

Original Article

Assessing clinical governance activities in secondary curative health care institutes in the Kandy District, Sri Lanka

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Key words: clinical governance, clinical governance assessment, healthcare quality, quality in public hospitals


Abstract

Background and objective: Clinical governance is a framework through which organisations are held accountable for continuously improving the quality of their services. Therefore, implementing clinical governance is a timely requirement for the Sri Lankan health system. This research assessed the status of clinical governance activities in secondary healthcare institutes in the Kandy District.

Methods: A descriptive, cross-sectional study including all the secondary curative health care institutes in the Kandy District; the District General Hospital, Nawalapitiya, the Base Hospital, Gampola and the Base Hospital, Theldeniya, was conducted in 2019. The principal investigator explored activities related to eight key areas of clinical governance, namely, patient and public involvement, clinical audit, risk management, education, training and continuing personal and professional development, clinical effectiveness programme, staffing and staff management, usage of clinical information supporting and quality improvement, by non-participatory observation and by interviewing Institutional Heads, Special Grade Nursing Officers, Medical Officers and Nursing Officers attached to the Planning and Quality Management Unit using a consensually validated and pretested checklist.

Results: The studied hospitals had 73.68% of clinical governance activities. The Base Hospital, Theldeniya showed the highest percentage (76.79%); however, it had the lowest bed capacity (227 beds), received the lowest financial allocation, spent the highest proportion of funds for training and had a qualified medical administrator continuously over the past six years. Gampola and Nawalapitiya Hospitals showed 69.49 percent and 74.76 percent overall clinical governance activities, respectively. Percentages of clinical governance activities did not show a statistically significant difference between hospitals ($F_{(w.g=21)}^{(b.g=2)} = 0.254$, $p=0.778$). Activities related to clinical audits (57.14%), clinical effectiveness programmes (49.20%), and staffing management (54.55%) were unsatisfactory in all hospitals.

Conclusion: The hospital with the highest clinical governance activities had the service of a qualified administrator for more than five years and utilised the highest proportion of funds for training. A similar approach may be helpful for similar organisations. However, clinical audits, clinical effectiveness and staffing management activities are unsatisfactory in the studied hospitals and require prompt attention.

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Received: 29 Jan 2023, accepted revised version: 03 Apr 2023, Published: 30 Jun 2023

Competing Interests: Authors have declared that no competing interests exist

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Introduction

The concept of clinical governance (CG) has evolved from corporate governance [1,2]. CG is a framework through which organisations are accountable for continuous improvement of the quality of their services, addressing gaps in professional performance (3) and safeguarding the highest standards of patient care by creating an environment where excellence in clinical care thrives [4,5]. A CG system intends to assure and improve quality, manage risks and incidents [6] and combine many aspects of external quality assurance and internal quality improvement [7].

Components of clinical governance

According to the white paper published by the Government of England in 1997 [8], the following processes must be implemented to ensure CG.

1. An organization-wide integrated quality improvement programme, including clinical audits.
2. Developing leadership skills at the clinical team level.
3. Practice of evidence-based medicine with supportive infrastructure.
4. Dissemination of good practices, ideas, and innovations within and outside the organisation.
5. Clinical risk reduction programmes.
6. Detection and investigation of adverse events and prompt application of the lessons learned
7. Systematic learning from complaints made by patients.
8. Early identification of poor performance and taking corrective actions to prevent harm to patients.
9. Inclusion of principles of CG in all professional development programmes.
10. Ensuring the quality of clinical information that is used to monitor clinical care.

Implementation of CG requires working with all healthcare teams, including health professionals, academic staff, healthcare managers, patients and the public [9].

There are many benefits of effective CG. Some crucial benefits are improvement in the quality of services, effective teamwork with reflection of all contribution, prompt implementation of lessons learned, building of a participatory climate in which education, research, and sharing of knowledge on good clinical practices are valued, optimum utilisation of resources, public engagement, strong leadership and use of information for planning and monitoring [10].

