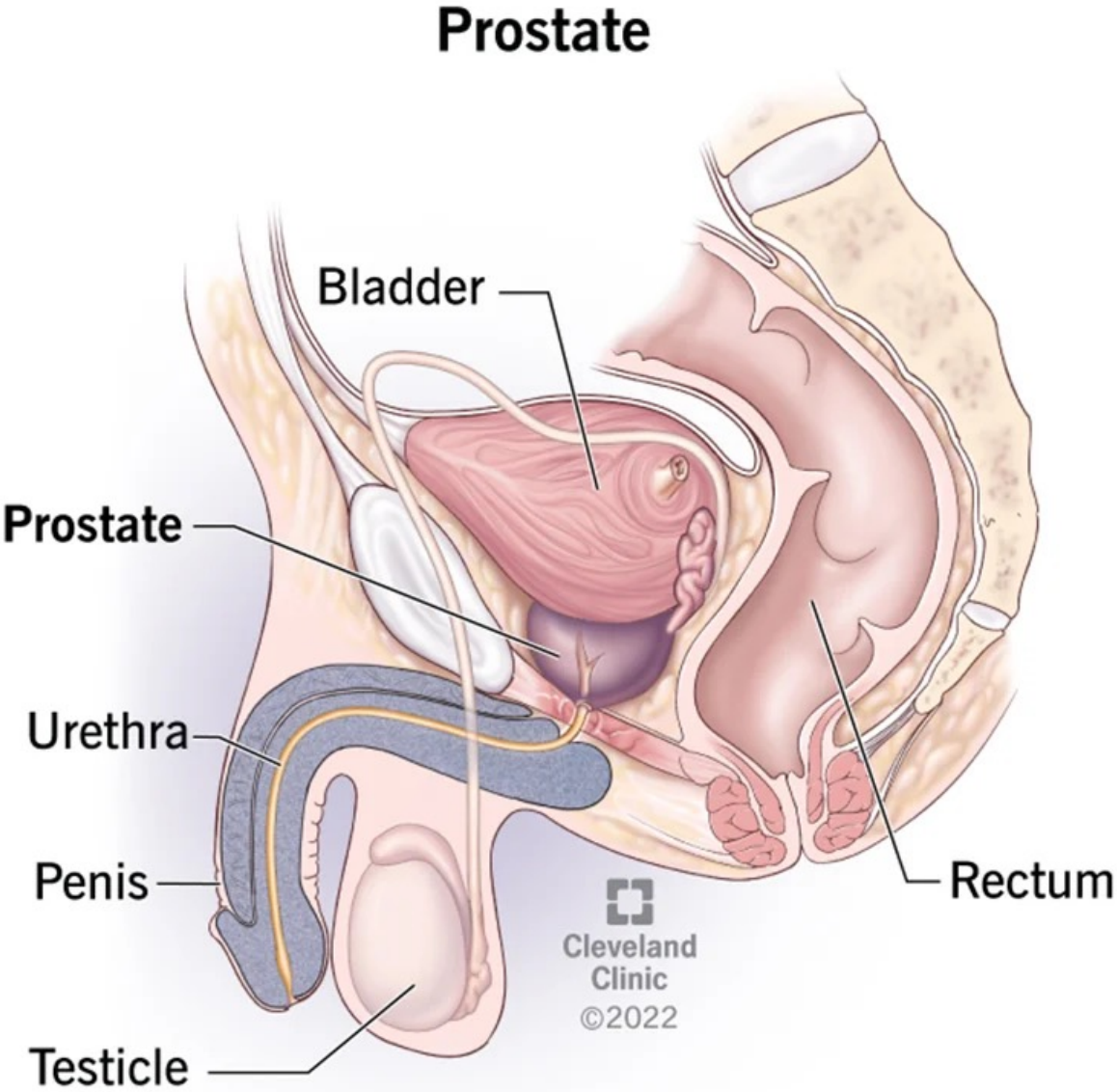
Cross section of the pelvis

BHC

Goals and Objectives

- To document the burden, knowledge, attitude, and behaviors of individuals toward cancer of the prostate.

- To develop a plan to improve cancer prevention in Klamath.

Methodology

- Target Population
  - Males who are 50 years and above.
- Key Project Design
  - Desk Review of cancer-related information globally and locally.
  - Primary data collection using a self-developed adapted questionnaire.
- Activities/efforts/initiatives
  - Literature search of published information on prostate cancer in Klamath Falls and Oregon.
  - IRB exemption.
  - Questionnaire development and review (with support from OHSU Evaluation Team).
  - Primary Data Collection (virtual and physical).
  - Quantitative analysis.
  - Inference and report development.

BHC

Reported cancer cases in Oregon (2015 – 2019)

Cancer name	2015	2016	2017	2018	2019	Total	
Breast	3,321	3,264	3,340	3,691	3,725	17,341	15.20%
Lung and Bronchus	2,826	2,791	2,840	2,726	2,683	13,866	12.20%
Prostate	**2,515**	**2,478**	**2,680**	**2,618**	**2,759**	**13,050**	**11.50%**
Colon and Rectum	1,725	1,686	1,788	1,667	1,666	8,532	7.50%
Melanoma of the Skin	1,371	1,254	1,320	1,174	1,325	6,444	5.70%
Colon excluding Rectum	1,237	1,144	1,217	1,182	1,147	5,927	5.20%
Urinary Bladder	1,107	1,098	1,118	1,100	1,116	5,539	4.90%
Non-Hodgkin Lymphoma	918	978	944	943	889	4,672	4.10%

Best Health Consult (BHC)

Reported Cancer Cases in Klamath Falls (2000 – 2019)

Cancer Name	2000 - 2004	2005 - 2009	2010 - 2014	2015 - 2019	Total	
Lung and Bronchus	273	311	287	290	1,161	14.20%
Prostate	**283**	**268**	**258**	**266**	**1,075**	**13.20%**
Breast	257	236	253	262	1,008	12.40%
Colon and Rectum	197	205	184	210	796	9.80%
Colon excluding Rectum	140	139	139	151	569	7.00%
Urinary Bladder	99	94	117	100	410	5.00%

Reported prostate cancer cases in Oregon according to ages (2015 – 2019)

Age	2015	2016	2017	2018	2019	Total	
0 - 17	-	-	-	-	-	-	0.0%
18 - 44	-	-	-	-	-	-	0.0%
45 - 64	855	833	883	810	807	4,188	32.2%
65 or older	1,654	1,639	1,792	1,805	1,945	8,835	67.8%
Total	2,509	2,472	2,675	2,615	2,752	13,023	100.0%

Reported prostate cancer cases in Klamath Falls according to ages (2000 – 2019)

Age	2000 - 2004	2005 - 2009	2010 - 2014	2015 - 2019	Total	
0 - 17	-	-	-	-	-	0.0%
18 - 44	-	-	-	-	-	0.0%
45 - 64	88	92	89	73	342	31.8%
65 or older	195	176	168	193	732	68.2%
Total	283	268	257	266	1,074	100.0%

Global Cancer Prevalence and Mortality, 2022

Cancer	Incidence		Mortality	
Lung	2,206,771	18.10%	1,796,144	27.50%
Colorectum	1,931,590	15.90%	935,173	14.30%
Liver	905,677	7.40%	830,180	12.70%
Stomach	1,089,103	8.90%	768,793	11.80%
Breast	2,261,419	18.60%	684,996	10.50%
Oesophagus	604,100	5.00%	544,076	8.30%
Prostate	**1,414,259**	**11.60%**	**375,304**	**5.70%**
Cervix uteri	604,127	5.00%	341,831	5.20%
Bladder	573,278	4.70%	212,536	3.30%
Thyroid	586,202	4.80%	43,646	0.70%
Total	**12,176,526**	**100.00%**	**6,532,679**	**100.00%**

Best Health Consult (BHC)

Mortality from Cancers in Oregon according to cancer types (2016 – 2020)

