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## Sickness absenteeism in a Nigerian polytechnic

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### Summary

Statistics on sickness absenteeism are very scanty in Nigeria. This paper describes a case study of the Ibadan Polytechnic workers. The result has shown that the prevalence rate is roughly 25% per annum and the frequency of sickness absence is highest among junior workers, females and the unmarried group. Frequent illnesses are infections and parasitic diseases, with malaria fever being the commonest. The duration of sickness absence was found to be, on average, 3 days, and the implications of the findings on the management and economic climate of the institution are discussed.

### Résumé

Les statistiques sur l'absentéisme par suite de la maladie sont à peine suffisants au Nigeria. Cette étude décrit une étude particulière due personnel de l'Ecole Professionnelle d'Enseignement Technique d'Ibadan. Les résultats ont montre que le taux de prévalence est approximativement 25% per an. La fréquence de l'absence par suite de la maladie est la plus élevée parmi les officiers subalternes, les femmes et le groupe célibataire. Les maladies communes sont les maladies contagieuses et parasites avec la fièvre paludéenne étant la plus commune. Tandis que la durée d'absence par suite de la maladie était 3 jours en moyenne, la portée de ces résultats sur la direction et le climat économique de l'institution est discutée.

### Introduction

Most health statisticians find it difficult to define sickness [1]. A consensus of opinion is that the medical doctor is the only authentic

professional who can certify a person sick. All over the world, one of the cogent reasons workers in employment houses adduce for being absent from work is sickness.

In order to convince the employer, the employee is expected to produce a certificate obtained from a qualified doctor. In employment houses such as institutions of higher learning, which have their own clinic facilities, the workers are expected to obtain their sick certificates from the doctors in such clinics. By this method the doctors are able to monitor the health of the population they serve.

Absenteeism is a very complex problem, which usually results in financial wastage and a delay or disruption in the productive process [2]. In Nigeria the attitude to work is generally deplorable; employees absent themselves without prior permission, only to report back afterwards with sickness certificates. Services rendered by this category of worker are undoubtedly disrupted during the unplanned period that they are temporarily absent from duty. Unfortunately, studies on sickness absenteeism in Nigeria are scanty; consequently, no standard figures can be quoted as the prevalence rate. The government recommends, arbitrarily, certain periods of time (3 months) that workers can be on sickness absence in a year [3]. During this time period, full pay would be received by such workers. But what is the rationale behind this official sickness leave? Are there any statistics to back the allowed official period a worker can be off sick and still receive full salary? What category of worker uses the sick-leave period most? What nature of illness warrants the issue of sick certificates? What are the financial implications?

It is in relation to these questions that this study examines the sickness absence records of workers in the Ibadan Polytechnic, of Oyo State of Nigeria, over a 12-month period.

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## Patients and methods

Ibadan Polytechnic is the biggest institution of its kind in Ibadan, a city with a population of about 2 million people and capital of Oyo State in the Western part of Nigeria. The Institution, established in 1973, awards Ordinary and Higher National Diplomas in professional courses such as town planning, estate management, marketing, insurance, accountancy, banking, engineering, secretarial studies, communication, architecture and fine arts. It also runs Advanced Level General Certificate of Education courses in arts and sciences. The Institution has its own comprehensive Health Centre that provides both curative and preventive services (e.g. immunization programme, family planning, child welfare clinic, environmental inspection) to students, staff and staff dependants. Staff dependants, in this context, include wives, children and domestic servants of members of staff (each staff member is entitled to treatment for one domestic help). The Health Centre is the only source recognized by the Polytechnic authority for the issuance of sick certificates for staff to be absent from work. When very ill patients are referred to neighbouring hospitals, or emergency cases are rushed into such hospitals for admission or surgery, sick reports from there have to be authenticated at the Health Centre by the Director of Medical Services to make it valid for the patient. In 1980, the Institution had a work force of 1370, made up of 1033 junior workers and 337 senior members of staff.

