

## Status of Quality Assurance Practices in Selected Teaching Hospitals of Kashmir Division

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**Abstract:** Introduction of organized quality management process in health care sector is fast gaining recognition and thus inviting attention of providers and customers of care through out the world . In order to study the status of quality assurance practices in teaching hospitals of Kashmir division three large hospitals of Srinagar city were selected in order to give representation to different types of teaching hospitals like tertiary care, intermediate care and specialty care. A retrospective study for one year of available records and a three month prospective observational study was conducted for a period of one month in each hospital. The study undertaken showed although there are a few quality assurance committees existing in SKIMS , less are in place at S.M.H.S and L.D hospital. Although existing quality assurance committees have contributed a lot in improving the quality of patient care , the hospitals need to make the existing quality assurance committees more effective and purposeful along with constituting certain other quality assurance committees . Preventive maintenance of equipment to reduce downtime , standardization of procedures , internal and external quality control should be a regular feature . Separate department of quality assurance under hospital administration needs to be incorporated in hospitals to implement the quality of care.

### INTRODUCTION

Quality is an important aspect of health care; indeed for most people it is the most important aspect. The concern for quality in healthcare is as old as care itself. Quality is defined in the dictionary as “degree of excellence” or “superiority in kind.”<sup>1</sup> Joint commission on accreditation of health care organizations has defined quality of patient care as “ the degree to which the patient care services increase the probability of desired outcomes and reduce the probability of undesired outcomes given the current state of knowledge. Thus the main purpose of quality implementation programme in health care is to meet or exceed the needs of both internal and external customers<sup>2</sup>. While traditional quality control theories seek out problems, assign fault and attempt to effect improvement by exhorting people to change their behavior, continuous quality improvement (CQI) seeks to understand process and revise those using data about the process themselves. CQI sees problem as opportunity for improvement. The CQI process involves a project-by-project approach to systematically improve quality, not just to maintain status quo<sup>3</sup>. Total quality management (TQM) rapidly is becoming the principle focus in health care field. TQM describes the philosophy of an organization that is dedicated to continuous quality improvement through out the organization<sup>3</sup>.

Throughout the world , introduction of organized quality management process in health care sector is fast gaining recognition and thus inviting attention of both the providers and customers of care<sup>2</sup>. Keeping this in mind, study of quality assurance practices in selected teaching hospitals of Kashmir division was planned.

### METHODOLOGY

In order to study the status of quality assurance practices in teaching hospitals of Kashmir division , three large hospitals of Srinagar city i.e. Sher-i- Kashmir Institute of medical sciences (SKIMS), Shri Maharaja Hari Singh Hospital (SMHS) and Lalla Ded Hospital (LD) were selected in order to give representation to different types of teaching hospitals like tertiary care, intermediate general and specialty hospitals.

A retrospective study for one year, of available records in administration, patient care (out-patient care , in-patient care, emergency services and operation theatre services) support service departments (radio-diagnosis, laboratories, blood bank, central sterile services department, laundry and linen, dietary services, medical records department, drug and pharmacy department, and medical gases department) was conducted in three selected

hospitals. Where the relevant records were either unavailable or deficient , the required information was supplemented through interviews with the concerned authorities by using a pre-devised interview schedule. This was followed by a three month observational study conducted for a period of one month in each hospital. Taking lead from the “Quality Assurance Programme (QAP)” proforma of Indian Hospital Association,<sup>(4)</sup> the developed schedule was used for collecting the relevant information through observation also. The schedule included information among other aspects, on following committees as well:

1. Quality assurance committee
2. Medical records committee
3. Nursing audit committee
4. Infection control committee
5. Antibiotic policy committee
6. Mortality meet committee
7. Grand round committee
8. Inspection committee
9. Utilization review committee
10. Blood transfusion committee
11. Tissue review committee
12. Theatre users committee

The evaluation of patient care was done indirectly, firstly by examining the quality and adequacy of the factors and facilities which contribute towards better care e.g. staff education and training, physical facilities and equipment , clinical and service facilities etc. Quality assurance activities are effectively carried out through standing committees and effectiveness of these committees hospital wise was judged by studying the frequency of meetings of these committees. From available records and information collected through the interview, terms/conditions and modus operandi of the individual committees was studied.

