

B. RESPONSIVENESS TO PEOPLE'S EXPECTATIONS

WHO considers responsiveness to people's expectations as one of the three main goals any health system should strive to achieve.

Responsiveness to people's expectations in regard to non-health-matters reflects the importance of respecting people's dignity, autonomy and the confidentiality of information. Responsiveness is built as a combined indicator that reflects patient-satisfaction, quality of care, and patient experience.

In a survey conducted by WHO in 142 countries where 8 aspects of health system were evaluated, it was found that , prompt attention, dignity, and confidentiality are the most important domains, while access to family, and community support are the least important.

EBM study placed lot of attention on the elements of the responsiveness to patients, as it is one of the dire areas which calls for improvement in Sri Lanka.

EBM conducted two studies to examine these issues in the health setup of Sri Lanka. The two predominant problems which could be identified are, overcrowding and long waiting lines in hospital OPDs and clinics. It induces patients to move to the private sector which only a few of them could afford. Other problems causing patient dissatisfaction include inadequate cleanliness, lack of comfort, disorderly arrangement, and delays in the various processes in the patients' clinical pathway (details in chapter 3.2). Based on the identified issues, several interventions were implemented at the pilot hospitals successfully. Here is an example of them.

B.1 EXAMPLES FROM THE FIELD TO ADDRESS ISSUES OF RESPONSIVENESS

- In Teaching Hospital, Kurunegala, the issue of patients being inconvenienced at the Dispensary was solved.

Large numbers of patients utilizing the health services of the hospital were subjected to great inconvenience mainly due to the practice of dispensing all such patients from one location.

All such patients fell into 4 categories. Namely, OPD patients, clinic attendants, heart patients, staff & Security personnel. It suggested that 3 separate dispensing counters be operated with OPD and heart patients in one location but separately to dispense the heart patients.

This procedure was adopted within the first three or four months and has expedited the dispensing system by pre-packaging of the common drugs separately, maintaining each pharmacist's inventory of drugs in their cupboard on a tiered system and storing the fast moving drugs on a prioritized system within the easy reach of the dispensers/pharmacists.

This exercise resulted in reducing the dispensing time per patient to less than 60 seconds. The duplication of work within the Dispensary Sub-Store was also minimized to a great extent by following the 5S methodology.

c. MAKE HOSPITAL A SAFER PLACE

The health sector is a high-risk area since adverse events, arising from treatment rather than disease, can lead to death, serious damage, complications, and patients' suffering. Although several hospitals and healthcare settings have procedures in place to ensure patients' safety, the healthcare sector still lags behind other industries and services that have introduced systematic safety processes.

A number of investigations from all over the world have underlined the need for and the possibility of reducing the number of adverse events in the health sector. Internationally, current data shows that almost half of all preventable adverse events are a repercussion of medical negligence. The health sector should be designed in a way that error and adverse events are prevented, detected, or contained so that serious errors are avoided and compliance with safety procedures is enhanced. Health sector-induced harm to patients imposes a heavy burden on the society. Investment in patient safety therefore has the potential to generate a reduction in the expenditure coupled with obvious benefits to patients. In a paper issued by WHO, healthcare-associated infections (HAIs) were identified as one of the major patient-safety issues. It stated that "at any given time, more than 1.4 Million people around the world become seriously ill from such infection and that overcrowding of patients and understaffing at healthcare facilities contribute to the perpetuation of this problem".

Sri Lanka is not an exception. Several interventions have taken place in some hospitals which show improvement on the health indicators relevant to the problem.

c.1 "CLEAN CARE IS SAFER CARE"

As a step to improve the safety measures inside the hospitals, EBM study made an effort to document the interventions that were implemented as part of the Quality management efforts. This will lead to decrease the incidence of HAIs and their effects. These are important interventions to achieve the WHO slogan of "Clean Care is Safer care". Examples of those interventions include the following:

c.2 INFECTION CONTROL SURVEILLANCE AND INFECTION CONTROL COMMITTEE

CSHW and Ampara General Hospital, established a system for Infection Control Surveillance. An infection Control officer(s) is responsible for maintaining the information system and producing the required IC reports to be presented to the Infection Control Committee during their regular meetings to arrive at necessary decisions.

Over months, and years, it was shown that the infection rates, morbidity, and mortality rates related to HAIs have reduced significantly.

c.3 ESTABLISHMENT OF CENTRAL SUPPLIER DIVISION (CSD) AT CSHW AND AMPARA HOSPITAL

Supply of linen and sterile material was very Spartan in CSHW before the implementation of 5S. Thus, a new CSD was set up and two main units were established;

- Central Linen Supplier Division.
- Central Sterile Supplier Division.

The CSD achieved the following:

- Improvement of the standard of services.
- Reduction of the workload of ward staff.
- Adequate supply of items on regular basis.
- Ward sisters released from additional responsibilities. They have more time to focus on the elements of quality services provided to patients.

These achievements led to a great change in the quality of services provided to customers and improved staff satisfaction.

The same results were documented at Ampara General Hospital with a significant improvement in health-related indicators, and patient satisfaction.

The above mentioned interventions proved to be useful in elevating the hospital, to a safe place for patients. The results were:

- Reduction of the hospital infection rates.
In a study carried out at CSHW to examine the improvement of performance, it was found that during the first two years of implementation of 5S, the Post-Caesarean Section (LSCS) infection rate was reduced by 52% and the neo-natal infection rates were decreased by 58%.
- Reduction in morbidity and mortality rates.
Ampara reduced the Neonatal mortality rates from 0.78% in 2000 to 0.37% in 2006. Major percentage of neonatal deaths is due to infections.
- Easing the financial burden of the health system

The management of the two hospitals experienced a marked fall of the financial burden with the reduction of the period of hospitalization and reduction of the treatment costs of the complications caused by the hospital infections.

c.4 REDUCING OTHER HOSPITAL HAZARDS

Other areas of potential hazards to the patients and hospital staff should be seriously considered in any quality management project.

Some areas of immediate danger to patients and staff have been addressed during the period of EBM study.

- Securing electric wiring in the hospital
 - Madampe Hospital patients/visitors/employees in danger due to poor the wiring system.

The hospital being an old establishment, the electrical wiring system (wires connected to the main switches, sub-panels boards) has been grossly neglected over the years. It seemed an eminent danger to patients/visitors and the staff working in the hospital.

