



ASSESSMENT OF TOTAL QUALITY MANAGEMENT OF CARE SERVICE BETWEEN INPATIENT AND PAEDIATRIC OUTPATIENTS IN URBAN AND RURAL AREA

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Abstract:

The efficacy of Total Quality Management (TQM) in pediatric care is additionally emphasized by the changing terrain of quality enhancement approaches. The scarcity of chronic diseases, socioeconomic elements, and limitations in resources require inventive methods to enhance the quality of pediatric healthcare. The purpose of investigating the disparity in hospital service quality between inpatient and outpatient settings with a total of 400 patients has been selected. 400 respondents have been selected from the various hospitals in the rural and urban area in Kolkata. Using a survey methodology, the distinction in the quality of inpatient and ambulatory pediatric healthcare services has been established. Only 80 respondents said there is an unbalanced distribution of pediatric services between in / out settings in urban and rural areas. Analysis shows a difference in the provision of pediatric services across in on those settings in urban and rural locations. 80 of the respondents stated that there is an unequal distribution of paediatric services across in- patient and out-patient settings within the paediatric healthcare system in both urban and rural areas. The concentration of sophisticated care in centralized children's hospitals might cause a gap in pediatric services. On the other hand, most community practices and community hospitals provide some level of pediatric care, although the level varies from place to place.

Keywords: Total Quality Management, Healthcare, Pediatric services, Inpatient, Outpatient

Introduction

Total Quality Management (TQM) is a crucial method for increasing organizational performance and patient outcomes in pediatric healthcare settings (Akdere et al., 2020). TQM, through its focus on continuous quality improvement, interdisciplinary teamwork, and evidence-based procedures, has the potential to revolutionize pediatric care delivery and ensure the health and well-being of children globally (Arora, 2018).

Ultimately, it is essential to use Total Quality Management (TQM) principles to effectively tackle quality and safety issues in pediatric healthcare environments (Aung et al., 2022). In order to effectively address these concerns and ensure the delivery of safe and high-quality care to pediatric patients, it is imperative that nursing staff, who are the frontline caregivers, get sufficient training, support, and resources (Busetto et al., 2020). By consistently following evidence-based practices,

regularly monitoring and auditing, and actively engaging in quality improvement programs, nursing staff can significantly contribute to improving patient outcomes and fostering a culture of safety and excellence in pediatric healthcare (Chiarini, 2020).

It is quite challenging to pinpoint the exact moment when individuals and companies first began to use management principles in their organisations. However, implementing TQM in hospitals is more challenging than doing so in other service sectors since determining what constitutes quality in the context of a hospital is complicated. The purpose of the research is to assess the TQM of care service between inpatient and outpatient in the hospital in urban and rural area.

Material and method

Research Design -Descriptive research was utilised to evaluate the effectiveness of hospital-wide quality management of paediatric care services. Survey data and information on overall quality management in paediatric healthcare systems have been understood and analysed with success thanks to a descriptive research strategy. In the present study, quantitative research technique has been used to analyse and interpret the effectiveness of total quality management service for Pediatric care patients. By using quantitative research technique, collected information has been represented with help of statistical tools, methods and techniques (Fu et.al., 2019). The data was subjected to a rigorous mathematical, statistical, and graphical investigation. In addition, tables were used to organise and organise the information in a way that was easy to understand(Newman and Gough, 2020).

Data Collection

The questionnaires are to be collected from different Pediatric healthcare hospitals in both rural and urban areas of Kolkata using the stratified sampling technique.

In order to collect the data, 400 numbers of respondents has been selected from the various hospitals in the rural and urban area in Kolkata. In this regard, 200 nurses and 200 Doctor has been selected from hospital of urban and rural area in Kolkata.

In order to achieve the research objective that is difference between in patient and out- patient service quality of hospital,with help of survey method, quality of paediatric healthcare services between in-patient and outpatient has been identified.

Data analysis

In the present research, questionnaires were employed as a statistical method to examine the influence of Total quality management on paediatrics care services in India, which is a developing country. All participants were asked to rate their degree of agreement with items on the questionnaire from "strongly agree" to "neutral."

Result and Discussion

This section presents the analysis of the data collected through the survey of the healthcare personnel in the various healthcare organisations in urban and rural area. The analysis has been done using tabular analysis & graphs. The results has been analysed and interpreted with help of quantitative research tool.

