

**Assessing the reasons for poor performance of Public Health  
Facilities in Tamil Nadu, in Kayakalp Award**

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## **Executive Summary**

The main objective of the study is to understand the various reasons hindering the public health facilities and to suggest the ways to improve cleanliness and hygiene promotion in public health facilities. Two thirds of districts in Tamil Nadu are not performing or not qualified for Kayakalp assessment during 2018-19, as most of the public health facilities are not aware of all the concepts and terms of Kayakalp assessment and lack of awareness on sanitation, infection control and hygienic practices. Reorientation training to all the staff including medical and paramedical staff is an urgent need to improve the standards of government health facilities. Formation of internal assessment committee, Infrastructure shortage, lack of awareness, shortage of equipment, no proper IEC display and provision of funds are the major reasons for not achieving Kayakalp scores. Irregular Fund and delay in receiving funds may affect the improvement of health facilities. The health officials may rectify the HR problems by recruiting medical and paramedical staff as per the IPHS standards.

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# **Assessing the reasons for poor performance of Public Health Facilities in Tamil Nadu, in Kayakalp Award scheme**

## **1. Introduction:**

Government of India has launched as a component on Swachh bharat abhiyan on 2nd October 2014, aimed at improving the Public health care facilities under six thematic areas including Hospital/ Facility Upkeep, Sanitation & hygiene, Waste Management, Infection Control, Supportive services & Hygiene promotion. The main objective of the Kayakalp initiative is to promote cleanliness, hygiene, infection control practices in public health care facilities. Facilities were ranked based on percentage scores obtained during assessment process through observation, staff interview & record review by internal and external assessments. Those public health facilities obtained a score above 70 percent will be selected for Kayakalp Certification with cash award. Though the government of India and the state governments have taken various steps to improve the cleanliness, hygiene & infection Control practices, most of the public health facilities were marked as non performing in Kayakalp score. Out of the total public health facilities in Tamil Nadu, only 23 percent of the facilities got the Commendation Award/Commendation Certificate/Runner/Winner and the remaining 77 percent of the public health facilities are either Non- Performing in Kayakalp or Not qualified for external assessment or Not Selected in External Assessment respectively. The reasons behind the factors responsible for not achieving high scores are not known. This study will highlight the factors associated with non performance of sanitation and hygiene practices in public health facilities.

## **2. Statement of the problem:**

Though the government of India and the state governments have taken various steps to improve the cleanliness, sanitation and hygiene practices, the actual situation in most of the public health facilities are poor and not performing in Kayakalp score. One of the reasons for not utilizing government health facilities even by poor people is over crowd and poor sanitation and hygiene practices. There are only limited studies to highlight the reasons behind non performance of public health facilities. The result of the study will be helpful for the policy makers to identify the factors associated with lack of sanitation and hygiene practices in public health facilities and to find the ways to achieve the same.

### **3. Review of Literature:**

According to the global scenario of BMW management, 18 to 64 percent of health care settings have unsatisfactory BMW management system (Indupalli AS et al., 2015) and according to WHO, 85 percent of hospital wastes are non-hazardous, 10 percent are infectious and 5 percent are noninfectious (WHO, 2016). The approximate quantity of waste generated in hospitals varies between 0.55 and 20 kg/bed/ day (Pandit, N. B. et al., 2005). In India 4,05,702 kg/day of which only 2,91,983 kg/day BMW is disposed (Dhruv. P. H et al., 2014).

According to the National Guidelines for Clean Hospitals, maintenance of cleanliness and hygiene in hospitals is necessary with strict adherence to the guideline for infection control practices (GoI, 2015). Proper biomedical waste management and handling system (BMW management and Handling Rules, 2016) has to be followed otherwise it will affect the patients, visitors and staff (Park K, 2005).

Panda M, Nanda S. (2018), highlighted in their study that improvements in Bio-medical waste management can be made by increasing the knowledge, awareness and practices of the health care providers as well as the beneficiaries with regular periodic monitoring and the same was highlighted in the studies of Somaiah and Shivaraj (2016).

The scoring for sharp waste management was improved but the staff was not aware properly about the PEP (post exposure prophylaxis) for accidental needle stick injury. Information about the risk involved in dirty hospital premises, lack of sanitation can be conveyed in the form of messages, pictorial representation through Workshop, seminar and exhibitions to make aware people who visit the government hospitals frequently.

