



# African Seventh-day Adventist Health Study

An Institutional Research by the School of Postgraduate Studies,  
Adventist University of Africa, Nairobi, Kenya



## Phase One

# African Seventh-day Adventist Health Study (ASDAHS)

Institutional Research of the School of Postgraduate Studies,  
Adventist University of Africa, Nairobi, Kenya

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# CONSULTANTS, ADVISERS, SPONSORS

**Dr. Peter Landless**  
(Health Ministries Director, GC)



“The African Seventh-day Adventist Health Study (ASDAHS) has been structured to provide real-time data on the health of Adventists in Africa. This unique study will inform best practices and wholistic interventions to combat non-communicable diseases(NCDs) on the Continent, and positively impact the physical, mental, spiritual, social and emotional wellbeing of many. Congratulations! To God be the glory.”

“The African Seventh-day Adventist Health Study is a landmark piece of research, both for what it reveals about the Adventist Church in Africa and in that it was conducted by African researchers. Its findings need to be taken into account by church leaders across Africa and by researchers.”



**Dr. David Trim**  
(Director of Archives, Statistics & Research, GC)

**Dr. Debert Baker**  
(Former AUA Vice-Chancellor)



“The ASDAHS is a priceless gift and a valuable tool to everyone interested in knowing more about health challenges and opportunities in Africa. The research provides insights into the secrets of preventive and curative wellness habits and it unveils secrets to a more abundant life. Read and grow wise.”

“Pure air, sunlight, abstemiousness, rest, exercise, proper diet, the use of water, trust in divine power—these are the true remedies. Every person should have a knowledge of nature's remedial agencies and how to apply them. It is essential both to understand the principles involved in the treatment of the sick and to have a practical training that will enable one rightly to use this knowledge. - EGW. MH 127”



**Dr Ron Smith**  
President, The Southern Union Conference of Seventh-day Adventists, Atlanta, Georgia, US  
(Major Supporter)

**Dr. David Williams**  
(Professor, Harvard University)



“This trail-blazing research study in the continent of Africa will be a blessing to the Church. This outstanding historic study will positively inform the strategies of health promotion by church leaders in Africa and beyond. The findings provide important information about disease trends and risk factors but more importantly about health and wellness strategies that highlight the advantages of the Adventist lifestyle. I congratulate the research investigators for this trend setting contribution.”

# CONSULTANTS, ADVISERS, SPONSORS

“This is a historic research paper focusing on the African Seventh-day Adventist Health Study. The results of this original research are encouraging in particular for those who practice the healthy lifestyle of the Adventist Church. These findings should be rich resources and I strongly recommend to the church leaders, pastors and church members to read and practice them. God cares for our bodies which He created perfectly so we should protect it for service to Him and humanity.”



**Dr. Blasious Ruguri**  
(President, East-Central Africa  
Division of the Seventh-day  
Adventists)

**Dr. Solomon Maphosa**  
(President, Southern Africa-Indian  
Ocean Division of the Seventh-day  
Adventists)



“This ground breaking work is really mind blowing. I have always looked forward to a time when such studies will be done in the Church in Africa and now it is actually in my hands. Praise the Lord.”

“The African Seventh-day Adventist Healthy Study is very important for the church and the continent of Africa as a whole. As the Church grows rapidly, this historic research study will contribute immensely in positioning the Church on health education based on real data. Congratulations!”



**Dr. Elie Weick-Dido**  
(President, West-Central  
Africa Division of the  
Seventh-day Adventists)

**Dr. Vincent Injety**  
(Vice-Chancellor, Adventist  
University of Africa)



“This is the first ever large-scale continent-wide health study conducted for the African SDA Church. Such a study is much needed which assesses the health status, practices and attitude to the SDA health message. The researchers have done an incisive investigation which provides understanding and profound insight in maintaining good health and longevity in the African context.”

”

Health is a treasure. Of all temporal possessions it is the most precious.

ELLEN G. WHITE  
COUNSELS ON DIET AND FOODS  
PAGE 20

”

To keep the body in a healthy condition, in order that all parts of the living machinery may act harmoniously, should be a study of our life. The children of God cannot glorify Him with sickly bodies or dwarfed minds.

ELLEN G. WHITE  
COUNSELS ON DIET AND FOODS  
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# ACRONYMS AND DEFINITIONS

Air	: The invisible gaseous substance surrounding the earth, a mixture mainly of oxygen and nitrogen
Anxiety	: A feeling of worry, nervousness, or unease about something with an uncertain outcome
Arthritis	: A painful inflammation and stiffness of the joints
ASDAHS	: African Seventh-day Adventist Health Study
Asthma	: A respiratory condition marked by attacks of spasm in the bronchi of the lungs, causing difficulty in breathing
AUA	: Adventist University of Africa
Back pain	: A discomfort or suffering associated with an injury or some other condition of the back or the posterior behind portion of the body that extends from the shoulders to the hips
BMI	: Body Mass Index
Cancer	: The name for a group of more than 100 diseases in which cells begin to grow out of control
CELEBRATIONS	: An acronym for twelve healthful living principles; Choice, Exercise, Liquid, Environment, Belief, Rest, Air, Temperance, Integrity, Optimism, Nutrition, and Social Support
Choice	: An act of choosing between two or more options
Chronic pain	: A long standing pain that persists beyond the usual recovery period or occurs along with a chronic health condition. Chronic pain may be “on” and “off” or continuous. It may affect people to the point that they can’t work, eat properly, take part in physical activity, or enjoy life
COPD	: Chronic Obstructive Pulmonary Disease
Depression	: A mood or mental disorder that involves a persistent feeling of sadness and loss of interest
Diabetes mellitus	: A condition in which the body’s ability to produce or respond to the hormone insulin is impaired, resulting in abnormal metabolism of carbohydrates and elevated levels of glucose in the blood
SID	: Southern Africa-Indian Ocean Division
ECD	: East-Central Africa Division
Emphysema	: A condition in which the air sacs of the lungs are damaged and enlarged causing breathlessness
Environment	: The natural world, as a whole or in a particular geographical area, especially as affected by human activity
Epilepsy	: A neurological disorder marked by sudden recurrent episodes of sensory disturbance,

	: loss of consciousness or convulsion associated with abnormal electrical activity in the brain
Exercise	: A type of physical activity that is planned, structured, repetitive, and purposive in maintaining physical fitness
HIV/AIDS	: HIV (human immunodeficiency virus) is a virus that attacks the body's immune system. If HIV is not treated, it can lead to AIDS (acquired immunodeficiency syndrome) group of diseases
Hopelessness	: Hopelessness is an emotion characterized by a lack of hope, optimism, and passion. An individual who feels hopeless may often have no expectation of future improvement or success
Integrity	: The quality of being honest and having strong moral principles
Keeping promise	: To fulfill or be faithful to a promise made
Lie	: An untruthful assertion
Liquid/water	: A substance that is neither a solid nor a gas
Medical doctor (MD)	: A general term for a person who has earned a medical degree
Medicine man	: These are traditional African healers with a mixture of western modern healing
Multiple sclerosis	: A chronic, typically progressive disease involving damage to the sheaths of nerve cells in the brain and spinal cord. Symptoms may include numbness, impairment of speech and of muscular coordination, blurred vision, and severe fatigue
Nutrition	: The process of taking in food and using it for growth, metabolism, and repair
Optimism	: Hopefulness and confidence about the future or the success of something
Osteoporosis	: Having less bone mass and strength. This condition often develops without any symptoms or pain, and it is usually not discovered until the weakened bones cause painful fractures
Pastor	: A pastor is the leader of a Christian congregation who also gives advice and counsel to people from the community or congregation
Peptic ulcer disease	: The disease occurs when open sores, or ulcers, form in the stomach or first part of the small intestine
Plant-based diet	: Diets focusing on mostly plants, such as fruits, vegetables, seeds, whole grains, legumes and nuts
Pneumonia	: An infection that inflames the air sacs in one or both lungs. The air sacs may be filled with fluid or pus (purulent material)
Pulmonary Tuberculosis	: An infectious disease of the lungs caused by a bacterium called <i>Mycobacterium tuberculosis</i>
Rest	: Cease work or movement in order to relax, sleep, or recover strength
Restlessness	: Feeling of being unable to calm your mind
Sadness	: Sadness describes the range of emotional states one can experience containing everything from mild disappointment to extreme despair
Seizures	: A burst of uncontrolled electrical activity between brain cells that causes temporary abnormalities in muscle tone or movements (stiffness, twitching or limpness), behaviors, sensations or states of awareness

Self-harm	: The act of hurting oneself as a way of dealing with very difficult feelings, painful memories or overwhelming situations and experiences
Social support	: Having friends and other people, including family, to turn to in times of need or crisis to give positive self-image
Spiritual healers	: Spiritual healers in the African context consist primarily of priest or priestesses, cult-healers, and Christian faith healers. These healers claim to have ancestral deities as their major source of power
Stroke	: A medical condition that occurs when the blood supply to part of the brain is interrupted or reduced, preventing brain tissue from getting oxygen and nutrients. Brain cells begin to die in minutes
Suicide	: Suicide is the act of intentionally causing one's own death
Temperance	: Total abstinence from anything that is injurious to the body and judicious use of the substances that are good for the body
WAD	: West-Central Africa Division

## PRINCIPAL INVESTIGATORS

**Daniel Ganu, DrPH**  
Principal Investigator (PI)



Daniel Ganu, DrPH, is a Professor of Public Health at the Adventist University of Africa, Nairobi, Kenya. He has published research articles in international peer-reviewed journals. His research interests are in children's health, drug and substance abuse, spiritual health, mental health, and health promotion.

Susan M. Baker, DSc, PT, is a physical therapist and educator who was the former Director of Research and Faculty Development and an Associate Professor in Public Health at the Adventist University of Africa, Nairobi, Kenya. She has worked in various health-care sectors, and public and private universities. Her research interests are rehabilitation, SOTL, and health education/promotion.



**Susan M. Baker, DSc, PT**  
CO-Principal Investigator  
(Co-PI)

**Josephine Ganu, PhD**  
CO-Principal Investigator  
(Co-PI)



Josephine Ganu, PhD, is an Associate Professor of Management and currently serves as the Director of Research and Grants at the Adventist University of Africa, Nairobi, Kenya. Her current research interest includes employees' health and wellbeing, corporate social responsibility, organizational behavior, and work place spirituality.

# INTRODUCTION

The Seventh-day Adventist Church has conducted several health research studies showing the impact and evidence-based outcomes of the Church's health principles. However, these studies have been undertaken primarily in North America and Europe. Findings from these studies indicate that adherence to the SDA health teachings appears to positively correlate to health and decreased disease, decreased incidence of non-communicable disease, particularly for hypertension, metabolic syndrome, diabetes, and some types of cancer and decreased death rate.

Public health professionals report that there is a lack of epidemiological data to guide strategies for health education and promotion. As Oni observed in an insightful article entitled *Africa's Health Won't Improve Without Reliable Data and Collaboration*:

*Africa has a data problem. This is true in many sectors. When it comes to health there's both a lack of basic population data about disease and an absence of information about what impact, if any, interventions...are having. Simply put, researchers often don't know who is sick or what people are being exposed to that, if addressed, could prevent disease and improve health (Oni, 2016).*

As has been shown in non-African health studies among SDAs, the health teachings of the Church appear to impact health status and outcomes. Yet, no significant research has been done to show whether or not the health teachings of the Church have made any difference in the health, mortality and morbidity of African SDAs. There is an important need for this epidemiological data because of the health challenges and needs that exist in Africa.

Consequently, in 2017, the African SDA Health Study (ASDAHS) was launched by the School of Postgraduate Studies at the Adventist University of Africa to explore the general health status of the church members in Africa.

## Phases of the Study

The African SDA Health Study is divided into three phases. Phase One (2017-2020) aimed to provide baseline data related to the health status, knowledge, practice, and attitudes of African SDAs regarding the health teachings of the Church, using the CELEBRATIONS acronym for health education. The General Conference Health Ministries Department developed the CELEBRATIONS acronym to provide structure for presenting a balanced, wholistic approach to Christ-Centered health and wellness.

Based on the baseline data collected in the initial phase, Phase Two (2021-2025) will be an intervention study, and it will be based on the results of phase one. A recommended research-based intervention program will be implemented in the three African Divisions for evaluation. The purpose is to produce positive behaviour changes and improve the general health status of SDAs in Africa. Phase Three (2026-2030) will monitor and evaluate the intervention program implemented in phase two.

 ... to provide structure for presenting a balanced, wholistic approach to Christ-Centered health and wellness. 

The main purpose of this study is to fill gaps in population health data and better understand how, or if, knowledge of health teachings informs health behaviour practice. While we will be looking at SDAs in Africa, the implications are transferable for non-SDAs and the general health of the populations on the continent, particularly in the area of NCDs.

# ASDAHS PHASE ONE

The first phase of the study was completed in January 2021. Out of the 21,600 questionnaires distributed, a total of 18,944 were retrieved. However, 3,510 questionnaires were discarded because more than 25% of the responses required were not provided. Therefore, 15,434 questionnaires (71%) were used for the data analysis presented below in Tables and Figures.

## Participation by Divisions

All the three Divisions in Africa participated in the study, as indicated in Figure 1.

Figure 1 shows percentage of participants of the health study in the three Divisions. The East-Central Africa Division (ECD) contributed the highest participation at 46.40% followed by the West Central Africa Division (WAD) at 41.70% and Southern Africa-Indian Ocean Division (SID) at 11.90%.

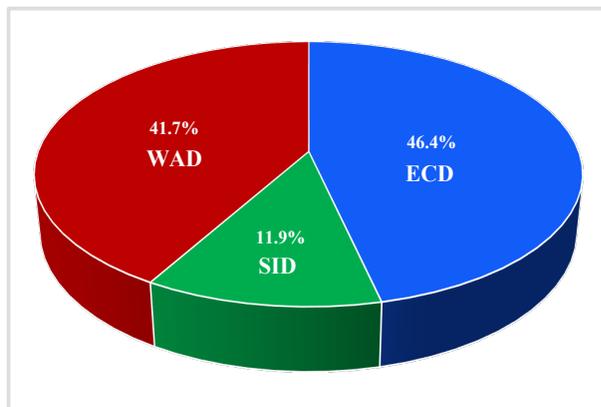


Figure 1: Participation by Divisions

## Participation by Unions

Tables 1-3 show participation by Unions in each Division. There were thirteen unions in ECD at the time of the study, and out of these thirteen unions, eight participated fully (see Table 1). Data could not be collected from some countries/unions due to civil/political conflicts that were going on during the data gathering. Table 1 also shows that 7,159 (46.4%) church members of ECD participated in the

study. Table 2 shows that six Unions participated in SID. There were also thirteen unions in SID at the time of the study. The total number of participants contributed by SID was 1,832 making 11.9% of the total participants of the study.

