ISSN Print: 2664-7591
ISSN Online: 2664-7605
Impact Factor: RJIF 5.2
IJAN 2023; 5(2): 17-23
www.pharmaceuticaljournal.in
Received: 07-06-2023
Accepted: 12-07-2023

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Quality of life, prevalence, knowledge, and management of hypertension amongst the political class in Bayelsa State

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DOI: https://doi.org/10.33545/26647591.2023.v5.i2a.57

Abstract
Background: Hypertension is a risk factor for all cardiovascular-related illnesses. Maintaining a high quality of life for those with hypertension is critical. As a result, the study's goal was to offer an update on the current prevalence and management of hypertension, as well as the quality of life among Bayelsa state politicians in Nigeria.
Aim: This study evaluated the management of Hypertension amongst the Political Class in Bayelsa State.
Methods: The study included 250 politicians, who were previously treated for hypertension. A questionnaire was designed to collect demographic, medication, and medication history information from the respondents. Ethical approval was obtained as it applies to this study. The questionnaires were analyzed using SPSS software version 27.0.
Results: Data obtained showed 61.6% were male while 38.4% were female. About 48.0% of the respondents indicated that their health was better, 31.6% stated that their health affects them from participating in rigorous physical activities, 57.6% said they participate in moderate activities, 20.8staircasesair cases, and other activities like bending, kneeling, or stooping (100%), walking more than a mile (100%), walking several hundred (100%) or one hundred (79.6%) yards, bathing or dressing oneself (48%), eye problems (43.8%), longer stay in hospital (90.4%). There was a significant difference between knowledge and pattern of management of hypertension. Using one-way ANOVA, there was no statistically significant difference between knowledge, prevalence, and quality of life among politicians that had hypertension
Conclusion: Participants revealed a high prevalence and low comprehension or knowledge of hypertension and blood pressure treatment among politicians in Bayelsa State. Those with some knowledge of hypertension control are managing and adhering to pharmacologic and non-pharmacological strategies. As a result, significant measures are required to enlighten them and carefully manage their blood pressure and overall health. This will increase their standard of living and their ability to serve humanity.

Keywords: Hypertension, knowledge, prevalence, management, quality of life, politics, Bayelsa

Introduction
Since all known cardiovascular diseases (CVDs) have been linked to hypertension, it is crucial to assess the disease's burden, plan for future healthcare requirements, and allocate resources accordingly. It is a top priority for addressing the prevalence of non-communicable diseases (NCDs) around the world. Extensive epidemiological research on the causes of non-communicable ailments and their cardiac consequences has consistently contributed to hypertension being the most prevalent. CVDs accounted for about 5278.4 in every hundred thousand adults in 2016, as reported by the Global Burden of Disease (GBD) (DALYs & HALE, 2016; GBD, 2016). A 2013 meta-analysis of community-based and cross-sectional demographic studies predicted that hypertension will occur at a rate of 28.9% in Nigeria (Adeloye *et al.*, 2015) [2].
Cardiovascular disease, cancer, diabetes (DM), and severe respiratory diseases like asthma, bronchoconstriction, pneumonia, bronchitis, etc., are among the primary causes of global

disease burden (WHO, 2010; Lozano, 2012) [15], and are regarded as major issues in achieving the ostensibly sustainable development goals of the twenty-first century (UN, 2011). Hypertension is a global concern due to its significant contribution to CVDs. Globally, it accounts for about 55% of CVD, with a prevalence and incidence rate of 40% (WHO, 2010). Hypertension can be successfully managed in low-income
countries utilizing basic, cost-effective, and easily implemented primary care approaches (WHO, 2013). However, the proportion of hypertensive patients who are effectively managed varies by nation, and uncontrolled hypertension accounts for almost two-thirds of all strokes as well as certain cardiovascular diseases. In response to the global NCD epidemic, major efforts have been made to achieve exceptional technologies and enhance guidelines in research and clinical practices for effectively managing hypertension and related CVDs (James, 2014; Xu, 2015) [1-19]. China bears a disproportionate portion of the burden of NCDs as compared to Europe, the greatest developing nation. The prevalence of hypertension nearly doubles every decade. Hypertension has been dubbed the "silent killer," accounting for 80% of CVD mortality in the US, with over half of those deaths occurring prematurely (He, 2009) [20].