A retrospective study of all the records of workers who obtained sick certificates from the Polytechnic Health Centre, and those referred to neighbouring hospitals, within the period 1 January to 31 December 1980, was carried out. For verification purpose, case-notes of the patients were cross-checked with originals sent by the Polytechnic doctors to the Establishment Department. The data collected included age, sex, marital status, occupation, duration of sickness absence, month of the year, salary grade level and clinical diagnosis/impression. In this study the term 'married workers' includes those married, divorced, separated or widowed. This group classification was necessitated because people generally are rather reluctant to admit that they are separated or divorced. Such persons, however, soon re-

marry, making it difficult to differentiate between the three groups. Similarly, the ages were, in most cases, mere estimates as many adult Nigerians have no birth certificates and resort to affidavits or just give estimated ages.

The occupations were divided into manual, semi-skilled workers, skilled workers and professionals. Manual workers include labourers, gardeners, cleaners and attendants. Semi-skilled workers include typists, drivers, plumbers, cooks, patrolmen, masons and stewards. Skilled workers include telephone operators, roneo-duplicating operators, domestic wardens, caterers and executive officers. Professionals include lecturers, nursing-sisters, pharmacists, doctors, technicians, administrators and most other members of the senior staff.

Diseases were classified into acute illnesses like malaria fever, bacterial, fungal and viral infections. Chronic diseases were tuberculosis, bronchitis, hypertension and diabetes. Cardiac diseases, congestive cardiac failure and cerebrovascular accidents were all placed under cardiovascular diseases. Other groups of classification were connective tissue disease, traumatic and metabolic disorders, degenerative diseases, miscellaneous disease and malignancies.

## Results

A total of 317 absentee workers, constituting 23.1% of the total work force in the Ibadan Polytechnic, was recorded in the 12-month period of this study. The frequency distribution of absenteeism by age, sex, nature of illness and duration of absence is shown in Table 1. The absolute frequency of absenteeism in workers was highest in the 30-39 year age bracket (43.2%), with a high preponderance of junior staff (83.3%) and male workers (60.0%). The statistical tests of significance (Table 2) reveal that the percentage frequency of absenteeism was significantly higher in the male workers than their female counterparts ( $P < 0.05$ ). Also, the prevalence of absenteeism was higher among the junior workers ( $P < 0.05$ ) of the staff, while 91.2% of all absentees were in the unmarried group.

Table 1 also shows that the highest absenteeism (54.6%) was as a result of acute illnesses, although chronic, cardiovascular and trau-

**Table 1.** Frequency distribution of absenteeism by various parameters (age, sex, nature and duration of illness) in Ibadan Polytechnic

Category	Frequency	% proportional
<i>Age (years)</i>		
Less 20	4	1.3
20-29	93	29.3
30-39	137	43.2
40-49	75	23.7
50+	8	2.6
Total	317	100
<i>Overall male : female ratio of workforce</i>		
Male	192	60.6
Female	125	39.4
Total	317	100
<i>Category of worker</i>		
Junior	264	83.3
Senior	53	16.7
Total	317	100
<i>Nature of illness</i>		
Acute	173	54.6
Chronic	31	9.8
Cardiovascular disease	31	9.1
Traumatic	29	9.1
Connective tissues	11	3.5
Degenerative	5	1.6
Metabolic disorders	1	0.003
Miscellaneous	38	12.0
Total	317	100
<i>Duration of illness (days)</i>		
1-3	246	77.6
4-7	56	17.7
8+	15	4.7
Total	317	100

**Table 2.** Percentage frequency of absenteeism by sex and category of workers in Ibadan Polytechnic

Category	Population	% with sickness absence
<i>Sex</i>		
Male	1076	17.8
Female	294	42.5
Total	1370	23.1
<i>Category of worker</i>		
Junior	1033	24.4
Senior	337	18.3
Total	1370	23.1

matic conditions occurred in almost equal proportion of duration (9%). The duration of absenteeism has a positively skewed distribution with a mode of less than 3 days. It is only in two cases that the period of sickness absence was above 7 days (12 and 42 days).

The proportion of junior workers, female workers, those married, and workers below 40 years of age, with a particular nature of illness for absenteeism, is presented in Table 3. This table also shows that a significant proportion of those with acute and chronic illness were the junior workers, with a high prevalence of cardiovascular and traumatic diseases.