In WAD (see Table 3), In WAD, seven Unions out of the ten Unions participated with a total number of 6,443 comprising of 41.70% total participation contributed by WAD to the study.

Table 1: East-Central Africa Division (ECD)

Unions	Frequency	Percent
East Kenya Union Conference	1,261	17.6
Ethiopian Union Mission	779	10.9
North East Congo Union Mission	1,153	16.1
Northern Tanzania Union Conference	784	11.0
Rwanda Union Mission	1,124	15.7
Southern Tanzania Union Mission	62	0.9
West Kenya Union Conference	878	12.3
South Sudan Attached Territory	1,118	15.6
Total	7,159	100.0

Table 2: Southern Africa-Indian Ocean Division (SID)

Unions	Frequency	Percent
North-Eastern Angola Union Mission	203	11.1
Malawi Union Conference	524	28.6
Mozambique Union Mission	451	24.6
Northern Zambia Union Conference	294	16.0
Zimbabwe Central Union Conference	274	15.0
Zimbabwe East Union Conference	86	4.7
Total	1,832	100.0

Table 3: West-Central Africa Division (WAD)

Unions	Frequency	Percent
Central African Union Mission	281	4.4
Eastern Nigeria Union Conference	883	13.7
Eastern Sahel Union Mission	503	7.8
Southern Ghana Union Conference	1009	15.7
Northern Nigeria Union Conference	1097	17.0
Northern Ghana Union Mission	1256	19.5
Western Nigeria Union Conference	1414	21.9
Total	6443	100.0

### General Demographic Characteristics of the Respondents

Table 4 gives a general overview of the socio-demographic profile of the Seventh-day Adventist Church in Africa. The male participation was slightly higher (50.6%) than the female participants (41.4%). The young adult age of 18-30 years composed the highest age range (46.2%) of the study. The majority of the participants (46%) were single, and majority also had attained primary and secondary education (50.6%). More than 48% of the participants were employed during the time of the study.

Table 4: General Characteristics of Respondents

Demographics	Item	Frequency	Percentage
Gender	Male	7817	50.6
	Female	6383	41.4
	Missing	1234	8.0
	<b>TOTAL</b>	<b>15434</b>	<b>100</b>
Age	18-30 years	7130	46.2
	31-50 years	5220	33.9
	51 and older	2064	13.4
	Missing	1020	6.6
	<b>TOTAL</b>	<b>15434</b>	<b>100.0</b>
Marital status	Single	7105	46.0
	Married	6626	42.9
	Separated	252	1.6
	Divorced	142	.9
	Widow/widower	469	3.0
	Missing	840	5.4
	<b>TOTAL</b>	<b>15434</b>	<b>100</b>
Educational attainment	No formal education	456	3.0
	Primary/Secondary	7803	50.6
	Bachelor/Professional degree	4679	30.4
	Postgraduate degree	1112	7.2
	Missing	1384	8.9
	<b>TOTAL</b>	<b>15434</b>	<b>100</b>
Employment status	Employed	7460	48.4
	Unemployed	2399	15.6
	Student	4087	26.5
	Missing	1488	9.6
	<b>TOTAL</b>	<b>15434</b>	<b>100</b>



### Knowledge of SDA Health Principles

Table 5 presents the extent to which SDAs in Africa know the health teachings of the Church as denoted by the CELEBRATIONS health principles. The results show that the church members are knowledgeable of the SDA health message. Thus, the overall mean score of 3.94 on the 5-point Likert Scale (SD = 0.58) is above average. However, a careful look at the individual items shows that the respondents may know more about air, liquids, and choices than other issues such as optimism, temperance, and social support.

Table 5: Level of Knowledge of the Health Principles of the Church Using CELEBRATIONS

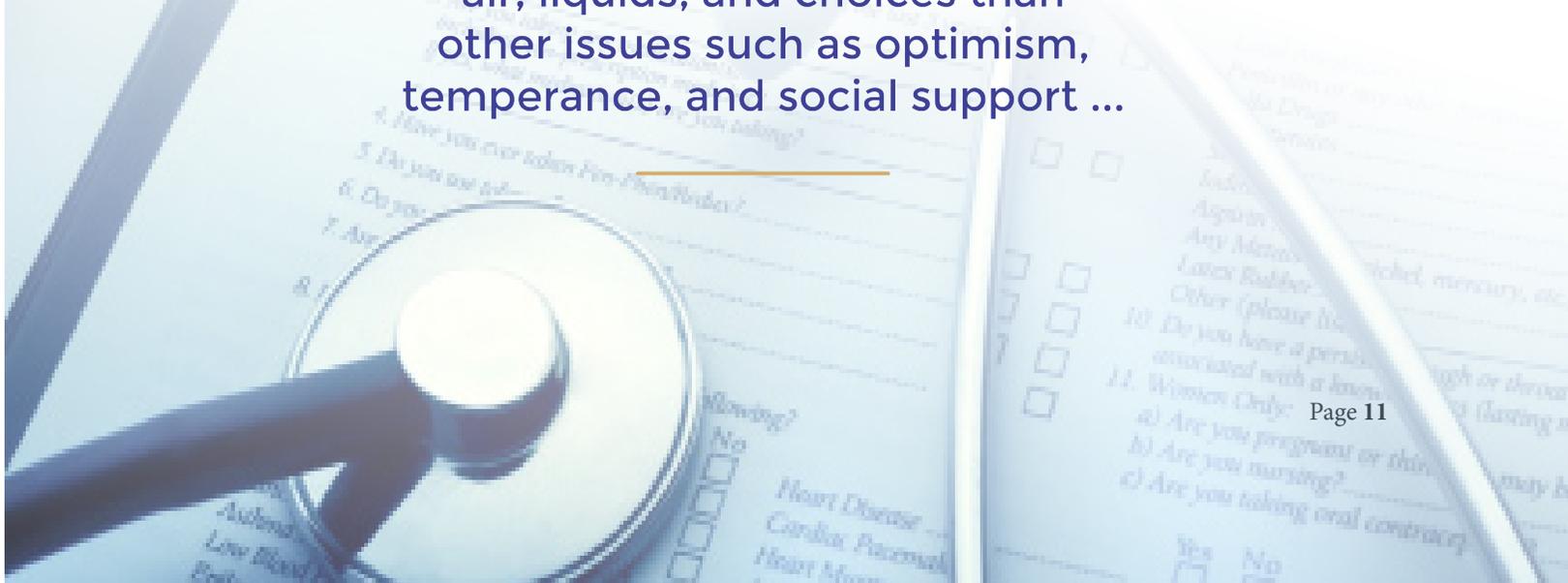
Item	N	Mean	SD	Interpretation
Knowledge about Choices	15304	4.10	0.63	Above Average
Knowledge about Exercise	15301	4.01	0.61	Above Average
Knowledge about Liquids	15372	4.38	0.61	Excellent
Knowledge about Environment	15299	3.98	0.60	Above Average
Knowledge about Belief	15335	4.02	0.54	Above Average
Knowledge about Rest	15237	3.84	0.59	Above Average
Knowledge about Air	15375	4.19	0.59	Above Average
Knowledge about Temperance	15258	3.43	0.41	Above Average
Knowledge about Integrity	15279	3.94	0.59	Above Average
Knowledge about Optimism	15138	3.69	0.64	Above Average
Knowledge about Nutrition	15335	3.91	0.59	Above Average
Knowledge about Social Support	15225	3.80	0.55	Above Average
<b>Overall Mean</b>		<b>3.94</b>	<b>0.58</b>	<b>Above Average</b>

#### Interpretation of Mean Scores:

1.00-1.79 = Poor | 1.80-2.59 = Below Average | 2.60-3.39 = Average | 3.40-4.19 = Above Average  
 4.20-5.00 = Excellent



... a careful look at the individual items show that the respondents know more about air, liquids, and choices than other issues such as optimism, temperance, and social support ...



### Attitude Towards SDA Health Principles

Equally, church members have a positive to an extremely positive attitude to the health message as shown in Table 6. The overall mean score of 3.99 on a 5-point Likert scale (SD = 0.72) connotes a positive attitude. Similar to results in knowledge, variation existed between CELEBRATIONS health principles with slightly larger differences in several areas.

Table 6: Attitude Towards the Health Principles of the Church Using CELEBRATIONS

Item	N	Mean	SD	Interpretation
Attitude toward Choices	15029	4.27	0.72	Extremely positive
Attitude toward Exercise	15018	4.05	0.76	Positive
Attitude toward Liquids	14999	4.22	0.71	Extremely positive
Attitude toward Environment	14982	4.15	0.70	Positive
Attitude toward Belief	14967	4.29	0.68	Extremely positive
Attitude toward Rest	14968	4.20	0.70	Extremely positive
Attitude toward Air	14936	4.19	0.70	Positive
Attitude toward Temperance	14903	4.13	0.72	Positive
Attitude toward Integrity	14878	3.10	0.74	Neutral
Attitude toward Optimism	14857	4.06	0.72	Positive
Attitude toward Nutrition	14856	3.09	0.75	Neutral
Attitude toward Social Support	14962	4.16	0.70	Positive
<b>Overall Mean</b>		<b>3.99</b>	<b>0.72</b>	<b>Positive</b>

#### Interpretation of Mean Scores:

11.00-1.79 = Extremely negative | 1.80-2.59 = Negative | 2.60-3.39 = Neutral | 3.40- 4.19 = Positive  
4.20-5.00 = Extremely positive

### Practice of SDA Health Principles

Table 7 shows that the overall mean score of 3.61 on a 5-point Likert Scale (SD = 0.73) is good. However, this is relatively low when compared to the respondents' level of knowledge and attitude. Thus, they are not putting their knowledge and attitude to full practice. Knowledge-Attitude-Practice (KAP) model is a common method for understanding and analysing human responses in health studies.

Table 7: Practice of the Health Principles of the Church Using CELEBRATIONS

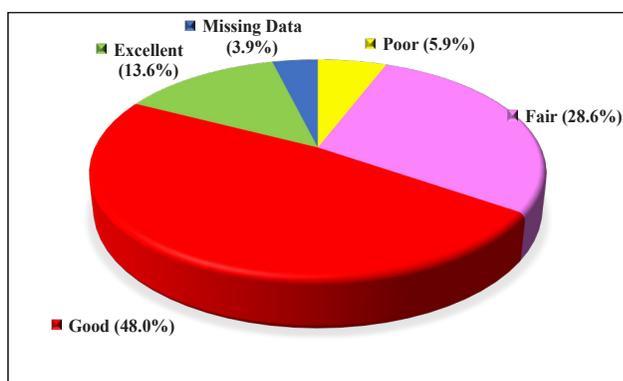
Item	N	Mean	SD	Interpretation
Practice of Choices	15087	3.43	0.62	Very Good
Practice of Exercise	14959	2.89	1.00	Good
Practice of Liquids	15095	3.90	0.71	Very Good
Practice of Environment	15273	3.40	0.85	Good
Practice of Belief	15168	3.91	0.75	Very Good
Practice of Rest	14861	3.45	0.65	Very Good
Practice of Air	14602	3.76	1.00	Very Good
Practice of Temperance	15146	4.68	0.57	Excellent
Practice of Integrity	15236	3.71	0.65	Very Good
Practice of Optimism	15094	3.61	0.64	Very Good
Practice of Nutrition	15147	3.02	0.55	Good
Practice of Social Support	15056	3.51	0.76	Very Good
<b>Overall Mean</b>		<b>3.61</b>	<b>0.73</b>	<b>Very Good</b>

**Interpretation of Mean Scores:**

1.00-1.79 = Poor | 1.80-2.59 = Fair | 2.60-3.39 = Good | 3.40-4.19 = Very Good | 4.20-5.00 = Excellent

**General Health Status of SDAs in Africa**

Figure 2 shows how participants rated or perceived their general health in the continent. Generally, 48% of the participants perceived their general health as good and 5.90% rated their health as poor.



*Figure 2: General Health Status as Perceived by the Participants*

More than 42% of the participants have not gone to the hospital within the last twelve months for care (Table 8). The known and general practice in the continent is that people go to the hospital only when they are sick. This means that almost half of the participants did not get sick for the last one year.

*Table 8: Gone to Hospital for Health Within the Last 12 Months.*

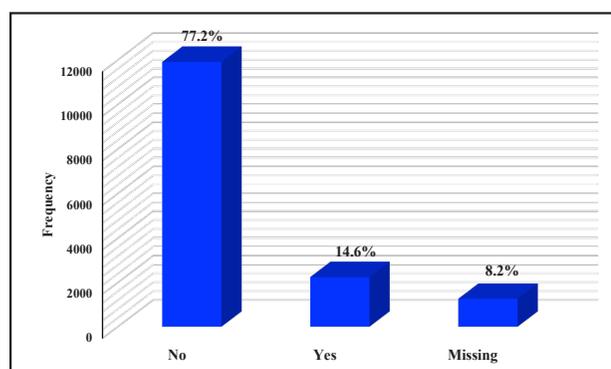
Gone to a Hospital or Clinic	Frequency	Percent
No	6545	42.4
Yes	8255	53.5
Missing	634	4.1
<b>Total</b>	<b>15434</b>	<b>100</b>

About 56% of the participants have had no back pains for the last twelve months (Table 9). At the same time, 39.4% had back pains which is on the higher side. Back pain is one of the most common reasons people go to the hospital or miss work, and it is a leading cause of disability worldwide. It usually results from a problem with one or more parts of the lower back, such as ligaments, muscles, nerves, discs and the bony structures that make up the spine called vertebral bodies or vertebrae.

*Table 9: Had Some Back Pain in the Last 12 Months*

Back Pain	Frequency	Percent
No	8606	55.8
Yes	6082	39.4
Missing	746	4.8
<b>Total</b>	<b>15434</b>	<b>100</b>

Figure 3 shows that 77.2% of the participants have not experienced arthritis in the last twelve months. Arthritis is the swelling and tenderness of one or more of the joints. The main symptoms of arthritis are joint pain and stiffness, which typically worsen with age. The most common types of arthritis are osteoarthritis and rheumatoid arthritis.



*Figure 3: Had Arthritis in the Last 12 Months*

Most people have headaches from time to time. But if the headache becomes frequent and severe, it can be termed a chronic headache. This also depends on how often the headaches occur and how long it lasts. Table 10 shows that 36.5% of the participants had a frequent and severe headache and 58.2% did not have frequent or severe headaches in the last 12 months.