Cancer Name	2016	2017	2018	2019	2020	Total	
Lung and Bronchus	1,891	1,865	1,811	1,782	1,793	9,142	22.80%
Colon and Rectum	659	635	656	669	618	3,237	8.10%
Pancreas	595	640	620	608	627	3,090	7.70%
Breast	585	506	525	573	552	2,741	6.80%
Colon excluding Rectum	488	439	488	476	443	2,334	5.80%
Prostate	**475**	**441**	**475**	**470**	**467**	**2,328**	**5.80%**
Liver and Intrahepatic Bile Duct	382	379	416	407	409	1,993	5.00%

Best Health Consult (BHC)

Mortality from Cancers in Klamath according to cancer types (1999 – 2020)

Cancer Name	1999 - 2003	2004 - 2008	2009 - 2013	2014 - 2018	2016 - 2020	Total	
Lung and Bronchus	66.2	72.7	66.5	60.3	58.6	324.3	23.40%
Breast	35.6	30.2	32.5	33.7	35.4	167.4	12.10%
Prostate	**30.6**	**21.3**	**22.5**	**39.9**	**43.3**	**157.6**	**11.40%**
Colon and Rectum	22.5	27.6	26	19.6	20.7	116.4	8.40%
Colon excluding Rectum	18.4	21.5	22.4	14.2	15.4	91.9	6.60%
Pancreas	14.1	14.5	13.9	17.8	18	78.3	5.70%
Ovary	11.9	10.3	9.6	12.6	10.6	55	4.00%

Our Primary Data Collection and Analysis

- The data above informed our subsequent research work

- All cases of cancer and deaths were among people **45 years and above**.

- Male cancer – especially prostate cancer - is among the top cancer cases and deaths globally, in Oregon and Klamath Falls.

- Little is being done to tackle this monster as most efforts are on breast and lung cancer.

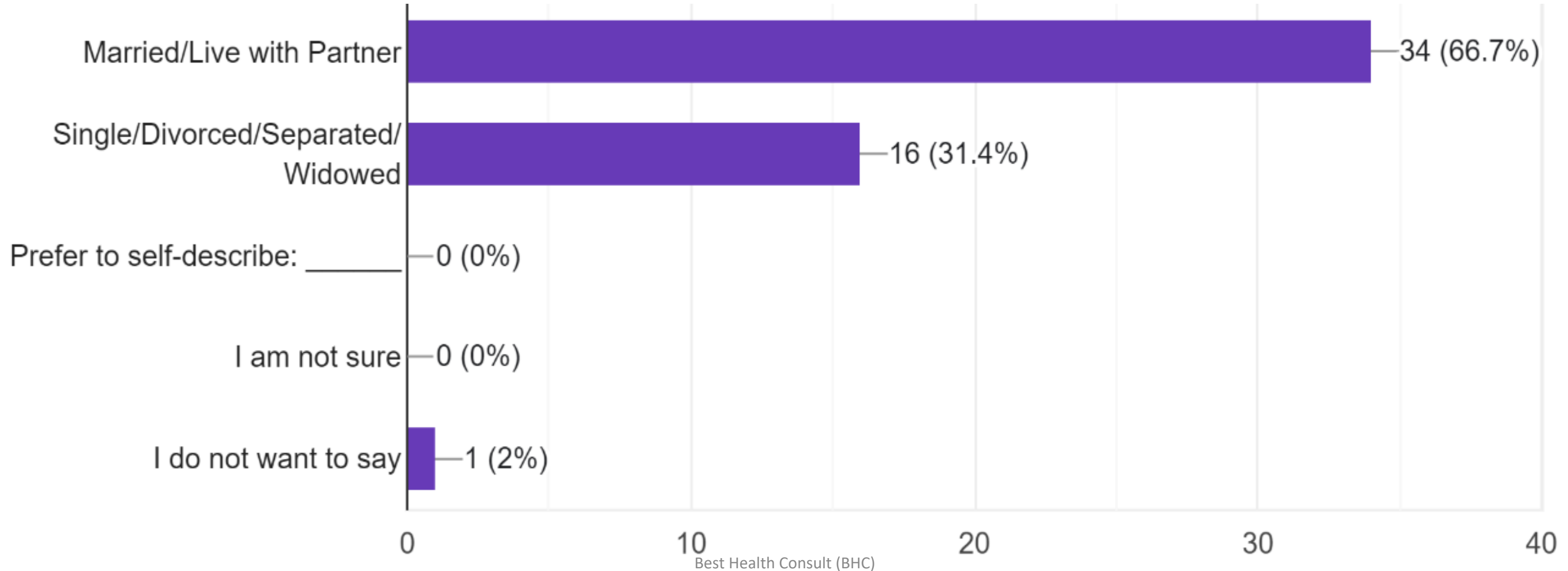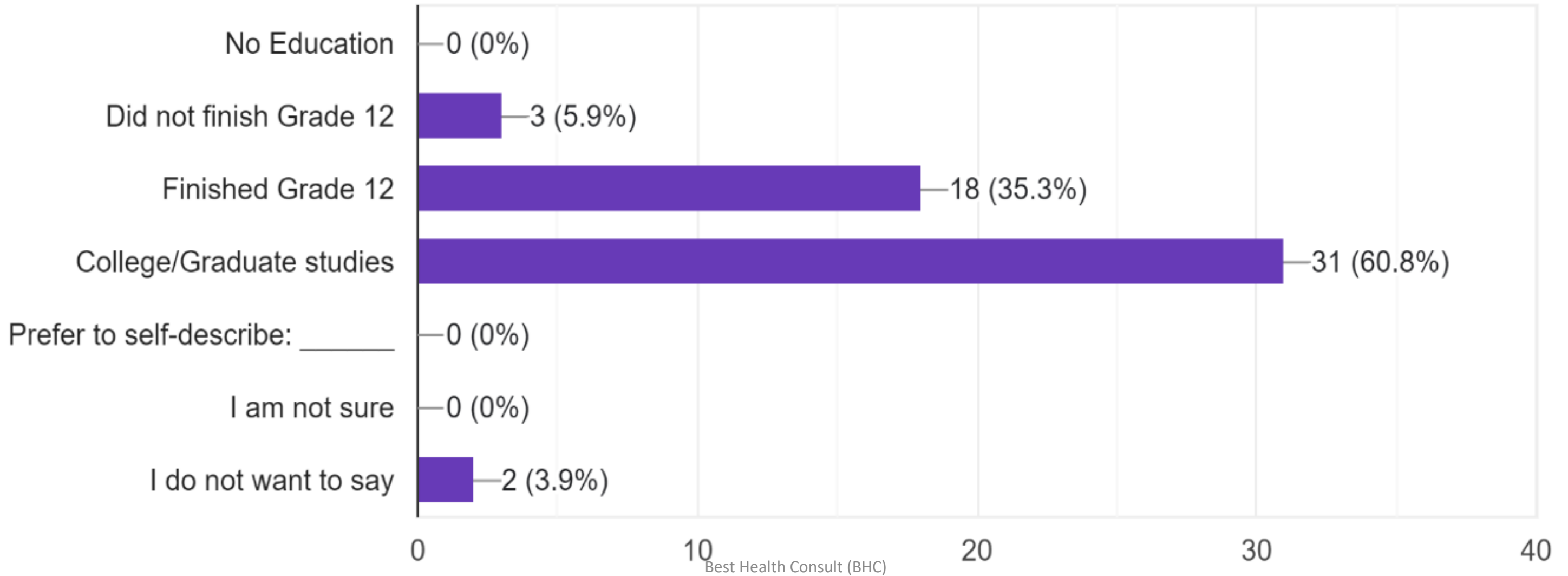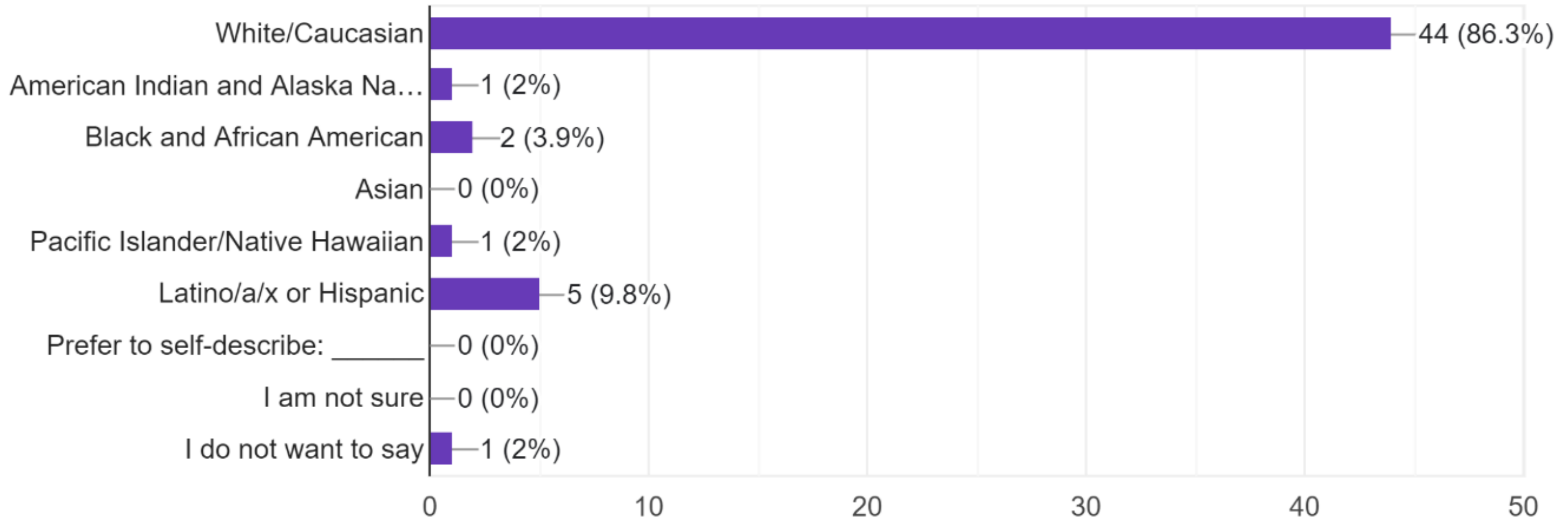- We needed to make this known and efforts should be directed towards this disease.