### RESULTS

Following observations regarding the status of quality assurance practices were made:

#### **Anaesthesiology :**

- Stand-by arrangements in operation theatre are available in SMHS hospital and SKIMS. In LD hospital stand-by arrangements have been kept for central nitrous oxide supply

and suction. In SKIMS stand-by arrangements are verified regularly in operation theatres.

- Down time of equipment in operation theatres remained negligible at all the three hospitals during study period.
- Sterilization and aseptic precautions were observed in all the three hospitals .
- Preventive maintenance and cleaning of equipment is done in SKIMS OT on Saturday.
- To avoid infections zoning concept is followed strictly in operation theatre of SKIMS.
- At SKIMS quality control in TSSU is ensured by use of chemical and biological indicators. During study period biological indicators were used on eight occasions and once the biological strip showed growth , the autoclave was got checked and repaired. Chemical indicator is used with every load in SKIMS TSSU.

#### ***Blood transfusion department***

- Universal precautions observed by staff at all the three hospitals.
- No down-time of equipment during study period. Preventive maintenance of equipment is done at SKIMS and SMHS hospital.
- Screening of donors, professional donors discouraged, blood grouping and cross matching is done under supervision in all the three hospitals.
- No external quality control is being practiced in all the three hospitals.

#### ***Clinical biochemistry***

- Automation had been achieved in all the three hospitals.
- Internal quality control is being practiced in all the three hospitals.
- No external quality control exists in LD hospital. At SMHS external quality control through “All India Quality Programme” and rated “A” grade majority of times during study period. External quality control of SKIMS lab. is done through WHO and Land Roche Diagnostics .
- There is no delay in results at SKIMS lab.

#### ***Clinical haematology lab.***

- Internal and external quality control practiced at SKIMS lab. No external quality control practiced at SMHS hospital and LD hospital.

#### ***Microbiology laboratory***

- External quality control not being practiced at any of the hospitals.

#### ***Radiodiagnosis***

- Number of repeat films at SMHS and SKIMS 1% and 1-2% at LD hospital.
- Shortage of staff especially faculty in all the three hospitals, necessary correspondence made.
- Radiation monitoring badges not available for staff on duty at SMHS and LD hospital.

#### ***Medical Records Department***

- At SKIMS statistical information compiled on daily, monthly, quarterly and yearly basis.
- Majority of staff untrained at SMHS and LD hospital.
- Record keeping and retrieval satisfactory at SKIMS and insufficient at SMHS and LD hospital.
- 60% and 65% patient files reach back to the department at SMHS and LD hospital respectively. 100% case files after discharge of patients reach medical records department at SKIMS and enquiry is conducted for loss of patient record in ward, if any .
- Shortage of staff is at all the three hospitals. Necessary correspondence made.

#### ***Laundry***

- Fully mechanized laundry at SKIMS and SMHS hospital.
- Shortage of staff at SMHS and LD hospital . Necessary correspondence done.
- Boiler , press, and dryer out of order for three years at LD hospital. No down-time of equipment at SMHS and SKIMS during the study period. Preventive maintenance of equipment done at SKIMS.
- No mechanism of quality control at SMHS and LD hospital. Microbiological testing of samples from dirty , fresh and washed linen being done at SKIMS laundry after every 2-3 months. During the study period reports satisfactory.

#### ***Central Sterile Supplies Department (CSSD)***

- No zoning of areas at LD hospital. Shortage of space at SMHS and LD hospital.
- Understaffed for workload at SMHS and LD hospital. Majority of staff at LD hospital untrained .
- Chemical indicators used at all the three hospitals but biological indicator used only at SKIMS . During study period it was used twice and found negative for growth.
- Samples from sterilized packs not subjected to microbiological examinations at SMHS and LD hospital. Results were satisfactory at SKIMS.