*Table 10: Had Frequent and Severe Headaches in the Last 12 Months*

Headaches	Frequency	Percent
No	8981	58.2
Yes	5638	36.5
Missing	815	5.3
<b>Total</b>	<b>15434</b>	<b>100</b>

**Chronic pain** can occur after the causal injury and illness have long gone. It tends to last longer than six months and can be lifelong with the only treatment option being the management of pain. Figure 4 shows

that 14.0% of participants had chronic pain in the last 12 months, 79.1% had none.

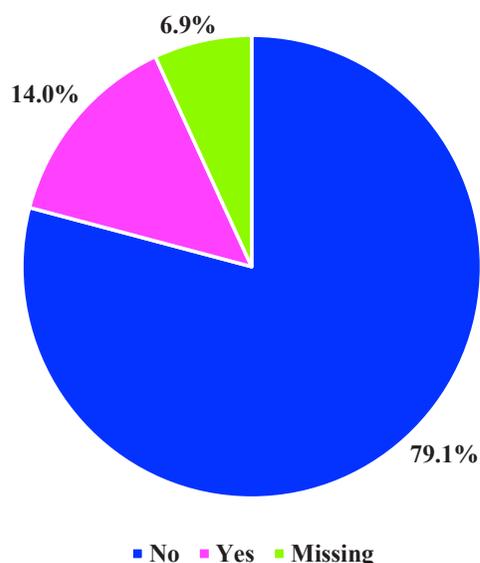


Figure 4: Had Chronic Pain in the Last 12 Months

**Allergies** are the result of the body responding to a substance that is perceived to be harmful. The number of reported allergy cases have been increasing yearly. Table 11 shows that 17.6% of participants had allergies in the last 12 months while 75.5% did not.

Table 11: Had Some Allergies in the Last 12 Months

Allergies	Frequency	Percent
No	11646	75.5
Yes	2709	17.6
Missing	1079	7.0
<b>Total</b>	<b>15434</b>	<b>100</b>

**Depression** is a serious mental illness that is affecting more of the world’s population as the years go by. It is greatly underdiagnosed and can lead to complications such as suicide and the lack of economic output. Eighteen percent (18%) of the study participants had some form of depression over the past 12 months while 75.0% did not (figure 5).

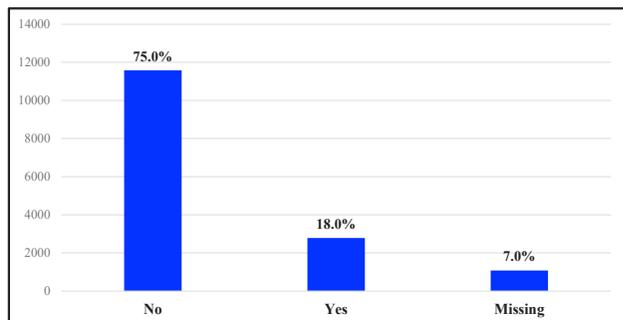


Figure 5: Had Some Depression in the Last 12 Months

Reports of suicide and self-harm have become more prevalent as a result of mental illness and other causes. Six percent (6%) of the study participants in the last 12 months had some thoughts of suicide or self-harm while a majority 87.3% did not (figure 6).

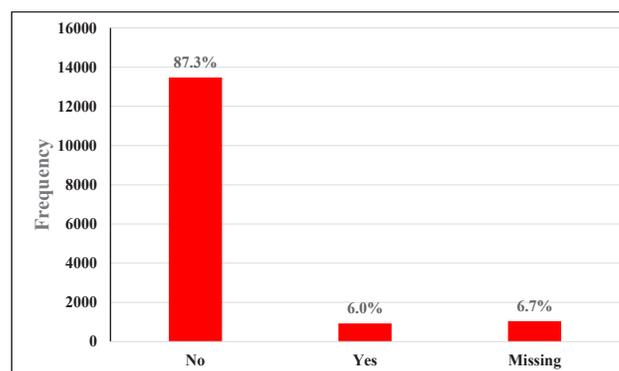


Figure 6: Had Some Thoughts of Suicide or Self-Harm in the Last 12 Months

**Anxiety** is the body’s natural response to stress. The response can be so severe that it can interfere with the daily activities and functions of an individual. Over the last 12 months, 43.5% of participants had some feeling of anxiety or worry while 51.5% reportedly did not (Table 12). If left unchecked, individuals can suffer from anxiety disorder which is a mental health disorder.

Table 12: Had Some Feeling of Anxiety or Worry in the Last 12 Months

Anxiety	Frequency	Percent
No	7943	51.5
Yes	6709	43.5
Missing	782	5.1
<b>Total</b>	<b>15434</b>	<b>100</b>

**Hypertension** is a major cause of premature death globally. It is estimated that over 1 billion people suffer from hypertension worldwide with the majority living in low- and middle-income countries. It is often missed and complications are what lead to screening for the condition. According to table 13, 11.8% of study participants have been told that they have high blood pressure by a doctor or healthcare professional while 84.2% have not.

Table 13: Ever Been Told by Medical Doctor or Other Health Care Professional of Having High Blood Pressure (Hypertension)

Hypertension	Frequency	Percent
No	12991	84.2
Yes	1821	11.8
Missing	622	4.0
<b>Total</b>	<b>15434</b>	<b>100</b>

**Diabetes** is a chronic disease that has no cure. There are two main types of diabetes with Type 1 Diabetes being hereditary and caused by insufficient insulin production while Type 2 Diabetes is lifestyle-related that develops as a result of insulin resistance. Diabetes is difficult to diagnose and often missed as screening only happens after the onset of complications. According to Figure 7, 91.8% of study participants have never been told by a doctor or health care professional that they have diabetes while only 3.8% have.

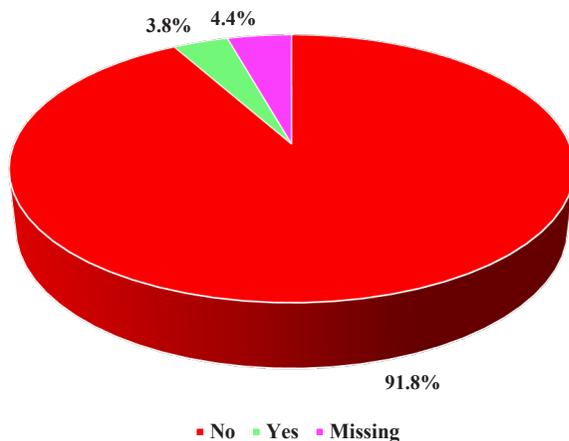


Figure 7: Ever Been Told by a Medical Doctor or Other Health Care Professional of Having Diabetes (High Blood Sugar)

**A stroke** is a medical emergency that occurs when blood supply to the brain is interrupted or reduced. According to Table 14, 2.0% of study participants have been told by a doctor or healthcare professional that they have had a stroke.

Table 14: Ever Been Told by a Medical Doctor or Other Health Care Professional of Having Stroke

Stroke	Frequency	Percent
No	14406	93.3
Yes	301	2.0
Missing	727	4.7
<b>Total</b>	<b>15434</b>	<b>100</b>

**Cancer** is caused by uncontrolled cell division. Its treatment and management are extremely expensive and, in some cases, not an option. About 94% of study participants have never been told by a medical doctor or health professional that they have cancer while 1.1% have been informed that they have it (Table 15).

Table 15: Ever Been Told by a Medical Doctor or Other Health Care Professional of having Cancer

Cancer	Frequency	Percent
No	14540	94.2
Yes	176	1.1
Missing	718	4.7
<b>Total</b>	<b>15434</b>	<b>100</b>

**Human Immunodeficiency Virus (HIV)** is a virus that has no cure but can be treated and managed under lifelong medication. This viral infection can progress to Acquired Immune Deficiency Syndrome (AIDS) disease and is most prevalent in Sub-Saharan Africa. Figure 8 shows that 1.6% of participants have been told by a medical doctor or healthcare professional that they are infected with HIV while 93.9% do not.



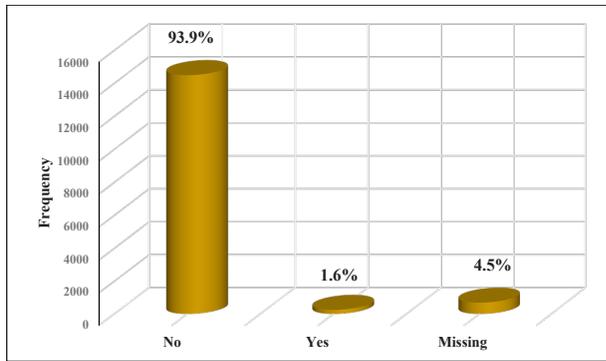


Figure 8: Ever Been Told by a Medical Doctor or Other Health Care Professional of Having HIV / AIDS Infection

**Pulmonary Tuberculosis (TB)** is a disease caused by bacterial infection typically in the lungs. Although it has been highly controlled globally, it still poses a threat among those living in rural areas that have not received the appropriate vaccine. In figure 9, 93.6% of the study participants have never been told by a doctor or healthcare professional that they have TB while 1.9% have been told they have TB.

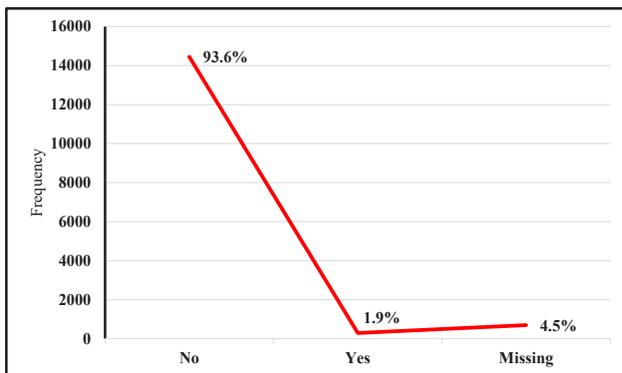


Figure 9: Been Told by a Medical Doctor or Other Health Care Professional of Having Tuberculosis (TB)

According to Figure 10, 4.5% of participants have been told by a doctor or healthcare professional that they have heart disease or have had a heart attack. About 91% have never been told so by a doctor or healthcare professional. Heart disease is a lifestyle-related disease that is one of the leading causes of death in the world.

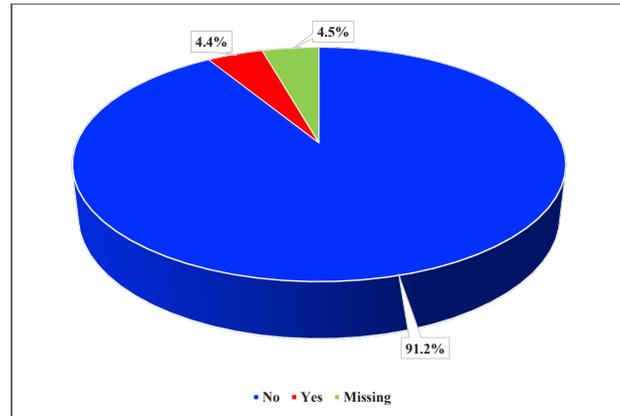
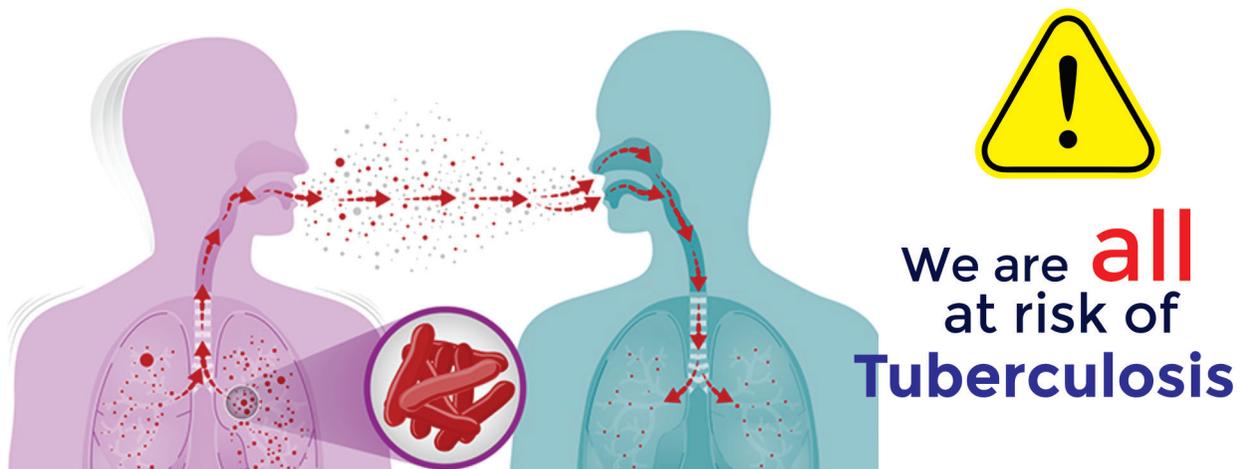


Figure 10: Been Told by a Medical Doctor or Other Health Care Professional of Having Heart Disease/ Heart Attack

Table 16 reports that 4.2% of participants have been told by a medical doctor or healthcare professional that they have asthma while 91.2% have not been told so. This condition results in difficulties in breathing as individuals produce more mucus in their airways, get inflamed, swell, and narrow.

Table 16: Been Told by a Medical Doctor or Other Health Care Professional of Having Asthma

Asthma	Frequency	Percent
No	14,078	91.2
Yes	645	4.2
Missing	711	4.6
<b>Total</b>	<b>15,434</b>	<b>100</b>



**Pneumonia** is an infection that leads to the inflammation of the air sacs. This can happen in one or both of the lungs. It can get complicated as the lungs may fill up with fluid or pus. Figure 11 shows that 5.8% of participants have reportedly been told by a doctor or healthcare professional that they have pneumonia while 89.5% have not.

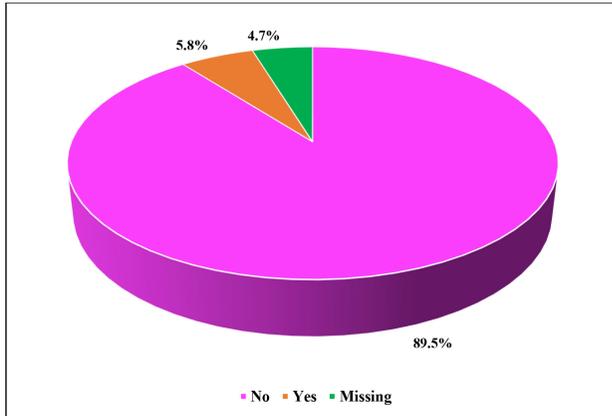


Figure 11: Ever Been Told by a Medical Doctor or Other Health Care Professional of Having Pneumonia.

