

SERVICE UPTAKE IN UCH, IBADAN: A Time Flow Study

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SUMMARY

Objective: To determine the time flow of service uptake as assessed by patients in the eye clinic of UCH with the view of identifying delays in service uptake, the reasons for such delays and ways to improve services.

Materials and methods: Patients attending the eye clinic of the University College Hospital (UCH) were selected consecutively and interviewed using a semi-structured questionnaire on the amount of time they spent waiting for the various services at the eye clinic and reasons for any perceived delays in receiving the services. For under-aged children, their guardians were interviewed.

Results: A total of 42 patients were interviewed, out of which 22 (52.4%) were male. The age range was 5 to 75 years. All the patients were referred, with 78.1% coming from the general outpatient department of the hospital. They spent between 30 minutes and 2 hours waiting to get their referral letters. Delay was believed to be due to the large number of patients relative to the small number of doctors. Services with extended time flow in the eye clinic include delayed first consultation due to long appointment dates (1 to 6 months in 45% of patients studied), need for repeated visits before doctor is seen (2 visits by 78.6% of patients), prolonged waiting for nursing procedures (1 to 3 hours by 11.9%), waiting for doctor's consultation (1 to 3 hours by 21.4%), and waiting to pay to the cashier (10 minutes to 1 hour). Reasons for delay include: insufficient number of doctors, few functioning equipment and the poor attitude of some staff. Other services with extended time flow include prolonged surgical bookings of between 1 week and 6 months, mainly due to industrial action by staff, lack of sterile linen due to broken down boiler, unsatisfactory laboratory results, unresolved medical problems or financial constraints.

Conclusion: Services in the eye clinic of UCH are perceived by patients to be associated with extended time flow due mostly to the insufficient number of trained staff and functioning equipment, recurrent industrial action and the poor attitude of some staff, which gives rise to patient dissatisfaction and complaints. There is the need to employ more eye doctors to provide functioning equipment, to re-educate/re-orientate all staff in the eye clinic and in UCH, and in fact, in all public health institutions, to provide a more patient-friendly environment through an attitudinal change, and to ensure accessible, affordable and acceptable health care.

Key words: public health care, time flow, eye care, delayed service

INTRODUCTION

The University College Hospital, Ibadan was established by an act of law in 1952. The statutory functions of the hospital include the provision of medical education, the provision of excellent clinical service to the community and the conduct of scientific research. All three statutory functions are important and interrelated, thus, when one fails the others suffer. The provision of high quality service to patients ensure a regular supply of patients for teaching and research. Perceived poor service could cause the number of patients, an essential commodity for research and training of health care personnel, to dwindle with the resultant deleterious effects. Several barriers including fear, cost, family responsibilities, ageism, fatalism and the attitude of being able to cope have been identified as responsible for the poor utilization of eye services.^{1,2} Previous studies have shown that the availability of eye care services in

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communities with a high prevalence of blindness and eye disease does not necessarily translate into appropriate utilization of such services as shown by a study which examined patterns of service utilization across the rural populations of four districts in Orissa.³ The study found that the key factors guiding the pattern of utilization are the reputation of the provider, cost, and physical accessibility. As a result of these factors, more private hospitals were found to constitute a major sector of utilized service, than public hospitals. In a participatory rural appraisal study carried out in India,⁴ 40% of the respondents quoted indirect costs such as time, effort and disturbance of daily activity for both the individual concerned and their families as the major reasons for non-utilization of eye services. Another study in Uganda recorded reasons such as 'too busy' as a major deterrent for accessing services.⁵

It is a common experience to spend 'the whole day' trying to see a doctor in government hospitals. This discourages many patients from seeking medical attention in government hospitals. In addition, there is little doubt that poor access significantly limits the reach of many eye care programmes. If Vision 2020 (the right to sight) is to achieve its goals, and carry out the recommendations made by the International Council of Ophthalmology to ophthalmological training centres in Nigeria on the need to increase patient load, greater efforts are needed to reduce the cost of access so that eye care can truly become a right for all.