BHC

Gender

Male — 49 (98%)
Female — 0 (0%)
Prefer to self-describe: — 1 (2%)
I do not want to say — 0 (0%)

0   10   20   30   40   50

Age

Less than 50 years old	10 (20%)
50 – 69 years old	21 (42%)
70 years old and above	19 (38%)
I am not sure	0 (0%)
I do not want to say	0 (0%)

Best Health Consult (BHC)

Marital status

Married/Live with Partner — 34 (66.7%)

Single/Divorced/Separated/Widowed — 16 (31.4%)

Prefer to self-describe: _____ — 0 (0%)

I am not sure — 0 (0%)

I do not want to say — 1 (2%)

0   10   20   30   40
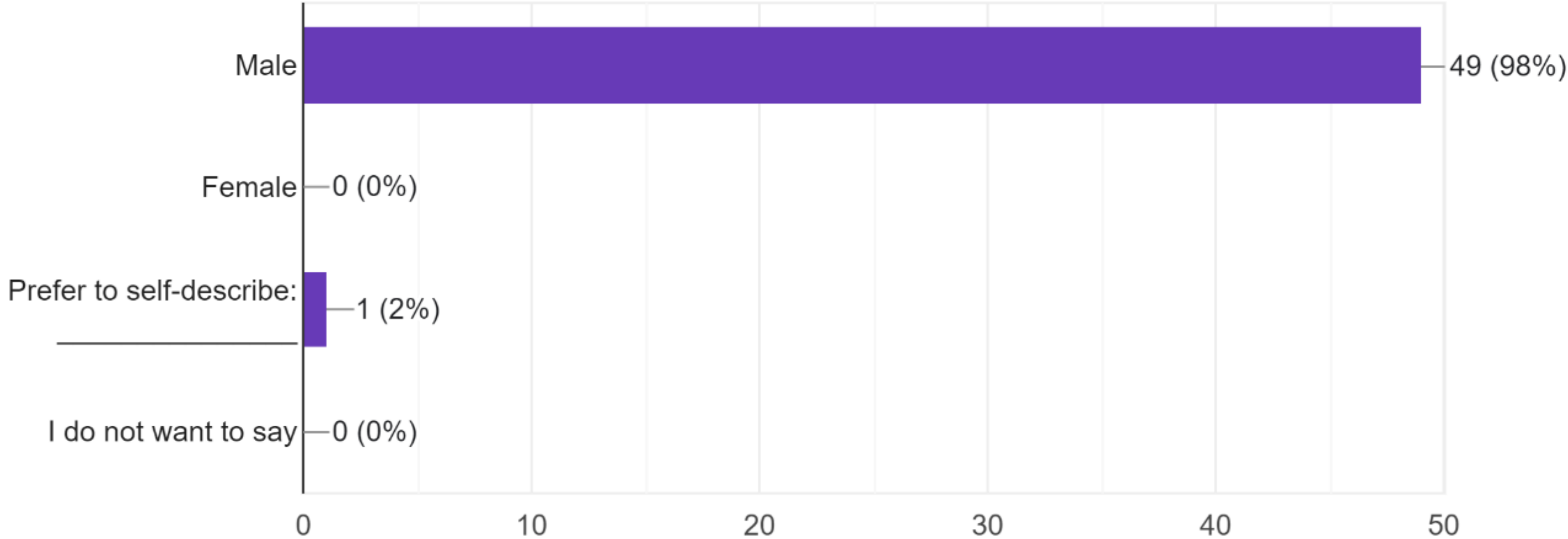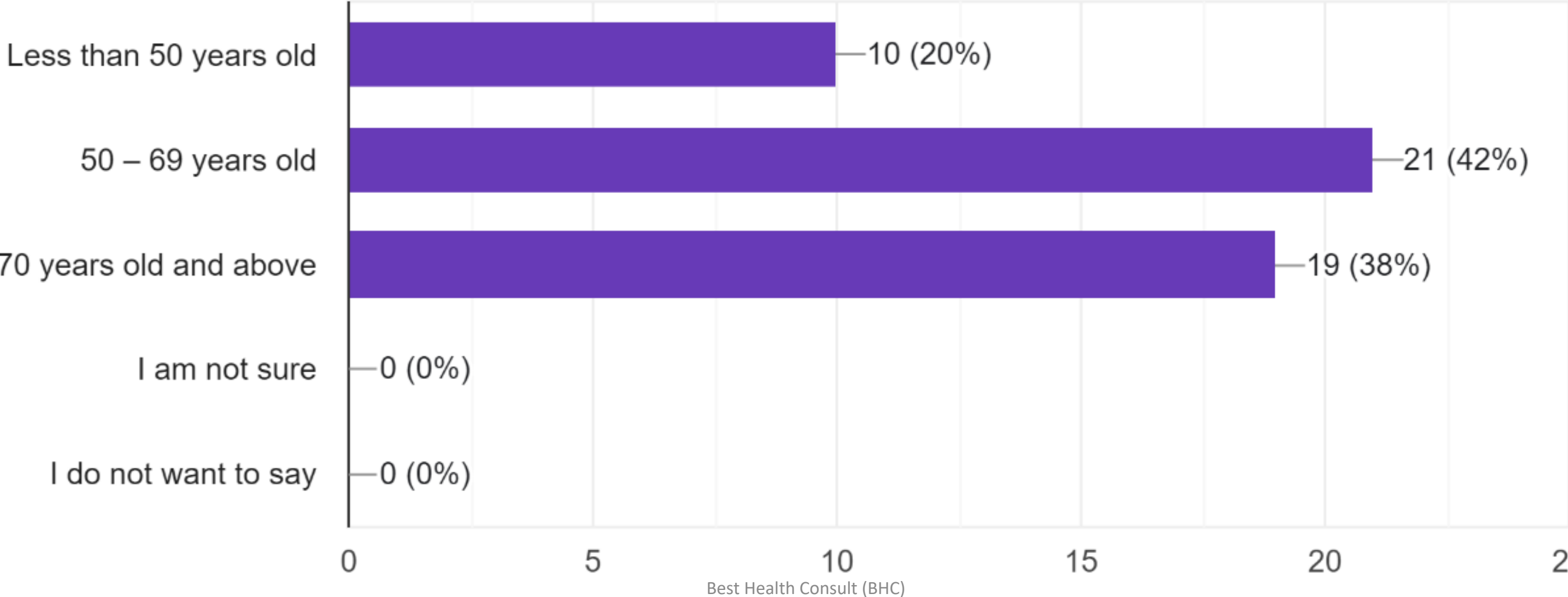
Education