Figure 12 shows that 2.4% of the study participants reported having been told by a doctor or healthcare professional that they have chronic lung disease while 92.8% have not been told by doctors or healthcare professionals.

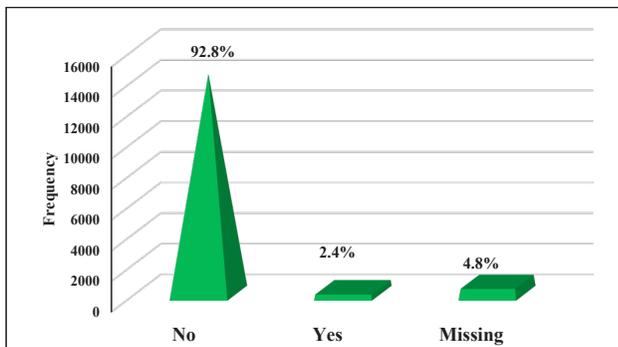


Figure 12: Ever Been Told by a Medical Doctor or Other Health Care Professional of Having Chronic Lung Disease Such as COPD or Emphysema

Table 17 shows there was a frequency of 4.4% of respondents in the study that reported having been told by a medical doctor or healthcare professional that they suffer from osteoporosis (brittle bones). This is in contrast to 90.5% who reported not to have been diagnosed with osteoporosis.

Table 17: Ever Been Told by a Medical Doctor or Other Health Care Professional of Having Osteoporosis (Brittle Bones)

Osteoporosis	Frequency	Percent
No	13,965	90.5
Yes	684	4.4
Missing	785	5.1
<b>Total</b>	<b>15,434</b>	<b>100</b>

Figure 13 shows the nearly even distribution of study participants that have been told they have malaria or another parasitic disease. The figure shows that 48.0% have been told by a medical doctor or other healthcare professional and 48.8% have never been told by either.

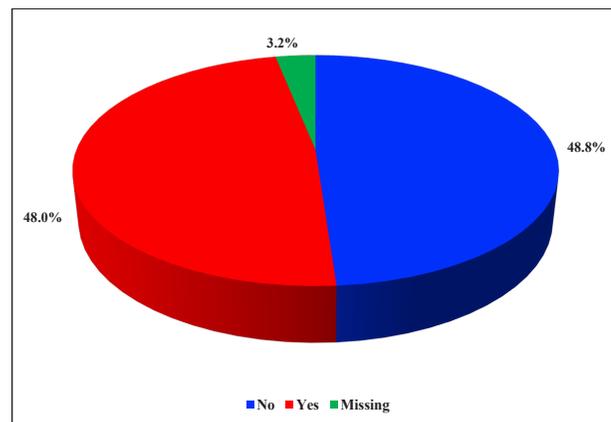


Figure 13: Ever Been Told by a Medical Doctor or Other Health Care Professional of Having Malaria or Another Disease Caused by A Parasite?

Figure 14 shows that 2.1% of study participants have ever been told by a medical doctor or other healthcare professionals of having seizures or epilepsy while 92.8% have never been informed or diagnosed.

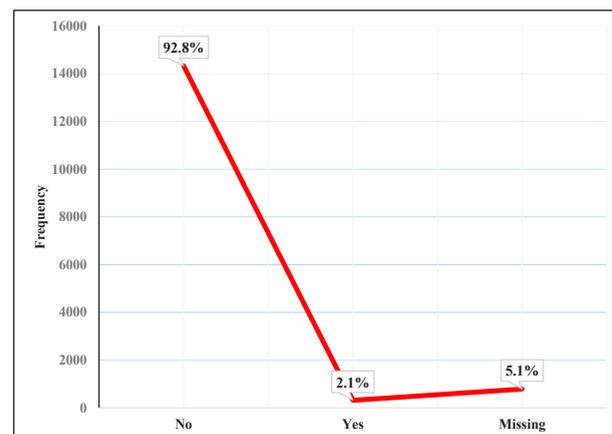


Figure 14: Ever Been Told by a Medical Doctor or Other Health Care Professional of Having Seizures or Epilepsy

According to Table 18, 16.2% of study participants reported having been told by a medical doctor or other healthcare professionals that they have peptic ulcer disease. Inversely, 79.3% of participants reported never having been told or diagnosed with peptic ulcer disease by medical doctors and other healthcare professionals.

Table 18: Ever Been Told by a Medical Doctor or Other Health Care Professional Ever of Having Peptic Ulcer Disease

Ulcers	Frequency	Percent
No	12,239	79.3
Yes	2,501	16.2
Missing	694	4.5
<b>Total</b>	<b>15,434</b>	<b>100</b>

According to Table 19, 4.5% of study participants have been informed, by a medical doctor or other healthcare professional, of having multiple sclerosis or some other neurological disease while 89.6% have never been told.

Table 19: Ever Been Told by a Medical Doctor or Other Health Care Professional of Having Multiple Sclerosis or Some Other Neurological Disease?

Multiple Sclerosis or Other Neurological Disease	Frequency	Percent
No	13836	89.6
Yes	693	4.5
Missing	905	5.9
<b>Total</b>	<b>15434</b>	<b>100</b>

Figure 15 outlines the number of participants that are currently receiving treatment for any of the aforementioned conditions. It is shown that 31.7% are being treated for one or more of the conditions while 63.2% are not.

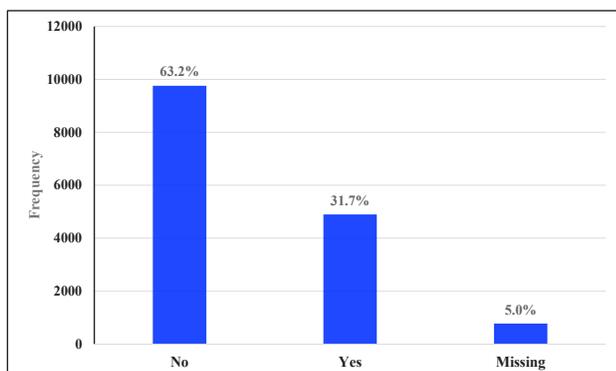


Figure 15: Currently Receiving Treatment for Any of The Conditions Above

Figure 16 shows that 34.1% of study participants are

taking medicine prescribed by a medical doctor while 46.8% are not. This occurs due to a lack of accurate diagnosis or the overall lack of knowledge on a particular condition.

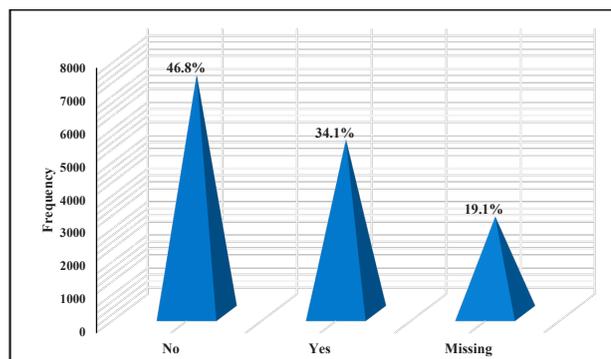


Figure 16: Medicine Prescribed by a Medical Doctor

Traditional healers use herbs to treat and heal their patients and avoid conventional medicine. Table 20 shows that 10.5% of study participants are receiving treatment from a herbal doctor while 76.2% are not.

Table 20: Receiving Treatment from A Traditional Healer

Traditional Healer Treatment	Frequency	Percent
No	11,767	76.2
Yes	1,614	10.5
Missing	2,053	13.3
<b>Total</b>	<b>15,434</b>	<b>100</b>

A medicine man is a type of healer that treats conditions caused by witchcraft or uses witchcraft to treat medical conditions. Figure 17 shows that a majority 84.4% of study participants are not receiving treatment from a medicine man. However, 13.6% of study participants are receiving treatment from medicine man.

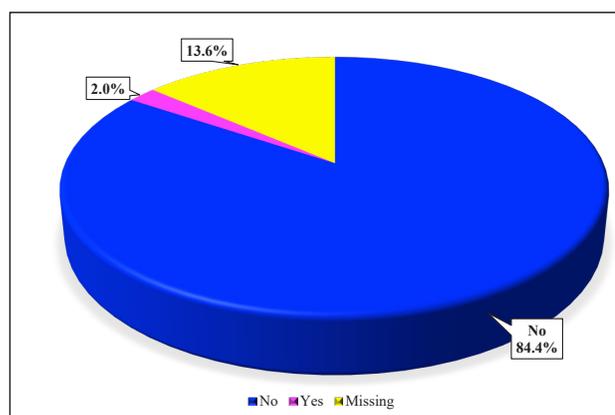


Figure 17: Receiving Treatment from A Medicine Man

Medicine men are not as common but still sometimes used. Among the study participants, 6.1% are receiving treatment from a medicine man while 77.0% are not (Table 21).

Table 21: Receiving Treatment from A Spiritualist

Spiritual Doctor Treatment	Frequency	Percent
No	11886	77.0
Yes	939	6.1
Missing	2609	16.9
<b>Total</b>	<b>15434</b>	<b>100</b>

According to Figure 18, 13.1% of the study participants reportedly are receiving treatment from a pastor while 78.9% are not. Pastors typically do not have any medical healthcare training and as such only use prayer and faith as a form of treatment for the sick.

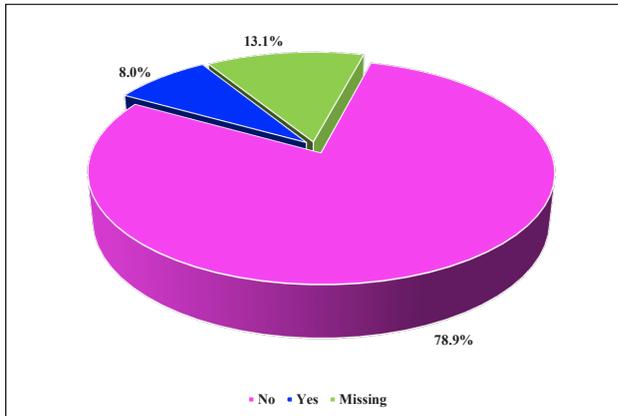


Figure 18: Receiving Treatment from A Pastor

Figure 19 shows that 68.7% reportedly are receiving some form of treatment from a medical doctor, medicine man, spiritualist, or pastor while 21.4% are not receiving treatment from any of them.

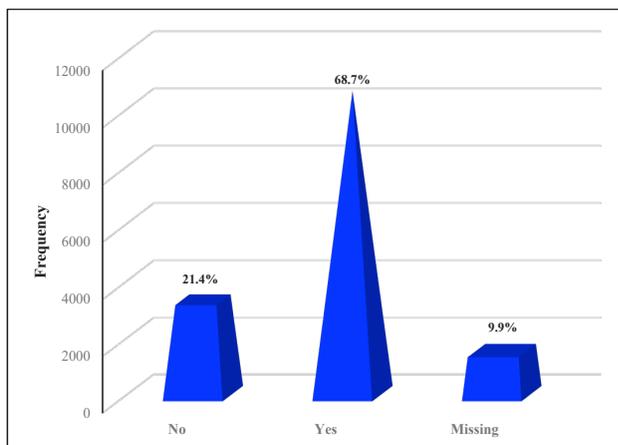


Figure 19: Receiving Treatment from None of The Above

A physical handicap or disability increases the disability-adjusted life years (DALYs) of the population. These are a measure of the years lost to ill health or premature death. According to the data collected in Table 22, 6.7% of study participants have a physical handicap or disability while 88.1% do not.

Table 22: Having A Physical Handicap or Disability

Physical Handicap or Disability	Frequency	Percent
No	13,603	88.1
Yes	1,038	6.7
Missing	793	15.1
<b>Total</b>	<b>15,434</b>	<b>100</b>

## BODY MASS INDEX

With the increased prevalence of obesity and lifestyle-related illnesses, individual Body Mass Index (BMI) measurements have become an important part of tracking the health of an individual. According to Figure 20, only 50.4% of all study participants have a healthy weight (BMI = 18.50 – 24.99). At the same time, 9.9% and 25.1% of study participants are reportedly underweight (BMI = Less than 8.23) and overweight (BMI = 25.00 – 29.99) respectively while 14.6% are obese (BMI above 30)

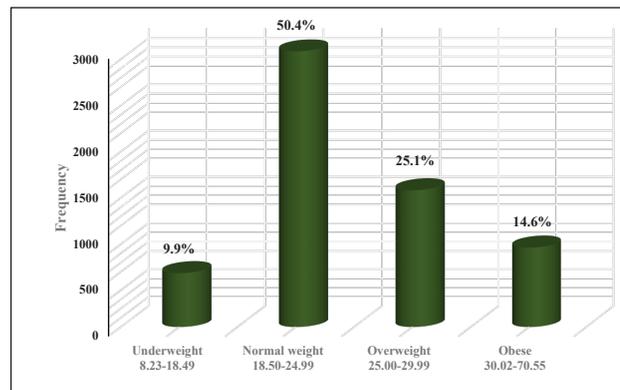


Figure 20: BMI Classification

Table 23 shows the cross-tabulation of respondent's body mass index in comparison to their age group. Of the total participants in this study (5,815), the largest population group was between the ages of 21-30 (30.0%) of which the majority of the group was underweight (36.0% of the group). The two youngest age groups (18-20 and 21-30) had a majority of their members underweight while the older groups were largely overweight and obese.

Table 23: Cross Tabulation of Respondent's Body Mass Index and Age

Years	Underweight		Ideal		Overweight		Obese		Total
	f	%	f	%	f	%	f	%	
18-20	142	24.8	379	12.9	111	7.6	72	8.5	704 (12.1%)
21-30	206	36.0	1050	35.7	340	23.4	151	17.8	1,747 (30.0%)
31-40	114	19.9	690	23.5	396	27.2	219	25.8	1,419 (24.4%)
41-50	60	10.5	425	14.5	344	23.6	224	26.4	1,053 (18.1%)
51-60	35	6.0	241	8.2	180	12.4	127	15.0	583 (10.0%)
Above 60	16	2.8	153	5.2	85	5.8	55	6.5	309 (5.3%)
<b>Total</b>	<b>573</b>	<b>100</b>	<b>2938</b>	<b>100</b>	<b>1456</b>	<b>100</b>	<b>848</b>	<b>100</b>	<b>5,815 (100%)</b>

”

Anything that lessens physical strength enfeebles the mind and makes it less capable of discriminating between right or wrong.

ELLEN G. WHITE, CHRIST OBJECT LESSONS P.346



**MENTAL HEALTH**

Figure 21 shows that 38.7% of the respondents were not depressed. It is also worth noting that 31.8% of the participants are depressed (All the time depressed, most of the time depressed, and sometimes depressed).

