

MEDICAL AND MENTAL DISORDERS IN ELDERLY PATIENTS SEEN AT THE OUTPATIENTS' CLINIC OF A TEACHING HOSPITAL IN EASTERN NIGERIA – PREVALENCE AND SOCIODEMOGRAPHIC CHARACTERISTICS

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SUMMARY

Aim: To describe the medical and mental disorders in elderly patients seen at the medical outpatients' clinic of Nnamdi Azikiwe University Teaching Hospital Nnewi.

Method: Records of all elderly patients aged 60 years and above that were seen for the first time at the (internal) medical outpatient clinic between February 1997 and February 1999 were examined. Sociodemographic and diagnostic characteristics of the patients were obtained.

Results: elderly patients constituted 11.2% of all the 7892 patients seen in the clinic during the study period. The male: female ratio was 1.5:1. Forty-one patients had more than one disease occurring in an individual. Cardiovascular diseases were the commonest occurring medical problems; degenerative, neoplastic and infectious diseases were also common. Mental disorders were diagnosed in only 2% of the patients with one case of Alzheimer's disease. No patient with mental disorder was given any second medical diagnosis nor referred for psychiatric opinion.

Conclusion: Elderly Nigerians probably have high rates of old age associated diseases (degenerative and neoplastic) with tropical infections. Recorded (diagnosed) mental disorders were low, reflecting possible under-diagnosis/under-recognition. Medical and mental health of the elderly must be properly integrated.

Key words: *Elderly, Nigeria, Medical and Mental Diseases*

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INTRODUCTION

The demographic structure of African countries, of which Nigeria is the most populous, is obviously weighted in favour of the younger age group and this is likely to continue for some time to come. However, when an African child survives the massive assault of deprivation, poverty, malnutrition, infections etc, the chances of growing into old age realistically increase. With the emphasis on primary health care and maternal and child health, Nigeria is recording some reasonable success in the National Programme on Immunization (NPI).

In Africa, advances in medical technology, may contribute to the breeding of healthier generations likely to produce an old age boom, perhaps earlier than expected. Already there are indications that Nigeria is gradually joining the greying nations. For example, elderly persons aged 60 years and above constituted about 3% in 1963 and this has increased to over 5% in 1991^{1,2}.

All over the world, ageing and the care of the elderly have become important political, medical and social issues. In this regard the world Health Organization (WHO) declared 1999 International Year of the Older Persons, and October 1999 was marked for launching of the Global Movement for Active Ageing – a WHO initiative.

The implications for the expansion of the aged population in Nigeria are many and varied. There is no form of organized social welfare scheme for elderly Nigerians and with more than four decades protracted and incomplete labour of the Nigerian National Health Insurance Scheme (NHIS), the sign for the future care of old people in Nigeria does not look bright. As was the case in pre-industrial Europe, extended family system and kinship practices had hitherto provided social security and care for the elderly, but with expanding urbanization and population mobility with influx into the cities, former stable rural communities in Africa are being de-

established, thus eroding the traditional care system. Yet no alternative arrangements are being put in place and this exposes the elderly to the reality of destitution.

Until recently the health and care of elderly Nigerians have not received much attention. Systematic records of the needs and problems of older Nigerians are scanty. The aim of the present study was to describe the medical profile and some social characteristics of elderly patients seen at the medical clinic of a Nigerian University Teaching Hospital over a two year period. We also aimed to explore the relationship between the chronic medical diseases and mental disorders in these patients.

METHOD

Setting: The study was done at the Nnamdi Azikiwe University Teaching Hospital, Nnewi (NAUTH). This is a semi urban-based modest 250-bedded teaching hospital in Anambra State, south Eastern Nigeria. The hospital has other 500 beds in outposts spread within Anambra State and manned by primary care, family and community physicians. Although NAUTH does not have a strictly defined catchment's area, most patients come from Anambra State with a population of about 3 million; patients also come from other neighbouring states in Southern Nigeria.

