

PSYCHOSOCIAL PREDICTORS OF REGULAR MEDICAL CHECK-UP AMONG NIGERIAN EMPLOYEES

By

¹Igbende, Dorothy Aumbur, ²Prof. Josiah A. Shindi,
³Anhange Samuel Terzungwu (Ph.D)

&

⁴Awopetu Ronke Grace (Ph.D)

¹E-mail: abelladorothy@gmail.com
aumbur@bsum.edu.ng
Mobile:08060256440,

²E-mail:josiahshindi@yahoo.co.uk
Moblie:08034778100,

³Email: anhangesamuel@gmail.com
Mobile:+2347037897964

&

⁴Email: graceawopetu@bsum.edu.ng
awopeturonke@gmail.com
Department of Psychology,
Benue State University

Abstract

This study explored the psychosocial predictors of regular medical check-up among Nigerian employees. The study employed a cross-sectional survey method where 501 participants consisting of 257 (51.3 %) males, 237 (47.3%) females and 7(1.4%)did not indicate their sex. Their ages ranged from 20-60years with the mean of 37.43 (SD = 9.56). The reliability coefficient of the regular medical check-up inventory used in the study was .79 Cronbach's alpha. Statistical analysis involved the use of chi-square and linear regression. Findings from the study indicated that, death anxiety did not significantly predict regular medical check-up among employees ($p > .05$). There was no significant association between religion and regular medical check-up among employees ($p > .05$). Finally, a significant association was found to have existed between the most preferred hospital of patients and regular medical check-up among employees $\chi^2(2df) = 14.11, p < .001$. It was therefore recommended that conscious efforts should be made to facilitate access to regular medical check-up among employees; and that more researches should be encouraged in the study area for further identification of long term solution to the problems of regular medical check-up among employees in Nigeria.

Key Words: Disease, Lifestyle management, Most preferred hospital, Prognosis, Regular medical check-up, Wellbeing.

Introduction

Interest in “regular medical check-up” among local government employees has accelerated in recent years. Part of the reason for this renewed interest has been that regular medical check-up is so vital in enhancing the wellbeing of workers. Medical check-up is referred to as an encounter with the health care system for the purpose of screening disease(s) when there was no doctors' diagnosis of illness in relation to the screening (Chobanian, Bakris, Black, Cushman, Green&Izzo, 2003). Medical check-up could be in form of regular screening or an adhoc nature performed by western medical practitioner (Center for Health Protection, 2008). Attending regular medical check-up is one of the basic approaches for disease prevention. When applied properly, medical check-up can help to detect early stage of certain diseases and to identify disease risk factors so that timely interventions can be introduced to improve patients' prognosis.

The public servants are the set of people affected by the industrial revolution and urbanization which resulted to sedentarism and associated problems. Center for Disease Control and Prevention (2012) reported that, inactivity alone resulted in a constellation of problems and conditions eventually leading to premature deaths. It was further noted that sedentary death syndrome relates to high blood cholesterol, high blood glucose, hypertension, myocardial ischemia, arrhythmias, congestive heart failure and obesity. Non- communicable disease are a major health burden in the industrialized countries and are increasing rapidly in the developing countries, owing to demographic transitions and changing lifestyles (World Health Organization, 2011). Furthermore, these lifestyle diseases have become important threats to the health of adults in sub-Saharan Africa, and efforts to detect these diseases are haphazard and prevention targets are largely in existence.

According to Centre for Health Protection (2008), a vast majority of people aged 15 years and above had positive views about the effectiveness of medical checkups. Over 90% of them had high expectations and believed that majority of diseases could be detected earlier through medical checkups and early detection would lead to improved prognosis. Furthermore, there is a variety of medical checkup packages available in the market. It is a misconception to believe that the most advanced and most expensive investigations are always the best ones. For example, 87.8% of people believed that the most advanced investigations were most effective in detecting diseases. On the contrary, the components of medical checkups should be tailored to individual needs and undertaken upon the advice of doctor based on one's medical history and personal background.

Similarly, Adamu (2012) indicated that, regular medical check-up has become very essential to enable the individual to detect his actual state of health and any

disease that he/she may be carrying at the early state. It is when such diseases are detected that they can be treated or managed at an early stage. According to him some people are genetically prone to certain health conditions that are hereditary, so regular medical check-up could assist in addressing the risk factors associated with such conditions before they become complicated health issues.