Quality of life (QOL) is a phrase often used in health care settings at policy and administration levels, in clinical assessments of therapies, and in clinical management of individual cases. While QOL is a broad concept that covers such areas as social, environmental, economic, and health satisfaction, health-related quality of life (HRQL) is less wide-ranging, including mental and physical health and its consequences. Health-related quality of life (HRQL) is considered one of the key concepts in the contemporary practice of medicine and delivery of health care. Quality of life assessment is complicated by the fact that there is no universally accepted definition for QOL. The researchers of this study have adopted the WHO defines QOL as individuals' perceptions of their position in life in the context of the culture and value system in which they live concerning to their goals, standards, and concerns (WHO, 1998).

In general, hypertension-related quality of life (HRQL) can be influenced directly and indirectly by various disease-related factors. Chronic diseases, such as cardiovascular diseases and mental disorders (e.g. depression) potentially decrease short-term and long-term HRQL. Direct effects of the disease itself and side effects of the treatment may influence HRQL in patients with stroke or hypertension. Hypertension and stroke are two prevalent medical conditions that may affect the quality of life substantially. Moreover, anti-hypertensive medication may induce fatigue, dizziness, and sexual dysfunction, which in turn in the patient's activity of daily living and quality of life (Cella *et al.*, 1995) [21].

Major medical consequences of stroke concern different physical and psychological aspects such as loss of sense, palsy, disturbance of body image, depression, and change in patient's role also affecting HRQL. Despite of side effects of medication (e.g. antidepressants, anti-cholinergic, and anti-adrenergic agents) potentially leading to decreased well-being, a meta-analysis of well-selected and comparable trials has shown the positive impact of anti-hypertensive medication on patient quality of life as a whole despite disturbing side effects (Leonetti *et al.*, 1994; Ozer *et al.*, 1994) [16-17]. This study aims to evaluate the management of Hypertension amongst the Political Class in Bayelsa State.

Methods

The study included 250 politicians, who were previously treated for hypertension. A questionnaire was created to collect demographic, medication, and medication history information from the respondents. The questionnaires were analyzed using SPSS software version 27.0.

Results

250 people in total took part in the survey, with 61.6% of them men and 38.4% of them women. The study's target audience was people between the ages of 20 and 70, so participants' ages fell into the following categories: 20 to 30, (11.2%), 31 to 40, (25.6%), 41 to 50, (32%), 51 to 60, (21.6%), 61 to 70, and (9.6%), respectively. Only 9.6% of respondents only had secondary education, compared to a larger (31.2%) portion who had professional degrees, 30.4% who had post-tertiary education credentials, 30.4% who had tertiary education, and 28.8% who did. There was a significant difference between knowledge and pattern of management of hypertension. Using one-way ANOVA, there was no statistically significant difference between knowledge, prevalence, and quality of life among politicians that had hypertension.

The Blood Pressure of participants was measured at the point of interview and 20.4% had a normal BP (<120/<80 mmHg) while a greater number of them (79.6%) had a BP of between 120-139 mmHg systolic pressure and 80-89mmHg diastolic pressure respectively. Another predisposing risk factor for hypertension is a family history of hypertension. About 10.8% of the participants affirmed that they have relatives with recurrent or consistent high blood pressure (Hypertension 19.2% of the participants were smoking cigarettes, 30.4% take alcohol, and 22.0% were diabetic with 42.4% currently undergoing hypertensive care. 42.4% are also aware of the systolic pressure reading and the lower or bottom number, diastolic pressure reading (48.8%) of blood pressure measurement. All participants (100%) agreed that having high blood pressure can be harmful to their health. Since a strong risk factor for developing hypertension is a family history, 88.8% of respondents agreed that this condition can be passed down through families. According to 69.6% of the participants, symptoms of severe hypertension include headache, shortness of breath (79.2%), feeling dizzy (82.4%), chest pain (47.6%), visual changes or changes in ocular pressure (36%), and the presence of blood in the urine (20.8%). Participants were also of the opinion that reducing blood pressure would improve their health and QOL (100%). Some of them (69.6%) are aware that there are different types of hypertension, including primary (41.2%) and secondary (41.2%) hypertension. The majority of participants (79.2%) thought that hypertension could be treated, but 20.8% weren't sure if it could be completely cured.