Research conducted in two psychiatric hospitals in Ghana in 2019 to assess healthcare workers' perception of CG performance in six dimensions: clinical effectiveness, clinical audit, risk management, quality assurance, research and development, and education and training, found that the implementation of CG activities was suboptimal. Participants agreed that quality assurance and research and development activities were implemented only 43.2% and 43.7% effectively, respectively. However, more than 50 percent of respondents believed that the hospitals had implemented measures to promote education and training (57.7%), clinical audit (52.7%), risk management (50.7%)

and clinical effectiveness (68.6%). In addition, quality assurance was a significant predictor of perceived hospital performance according to the multiple linear regression at 0.05 level [11]. A descriptive analytic interventional study was performed in four hospitals in Mashhad, Iran in 2011, to evaluate the success of the implementation of clinical governance activities. Data collection was performed using a standard checklist which included seven pillars: management, risk management and patient safety, clinical effectiveness, clinical audit, patient and relatives and community interaction, the use of information and personnel management and training. Clinical governance measures were established after the initial survey. Scores were given for items under each pillar. After analysing the difference between the scores obtained before the intervention and after the intervention, it was revealed that all four hospitals showed significant improvement in the total scores obtained under each. However, there was no statistical difference in improvement among the hospitals. This study demonstrated the successful introduction of a clinical governance framework at the studied hospitals [12].

Robin Gauld and Simon Horsburgh analysed participants' comments obtained during the National Healthcare Professional Survey 2012 conducted in New Zealand, which aimed to assess the implementation of the components of the clinical governance policy. They found that despite some progress across the 19 District Health Boards indicating an increase of the index score from 46% to 54% compared to the survey conducted in 2010, significant efforts were needed to develop CG at the local level. Furthermore, the analysis suggested shifting the hierarchical management system to healthcare professional partnerships and creating ways to build inter-professional engagement [13].

Many countries have made efforts to improve excellence in healthcare through the integration of CG concepts. CG is also a timely requirement for the Sri Lankan health system. Knowledge of the current status of CG activities is required for planning and monitoring internal quality improvement related to CG. Therefore, this research was conducted to assess the status of CG activities in selected secondary curative healthcare public institutes in the Kandy District.

Methods

A descriptive, cross-sectional study was conducted in all the hospitals in the Kandy District that offer secondary health care services, District General Hospital (DGH) Nawalapitiya, Base Hospital (BH) Gampola and Base Hospital (BH) Theldeniya, from 1st of March to 30th September 2019 using a Check List to investigate Institutional Clinical Governance Activities (CLICGA) developed by the Principal Investigator (PI) after referring to the literature [9,14-17] which was consensually modified with the assistance of three medical administrators with doctorates. The study instrument was checked for face and content validity. Pretesting of the CLICGA was done at DGH Matale.

The CLICGA consisted of eight components representing the building blocks of CG. There were items to identify CG activities under each component as shown below.

1. Patient and public involvement activities (12 items)
2. Clinical audit activities (7 items)

3. Risk management activities (13 items)
4. Education, training, and continuing personal and professional development activities (5 items)
5. Activities of the clinical effectiveness programme (9 items)
6. Staffing and staff management activities (11 items)
7. Activities related to using information that supports CG (5 items)
8. Quality improvement activities (5 items)

In addition to the above items, information on human resources, capital fund expenditure and expenditure on training were also included in the CLICGA.

The PI collected information on specific activities related to CG by interviewing the Institutional Heads, Medical Officers of Planning and Quality Management, Special Grade Nursing Officers, and Nursing Officer Quality Management and by non-participatory observations. Information on available human resources, capital fund expenditure, and expenditure on training were collected and verified with each hospital's accountant and administrative officer.

The Ethics Review Committee of the Faculty of Medicine, University of Colombo granted ethics clearance. The Provincial Director of Health Services (Central Province) and each Institutional Head provided administrative clearance.

A descriptive analysis was performed on the status of CG activities in the studied hospitals. Each item in the main components of the CLICGA was rated from 1 to 7. The items which had the response 'yes' or 'no' were rated as '1' or '0' respectively. Furthermore, each item in the main components was given a percentage out of the total achievable mark allowing comparison across hospitals. Then the average percentages were calculated for each component and the hospital for analysis. Inferential statistics were performed to find statistically significant differences between each key area of CG and the overall values of hospitals using the one-way ANOVA test.

Results

Institutional clinical governance activities

The average values calculated for available institutional CG activities in each CG component are shown in Table 1.