The different categories of bio medical waste management was not known by most of the health personnel (Pandit et.al., 2005), 56 percent of the population knew about the different BMW categories (Basu et.al., 2012) and a research study conducted in Haryana highlighted that doctors, nurses and lab technician had good knowledge, attitude and practice regarding biomedical waste management, however it was very low in class IV employees (Anand et.al., 2016).

#### **4. Objective:**

The main objective of the study is to understand the various reasons hindering the public health facilities and to suggest the ways to improve cleanliness and hygiene promotion in public health facilities.

The specific objectives are

1. To assess the rectified and non rectified gaps during Kayakalp assessment.
2. To find out the reasons for not achieving Kayakalp scores and to suggest to improve cleanliness and hygiene promotion in public health facilities.

#### **5. Methodology:**

It is a descriptive cross sectional study. As per the guidelines of MoHFW for the flagship study, 5 districts were randomly selected based on the performance scores obtained by the public health facilities for KAYAKALP award during 2018-19. The five districts namely, Dharmapuri, Salem, Kancheepuram, Thiruvallur, Thoothukudi including Chennai were selected for the study area in Tamil Nadu.

The public health facilities namely Sub district hospitals (SDH), CHC/Block PHC, Primary Health Centre (PHC), Urban Primary Health Centre (UPHC) one each scored above 70 percent and got the Kayakalp award and another one health facility each which are not performing in each district also considered for data collection. Direct personal interview made with the health personnel using structured interview schedule, observation and verification of records carried out as interview methods. Two PRC staff have collected information from the performed and non performed health facilities of SDH, block PHCs and UPHCs from each district. The information collected from the health facilities in six thematic areas namely Hospital/ Facility Upkeep, Sanitation & hygiene, Waste Management, Infection Control, Supportive services & Hygiene promotion. The various gaps identified, sub heading, thematic scores obtained by the facility, rectified gaps, non rectified gaps and various reasons hindered the public health facilities to achieve cleanliness and hygiene promotion were also analyzed.

There are seven criteria fixed for Kayakalp assessment namely, A. Hospital / Facility Upkeep, B. Sanitation & Hygiene, C. Waste Management, D. Infection Control, E. Support Services, F. Hygiene Promotion and G. Beyond Hospital Boundary with five to ten sub headings. The gaps identified given as score '0', partial given as score '1' and satisfied given

as score '2' and the sub heading scores added to form thematic scores and the sum of all thematic scores given as total scores for getting awarded by the health facility if it is above 70 percent. The internal committee has to be formed to assess the health facility in each quarter, the concerned health facility will try to rectify the gaps to get high scores. If it attains more than 70 percent, peer team will assess the facility and if the total scores are more than 70 percent, the final external committee will assess the same facility and the KAYAKALP award will be given as Cash award or certification based on the scores.

## 6. Significance of the study:

The study findings will be helpful for the policy makers and program implementers especially the health officials to identify the reasons hindered the public health facilities to achieve cleanliness and hygiene promotion and to improve the situation in public health facilities by improving the Kayakalp score.

## 7. Results and Discussion:

### 7.1 Status of public health facilities in Tamil Nadu

The overall status of Public health facilities for Kayakalp award in Tamil Nadu during 2018-19 is presented in Table 1. Out of the total DHQ hospitals in Tamil Nadu, 80.6 percent of the facilities got the Winner/Certified / Kayakalp awarded and the remaining 19.4 percent of DHQ hospitals either not performed or not selected for external assessment. Regarding SDH, 32 percent got selected for Kayakalp award or certified and the remaining 68 percent of the SDH are not assessed due to low scores.