Table 1: Respondents' Background Knowledge of Hypertension

Variable	SA (N, %)	A (N, %)	NS (N, %)	D (N, %)	SD (N, %)
Knowledge					
Hypertension can be dangerous to your health	172 (68.8)	78 (31.2)	0	0	0
If your parents or relatives are hypertensive you can also, be hypertensive	76 (30.4)	146 (58.4)	28 (11.2)	0	0
Someone can have headache in severe hypertension	0	174 (69.6)	76 (30.4)	0	0
Can someone with hypertension experience shortness of breath	96 (38.4)	102 (40.8)	24 (9.6)	28 (11.2)	0
Can someone with hypertension feel dizzy	0	206 (82.4)	28 (11.2)	16 (6.4)	0
Do hypertensive patients experience chest pain	48 (19.2)	71 (28.4)	131 (52.4)	0	0
Can hypertensive patients have visual changes	52 (20.8)	40 (16.0)	130 (52.0)	28 (11.2)	0
Can hypertensive patients have blood in their urine	0	52 (20.8)	99 (39.6)	83 (33.2)	16 (6.4)
Do you know that hypertension can be classified	68 (27.2)	106 (42.4)	52 (20.8)	24 (9.6)	0
Primary hypertension is a class of hypertension	24 (9.6)	79 (31.6)	123 (49.2)	24 (9.6)	0
Secondary hypertension is a class of hypertension	28 (11.2)	75 (30.0)	120 (49.2)	0	24 (9.6)
Lowering High blood pressure can improve a person's health	116 (46.4)	134 (53.6)	0	0	0
Hypertension can cause an increased resistance to Blood	44 (17.6)	130 (52.0)	76 (30.4)	0	0
High BP (hypertension) is a lifelong disease	68 (27.2)	79 (31.6)	76 (30.4)	0	27 (10.8)
Hypertension is a condition that you can be cured	0	198 (79.2)	52 (20.8)	0	0

Table 2: Risks factors

Risk factors					
Too much salt intake	28 (11.2)	126 (50.4)	96 (38.4)	0	0
Tension	148(59.2)	102(40.8)	0	0	0
Lack of exercise	28(11.2)	198(79.2)	24(9.6)	0	0
High cholesterol	28(11.2)	158(63.2)	64(25.6)	0	0
Obesity	52(20.8)	142(56.8)	56(22.4)	0	0
Smoking	120(48.0)	106(42.4)	24(9.6)	0	0
Aging	80(32.0)	146(58.4)	24(9.6)	0	0
Diabetes	24(9.6)	186(74.4)	40(16.0)	0	0
Alcohol abuse	120(48.0)	106(42.4)	24(9.6)	0	0
Complications					
Heart attack	148(59.2)	102(40.8)	0	0	0
Stroke	44(17.6)	206(82.4)	0	0	0
Aneurysm	0	102(40.8)	108(43.2)	16(6.4)	24(9.6)
Narrowed blood vessels in Kidney	0	118(47.2)	108(43.2)	0	24(9.6)
Narrowed blood vessels in the eyes	0	78(31.2)	76(30.4)	72(28.8)	24(9.6)
Metabolic syndrome	24(9.6)	94(37.6)	108(43.2)	24(9.6)	0
Trouble with memory or understanding	64(25.6)	78(31.2)	52(20.8)	56(22.4)	0