This study was therefore aimed at determining the time flow of service uptake as perceived by patients in a teaching hospital, using UCH as an example. The overall aim is to improve the capacity utilization of facilities in the hospital and to ensure that the hospital effectively carries out its statutory functions in the spirit of affordable, accessible and acceptable health care.

METHODS

The study was carried out at the Eye Clinic of the University College Hospital, Ibadan. It is one of the several out-patient clinics of the hospital. The clinic provides specialty ophthalmic care by appointment to patients referred from other clinics within UCH and from hospitals within and outside Ibadan. The clinic operates three days a week – on Mondays, Wednesdays and Fridays. Two consultant ophthalmologists operate the clinic each day, assisted by an average of 10 resident ophthalmologists-in-training and one optometrist. Other clinic staff include the matron in charge of the clinic assisted by about 3 nurses, 3-4 clinic assistants and 3-5 orderlies. Emergency cases are treated in a special room by the emergency team of doctors on call. The emergency team also sorts through referred cases, to

select the ones that require immediate attention and gives appointments to all others to see a consultant at a later date. The Eye Department has its own ward with 28 in-patient beds and a dedicated theatre which handles routine cases on Mondays and Thursdays every week, but attends to emergency cases daily. An average of 40 new patients and 60 follow-up cases are seen on each clinic day. One of the major sources of referred patients to the eye clinic is the General Out Patient Department (GOPD) of the hospital, where an average of 50-100 patients present daily. It is manned by three consultant family physicians and about 6 residents; initial sorting of the patients is usually done by one or two doctors. Minor eye ailments such as allergic conjunctivitis are treated at the GOPD by these doctors (who normally spend one month during their training period in the eye clinic learning about the management of eye disease); more serious or complicated cases are referred to the eye clinic.

A semi-structured questionnaire was administered to all 42 consenting consecutive patients attending the eye clinic in UCH during the study period in June 2001. All interviews were carried out at the end of the process of care. Patients were made to estimate the time spent from when they left home until they were eventually attended to by the doctor and given treatment. For under-age persons, the accompanying guardian was interviewed on behalf of the patient. Each patient was guided to recollect each step, from the security post, through the general outpatient department (where applicable), to the records department, where he/she was registered and given an appointment. The time it took for preliminary procedures – blood pressure measurement, urinalysis, visual acuity, etc. – to be carried out before the patient was seen by the doctor was estimated. The patients were grouped according to the amount of time spent at each stage: less than 1 hour, 1-3 hours and over 3 hours. For ease of analysis, subjects who got appointments were grouped into four categories: less than 1 week, 1-4 weeks, 1-6 months, and over 6 months. For those who required admission or surgery, the time flow from when surgery was offered and when it was actually done, the period spent on admission and the reasons for delays, if any, were identified.

RESULTS

The 42 patients interviewed included 22 males (52.4%) and 20 females (47.6%). The age range was from 5 years to 75 years. Most of the patients (85.7%) resided in Ibadan and spent less than 1 hour to get to the hospital. None of the patients reported any delay at the security

post and most of them (97.6%) had no difficulty locating the eye clinic. Also, a majority of the patients (88.1%) reported that they obtained their case files promptly without delay. All of the patients interviewed were referred to the eye clinic. Most of them (78.6%) had been referred from GOPD, while 14.3% were from private clinics. The remaining patients were referred from other clinics in UCH. The majority of these patients spent between 30 minutes and 2 hours to obtain a referral letter. They attributed the delay mainly to the small number of doctors who have to attend to the many patients who present daily at the GOPD. All the patients, except two who presented with a red painful eye, were given appointments (to see the consultant) ranging from a few days to three months. The majority of the patients (78.6%) stated that they had to visit the hospital twice before they were able to see the doctor, while 16.7% visited 3 or more times. Only two of the patients were seen on the same day because they were emergencies. A flow chart of the process of care as assessed by respondents at the eye clinic in UCH is presented in figure 1.