**Table.1: Status of Public health facilities for Kayakalp award in Tamil Nadu (2018-19)**

Kayakalp	DHQH	SDH	BPHC/CHC	PHC	UHC	UPHC	Total
Commendation Award	71.0	24.4	37.9	13.7	26.7	6.4	18.7
Commendation Certificate	3.2	6.8	1.1	1.1		3.6	2.2
Non- Performing in Kayakalp	12.9	59.9	49.9	69.9		36.0	58.5
Not qualified for EA					66.7	49.3	8.6
Not Selected in Extl. Assessment	6.5	8.2	10.4	13.0			9.7
Runner						2.1	0.4
Runner Up Award (State Level)	3.2	0.4	0.2				0.1
Winner					6.7	2.6	0.5
Winner (District Level)				2.3			1.2
Winner Award (State Level)	3.2	0.4	0.5				0.2
<b>Tamil Nadu</b>	<b>31</b>	<b>279</b>	<b>441</b>	<b>1335</b>	<b>15</b>	<b>420</b>	<b>2521</b>

Source: Assessment of facilities under Kayakalp (Cleanliness drive) programme in Tamil Nadu: 2018-19.

Similarly, 40 percent of the BPHCs got the Kayakalp awards/certificates but the remaining 60 percent of the block PHCs are not ready with their quality achievement. Regarding PHCs in Tamil Nadu, only one-fifths of them performed well and got the Kayakalp award but the majority 83 percent of PHCs either not performing in Kayakalp or not selected for external assessment. One third of UCHCs got awarded and two thirds are not ready with quality achievements. Only 10 percent of UPHCs got the award and the remaining 90 percent of them either not performing in Kayakalp or not qualified for external assessment. This clearly shows that majority of PHCs/BPHCs including UPHCs are not ready with the quality achievement in Tamil Nadu.

The status of government health facilities for Kayakalp award in the districts of Tamil Nadu during 2018-19, the district analysis is presented in Table 2. Out of the total public health facilities, 18.7 percent of the facilities got the Commendation Award, Commendation Certificate (2.2 percent), Runner/Winnner (2.3 percent), Non- Performing in Kayakalp (58.5 percent), Not qualified for EA (8.6 percent) and Not Selected in External Assessment (9.7 percent) respectively which are computed from the scores of assessment of facilities under KAYAKALP program. It is clear from the table that three-fourth of government health facilities are not ready with quality achievements which are not assessed due to low scores. Nearly 67 percent of the districts in Tamil Nadu are not performing or not qualified for Kayakalp assessment. The performance of the districts in Tamil Nadu namely, Thanjavur (94.5 percent), Dindigul (89.3 percent), Kancheepuram (88.3 percent), Nagapattinam (88.2 percent), Madurai (87.3 percent), Theni (86.7 percent), Ariyalur (85.4 percent), Tirunelveli (83.3 percent), Sivaganga (82.6 percent), Tiruvallur (82.6 percent), Tiruvannamalai (82.4 percent), Salem (81.4 percent), Chennai (81.0 percent), Tiruchirapalli (80.7 percent) and The Nilgiris (80.5 percent) are very poor in quality achievement status which are either non performing in Kayakalp/not qualified or not selected for external assessment. These districts did not follow the guidelines based on six thematic areas and fail to achieve the Kayakalp scores.