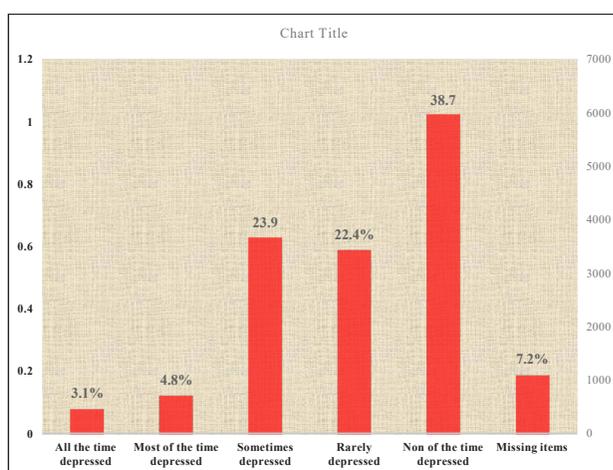


Figure 21: Depression Among Church Members

Table 24 also shows similar results.

Table 24: Sadness that Could not be Cheered up

Experienced Sadness	Frequency	Percent
All the time sad	622	4.0
Most of the time sad	786	5.1
Sometimes sad	3,389	22.0
Rarely sad	3,582	23.2
None of the time sad	6,139	39.8
Missing	916	5.9
<b>Total</b>	<b>15,434</b>	<b>100</b>

The feeling of hopelessness and feeling of restlessness scored 3% and 2.9% respectively for all the time hopeless and restless (see Figure 22 & 23). On the other hand, 43% of the participants felt none of the time hopeless while 33.6% felt none of the time restless. Feeling down from time to time is a normal part of life, but when emotions such as hopelessness take hold and will not go away, then depression can set in.

“ Heaven is all health ”

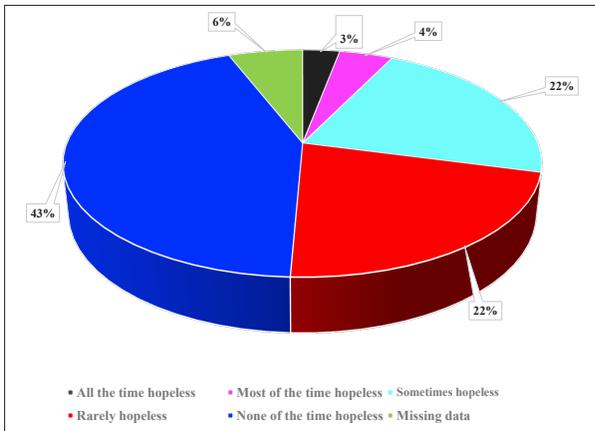


Figure 22: Feeling of Hopelessness

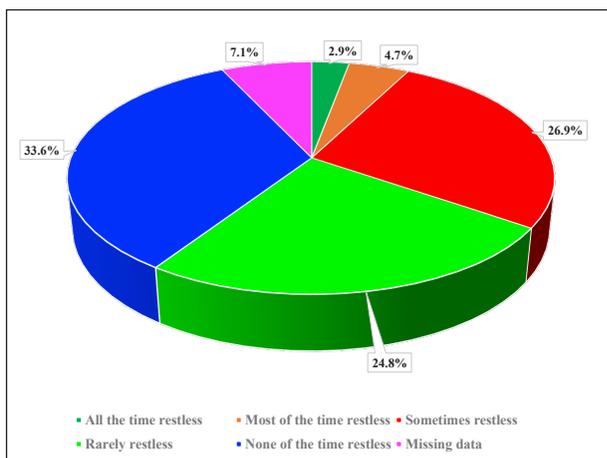


Figure 23: Feeling of Restlessness

Table 25 presents the stress level of the participants and it is interesting to note that more than 50% of the

participant are stressed (100% of the time stressed, 90% of the time stressed, and 50% of the time stressed). But on a positive note, more than 70% of the participants also nurture positive thinking (see Figure 24).

Table 25: Stressed Most of the Time

Stress	Frequency	Percent
Never, 0% of the time	2701	17.5
Rarely, 10% of the time	3890	25.2
Sometimes, 50% of the time	4650	30.1
Usually, 90% of the time	1854	12.0
All the time, 100% of the time	1270	8.2
Missing	1069	6.9
<b>Total</b>	<b>15434</b>	<b>100</b>

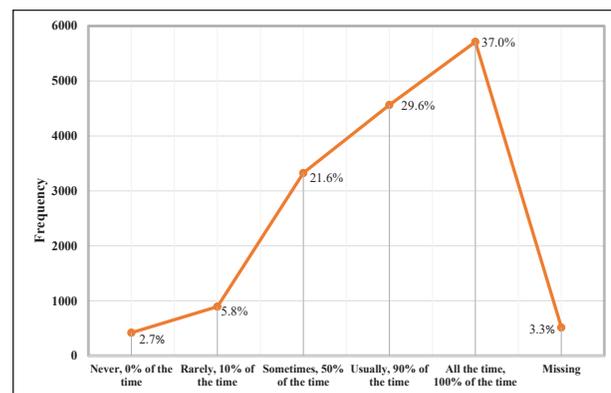


Figure 24: Nurturing Positive Thinking



Depression is a common mental disorder and approximately 280 million people in the world have depression. Depression can lead to suicide and over 700 000 people die due to suicide every year. Suicide is the fourth leading cause of death in 15-29-year-olds .

(WHO, 2021).

# CELEBRATIONS



## CHOICE

According to Figure 25, more than 50% of the church members generally are not careful in choosing what to put into their bodies. Only 37% are all the time (which is 100% of the time) mindful in choosing what to put into their body.

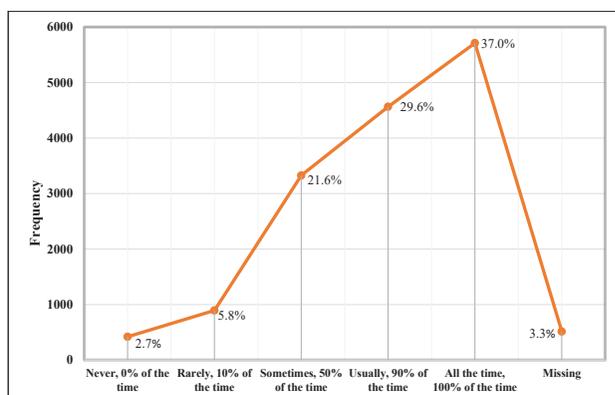


Figure 25: Chosing Carefully What to Put into the Body

Table 26: Choices Are Hard to Make, do not Worry Much About Making Choices

Choices	Frequency	Percent
Never, 0% of the time.	5,804	37.6
Rarely, 10% of the time.	2,287	14.8
Sometimes, 50% of the time.	3,196	20.7
Usually, 90% of the time.	1,861	12.1
All the time, 100% of the time.	1,634	10.6
Missing	652	4.2
<b>Total</b>	<b>15,434</b>	<b>100</b>

Also, a significant number of the church members (10.6%) think that choices are hard to make and therefore, will not worry much about making choices (Table 26). This means that generally, over 50% of the church members will not think in this direction.



**EXERCISE**

Exercise is one of the best preventive practices for preventing non-communicable diseases. Researches have established that exercise can reduce the risk of major illnesses, such as heart disease, stroke, type 2 diabetes and can also lower the risk of early death. Exercise is free, easy to take, and has an immediate effect. Figure 26 shows that over 37% of the church members have good exercise habits. The figure shows that over 65% (good, very good, excellent) of the church members exercise habits are generally good.

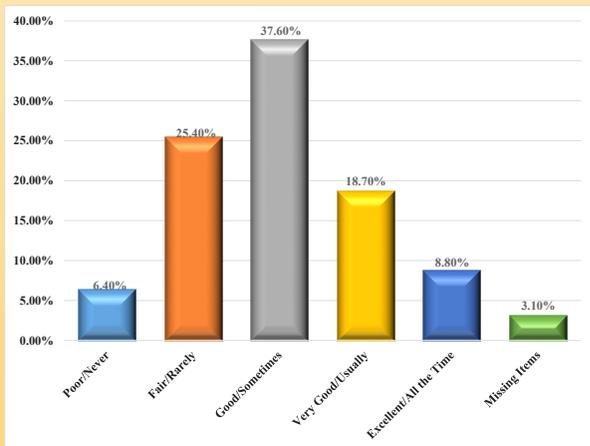


Figure 26: The Extent of Practice of Exercise Habits

Again, church members are doing well by exercising daily. Table 27 shows that over 57% (sometimes, usually, all the time) of the members are engaging in a daily exercise program 50% of the time. This is encouraging and church members should continue to even improve upon this.

Table 27: Daily Exercise

		Frequency	Percent
Valid	Never, 0%	2227	14.4
	Rarely, 10% of the time	3142	20.4
	Sometimes, 50% of the time	4565	29.6
	Usually, 90% of the time	2126	13.8
	All the time, 100% of the time	2417	15.7
	Total	14477	93.8
Missing	System	957	6.2
<b>Total</b>		<b>15434</b>	<b>100.0</b>

More than 50% of the church members (sometimes, usually, all the time) engage in exercise 50% of the time (Figure 27). To maintain the good benefit from your exercise program, it is important to exercise at least 30 minutes three times per week.

**“Morning exercise, walking in the free, invigorating air of heaven... is the surest safeguard against .... colds, coughs, ...and a hundred other diseases.”**

**Ellen G. White, Healthful Living, p176**

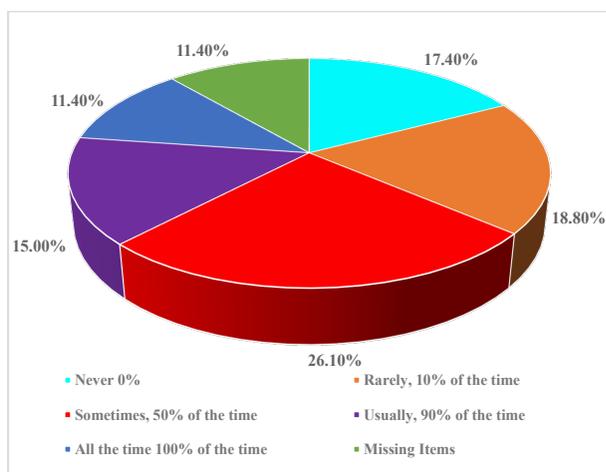


Figure 27: Three Times Per Week Exercise

On the other hand, about 50% (sometimes, usually, all the time) of the church members generally exercise only once per week (Figure 28).

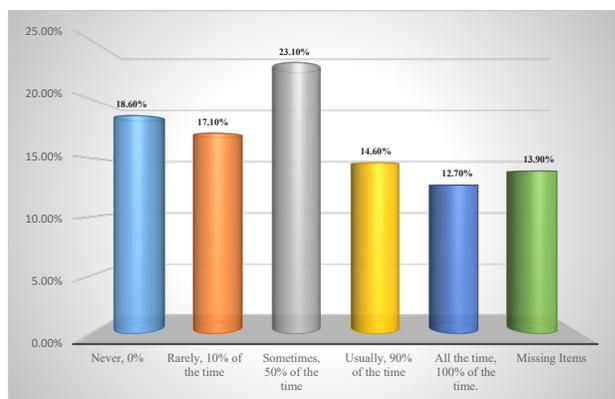


Figure 28: Once a Week Exercise.

Table 28: Once a Month

		Frequency	Percent
Valid	Never, 0%	3,642	23.6
	Rarely, 10% of the time	2,148	13.9
	Sometimes, 50% of the time	3,235	21.0
	Usually, 90% of the time	2,064	13.4
	All the time, 100% of the time	1,971	12.8
	Total	13,060	84.6
Missing	System	2,374	15.4
<b>Total</b>		<b>15,434</b>	<b>100.0</b>

Table 28 also shows that about 46% (sometimes, usually, all the time) of the church members are exercising only once a month.

### LIQUID/WATER

Figure 29 shows that only 26.6% of study participants will, all the time (100% of the time), drink 6-8 glasses of water and a significant percentage (6.8%) will never drink 6-8 glasses of water. 25.9% will drink 6-8 glasses sometimes (50% of the time).

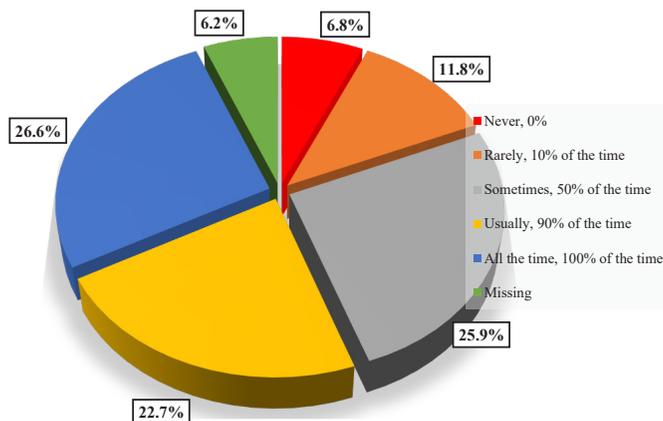
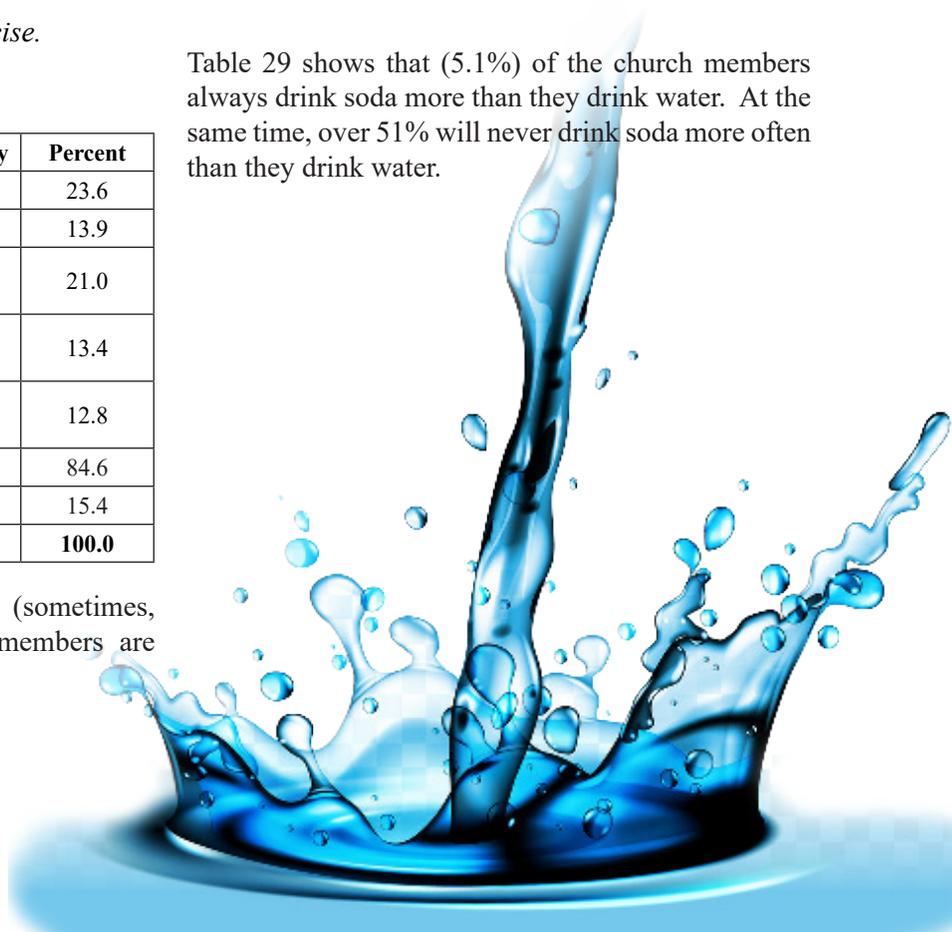


Figure 29: Drinking at least 6-8 Glasses of Water a Day

Table 29: Drinking Soda More Often Than Water

Drinking Soda	Frequency	Percent
Never, 0% of the time	7,948	51.5
Rarely, 10% of the time	3,507	22.7
Sometimes, 50% of the time	1,804	11.7
Usually, 90% of the time	793	5.1
All the time, 100% of the time	788	5.1
Missing	594	3.8
<b>Total</b>	<b>15,434</b>	<b>100.0</b>

Table 29 shows that (5.1%) of the church members always drink soda more than they drink water. At the same time, over 51% will never drink soda more often than they drink water.