Allocation of funds for this type of work in the hospital has been neglected by the Provincial Health Ministry for reasons better known to them. We suggested that a sponsor be found if the estimate of the requirement of wires and cables is made and the allocation of the labour component is done by DPDH Office.

The QMU and the MOC obtained the estimate for the wires and cables and we have found a sponsor for the requirements of wires and cables.

The re-wiring has to be done with the assistance of the DPDH Office (on labour) along with the switches to be replaced.

It would be necessary for the health authorities in the country to remedy this malady of danger since many patronizing the hospital are in a vulnerable situation.

Improving the quality of water supply.

- Chilaw Hospital managed to solve the problem of poor quality of water-supply to the Dental Unit.... A Success story of QMU.

The Dental Unit at the Chilaw Hospital is the only such institution serving the whole of Puttalam District. Thus, it is frequented by large numbers and approximately 80 to 100 patients are treated on average daily.

The Specialist Dental Surgeon informed JASTECA (EBM consultant) when when they visited the hospital with the QMU members that the biggest problem encountered is the supply of poor quality water which damages dental equipment and instruments.

JASTECA sought the assistance of Brandix Limited on this project relying on their Corporate Social Responsibility (CSR).

After testing the water, Brandix Limited pledged their support on this project by providing the required Water Softener Processing Plant, which they installed at the hospital in early March 2007.

Future of the Softener Plant depends on how well it is maintained by the hospital authorities.

D. STRENGTHENING COMMUNITY INVOLVEMENT

Establishment of an active Hospital Development Committee worked well to enhance Public Assistance in PU Madampe.

It was observed that several infrastructure development projects were grossly neglected by the government, which however, are capable of rendering a sound quality medical service to the patients.

This support also may be achieved by the establishment of a Hospital Development Committee comprising the Head of the Hospital as Chairman (Medical Officer in charge), Senior Provincial Council Ministers and Public Service officers such as the Police, Urban Development Authority, Post Office, religious leaders, industrialists and the businessmen who will undoubtedly form a collective forum.

The MOC along with the QMU recorded all the infra-structural requirements and a meeting was held to obtain their support. The enthusiastic representatives of the Quality Management Unit reached the community in search of prospective sponsors who had already observed and expressed their satisfaction over the visible improvements taking place at the hospital.

Apart from the sponsors who came forward, several invitees to the initial meeting pledged their fullest support with the new year budget coming to effect in January 2007.

The facelift given to the frontage of the hospital, its premises, maternity ward, renovations done to the existing toilets and re-wiring the entire hospital are some of the projects undertaken by the participants at the meeting.

It would be imperative that follow-up action is taken to brief the neighbouring community of the Madampe Hospital about the development plans with a view of canvassing their monetary support in future endeavours.

We noticed that the MOC has always acted as the live-wire in the development of the hospital. The support he has obtained from the community is praise-worthy. Though this is a Peripheral Unit, all employees have rallied round the MOC to sustain the activities leading to the 5S implementation.

D.1 HOSPITAL SUPPORT FROM THE PRIVATE SECTOR

A local company came forward to improve the frontier of the Dankutuwa Hospital which hitherto carried a negative message to those who patronized the institution.

The hospital is situated along the main road from the Dankotuwa junction. The entire frontage of the hospital was in wilderness covered by fully grown Indian Willow trees up to a height of about 25 feet.



FIGURE 5-9: RENEVATION OF THE MATERNITY WARD

About 12 feet interior to this row of Indian Willows, was a parapet wall of about 5 feet in height built from one end of the gate to the other. There was a little chance of spotting it specially at night. Indian Willow trees were cut off and removed from the site along with the parapet wall. (this was built about 15 feet inside of the boundary of the hospital perimeter, thus wasting valuable land). At the correct perimeter line of the hospital land bordering the main road, we suggested erecting the new chain-link fence with posts every 10 feet apart. The gate posts at both ends were also built to give an additional look to the hospital. The extra land that was acquired by the hospital side had to be filled with earth. The assistance of the Police and the Urban Development Authority were obtained to transport required quantity of earth at no cost. The extra earth that was brought to the site was leveled by the staff of the Dankotuwa Porcelain Company situated close to the hospital. Chain-link fence sections were fixed. Internal roadway was covered with Bitumen with the assistance of the UDA and the Police. Foliage planting and the other gardening work was done mostly by the staff of the Hospital.



FIGURE 5- 10: DANKOTUWA HOSPITAL SUPPORT FROM THE COMMUNITY

The out look of the hospital now is very different to what it was nine month ago.

5.2 ASSESSMENT OF THE 5S-TQM INTERVENTIONS AT PILOT HOSPITALS

5.2.1 SUMMARY OF FINAL ASSESSMENT/AUDITING OF 5S-TQM

A. PURPOSE OF THE 5S AUDIT

Implementation of the 5S and other quality improvement methods require constant reviews and modifications of the actions. External assessment can objectively address what has and has not been accomplished. Often, it can detect what internal reviews easily dismiss. For the hospitals, auditing provides an invaluable opportunity to reflect their 5S practices, thereby finding the ways for further progress.

5S audit is not novel to Sri Lanka. The JASTECA annually nominates the best performing companies and entities in the public sector based on their auditing results. Initially, the JICA EBM Study attempted to introduce the same audit sheet, and soon realised that the hospital auditing is takes a different perspective from other settings although the principles of 5S remain common to any setting.

A working group was formed in February 2007. It consisted of nine medical professionals nominated by the Ministry of Health who had experience on TQM programmes (Annex 1: list of members). Through bi-weekly meetings, the working group modified the existing audit sheet (among other tasks) to make it more relevant to the health sector.

B. THE AUDIT SHEET

B.1 STRUCTURE OF THE 5S AUDIT SHEET

The auditing looks into the 5S practices at eight different locations of the hospital: OPD/EPU/clinics, wards, labour room, laboratory, record room, office, outside premises, and kitchen. To accommodate differences in physical set up and type of services (administrative or medical) at each location, eight sets of audit sheets are prepared and each starts with questions related to *Seiri*, followed by the other four Ss, namely *Seiton*, *Seiso*, *Seiketsu*, and *Shitsuke*.

See below for a sample check list on OPD, ETU, clinic areas and dispensary.

In comparison, other audit sheets were made of fewer numbers of statements that actually evaluated and gave scores. They relied to a great extent on the auditors' experience and skills to triangulate the assessment on various check points. Four or five auditors look at the entire institution and the final assessment is given based on the consensus of all (average score).