**Table 2: District wise Status of government health facilities for Kayakalp award (2018-19)**

District	Commendation Award	Commendation Certificate	Non-Performing in Kayakalp	Not qualified for EA	Not Selected in External Assessment	Others (Runner /Winner)	Total
Ariyalur	9.8	2.4	61.0	0.0	24.4	2.4	<b>41</b>
Chennai	10.8	2.5	19.6	61.4	0.0	5.7	<b>158</b>
Coimbatore	14.9	4.0	59.4	17.8	1.0	3.0	<b>101</b>
Cuddalore	19.5	0.0	79.3	0.0	0.0	1.2	<b>82</b>
Dharmapuri	23.2	0.0	67.9	1.8	0.0	7.1	<b>56</b>
Dindigul	6.0	2.4	84.5	3.6	1.2	2.4	<b>84</b>
Erode	35.4	3.7	54.9	0.0	2.4	3.7	<b>82</b>
Kancheepuram	8.2	2.4	87.1	1.2	0.0	1.2	<b>85</b>
Karur	20.9	4.7	62.8	0.0	4.7	7.0	<b>43</b>
Krishnagiri	28.8	3.8	61.5	0.0	3.8	1.9	<b>52</b>
Madurai	10.9	0.0	50.0	29.1	8.2	1.8	<b>110</b>
Nagapattinam	8.8	1.5	77.9	1.5	8.8	1.5	<b>68</b>
Namakkal	41.4	4.3	27.1	0.0	25.7	1.4	<b>70</b>
Perambalur	21.2	0.0	66.7	0.0	9.1	3.0	<b>33</b>
Pudukottai	31.9	1.1	46.2	0.0	18.7	2.2	<b>91</b>
Ramanathapuram	29.9	3.0	38.8	0.0	26.9	1.5	<b>67</b>
Salem	14.4	3.4	52.5	13.6	15.3	0.8	<b>118</b>
Sivaganga	11.6	2.5	79.3	0.0	3.3	3.3	<b>121</b>
Thanjavur	4.4	0.0	50.5	0.0	44.0	1.1	<b>91</b>
The Nilgiris	17.1	0.0	80.5	0.0	0.0	2.4	<b>41</b>
Theni	11.1	0.0	37.8	2.2	46.7	2.2	<b>45</b>
Thoothukudi	12.5	12.5	33.3	20.8	20.8	0.0	<b>24</b>
Tiruchirapalli	14.0	3.2	57.0	17.2	6.5	2.2	<b>93</b>
Tirunelveli	15.0	0.8	80.8	0.8	1.7	0.8	<b>120</b>
Tiruvallur	13.8	2.5	76.3	1.3	5.0	1.3	<b>80</b>
Tiruvannamalai	14.8	1.9	78.7	0.9	2.8	0.9	<b>108</b>
Tiruvarur	20.4	1.9	72.2	0.0	3.7	1.9	<b>54</b>
Tuticorin	17.8	2.2	44.4	0.0	33.3	2.2	<b>45</b>
Vellore	34.2	2.5	31.6	1.3	27.8	2.5	<b>79</b>
Villupuram	33.0	2.2	58.2	0.0	5.5	1.1	<b>91</b>
Virudhunagar	41.4	0.0	37.9	1.7	13.8	5.2	<b>58</b>
Tiruppur	25.3	2.7	49.3	21.3	0.0	1.3	<b>75</b>
Kanniyakumari	20.0	3.6	65.5	9.1	0.0	1.8	<b>55</b>
<b>Tamil Nadu (No.)</b>	<b>471</b>	<b>55</b>	<b>1475</b>	<b>217</b>	<b>244</b>	<b>59</b>	<b>2521</b>
<b>Percent</b>	<b>18.7</b>	<b>2.2</b>	<b>58.5</b>	<b>8.6</b>	<b>9.7</b>	<b>2.3</b>	<b>100.0</b>

Source: Assessment of facilities under Kayakalp (Cleanliness drive) programme in Tamil Nadu: 2018-19.

## 7.2 Scores obtained by the visited government health facilities

The thematic scores obtained by the visited government health facilities are presented in Table 3. This clearly shows the various reasons under 7 major headings namely “Hospital Upkeep, Sanitation and Hygiene, Waste Management, Infection control, Support services, Hygiene promotion and Beyond hospital boundary” which contributed to achieve low scores ie., below 70 percent.

**Table 3: Thematic scores obtained by the visited health facilities during Kayakalp assessment.**

Sl. No.	Facility Type	Hospital Upkeep	Sanitation and Hygiene	Waste Management	Infection Control	Support services	Hygiene promotion	Beyond Hospital boundary
		A	B	C	D	E	F	G
1	SDH	77	55	80	56	22	17	45
2	SDH	74	65	86	68	29	39	47
3	SDH	83	72	81	78	35	41	49
4	SDH	50	50	25	50	50	25	48
5	BPHC	87	82	87	56	22	17	48
6	BPHC	69	70	67	67	31	28	49
7	PHC	50	46	34	55	23	18	30
8	PHC	52	57	69	59	32	42	28
9	PHC	33	29	33	36	15	17	33
10	PHC	20	20	20	20	10	10	18
11	UPHC	48	49	33	43	21	17	31
12	UPHC	33	37	17	35	15	11	23
13	UPHC	87	78	66	67	21	30	30
14	UPHC	45	47	35	37	17	17	37
<b>Out of the total Scores</b>		<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>50</b>	<b>50</b>	<b>50</b>

Kayakalp assessment of PHCs reveals that, Hospital upkeep, Sanitation and Hygiene, Waste management and Hygiene promotion plays the vital role for the non performance of Kayakalp / not selected for external assessment. UPHCs got lower scores in the almost all the areas especially Waste management and Infection control. Only one of the SDH is poor in Hospital upkeep, Waste management and Hygiene promotion. These areas out of the 7 major headings may be given preference to rectify gaps and to achieve quality achievements in government health facilities.