Table 1. Duration of appointments to the eye clinic, UCH, Ibadan

Duration	No. of patients	Per cent
< 1 week	4	10.0
1-4 weeks	18	45.0
1-6 months	18	45.0
Total	40	100.0

Table 2. Number of visits before seeing the doctor in the eye clinic, UCH, Ibadan

Number of visits	No. of patients	Per cent
1	2	4.7
2	33	78.6
3	6	14.3
4	1	2.4
Total	42	100.0

Thirty-one of the respondents (73.8%) reported that on an appointment day, they spent between 10-60 minutes trying to pay fees for consultation and other procedures, while 9 (21.4%) spent 1-3 hours. The reason given for the delay was that there were few cashiers attending to many patients and they were inefficient. On procedures such as blood pressure measurement, urinalysis and visual acuity, which are performed by nurses, 35 patients (83.4%) spent less than one hour, while 5 (11.9%) spent between 1-3 hours. The reasons the patients gave for spending more than one hour were the few available instruments, and few nurses available

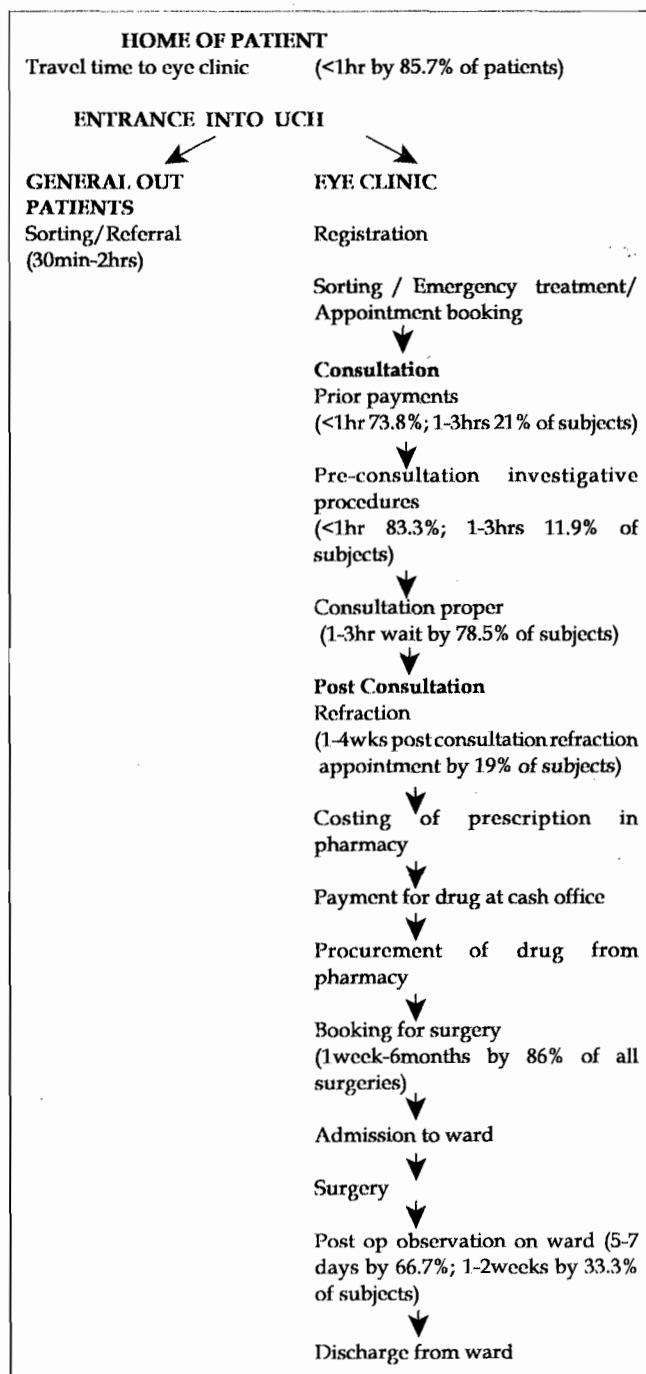


Figure 1. Flow chart of the process of care at the eye clinic, UCH, Ibadan

to attend to the large number of patients who needed attention. Most of the patients (78.5%) spent 1-3 hours or more waiting to see the consultant. The reasons the patients gave for the delay include: inadequate number of instruments, late arrival of the consultant, large number of patients, and the long period of time spent on each case. Of the patients interviewed, 8 (19%) were sent for refraction with appointments ranging between 1 and 4 weeks. More than half of the patients (59.6%) were given a prescription for drugs. The majority (96%)

experienced delay at the pharmacy while trying to pay for and obtain the drugs. The delay was attributed to the few cashiers who had to attend to many patients. Some blamed the delay on the bad attitude of the pharmacists.