Race and Ethnicity

White/Caucasian — 44 (86.3%)
American Indian and Alaska Na… — 1 (2%)
Black and African American — 2 (3.9%)
Asian — 0 (0%)
Pacific Islander/Native Hawaiian — 1 (2%)
Latino/a/x or Hispanic — 5 (9.8%)
Prefer to self-describe: _____ — 0 (0%)
I am not sure — 0 (0%)
I do not want to say — 1 (2%)

Best Health Consult (BHC)

Knowledge of Prostate and Prostate abnormalities

Legend (top left): Yes, No, Maybe, Not sure

98.1%
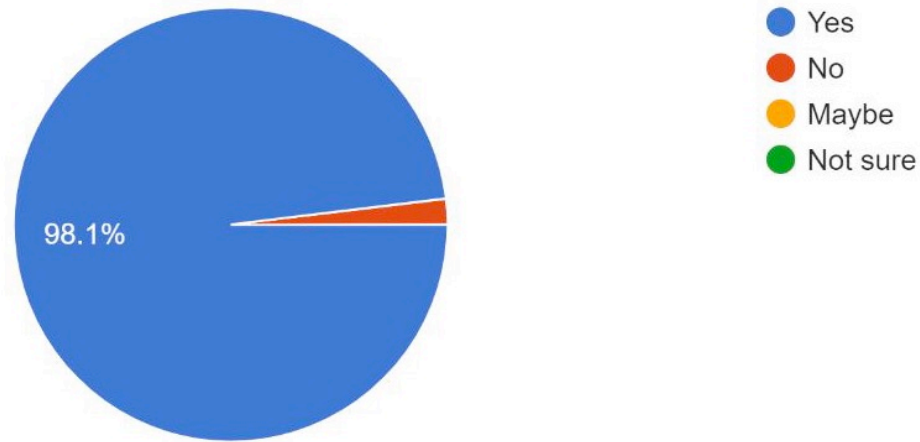
98% of respondents have heard of the prostate

Legend (top right): Yes, No, Maybe, Not sure

39.6%

13.2%

45.3%
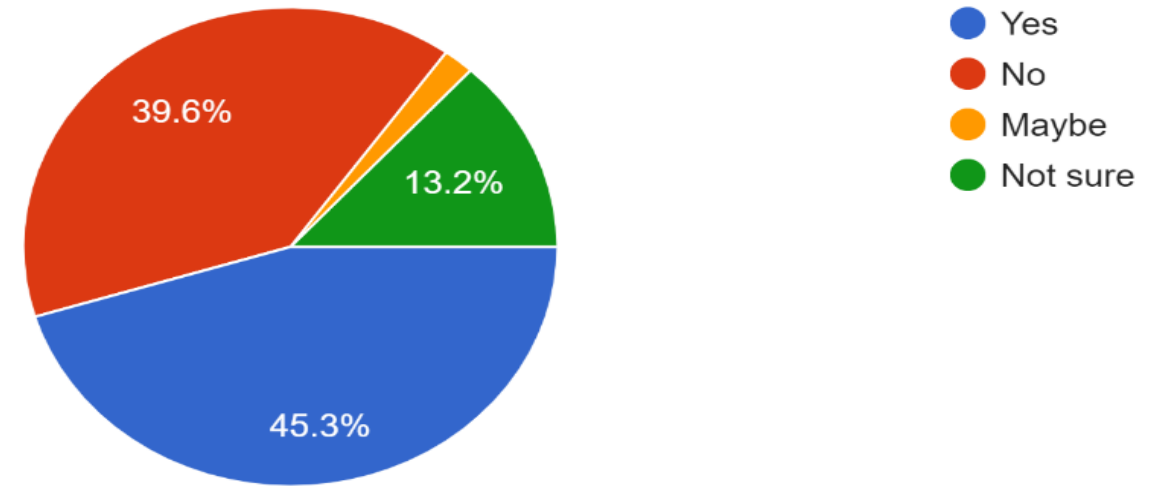
45% believe they are at risk of prostate cancer

Legend (bottom): Yes, No, Maybe, Not sure

15.1%

75.5%
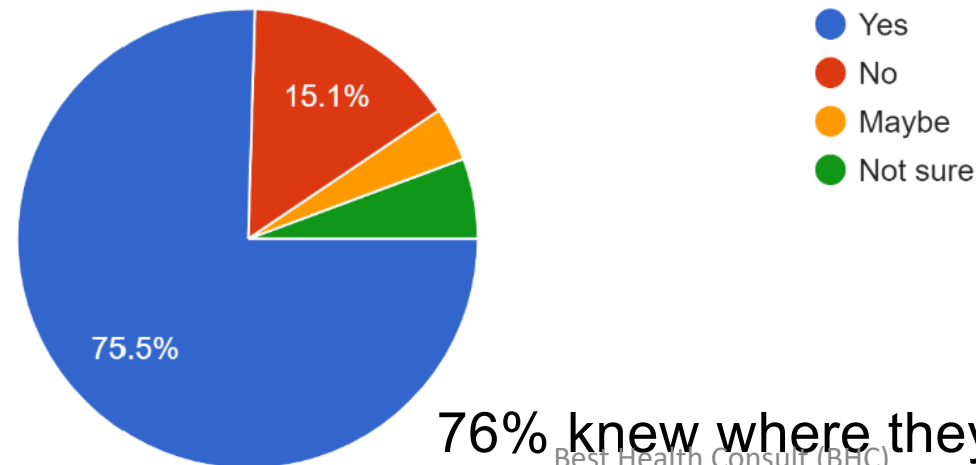
76% knew where they could go for screening for prostate cancer

Best Health Consult (BHC)