There exist difference between scores given by internal assessment team and the peer team. For some of the items scored as satisfied (2) by the internal assessment committee, peer team has scored as partial (1). This clearly shows that the awareness about giving scores for KAYAKALP assessment is low among health personnel and they are in need of more training. The internal committee assessed the facilities in a hurried manner without understanding the KAYAKALP concepts fully. Only one time assessment was done by internal assessment committee and quarterly assessment was not done in most of the health facilities and thus resulted in difference of scores between internal and peer teams.

### **7.3 Major gaps identified for PHC/ Block PHC/ UPHCs:**

According to the report submitted by internal assessment committee or peer assessment team, the major gaps identified during Kayakalp assessment are Pest & Animal Control under “Hospital / Facility Upkeep (A)”, Cleanliness of Circulation Area, Monitoring of Cleanliness Activities under “Sanitation & Hygiene (B)”, Disposal of Biomedical waste, Solid General Waste Management, Liquid Waste Management under “Waste Management (C)”, Personal Protective Equipment (PPE), Infection Control Program, Environment Control under Infection Control (D), Kitchen Service, Security service, Out-sourced Services Management under “Support services (E)”, Community Monitoring & Patient Participation, Information Education and Communication, Leadership and Team work under “Hygiene Promotion (F)”, Promotion of Swachhata in surrounding area, Coordination with local Institutions, Alternative Financing and support Mechanism, Leadership & Governance in Surrounding area and Public Amenities in Surrounding Area under “Beyond Hospital Boundary(G)”, etc.,

### **7.4 Major gaps identified for Sub district hospitals:**

The major gaps identified during Kayakalp assessment are Pest & Animal Control, Hospital / Facility Appearance, Maintenance of Furniture & Fixture under “Hospital / Facility Upkeep (A)”, Drainage and Sewage Management under “Sanitation & Hygiene (B)”, Implementation of Biomedical Waste Rules 2016, Sharp Management, Liquid Waste Management, Management Hazardous Waste, Solid General Waste Management under “Waste Management (C)”, Hospital Acquired Infection Surveillance, Isolation and Barrier Nursing, Hospital Acquired Infection Surveillance, Environment Control under “Infection Control (D)”, Laundry Services & Linen Management , Out-sourced Services Management under “Support services (E)”, Information Education and Communication under “Hygiene Promotion (F)”, Promotion of Swachhata in surrounding area, Coordination with local Institutions, Alternative Financing and support Mechanism, Leadership & Governance in Surrounding area, Approach Road to Health facility, Public Amenities in Surrounding Area, Maintenance of Surrounding Area under “Beyond Hospital Boundary (G)”.

## **7.5 Reasons for not achieving Kayakalp scores**

The following are the various reasons for not achieving Kayakalp scores namely, formation of internal assessment committee, Infrastructure shortage, lack of awareness, shortage of equipment, no proper IEC display and other reasons which hamper the improvement of public health facilities in Tamil Nadu.

### **7.5.1 Internal assessment Committee:**

Only overall committee is formed in the public health facilities such as PHC, Block PHC, UPHC and Sub district hospitals. As per the guidelines of Kayakalp assessment, the specific committees for infection control, sanitation and hygiene, Waste management, hygiene promotion etc., have to be formed, to assess the public health facilities. Previously the health facilities were not aware of the committees to be formed and only recently they have started to form committees. The training for the committee members is not enough as they did not understand the KAYAKALP assessment concept fully.

### **7.5.2 Infrastructure:**

Infrastructure is one of the very important components for the improvement of public health facilities. The drawback for getting low scores during Kayakalp assessment is lack of infrastructure component such as Compound wall, Partial compound/fencing, No intact wall boundary, compound wall damaged due to heavy rain, lack of animal trap, parking facility, separate rooms, outside toilet facility, no staff quarters, laundry service, inadequate ward facility, land issues, no place for kitchen, no separate OP counter, no isolation ward, old ramp, no maternity block and nursing station etc.,