The economic loss to the Institution was

**Table 3.** Frequency distribution of some personal characteristics and nature of illness

Nature of illness	Total sample	Proportion of junior workers	Proportion of female workers	Proportion of married workers	Proportion below 40 years of age
Acute	173	77.5	21.1	8.7	76.3
Chronic	31	98.5	16.1	1.6	83.9
Cardiovascular	29	86.3	0.0	0.0	51.7
Connective tissue	11	90.0	18.2	0.000	81.8
Metabolic disorders	1	100.0	0.0	0.0	0.0
Degenerative	5	60.00	40.00	0.006	80.0
Traumatic	29	96.6	0.0	0.0	65.6
Miscellaneous	38	89.5	10.5	1.3	70.3
Total	317	83.3	39.4	8.8	73.8

assessed by converting the man-hours lost to the amount being paid as salaries to these workers. During the study period (1980) a sum of nearly 7000 naira was lost in a year, which at that time was equivalent to U.S. \$10,350 (Table 4). However, economic loss by the junior workers is twice that lost by their senior counterparts.

**Table 4.** Economic loss to the Institution in Nigeria

Category of worker	No.	Amount lost
Junior	264	₦4181.55
Senior	53	₦2717.25
Total	317	₦6898.80

## Discussion

This study has shown that the prevalence of sickness absence in the Institution can be put at about 25%. Thus, one in every four Polytechnic workers will absent himself from work as a result of sickness at least once in a year.

The biological characteristic that showed a higher proportion of female (42.5%) compared with (18.6) male workers has been found in other studies. Ryan [4], in his study of worker's morbidity, recorded a female proportion of 63%. However, Couper [5] had suggested that

the higher absenteeism rate amongst females may not be explained primarily by biological reasons, rather, as a result of management. In the Polytechnic community, the quality of supervision and the nature of work done may be factors causing a higher preponderance of absenteeism among junior workers (60.6%) than their senior counterparts.

The fact that 91.2% of the absenteeism occurs among unmarried workers, and a higher prevalence rate is found amongst junior workers, further suggested that there may be subtle management problems. In addition, the majority of the workers may not be happy with their present jobs and thus absent themselves with the slightest pretext in search of greener pastures. Melbin [6] has found that there could be a continuum of withdrawal from an organization, with absenteeism being a precursor of turnover. Low motivation and the low salary earned by the junior workers are other significant factors that could be responsible for their dissatisfaction and negative attitudes, thus resulting in frequent illnesses and a high absence rate found among middle management. In fact, the absenteeism rate of junior and senior workers (25.5% and 15.1%, respectively) may mean an under estimation of the senior staff workers who, in a majority of cases, can be absent from work without official permission or without production of a sick report.

The nature of illness for absenteeism is indicative of the prevailing disease in the community; infectious and parasitic disease have been found as the commonest causes of

morbidity in the Nigerian environment [7,8]. Malaria fever often has a shorter duration, hence the report that the mode duration of illness was about 3 days. Thus, only about 20% of those away due to sickness could be taken seriously.

The economic loss to the institution, which is put at approximately U.S. \$10,350 in this study, is an under estimation. As not all those absent from work have been studied here, it is desirable to carry out another study now that the Nigerian economy is at a very low ebb. The damaging effect of an unplanned absenteeism on the output of any establishment is more than can be quantified.

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#### References

1. Benjamin B. Health and Vital Statistics. London: Allen and Unwin, 1968.
2. Badger BA. Man in Employment. Kent: John Mackey and Co. Ltd., 1960.
3. General Orders, Federal Government of Nigerian Civil Service.
4. Ryan M. Some social influences on workers morbidity. *Br Med J* 1981;283:546-7.
5. Couver BJ. Management factors affecting absenteeism. *Harvard Bus Rev* 1950; 28:42-8.
6. Melbin M. Organisational practice and individual behaviour: absenteeism among psychiatric aids. *Am Soc Rev* 1961;26:14-23.
7. Ayeni O. Causes of mortality in an African city. *Afr J Med med Sci* 1980;9:139-49.
8. Bamgboye EA. An analysis of discharge data from Ibadan University Teaching Hospital. *Nig Med J* (in press).

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