**ENVIRONMENT**

Figure 30 shows that 18.2% of the participants always litter while 24.3% all the time do not litter.

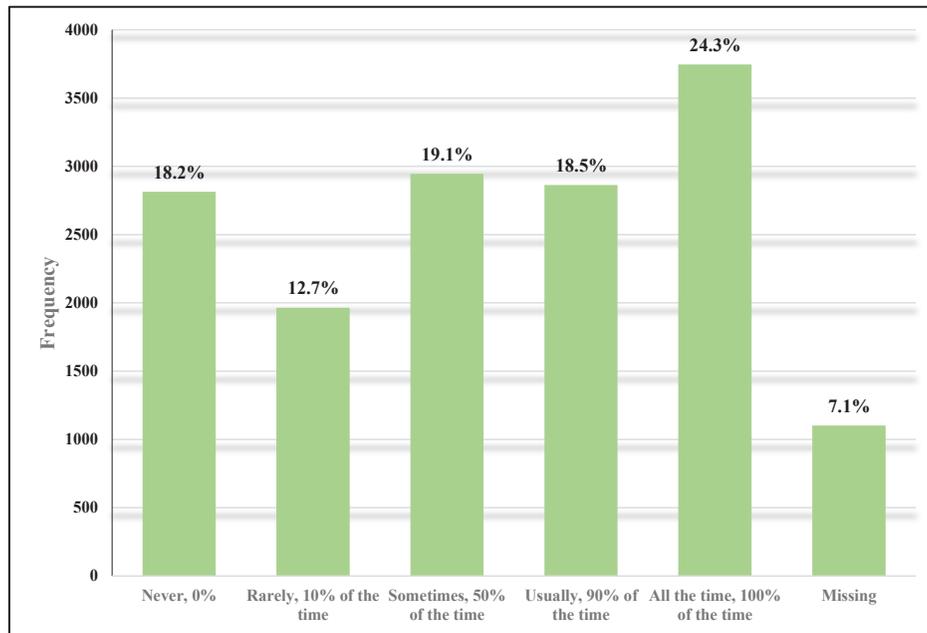
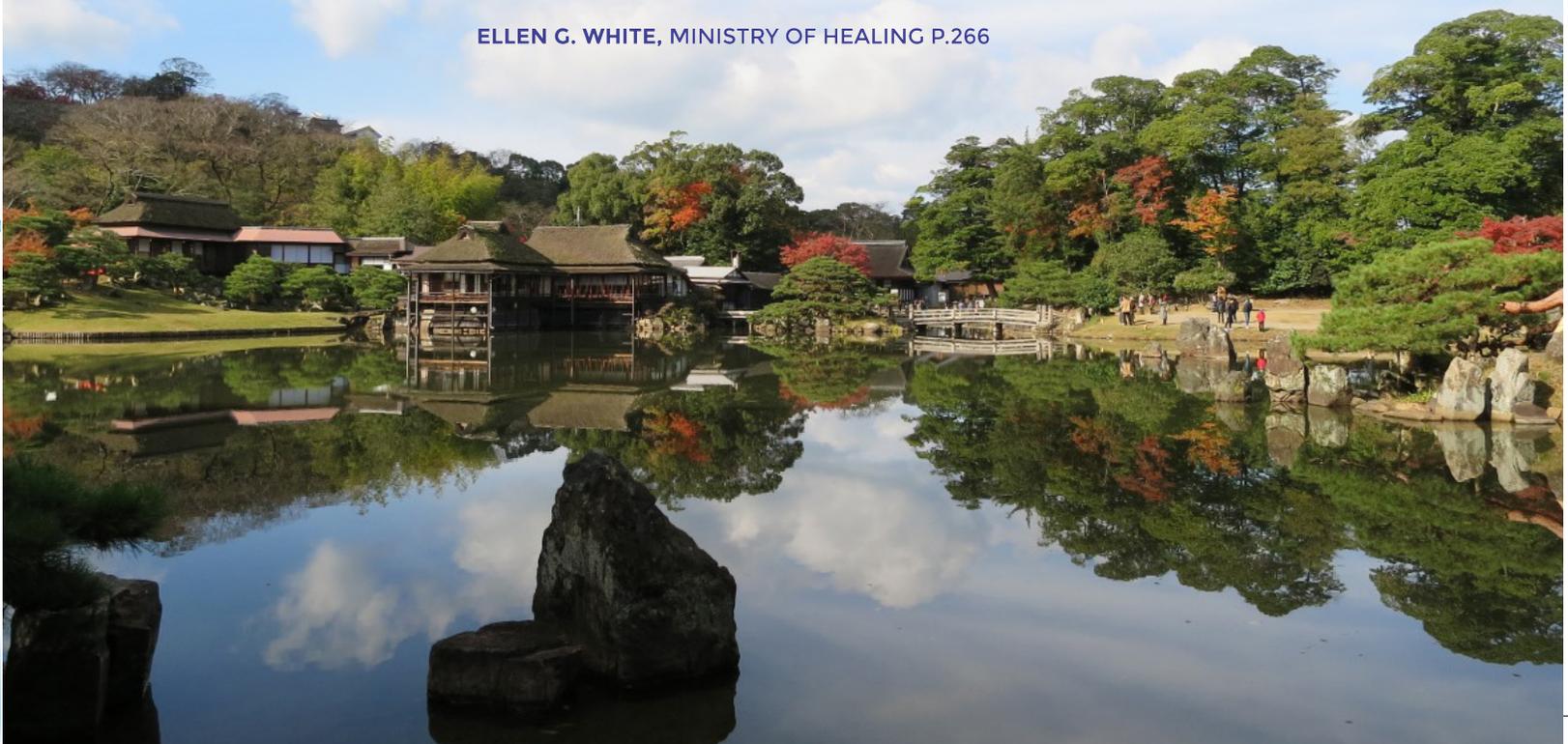


Figure 30: Do Not Litter



Out of doors, amid the things that God has made, breathing the fresh, health-giving air, the sick can best be told of the new life in Christ. Here God's Word can be read. Here the light of Christ's righteousness can shine into hearts darkened by sin.

ELLEN G. WHITE, MINISTRY OF HEALING P.266



**BELIEF**

Table 30 indicates that a high percentage of the participants (91%) attend church services (100% of the time, 90% of the time, & 50% of the time). Only 1.6% never attend church services.

Table 30: Attend Church Services

Church Attendance	Frequency	Percent
Never, 0%	240	1.6
Rarely, 10% of the time	599	3.9
Sometimes, 50% of the time	1882	12.2
Usually, 90% of the time	4188	27.1
All the time, 100% of the time	7975	51.7
Missing	550	3.6
<b>Total</b>	<b>15434</b>	<b>100.0</b>

Also, in Figure 31, more than 82% of the participants spend time reading their Bible and other devotional books 100% of the time, 90% of the time, & 50% of the time).

Table 31 depicts that 4.2% of the participants never allow their Christian beliefs to influence the dealings in their life.

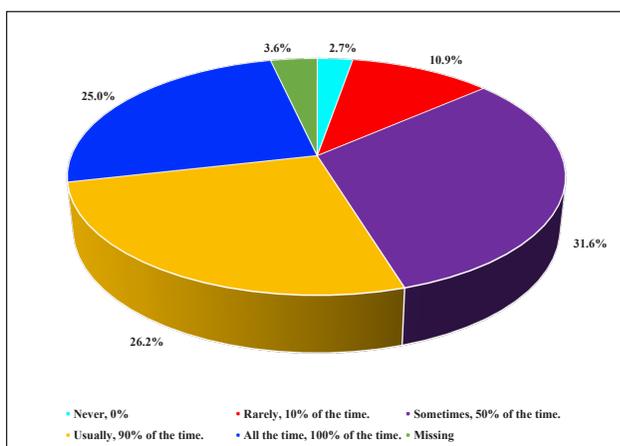


Figure 31: Spending Time Reading the Bible or Other Devotional Books

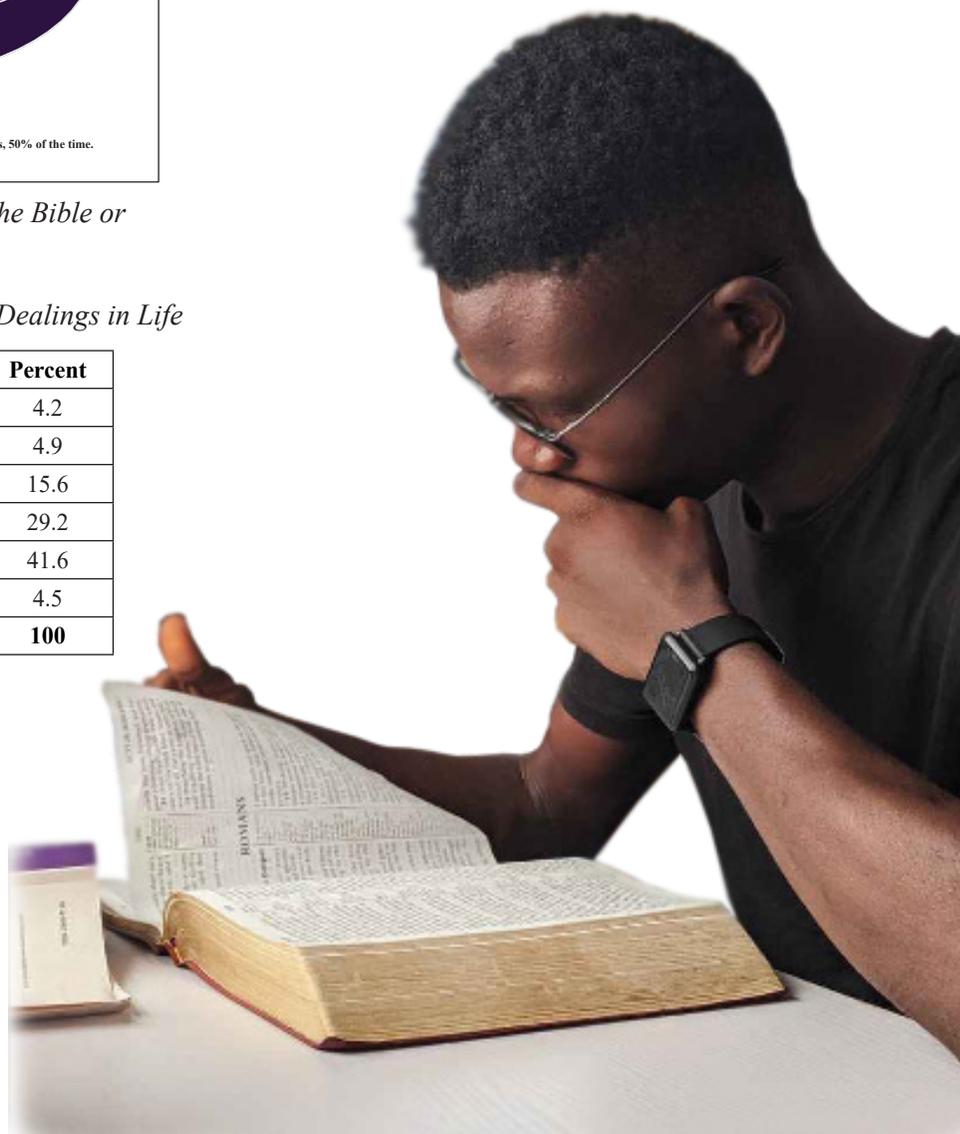
Table 31: Christian Beliefs Influencing Dealings in Life

Beliefs	Frequency	Percent
Never, 0%	655	4.2
Rarely, 10% of the time	753	4.9
Sometimes, 50% of the time	2403	15.6
Usually, 90% of the time	4509	29.2
All the time, 100% of the time	6414	41.6
Missing	700	4.5
<b>Total</b>	<b>15434</b>	<b>100</b>



A person whose mind is quiet and satisfied in God is in the pathway to health.

ELLEN G. WHITE, HEALTHFUL LIVING P.235



**REST**

Figure 32 shows that a significant percentage of the church members, which is 9.6%, will go to bed after midnight and only 28.4% go to bed before midnight. Moreover, 26.6% of the church members will sleep at least 7-8 hours every night. On the other hand, 5.5% never had 7-8 hours of sleep every night (Table 32).