The campaign for maintaining regular blood checkup has assumed a global dimension as a strategy for addressing high blood pressure related problems (cardiovascular complications). Commenting on importance of regular medical checkup, Transmed (2009) noted that a regular medical checkup can be a valuable tool to one in order to maintain good health and help prevent a number of health problems. The main benefit of a checkup is the detection of disease conditions at an early stage or better still, the prevention of a condition occurring in the first place. It is recommended in the 6th edition of Transmed that one should have one medical checkup at least once annually for people with normal conditions of blood pressure. A medical checkup allows your doctor to obtain full history of your medical background should you have a medical complication, a medical history will assist your doctor to make a diagnosis. A medical checkup will also assist you to know your body. It may trigger a health conscious mind that will help you to be in harmony with your body. You will become aware of your body's strength and weaknesses, and be able to address your body's weaknesses.

The above analysis is important to workers since most of them do not realize their blood pressure is high (hypertension), as high blood pressure, cardiovascular, coronary heart disease etc, usually has no symptoms. Apart from recommending early detection and long-term treatment as to a healthier life, Nathan Kidney Foundation (2010) also encouraged families to follow doctors' advice about any life style changes they need to make. The lifestyles include dieting, exercise, avoiding smoking among other risk factors as possible.

Researchers have examined whether life-threatening illness is associated with heightened death anxiety. Among young men treated for either testicular cancer or Hodgkin's disease, death anxiety was higher among the more recently diagnosed men using the 15-item fear of Death Questionnaire (Cella & Tross, 1987). Furthermore, Contextual issues surrounding serious illnesses such as concerns related to having loved ones witness the dying process and leaving loved ones behind were also associated with increased death anxiety. Patients with brain tumors and their families were preoccupied with death anxiety and existential thoughts in qualitative analyses of interview data (Adelbratt & Strang, 2000). Patients lived with a constant sense of threat and tried to avoid death thoughts during their daily lives, but symptoms would activate death anxiety (Adelbratt & Strang, 2000). In terminally ill patients, death anxiety was relatively low

suggesting that realistic acceptance and coming to terms with the inevitability of death had occurred using fear of death scale (Smith, Nehemkis, & charter,1984).Recognizing this phenomenon may assist healthy individuals to directing their lives toward life-enhancing fulfillment such as attending regular medical check-up. Further, the findings demonstrate the necessity of targeting interventions aimed at managing death anxiety and its repercussion toward varying developmental stages in healthy individuals.

Several studies have shown that when death awareness and its associated anxiety are increased, individuals respond by defending and/or intensifying their cultural beliefs (Pyszczynski, Solomon& Greenberg, 2002). In western cultures, the pursuit and possession of material objects, or materialism, could also be a coping response to death anxiety (Arndt, Solomon, Kasser, & Sheldon, 2004;Rindfleisch & Burroughs, 2004). Collective endorsement of brands and consumerism may provide a sense of meaning, strengthen social ties and belonging, and enhance perceptions of power in achieving important life accomplishments. This in turn may improve self- worth and status perceptions, factors that insulate against death awareness and death anxiety (Rindfleisch &Burroughs, 2004). In fact, studies on death anxiety among the sick have foundhigh death anxiety only among people diagnosed with life threatening healthproblems such as testicular and brain cancer (Cella & Tross, 1987; Adelbratt & Strang, 2000).

Similarly patients with brain tumors and their families were preoccupied with death anxiety and existential thoughts in qualitative analyses of interview data (Adelbratt & Strang,2000). Patients lived with a constant sense of threat and tried to avoid death thoughts during their daily lives, but symptoms would activate death anxiety (Adelbratt & Strang, 2000). In terminally ill patients, death anxiety was relatively low, suggesting that realistic acceptance and coming to terms with the inevitability of death had occurred using the Fear of Death Scale (Smith Nehemkis, & Charter, 1983–1984). Certainty of beliefs toward an afterlife of reward was a significant finding in this study. A longitudinal study that focused on Human Immunodeficiency Virus (HIV) status and death anxiety among males found the highest levels of death anxiety among the group who were both HIV positive and symptomatic (Catania, Turner, Choi, & Coates, 1992).Furthermore, Social support became particularly important as the men approached death, and interpersonal interaction may have alleviated death anxiety.