There are 8 consultants in internal medicine and a medical outpatient clinic holds every working day. Referrals to the consultants' medical outpatients' clinics come from private general practitioners, and other departments within the hospital, including the General Practice clinic (GOPD).

The Medical Records Department codes the patients' final diagnosis made by the most senior doctor in any unit at the end of each clinic. On each consultant's clinic day, a nurse records all patients seen (both old and new).

Design: This is a retrospective cross-sectional descriptive study.

Subjects: Patients aged 60 years and above, seen for the first time at the medical consultant outpatient clinic between February 1997 and February 1999 formed the subjects of study. February 1997 was chosen because the medical records from then was better kept than the previous years. NAUTH had operated as Anambra State University of Science and Technology Hospital until 1992 when the Federal Government of Nigeria took it over, renamed it and changed its management.

Procedure: A form was prepared to enter the information extracted from the medical records. Inpatient records were not included.

First, all the Nurses' outpatient's records were used to identify patients seen for the first time in the internal medicine consultants' outpatients' clinics between February 1997 and February 1999. The medical case records of the patients so identified were then retrieved from the Medical Records' Department. Information extracted from the case records included: age, gender, occupation, marital status, diagnosis, disposal etc. The data obtained were entered into the prepared form.

Analysis: Analysis was by SPSS (version 10), presenting simple descriptive statistics.

RESULT:

A total of 7,892 new patients (3478 males and 4414 females) were seen during the period of review. Of this number, 883 (11.2%) were aged 60 years and above.

The male to female ratio of the elderly patients was] .5: 1 as against 1: 1.3 for the total patient population; in other words, there were relatively more males (528) among the elderly group than females (355) compared to the gender distribution of the total patient population.

Duration of diseases before presentation could not be determined from most of the records and it was not clear how the patients came to the hospital (for example either alone or in company of identified family members).

Table 1: Some Sociodemographic Characteristics of the Patients

| | |
|--------------------------|-----------------|
| Sex | No (%) |
| Males | 528 (59.8) |
| Females | 355 (40.2) |
| | |
| Age range (years) | 60 - 98 |
| Mean Age | 69.6±5.2 |
| | |
| Marital Status | No (%) |
| Not Recorded | 26 (2.9) |
| Married | 665 (75.31) |
| Widowed | 192 (21.7) |
| | |
| Occupation | No (%) |
| Not Recorded | 63 (7.1) |
| Farming | 297 (33.6) |
| Trading | 134 (15.2) |
| Public/Civil Service | 38 (4.3) |
| Others | 351 (39.8) |

• Include wine tapping, repair works, shoe mending etc.

Table 1 shows some of the sociodemographic characteristics of the patients as recorded.

Table 2: Distribution of the Medical Diseases in the Elderly Patients

| Diagnosis | Gender | | Total (%) | Mean Age |
|----------------------------|--------|----|------------|----------|
| | M | F | | |
| Diabetes Mellitus | 83 | 78 | 161 (18.2) | 63.7 |
| Hypertension | 42 | 54 | 96 (10.9) | 67.2 |
| Congestive Cardiac Failure | 34 | 33 | 67 (7.6) | 61.8 |
| Right Ventricular Failure | - | 1 | 1 (0.1) | 65.0 |
| Mitral Valve Disease | - | 1 | 1 (0.1) | 69.0 |
| Rheumatic Heart Disease | 1 | - | 1 (0.1) | 69.0 |
| Cardiomyopathy | - | 1 | 1 (0.1) | 68.0 |
| Neoplastic Diseases | 22 | 14 | 36 (4.1) | 84.8 |
| Infections | 27 | 8 | 35 (4.0) | 71.4 |
| Cardiovascular Accidents | 14 | 16 | 30 (3.4) | 70.6 |
| Arthritis | 7 | 9 | 16 (1.8) | 68.3 |
| Cervical Spondylosis | 2 | - | 2 (0.2) | 67.8 |
| Osteoporosis | - | 1 | 1 (0.1) | 71.0 |
| Epilepsy | 3 | 2 | 5 (0.6) | 68.4 |
| Parkinson's Disease | 1 | 2 | 3 (0.3) | 68.7 |

Table 2 shows the distribution of the medical diseases in the patients.

