



### Beliefs and Attitudes Towards Dementia among Community Leaders in Northern Nigeria

*Croyances et Attitudes Vis À Vis De La Démence Parmi Des Leaders Communautaires au Nord Du Nigeria*

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#### ABSTRACT

**BACKGROUND:** Dementia is an important devastating disease in old age. The number of dementia cases is in increasing worldwide with majority of them living in developing countries; however awareness about this important disease is poor especially in these developing countries.

**OBJECTIVES:** This study aimed at determining the beliefs and attitude of community leaders on dementia in Northern Nigeria.

**METHODS:** A cross sectional descriptive study was done using a structured questionnaire answered in Yes or No pattern. The questions were derived from the informant section of Community Screening Interview for Dementia and Blessed Dementia Scale. Fifty seven traditional rulers and forty three Islamic clerics were interviewed. Data obtained was analysed using SPSS for windows version 11.0.

**RESULTS:** The mean age of the participants was 57.76±11.10 years and 28% were over the age off 65years. The result showed that 77 (77%) of the subject believed that dementia is a normal process of aging. This was significantly associated with educational status but not age of the participants. The most recognisable symptoms are psychotic features of dementia (82%), while difficulty in dressing (56%) is the least recognisable symptom. Most of the participants would refer a person with features suggestive of dementia to see a physician.

**CONCLUSION:** The study demonstrated that the belief dementia is a normal process ageing is common among these community leader. Therefore there is need to carry out awareness campaign to educate them. *WAJM 2012; 31(1): 8–13.*

**Keywords:** Dementia, attitude, awareness, community leaders.

#### RÉSUMÉ

**CONTEXTE:** La démence est une affection importante et dévastatrice chez les sujets âgés. Le nombre de cas de démence est en croissance à l'échelle mondiale avec une grande majorité vivant dans les pays en développement; toutefois cette affection est peu connue particulièrement dans ces pays en développement.

**OBJECTIFS:** Le but de cette étude était de mettre en évidence les croyances et attitudes de leaders communautaires sur la démence au nord du Nigéria.

**METHODES:** Nous avons réalisé une étude descriptive, transversale en utilisant un questionnaire en mode dichotomique à réponse oui/non. Les questions provenaient de la section informant du questionnaire de Dépistage Communautaire de la démence par l'échelle de la Démence de Blessed. Cinquante sept chefs traditionnels et 43 chefs islamiques ont été interviewés. Les données obtenues ont été analysées en utilisant le logiciel SPSS pour la version windows 11.0.

**RESULTATS:** La moyenne d'âge des participants était de 57.76±11.10 ans et 28% avaient plus de 65 ans. Les résultats avaient montré que 77 (77%) des sujets croient que la démence est un processus normal de vieillesse. Cette croyance était de façon significative associée au niveau d'éducation et non à l'âge des participants. Les symptômes les plus apparents sont les manifestations psychotiques de la démence (82%), tandis que la difficulté à s'habiller (56%) était un symptôme moins apparent. Beaucoup de participants seraient dans les dispositions de référer à un médecin les personnes présentant des manifestations évoquant une démence.

**CONCLUSION:** L'étude montre la croyance répandue chez ces leaders communautaires selon laquelle la démence est un processus lié à l'âge. Ainsi il est nécessaire de renforcer les campagnes de sensibilisation pour les éduquer. *WAJM 2012; 31(1): 8–13.*

**Mots Clés:** Démence, attitude, sensibilisation, leaders communautaires

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Abbreviations:

## INTRODUCTION

One of the most important human achievements in the last century is increase in the life expectancy at birth.<sup>1</sup> That was as a result of advancement in medical care and improved standard of living.<sup>2</sup> One of the implications of increasing life expectancy is an ageing population. The risk of developing chronic degenerative diseases like dementia increase with older age<sup>3,4</sup> and it is generally agreed that dementia is one of the most devastating disease in old age.<sup>5,6</sup> Dementia places an immense burden on the patient, caregiver and the society in general.<sup>7</sup> In 2003 it was estimated that there were 24 million case of dementia worldwide, with a new case occurring every 7 seconds.<sup>8</sup> According to this estimate the number will rise to over 80 million cases in the next 2 decades with over 70% of them in the developing countries. However, awareness of this important disease of old age is poor in most traditional societies of Asia and Africa. The concept and causation of dementia varies from one society to another. In a study carried out in Manchester among elderly Caucasians and Indians, Prundare *et al*, reported poor knowledge of dementia among both ethnic groups.<sup>9</sup> In another study of elderly people in Turkey, 66% of the respondents believed that dementia is a normal process of ageing.<sup>10</sup> In Kerela, Southern India dementia is considered to be a form of reversal to childhood.<sup>11</sup> Among the American Indians dementia is considered to be a natural aspect of ageing or even a supernormal gift.<sup>12</sup> Some African Americans communities in the United States of America believe that dementia in old age is cause by ‘worroration’. ‘Worroration’ is defined as worry and stress that leads to brain damage.<sup>13</sup> In Hong Kong 78% of caregivers believed that dementia is a normal process of ageing.<sup>14</sup> In Eastern Nigeria, dementia in old age is considered to be punishment by the gods for earlier wrong doing in earlier life.<sup>15</sup> In extreme cases, demented subjects are branded as either witches or being possessed by demons. Families of patients consider dementia as a mark of shame and source of disgrace in the community. In Southern Nigeria, among the Yoruba ethnic group,

dementia is also considered to be a form of reversal to childhood.<sup>16</sup> In Northern Nigeria among the Hausa-Fulani ethnic group dementia is call “*dimuwa*” which literally means confusion of old age or getting loss. Therefore, the perception of dementia as a normal process of aging is widespread among lay people and might greatly influence the need to not only to seek medical attention but the outcome of the disease. Earlier studies carried out in Nigeria about belief on mental illness were not specific or did not include dementia in old age.<sup>17, 18</sup> The present study is an attempt to explore the beliefs and attitudes of community leaders in Northern-Nigeria about dementia and features of dementia and also make comparisons with other parts of the world. These community leaders could influence utilisation of health facilities by subjects under their authority.

## SUBJECTS, MATERIALS AND METHODS

**Location:** The study was carried out in the ancient city of Zaria, which is located in Northern Nigeria. It is a predominantly Hausa and Fulani community established around the 1000AD. The city is well known in Northern Nigeria as a centre for Islamic studies. The main occupations of the inhabitants are trading, farming and animal husbandry. There is a general hospital and six primary health care centers in the

### Participants

The participants are one hundred religious and traditional title holders in the community. They were selected randomly using a table of random numbers from a list of community leaders compiled while carrying out a study on dementia in the community.<sup>19</sup> The traditional rulers in Northern Nigeria had governed their subjects under the emirate system of government for over 200 years. The traditional leaders and the Islamic clerics play an important role in the lives of their ‘people in this region. Therefore, they play an important role in every facet of the lives of their followers.

### Instrument

The instrument was a questionnaire designed for the purpose of this study. It

was designed to obtain socio-demographic information and asses beliefs and awareness of dementia. The questions were derived from the informant section of Community Screening Interview for Dementia and Blessed Dementia Scale.<sup>20,21</sup> They assess common features of dementia in the elderly ranging from impairment in memory to difficulties in carrying out activities of daily living. Answers are given in Yes or No format.

### Validity of the Instrument

The questions in this instrument were adapted from valid measures designed for the assessment of dementia among the elderly in the community. These valid measures had been used extensively by the Ibadan-Indianapolis Dementia Project in Nigeria and the 10/66 dementia study group in many developing countries to asses dementia in the community.<sup>20,22</sup> As such the instrument used in this study has a criterion validity due to it origin and it relationship to these valid measures.

### Reliability of the Instrument

The reliability of the instrument was tested using 10 subjects that were not part of the study. They were interviewed on two different occasions by the same rater after 3 weeks interval. The test-retests reliability using correlation coefficient was 0.82. Item correlation was carried out on the questionnaire and Coefficient alpha was 0.716.

### Translation of the Instrument

The instrument was back translated into Hausa language and harmonised.