The topic religion and AIDS has become highly controversial in the past twenty years, primarily because many prominent religious leaders have publicly declared their opposition to the use of condoms (Wikipedia, 2012). In addition to prevention, some religious groups have interrupted the treatment of AIDS, several people have stopped taking their medication, sometimes on the direct advice of

their pastors, leading to a number of deaths. Though some religious groups for the sake of marriage ask their members to go for check-up which in the end, marriage may hold or not based on the result. According to Harold (2004), beliefs conflict with medical care showing example of an adult Christian scientist of the reformed churches taking antibiotics or receiving immunizations. However, religious beliefs and activities have been associated with better immune function, lower blood pressure, lower death rate from cancer, less heart diseases or lower cardiac outcomes, lower cholesterol and better health behaviours (Oman, Kurata, Strawbridge, 2002). Furthermore, the choice of hospital will influence ones regular medical check-up (Centre for Health Protection ,2008).

According to Wyatt, Akylbekova, Wofford, Coady, Walker, and Andrew (2008) there is need to optimize the management and care of Coronary Heart Disease (CHD) patients, and we need to acknowledge that emotions carry independent additional risk, with particular subsets of patients dying prematurely due to their psychological vulnerability. Physiological mechanisms may provide part of the answer to the vicious cycle linking emotions to incident Coronary Health Disease (CHD) and its progression. Behavioral mechanisms should not be forgotten, as there is an urgent need for more effective lifestyle management in these patients, due to increases in the prevalence of obesity and diabetes, and no change in the proportion of patients who smoke, despite an increase in the prescription of cardio protective drugs. The issue of inadequate lifestyle management is unlikely to be resolved without attending to the emotions of our patients, as emotions such as depression play a pivotal role in compliance and adherence. This suggests that the 'one size fits all approach' to intervention in CHD patients is unlikely to work and that a personalized medicine approach is warranted (Fisher, 2011). This study aimed at investigating the psychosocial predictors of regular medical check-up among employees of Makurdi local government area, Benue State. It was therefore hypothesized that:

1. Death anxiety will significantly predict regular medical check-up among employees of Makurdi local government area.
2. There will be a significant association between religion and regular medical check-up among employees of Makurdi local government area.
3. There will be a significant association between respondents' most preferred hospital and regular medical check-up among employees of Makurdi local government area.

Method

Participants

Participants for this study were 501 employees who were purposively selected from employees of Makurdi local government area in Benue State. The age range of the participants was 20-60 years with the mean of 37.43 and standard deviation

of 9.56. Of the participants, 257 (51.3%) were males, 237 (47.3%) were females, while 7(1.4%) did not indicate their sex. As for their educational attainment, 19 (3.8%) had primary education, 107 (21.4%) had secondary education, 371(74.1%) obtained tertiary education, while 4(0.8%) did not indicate their level of education. In terms of income, 133(26.5%) were low income earners, 262(52.3%) were medium income earners, 93(18.6%) had high income, while 13(2.6%) did not indicate their income level. As for the cadre of the participants, 119(23.8%) belonged to the junior cadre, 124(24.8%) were intermediate cadre, 239(47.7%) were senior cadre, while 19 (3.8%) did not indicate their cadre. In terms of religion, 6(1.2%) belonged to African Traditional religion, 463(92.4%) were Christians, 30(6.0%) were Muslims, while 2 (0.4%) did not indicate their religion.

Measures/Instrument

The instrument used for the study was a regular medical check-up questionnaire developed by the researcher. The instrument has a reliability coefficient value of .79 Cronbach's alpha. The questionnaire was divided into four sections 'A' was demographic information, section 'B' had information on respondents' view about regular medical check-up, while section 'C' contained information on respondents' reasons for not having regular medical check-up, and section 'D' sought the information on respondents' reasons for having regular medical check-up. The instrument was scored using nominal scale. The scores were summed and analyzed.