Table 3: Self-care practices and management of hypertension

Variable		Frequency (n)	Percentage (%)
Have sphygmomanometer at home?	Yes	27	10.8
	No	223	89.2
Regularly check your BP?	Yes	170	68.0
	No	80	32.0
How often do you check?	Nil	56	22.4
	Monthly	43	17.2
	Every 3 months	103	41.2
	More than 3 months	48	19.2
Where do you check BP?	Nil	56	22.4
	Home	24	9.6
	Tertiary hospital	79	31.6
	Nearest facility	48	19.2
	Voluntary check by a medical personnel	43	17.2
Barriers towards self-testing for BP?	Expensive	8	3.2
	Lack of awareness	76	30.4
	Inaccurate result	67	26.8
	Pain	24	9.6
	Don't feel the need	75	30.0
Consult your doctor for HTN	Once/twice in a month	43	17.2
	Every 2 months	27	10.8
	Every 3-6 months	80	32.0
	Every 6-12 months	76	30.4
	More than 12months	24	9.6
Consult your cardiologist for heart examination?	Once or twice in a month	27	10.8
	Every 2 months	67	26.8
	Every 3 months	24	9.6
	Every 6 months	52	20.8
	Once in a year	80	32.0
ECG examination?	Once /twice in a life time	40	16.0
	Monthly	27	10.8
	Ever 3months	51	20.4
	Every 6months	28	11.2
	More than that	24	9.6
	Never	80	32.0
Most important practice to control high BP?	Taking medications	27	10.8
	Rhythmic exercise	80	32.0
	Less stress	95	38.0

Table 4: Self-Management

	Quitting smoking	24	9.6
	Losing Weight	24	9.6
How do you manage hypertension?			
Food restriction	Yes	0	0
	No	250	100.0
Avoiding alcohol	Yes	0	0
	No	250	100.0
Salt restriction	Yes	0	0
	No	250	100.0
Antihypertensive medications	Yes	51	20.4
	No	199	79.6
Moderate exercise	Yes	92	36.8
	No	158	63.2
Herbal Medicine	Yes	27	10.8
	No	223	89.2
Adequate rest and sleep	Yes	80	32.0
	No	170	68.0
How often do you take your medication?	Alternate day	52	20.8
	Once a day	92	36.8
	Twice a day	106	42.4
How many hypertensive medications do you take a day?	One	28	11.2
	Two	195	78.0
	Three	27	10.8
Have you experienced side effects of your antihypertensive medication?	Yes	107	42.8
	No	143	57.2
Are you on any herbal medication used for hypertension?	Yes	51	20.4
	No	199	79.6
Have you experience side effects when you use the herbal medication?	Yes	48	19.2
	No	202	80.8
Do you feel herbal medications are better than orthodox?	Yes	43	17.2
	No	207	82.8

Table 5: Specific assessment for quality of life

Variable	Not at all	Yes, somehow	Yes, a lot	Yes, very much
Sleeping poorly?	104 (41.6)	118(47.2)	28(11.2)	0
Difficulty maintaining social relationships?	127(50.8)	83(33.2)	40(16.0)	0
Difficulty interacting with other people?	131(52.4)	71(28.4)	24(9.6)	24(9.6)
Not playing a useful role in life?	183(73.2)	67(26.8)	0	0
Unable to make decisions and start new things/projects?	99(39.6)	151(60.4)	0	0
Continuously distressed and tense?	28(11.2)	130(52.0)	68(27.2)	24(9.6)
Life is a constant struggle?	0	198(79.2)	0	52(20.8)
Incapable of enjoying your daily activities?	80(32.0)	130(52.0)	40(16.0)	0
Worn-out and powerless?	83(33.2)	127(50.8)	24(9.6)	16(6.4)
Have you felt sick?	55(22.0)	103(41.2)	92(36.8)	0
Had difficulty breathing or felt breathless for no apparent reason?	76(30.4)	174(69.6)	0	0
Ankles been swollen?	88(35.2)	82(32.8)	80(32.0)	0
Urinating more frequently?	92(36.8)	134(53.6)	24(9.6)	0
Has your mouth been dry?	76(30.4)	106(42.4)	24(9.6)	44(17.6)
Have you felt pain in the chest without doing any physical exertion?	24(9.6)	106(42.4)	44(17.6)	76(30.4)
Numbness or a tingling sensation in any part of the body?	48(19.2)	202(80.8)		
Hypertension and its treatment have affected your quality of life?	51(20.4)	107(42.8)	24(9.6)	68(27.2)