### Ethical Considerations

The study was approved by the Institution Review Board of the Ahmadu Bello University Teaching Hospital Zaria. An informed consent was obtained from each of the subject. Subjects who are able read and write signed, but those with little education were asked to thumb print the consent forms after the details have been read to them.

### Procedure

All the subjects were interviewed in Hausa language irrespective of their

educational status. The questionnaire was administered by one of us, AJY.

**Data Analysis**

Data was analyzed using Statistical Package for Social Sciences (SPSS) Windows version 11. Descriptive statistic was calculated for all continuous variables. Percentages were calculated for the various responses, Chi square and Student’s “t” test were used to compare responses and difference in the socio-demographic variables of the respondents. The level of significance was set at 5 % level of probability.

**RESULTS**

**Socio-demographic Characteristics of Participants**

A total of one hundred subjects were interviewed consisting of 43 clergy men and 57 traditional leaders. All the subjects were males in keeping with the tradition of the area. The mean age of the subjects was 57.76 ± 11. 10 years, ages ranged from 40 to 88 years, 28% of them were over 65 years of age. Majority of the participants in this study had formal education.

**Beliefs on Dementia**

Seventy percent of the participants believe that dementia in the elderly is normal process of aging. Those who said dementia was normal ageing process were older than those who said it is abnormal 58.54 (11.14) years vs. 55.52) years, but not significantly so t=0.82, p> 0.05. However those who said dementia was normal aging process had lower mean years of formal education compared with those who thought it was abnormal 6.04 (6.61) vs. 11.2(6.14) t=2.55, p.001. This was further confirmed using logistic regression (Waldχ<sup>2</sup>6.34, p=.012). Also more clergy believed that dementia was abnormal when compared with traditional leaders but this is not statistically significant as shown in Table 1. The relationship between socio-demographic characteristics of the participants and belief on dementia in the elderly is shown in Table 1.

**Attitude to Common Dementia Symptoms**

Many of the participants stated that there is a need for an elderly person with

**Table 1: Relationship between Socio-demographic Characteristics and the Believe about Dementia in Old Age**

SN	Variable	Dementia is normal in old age	Dementia is abnormal in old age	Statistic
1.	Age			
	<65	5	18	t= .82,
	>65	23	5	p=.272
	Mean age	58.43±11.14	55.52±10.93	
2.	Education			
	Formal education	43	20	t=2.55
	No formaleducation	34	3	p=.001
	Mean years of education	6.04±6.61	11.22 ±6.14	
3.	Occupation			
	Traditional Leaders	44	13	χ <sup>2</sup> = .003, df
	Clergy	33	10	1,p=1.0

**Table 2: Responses of Participants on the Need to refer an Elderly Person to a Physician Based on Symptoms of Dementia**

SN	Variable	Yes	No
1.	Forgetting where he or she keep things	61(61)	39(39)
2.	Forgetting where things are usually kept	72(72)	28(28)
3.	Inability to recall recent events	72(72)	28(28)
4.	Getting lost in the community	60(60)	40(40)
5.	Getting lost at home	71(71)	29(29)
6.	Difficulty in handling money	69(69)	31(31)
7.	Difficulty in dressing	56(56)	44(44)
8.	Difficulty in personal care	56(56)	44(44)
9.	Difficulty in conversation	71(71)	29(29)
10	Hearing or seeing strange things	82(82)	18(18)

*\*Figures in parenthesis indicate percentages*

symptoms or features suggestive of possible cognitive impairment or dementia to see a physician. Table 2 shows common symptoms of dementia and the need to see a physician. However the most important reason to see a physician was when the elderly person sees or hears strange things (82%). This was followed by inability to recall recent events and forgetting where things were usually kept 72% each. In this cohort difficulty with dressing and difficulty in personal care were less important reasons why an elderly person should see a physician. Each of these factors was rated important by 56% of the participants.

**Socio-demographic Characteristics and Attitude to Dementia Symptoms**

The responses of the participants to various symptoms suggestive of

dementia were most of the time influenced by education status of the participants and in few instances influenced by the age of the participants. These are shown in Table 3 and 4. However all were not statistically significant using multiple regression analysis (Table 5 and 6).

