Default to elective surgery appointment at the Komfo Anokye Teaching Hospital, Kumasi, Ghana

Christian Kofi Gyasi-Sarpong1*, Patrick Opoku Manu Maison2*, Koranteng Adofu1, Charles Kofi Daly1, Roland Azorlida1, Kwaku Addai Appiah Arhin1, Ishmael Kyei1, Michael Amoah1, George Amoah1, Robert Sagoe1, Kwaku Otu-Boateng1, Abiboye Cheduko Yifieh1, Boateng Nimako1, Joseph Yorke1, Michael Ofosu Adinku1, Francis Somiah-Kwaw Aitullah1, Dominic Akuko Darkoah1, Benjamin Frimpong-Twumasi1, Anita Eseenam Agbeko1, Frank Enoch Gyamfi1 and Joseph Oppong1

1Department of Surgery, School of Medicine and Dentistry, College of Health Sciences, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana.
2Department of Surgery, School of Medical Sciences, College of Health and Allied Sciences, University of Cape Coast, Cape Coast, Ghana.
3Department of Surgery, Komfo Anokye Teaching Hospital, Kumasi, Ghana.

*Corresponding author. Email: pmaison@uccsms.edu.gh. Tel: +233209143114.

INTRODUCTION

Hospitals invest considerable amount of human and material resources in maintaining their operating theatres. Hence, in resource-poor settings where scarce resources are harnessed to provide surgical services, increasing default to surgical appointment causes a serious impediment to optimizing resources for improved surgical care and constitutes a substantial financial burden to health care delivery (Woodcock, 2000).

Non-attendance to elective surgeries also has other undesirable effects such as depriving other patients the opportunity of having early surgery, prolonging waiting lists and altering the planned work schedules (Lee et al., 2000; Mason, 1992).

A review of theatre records at the Komfo Anokye Teaching Hospital (KATH), a tertiary hospital in Kumasi, Ghana, over a period of 3 years (2016-2018) showed increasing default to surgical appointment. This trend translated into underutilization of surgical resources with a corresponding increase of financial burden to the hospital.

This study was conducted to evaluate the causes of defaulting to surgical appointments and to adapt appropriate strategies to reduce elective surgery non-attendance.

ABSTRACT

A review of theatre records at the Komfo Anokye Teaching Hospital (KATH), a tertiary hospital in Kumasi, Ghana, from 2016-2018 showed increasing default to elective surgical appointment. This study evaluates the causes of defaulting to surgical appointments. This is a prospective survey among elective surgical patients who defaulted surgical appointment at the hospital from March 2019 to August 2019. These patients and theatre staff were interviewed to find reasons for defaulting. The results showed that almost a quarter (21%) of scheduled elective surgeries during the study period defaulted appointments but only 111 (78.2%) of these patients participated in the study.

Eighty one 81 (73.0%) patients had been operated elsewhere as at the due date for the surgery. This was due to the long scheduled dates for their surgeries. The remaining 27 (24.3%) failed to attend due to inability to pay for surgery. Three patients (2.7%) died prior to the scheduled surgery date. Theatre staff identified cancellation of scheduled cases on the day of surgery as one reason for patient non-attendance.

Long waiting time is the main cause of default to elective surgery appointments.

Key words: Elective surgery, theatre, non-attendance, default.
attendance rates.

MATERIALS AND METHODS

The study is a longitudinal prospective survey among elective surgical patients who defaulted surgical appointment at the Komfo Anokye Teaching Hospital over a period of 6 months (March – August 2019).

Theatre records were searched for the names of patients who defaulted their elective surgery schedule during the study period. The contacts of these patients were obtained from hospital records and they were visited and interviewed using a structured questionnaire.

Data obtained included patient demographics, indication for surgery, reasons for defaulting and patients perception about the surgical services available at KATH.

We also conducted one-on-one interview of theatre staff using a structured questionnaire to find their perception on the reasons for patient non-attendance to elective surgeries.

Data were captured using the Epi-data software and analyzed with PASW Statistics for Windows, Version 18.0. Chicago: SPSS Inc.