By providing specific details of assessment areas, this audit sheet can be used even by less experienced auditors.

The original version developed by JASTECA used a marking scale ranging from 0 to 10. Although this method is simple and user-friendly, a higher variance of total scores is inevitable due to the higher margin of subjectivity. Alternatively, the Study Team considered a simple “Yes” or “No” marking scheme. Finally, a marking scale of 0 to 5 was employed to consider the situations where transformation is not quite complete but deserves recognition. The shorter scale also helps reduce a variance of the score.

Hospital Name:

Name of Auditor:

Started at : **OPD, ETU, CLINICS**

Finished at :

1. SEIRI		0-5	Aug
1.1	Outside the building - Garden Floor-even	0-5	<input type="checkbox"/>
1.2	Inside the building Free of broken unusable furniture/items Free of unwanted records, registers & returns Free of outdated notices Free of unwanted decorations/posters Free of unusable/unserviceable equipment	0-5 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>
1.3	Roof tops Free of clutter	0-5 <input type="checkbox"/>	<input type="checkbox"/>
1.4	Tops of work areas/Cupboards/Shelves/Tables free of unwanted items		
1.4.1	Work areas (tables) Free of unserviceable and/or inappropriate items (records, registers, returns)	0-5 <input type="checkbox"/>	
1.4.2	Top of cupboards – totally free of inappropriate items Top of shelves – totally free of inappropriate items Top of refrigerator – totally free of inappropriate items	0-5 <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
1.5	Appropriate storing of drugs		
1.5.1	Drug Cabinets Free of inappropriate items Free of expired items	0-5 <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>
1.5.2	Drug Carts Free of inappropriate items Free of expired items	0-5 <input type="checkbox"/> <input type="checkbox"/>	
1.5.3	Emergency Tray Free of anything other than included in the check list. Free of expired items	0-5 <input type="checkbox"/> <input type="checkbox"/>	

Hospital Status Assessment Tool developed by EBM Study Working Group *

The location to audit

Check list format

Areas of

Marking scale

FIGURE 5- 11: EXAMPLE OF AN AUDIT SHEET

C. PRE-TESTS

To ensure the validity of the audit sheet, two Pre-tests were carried out in General Hospital Kalutara and Base Hospital Homagama on 25th of June and 02nd of July 2007 respectively.

1st Pre-test at GH Kalutara

The Audit sheet tested was not designed to evaluate the conditions by the location. Auditors found it extremely difficult to register their own assessment on the sheet. Suggestions were made to have separate audit sheets specified for each location. Auditors also suggested additional aspects to be evaluated and some irrelevant areas to be removed. All suggestions were incorporated into the audit sheet.

2nd Pre-test at BH Homagama

A few amendments were done: Average time per location was roughly estimated, which helped in planning the final assessment at five different types of hospitals. As a result, more auditors were deployed to audit bigger hospitals.

It was decided to give a brief summary feedback to the Head of the institution at the end of the Audit day, by which main issues related to 5S TQM could be highlighted for future developments. Also immediate feedback helped ease anxiety of the hospital staff for 'being examined'.

A decision was also made to develop a marking scheme: Originally designed to give "Yes" or "No" to assess the performance. By introducing a scale of 0 to 5, the degree of achievement was measured.

D. FINAL ASSESSMENT

D.1 SELECTION OF AUDITORS

Five auditors who have expertise on TQM programmes were nominated from four different institutions.

- Auditors
 - Dr. S. SridharanReg Med. Admin. CSHW
 - Dr. C.J. Gunasekara SMO OPD / CSHW
 - Dr. D.M.S. Karunaratne MO/ Air Force Hospital
 - Dr. Mahinda Wickramarachchi MO/NHSL
 - Dr. Dammika MayadunnaAct. MS Gampaha Hospital

The auditors participated in the pre-tests, through which they learned the specifics they were expected to assess during the actual auditing.

D.2 FINAL ASSESSMENT SCHEDULE

- Kuliyaitya BH 05th of July 2007
- Chilaw DGH 09th of July 2007
- Dankotuwa DH 11th of July 2007
- Madampe PU 11th of July 2007
- Kurunegala TH 12th of July 2007

Auditing started between 9 a.m. and 10 a.m. followed by a courtesy call to the Director of the hospital. Auditors were introduced and procedures/time schedules were explained.

Auditing was completed between 1 p.m. and 2 p.m. Auditors were allocated a room to gather and summarize their assessment.

E. RESULTS

E.1 OVERALL ASSESSMENT

All hospitals except Kurunegala Teaching Hospital have been engaged in 5S activities since July 2006. It is well understood that the hospitals need more time to organize all locations and facilities. It is quite obvious that the hospitals had set priority in the certain locations- OPD area and outside/inside premises being chosen in general. This is because OPD, clinics, and dispensary areas are the most frequented by the patients and their improvements are expected to respond to the most urgent needs of the majority. The expected benefits are observed to take shape through clean and organised work zones, improved work flow and release of working space. The evidence of 5S activities in all five hospitals is particularly visible from clean premises, landscaping, newly painted areas, visual displays, signages, directional boards, visual improvements such as colour coding and trained staff.

QMUs of all the hospitals have made a genuine effort to train and inculcate the ideas on 5S practice in their staff. Some WIT leaders have displayed lot of enthusiasm and their members were innovative in adapting their work zones into patient-friendly and efficient places. It is noted that a radical cultural breakthrough of 5S is taking place. The staff would proudly take ownership to such a state in their hospital.

The Director Teaching Hospital Kurunegala, MSs at Kuliapitiya and Chilaw hospitals, DMO Dankotuwa and MOi/C Madampe ,their QMU staff and some dedicated WIT deserve to be congratulated on their commitment to make the implementation a success, more so when many improvement activities have been carried out with limited resources and through mobilising the community support.

On the other hand, it is uniformly observed that the laboratory and the kitchen are the two areas with least priority for the last one year. Given the requirement of high hygienic standards in these locations, the hospitals need to attend to their improvement in the near future, if not as a first priority.

Attention called on the labour room is consistently lower than the ward and OPD areas in all 5S aspects.

Except Kurunegala Teaching Hospital, application of 5S concept is observed more in non-clinical dimensions, such as alignment of furniture, storing of records and drugs, and clutter-free table tops rather than clinical dimensions that require standard setting for infection/risk control through protocol observation and colour coding scheme.