Procedure

A copy of questionnaire was given to each of the respondents in their offices and duty posts. Compliance with the code of ethics of local government service commission as well as confidentiality of the participants' responses and strict adherence to individual privacy were assured. All the participants who were available within the duration of data collection and willing to participate were administered the questionnaire. All completed questionnaire were collected on the spot while those not completed were collected on a later date. A total of 550 questionnaire were administered but only 501 were returned.

Design

This study employed a cross-sectional survey method to explore psychosocial predictors of regular medical check-up among employees of Makurdi Local Government Area, Benue State.

Results

The first hypothesis stated that death anxiety will significantly predict regular Medical check-up among employees of Makurdi Local Government.

Table 1: *Summary of simple regression scores showing how death anxiety will have a significant prediction on regular medical check-up among local government employees in Makurdi metropolis.*

Variable	R	R ²	F	β	t	p	Remarks
Constant	.002	.000	.002	.82	.794	.000	N/S
Death Anxiety	-.002	-.046	.963				

Predictor: Regular medical check-up.

R= .002, R²=.000, F(1,499)= .002, p>.05

The result of the Table 1 shows that the hypothesis was not confirmed. This implied that, death anxiety did not significantly predict regular medical check-up among employees of Makurdi local government R² = .000, F(1,499)= .002, p>.05. This finding therefore suggests that death anxiety has no significant influence on regular medical check-up embarked upon by employees.

Hypothesis two stated that there will be a significant association between religion and regular medical check-up among employees of Makurdi local government area.

Table 2: *showing results of Chi-square as an association between religion and regular medical check-up among employees in Makurdi metropolis.*

Variable	N	X ²	df	p	Remarks
Religion	499	3.92	2	.126	N.S
Regular medical Check-up	499				

The result from Table 2 shows that there is no significant association between religion and regular medical check-up. This result implied that no particular religion, viz-a-viz Christianity, Islam or African Traditional religion is significantly associated with regular medical check-up $X^2(2)=3.92, p>.05$.

Hypothesis 3 stated that there will be a significant association between respondents' most preferred hospital and regular medical check-up among employees of Makurdi Local Government

Table 3: Results of Chi-square showing the association between “most preferred hospital” for medical check-up and regular medical check-up among employees in Makurdi metropolis

Variable	N	x ²	df	p	Remarks
Most preferred Hospital	497	14.11	2	<.001	Sig
Regular medical Check-up	497				

The result from table 3 shows that there is a significant association between most preferred hospital of participant and regular medical check-up among employees of Makurdi local government $X^2(2)= 14.11, p <.001$. This finding implied that the most preferred hospital of an employee has a significant influence in his or her attending regular medical check-up.

Discussion

The first hypothesis stated that death anxiety will significantly predict regular medical check-up among employees of Makurdi local government was statistically not significant. This implies that death anxiety did not predict regular medical check-up among employees of Makurdi local government. This hypothesis sought to find out if death anxiety will significantly predict regular medical check-up among employees of Makurdi Local Government. The result of this hypothesis was not confirmed as death anxiety did not show any significant prediction on regular medical check-up. This finding could imply that people go for medical check-up to enhance longer life as such practices are aimed at detecting a health problem in its early stage. This would rather be a behaviour aimed at preventing death than eliciting death anxiety. The result might thus be showing a reverse direction to death anxiety. It could also imply that the participants were people who were not in a life threatening illness condition and therefore, the medical check-up behaviour elicited in the study could be interpreted in terms of their health-seeking behaviour. In fact, studies on death anxiety among the sick has found high death anxiety only among people diagnosed with life threatening health problems such as testicular and brain cancer (Cella&Tross, 1987; Adelbratt&Strang, 2000) which are terminal illnesses.