Informed consent was obtained from all participants prior to enrollment into the study and ethical clearance to conduct this study was obtained from the Committee of Human Research Publication and Ethics of the School of Medicine and Dentistry, Kwame Nkrumah University of Science and Technology, Kumasi.

RESULTS

One hundred and forty-two patients, representing 21% of the scheduled elective surgeries defaulted the surgical appointments during the study period. Out of this number, 24 (16.9%) defaulted patients were not contacted due to incompleteness of their contact details and 7 (4.9%) of them declined to consent to participate in the study. One hundred and eleven 111 (78.2%) patients consented and participated in the study.

There were 63 (56.8%) males and 48 (43.2%) females with a mean age of 43.6 ± 24.8 (SD) years. The defaulted patients had been diagnosed with clinical conditions, such as urological malignancies, anorectal malformations, groin and scrotal swellings, breast malignancies and other surgical conditions known to be effectively managed with surgical procedures. Three of these patients (2.7%) died prior to the scheduled surgery date.

The cost of surgery at KATH was described by the patients as relatively reasonable and affordable to the majority (72.1%) of them. Almost 90% of the patients perceived that undergoing surgery was the most appropriate treatment for their condition. The rest believed that herbal treatment or faith/spiritual healing could provide relief for their surgical condition.

All the patients expressed satisfaction with the quality of surgical services at KATH. Their perception of the quality of surgical services at KATH was based on either patient’s personal experience (11.7%), relative/friend’s surgical history (20.7%), recommendation from the referral centres (59.5%) or their observations during the visit to the consulting rooms (8.1%).

Reasons for defaulting surgical appointment

Eighty one 81 (73.0%) patients were confirmed to have been operated elsewhere as at the due date for the surgery. This was mainly due to the long scheduled dates (ranging from 1-8 months) for their surgeries. Almost 30% of these cases were operated by surgeons from KATH in private hospitals at relatively higher charges.

The remaining 27 (24.3%) whose surgery had not yet been performed, cited inability to pay for surgery as their reason for non-attendance. These patients needed surgery for groin swellings such as hernias and hydroceles, goiters, cholelithiasis, prostate hyperplasia etc. Three patients (2.7%) died prior to the scheduled surgery date.

The relatives of two of these patients said they could not have afforded the cost of surgery whilst relatives of the other patient who died felt the long scheduled date contributed to the death of the patient.

In effect, the long appointment time and cost of surgery were the primary factors contributing to the default to surgical appointments at KATH.

Interview with theatre staff

We interviewed theatre staff at KATH to find their perception on the reasons for patient non-attendance to elective surgeries. The participants comprised 10 surgeons, 15 Nurses, 5 Anesthetists and 2 Orderlies representing 18% to 57% of the various categories of theatre staff. The mean operating theatre professional experience of these participants was 6 years.

All of them acknowledged that default of surgical appointments was a major challenge to the efficient management of the operating theatre. They cited the inability to meet timelines in the delivery of surgical
services in theatre and the cost of surgery as the causes of default to surgical appointments. They identified the occasional cancellation and deferring of scheduled cases on the day of surgery as a major cause of prolonged appointment dates which caused patients to seek care elsewhere.

They mentioned two main factors to be responsible for the delays experienced in theatre. The first problem was the inadequate supply and maintenance of biomedical equipment and logistics.

They all believed that the existing biomedical equipment in the theatre was not durable enough to support the increasing demand for surgical operations. The frequent breakdown of major equipment such as anesthetic machines and patient monitor contributes immensely to delay and cancellation of scheduled cases in theatre.

The 2nd reason for theatre delays was the inadequate numbers of nurses, anesthetists and other theatre staff who support surgeons to work in theatre. Hence, surgeries do not start on schedule, turnaround time between surgeries is prolonged and eventually, some scheduled cases for the day get deferred, prolonging appointment dates for new cases. An estimated minimum time of 40 - 60 min is spent between the end of one case and the start of the next. Patients who are not comfortable with long schedule and deferred appointments seek early surgical care elsewhere.