It should also be place on record that patient safety was given lower priority at all hospitals. Emergency measures and standardized signage system for visual alert were not displayed adequately in most locations at all hospitals.

- Key findings are summarised as below:
 - All hospitals pay adequate attention to remove unwanted items particularly from OPD, ETU, clinic areas, dispensary, outside & inside of premises and office rooms. Less attention was given to kitchen and laboratory.
 - Storing of drugs is quite satisfactory. The adoption of 'red tag' system, however, varies from hospital to hospital.
 - The basic principle for arranging items such as "Can see, Can take out, Can return" and X-Y axis is well practiced in most divisions of all hospitals.
 - Cleanliness lags behind the first three Ss. Also, cleaning appears to be selectively done in particular locations. As a result, certain locations remain neglected. Laboratory is the least clean location in all hospitals.
 - Availability of cleaning responsibility schedule is an effective indicator of actual cleanliness.
 - OPD area maintains both administrative and clinical standards above any other location at three hospitals. The laboratory has the lowest average standards out of all divisions in the hospital. As a whole, the office is also given a lower priority in setting standards.
 - The best self discipline is found at KTH where most of the WITs are functioning well.

Summary audit reports of each hospital are attached. (See annex)

F. SUGGESTIONS FOR IMPROVING AUDITING

- A simpler check list should be considered.
- A narrower marking scale (0 to 3) would be more accurate, and this will reduce variance of the scores.
- Separate check lists for the OPD, ETU, clinic area and the dispensary are necessary as the respective locations have highly individualized specifications to be examined.
- Taking into consideration, the differences in physical and clinical requirements among the hospitals, it is recommended to develop separate audit sheets in relation to the extent of the hospital.
- Check lists for *Seiketsu* and *Shitsuke* should consider aspects to check the availability of standards for ensuring patient- safety and infection control.

- Special attention should be given to measure the WIT activities as their initiations are the key to quality improvement.
- Auditors should be given the basic profile of the hospital before their visits, such as bed strength, average admissions, average number of deliveries in a month, number of units etc.

G. LIMITATIONS

- Due to time constraints and lack of experienced auditors, it was not possible to inspect all facilities available at these hospitals, especially the larger ones. Therefore, the selected areas were inspected on the assumption that these common areas would represent the 5S implementation being practiced at the targeted hospital.

5.2.2 SUMMARY: THE FINAL KAP ASSESSMENT

A. PURPOSE OF THE KAP ASSESSMENT

Effective implementation of the 5S and other quality improvement methods require constant reviews. Reviews are for finding of the areas which require improvement and not for scrutinizing shortcomings.

In order to assess the knowledge, attitude and practices towards quality related issues, a questionnaire was developed by a group of health sector professionals appointed by the Ministry of Health.

This questionnaire was distributed among all segments of the hospital staff including the minor staff. The results of this study would be used to provide appropriate training programmes and guidance to hospitals to design specific interventions to improve the performance of the hospital and to provide excellent services to their clients.

B. ASSESSMENT SHEET

The questionnaire, which was a self-filling one, was designed to assess the knowledge, attitude and practices on 5S-TQM concept among healthcare staff in the hospitals. The target respondents were already exposed to the 5S concept through training or workshops. The respondents were expected to state 'yes' or 'no' against most of the questions. This was a tool of time saving and easier data analysis. It mainly consisted of four sections.

- I. General information
- II. Knowledge on 5S- Kaizen
- III. Practices related to 5S concept
- IV. Attitudes on 5S concept

I. This section includes the general information and basic details such as age, sex, ethnicity, duration of stay in hospital and designation.
II. This section intends to assess the level of knowledge on the key concepts such as: <ul style="list-style-type: none"> ▶ Productivity ▶ Quality improvement in healthcare

<ul style="list-style-type: none"> ▶ 5S concept ▶ Kaizen ▶ Work Improvement Team <p>In this section most of the answers are to be marked as 'yes', 'no' or 'don't know'. They are also asked to list the components of 5S and to name the organizational body/unit that is responsible for quality and productivity under the Ministry of Health if such one is available.</p>
<p>III. This section intends to assess to what extent the hospital staff regularly practices 5S. Activities related to 5S, measures taken to improve the quality of services provided, training sessions given to the staff are inquired in this section. The respondents are also asked to list three obstacles they have encountered for improvement of services in their respective hospital.</p>
<p>IV. The last section inquires perceptions of the respondents on the 5S-related activities, based on the assumption that one's practice is subject to how he/she perceives the given notions. A rating scale of one to five is given to measure agreeability or disagreeability of the statements given.</p>

C. SAMPLING TECHNIQUE

Taking into consideration the possibility for error associated with the qualitative data, a higher percentage of representation was given to the categories of the sample which are likely to have different views (larger variance).

D. PRE-TESTING AND REVIEW FROM THE FGD

To increase validity of the assessment tool, pre-testing was carried out in Kalutara General Hospital and Homagama Base Hospital.

Overall, there weren't many amendments required to the original questionnaire.

E. RESULTS

E.1 GENERAL INFORMATION ABOUT RESPONDENTS

5.1.1 Graph 5.1 shows the number of staff according to job categorization in each hospital, while graph 5.2 shows the total number of staff in each hospital which was included in the KAP survey. The total number of staff responded to the questionnaire was 245.

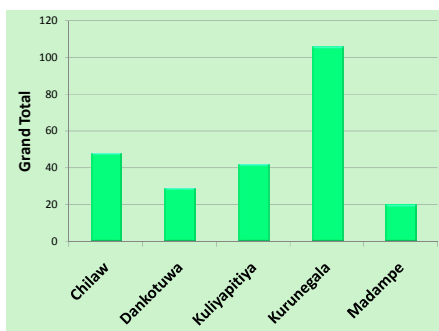


FIGURE 5- 12: NO OF STAFF IN EACH HOPITAL

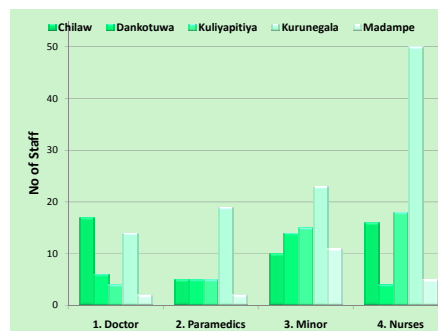


FIGURE 5- 13: NO OF STAFF ACCORDING TO JOB CATEGORIZATION IN EACH HOPITAL

- 5.1.2 Training and supervision of work

The survey shows that smaller hospitals of Madampe, and Dankotowa had a higher percentage of staff trained during the last year, presumably due to limited staff available at these two hospitals. This was also the same in regard to training pertaining to productivity and participation at review meetings on work improvement.