According to Wyatt, Akylbekova, Wofford, Coady, Walker, and Andrew (2008) there is need to optimize the management and care of Coronary Heart Disease (CHD) patients, and we need to acknowledge that emotions carry independent additional risk, with particular subsets of patients dying prematurely due to their psychological vulnerability. Physiological mechanisms may provide part of the answer to the vicious cycle linking emotions to incident Coronary Health Disease (CHD) and its progression. Behavioral mechanisms should not be forgotten, as there is an urgent need for more effective lifestyle management in these patients, due to increases in the prevalence of obesity and diabetes, and no change in the proportion of patients who smoke, despite an increase in the prescription of cardio protective drugs. The issue of inadequate lifestyle management is unlikely to be resolved without attending to the emotions of our patients, as emotions such as depression play a pivotal role in compliance and adherence. This suggests that the 'one size fits all approach' to intervention in CHD patients is unlikely to work and that a personalized medicine approach is warranted (Fisher, 2011). Similarly patients with brain tumors and their families were preoccupied with death anxiety and existential thoughts in qualitative analyses of interview data (Adelbratt&Strang,2000). Patients lived with a constant sense of threat and tried to avoid death thoughts during their daily lives, but symptoms would activate death anxiety (Adelbratt&Strang, 2000). In terminally ill patients, death anxiety was relatively low, suggesting that realistic acceptance and coming to terms with

the inevitability of death had occurred using the Fear of Death Scale (Smith Nehemkis, & Charter, 1984). Certainty of beliefs toward an afterlife of reward was a significant finding in this study. A longitudinal study that focused on human immunodeficiency virus (HIV) status and death anxiety among males found the highest levels of death anxiety among the group who were both HIV positive and symptomatic (Catania, Turner, Choi, & Coates, 1992). Furthermore, Social support became particularly important as the men approached death, and interpersonal interaction may have alleviated death anxiety. The result of the hypothesis therefore suggests that people do not experience death anxiety before going to the hospital for medical check-up, but death anxiety is experienced when there are serious symptoms of a particular disease, when a loved one is involved in a motor accident, or when one watches a patient dying, for it reminds one of death and the life hereafter.

Another hypothesis tested was that, there will be an association between religion and regular medical check-up among employees of Makurdi local government area. This hypothesis was statistically insignificant. The result means that no particular religion, viz ; Christianity, Islam or African traditional religion is particularly significantly associated with regular medical check-up. This may be in line with Wikipedia (2012) that the topic religion and AIDS has become highly controversial in the past twenty years, primarily because many prominent religious leaders have publicly declared their opposition to the use of condoms. In addition to prevention some religious groups have interrupted the treatment of AIDS, several people have stop taking their medication, sometimes on the direct advice of their pastors, leading to a number of death. Though some religious groups for the sake of marriage ask their members to go for check-up which in the end, marriage may hold or not based on the result. According to Harold (2004) beliefs conflict with medical care showing example of an adult Christian scientist of the reformed churches, taking antibiotic or receiving immunizations. However religious beliefs and activities have been associated with better immune function, low blood pressure, lower death rate from cancer, less heart diseases or lower cardiac outcomes, low cholesterol and better health behaviour (Oman, Kurata, & Strawbridge, 2002).

The third hypothesis which stated that there will be a significant association between most preferred hospital for regular medical check-up and regular medical check-up was statistically significant. The result has confirmed the position of Center for Health Protection (2008) that the choice of hospital will influence ones regular medical check-up.

Implication towards the society

These findings are instrumental to the society in several respects. For one thing, death anxiety is initiated by an increased awareness of death salience. According to the American Heart Association (2011) hypertension awareness, treatment and control shows that among African American men with high blood pressure awareness (told by physicians that they have high blood pressure or hypertension), treatment (taking prescribed medication) and control (maintaining their blood pressure within normal limits) has been increasing over time. A significant predictor of greater awareness, treatment, and control of the disease in African American men is increasing age, so in the words of American Heart Association (2011) death anxiety did not predict regular medical check-up, but age. However, death anxiety is initiated by an increased awareness of death salience (reminder of personal mortality). Conscious manifestation of death anxiety may fluctuate in the face of stressors among individuals based on the type, context and duration of environmental trauma and death-related stressors. In the same way, researchers have examined whether life-threatening illness is associated with heightened death anxiety. Among young men treated for either testicular cancer or Hodgkin's disease, death anxiety was higher among the more recently diagnosed men using the 15-item fear of death questionnaire (Cella&Tross, 1987).

No particular religion viz; Christianity, Islam or African traditional religion is particularly associated with regular medical check-up. The choice of hospital will influence one's medical check-up (Center for Health Protection, 2008). For some the private hospital serves them better and confidentially; though expensive for others, the public hospital does better because they incur less expenses even confidentially is not certain. These put together will influence the choice of one's hospital for regular medical check-up. People are always careful when choosing a particular hospital for medical check-up, reasons being that people know their health status or are afraid of what others may say about them.