Table 1: Institutional activities that were supportive of CG

Main Components of CG activities	BH Gampola %	DGH Nawalapitiya %	BH Theldeniya %	one- way ANOVA test	average value %
1. Patient and Public Involvement Activities	71.19	63.57	84.76	$F_{w.g=45}^{b.g=2} = 3.573, P=0.036$	73.17
2. Clinical audit activities	57.14	57.14	57.14	-	57.14
3. Risk management activities	80.22	70.33	81.32	$F_{w.g=36}^{b.g=2} = 0.673, P=0.516$	77.29

4. Education, Training, and Continuing Personal and Professional Development Activities	97.14	97.14	97.14	-	97.14
5. Clinical effectiveness programmes	19.05	74.60	53.97	$F_{w.g=39}^{b.g=2}$ = 2.283, P=0.115	49.20
6. Staffing and Staff Management Activities	59.74	61.04	42.86	$F_{w.g=30}^{b.g=2}$ = 0.476, P=0.626	54.55
7. Information management activities	94.29	94.29	97.14	$F_{w.g=12}^{b.g=2}$ = 0.25, P=0.783	95.24
8. Quality improvement activities	77.14	80.00	100.00	$F_{w.g=12}^{b.g=2}$ = 0.597, P=0.566	85.71
9. Average clinical governance activity score	69.49	74.76	76.79	$F_{w.g=21}^{b.g=2}$ = 0.254, p=0.778	73.68

The average percentages for each hospital's patient and public involvement activities were significantly different ($F_{w.g=45}^{b.g=2} = 3.573$, $p=0.036$). The highest public involvement activities were available at BH Theldeniya (84.76%). The percentage of clinical audit activities was similar in each hospital and the results showed low coverage (average value of the sample - 57.14%). No staff members were assigned to facilitate clinical audit activities in each hospital. Furthermore, no clinical audits or training on clinical audits were carried out in any hospital. The risk management activities that were supportive for CG among each hospital were different between hospitals but the difference was not statistically significant. BH Theldeniya had the highest risk management activities (81.32%). All three hospitals showed equal percentages of education, training, and continuing personal and professional development activities (97.14%).

The clinical effectiveness programme activities in each hospital were different, with DGH Nawalapitiya showing the highest availability of such activities, but the difference was not statistically significant. The score was low in the sample (49.20%). BH Theldeniya had the lowest score for staffing and staff management activities, though the difference between hospitals was not statistically significant. The overall value of the sample was also low (54.55%). All three hospitals showed a high level of information management activities with no statistically significant difference between hospitals (95.24%). BH Theldeniya showed 100 percent availability in quality improvement activities compared to fewer activities reported in other hospitals. However, the difference was not statistically significant between hospitals. The overall value of the sample was 85.71%.

Considering overall CG activities, the three hospitals, showed an average of 73.68% of CG activities. The BH Theldeniya scored the highest (76.79%), though the difference among hospitals was not significant. ($F_{w.g=21}^{b.g=2} = 0.254$, $p=0.778$).

Analysis of human resources and clinical governance activities

The number of staff was different across the studied hospitals. Despite showing the highest CG activities (76.79%), BH Theldeniya had the lowest staff (257). BH Gampola had 630, and DGH Nawalapitiya had 578 staff members; however, those institutes showed 69.49 and 74.76 percent overall available CG activities, respectively. Further analysis of available human resources in each hospital is shown in Table 2.

Table 2: Analysis of human resources of each hospital

Hospital	BH Gampola	DGH Nawalapitiya	BH Theldeniya
Percentage availability of human resources in the planning and quality management unit	75.00	100.00	50.00
Percentage of Specialist Medical officers in the approved cadre	94.44	75.00	100.00
Percentage of Medical officers in the approved cadre	70.00	54.29	80.00
Percentage of Nursing Officers to the approved cadre	88.21	63.00	96.97
Percentage of paramedical staff to the approved cadre	76.92	96.97	61.54
Percentage of Minor staff to the approved cadre	75.77	73.33	64.00
Percentage of Office staff to the approved cadre	79.31	52.63	100.00

BH Theldeniya had the lowest availability of human resources in the Planning And Quality Management Unit though it obtained the highest CG activity score. However, BH Theldeniya had the highest percentage availability of Medical Officers, Nursing Officers, Specialist Medical Officers, and office staff. The availability of a qualified medical administrator as an institutional head (percentage of available time for the last 6 years), the percentage of capital expenditure for training and per bed allocation of capital funds showed variation among hospitals (Table 3).

Table 3: Average CG activity score and availability of institutional head, percentage of capital expenditure for training and per bed allocation of capital funds

Hospital	BH Gampola	DGH Nawalapitiya	BH Theldeniya
CG activity Score	69.49	74.76	76.79
Availability of an institutional head for the last 6 years %	90.00	95.00	100.00
Percentage of budget spent for training %	54.70	24.20	59.20
Per bed financial allocation Rs. (Mn)	0.2819	0.0924	0.0740
Per bed financial allocation as a percentage of the sum of allocation for three hospitals %	62.88	0.0740	16.50

The lowest financial allocation was received by BH Theldeniya, which spent the highest percentage on training in 2018 and achieved the highest CG activity score.