Diseases of the cardiovascular system were the commonest, constituting 18.9% of the diseases in all the elderly patients or 20.7% of all the recorded diseases. The records of 77 patients did not contain any specific diagnoses. Forty-one of the patients had more than one ~ occurring in the same individual, giving a co-morbidity rate of 4.60/0. Fifteen patients (1.7%) had two diseases, 20 patients (2.3%) had three diseases and 6 patients (0.7%) had four diseases.

The malignant diseases involved the gastrointestinal system (i.e. colon, liver, rectum, and caecum); breast, and prostate.

Degenerative diseases were diagnosed in 18(2.00/0) of the patients, whereas diseases affecting the nervous system were recorded in 37 (4.2%) patients.

The identified infections included malaria, urinary tract infection, pneumonia, tuberculosis and human-immune-deficiency virus (HIV).

Table 3: Mental Disorders Recorded by Internists in Elderly Patients

| Mental Disorder | No (%) |
|---------------------|---------|
| Depression | 2 (0.2) |
| Internal Heat | 2 (0.2) |
| Alzheimer's Disease | 1 (0.1) |
| Senile Dementia | 1(0.1) |
| Organic Psychosis | 1(0.1) |
| Tiques | 1(0.1) |
| Psychoneurosis | 1(0.1) |
| Huntington's Chorea | 1(0.1) |
| Anxiety | 1(0.1) |
| Anxiety Neurosis | 1(0.1) |
| Psychosomatisation | 1(0.1) |
| Insomnia | 1(0.1) |

Table 3 shows the mental disorders identified, and recorded by the internists.

A total of 15 patients (1.7%) were identified as having mental disorders by the internists. No other medical diagnoses were made in these patients, probably indicating that they had primary non-co-morbid psychiatric

disorders. Use of substances of dependence was not recorded the elderly patients. None of the patients diagnosed as having mental disorders were referred to the mental health team.

Association between Chronic Medical Diseases and Mental Disorders: Besides infections, the rest of the recorded medical diagnoses were chronic diseases. There were no (recorded) medical diseases in those with mental disorders, and it was not possible to test any association between chronic diseases and mental disorders.

DISCUSSION

There are many weaknesses inherent in this work, which are shared by similar retrospective studies. The records were grossly incomplete and could not allow for a study of all the necessary variables. It would seem that both physicians and medical records' officers do not document all that is done for their patients, leaving wide gaps that can only be filled by purposely designed prospective interview studies. The recorded ages are also suspect. Even in young and literate subjects, getting the accurate age of Nigerians is always difficult; it is not known what methods medical records' officers in the environment used in determining the age of most elderly patients and how valid such methods are. In prospective studies, the use or historical landmarks has been found to be valid and useful in elderly Nigerians. It was not possible to determine the literacy level and social support facilities available to the patients nor the burden of their care since these items were not recorded. Furthermore, it is not known to what extent the hospital patients could be said to be representative of the general population of elderly subjects in Anambra State. These are all issues for prospective, population-based studies. The results of the present work give some clues for areas of possible comprehensive exploration in future studies.

Diabetes mellitus and diseases of the cardiovascular system were quite common in the study population. This is in keeping with other works³⁻⁵. Both these diseases and degenerative disorders are chronic medical conditions requiring long term care for the patients; this no doubt requires enormous resources in terms of manpower and finances. Without state organized health insurance or social welfare schemes, such needed care may only be adequately provided in an extended Kinship family setting; unfortunately this system is gradually being displaced in Nigeria. Any health services planning for the elderly must take this into account.

Malignant and infectious diseases were also common among the patients. This is where elderly Nigerians are at a very serious disadvantage. As nations develop, infections tend to give way to non-communicable diseases but elderly Nigerians seem to be grappling not only with the more common diseases of old age (degenerative and neoplastic) but also with tropical infections including tuberculosis. The current wave of HIV infections has not spread to the elderly; HIV control programmes should therefore also target the senior citizens.