61.6% affirmed that too much intake of salt is a major risk factor in hypertension, while other state tension (100%), lack of physical exercise (90.4%), high cholesterol levels (74.4%), obesity (77.6%), cigarette smoking (90.4%), alcohol abuse or chronic intake (90.4%), diabetes (84%) and aging (90.4%), respectively. Also, all participants (100%) were aware that some major complications of hypertension are heart attack and stroke. Other complications include aneurysms (40.8%), narrowed blood vessels in the kidney (47.2%) and eyes (31.2%), metabolic syndrome such as diabetes (47.2%), and trouble with memory or understanding (56.8%)

Table 6: Outcome assessment of hypertensive care with adjusted year's quality of life (AYQL)

Variable	Much better now	Somewhat better now	About the same as one year ago,	Worse than one year ago	Much worse now
Compared to one year ago, how would you rate your health in general now?	106 (42.4)	120 (48.0)	24(9.6)	0	0
Does your health now limit you in these activities? If so, how much?	**Very much**	**Much**	**Little**	**No effect**	
Vigorous activities, such as running, lifting heavy objects, participating in strenuous sports.	91(36.4)	79(31.6)	80()32.0	0	
Moderate activities, such as moving a table, pushing a vacuum cleaner, bowling, or playing golf.	27(10.8)	144 (57.6)	51(20.4)	28(11.2)	
Lifting or carrying groceries	107(42.8)	52(20.8)	91(36.4)	0	
Climbing several flights of stairs.	27(10.8)	120(48.0)	76(30.4)	27(10.8)	
Climbing one flight of stairs	27(10.8)	52(20.8)	100(40.0)	71(28.4)	
Bending, kneeling, or stooping	55(22.0)	64(25.6)	131(52.4)	0	
Walking more than a mile	27(10.8)	79(31.6)	144(57.6)	0	
Walking several hundred yards	51(20.4)	72(28.8)	127(50.8)	0	
Walking one hundred yards	95(38.0)	28(11.2)	76(30.4)	51(20.4)	
Bathing or dressing yourself	27(10.8)	28(11.2)	40(16.0)	155(62.0)	
Has the condition affected your eye sight	56(22.4)	27(10.8)	24(9.6)	143(57.2)	
Has the condition affected your Sexual Performance	28(11.2)	40(16.0)	106(42.4)	76(30.4)	
Has the condition made you spend so much time in the hospital	52(20.8)	44(17.6)	130(52.0)	24(9.6)	
Has the condition affected the way you enjoy food such as taste, quantity, choice etc. (addition of salt, fries)	56(22.4)	24(9.6)	122(48.8)	48(19.2)	
During the past 4weeks, how much of the time have you had any of the following problems with your work or other regular daily activities as a result of your physical health?	**All the time**	**Most of the time**	**Some of the time**	**A little of the time**	**None of the time**
Cut down on the amount of time you spent on work or other activities	0	119(47.6)	76 (30.4)	55(22.0)	0
Were limited in the kind of work or other Activities	24(9.6)	107(42.8)	40(16.0)	79(31.6)	0
Had difficulty performing the work or other activities (for example, it took extra effort)	28(11.2)	75(30.0)	48(19.2)	99(39.6)	0
Accomplished less than you would like	0	28(11.2)	158(63.2)	64(25.6)	0

Some of the participants (31.6%) claimed that engaging in demanding activities like running, lifting heavy objects, and playing demanding sports had some negative effects on their health. Others (57.6%) said it prevents them from doing things like moving a table, pushing a vacuum, bowling, or playing golf; lifting or carrying groceries (20.8%); climbing

multiple stairs (30.4%), and having eye issues (43.8%). Some of the participants admitted that within the previous four weeks, they had reduced the amount of time spent at work (47.6%), limited a particular kind of work (52.4%), struggled to complete tasks (41.2%), completed less than anticipated (74.4%), and worked less carefully than usual (43.2%). Additionally, 79.6% of respondents said that their emotional or physical health issues had a mildly negative impact on their ability to engage in their usual events with friends, and family. Additionally, all participants feel full of life (100%), even though some have experienced extreme nervousness (79.2%), calmness and peace (50.8%), a lot of energy (100%), occasionally feeling down and depressed (47.6%), and worn out (52.0%), happiness (100%), and tiredness (100%).