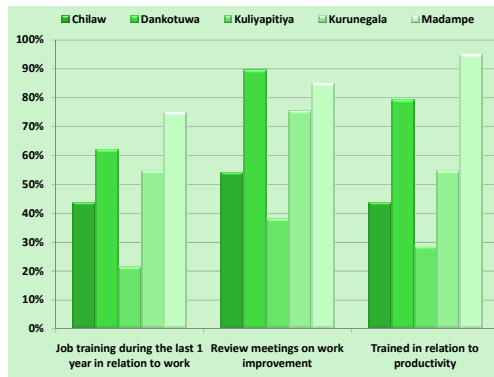


FIGURE 5- 14: TRAINING AND SUPERVISION OF WORK

E.2 ASSESSMENT OF THE LEVEL OF KNOWLEDGE

- Awareness of the key concepts according to designation.

The key concepts that were assessed were Productivity, Quality improvement in healthcare, 5S concept, Kaizen concept, and WIT. The results revealed that all paramedics were well equipped with all five concepts. Majority of the categories were aware of productivity, quality of services, and 5S. There was a moderate grasping of Kaizen concepts, but least was enlightened about the WIT.

On average, the knowledge of all hospital staff about the various concepts was as follows;

- Productivity : 97.4%
- Quality improvement in healthcare : 93%
- 5S concepts : 95.6%
- Continuous improvement for betterment (Kaizen) : 78.6%
- Work Improvement Team (WIT) : 72.9%

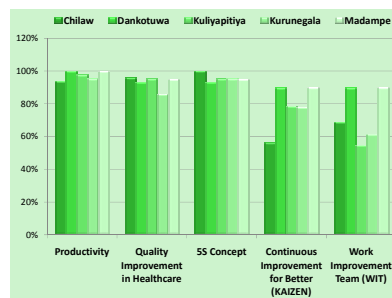


FIGURE 5- 15: KNOWLEDGE OF 5S CONCEPT

- Awareness of the components of 5S according to job description

The majority of all staff categories were able to identify all 5S components. On an average, 85.4% answered all 5S correctly. This is a positive indicator of the awareness of the quality improvement notions inside the hospitals. This is denoting a lot of improvement in knowledge, compared to the 30% result of the Baseline Survey done one year earlier.

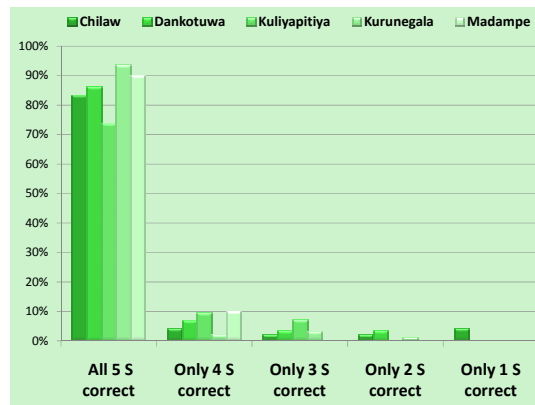


FIGURE 5- 16: AWARENESS OF COMPONENTS OF 5S ACCORDING TO JOB DESCRIPTION

E.3 ASSESSMENT OF PRACTICES

- Assessment of self practice of 5S at each pilot hospital

Four main activities were used as indicators to assess the self practice of 5S at various hospitals. The results show that there were significant improvements in all the four indicators in all hospitals.

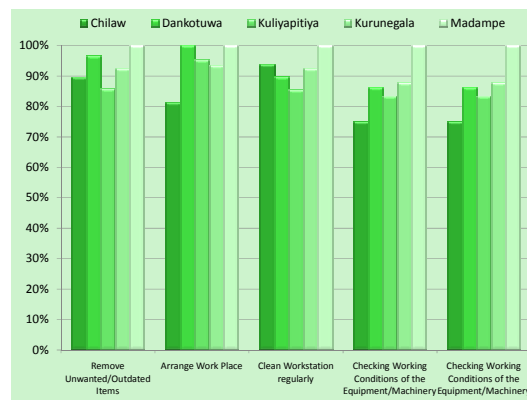


FIGURE 5- 17: % OF PARTICIPANTS WHO SELF PRACTICE 5S

- 5.3.2 Average result of assessment of self practices of 5S

A significant improvement is visible in all hospital activities in general. Namely:

- Removal of discarded / outdated items; 93%
- Arranging the work place; 94%

- Cleaning the workstation regularly; 92%
- Checking the working condition of the equipment; 86%

These results provide positive evidence of the high possibility of sustainability of such a programme within the hospitals. One area which is less practiced is, cleaning of the workstation by the doctors' category.

E.4 ASSESSMENT OF ATTITUDE ON 5S, QUALITY, AND PRODUCTIVITY CONCEPTS.

Although the 5S system improves the quality of hospitals, it is greatly affected by the attitudes of people who participate in this. If more optimistic thinkers participate in this, an effective quality output can be achieved with the minimum time.

Several statements were used to assess the attitude of the hospital staff towards specific concept related to 5S, improving quality, and productivity. There are a lot of favourable results revealed from this study that could be adapted in constructing training workshops, and focus on the requisite of a better knowledge and an attitude among the staff members. The following graphs summarize the main results;

- 5S concept can be implemented successfully in the public sector and the private sector alike.
 - It was found that 89% of the whole staff agrees on the possibility of implementing 5S concept successfully in the public sector as well as private sector. This gives an important indicator of the positive thinking of the hospital staff and reflects their confidence in the success achieved.

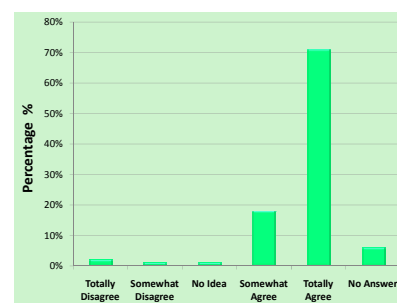


FIGURE 5- 18: 5S CAN BE IMPLEMENTED AT PUBLIC HOSPITALS

- Labour disputes can be minimized in institutions where 5S concept is being implemented.
 - 79% of the staff considers that labour disputes can be minimized in institutions where 5S concepts are implemented. Only a small percentage of 7% is of a contrary view. This is another indicator of the benefits identified and felt by the staff during the implementation of 5S in thier hospitals.