BHC

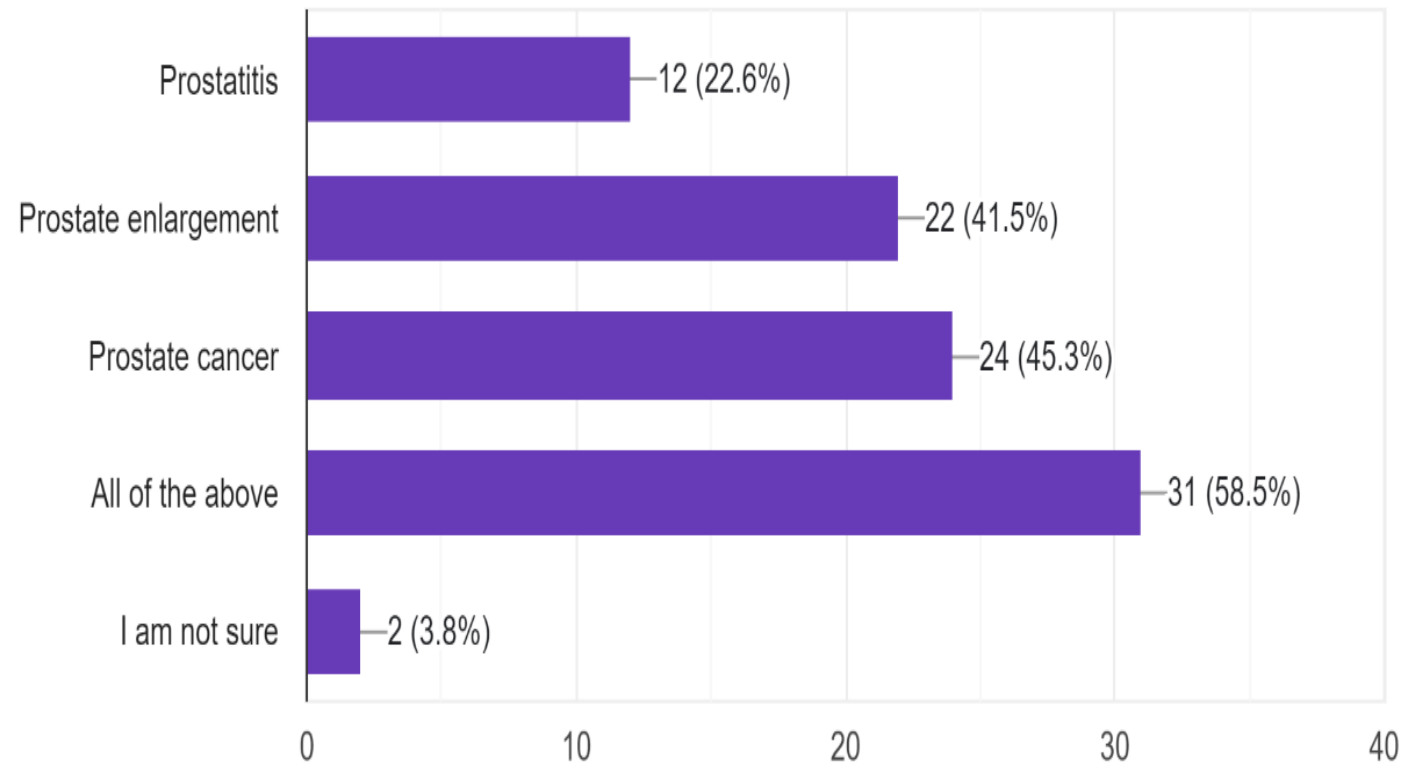# Knowledge of Prostate and Prostate abnormalities
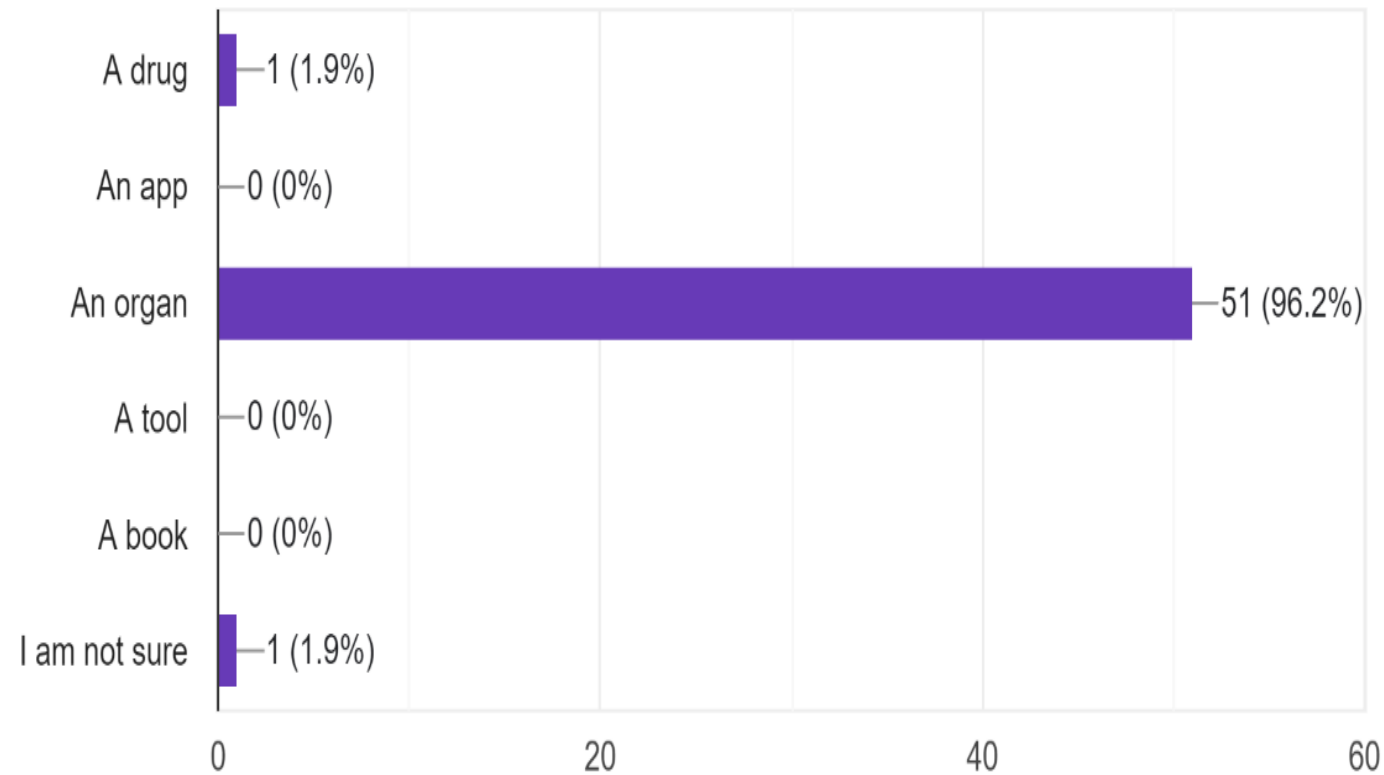
96% of respondents appropriately identified the prostate as an organ of the human body
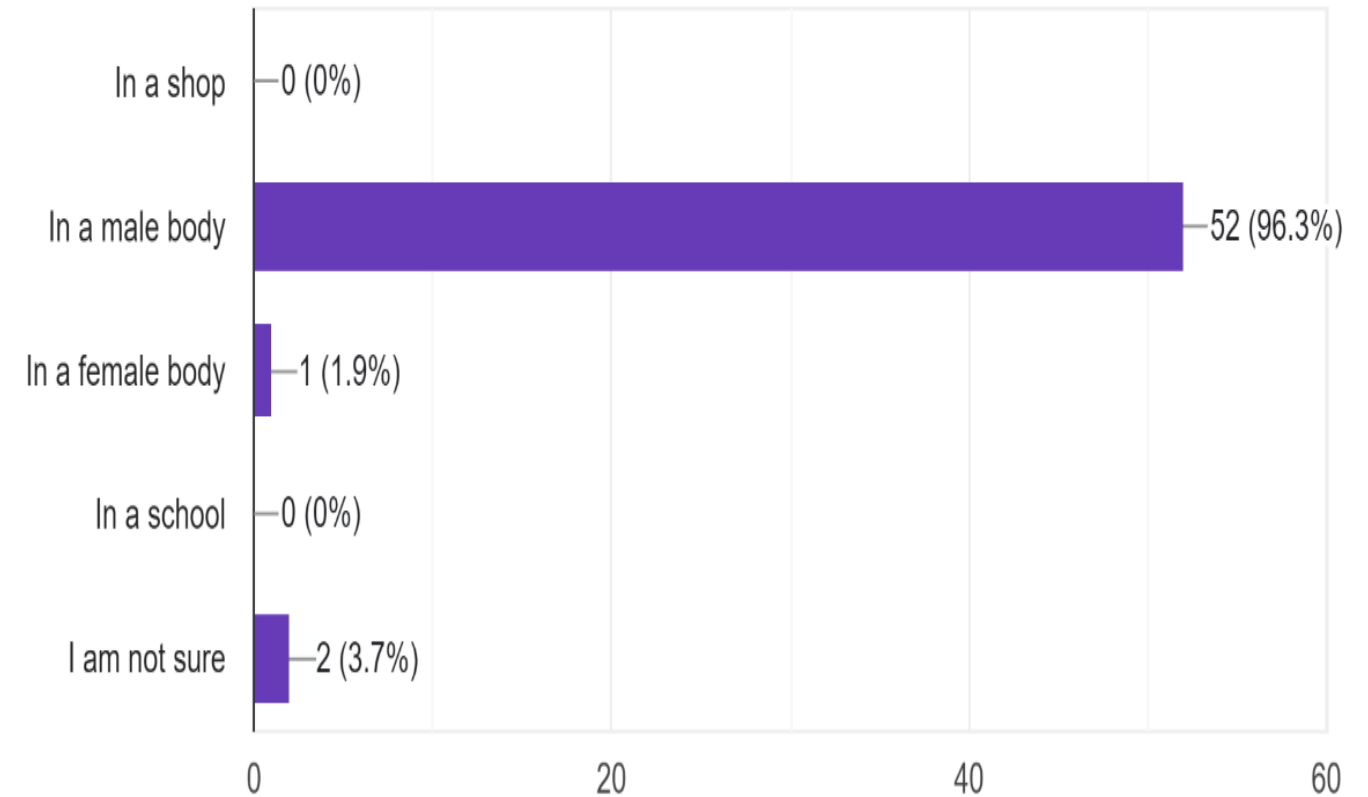
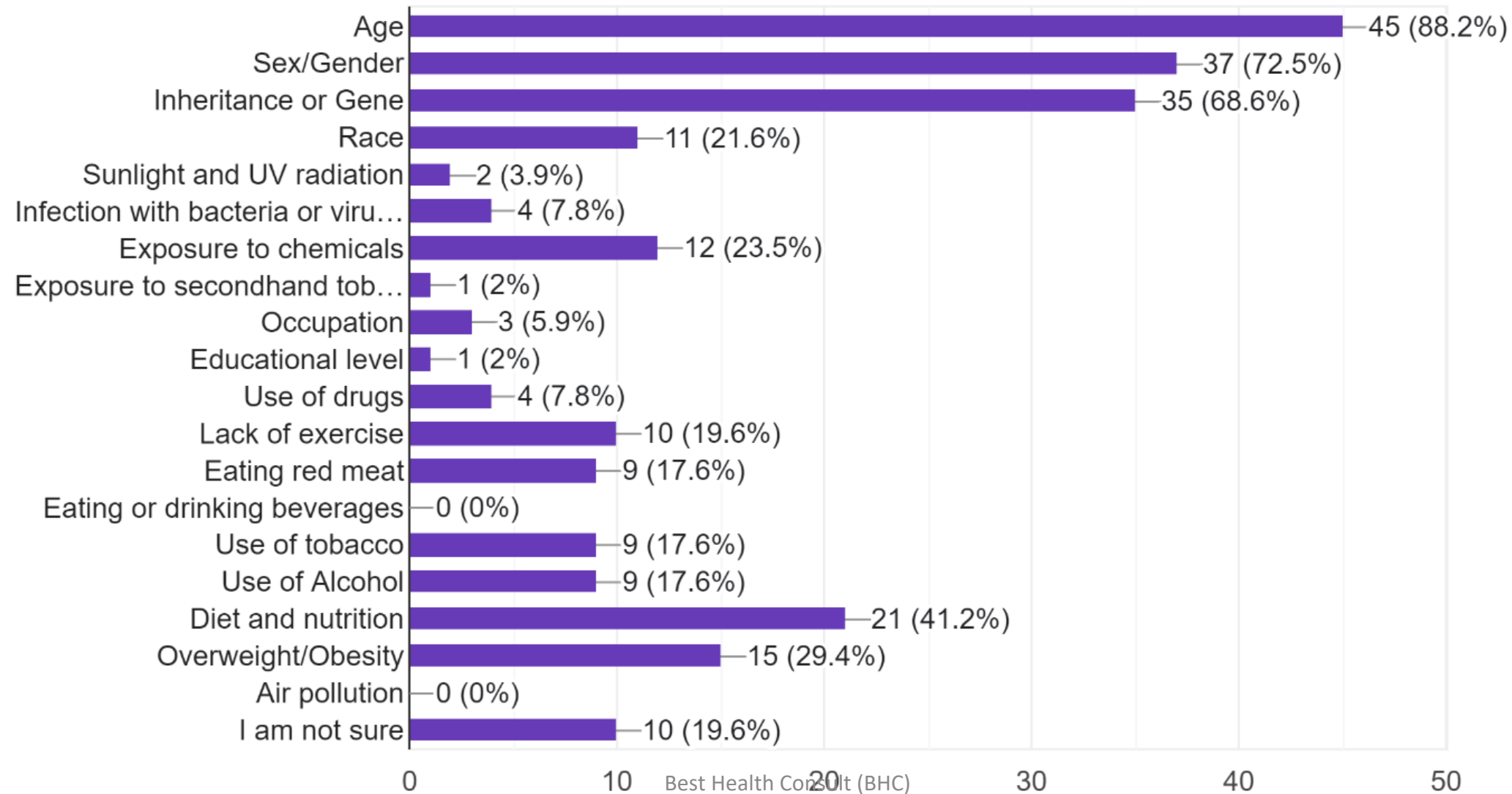96% correctly identified where the prostate is located – male body