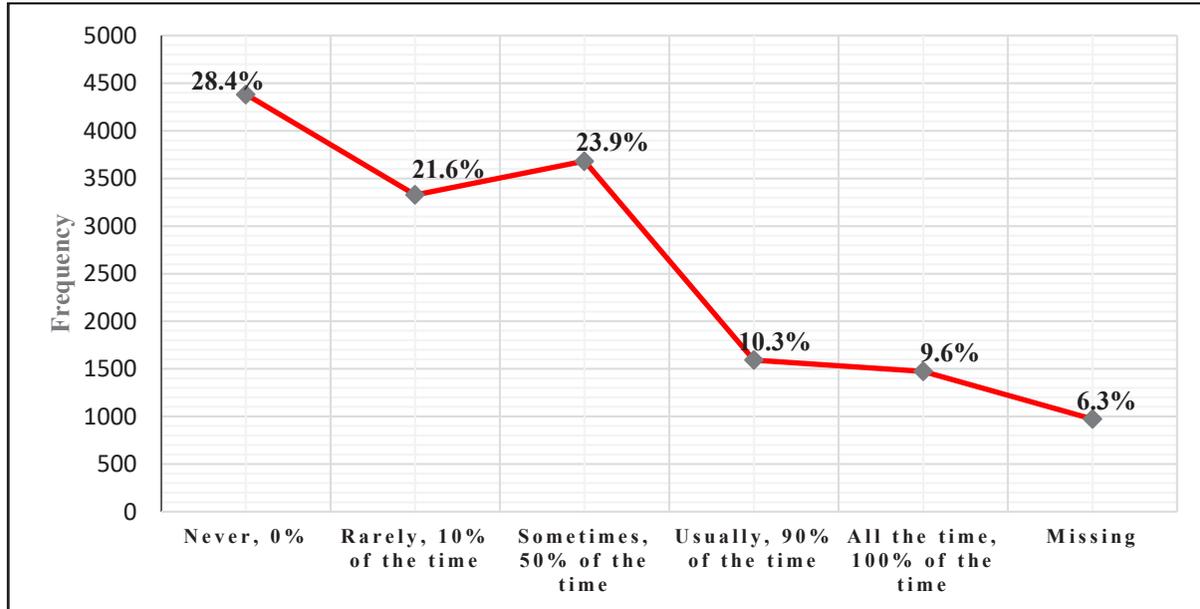


Figure 32: Go to Bed After Midnight

Table 32: Sleeping at Least 7-8 Hours Every Night

Sleeping	Frequency	Percent
Never, 0% of the time	845	5.5
Rarely, 10% of the time	1549	10.0
Sometimes, 50% of the time	3960	25.7
Usually, 90% of the time	3952	25.6
All the time, 100% of the time	4103	26.6
Missing	1025	6.6
<b>Total</b>	<b>15434</b>	<b>100</b>



### AIR

According to Figure 33, 24.3% of participants reported that they always breath fresh air to maintain health while 10.0% never do so. More so, Figure 34 showed that 4.2% of study participants never open their windows for fresh air while 45.9% always have their windows open.

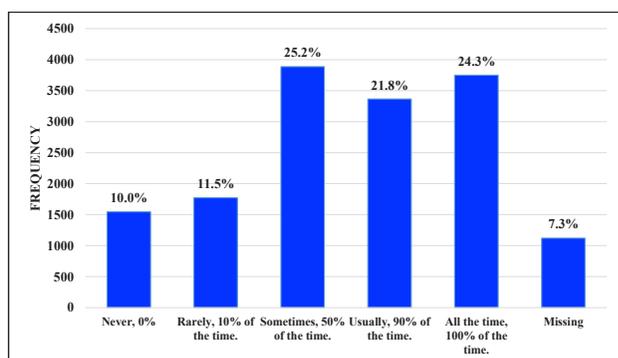


Figure 33: Taking Deep Breaths of Fresh Air

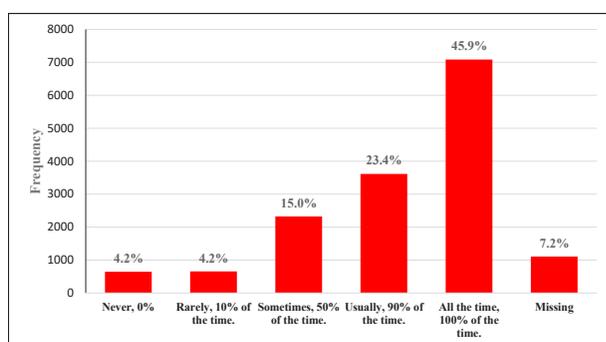


Figure 34: Opening Windows for Fresh Air

### TEMPERANCE

In this study, 2.3% of participants reported that they drink alcohol all the time while 83.3% never do so. Three point four percent (3.4%) sometimes (50% of the time) drink alcohol (see Table 33). From the table, 89.1% of participants also reported to never smoke cigarettes while 1.8% always do so and 1.5% sometimes (50% of the time) smoke (see Figure 35).

Table 33: Drinking Alcohol

Drinking Alcohol	Frequency	Percent
Never, 0% of the time	12,854	83.3
Rarely, 10% of the time	678	4.4
Sometimes, 50% of the time	531	3.4
Usually, 90% of the time	278	1.8
All the time, 100% of the time	355	2.3
Missing	738	4.8
<b>Total</b>	<b>15,434</b>	<b>100.0</b>

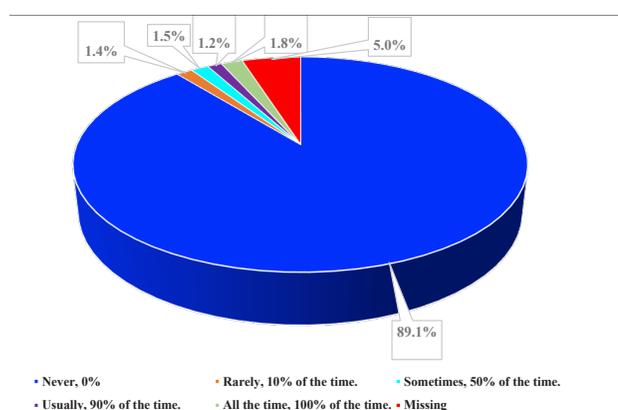


Figure 35: Smoking Cigarettes

According to Figure 36, 88.6% of study participants never use illicit drugs, and 1.8% sometimes (50% of the time) use illicit drugs. About 2.2% of all participants reported always using illicit drugs.

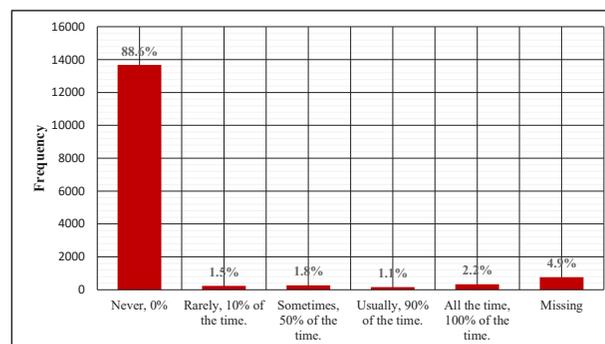


Figure 36: Using Illicit Drugs

### INTEGRITY

Among study participants, Figure 37 shows that 0.9% had 5-7 sexual partners during the past 12 months while 44.5% had none, 40.7% had 1 partner and 6.0% had 2-4 partners. The percentage of those who were able to stand alone and defend convictions all the time stands at 35.4% while 5.3% will never do so (see Figure 38).

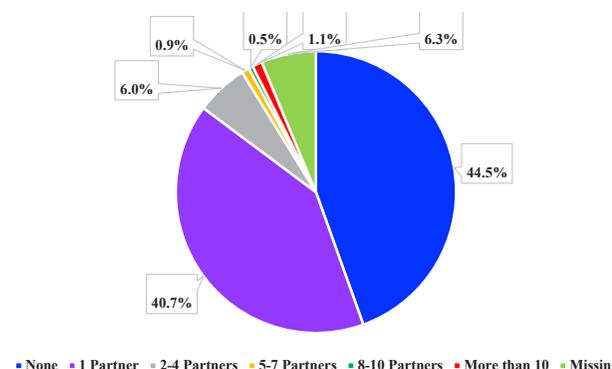


Figure 37: Sexual Partners in the Past 12 Months

Table 34 presents daily action consistent with things said to other people about God, health, behaviour etc. According to the table, 24.7% of the participants' actions are consistent with things said.

Table 34: Daily Actions Consistent with Things Said to Other People About God, Health, Behaviour etc, ("Walking the Talk")

Actions (Walking the Talk)	Frequency	Percent
Never, 0% of the time	611	4.0
Rarely, 10% of the time	1,141	7.4
Sometimes, 50% of the time	4,294	27.8
Usually, 90% of the time	4,707	30.5
All the time, 100% of the time	3,818	24.7
Missing	863	5.6
<b>Total</b>	<b>15,434</b>	<b>100.0</b>

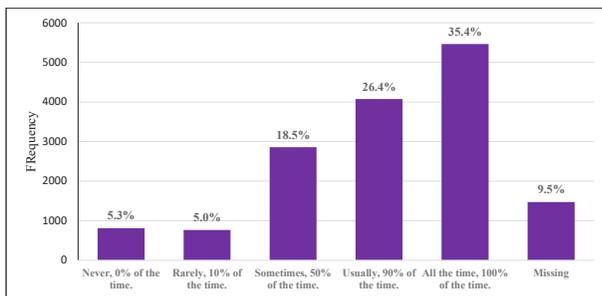


Figure 38: Able to Stand Alone and Defend Convictions

Table 35: Lie If It Does Not Hurt Anyone

Lying	Frequency	Percent
Never, 0% of the time	4,737	30.7
Rarely, 10% of the time	3,300	21.4
Sometimes, 50% of the time	4,024	26.1
Usually, 90% of the time	1,516	9.8
All the time, 100% of the time	1,221	7.9
Missing	636	4.1
<b>Total</b>	<b>15,434</b>	<b>100.0</b>

Table 35 shows that 7.9% of study participants will always lie if it does not hurt anyone and 30.7% will never do so while 26.1% will sometimes (50% of the time) lie if there is no harm done to anyone. According to Figure 39, 24.8% of study participants reported that

they always keep their promises to others and 3.5% reported never keeping their promises.

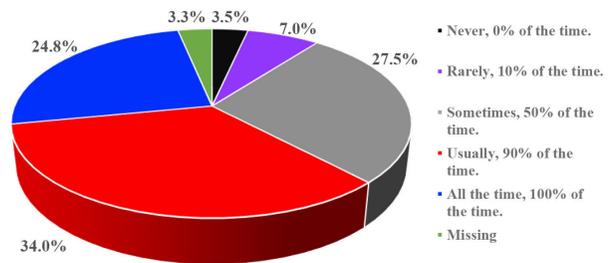


Figure 39: Keeping Promises to Others

### OPTIMISM

Table 36 shows that 29.3% of people always have hope amid human brokenness while 12.2% never have it. Furthermore, 20.8% always believe that something which can go wrong, will go wrong and 11.3% never believe this (see figure 40).

Table 36: Having Hope in The Midst of Human Brokenness

Having Hope	Frequency	Percent
Never, 0% of the time	1,876	12.2
Rarely, 10% of the time	1,266	8.2
Sometimes, 50% of the time	3,060	19.8
Usually, 90% of the time	3,929	25.5
All the time, 100% of the time	4,525	29.3
Missing	778	5.0
<b>Total</b>	<b>15,434</b>	<b>100.0</b>

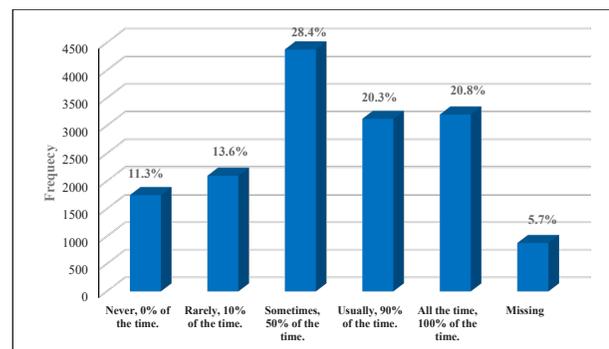


Figure 40: Believing that if Something Can Go Wrong, It Will go Wrong

”

Talk unbelief, and you will have unbelief; but talk faith, and you will have faith.  
According to the seed sown will be the harvest.

---

ELLEN G. WHITE, HEALTHFUL LIVING P.235



Table 37: Having What it Takes to Succeed in Life

Successful Life	Frequency	Percent
Never, 0% of the time	637	4.1
Rarely, 10% of the time	851	5.5
Sometimes, 50% of the time	2,244	14.5
Usually, 90% of the time	3,958	25.6
All the time, 100% of the time	7,177	46.5
Missing	567	3.7
<b>Total</b>	<b>15,434</b>	<b>100.0</b>

Table 37 shows that 46.5% of participants always believe that they have what it takes to succeed in life while 4.1% reportedly never have what it takes. Fourteen point five percent (14.5%) sometimes (50% of the time) have what it takes to succeed in life.

**NUTRITION**

Figure 41 shows the participants who practice vegetarianism. From the figure, 13.6% never practiced vegetarianism while 32.5% practice it all the time.

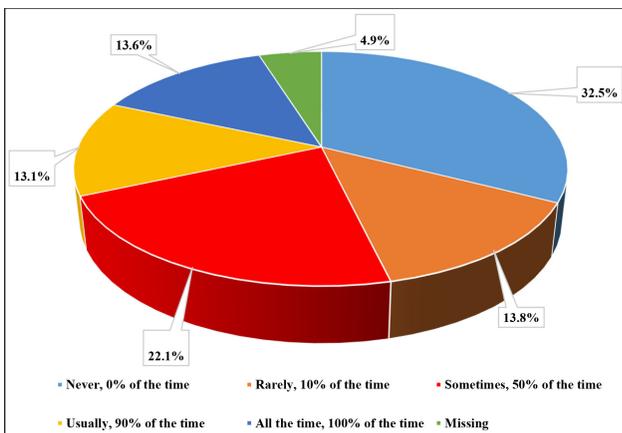


Figure 41: Vegetarianism (plant-based diet)

”

Those foods should be chosen that best supply the elements needed for building up the body. In this choice, appetite is not a safe guide... The disease and suffering that everywhere prevail are largely due to popular errors in regard to diet.

Ellen G. White, Ministry of Healing, Page 296

Table 38: Daily Intake of Variety of Fruits and Vegetables

Fruits & Vegetables	Frequency	Percent
Never, 0% of the time	673	4.4
Rarely, 10% of the time	2,070	13.4
Sometimes, 50% of the time	5,201	33.7
Usually, 90% of the time	3,127	20.3
All the time, 100% of the time	3,735	24.2
Missing	628	4.1
<b>Total</b>	<b>15,434</b>	<b>100</b>

From Table 38, Fruits and vegetables are consumed every day by 24.2% of study participants while 4.4% never eat fruits and vegetables daily. From Figure 42, 27.6% of respondents sometimes (50% of the time) eat meat while 13.4% never do so and 22.7% always eat meat.

