Galore International Journal of Health Sciences and Research
Vol. 8; Issue: 4; Oct.-Dec. 2023
Website: www.gijhsr.com
Case Study *P-ISSN: 2456-9321*

Congestion at the Outpatient Department of Lady Ridgeway Hospital Sri Lanka

Siraj Mohamed Ibrahim

Acting Consultant in Medical Administration, Ministry of Health, Sri Lanka

DOI: https://doi.org/10.52403/gijhsr.20230414

ABSTRACT

Lady Ridgeway Hospital for Children is a 125-year-old paediatric hospital with several specialties. There are 1016 beds to accommodate patients. It provides care for children who are less than 14 years old. It is the final referral centre and receives patients from all over the island. It is situated in an easily accessible place. The outpatient department provides consultative service from 07.00 am to 12.00 midnight. It serves 1,500 to 1,800 patients daily and, catered 500 to 600 patients during the COVID-19 pandemic. This case study aims to identify the reasons for congestion at OPD and suggest solutions for them. Observation, key informant interviews, and review of the reports were the data collection methods. Congestion at OPD is due to several factors. Among them, stakeholders identified the need for more guidance for those who attend OPD as the main contributing problem. There were several causes for this problem related to client, staff, environment, process, and information. The OPD is functioning in an old building with other clinics and services. The building is packed with several units. Therefore, the number of clients using these premises is more than those using the OPD service. There needs to be direction boards to guide the patients regarding the available services, even though there are name boards for the rooms. A layout map of the OPD is also not available. The rooms are numbered, not in order. Lack of communication skills, poor attitude, unmotivated staff, inadequate responsiveness, not practicing the satisfaction survey, lack of supportive supervision, and need to have regular training are the other causes. Displaying the direction board and OPD layout will help the clients find their way quickly to reach their destination. In addition, strengthening the staff by providing knowledge and skills, field visits, non-monitory incentives and improving welfare will enhance their communication skills and attitude. Development of the staff will improve the quality of the service. Regular patient satisfaction surveys will help assess the service provision's feedback. The information collected from the survey will help correct the shortcomings and help plan the services in the future. Altogether, these will improve the guidance for the patients who attend the OPD and reduce congestion at OPD.

Keywords: Outpatient department, congestion, layout, direction

INTRODUCTION

The Sri Lankan government sector is the leading healthcare provider in the country. Five hundred seventeen primary medical care units (PMCU) and 588 hospitals provide healthcare services to the public under the Ministry of Health, Sri Lanka. [1] The hospitals range from divisional hospitals (DHs), base hospitals (BHs), district general hospitals (DGH), provincial general hospitals (PGHs), teaching hospitals (THs), specialized hospitals, and national hospitals. In addition, 358 Medical Officer of Health (MOH) offices provide public health care focusing on preventive health. Teaching hospitals provide routine and specialized care, and PMCU provides only outpatient care. [2] The public sector provides approximately 95 % of inpatient care. Outpatient care is shared almost equally between the public and private sectors. In 2019, 58.8 million outpatient visits occurred in the public sector, an

increase of 3.5 per cent compared to 2018. [3] The total outpatient department (OPD) visits were 38.9 million in 2020. There was a massive drop in OPD visits per 1000 population in 2020. The drop was around 34 per cent compared to 2019 due to COVID. This drop was huge in the last 50 years. [2]

Lady Ridgeway Hospital for Children (LRH) is the largest public paediatric hospital in Sri Lanka. It serves as the national referral centre in Sri Lanka for paediatric care and as a local hospital for the population in and around Colombo. This hospital has 1,016 beds and treats children below 14 years of age. There are 26 specialities in the hospital. [4] The total number of staff is around 2,350. The team consists of nearly 90 consultants, 360 medical officers, five matrons, 20 nursing sisters, almost 850 nursing officers, 88 attendants, 182 Saukya Karya Sahayaka (Ordinary), 396 Saukya Karya Sahayaka (Junior) and others. They are organized as medical teams headed by permanent senior consultants who have international experience in that speciality. LRH has all the necessary supportive services required to deliver quality patient care.