10.8% of all participants happened to have a sphygmomanometer at home, but 68% consented that they check their blood pressure regularly. 9.6% check their BP at home regularly, 31.6% at tertiary hospitals, and 19.2% at nearby health facilities.

Discussions

Medication-assisted blood pressure control is without a doubt one of the most cost-effective methods of reducing premature cardiovascular morbidity and mortality. The purpose of this study was to update the political class in Bayelsa State's approach to hypertension management. The study's target audience was people between the ages of 20 and 70, so participants' ages fell into the following categories: 20 to 30, (11.2%), 31 to 40, (25.6%), 41 to 50, (32%), 51 to 60, (21.6%), 61 to 70, and (9.6%), respectively

The body weights of participants showed that 6.4% were between 40 and 54 kg, 20.8% between 55 and 69 kg, 41.2% between 70 and 89 kg, and 31.6% were over 89 kg. Obesity is one of the main risk factors for hypertension, and almost all study participants needed to maintain a healthy body weight. 48.0% of the participants had a BMI between 26 and 30, while 52.0% had a BMI above 30. This is in line with a previous report on the prevalence of hypertension and its management (Bello, 2013; Mezue, 2013) [12]

Self-care practice is mostly encouraged for pharmacodynamic conditions such as hypertension because it reduces hospital visits and incessant spending by patients. From the survey, only 10.8% of all participants happened to have a sphygmomanometer at home, but 68% consented that they check their blood pressure regularly.

All participants' quality of life was specifically assessed using standardized questions, and from the pool, more than the average (58.4%) reported that their sleep has been excellent, while 49.2% continue to have positive social relationships with their partners and all participants agreed that they are capable of making decisions and beginning new tasks or projects. While 79.2% of people say life is a constant struggle, 52.0% of them agree that they constantly feel anxious and tense. More than half of the participants feel unable to enjoy their daily activities, 76.8% often feel exhausted and helpless, 88% constantly feel ill and unwell, 69.6% have experienced difficulty breathing or have felt breathless for no apparent reason, 64.8% have experienced swollen ankles, 63.2% have also, frequently urinated, 69.6 have experienced dry mouth, 89.4% have experienced chest pain without engaging in any physical activity, and 80.8% have experienced fatigue (numbness or a tingling sensation). Additionally, 79.6% acknowledged that their quality of life has been impacted by hypertension and its treatment

Additionally, the analysis of demographic information and history of hypertension revealed that hypertension was more common in people between the ages of 20 and 30 and 51 and 60, indicating that both young and old are affected. This is consistent with a 2011 UN study that found that even at age 55, people still have a 90% lifetime risk of developing hypertension shortly. People with professional degrees appear to know more about hypertension and other conditions related to it. Also, from the analysis of hypertensive history and management, those family members with known hypertension tend to take major precautions in avoiding the likely risk factors that would predispose them to hypertension and all participants had the correct knowledge of what hypertension is all about

Conclusion

Politicians in Bayelsa State, of Nigeria have a high prevalence and poor understanding of the management of hypertension. Those who have some understanding of the topic are managing and following both pharmacological and non-pharmacological treatments for hypertension.

Recommendation

This study, therefore recommends drastic measures are needed to educate them and carefully manage their blood pressure and general health. Their standard of living and ability to serve humanity will both be improved in the nearest future.

Acknowledgement

The authors of this article appreciate the statisticians that analyzed the study data. There was no conflict of interest among the authors.

Conflict of interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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