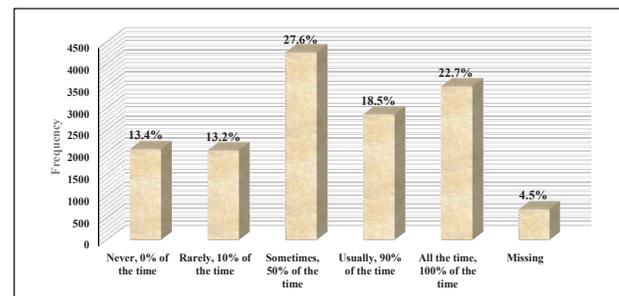


Figure 42: Eat Meat (Flesh or An Animal, Poultry or Bird)

Table 39: Eat Sweets and Sugary Foods

Eating Sweets	Frequency	Percent
Never, 0% of the time	2,349	15.2
Rarely, 10% of the time	4,312	27.9
Sometimes, 50% of the time	4,959	32.1
Usually, 90% of the time	1,793	11.6
All the time, 100% of the time	1,459	9.5
Missing	562	3.6
<b>Total</b>	<b>15,434</b>	<b>100.0</b>

Table 39 shows that 15.2% of people never eat sweets

and sugary foods while 9.5% always eat sweets and sugary foods. 32.1% will sometimes (50% of the time) do so.

Figure 43 shows that 10.6% of study participants always eat between meals while 15.6% never eat between their meals. 32.9% sometimes eat between meals.

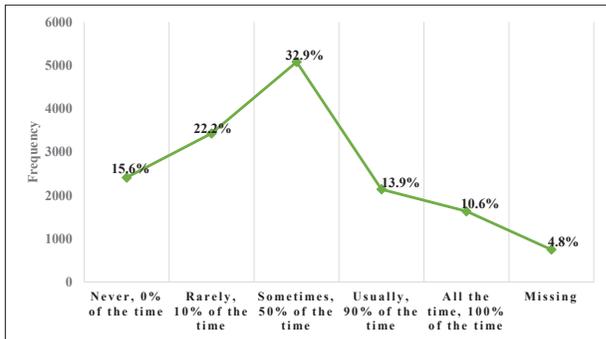


Figure 43: Eat Between Meals

According to Figure 44, although breakfast is an important meal of the day, the majority of people (33.1%) never eat breakfast while 6.5% do.

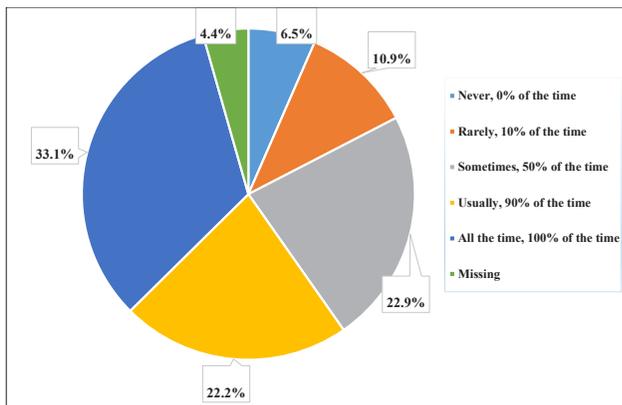


Figure 44: Eat Breakfast



It is shown in Figure 45 that 10.1% of people never eat their last meal after 7:00 pm while 20.9% always eat their last meal after 7 pm. 29.7% sometimes did so (50% of the time).

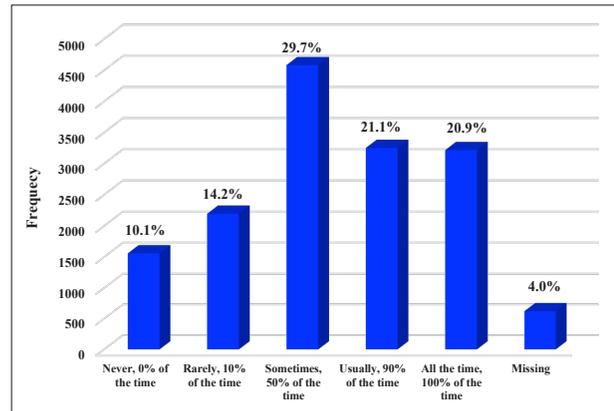


Figure 45: Eat Last Meal After 7:00 PM



Make your breakfast correspond more nearly to the heartiest meal of the day."

Ellen G. White,  
Counsels on Diet and Foods, page 173



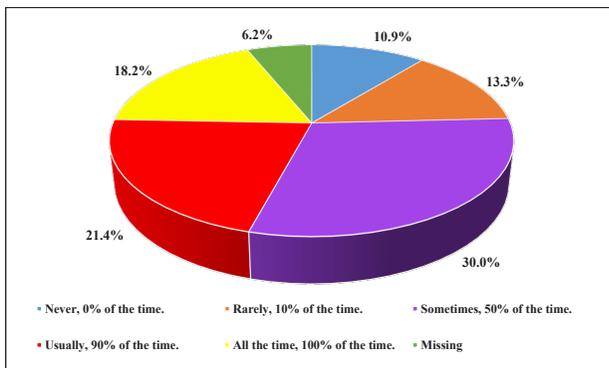
**SOCIAL SUPPORT**

*Table 40: Have A Reliable Network of People to Support if in Trouble*

Social Support	Frequency	Percent
Never, 0% of the time	1,276	8.3
Rarely, 10% of the time	2,419	15.7
Sometimes, 50% of the time	4,729	30.6
Usually, 90% of the time	3,485	22.6
All the time, 100% of the time	2,972	19.3
Missing	553	3.6
<b>Total</b>	<b>15,434</b>	<b>100.0</b>

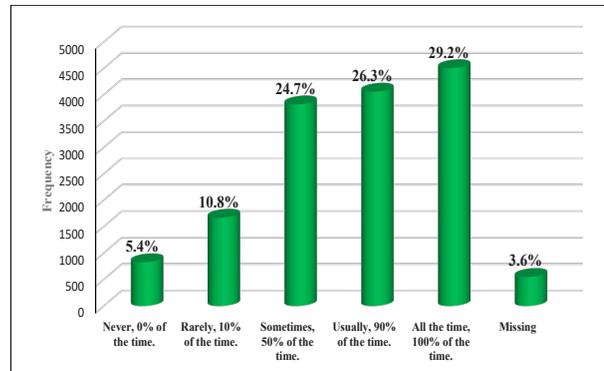
Table 40 above shows that 19.3% of participants have a reliable network of people to support if in trouble. At the same time, 8.3% have no one.

Figure 46 above reports that 18.2% of the people always have someone to talk to when feeling lonely while at the same time 10.9% never have anyone to talk to when feeling lonely.



*Figure 46: Have People to Talk to When Feeling Lonely*

From Figure 47, 29.2% of people always get needed emotional support from family while 5.4% never get it. Emotional support is an important aspect of overall health and mental health.



*Figure 47: Get the Needed Emotional Support from Family*

**Special appreciation of the donors to the study**

1. The Southern Union Conference of Seventh-day Adventists, Georgia, USA
2. The General Conference Health Ministries Department, USA
3. The General Conference Office of Archives, Statistics, & Research, USA
4. The three Divisions in Africa (ECD, SID, WAD)
5. Adventist University of Africa, Nairobi, Kenya

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1. The Adventist University of Africa Council for approving the Health Study
2. Dr. David Williams for his time and expertise.

## ASDAHS PHASE TWO

Phase One of the study, which covered 2017-2020, aimed at providing baseline data related to the health status, knowledge, practice, and attitudes of African SDAs regarding the health teachings of the Church, using the CELEBRATIONS acronym for health education. Phase One of the study included 15,434 participants from countries across Africa. Data revealed that approximately 40% of respondents self-reported height/weight classified as overweight or obese using the BMI reference of (25.0 kg/m<sup>2</sup> - > 30.0kg/m<sup>2</sup>). This statistic is consistent with the data on overweight/obesity in many countries of sub-Saharan Africa. For example, in Ghana (West Africa), the rate of overweight/obese adults was 43% (Ofori et al. 2016). Rates of overweight/obesity in Kenya (East-Central Africa) were 47% in urban dwellers (Oti, et al., 2013), and in Zimbabwe (Southern Africa), overweight/obesity rates were 33% (Amugsi et al., 2017).

Phase Two of the study, which will cover 2021-2024, is an implementation phase based on the data obtained from the first phase of the study. Intervention programs will focus on weight management among SDA populations in Africa. The specific aim of the Phase Two intervention study is to assess a culturally sensitive, tailored faith-based weight management intervention program to address the emerging problem of overweight/obesity in the church and in the continent of Africa. The significance of this study will offer a blueprint for an economical weight management intervention for use among the church

members and the African communities to curb the obesity and overweight epidemic. Findings from this study may inform future research on the use of technology to promote health behavior change in the church and in the African community.

### References

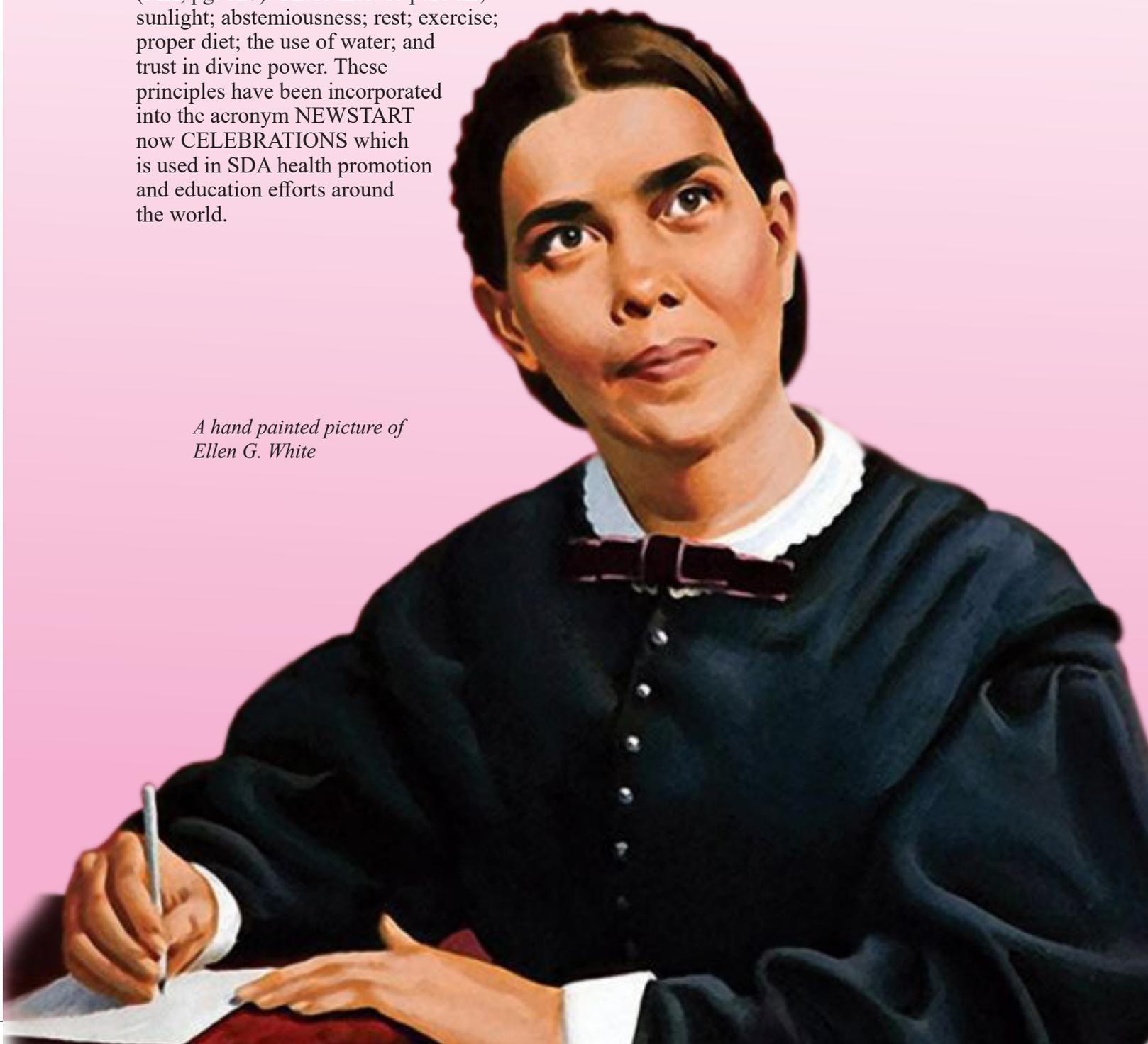
1. Ofori-Asenso, R., Agyeman, A.A., Laar, A. *et al.* (2016) Overweight and obesity epidemic in Ghana—a systematic review and meta-analysis. *BMC Public Health* **16**, 1239.
2. Oti SO, van de Vijver SJ, Agyemang C, Kyobutungi C. (2013) The magnitude of diabetes and its association with obesity in the slums of Nairobi, Kenya:
3. Amugsi DA, Dimbuene ZT, Mberu B, Muthuri S, Ezech AC. (2017) Prevalence and time trends in overweight and obesity among urban women: an analysis of demographic and health surveys data from 24 African countries, 1991-2014. *BMJ Open.* 7(10) e017344.
4. WHO, Depression, September 13, 2021. <https://www.who.int/news-room/fact-sheets/detail/depression>

## THE SDA HEALTH MESSAGE

The Seventh-day Adventists are known as a health-minded people. A denomination that places emphasis on the close relationship between physical well-being and spiritual life and growth. Only religious conviction and a concept which makes the health message a part of the third angel's message could motivate a health reform program which moves men and women in all parts of the world to adopt new and better living habits, and could lead the denomination to establish and operate a worldwide system of medical institutions. (SHM, pg. 52) The core health teachings of the SDA Church are largely based on the health principles articulated by White in her numerous books, many of which refer to healthful living in one way or another.

A summary of the SDA health teachings articulated by White in the book, *The Ministry of Healing* shows that the SDA teachings are not just related to nutrition, exercise or a single health habit. Rather, they are inclusive of eight healthy habits that White called the "true remedies" (MH, pg. 127). These include pure air; sunlight; abstemiousness; rest; exercise; proper diet; the use of water; and trust in divine power. These principles have been incorporated into the acronym NEWSTART now CELEBRATIONS which is used in SDA health promotion and education efforts around the world.

*A hand painted picture of  
Ellen G. White*





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## **African Seventh-day Adventist Health Study**

An Institutional Research by the School of Postgraduate Studies, Adventist University of Africa, Nairobi, Kenya

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