Surgery was recommended to fifteen (35.7%) of the patients; twelve of them required admission. All the patients, except the two emergency cases, were given appointments for surgery ranging from 1 week to 6 months or more.

Table 3. Time interval between offer of surgery and the actual operation of 15 operated eye patients

Time interval	No. of patients	Per cent
<1 week	2	13.3
1-4 weeks	1	6.7
5-8 weeks	5	33.3
9-16 weeks	4	26.7
>6 months	3	20.0
Total	15	100.0

Various reasons were identified for long delays and these included recurrent strike action by staff; unsatisfactory laboratory results (conjunctival swab) necessitating rebooking; medical problems such as hypertension and diabetes that needed to be controlled before surgery could be performed; non availability of booking space; and financial constraints on the part of some respondents. The majority of the admitted cases (66.7%) spent between 5-7 days before discharge, whereas 33.3% of them spent between 1-2 weeks. The reasons given for the extended stay in hospital include 1-3 days admission for routine pre-op medication and preparation, operation list cancellation due to lack of theatre linen, post-operative complications, and the need to wait till the following week for the second eye to be operated in bilateral cases.

DISCUSSION

This study has identified prolonged intervals of time in the process of receiving service by patients as a possible barrier to service uptake in UCH. Various factors were identified as contributory to the perceived prolonged time flow of service uptake in the eye clinic, UCH.

The first point where patients encountered delay was at the GOPD where they were given referrals. The main reason given was the large number of patients presenting to the sorting doctor who may sometimes have to sort through more than 50 patients. More doctors need to be assigned to the GOPD, particularly on days when there is a large turnout of patients.

Many of the patients interviewed were unhappy with having to make two or more appointments, with intervals ranging from a few days to three months before

they could see the specialist, the long queues, and consequently the time wasted while trying to pay consultation fees and fees for various procedures. They were also unhappy with the small number of cashiers available to attend to the large number of patients, and their non-chalant attitudes.

These findings are similar to those in an Algerian study which identified difficult access to public health service due to long distance to the clinic, long waiting times, incompetent staff, favouritism and lack of personnel⁶ as barriers.

In a similar study in Jos (Nigeria), Mpyet⁷ found, in his audit of the use of ophthalmic theatre time, that there were delays in starting all 42 elective operation lists surveyed by as much as 24.3% of the total time spent operating. The delays were mostly due to: the attitude of the surgeons who arrived late, disruption in power supply, and the attitude of theatre staff who failed to prepare sterile sets on time and ward nurses who failed to transfer patients to the theatre on time. Such prolonged time flow of service is bound to reflect negatively on the satisfaction of the patient in terms of cost of time lost, disturbance of daily activity for the individual, his/her family or escort. Public service health workers, therefore, need to change their attitude to patient care.

Kyndt⁸ on the importance of affordable eye care has, among other things, suggested reducing the need for repeated visits by creating a 'one stop' referral or treatment service to reduce the burden of unnecessary travel and time costs for patients; introduction of demand management strategies by structuring service management to meet the variations of seasonal peaks in demand to reduce patient waiting time. Shah,⁹ in his study on barriers to uptake of cataract surgery for women in urban Cape Town, observed that socio-economic costs of surgery such as taking time off work and leaving daily responsibilities were important barriers for women as well as their carers. He suggested 'fast-tracking' of patients to reduce waiting lists; decentralization of ophthalmic care and increased resources and funding for the hospital and health-system as ways of increasing the capacity of service delivery.

In this study, shortage of equipment such as blood pressure apparatus, ophthalmoscopes, slit lamps and the few number of nurses and doctors relative to the large number of patients were the other reasons identified for delays with procedures. This again highlights the need for adequate funding of health facilities.

