

## Health Beliefs Related to Hypertension Prevention among Elderly Male Members of Ahmadiyya Muslim Community in Nigeria

Article by Oni, Olawale Bashir-Ud- Deen Department of Public Health, Texila American University, Guyana, USA E-mail: oniolawale91@gmail.com

#### Abstract

Health beliefs have long been associated with a lower risk of various diseases, better compliance with medication and less likelihood of relapsing, and Hypertension is a major global public health problem due to its high prevalence with vascular disease, premature death, stroke, renal diseases, and retinopathy. This study aimed to study the health beliefs of elderly male members of the Ahmadiyya Muslim Community in Nigeria as they relate to hypertension lifestyle and prevention behaviors. A total of 372 questionnaires were distributed to collect the information using a stratified random sampling technique. A total of 357 questionnaires were retrieved and analyzed using descriptive statistical methods. The study revealed that the majority of elderly male members (72.3%) did not know their family member(s) with hypertension. The level of awareness of hypertension among the respondents was very low (84.3%) while a larger percentage (52.7%) used light exercise as preventive practice. Only 99 (27.7%) had close relations living with hypertension. The respondents were also associated with other complicated issues related to hypertension. A larger number of respondents were unaware of hypertension severity and associated risk factors. The higher degree was more aware of the benefits of hypertension preventative lifestyle behaviors. Based on these findings, enlightenment campaigns and/or health education on hypertension and mode of its prevention should be put in place, governmental and non-governmental organisations, as well as religious leaders, should take hypertension medication compliances seriously.

Keywords: Ahmadiyya Muslim, Elders, health beliefs, hypertension, Nigeria.

## Introduction

Hypertension is recognized as a major global public health problem due to its high prevalence of the vascular disease, premature death, stroke, renal diseases and retinopathy (Bani, 2011). In other words, Hypertension has been associated with the majority of cardiovascular adverse outcomes and stands as the second most important contributor to the global burden of disease, affecting almost one billion people worldwide (Lim *et al.*, 2012). These diseases kill about 12 million annually worldwide which is more than any other disease (Chavez, 2000). According to the American Heart Association as cited in Mary, Low, and Chung (2012), the estimated prevalence of hypertension was 73,600,000 (35,300,000 males and 38,300,000 females).

Al-Wehedy, Abd Elhameed, and Abd El-Hameed (2014) state that the prevalence of hypertension is usually high and was highest among elderly adults in developing countries. Leconte and Ismael (2012) described the term "Hypertension" as a medical condition in which the blood pressure in the arteries is elevated exceeding 140 over 90 mmHg. This elevation makes the heart work harder than usual to circulate blood through the blood vessels. Many patients suffer from this disease are not aware of this condition early because it is usually occurring without any symptoms. Hypertension takes a long time before diagnosed thereby causing major health problems like damage to organs as the brain and kidneys and so on are the long-term effect of hypertension disease (Cunha and Marks, 2011).

The belief of the individual has a greater impact on his/her health. Likewise, spiritual people are less prone to self-destructive behaviors, have a stress free and more optimum satisfaction of life. Various risk factors have been associated with hypertension such as age, sex, race, decrease physical activity, obesity, smoking, dietary, hormonal changes to mention but a few. Steven (2018) states that spiritualism has been seen in people, especially in elderly patients which have reduced depression,



improved management of hypertension and improved immune system. However, religious beliefs should not be a deterrence to medical care. This momentum of the religious adherent towards health has been observed in society.

As it has been stated earlier that hypertension is common especially among the blacks, they occur as target organ damage. It is unimaginable when an individual with a second-degree level of education rejects anti-hypertensive medications because he believes prayers work better than drugs in control of the diseases. Such believe is completely odd and eventually results in complications such as stroke, sudden cardiac death, chronic renal disease, hypertensive retinopathy, to mention but a few.

Several hypotheses have been offered to explain the health belief relating to hypertension among individuals, especially among elderly religious adherents and there are a lot of socio-cultural behaviors and beliefs associated with the management of hypertension. Many religious leaders in Africa, especially Nigeria claims to cure virtually any disease with a lot of misinformation and deceits. The idiosyncratic/dogmatic religious belief of Nigerians also poses danger in the management and prevention of hypertension.

At present, however, no study has investigated the health belief impact of elderly male members of this community regarding hypertension in Nigeria. Though several studies have been done of HBM on non-communicable diseases. For this purpose, this study focuses on elderly male members of the Ahmadiyya Muslim Community in Nigeria with a keen interest in the religious idiosyncrasy regarding their health. The economic importance of this includes community instability, low or no income, under-population, and so on. For instance, if a breadwinner in the family has a disability, hence limitation in their various performances at home, work, and community.