The vision of the LRH is "To be one of the best centers for pediatric health care in the region". The mission is "To provide the best and most comprehensive paediatric care for all children who are referred to us from all over Sri Lanka and neighbouring countries. Our entire staff is dedicated to provide child friendly, best quality and safe healthcare with individualized personal attention. With the guidance of Ministry of Health, and collaboration with all donors and other stakeholders our endeavor is to achieve expected standards with continued training of our staff." [5]

This case study aims to identify the causes of the congestion at OPD and identify solutions. The following methodologies were used to collect information regarding the congestion at OPD. The patient flow at OPD was observed. Key informant interviews (KII) with medical officer in charge (MOIC), medical officers, nursing sister, nursing officers, medical laboratory technician (MLT) and clients. Desk review of the available data.

The patients can present to the hospital with emergency or non-emergency conditions. The emergency may be a surgical or medical condition. A surgical emergency is catered by the accident and emergency (A&E) department. A medical emergency is catered to by the preliminary care unit (PCU). Non-emergency conditions are treated at OPD and clinics.

There is a well-equipped A&E department to attend to an emergency patient. It is located on the ground floor of the main building for easy access and functioning 24 hours a day. The department provides immediate attention to critical life-threatening and minor urgent casualties. There is a separate 24-hour dispensary for accident service patients. There were 47,505 patients catered by the A&E department in 2019. The main reasons for seeking care at this department are falls, trauma, animal bites, foreign bodies, cut injuries, burns, etc.

Medical emergencies are managed at the PCU. It is located opposite to the Medical Research Institute (MRI). It is the other side of the LRH. There were 59.674 patients managed in the PCU in 2019. The OPD is the area most utilized by patients in any hospital. The proper functioning of OPD is interrelated with the smooth functioning of other units. An OPD is part of a hospital designed for the treatment of outpatients, people with health problems who visit the hospital for diagnosis or treatment but do not at this time require a bed or to be admitted for overnight care.

Table 1: Summary of the services provided at LRH OPD [8-12]

Services	Year				
	2015	2016	2017	2018	2019
No of the first OPD visits	423,454	430,978	414,528	435,616	422,516
No subsequent OPD visits	25,038	20,780	22,240	19,728	16,374
No of A&E visits	43,673	44,566	45,549	49,311	47,505

No of PCU admissions	53,134	58,277	62,944	50,830	59,764
PCU to ward admission	10,674	10,345	17378	10,567	17,081
No of ward admissions	78,692	77,454	85,148	81,587	84,299
No of the specimens taken	52,479	70,042	101,698	89,966	105,524
No dressing was done	6,297	1,075	5,615	5,273	5,359
No of Mantoux test done	529	401	582	579	600

Modern outpatient departments offer various treatment services, diagnostic tests and minor surgical procedures. [6] A situation where a place is too blocked or crowded, causing difficulties, is congestion. [7]

OPD should be close to the accident and emergency department. Functionally, having a hospital laboratory, X-ray, pharmacy, and physiotherapy department near the OPD is essential. Designs that allow the free flow of patients rather than allow them to stagnate in one area are crucial points in designing the OPD. The OPD should have a front information desk. There should be a counter for registering patients. There should be sufficient consultation rooms, dressing rooms and injection rooms. The OPD should have adequate patient transport modalities [7]. Patient admission, dressing, phlebotomy and immunization services are also provided in the OPD. The summary of services offered in the last five years is shown in Table 1.

FINDINGS

The OPD of LRH is functioning in one of the oldest buildings. The arrangement of OPD could be better, and the different sections are situated not in order and look fragmented. The OPD is functioning from 07.00 am to 12.00 midnight. The admission and PCU are working 24 hours a day. There was some congestion at the triage station, where the patients are screened for signs and symptoms suggestive of COVID-19, such as fever, cold, cough and contact history with COVID patients. Based on the findings, patients are given chits with the temperature marked on them. A pink colour chit is for patients with fever, cough, cold, and contact history, and they are directed to a separate room (14B) after registration. The other patients are given green chit and directed to room 14A. The patients are registered after triage with their name, age and weight. After registration, patients are referred to the medical officers, who examine them and provide the necessary treatment.