**DISCUSSION**

**Socio-demographic Characteristic**

A large proportion of the participants had formal education and are within the middle age group as such are likely to be become part of the elderly population in the near future. The likely implication is that we would have a population of the elderly that have some education as community leaders in the near future. Some of them are religious leader in the community. The religious leaders sometimes function as healers

**Table 3: Responses of Participants to Symptoms Suggestive of Dementia in the Elderly Based on Age**

SN	Variable	<65years	>65years	Statistics
1.	Forgetting where he or she keep things			
	Yes	62(86.1)	10(13.9)	
	No	19(67.9)	9(32.1)	$\chi^2=4.36$ df1, p=.048
2.	Forgetting where things are usually kept			
	Yes	55(76.4)	17(23.6)	
	No	56(77.8)	16(22.2)	$\chi^2=2.46$ ,df=1,p=.140
3.	Inability to recall recent events			
	Yes	56(77.8)	16(22.2)	
	No	16(57.1)	12(42.9)	$\chi^2=4.26$ , df=1,p=.049
4.	Getting lost in the community			
	Yes	54(75.0)	18(25.0)	
	No	17(60.7)	11(39.3)	$\chi^2=1.99$ df1, p=.219
5.	Getting lost at home			
	Yes	47(65.3)	25(34.7)	
	No	13(46.4)	15(53.6)	$\chi^2=2.98$ ,df1,p=.112
6.	Difficulty in handling money			
	Yes	53(73.6)	19(26.4)	
	No	16(57.1)	12(42.9)	$\chi^2=2.56$ , df1, p=.148
7.	Difficulty in dressing			
	Yes	43(59.7)	29(40.3)	
	No	13(46.3)	15(53.6)	$\chi^2=1.45$ ,df=1, p=.260
8.	Difficulty in personal care			
	Yes	54(75.0)	18(25.0)	
	No	13(46.4)	15(53.6)	$\chi^2=4.33$ , df1, p=.260
9.	Difficulty in conversation			
	Yes	52(72.2)	20(27.8)	
	No	19(67.9)	9(8.1)	$\chi^2=.187$ , df1, p=.806
10.	Hearing or seeing strange things			
	Yes	61(84.7)	11(15.3)	
	No	21(75.0)	7(25)	$\chi^2=1.29$ , df1, p=.261

\*Figures in parenthesis indicate percentages, df–degree of freedom, p- p-value

and they are the first point of consultation for any behavioral and psychological symptoms. The likely implication of this finding is that they would be more likely to embrace modern treatment for their followers. Another important finding of this study is that community leaders in this society are all males. This has a lot of implication for the caregiver role which is mainly carried out by the females in African societies.<sup>16</sup> As such the females in this community might not be able to influence decisions like treatment of dementia.

**Belief on Dementia**

The majority of the respondents in this study believe that dementia is a normal process of ageing. Similar observation was reported in Turkey among community dwelling elderly and

American Indians.<sup>10,12</sup> It is also in keeping with what was reported by the study in Hong Kong.<sup>14</sup> However it differs with the finding on the belief about dementia in southern India and among the Yoruba in southern Nigeria where dementia in the elderly is seen as a form of reversal to childhood.<sup>11,16</sup> This belief that dementia is normal process of ageing is higher among the traditional leaders compared to the clergy. But this is probably due to higher level of education in the clergy. There was a significant difference in the mean years of education between subjects that belief dementia is an illness compared to those who belief it is normal process of ageing. However no education effect was observed in the cohort in Turkey,<sup>10</sup> but like in the present study age was not significantly associated with the belief.