Table 1 The uneven distribution of pediatric services between in-patient and outpatient in Pediatric healthcare system in Urban and Rural area?

Do you think that there is an uneven distribution of pediatric services between inpatient and outpatient in Pediatric healthcare system ?	Frequency
Yes	310
No	80
Can't say	10

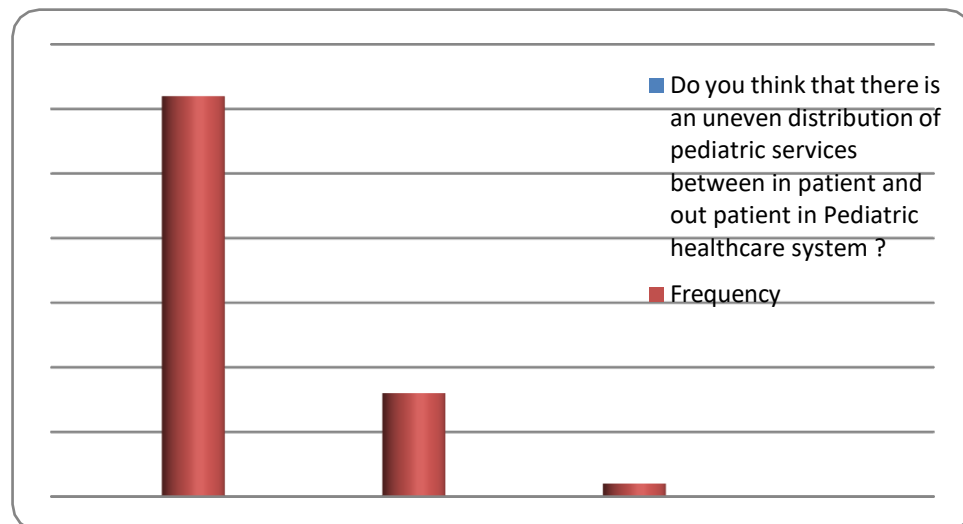


Figure 1: Uneven Distribution between in patient and Out patient

On the basis of the graph and table in the frequency analysis that was just presented, it has been found that the majority of respondents in the survey said that there is an uneven distribution of paediatric services between in-patient and out-patient care in the paediatric healthcare system in urban and rural areas. This was found when the data was broken down into frequency categories. According to the results of a survey with 400 people who participated, 310 of those people felt that there is an uneven distribution of paediatric services across in-patient and out-patient settings within the paediatric healthcare system in urban and rural areas.

On the other hand, only 80 of the respondents stated that there is an unequal distribution of paediatric services across in-patient and out-patient settings within the paediatric healthcare system in both urban and rural areas. Therefore, based on the data presented above in the survey, it has been determined through analysis that there is a disparity in the distribution of paediatric services between in-patient and out-patient settings within the paediatric healthcare system in both urban and rural areas. It is not uncommon for there to be a disparity in the distribution of paediatric services; this is caused in part by the concentration of advanced care in centralised children's hospitals.

On the other hand, community practises and community hospitals typically offer varying degrees of paediatric services. This is particularly problematic in low-resource areas because it widens the already existing gaps in treatment and outcomes. Instead of coming from on high (children's hospitals), regional planning should involve all stakeholders in the area and be the result of conversations and data sharing facilitated by regional leadership (such as health departments, health care coalitions, disaster coalitions, or Emergency Medical Services for Children state partners).

In-patient and Out-patient quality of care service Comparison in Urban and Rural Area

A person who is admitted to a hospital for the sake of receiving medical treatment is referred to as a "inpatient." The majority of individuals check into an inpatient hospitalisation through either an operation or therapy that was previously arranged or through an emergency (Pattanayak et al.,2023). When receiving inpatient care, one must plan to spend at least one night at the facility, regardless of the length of one's stay. A person who requires medical attention but does not require hospitalisation is referred to as a "outpatient" (Sen,2017).Outpatients treatments are carried out outside from hospitals, in places such as clinics, diagnostic centres, and similar establishments. both general practitioners and medical experts (physician assistants, physical therapists, etc.).