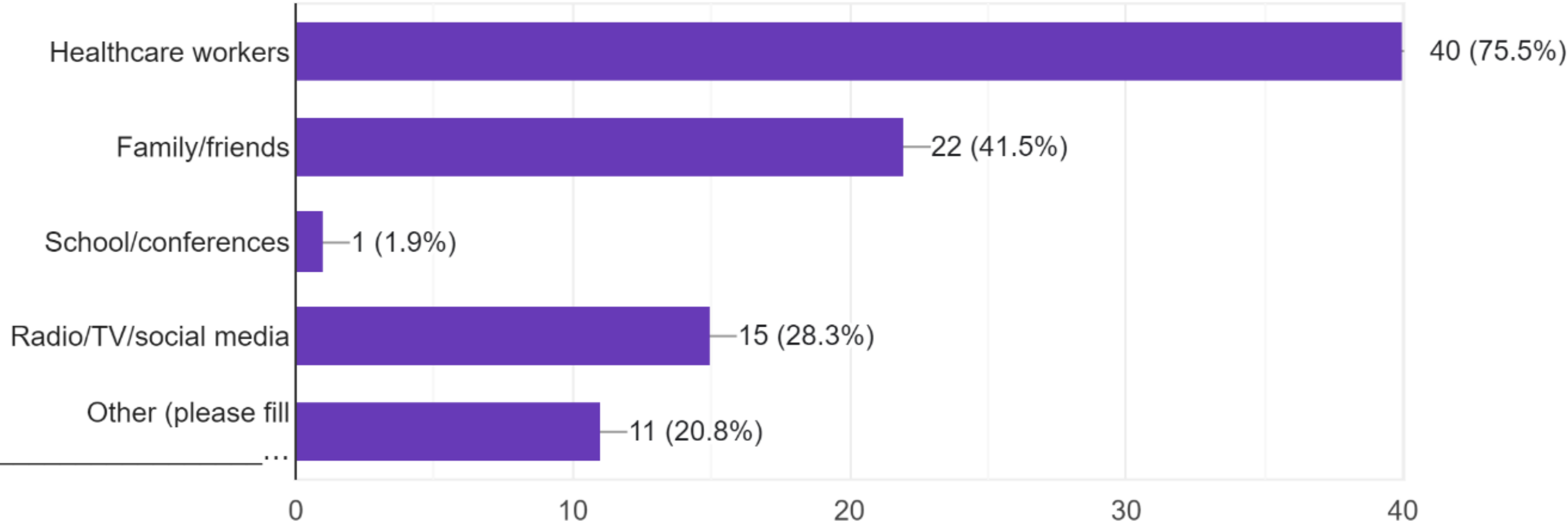# Knowledge of Prostate and Prostate abnormalities
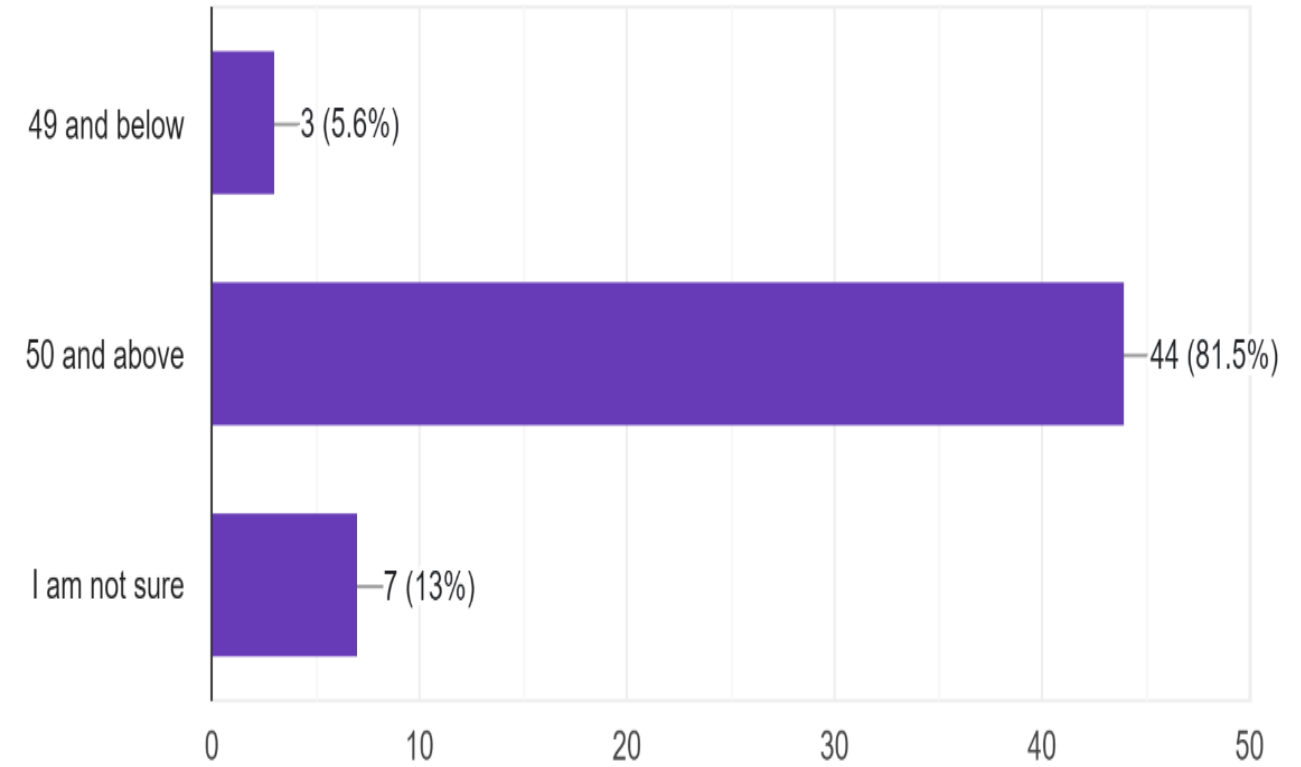
58% of the respondents knew the common diseases of the prostate