**Attitude and Practice to Dementia Symptoms**

Over 50% of the subjects said there was need to see a physician for most of the symptoms of dementia listed in Table 2. This is despite believing that dementia is a normal aging process. Another possible explanation for this is that the word describing dementia in the local language (*dimuwa*) is associated with memory deficits and confusions occurring in old age. Behavioural and Psychological Symptoms of Dementia (BPSD) are the main reason for seeking medical attention for elderly people with dementia.<sup>7,11,15</sup> As such the respondents were more likely to refer an elderly with such symptom than using those without. The percentage of those who felt a physician should be seen ranged from 56% in those who had difficulty with personal care to 82% in those who hear of see strange things. Behavioural symptoms of dementia (BPSD) like hearing or seeing non exiting stimulus were the most recognisable feature of dementia among these subjects. In Nigeria, Baiyewu *et al* reported that BPSD are the most compelling reasons of seeking medical consultation for the elderly with dementia.<sup>16</sup>

The study also demonstrates the effect of education on attitude towards dementia in this community. In this study leaders that had formal education were more likely to recognised and refer an elderly person with features suggestive of cognitive impairment or dementia to see a physician. This is in contrast with the findings in Turkey by Sahin *et al*<sup>10</sup> where education had no effect. The implication of this finding is that providing formal education in this community will increase utilisation of orthodox care not only for the elderly suffering from dementia but also other medical illnesses. The lack of association between education and responses of the participants using multiple regression might be due to the sample size in this study. The study also demonstrated that age of the community leaders is not a very important factor in recognising and referring elderly with features suggestive of dementia to a physician.

It could be deduced from this study, that there is some willingness on the part

**Table 4: Responses of Participants to Symptoms Suggestive of Dementia in the Elderly Based Educational Status**

SN	Variable	Formal Education	No formal Education	Statistics
1.	Forgetting where he or she keep things			
	Yes	54(85.7)	9(14.5)	
	No	27(73.00)	10(27.0)	$\chi^2=2.46, df1, p=.186$
2.	Forgetting where things are usually kept			
	Yes	49(77.2)	14(22.2)	
	No	23(63.2)	14(17.5)	$\chi^2=2.82, df1, p=.110$
3.	Inability to recall recent events			
	Yes	52(82.5)	11(17.5)	
	No	20(54.1)	17(45.9)	$\chi^2=9.38, df, 1, p=.003$
4.	Getting lost in the community			
	Yes	52(82.5)	20(31.7)	
	No	19(51.4)	18(48.6)	$\chi^2=11.01, df1, p=.001$
5.	Getting lost at home			
	Yes	43(68.3)	20(31.7)	
	No	17(45.9)	20(54.1)	$\chi^2=4.83, df1, p=.035$
6.	Difficulty in handling money			
	Yes	50(79.4)	13(20.6)	
	No	17(45.9)	20(48.6)	$\chi^2=8.55, df=1, p=.007$
7.	Difficulty in dressing			
	Yes	42(66.7)	21(33.3)	
	No	14(37.8)	23(62.2)	$\chi^2=7.86, df1, p=.007$
8.	Difficulty in personal care			
	Yes	52(82.5)	11(17.5)	
	No	17(45.9)	23(62.2)	$\chi^2=14.59, df1, p=.001$
9.	Difficulty in conversation			
	Yes	50(79.4)	13(20.6)	
	No	21(56.8)	16(43.2)	$\chi^2=5.79, df1, p=.022$
10.	Hearing or seeing strange things			
	Yes	57(90.5)	6(9.5)	
	No	25(67.6)	12(32.4)	$\chi^2=8.29, df1, p=.006$

\*Figures in parenthesis indicate percentages, df –degree of freedom, p- p-value

of these community leaders to refer an elderly person with features of dementia to physician. This contrast with a survey from Eastern Nigeria which reported such elderly people with behaviour symptoms are likely to be branded as witches or wizards or at best hidden from the rest of the society due to stigma.<sup>15</sup>

The Hausa- Fulani communities are found in many countries of the West-African sub-region and cultural and religious inclinations are similar. It is thus reasonable to speculate that the findings of this study are of public health importance not only in Nigeria but in the West-Africa Sub-region. Therefore there is need to educate this community leaders about dementia. This might lead to early referral to hospital and possible reduce the burden of the disease on both caregivers and patients.

The study is limited by only involving small number of subject and marginal level significance presented in the results. However, it is in keeping with views held by many lay people about dementia in many traditional societies.

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