Mental disorders constituted about 2% of the diagnoses made by the internists. We speculate that this must likely be an under-diagnosis. Without special training in geriatric medical practice, psycho-geriatrics or general psychiatry, identification of mental disorders in old age can be difficult. Studies have shown that even among practitioners with geriatrics background, many mental disorders in the elderly resist identification⁶⁻¹¹.

The scanty nature of the information in the medical records did not permit us to make independent diagnosis of mental disorders in the patients. The psychiatric problems are listed in the table exactly as the physicians recorded them and many of the diagnoses do not conform to entities of the modern international classification of mental

disorders¹². It is curious that the internists did not make any physical (medical) diagnoses in the patients recorded as having mental disorders. Generally, mental and medical diseases commonly co-occur in older persons. We could not test the association between mental disorders and chronic diseases.

There are contradictory reports in the literature linking high mental morbidity with chronic diseases¹³⁻¹⁶ and no or weak association between the two¹⁷.

Other workers have reported that generic characteristics of a chronic medical disease (including life threat, unpredictable care, and age, gender and illness duration) may increase the probability of mental disorders in the elderly¹⁸⁻¹⁹. It is highly likely that the non-existence of co-morbid mental and medical diseases in our sample was an artefact of poor diagnosis and recording.

Although there were 2 consultant psychiatrists in NAUTH during the period under review, none of the patients identified as having mental disorders by the internists were referred for psychiatric opinion.

It has been shown that many factors influence psychiatric referral, including the preference of the physician, disposition toward and belief in psychiatry²⁰⁻²³. In a General Teaching Hospital of this nature, elderly patients are expected to benefit from the consultation-liaison services of psychiatrists unless the internists feel adequately suited to provide mental health care. In previous studies, Ihezue reported that elderly patients constituted 5% of the patients seen at the psychiatric Hospital Enugu (Nigeria) and 4% of the patients referred to the psychiatric clinic of a Nigerian University Teaching Hospital²⁴⁻²⁵.

As already stated, there was not enough information in the older patients' records to permit independent diagnosis. Some of the psychiatric terms used are obsolete and may not have the same meaning covered in modern psychiatric classification. One diagnosis was insomnia; although primary insomnia may be

a diagnostic entity, it is possible that the insomnia recorded here by the internists could be a symptom of another major mental disorder if the patient was adequately assessed. The same is true of internal heat, and psychosomatisation. It is not uncommon for elderly patients to present with bodily symptoms instead of pure emotional or psychological complaints. Diagnosis can even be much more difficult if a mental disorder coexists with a physical disease²⁶⁻²⁷. While it may be correct that the older patients recorded as having mental disorders did indeed have them, the nature and rate of such mental disorders may not truly reflect the reality if the older persons were to be assessed by experienced psycho-geriatricians (or psychiatrists). In a study of mental morbidity among elderly patients admitted to non-psychiatric wards in a Nigerian general/teaching hospital, using a geriatric mental state evaluation, Uwakwe²⁸ reported a rate of 45.3%.

Non-identification- and correct diagnosis of mental disorders in elderly patients with medical diseases have serious implications: such disorders can adversely affect the co-existing physical diseases. Certain physical diseases and their treatments can also adversely affect any co-existing mental disorders. A properly identified disorder-either medical or mental can be adequately treated in its own right and will improve the quality of life for the elderly patient. In planning services for the elderly, there is need for a proper integration of medical and mental health.

In this millennium, it is expected that socio-medical changes/advances may produce an unprecedented rise in the number of old people in the developing countries such as Nigeria. Medical diseases, degenerative, neoplastic, infective diseases, along with mental and social problems in the elderly may sharply rise in Africa. Already in the developed Western nations, the problems of

the elderly have become a serious challenge. Changes that saw the explosion of the population of the elderly in the West did not occur overnight. Policy makers and health planners in developing countries have a great lesson to learn in devising preventive measures that will mitigate the problems associated with old age.

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