Some of the health facilities such as PHC, Block PHCs with the help of fund allotted by the Deputy Director of Health Services (DDHS) office or managed with their own RKS fund allotted by NHM or the previous year fund received as Kayakalp Cash award by the concerned health facilities, the infrastructural development was achieved such as room partition for labour room, common and emergency room, Isolation ward, separate OP counter, land issues rectified, Cattle trap and Compound wall constructed with gate, floor changed with tiles, etc.,

If the public health facilities are constructed recently or new buildings, the partition can be done for separate rooms and modification can be done with the existing infrastructure but if they are old buildings, renovation may not be done to get high scores. For new constructions or infrastructure developments, the public health facilities should depend on PWD department, and due to lack of coordination with the department and due to lack of provision of funds, there exist delay in infrastructure developments. As the infrastructure development depends on financial, most of the public health facilities are not able to construct the Compound wall, animal trap, parking facility and outside toilet facility which are in need of large amount for construction.

### **7.5.3 Awareness:**

The awareness about formation of separate committees for internal assessment was not known by most of the facilities. The overall committee formed by the concerned medical officer made one time assessments instead of quarterly assessment was observed in almost all the public health facilities. As the medical officer newly joined, the committee formation yet to start in one of the facilities. The Bio medical waste management (BMW) was not done properly at some of the facilities as it is difficult to segregate BMW during emergency and heavy patient load as reported by the facility. The BMW management agreement with pollution control board was not done and not aware by some of the facilities. The scores given by some of the facilities was high as it reflects with peer team assessment and external assessment. The awareness about the concepts, definition and scores to be explained in detail to the concerned health personnel by additional trainings.

### **7.5.4 Equipment:**

Equipments play a major role in utilization of service in the public health facilities. The public health facilities especially the Primary health centres and block PHCs have shortage of cleaning materials, 3 bucket system, lack of surgical items, no washing machine or under repair, elbow tap not functional etc., which lead to achieve low scores. After the implementation of assessment for Kayakalp in public health facilities, they have purchased cleaning materials and surgical items, furniture and computers etc., The three bucket system in labour room, indoor window in labour room, mosquito nets, Heater, curtains, bed spread purchased and Auto clave issue was rectified in the facilities. X ray and scan facilities are yet to be installed in some of the health facilities.

### **7.5.5 IEC display:**

No uniform sign board and lack of IEC materials display reduced the scores during Kayakalp assessment. Kayakalp assessment helped the public health facilities to display uniform sign board and proper IEC display in most of the public health facilities. Name boards in the Primary health centres installed. As the financial commitment is low for IEC display, it was done with the existing funds.

The other issues faced by the public health facilities for the major contribution for getting scores namely, electricity problem, old lighting system, lack of LED, CFL bulbs, need of mosquito net, no rain water harvesting, registers not maintained, no water connection, lack of inter wall painting, surrounding not clean, vendors outside campus during AN clinic, lack of municipality drainage etc., For the gap closure, most of the issues were sorted out by the public health facilities like replacement of LED, CFL bulbs, maintenance of records, purchase of mosquito net, rain water harvesting, water connection, inter wall painting and cleanliness of surrounding area with the help of available funds.

**7.6 Major reasons:** The major reasons identified during our interview made with health personnel in the public health facilities are Fund, Manpower, Cooperation and other issues.

**7.6.1 Fund:** Fund is the major issue for not getting high scores by the public health facilities. As the fund is not available, the major work which depends on budget could not be done such as construction of compound wall, waiting area, animal trap, walk path and parking facilities. Delay in getting funds from government for the constructing of new building or renovation and lack of coordination with PWD department also restricts the facilities for getting high scores. Separate fund may be allotted for the collection of BMW as there existed disposable issue for the additional PHCs.

**7.6.2 Manpower:** Vacant posts of medical and para medical posts in the concerned government health facilities also a major problem in promotion of health services. Some of the facilities also face HR problems due to deputation of staff members especially Staff nurse to the nearby health facilities. Lack of specialty care services such as OG, Pediatric,

Anesthetist etc., and the para medical staff namely Staff nurse, Lab technician, Pharmacist, Sanitary workers and ASHAs in the tribal hill areas also play a major role for the improvement of health facilities. As the HR problem existed throughout the district, the district and state health officials may rectify the HR problems by recruiting medical and paramedical staff as per the IPHS standards.