Ahmadiyyah Muslim Jama'at Nigeria (AMJN) contributes a greater impact in reshaping the belief of the citizens, especially the Muslims since its inception (1916) in Nigeria. The elderly male members of the Ahmadiyya Muslim Community in Nigeria which is called Majlis Ansarullah Ahmadiyya Nigeria (MAAN) were the focus of this study since they are mostly the aged group where hypertension and its complication are mostly noticed. Hence, the study in this age group would give us a clue about the health belief impact regarding hypertension among elderly male members of AMJN. This study is significant to public health if efforts on primary prevention especially greater efforts on changing members' socio-cultural beliefs and/or perspectives via health education on social media, radio, TV and even house to house education as it is being done on religious preaching.

#### The study area

The study was conducted at the headquarters of Ahmadiyya Muslim Jama'at Nigeria (AMJN) in Ojokoro, Lagos State. Ojokoro is a Local Government Council Development Area (LCDA) in Ifako-Ijaiye Local Government Area of Lagos state. The town lies on the outskirts of Lagos and shares a border with Ogun State. It is a major residential area for an ever-emerging number of middle-class folks who live on the border of Lagos State. A major point of interest in Ojokoro is the Jankara Market, a popular market where local crafts, imported clothing, and jewelry are sold (travel.jumia.com).

## **Materials and methods**

Ahmadiyyah Muslim Jama'at Nigeria (AMJN) comprises five different auxiliary bodies namely: Majlis Ansarullah Ahmadiyya Nigeria (male members of 41 and above), Majlis Khuddamul Ahmadiyya (male youths between ages 16 and 40), Majlis Atfal (male children of ages 7 and 15), Lajna Imaillah (women of ages 16 and above) and Nasiratul-Ahmadiyya (female children between ages 7 and 15). Majlis Ansarullah Ahmadiyya Nigeria (MAAN) members which were the focus of this study, scattered nationwide, most especially, Northern, Eastern and Southern parts of the country with the registered population of about 5000. Since the population of MAAN throughout Nigeria was less than 10,000, the minimum number of the subject required for the study was calculated using Krejcie and Morgan (1970) formula to determine the sample size which is given below.

$$S = \frac{X^2 N P (1 - P)}{D^2 (N - 1) + X^2 P (1 - P)}$$

#### Where

S = the required sample size

```
X^2 = table value of Chi-Square @ d.f. =1 for desired confidence level .10=2.71, .05=3.84,
.01=6.64, .001=10.83)
N= population size
P= population proportion (assumed to be .50)
```

D= degree of accuracy (expressed as a proportion)

After applying the formula, the sample size is 372

Before administering the questionnaires, it was pretested at a mosque comprising elderly male members in Ilaro, Ogun State, Nigeria. A total of 25 questionnaires were distributed and analyzed. After the pre-test, a semi-structured-self-administered questionnaire was used to collect the information from the targeted population and a total of 372 questionnaires were administered using a stratified random sampling technique. The members were randomly stratified into four groups in their sitting arrangements at the workshop. All the even numbers of the rows in the four groups were randomly selected for the data collation. The executive members and research assistants of MAAN helped as data collectors, during the break time and returned immediately via them from whom the questionnaires were centrally collated. Data collection included demographics; current health status; knowledge and attitudes towards hypertension prevention behaviors and healthy lifestyle behaviors.

## Results

## Demographic characteristics of the respondents

In Table 1, 94 (26.3%) of respondents' ages range between 40 and 50, 127 (35.6%) were between 51 and 60 years of age, 104 (29.1%) were between 61 and 70 years, 26 (7.3%) were between 71 and 80 years of age while 6 (1.7%) respondents were 80 years and above. On the level of accurate and knowledge of hypertension by years among the respondents, 255 (71.4%) of total respondents were not hypertensive, 24 (6.7%) were having it within 1 year, 13(3.6%) were hypertensive between 1 to 5 years, 25 (7.0%) were hypertensive between 5 and 10 years, 38 (10.6%) were hypertensive more than 10 years while 2 (0.6%) of respondents were not hypertensive in their lifetime.

Based on the years spent in AMJN among MAAN, 4 (1.1%) of respondents have joined AMJN between 1 to 5 years, 47 (13.2%) joined between 5 to 20years, 50 (14%) joined between 21 and 30 years, 59 (16.5%) joined between 31 and 40years ago, 20 (5.6%), 177(49.6%) were AMJN members since birth. In the level of education, 10 (2.8%) of total respondents were not formally educated, 72 (20.2%) have Primary school leaving certificate, 95 (26.6%) were O-level certificate holders, 38 (10.6%) were A-Level holders, 4 (1.1%) were Grade Two holders, 2 (.6%) were NCE holders, 87 (24.4%) were First Degree holders while 49 (13.7%) of respondents were Postgraduate Certificate holders.