Those who need blood investigation are directed to the bleeding room to take blood samples. The OPD laboratory performs a basic haematology investigation and Urine Full Report, and the reports are provided in 20 minutes. The biochemistry chemical pathology investigations are performed at the central laboratory, and the reports are issued at the OPD report counter. The medical officers review the reports, and the necessary decisions are made for treatment. Those who need admission are admitted to the wards, and those who need consultant advice are referred to clinics. There is a dressing room for cleaning dressing and suture removal. The immunization unit provides the Expanded Program on Immunization (EPI) vaccines for those with special conditions.

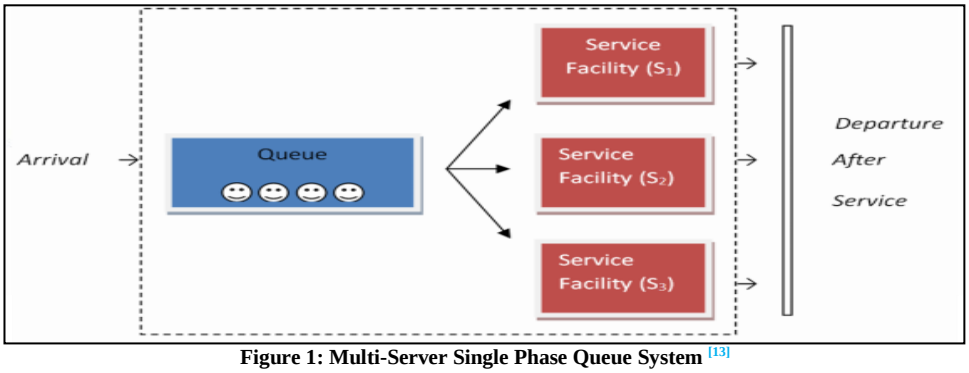

Figure 1: Multi-Server Single Phase Queue System [13]

At OPD, more than one consultative point provides similar services for a single waiting line. This type of queuing system is known as a multi-server single queue system, which is currently practised at the LRH OPD (Figure 1). Waited patients are directed to the first available service provider.

The consultation room is in front of the waiting area. There are around 100 chairs for patients. More than one parent or guardian accompanies the child, which also causes more congestion in the OPD. There are health assistants to call up numbers. The consultation rooms were not separated individually. There are 18 spaces for consultation at once. During the COVID-19 pandemic, these 18 consultation points were divided into eight for suspected patients with symptoms and ten for the others. There is only one examination bed in the consultation room with adequate privacy.

The X-ray facility is far away from the OPD. The ECG facility is also in a different place and far from OPD. The OPD laboratory is nearby. The OPD laboratory is practising a commendable numbering system. It minimizes the congestion at the laboratory. The injection room and the dressing room were moderately congested. Three drug counters out of seven were allocated for the OPD patients. The OPD dispensary counters distribute medicines, including syrups. During some rush hours, only two counters were in operation. Some drug dispensing counters dedicated to other clinics lack patients during OPD rush hours.

There were name boards in front of particular rooms in all three languages. Direction boards were not available. A layout map of OPD was also not available to facilitate the flow of the patients. No full-time staff member was available for active patient guidance. There are no proper direction boards, so patients are moving here and there in the OPD premises to find their designated places. The person who first visits the hospital face difficulties without knowing the layout of the hospital and OPD, therefore it is always necessary to be guided. The rooms are not numbered in order.

The office of the MOIC (Medical Officer-In-Charge) /OPD is on the other side of the consultation rooms, making it challenging to supervise the OPD frequently. All the processes of the OPD are currently being conducted manually.