Discussion

The findings of this research showed that the hospital with the highest CG activities was BH Theldeniya. This hospital had an Institutional Head throughout the previous six years, whereas there had been instances where an Institutional Head had not been present for a certain period in the other hospitals. Hence, there could be a correlation between the continuous availability of a permanent Institutional Head and regular CG activities in hospitals.

The institute which showed the highest CG activities, BH Theldeniya, had the lowest per-bed financial allocation, highlighting that CG is not entirely dependent on financial resources. At the same time, the institute which spent the highest on training was BH Theldeniya, showcasing the importance of staff training on the implementation of CG.

The hospital's focal point for quality improvement is the medical officer and support staff of the planning and quality management unit. However, it was observed that the institute that reported the highest CG activities did not have the required human resources for that purpose. This may indicate that the leadership given by the head of the institute is more important for the implementation of CG in a hospital than the presence of the required human resources in a quality management unit. However, the availability of the required cadre of medical officers and nursing officers seems to be a factor in implementing CG activities as BH Theldeniya showed the highest availability of those human resources (Table 2).

Analysis of the institutional activities contributing to CG showed that patient and public involvement activities differed significantly between the hospitals. The smallest hospital, BH Theldeniya, which had a bed capacity of 227, had the highest involvement (84.76%) and the largest hospital, DGH Nawalapitya, with a bed capacity of 550, had the lowest involvement (63.57%). Since patient and public involvement activities are crucial for implementing CG, factors that may influence these activities, other than the size of the hospital, should be investigated in future studies.

Clinical audit activities were at an unsatisfactory level in all the hospitals (57.14%). In addition, activities related to clinical effectiveness and staffing and staff management were also unsatisfactory. It is important to investigate factors influencing these activities and strategies to improve these areas in future studies.

Interestingly, staffing and staff management scores showed an inverse relationship to CG activities. This area, too, requires further assessment to determine whether staff management is independent of the overall CG system.

Successful implementation of activities in a CG framework requires more consideration of quality improvement initiatives, as evident by the successful implementation of quality improvement activities by BH Theldeniya.

Conclusion

This study assessed eight domains of CG activities in secondary curative health care institutes in the Kandy District. There was no significant variation in overall CG activities among the secondary care hospitals in the Kandy District. However, out of eight domains of CG, patient and public involvement activities showed statistically significant differences among the hospitals. Furthermore, CG activities related to clinical audits, clinical effectiveness programme and staffing and staff management were relatively unsatisfactory in these hospitals, as the average results were closer to 50 percent. On the other hand, CG activities related to patient and public involvement, risk management, education, training, continuing personal and professional development, information management and quality improvement activities were satisfactory in these hospitals as the average results were more than 70 percent.

It was observed that the hospital with the highest CG activities received the lowest per-bed financial allocation, whereas the hospital with the lowest CG activities received the highest per-bed financial allocations.

The allocation of a high proportion of funds for training, the presence of a qualified medical administrator, the availability of Medical Officers, Nursing Officers, Specialist Medical Officers, and Office staff against approved cadre were all associated with satisfactory CG activities.

Recommendations

Activities related to clinical audits, clinical effectiveness programmes and staffing and staff management were unsatisfactory in the hospitals. Therefore, further studies are required to understand the causative factors and necessary interventions. Although statistically not proven by this research study, it was observed that the hospital with the highest CG activities had a single medical administrator continuously for more than five years. Excellence in leadership has been identified as an essential factor for the implementation of CG [14,18]. Therefore, hospitals should be supported by qualified medical administrators who can lead CG activities effectively for an adequate period until a support system and culture are established to ensure the quality of clinical care. Optimal utilisation of funds for training in CG activities is a prerequisite to uplift CG in similar hospitals.

Acknowledgments

We would like to acknowledge and thank Dr. (Mrs.) Suranji Dahanayake and Dr Ravindra Pathirane, Consultants in Medical Administration, for their valuable inputs for modifying the checklist to investigate institutional clinical governance activities. Further, we would like to acknowledge the support provided by the institutional heads of District General Hospital Nawalapitiya, Base Hospital Gampola and Base Hospital Theldeniya.

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