		Frequency	Percent
Age range among surveyed MAAN	40-50	94	26.3
(N = 372)	51-60	127	35.6
	61-70	104	29.1
	71-80	26	7.3
	80 and above	6	1.7
	Total	357	100
Levels of accurate awareness and	N/A	255	71.4
knowledge of hypertension by years	0-1 Year	24	6.7
among surveyed MAAN ( $N = 357$ )	1-5 Years	13	3.6
	5-10Years	25	7.0
	>10 Years	38	10.6
	No time	2	0.6
	Total	357	100

Table 1. Demographic characteristics of the respondents (in percentage)

Years spent in AMJN among	1-5 Years	4	1.1
surveyed MAAN ( $N = 357$ )	5-20 Years	47	13.2
	21-30 Years	50	14.0
	31-40 Years	59	16.5
	41-50 Years	20	5.6
	All my life	177	49.6
	Total	357	100
Level of Education among surveyed	Informal Education	10	2.8
MAAN (N = 357)	Primary	72	20.2
	O-Level	95	26.6
	A-Level	38	10.6
	Grade Two Teacher	4	1.1
	NCE	2	.6
	First Degree	87	24.4
	Postgraduate Degree	49	13.7
	Total	357	100

# Knowledge of hypertension, barriers, preventive practice and close relations with hypertension

In Table 2, 55 (15.4%) of respondents were hypertensive, 301 (84.3%) were not hypertensive while 1 (.0.3%) were no more hypertensive. On the aspect of susceptible barriers in taking drugs daily, 44 (12.3%) of the total respondents were not respond, 61 (17.1%) were taking drugs daily, 77 (21.6%) were not taking their drugs daily while 175 (49.0%) were not on drugs. Table 4.2 also shows that 10 (2.8%) of the total respondents did not respond, 188 (52.7%) were engaging in light physical activities, 107 (30.00%) were into moderate activities while 52 (14.6%) were actively engaging in physical activities. About knowledge of the close relations living with hypertension, 99 (27.7%) of the respondents were knowing close relations while 258 (72.3%) do not know their relative hypertensive status.

		Frequency	Percent
Knowledge about Hypertension	Yes	55	15.4
among surveyed MAAN ( $N = 357$ )	No	301	84.3
	Yes, before but no more	1	0.3
	Total	357	100
Susceptible Barriers in taking drugs	Not responded	44	12.3
daily among surveyed MAAN (N =	Yes	61	17.1
357)	No	77	21.6
	Not on Drugs	175	49.0
	Total	357	100
Preventive practice with a level of	Not responded	10	2.8
Physical Activities among surveyed	Light	188	52.7
MAAN (N = 357)	Moderate	107	30.0
	Active	52	14.6
	Total	357	100
Knowledge About Close Relations	Yes	99	27.7
with Hypertension among surveyed	No	258	72.3
MAAN (N=357)	Total	357	100

Table 2. Knowledge of hypertension, barriers, preventive practice and close relations with hypertension

## Complication related to hypertension among MAAN

The above table 3 below shows that 144 (40.3%) of the total respondents have poor vision, 3 (0.8%) have heart attack, 2 (0.6%) have kidney disease, 3 (0.8%) have to disease, 2 (0.6%) were

having poor vision, hepatitis, and high cholesterol, 2 (0.6%) poor vision and heart attack while 201 (56.3%) were missing.

		Frequency	Percent
Complication	Poor vision	10	2.8
related to	Heart Attack	72	20.2
hypertension	Kidney Disease	95	26.6
	Poor and Kidney Disease	38	10.6
	Poor Vision, Hepatitis & High Cholesterol	4	1.1
	Poor Vision & Heart Attack	2	.6
	Total	87	24.4
	Missing System	49	13.7
	Total	357	100

Table 3. Complication related to hypertension among surveyed MAAN (N=357)

## Discussion

Based on the findings of this study, the perceived threat of developing hypertension in the future will be low among the study sample. Less than half of the elderly male members believed that they might develop hypertension within their lives. Even though a significant percentage of the participants declared a close relative with hypertension, many did not perceive themselves as susceptible to developing the disease in the nearest future. This is mostly due to the poor level of knowledge related to hypertension and its complications among this group of elders.

Almost a third (27.7%) of the elderly male members in this study described hypertension as a serious disease compared to other chronic diseases like diabetes, while another more than half (72.3) falsely believed that hypertension was not their portion as religious leaders do preach during the sermon. The findings in this study are most likely due to poor knowledge of hypertension risk factors or methods of hypertension prevention. A greater number of elderly male members perceived the benefits of adopting a healthy lifestyle. This indicates that the majority of elderly male members believed that prevention behaviours were key to preventing hypertension as it is observed that (52.7%) of them engaged in light exercise.