PROBLEM ANALYSIS

There were several issues noted for congestion at OPD. After the discussion with key stakeholders, the 'lack of guidance for patients who attend OPD' was selected as the most acute problem. The causes of this problem were analyzed using the Ishikawa diagram. The reasons were related to people, processes, systems, information and environment.

The patients who are treated at LRH are children who are less than 14 years old. The parents and guardians who have children are more cautious about the health of their children rather than themselves. Therefore, when they feel that that child has any symptoms, they take the child to the hospital for treatment. This practice is because of the educational level of the community as well as the influence of the free health system in the country. When a child is taken for treatment, the child is accompanied by at least two people or more. Therefore, one patient will have three people in the OPD. The OPD is situated among the other units, such as clinics, with patients and parents. These people also increase the number of people in the OPD premises. The people's attitude is just to follow the people in front of them without their knowledge. This attitude adds to the movement of the people without getting the necessary information OPD is the most crowded place in the hospital, situated among several other units, especially with clinics and PCU. The space in the OPD is utilized to start several different units. The rooms are arranged haphazardly without any order. At the same time, the related departments such as X-ray, ECG and pharmacy are far from the OPD. The remaining available space is used for

seating arrangements. Therefore, the OPD looks more congested, and it isn't easy to find relevant places.

There is a lack of health assistants. Among the available, there are absentees and chronically ill staff. Therefore, working capacity is lower than the available staff. They also don't have adequate knowledge and skills in communication to guide and support clients. There is no regular scheduled training for them. They are not motivated to perform their duty productively.

No regular survey is conducted on patient experience or satisfaction with OPD patients. At the same time, staff satisfaction surveys are also not conducted regularly. The supervision by the middle-level managers is also not as expected due to the increased workload and diverse staff composition. There are no direction boards available at the OPD. A layout map of the OPD is also not available. The unavailability of directions makes the patients to find the places difficult. Currently, the OPD does not use information and communication technology (ICT) facilities to guide the clients.

The quality management unit (QMU) of LRH is not functioning as expected. The unit is operating with only one medical officer and limited facilities. The work improvement team (WIT) of the OPD is not functioning effectively.

PROPOSALS

Several causes are identified for the lack of guidance for the patients who attend the OPD. They are related to people, processes, information, systems and environment. The health-seeking behaviour of the community, the attitude of the people, and more walking clients are patient-related and challenging to tackle. The staff-related causes are lack of staff, lack of motivation and poor communication skills. Providing adequate staff for OPD will provide enough staff to utilize for guidance. Currently, there is a shortage of health assistants all over the place in LRH. Therefore, it is not possible to provide additional staff for OPD immediately. The new appointment of health assistants depends on the government, which cannot be predicted when the new appointment will be provided. The attitude of the staff can be changed by providing proper knowledge, skills, non-monitory rewards, and welfare activities.