#### ***Dietetics and Therapeutics***

- No automation in kitchen at SMHS and LD hospitals.
- Food handlers subjected to periodic medical checkups at all the three hospitals.
- Infection control team at SKIMS periodically takes samples from service areas, utensils and food handlers.

#### ***Medical Gas and Suction***

- Understaffed at LD hospital.
- At SMHS central supply of medical gas and suction available during the day time for selected areas. At LD hospital central supply of nitrous oxide and suction available between 10am to 4pm and oxygen supplied in cylinders . At SKIMS central supply of medical gases and suction available throughout twenty four hours and in all the patient care areas.

#### ***Out Patient Department***

- Basic facilities and space not sufficient for waiting patients/ attendants at SMHS hospital and LD hospital.
- Patient satisfaction surveys not done at SMHS and LD hospitals. Patient satisfaction survey was done once at SKIMS OPD.
- No central collection counter for blood samples at SMHS and LD hospital OPD.
- Appointment system to avoid over crowding and reduce waiting times being practiced only in referral clinic of SKIMS.

#### ***Accident and Emergency***

- Disaster management plan exists only at SKIMS.

#### ***Drug and pharmacy***

- Internal and external quality control only at SKIMS.

#### ***Miscellaneous***

- Doubling of patients on bed at times was observed on admission days at SMHS and LD hospital.
- Job description of all the categories of staff are available at SKIMS.

The status of various quality assurance committees in the hospitals under study is depicted in Table-I. The effectiveness of these committees hospital-wise was judged by studying the frequency of meetings of these committees and is depicted in Table-II.

**Table-1 : Hospital wise status of various quality assurance committees**

Hospital	Medical audit	Nursing audit	Infection control	Utilization review	Tissue review	Theatre users	Inspection	Mortality meet	Blood transfusion
Skims	no	no	yes	no	no	yes	yes	yes	yes
smhs	no	no	no	no	no	yes	yes	no	no
L.d	no	no	no	no	no	yes	yes	no	no

**Table-2 : Frequency Of Meeting Of Various Existing Committes (Hospital Wise)**

Hospital	Hospital infection Control committee	Mortality meet committee	Grand round committee	Inspection committee	Blood transfusion committee	Theatre Users committee
SKIMS	Committee meets once in two months .During study period convened 6 meetings. Infection control team carries out 1-2 surveys per month. During study period conducted 10 surveys .	committee holds meeting every month to select the cases for presentation in mortality meets held every alternate Saturday	Held every alternate Saturday	When ever supplies are received.	Did not meet during study period	Met once during study period.
SMHS	-	-	-	When ever supplies are received	-	Did not meet during study period
LD	-	-	-	When ever supplies are received	-	-

**DISCUSSION**

In today’s competitive environment , health care organizations must consider a wide range of innovative business practices to achieve competitive advantage<sup>5</sup> and successful implementation to TQM strategy requires substantial commitment from employees through out the hospital including management, clinical and support staff<sup>6</sup>. Typically a health care organization with a quality improvement programme establishes a committee on quality or quality council. The quality committee selects several general processes that need improvement and assign the process to quality improvement teams which identify specific components of assigned processes where opportunities for improvement exist . With the aid of quality advisors, the teams analyze the process and propose solutions. The solutions are then implemented, monitored and evaluated. So the constitution of various quality assurance related committees in these hospitals achieves paramount importance for optimum utilization of available meager resources.

The study undertaken showed that although there are a few quality assurance related committees existing in SKIMS hospital, so is not the case with SMHS and LD hospitals. The relevance, functioning and role of these standing committees towards achieving the very purpose of their being constituted can be inferred from the observations although the outcomes are not easily tangible in statistical terms.