**7.6.3 Cooperation:** The Cooperation between the staff is also an important factor to implement sanitation and hygiene promotion in public health facilities. Similarly, the Cooperation among people for sustaining sanitation and hygiene measures need to be increased by awareness campaign among staff and people who utilize the public health services.

**7.6.4 Others:** The other major issues existed in public health facilities namely, PWS fund was not sufficient to improve the facilities of PHCs and lack of separate rooms in the existing building which is old, no time to arrange for sponsorship, PWD problem for the construction or renovation of building and the same norms for the facilities which are located in plains and hills, etc.,UPHC buildings and few staff are under Municipality control and the remaining staff such as Medical officer, Staff Nurse, Pharmacist, Lab technician and medicines, equipments are from Deputy Director of Health Services (DDHS) office. Since the UPHCs are under the control of two different departments, the renovation or construction of new building and improvement of health facility seems to be difficult. The Chief Minister health insurance schemes are not done in some of the sub district hospitals and it is reported that there is no time to approach for getting sponsorship outside for the development of sub district hospitals.

## **8. Patient satisfaction:**

Exit interview with outpatients and inpatients was carried out to assess the satisfaction of patients on 1. Hospital accommodation, 2.Adequate medical facilities, 3.Sufficient medical personnel, 4.Sanitation in surrounding area, 5.Clean rooms and wards of the Hospital, 6.Cleanliness of the toilets, 7.Water and other facilities, 8.Biomedical waste management, 9. Infection control action, 10. Drainage and sewerage management, 11. IEC Display etc., in each health facility. Majority of respondents expressed their satisfaction regarding hospital accommodation, adequate medical facilities, sufficient medical personnel, clean rooms, wards of the hospital, drainage facilities and sufficient IEC display. They are not satisfied with sanitation of surrounding area,water facilities and cleanliness of the toilets and mostly not aware about Bio-medical waste management and Infection control measures.

## **9. Conclusion and suggestion:**

After the implementation of Kayakalp assessment most of the public health facilities have improved in sanitation and hygiene measures and thus improvement in infrastructure, human resource, hospital cleanliness, infection control etc., All staff including Medical officer and Para medical staff satisfied with the existing improvements and the satisfaction of the patients also increased compared with previous years. The confident level and faith on public health facilities among people also increased as the sanitation and hygienic condition improved.

Majority of PHCs / UPHCs and three-fourth of government health facilities are not ready with the quality achievement which are not assessed due to low scores in Tamil Nadu. Nearly 67 percent of the districts in Tamil Nadu are not performing or not qualified for Kayakalp assessment. Hospital upkeep, Sanitation and Hygiene, Waste management and Hygiene promotion are the major areas need to be taken care by the PHCs/UPHCs for quality achievement on cleanliness, sanitation and hygiene promotion. As most of the health facilities are not aware of all the concepts and terms of Kayakalp assessment and lack of awareness on sanitation, infection control and hygienic practices and formation of internal assessment committees, reorientation training to all the staff including medical and paramedical staff to improve the standards of government health facilities.

Infrastructure development along with required equipments and the facilities has to be improved as per the standards of IPHS, so that upgraded facilities may get all the facilities/services including infrastructure development. Irregular Fund and delay in receiving funds may affect the improvement of health facilities. Some of the facilities reported that the existing PWS fund is not sufficient to them and they didn't receive the previous years' Kayakalp cash award and PWS fund. It will be useful for the facilities to upgrade the infrastructure and for IEC materials if the fund is provided without delay. Major construction or renovation work with huge budget may not be carried out with the existing funds. A separate fund may be provided from the health department/ govt. of Tamil Nadu and the issues of PWD department may be rectified for the speedy infrastructure development. Some of the facilities have received the fund for gap closure and got the Kayakalp award, the other facilities may be provided the fund for gap closure.



To overcome the shortage of manpower problem, new recruitment of medical and paramedical posts as per the standards and requirement is an urgent need for the improvement of public health facilities. The vacant posts of specialty care services namely, OG, Pediatric, Anesthetist and sanitary workers, staff nurse may be posted at the earliest by the health department. The Cooperation between the staff and among people who utilize the services of public health facilities for the sustainable development of sanitation and hygiene measures need to be taken care.

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## Annexure 1: Health facilities visited for Kayakalp study \_ PRC Gandhigram