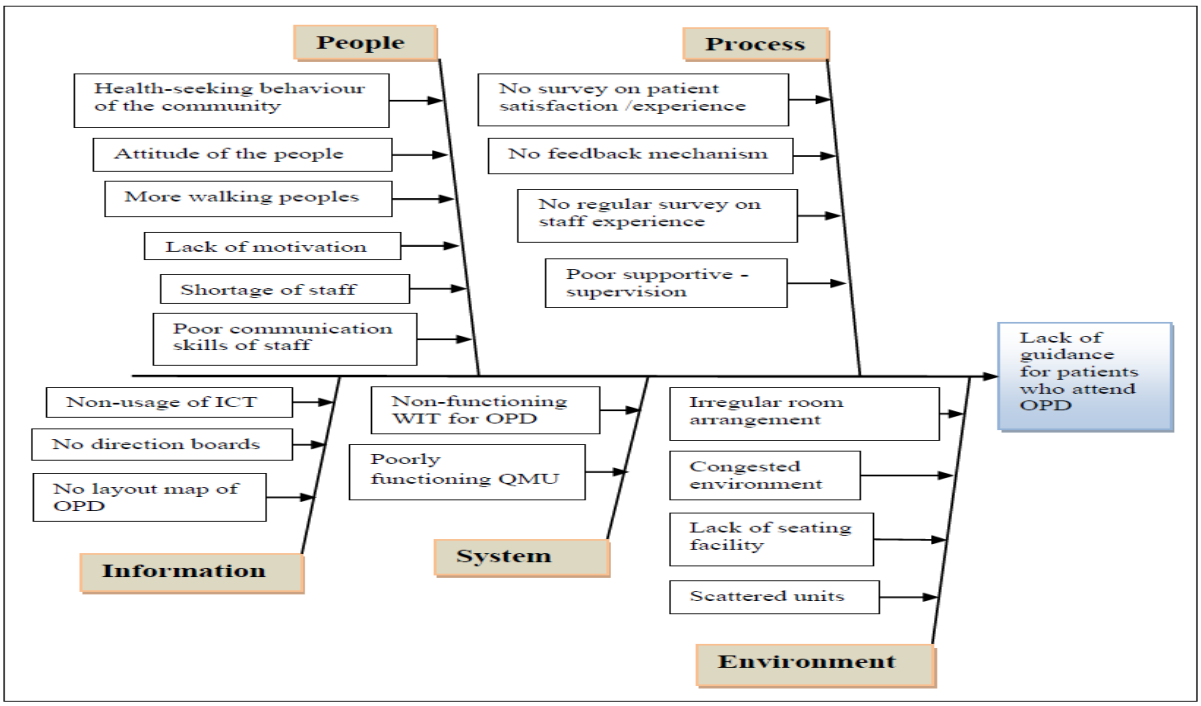

Figure 2: Ishikawa diagram for lack of guidance for patients who attend OPD at LRH

The QMU of the LRH can arrange field visits to well-functioning institutions of a similar category or a different category in addition to improving their knowledge.

Conduction of the patient satisfaction survey is an excellent source of information to assess the quality of the service provided by the OPD. There are enough samples at OPD. There are 1500 to 1800 patients get the service from OPD, which was reduced to 500 to 600 during the COVID-19 pandemic.

But the initiative should come from the higher authorities. The role of the QMU is high in this activity. Besides, the QMU of LRH is not strengthened to perform this task. The WIT of the OPD needs to be energized to function productively to improve the quality of the services provided there.

Similarly, a staff satisfaction survey also will provide enough information for the improvement of service. Inadequate supportive supervision by middle-level managers and high-level authorities contributes to this problem. Most of the staff feel that supervision is a fault-finding process. Low-level managers should be trained in supportive supervision. The hospital authority can arrange this training by using experts. The Education, Training and Research Unit of the Ministry of Health provides financial assistance for staff training.

Providing a direction board is the most feasible alternative solution with little effort and financial allocation. The existing setup of the OPD can be made as the blueprint for this purpose. At the same time, it is easy to find sponsors for this kind of activity, such as local or international non-governmental organizations (NGOs) or other organizations. With the direction board, the OPD layout map can also be made available at the OPD for easy reference.

The existing setup of the OPD and other units cannot be altered immediately. The building is an old one. The space in the building is limited. There are several other unit functions in the building. The identification number of the rooms cannot be changed immediately, even though they are not in order. Those identification numbers for the places are used for a long time, and the clients are too familiar with those numbers. Some specific numbers are given to special clinics, and changing the numbers of the clinic rooms will also confuse the clients.

RECOMMENDATIONS

An easily implementable and feasible solution is chosen among the alternative solutions. The recommended solutions are as follows. Displaying the direction boards in suitable and necessary places will help the clients find the way easily, and this does not need a lot of modifications in the OPD. The existing structure can be used to display the direction boards. Organizations can sponsor the cost.

The existing staff can be trained in communication skills. In addition, their attitude can also be influenced by providing knowledge, skills, non-financial incentives, welfare, and field visits to well-functioning institutions. These can be implemented through the QMU of the LRH. Financial assistance can be obtained from the ET&R unit of the Ministry of Health to develop the staff.