CONCLUSION AND RECOMMENDATIONS

A call has been made by Chassin and Galvin¹⁰ for a major systematic overhaul of the way health care services are delivered, and for the education and training of clinicians. Hospitals need to be made more patient friendly. Care-givers need to be re-orientated to understand that health is a commodity in a buyer's market, and the patient has the option of going to a more patient-friendly and humane market. He therefore deserves to be treated with more respect. Payment for services by patients need to be streamlined by introducing bulk payment for services, so as to eliminate multiple visits to the cashier. For example, a patient who comes to UCHI for cataract or glaucoma surgery pays a fixed bulk amount which covers all the services related to the admission, and the hospital ensures that all services paid for are provided. Computerization of the records and accounts departments, and indeed the hospital as a whole, will further enhance service delivery to the public. Bookings can thus be strictly adhered to, with each patient having a fixed time for a visit. The National Health Insurance Scheme, if well implemented, will also greatly enhance the uptake of services by patients because cost would no longer be a reason for delaying treatment such as surgery.

Government should also provide incentives (such as attractive remuneration and adequate equipment) for health workers, to check the incessant industrial action in the health sector which has further compounded the problem of patient backlog. There is also a need for expansion of facilities and employment of more personnel to cater for the increasing number of patients in the eye clinic in particular and UCHI in general. The provision of adequate tools to work with, e.g. one or two slit lamps per consulting room, one ophthalmoscope per doctor, adequate numbers of functional trial lens boxes, will eliminate the need to move from one room to another thereby minimizing time wasted per patient. Furthermore, the procurement of more operating instruments, e.g., cataract sets and operating microscopes, will ensure that more patients can be booked for surgery and several patients operated upon simultaneously. In addition, the commencement of the training of trainers programme in intraocular surgery will boost the number of specialist hands available to carry out surgery. Formation of specialized teams under the various consultants will ensure that elective operations are carried out on more days of the week than is presently done. Management could also review

downwards the cost of surgery or formulate welfare programmes to cater for those unable to afford the cost of surgery.

Finally, the general practitioners should be taught to handle simple problems such as uncomplicated allergic conjunctivitis, malingers, and minor eye trauma, and more optometrists should be engaged to handle cases of refractive errors, so that the ophthalmologists will have more time to handle more complicated cases.

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REFERENCES

1. Fletcher AE, Donoghue M, Thulsiraj RD, Scott S. Low uptake of eye services in rural India: A challenge for programs of blindness prevention. *Arch Ophthalmol* 1999; 117(10): 1393-9.
2. Rabi MM. Cataract blindness and barriers to uptake of cataract surgery in a rural community of northern Nigeria. *Br J Ophthalmol* 2001; 85: 776-780.
3. Ager A, Pepper K. Patterns of health service utilization and perceptions of needs and service in rural Orissa. *Health Policy Plan* 2005; 20(3): 176-84.
4. Fletcher AE, Donoghue M. Barriers to uptake of cataract services and proposed strategies to address these. Background paper prepared for WHO informal consultation on analysis of blindness outcomes, 1998, Geneva.
5. Whitworth J, Pickering H, Mulwany F, Ruberantwari A, Dolin P, Johnson G. Determinants of attendance and patient satisfaction at eye clinics in south-western Uganda. *Health Policy and Planning* 1999; 14(1): 77-81.
6. Mebtoul N, Cook J, Benekh Lefgoun A, Lamari F, Grangand JP. Families and children confronting health care practices in Algeria. *Revue épidémiologie et de santé publique*. 47 suppl 2: 2538-52, 1999 Oct.
7. Mpyet CD. An audit of the use of ophthalmic theatre time. *Community Eye Health* 2002; 15(44): 62-3.
8. Kyndth M. Importance of affordable eye care. *Community Eye Health Journal* 2001; 14: (37): 1-3.
9. Shah A. Barriers to uptake of cataract surgery for women in urban Cape Town. *Community Eye Health Journal* 2005; 18(53): 80.
10. Chassin MR, Galvin RW. The urgent need to improve health care quality. *JAMA* 1998; 280 (11): 1000-5.