Educational level differences could be driven by higher levels of awareness among elderly male members, especially with regards to health attach and regular blood pressure measurements. However, elderly people were also more likely to perceive barriers to engaging in hypertension prevention behaviours. Usage of HBM is a theoretical jargon, the relationships between the four fundamental dimensions of the HBM (perceived susceptibility and\_severity of disease and perceived barriers and benefits\_of the preventative action) indicate that the model is a useful theoretical framework in describing attitudes\_toward hypertension prevention behaviours. The finding\_of this current study remains convinced of the significance.

One-thirds (27.3%) of the elders had at least one family member with hypertension. This indicates poor recognition of hypertension risk factors. Many elders were unaware of the severity of this chronic disease. High level of education elders perceived the benefits of effective lifestyle behaviours more frequently than low-level education elders, although the latter reported engaging in physical activity more often.

## **Conclusion and recommendation**

The findings of this study show that almost one-third (27.3%) of the elders had at least one family member with hypertension, the current study indicated poor recognition of hypertension risk factors and the importance of adopting a healthy lifestyle and engagement in physical exercise among this MAAN. An alarmingly high number of elderly male members were unaware of hypertension severity and associated risk factors. High level of education elders perceived the benefits of effective lifestyle behaviours more frequently than low-level education elders, although lower degree engaged in routine exercise more often.

Based on the findings of this study, the following recommendations are made

- 1. There should be enlightenment campaigns through workshops, electronic and social media communication, on hypertension and mode of its prevention.
- 2. Health education should also be put in place for elderly people and
- 3. Governmental and Non-governmental organizations, as well as religious leaders, should take hypertension medication compliances seriously.

# References

[1]. Al-Wehedy A., Abd Elhameed, S.H., and Abd El-Hameed D. (2014). Effect of a lifestyle intervention program on controlling hypertension among older adults. *Journal of Education and Practice*, 5(5), 61.

[2]. Bani, I.A. (2011). Prevalence and related risk factors of essential hypertension in the Jazan Region, Saudi Arabia. *Sudanese Journal of Public Health*, 6(2), 45-50.

[3]. Chavez, M.L. (2000). Knowledge and practices on hypertension of adults: An interventional study by trained volunteer health workers in Barangay Militar, Tukuran, Zamboanga Del Sur, The Faculty of the Zamboanga Medical School Foundation, I.N.C. Zamboanga City, *Doctoral Degree of Medicine*, 2000. 3, 20. [4]. Cunha and Marks, 2011.

[5]. Glanz, K. (2008). *Health behaviour and health education: Theory, research, and practice*. 4th Edition. San Francisco, California, USA: Jossey-Bass, .46.

[6]. Janz, N.K., and Becker, M.H. (1984). The health belief model: A decade later. *Health Educ Q 1984*, 11, 1–47.

[7]. Leconte, M.M., and Ismael, V. (2012). *Teaching plan for high blood pressure management, college of technology*. New York City, 126.

[8]. Lim, S.S., Vos, T., Flaxman, A.D. (2012). A comparative risk assessment of burden of disease and injury attributable to 67 risk factors and risk factor clusters in 21 regions, 1990–2010: A systematic analysis for the Global Burden of Disease Study 2010. *Lancet*, 380, 2224-60.

[9]. Mary Beth, M.R., Low, S.Y., and Chung, P.Y. (2012). Study to assess the knowledge on self-blood pressure monitoring among hypertensive patients in selected wards of hospital Lam Wah Ee, Malaysia, School of Health Sciences, International Medical University, Kuala Lumpur, Malaysia. *Ie JSME*, 6(2), 43-45.

[10]. Steven Dowshen, M.D. (2018). How can spirituality affect your family's health, retrieved on the 30<sup>th</sup> of December, 2018? www.kidshealth.org/parents/spiritual.

[11]. Taylor, D. et al. A review of the use of the Health Belief Model (HBM), the Theory of Reasoned Action (TRA), the Theory of Planned Behaviour (TPB) and the Trans-Theoretical Model (TTM) to study and predict health-related behavior change. From: www.nie.org. UK/guidance/ph6/resources/behaviour-change-Taylor-et-al-modelsreview2 Accessed: Dec. 2018.

[12]. Wikipedia https://travel.jumia.com/en-gb/destinations/ojokoro-10003456.

[13]. Wikipedia *List of Nigerian states by population* http://www.free en.m.wikipedia.org/. (Accessed 5 Jan 2018).

[14]. Williams, C. (2003). Cushman the burden of uncontrolled hypertension: morbidity and mortality associated with disease progression. *Journal of Clinical Hypertension* (Greenwich UK).