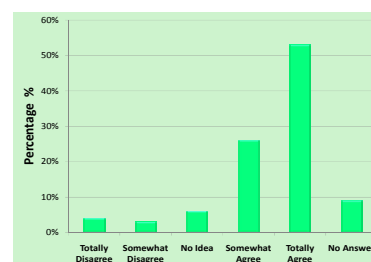


FIGURE 5- 19: LABOUR DISPUTES CAN BE MINIMIZED

- Employees can receive more benefits by practicing the 5S concept
 - Again, 76% of the staff of the five hospitals interviewed, felt that employees could reap more benefits by practicing 5S concepts in comparison with the 10% in disagreement. This is a positive achievement towards changing the mind set of the staff of the hospitals taking into consideration the fact, that the programme is still in its infancy with one year of implementation.

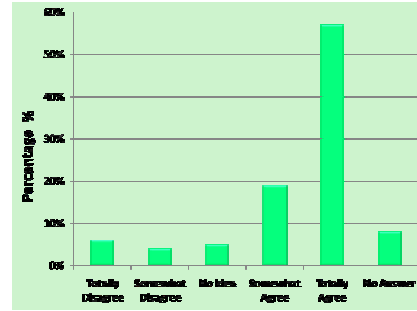


FIGURE 5- 20: EMPLOYEES CAN GET MORE BENEFITS

- Productivity provides benefits only to the officers of higher level
 - Most of the staff, (76%) disagrees with the statement that “productivity provides benefits only to higher level officers” in comparison to 11% who agreed. This ensures that the staff really understands and experiences the benefits of productivity principles when applied in hospital settings.

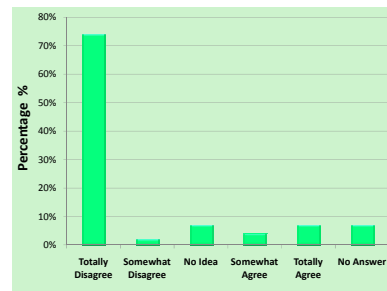


FIGURE 5- 21: PRODUCTIVITY PROVIDES BENEFITS ONLY TO A HIGHER FFICERS

- 5S implementation is a tool of economising funds
- It is very important to ensure that 63% of the staff is in agreement that after implementation of 5S, the money can be saved. It is imperative to ensure that the staff understands that quality and cost are not synonymous.

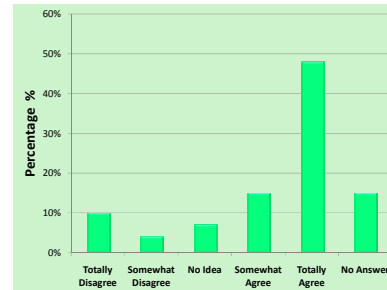


FIGURE 5- 22: MONEY CAN BE SAVED

- The workload level when 5S concept is implemented
 - Other important principle that was found to be familiar among the staff of the pilot hospitals is that the workload is eased when 5S concept is implemented.

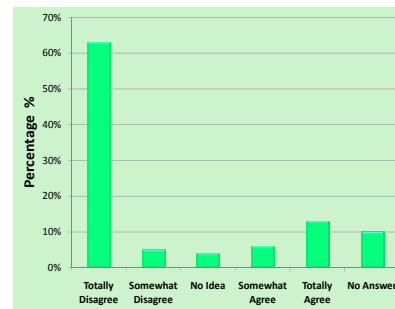


FIGURE 5- 23: THE WORK-LOAD INCREASES

- The money allocated to the government hospitals is hardly adequate to implement the 5S concept

- The statement, “the money allocated by the government to hospitals are hardly adequate to implement the 5S concept principles” is dividing the staff into two camps of thinking.

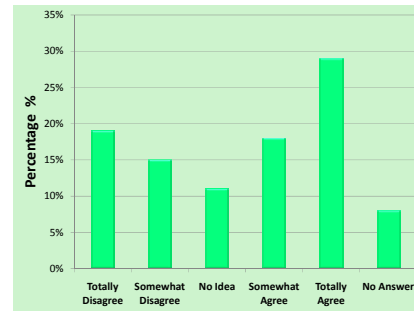


FIGURE 5- 24: MONEY ALLOCATED FOR THE HOSPITAL

This is a difficult concept to be resolved in the first year of implementation, and also would result from the different experiences with the shortage of funds as well. This is the same with the statement, “The staff must be increased to implement the 5S concept,” as several hospitals experienced a persistent shortage of staff, especially the minor staff responsible for the housekeeping functions.

F. SUGGESTIONS AND RECOMMENDATIONS FROM THE HOSPITALS STAFF

- Many hospital staff members are of the view that a national policy on quality management should be adopted. The operation of a separate unit for this purpose in the Health Ministry will facilitate easy implementation island-wide.
- Basic facilities (eg:-Digital camera, computer, multi media projector) to initiate quality management programmes should be provided to each and every hospital. This will enable to witness the gradual progression of the hospital.
- Training programmes should be conducted to impart necessary knowledge on quality improvement programmes which should be done equally among all staff members. Knowledge can be imparted by several means: lectures, work shops, success stories etc... Many people prefer to have field visits in hospitals where 5S is implemented successfully. This is not only a source of motivation but a channel of enhancing knowledge to improve their hospitals.
- Regular supervision has to be made. By this, mistakes and obstacles for improvement can be identified and solutions for them can be found. Most hospital staff members favoured regular supervision. A checklist can be used for this purpose.
- Regular review meetings have to be held in order to review the progress. Participation in such programmes is imperative irrespective of the cadre. Problems identified in each unit should be addressed. Minutes of the meeting has to be prepared and distributed throughout the hospital. At the next review meeting, progression should be reviewed.

5.2.3 JICA – EBM QUALITY AWARDS

Phase four inuniciates the implementation of 5S-TQM to share and communicate the results of the final assessment/audit to all involved

parties. Based on the results of this assesment, EBM Study Team organized an Awards Ceremony under the title “JICA-EBM Quality Awards Ceremony, 2007”

- Objectives:
 - Recognizing and rewarding the efforts of the staff at pilot hospitals.
 - Creating a demand for quality health services.
 - Raising awarness among institutions inside and outside the MOH.
 - Winners of the Quality award will publicise their achievement.