Conclusion

Since the regular medical check-up of employees occupies an important place in today's industrial environment, it is therefore recommended that conscious effort be made to facilitate access to regular medical check-up, develop health education programmes and guidelines and workforce training so as to enhance regular medical check-up of employees in Makurdi local government area, and Nigeria at large.

References

Adamu, G. (2012). Ensure regular medical check-up. Available online at www.archinternmed.com Accessed on the 11th June 2012.

- Adelbratt, S., & Strang, P. (2000). Death anxiety in brain tumour patients and their spouses. *Palliative medicine*, 14, 499-507.
- Arndt, J., Solomon, S., Kasser, T., & Sheldon, K. (2004). The urge to splurge: A terror management account of materialism and consumer behavior. *Journal of Consumer Psychology*, 14, 198–212.
- American Heart Association. (2011). "Role of Home Blood Pressure Monitoring in overcoming therapeutic inertia and improving hypertension control. A Systematic Review and Meta-Analysis. Downloaded from <http://hyper.ahjournals.org> Accessed on the 6th May 2012.
- Catania, J.A., Turner, H.A., Choi, K. H., & Coates, T.J. (1992). Coping with death anxiety: Help-seeking and social support among gay men with various HIV diagnosis. *AIDS*, 6, 999-1005.
- Cella, D. F., & Tross, S. (1987). Death anxiety in cancer survival: A preliminary cross-validation study. *Journal of Personality Assessment*. 51, 451–461. 38 Lehto and Stein.
- Centre for Disease Control and Prevention. (2012). Work place health promotion. Available on <http://www.cdc.gov/workplacehealthpromotion>. Accessed on the 7th August 2012.
- Centre for Health Protection. (2008). Knowledge, Attitude and Practice of Medical Check-up. <http://www.chp.gov.hk> accessed on the 20th July 2012.
- Chobanian, A.U., Bakris, G.L., Black, H.R., Cushman, L., Green, B., & Izzo, J.L. (2003). Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation and Treatment of High Blood Pressure. *JAMA*, 28,9, 2560-2572
- Fisher, C. (2011). Intense Fear of Death During Heart Attack Leads to Increased Inflammation and Poorer Outcomes in Disease Disorders, Mental Health BMED Report Health and Wellness through Psychological Science. Retrieval date, 18/6/2012.
- Harold, K.G. (2004). Religion, Spirituality and Implications for Clinical Practice. *Southern Medical Journal*, 97, 12.
- Nathan Kidney Foundation. (2010). High blood pressure and your kidney. Available online at www.nkidneyfoundation.org/what-is-D.
- Oman, D., Kurata, J.H., & Strawbridge, W.J. (2002). Religious attendance and cause of death over 31 years. *International Journal of psychiatry medicine* 32:69-89.
- Pyszczynski, T., Solomon, S., & Greenberg, J. (2002). *In the wake of 9/11: The psychology of terror*. New York: American Psychological Association.
- Rindfleisch, A., & Burroughs, J. E. (2004). Terrifying thoughts, terrible materialism? Contemplations on a terror management account of materialism and consumer behavior. *Journal of Consumer Psychology*, 14, 219–224.
- Smith, D. K., Nehemkis, A. M., & Charter, R. A. (1984). Fear of death, death

- attitudes, and religious conviction in the terminally ill. *International Journal of Psychiatric Medicine*, 13, 221–232.
- Transmed, J. (2009). The importance of a regular medical check-up. *Infor BULLETIN* (2nd ed). Available online at www.transmed.co.2a Accessed on the 22nd June 2012.
- Wikipedia. (2012). The health care status in Nigeria. Available online at www.healthcare. Accessed on the 16th August 2012.
- World Health Organization. (2011). Proportional Mortality estimate of communicable and non-communicable disease in Nigeria. Available online at www.bloodpressure/measurement. Accessed on the 22nd July 2012.
- Wyatt, S. B., Akylbekova, E. L., Wofford, M. R., Coady, S. A., Walker, E. R., & Andrew, M. E. (2008). Prevalence, awareness, treatment, and control of hypertension in the Jackson Heart Study. *Hypertension*; 51, 650–656.