The nosocomial infections invariably prolong the average length of hospital stay on an average seven days<sup>7</sup>. A competent and active Infection control is the most important part of a programme for control of nosocomial infection.<sup>(8)</sup> The relevance of this committee in tackling the hospital infections thereby increasing the quality of patient care cannot be ignored. Based on the presentations on grand round and mortality meet deficiencies in the treatment are identified. Since materials account for a substantial portion (30-40%) of hospital budget and contribute to a great degree to patient care,<sup>9</sup> the quality aspect of materials purchased in SKIMS have also been contributing a lot for assuring quality of materials needed for patient care by checks and cross checks and quality control at every step from source identification to the disposal of hospital supplies. There is a

definite need for constitution of hospital infection control committee, grand round and mortality meet committees at SMHS and LD hospital. Although a blood transfusion committee is constituted at SKIMS, it did not meet during the study period. It is imperative to revitalize the functioning of this committee and a similar committee needs to be constituted in SMHS and LD hospital.

In general it was observed that existing quality assurance committees in SKIMS have been contributing a lot in improving the quality of patient care directly or indirectly. However to improve and sustain their efforts and effectiveness to create a strong, consistent organizational culture and environment where employees will provide high quality service to their customers, the hospitals need to make the existing quality assurance committees more effective and purposeful, along with constituting certain other quality assurance committees such as Medical audit, nursing audit committee, utilization review committee, tissue review committee etc. The associated hospitals of Govt Medical college srinagar should follow the suit to herald the quality health care in these hospitals .

It is unrealistic to expect high performance from employees when they are working with poorly maintained or inadequate equipment , substantial supplies, incompetent supervision or lack of a clear method on how to perform a task. Management must provide the means to the ends it proclaims<sup>10</sup>. Preventive maintenance of the equipment to reduce their down time is one of the quality control activities in majority of the departments but in some departments unprecedented long down time of equipment affects the ultimate quality of services. Calibration of equipment and standardization of procedures, frequency of using internal control, use of computerized system in labs. under the skilled supervision and external quality control in some labs of SMHS and SKIMS hospitals commensurate with the quality services. In waiting areas, there are better measures and policies to reduce waiting time and turn around time of patients in clinical and clinical support areas in SKIMS than in associated hospitals of GMC. Daily administrative rounds and zoning of certain necessary areas according to speciality is better planned in SKIMS than other hospitals.

**Intervention strategies**

- Quality management should be included in the curricula during training of doctors , nurses and other staff .
- CME’s should be conducted regularly.
- There should be a separate department of quality assurance in health care sector to look into and implement the quality of care.
- Development of required infrastructure to provide optimum patient care.
- The committees should be constituted in all the hospitals to look into the quality issues and already existing committees should be revitalized.
- Authorities must take the initiative in quality improvement implementations .

**REFERENCES**

1. Edward.N.Brandt. "Foreward" In The text book of Total Quality in health care . Al-Assaf & June. A. Schemule . St. Luci Press, Boca Raton , Florida -33431:1997.
2. Quadri. G.J. " Why quality management " Quality management newsletter, Quality management department, MOH , KSA; 1999 Sept Vol 1 : No 2 : p 2-4.
3. James. D. Suver, Bruce. R. Neumann , Keith. E. Boles . "Accounting for costs of quality" Health care financial management . 1992; 46(9) : 29-37.
4. Quality assurance programme : proforma of Indian Hospital Association , Journal of Hospital Administration , 1987 March /June ; 24, 1&2 : 82-89.
5. Kenneth. C. Gehrt. " Assessing the viability of situation ally driven segmentation opportunities in the health care market" In Hospital and Health services Administration , 1993; 38(2) : 243-265.
6. Michael.A.Counte et al. " Improving hospital performance Issues in assessing the impact of TQM activities" J. Hospital and Health services Administration ; 1995; 40(1) : 84-94.
7. Francis . C. M and Marco .C. de Souza . " Control of hospital acquired infection" In Hospital Administration 3<sup>rd</sup> Edition , Jaypee brothers : 329-340.
8. Francis.D. Pien . "Hospital infection control committees . Are they effective ? peoblems and possible solutions. J. Hospital Topics ; 1981 March /April, 59(2) : 40-41.
9. Sakharkar.B.M. "Materials management" In Principles of Hospital Administration and planning . 1<sup>st</sup> edition Jaypee brothers, 1999: 246-259.
10. Robert . F. Casalo. " Total Quality management in health care" Hospital and Health care Administration . 1991: 36(1); 134-146 .