Under the patronage of JICA country representative, and the secertary of MOH, the ceremony was held on August 13, 2007 with an attendance of about 80 invitees of pilot hospitals, MOH, and other related insitutions.

Kurunagala Teaching Hospital secured the first award as the ‘Best implementers of 5S-TQM’.

Other hospitals won merit awards as follows;

- Chilaw : Best progress in short time.
- Dankotuwa: Best quality improvement team.
- Madampe: Best community involvement .
- Kuliypitiya: Best 5S zone applying 5S-TQM.



FIGURE 5- 25: JICA-MoH OFFICIALS WITH THE AWARD WINNERS

5.3 FACTORS CONTRIBUTING TO THE SUCCESSFUL IMPLEMENTATION OF 5S-TQM IN HOSPITALS

Three case studies and success stories of the three hospitals, namely, CSHW, Ampara G Hospital, and Monaragala DG Hospital, were employed to study the main contributing factors of the successful hospitals, in implementing 5S- TQM approach and to determine the existence of common factors among those hospitals (Annexure).

- **Main findings**

The studies ruled out four common factors contributory to the success of those hospitals. (They are mentioned below). The following table summarizes the comparison of the three hospitals.

Table 5- 6: Comparison of the 3 Hospitals

	CSHW	AMPARA	MONARAGALA
Profile			
Location	Colombo District – Western Province	Ampara District – Eastern Province	Monaragala District – Uva Province
Specialty	Gynaecology	General	General
Type of Hospital	Teaching Hospital	General Hospital	District General Hospital
Bed strength	383(year 2005)	430	355
No of staff	115(year 2005)	745	112 (year 2006)
Doctors	...		43
Paramedics	278		128
Nursing staff	204		133
Minor staff	865		429
Total			
Awards	4 (Taiki Akimoto Award, National Productivity Award,Kaizen Award, SLNQ Award)	7 (Taki Akimoto Award 2003/2004, National Productivity Award 2004/2005,Special Kaizen Award JASTECA, National Quality Award)	1 (Taki Akimoto Award)
5S started	April, 2000
Success factors			
Key Leadership	<ul style="list-style-type: none"> -Director of the Hospital -Initial assessment of the hospital set up done by the leader -Identification of dedicated group -Make a feasible plan -Prioritization of challenges 	<ul style="list-style-type: none"> -Director of the hospital -Continuous motivations given to the staff despite occasional drawbacks. 	<ul style="list-style-type: none"> -Consultant Anaesthetist -Give Continuous motivation to the staff -Keep non-confrontational attitude of the leader.
Resource utilization	<ul style="list-style-type: none"> -Efficient utilization of available resources -Cost-cutting materials were used when ever possible -First obtain recognition then ask for funds 	<ul style="list-style-type: none"> -Efficient use of available resources -Hospital developmental committee contributed -Launch self funded programmes 	<ul style="list-style-type: none"> -Efficient use of available resources -Launch self funded programmes -Financial support from non governmental organizations
Training	<ul style="list-style-type: none"> -Continuous training programmes is a key feature 	<ul style="list-style-type: none"> -Continuous training programmes -Use IT training for all categories of staff 	<ul style="list-style-type: none"> -Initially several trainings were done -Conduct Field visits
Team work	<ul style="list-style-type: none"> -Strengthen team work including majority of the staff members 	<ul style="list-style-type: none"> -Strengthen team work with staff members 	<ul style="list-style-type: none"> -Strengthen team work in staff members -Less than 50% of the staff joined the WITs

Monitoring and supervision	<ul style="list-style-type: none"> -Majority joined the WITs -Regular supervision and monitoring by the Head of the units/nurses/minor staff 	-Regular supervision and monitoring at a satisfactory level	-Regular supervision and monitoring at a satisfactory level
Others	<ul style="list-style-type: none"> -Well functioning information gathering system -Feedback for the staff at a satisfactory level (appreciation/rewarding), -Establishment of a well functioning CSD -Several measures to reduce work load of the staff were adopted -Staff welfare issues were well addressed 	<ul style="list-style-type: none"> -Well functioning information gathering system -Hospital Development Committee helped a lot. 	<ul style="list-style-type: none"> -Establishment of a well functioning CSD -Staff welfare issues were considerably well addressed
Weak Areas	No internet facilities for the staff	Negative attitude among the staff is still prevalent	<ul style="list-style-type: none"> -A continuous training programme is not in practice -Negative attitude among the staff is still prevalent

- As part of the workshop that was held in CSHW from May31 to June 2, 2007, a SWOT ANALYSIS was done for three pilot hospitals.
- Members of the three hospitals, Chilaw, Kulyapatiya, and Dankotuwa participated in that exercise. Dr. Samarage facilitated this session.
- The main points of strength and opportunity that contributed to their success were as follows:
 - I. Good leadership and proper supervision of the leaders of each unit.
 - II. Strengthened hospital development committee.
 - III. Support of the community.
 - IV. Appointment of a permanent MS to the hospital. (Chilaw)
 - V. Fine support of the Regional Director of Health Services.
 - VI. Opportunity to participate in training programmes.
 - VII. Establishment of QMUs.
 - VIII. Organization of award ceremonies.

Several of the above mentioned points have been emphasized by many participants from the three hospitals.

It seems that there is an excellent match between the “old” three model hospitals, and the “new” pilot hospitals on the factors that contribute to the success in implementation of 5S-TQM approach in the hospitals.

- Common Factors:
 - Strong and persistent leadership
 - Continuous training programmes or field visits to keep the staff enthusiastic
 - Regular supervision and monitoring
 - Efficient use of the available resources

These contributing factors should be seriously taken into consideration by decision makers in planning and implementing Quality Management projects in the future.

5.4 INTERVENTIONS AT THE NATIONAL LEVEL

Several important developments have been achieved as the main outputs of EBM Study at the central level to provide the MOH with decisive cornerstones to formulate the National Quality Management Programme. Among those are:

- Development of the Quality Management Tools
- Guidelines for 5S implementation at hospital settings.
- Development of a proposed National Action Plan

The first two strategies are very crucial at the level of implementation of the 5S – TQM programme. The programme needs the guidelines to create a standardized understanding and practice of the approach, and required tools to document, assess, monitor, and evaluate the 5S – TQM programme. Those two aspects are fundamental necessities prior to expanding the programme.