Conducting surveys on patient satisfaction is also possible. A considerable number of clients are coming to get the service from the OPD. The QMU, with the help of other staff, can conduct the survey, and the information can be used to plan and modify service provision.

The WIT of the OPD can be restarted to function. The MO/QMU, MOIC and nursing sister in charge of OPD can take this quality aspect initiative, improve teamwork, and help the staff of the OPD find creative solutions for their problems.

IMPLEMENTATIONS

The implementation plan for alternative solutions is shown in Table 2.

Table 2: An action plan for implementation of an alternative solutions

Activity	Responsibility	Time frame
Display the direction boards	MO/QMU MOIC/OPD MO/Planning	Three months
Display of OPD layout	MO/QMU MOIC/OPD MO/Planning	Two months
Training for staff	MO/QMU MOIC/OPD MO/Planning Nursing Sister/OPD	One year
Satisfaction survey on patient and staff	MO/QMU	Four months
Functioning WIT	MO/QMU MOIC/OPD Nursing Sister/OPD	Three months

CONCLUSION

OPD is an essential area in a hospital. It caters for a large number of patients daily. The OPD of LRH is the most complex and crowded area in the hospital. The congestion of OPD is due to several reasons. The lack of guidance for patients attending OPD was the most influencing problem. Several initiatives can overcome this problem. However, the most feasible interventions are providing a direction board at OPD and displaying the layout of the OPD. The staff can improve communication skills and attitude through training, field visits and welfare. The patient satisfaction survey can also be conducted to get feedback on the service provided by the OPD, which will help improve the quality of the service.

Declaration by Authors

Acknowledgement: None
Source of Funding: None
Conflict of Interest: The authors declare no conflict of interest.

REFERENCE

1. Ministry of Health, Sri Lanka. Health Institutions in Sri Lanka. 2023. Available at: https://www.health.gov.lk/health-institutions-in-sri-lanka/
2. Ministry of Health, Sri Lanka. ANNUAL HEALTH BULLETIN 2020. (n.d.) Available at: https://www.health.gov.lk/wp-content/uploads/2023/09/Annual-Health-Bulletin-2020Updated-on-2023.02.02.pdf
3. Ministry of Health, Sri Lanka. ANNUAL HEALTH STATISTICS 2018. (n,d,) Available at: http://www.health.gov.lk/moh_final/english/public/elfinder/files/publications/AHB/2020/Final%20AHS%202018.pdf
4. Lady Ridgeway Hospital for Children, 2020. ANNUAL HOSPITAL BULLETIN 2019.
5. Lady Ridgeway Hospital for Children, Sri Lanka. 2020. Vision and Mission. Available at: https://lrh.health.gov.lk/vision-and-mission/
6. WIKIPEDIA, 2020. Outpatient clinic (hospital department). Available at: https://en.wikipedia.org/wiki/Outpatient_clinic_(hospital_department)
7. Ministry of Health Sri Lanka, 1995. MANUAL ON MANAGEMENT OF TEACHING, PROVINCIAL, BASE AND SPECIAL HOSPITALS.
8. Lady Ridgeway Hospital for Children, 2016. ANNUAL HOSPITAL BULLETIN 2015.
9. Lady Ridgeway Hospital for Children, 2017. ANNUAL HOSPITAL BULLETIN 2016.
10. Lady Ridgeway Hospital for Children, 2018. ANNUAL HOSPITAL BULLETIN 2017.
11. Lady Ridgeway Hospital for Children, 2019. ANNUAL HOSPITAL BULLETIN 2018.
12. Lady Ridgeway Hospital for Children, 2020. ANNUAL HOSPITAL BULLETIN 2019.
13. Weebly, n.d. *QUEUEING THEORY*. Available at: http://project6team3.weebly.com/waiting-systems.html

How to cite this article: Siraj Mohamed Ibrahim. Congestion at the Outpatient Department of Lady Ridgeway Hospital Sri Lanka *Gal Int J Health Sci Res*. 2023; 8(4): 113-119. *DOI: https://doi.org/10.52403/gijhsr.20230414*

******