In TQM Implementation:

In-Patient area Mean=3.9, SD=0.099 and Out-Patient Sector Mean = 3.3, SD=0.2;

In Competitive Advantage:

In-Patient area Mean=3.9, SD=0.0 and Out-Patient Area Mean = 3.5, SD=0.34;

In Business Performance:

In-Patient area Mean=4.0, SD=0.12 and Out-Patient Area Mean = 3.4, SD=0.19.

Table 2: Difference between out-patient and in-patient Pediatric healthcare system quality management in Urban and rural areas

	In-Patient	Out-Patient
1 Top management leadership	3.9	3.4
2 Customer management	4.0	3.1
3 Quality of health care service	4.0	3.6
4 Customer satisfaction	4.0	3.2
5 Staff behaviour with patient	3.6	3.6
6 Time delivery service	3.9	3.2
7 Emergency services	3.9	3.2
8 Cost effective services	3.7	3.3
Average	3.9	3.3
Standard Deviation	0.099	0.2

Two area's hospitals which were under direct comparison in this research are the In-Patient (n=220) and Out-Patient area (n=180) hospitals in urban and rural areas. The dimensions of the three constructs of research interest are comparatively analyzed in the following sections. On the average the In-Patient urban area has performed much better than the Out- Patient area rural area in all the three constructs.

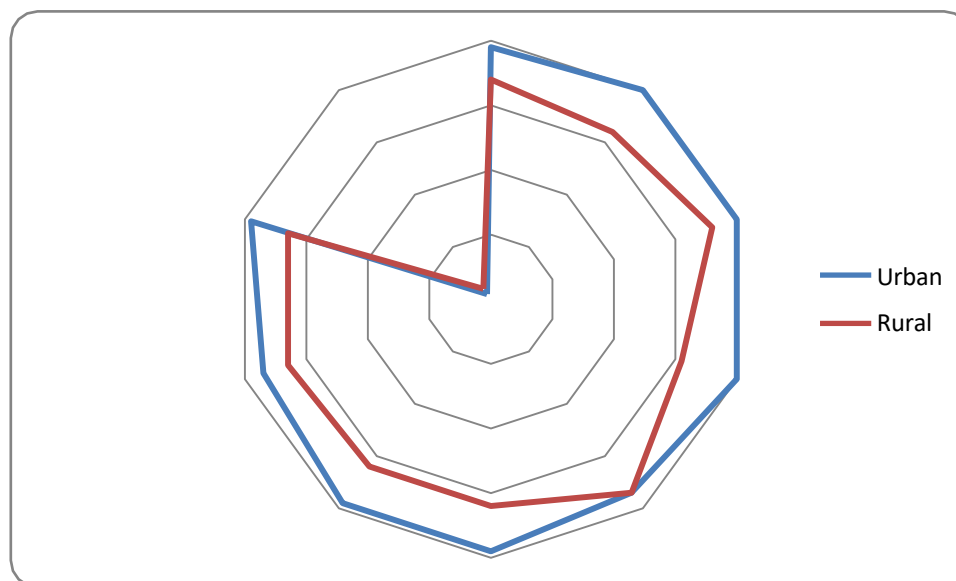


Figure 2: Inter-area Comparison- TQM Dimension

The TQM Dimensions The focal point of this research is TQM, so it was required to study how this construct has been perceived across the two area such as urban and rural areas so that the best practices could be shared while drawing the implications of the study. Surprisingly, except for the dimension People Management (PMT) where both the area has performed equally, the In-Patient sector hospitals in urban areas have completely outsmarted the Out-Patient sector hospitals in rural area. Zaid et al. (2020) split quality management into excellence practises and quality context. The study showed that quality environment influences quality practises and quality management (Singh and Prasher, 2019).

The management has to make sure that there are sufficient resources available in order to improve the level of service quality. In conclusion, in order for the hospital to evaluate the efficacy of its

efforts for continuous quality improvement, it should assess its performance on a consistent basis, and based on the findings, it should re-evaluate its quality assurance procedures.

Conclusion

It has been determined, on the basis of the information gleaned from the interpretation and analysis of the data provided in questions, that the alternative hypothesis should be accepted, while the null hypothesis should be rejected. Due to the fact that the quality management of pediatric healthcare in urban and rural locations differs significantly, there is a major gap between outpatient and inpatient pediatric healthcare. The research goal of determining whether or not there is a quality concern in the in-patient and out-patient treatment provided to pediatric patients in hospitals located in urban and rural areas has been accomplished.

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