82% of respondents knew that prostate cancer is commoner among males 50 years and older
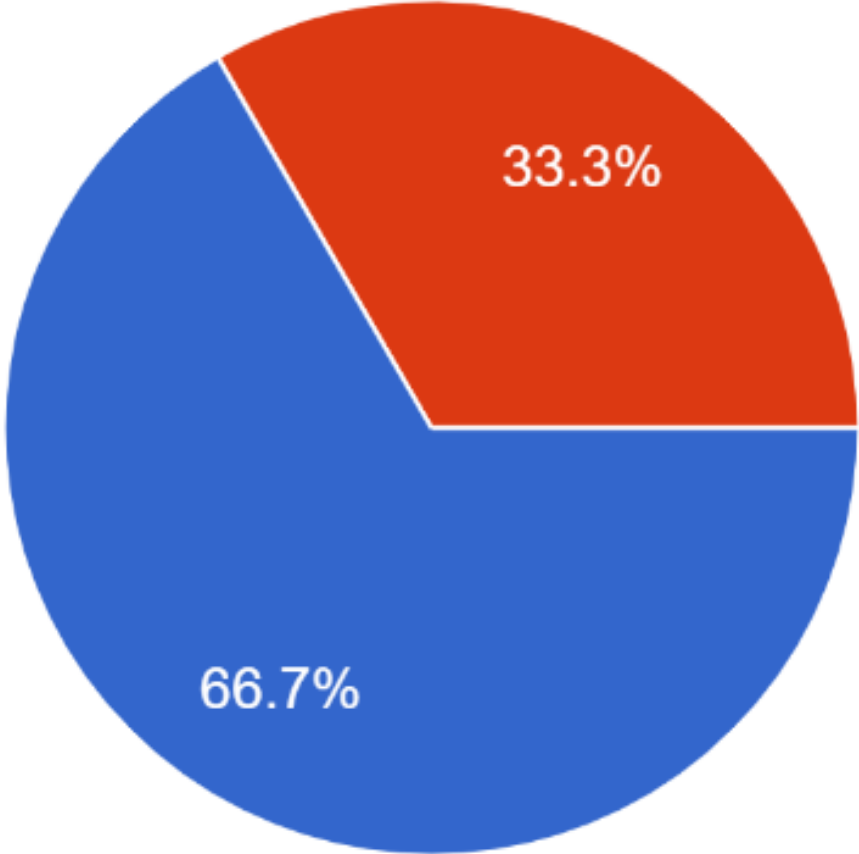
Best Health Consult (BHC)

Common Risk Factors Identified

Age — 45 (88.2%)
Sex/Gender — 37 (72.5%)
Inheritance or Gene — 35 (68.6%)
Race — 11 (21.6%)
Sunlight and UV radiation — 2 (3.9%)
Infection with bacteria or viru… — 4 (7.8%)
Exposure to chemicals — 12 (23.5%)
Exposure to secondhand tob… — 1 (2%)
Occupation — 3 (5.9%)
Educational level — 1 (2%)
Use of drugs — 4 (7.8%)
Lack of exercise — 10 (19.6%)
Eating red meat — 9 (17.6%)
Eating or drinking beverages — 0 (0%)
Use of tobacco — 9 (17.6%)
Use of Alcohol — 9 (17.6%)
Diet and nutrition — 21 (41.2%)
Overweight/Obesity — 15 (29.4%)
Air pollution — 0 (0%)
I am not sure — 10 (19.6%)

Best Health Consult (BHC)

BHC

Sources of Information

Healthcare workers — 40 (75.5%)
Family/friends — 22 (41.5%)
School/conferences — 1 (1.9%)
Radio/TV/social media — 15 (28.3%)
Other (please fill _____... — 11 (20.8%)

BHC

Screening for Prostate Cancer

Yes
No
Maybe
Not sure

33.3%

66.7%

BHC

Screening Results

Best Health Consult (BHC)
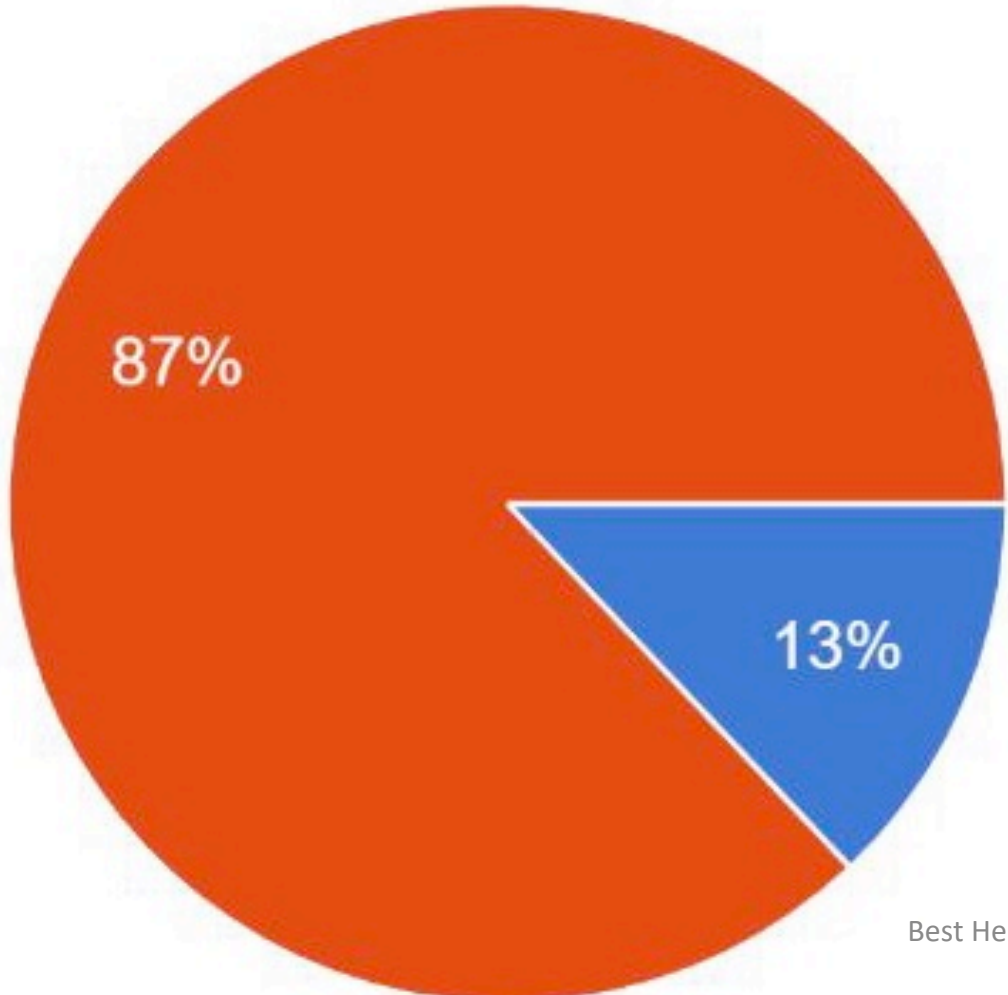
Current Habits to Reduce Cancer