**DISCUSSION**

It is estimated that close to three billion people lack access to adequate surgical services worldwide (Bae et al., 2011). This is a result of a wide range of factors such as long scheduled dates, absent or deficient infrastructure, lack of essential medicines and equipment, underfinancing, poor logistics, and inadequate information reporting systems (Kushner et al., 2010).

Many tertiary health facilities in Africa, including KATH, are challenged with reliable supply of logistics such as water, oxygen, electricity and anesthetic supplies, making it extremely challenging to perform even the most basic surgical operations (Kushner et al., 2010). In such resource-poor settings, increasing default to surgical appointment causes a serious impediment to optimizing resources for improved surgical care and constitutes a substantial financial burden to health care delivery (Woodcock, 2000).

In China, Lee et al. (2000) found that 15.3% of 528 bookings failed to attend to their elective surgery appointment due to reasons such as appointment forgotten, operation done in another hospital and operation refused. Similarly, Parekh et al. (2003) found a 20% default for elective operating theatre appointments in England. The reasons for non-attendance included new illness and surgery already done in another hospital.

In a recent study, Koka and Singh (2010) found a plastic day surgery non-attendance rate of 1.79% and the reasons for non-attendance included forgot appointment, operation refused and miscommunication. These studies suggest that there are varying default rates and the reasons for elective surgery non-attendance are multifactorial.

In the present study, there was a default rate of 21%, comparable to the findings by Parekh et al (2003) and the main reason for defaulting was operation done in another hospital due to the long waiting time as was also noted by Lee et al. (2000). The high proportions (73%) of patients who sought early surgery elsewhere makes it imperative for the Management of KATH to take measures to reduce the waiting time especially when most of the patients were still operated by surgeons from KATH.

The hospital should also adopt measures such as obtaining efficient theatre equipment and logistics and increasing theatre staff numbers to reduce day of surgery cancellations which ultimately prolong appointment days. Garg et al. (2009) found that cancellation of scheduled surgeries was a major cause of inefficient use of theatre space and contributed to default rates. They recommended that proper administrative measures are taken to complete the theatre list daily.

Lee and McCormick (2003) reduced the proportion of unused beds in a district hospital in Dublin from 24.3 to 4.6% by telephoning patients a week before their appointments to know if they intended to come or not. This can help to replace patients who have been operated elsewhere or who do not intend to report. The telephone calls also help to remind patients and encourage them to keep their appointments.

Basu et al. (2001) adopted a similar approach to reduce non-attendance of ambulatory surgery rates from 12 to 2.25%.

Hardy et al. (2001) showed that telling patients what to expect reduced non-attendance rates from 15 to 4.6%. In the study by Lee et al. (2000), non-attendance rate was significantly reduced when patients were given a health talk, ward tour and operating theatre orientation.

Another approach to reducing non-attendance rate, as suggested by Parekh et al. (2003) is to educate patients against non-attendance and to explain to them that the long waiting list is partially due to non-attendance. They should be encouraged to notify the hospital as soon as they perceive they cannot honor their appointment to enable a convenient replacement from the waiting list.

Reducing non-attendance rates has a positive impact on
waiting lists. Therefore, although it is important to improve theatre resources to reduce case cancellations, in poorly resourced centers such as KATH, adopting some of the measures outlined above are critical to reducing non-attendance rates, resulting in reduced waiting time and thus enabling more patients obtain early surgery as desired.

Although most of the patients (72%) could afford the cost of surgery, 27 (24.3%) patients defaulted because they could not pay for surgical services. Costs incurred by patients can be reduced if some cases are operated on outpatient based same day admission instead of inpatient elective surgical admission basis. Boothe and Finegan (1995) showed that in-patients scheduled for laparoscopic cholecystectomy, a same day admission process was more cost effective as compared with in-patient surgical admission. Some of the patients in this study who defaulted due to hospital charges had groin swellings such as hernias, hydroceles etc. which could have been operated on outpatient basis to reduce cost.

Conclusion

Long waiting time is the main cause of default to elective surgery appointments followed by the cost of surgery. Improving efficiency in theatre to reduce case cancellations and adopting outpatient based same day admission to reduce cost will help reduce the default rate.

REFERENCES


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