Stopping or reducing tobacc… — 10 (19.6%)
Starting or increasing physic… — 30 (58.8%)
Preventing or treating bacter… — 4 (7.8%)
Eating more healthier diets — 32 (62.7%)
Reducing or stopping alcoho… — 17 (33.3%)
Reducing exposure to sunlig… — 4 (7.8%)
Reducing or maintaining hea… — 30 (58.8%)
Reducing or stopping eating… — 20 (39.2%)
Stopping or reducing eating… — 11 (21.6%)
Participating in a cancer scr… — 21 (41.2%)
Receiving vaccination again… — 0 (0%)
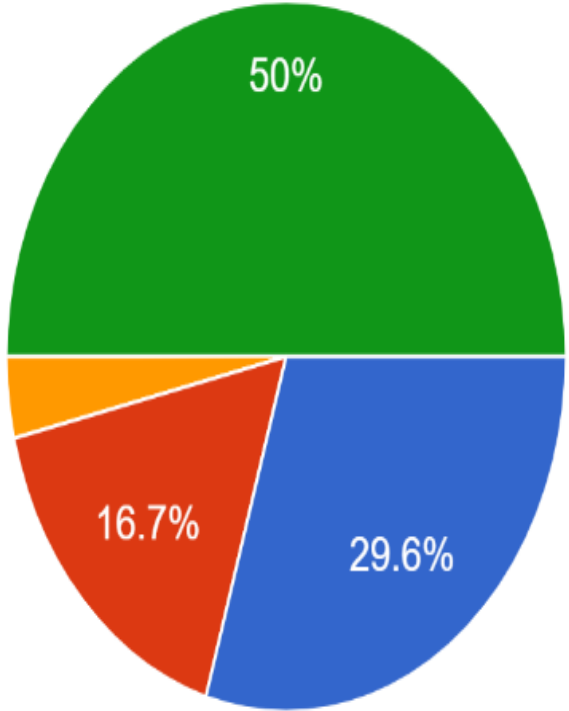Taking multivitamins — 25 (49%)
None of the above — 8 (15.7%)
I am not sure — 1 (2%)

Satisfaction with current control measures
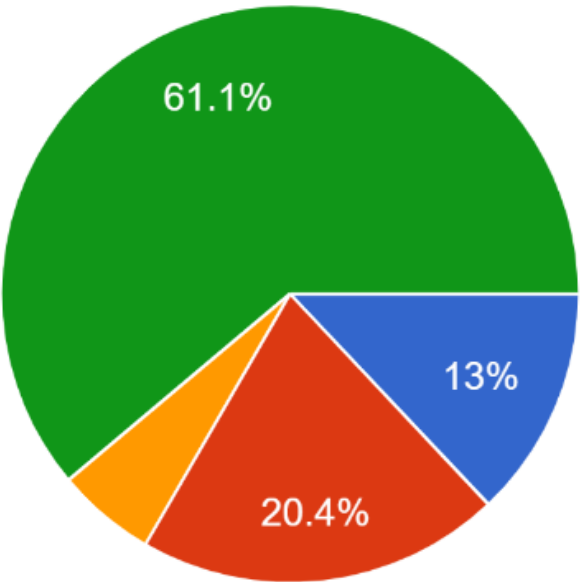
87% were either not sure or unsatisfied with governmental and societal programming as it relates to prostate cancer

78% of respondents were not sure that science and technology were doing enough to prevent, manage and or cure prostate cancer

Best Health Consult (BHC)

Discussions

- The findings of this study are in agreement with most global reports that prostate cancers are common in non-Hispanics and males above 45 years.

  - While Klamath Falls accounted for **2.0%** of all cancer cases in Oregon, it accounted for **2.9%** of cancer-related deaths.

- While Whites accounted for over **90%** of cancer cases in Oregon and Klamath Falls, they accounted for less than **75%** of deaths in Klamath Falls.

  - Similarly, while the American Indian or Alaska Native accounted for **1%** (Oregon) and **3%** (Klamath Falls), they accounted for 1% (Oregon), but **26.4%** of all cancer-related deaths in Klamath Falls.

- Prostate cancer is a killer disease and is the fifth most common cause of cancer death in Oregon, and the third in Klamath Falls. A

  - Among males in Klamath Falls, prostate cancer is the second commonest cause of cancer-mediated deaths.

  - While Klamath Falls accounted for **2.0%** of all prostate cancer cases in Oregon, it accounted **for 4.0%** of prostate cancer deaths.

BHC

Discussions

- The primary data revealed that knowledge of prostate cancer is high among respondents.

    - However, the findings may be different if less educated individuals and more Native Americans and African Americans were interviewed.

- We have a good opportunity to increase males' awareness of the risk of prostate cancer from 45% to over 70% as well as increase correct knowledge of what the prostate is to 100%.

    - We can do this by making schools and training institutions great places for health education and risk modification.

- With a 13% yield among those who were screened for prostate cancer, we can encourage prostate cancer screening among males over 50 years.

    - Greater yield may be obtained from those with related medical symptoms than for the general population.

- We can also develop programs that will help the over 30% of males who are not taking any steps to enroll in prostate (and other cancers) prevention programs like exercises, dietary management, risk modifications, etc.

- We need to get the government and scientific world to do more to improve the diagnosis, treatment and prognosis for prostate cancer.

BHC

Limitations

- Secondary data analysis has its known limitations which we noticed in this study.
- Our biggest limitation in primary data collection was the unwillingness of people to respond to our questionnaires.
- We were not able to reach our study sample size even though over 150 individuals were reached in different fora.
- But the findings are still relevant to the community studied.

BHC

Men's health matters and should be given equal priority

Recommendations

- Make Prostate cancer education and control an issue of public health importance in the County.
  - This will galvanize funding for the development, implementation and monitoring of a prostate cancer prevention and control program in the County.
- Add cancer enlightenment classes into Grades 9 – 12 and college students' curricula.
  - This will create early awareness, behavioral modifications, and involvement in screenings, diagnosis, and treatment of cancers with resultant better prognosis
- Partner with social, electronic, and print media towards community cancer enlightenment programs, education, and prevention activities.
  - This will give scale and scope to the cancer control program.
- Fund profit and non-profit organizations to research earlier diagnostic and better treatment algorithms for cancer.
  - Studies have shown that early diagnosis improves prognosis, quality of life, possibility of cure, and length of life lived post-diagnosis.
  - Better treatment algorithms with minimal side effects will improve quality of life and adherence to treatment.
- Develop tailored cancer prevention programs to address prostate cancer in Klamath Falls.

BHC

Project Team

- ***Project team***

1. Dr. Obinna Oleribe

2. Rebecca Jackson

3. Roland Burkhead

4. Mike Bonomo

5. Dr. Okey Nwanyanwu

6. Delight Osita

- **And several Community Partners**

Thank you!