Based on the evidence of the study, the MOH in collaboration with EBM, had developed a proposal for the National Quality Management Programme that focuses in its main component , on the enhancement of the Quality Secretariat as the hub for designing and monitoring the Quality Management programme and building a network of provincial and district unit to cope with the expanded programme island-wide.

5.4.1 DEVELOPMENT OF QUALITY MANAGEMENT TOOLS.

During the implementation of EBM study, various tools were introduced. The aim was to use the tools to document the work undertaken as well as to assess the quality improvement process. These tools were drafted by the EBM team in collaboration with the QS and JASTECA, and then utilized at the pilot hospitals.

During this period, it was observed that the survey instruments required improvement. The information and data drawn by the standardized tools could be compared and used for better planning by the hospital management as well as policy makers.

A working group was formed to review the existing instruments used in Baseline Surveys and in other quality related studies such as patient and staff satisfaction surveys with a view of producing reliable research tools.

This working group was formed in January 2007. It consisted of nine medical professionals nominated by the Director General of Health Services for this purpose.

The first working group meeting was scheduled for January 2007. Through bi-weekly meetings, the working group modified the existing instruments and tools to make it more compatible with the health sector.

- List of revised and developed tools.
 - Set of documentation tools of quality improvement.
 - Set of instruments to be used for Baseline Survey/ situational analysis (including KAP study tools) to assess and review quality and related principles in the hospitals.
 - Set of auditing sheets of all components of 5S and quality of hospital leadership for measuring and monitoring hospital quality.

Those sets of tools will serve as excellent sources of instruments to help the MOH in designing, implementing and monitoring the QMP in the future.

A. DOCUMENTATION TOOLS OF QUALITY IMPROVEMENT

Basic set of tools tailored for documenting changes:

- WIT work sheet

This work sheet helps WIT to plan and record the steps for identifying and analyzing problems, changes being tested and the results. Once manageable tasks are identified to solve the problem, the team tackles with one task at a time, and the process and the result are recorded on the worksheet. It will help WIT to record the changes systematically. Each team will maintain a file of the work sheets for later assessments.
- Work planning form for WIT

WIT leaders list all changes that are tested on this form. This summarises the process and results as per quality problem. It also records a problem statement, aims and the measures to determine whether expected results are achieved or not. This helps the team to see their work at a glance and identify the changes and those yet to be made. JASTECA has successfully utilized a similar format which is called 'Traffic light system'. This indicates green light if the identified problems are solved, yellow for 'in progress' and red for 'not being solved'.
- Story Boards

This tool is for presenting teams work to other groups. The use of this tool requires training in order to produce an analytical report display presentation skills.
- WIT Assessment Sheet

This tool is to assess progress of work by WIT. This sheet is used by supervisors from Quality Management Unit (QMU) to monitor performance of WIT.

B. KAP STUDY TOOLS

- This set includes the following,
 - Assessment of the present state of quality and productivity of the selected institute.

- Collection of the vital statistics and factors associated with the health indicators.
- Assessment of knowledge, attitude, and practices of 5S-TQM concepts.

(These instruments were discussed earlier).

c. 5S AUDITING SHEET

This set was described in detail under section 4.4.2 of final assesemnt/auditing of 5S at pilot hospitals.

5.4.2 GUIDELINES FOR 5S IMPLEMENTATION

The guidelines will describe step by step implementation of 5S and would serve as a quick reference guide for the hospitals interested in initiating 5S implementation. The formation of the guidelines will also facilitate ongoing efforts at the public hospitals where 5S is already introduced

Understanding successful implementation of 5S and Kaizen is still a challenge. There is a human element involved in those methods which undoubtedly plays a very significant role in the implementation of TQM practices.

As the concept and principles of 5S, Kaizen, and TQM have been implemented in the industrial sector prior to the service sector (including the health services), documentation and literature concerning implementation of 5S-TQM in health services is very limited.

There are no comperhensive guidelines for implementation of 5S in the fabric of healthcare in Sri Lanka.

According to the HMP, it was stated that, “Based on the project experience implementation guidelines will be developed for all public hospitals” Volume II – Page 6-20.

EBM study developed the guideline for 5S implementation as one of the main outputs to fill this gulf of knowledge and practices in the decisive field of enhancing health services in Sri Lanka.

Based on the field experience from the pilot hospitals and other hospitals that were involved in implementation of 5S-TQM approach, the 5S- TQM guidelines have been developed to assist any hospital in the country which has a comprehensive plan and commitment to implement such approach.

The guidelines are presented in a concise, direct and a condensed manner to be easily accessible by the reader and the implementer alike (**Anexure 5**).

5.4.3 DEVELOPMENT OF THE NATIONAL ACTION PLAN

Under the first strategic objective of the Health Master Plan (HMP), the programme of “Enhanced quality of services delivery” was identified as one of the programmes of priority to be tackled by the MOH. The MOH leads the quality improvement project to ensure the formulation of a programme capable of fostering team spirit, which will simultaneously focus on patient-satisfaction.

Based on the evidence from the interventions of the EBM study and from other existing quality improvement programmes, the MOH in collaboration with EBM study, developed a proposal of a National Action Plan (NAP) for the next few years.

A. PROFILE OF ACTION PLAN

This proposal of the National Action Plan responds to three main policy goals- number 2,3 and 4 of the draft National Policy of Quality and Safety for hospitals. The three related projects will be embodied in this programme. However, it should be noted that the first project concerning the organizational development, is considered a prerequisite to all other projects, serving as the foundation of the entire programme. Those projects are;

- Organizational development for the quality management programme. For implementation under the second policy goal: Managerial systems
- Implementation of National Clinical Guidelines in the MOH hospitals. For implementation under the third policy goal: Clinical Practice
- Establishment of Risk Management System to ensure patient and staff safety in the MOH health institutes. For implementation under the fourth policy goal: Risk Management and Safety

The proposed plan of action is to be finalized after reviewing and receiving comments of stakeholders.

A.1 ORGANIZATIONAL DEVELOPMENT FOR THE QUALITY MANAGEMENT PROGRAMME (QMP)

This project aims to develop the structure and the organization that facilitates the National Quality Management Programme (QMP) that would facilitate the institutionalization of quality management including 5S practices in health institutions.

The strategic framework of this project is based on the recently drafted National Policy on Hospital Quality and Safety, with specific focus on organizational development. Improved productivity and quality of health services will be the ultimate aim of the Quality Management Programme, and organizational development contributes to management, improvement and identification of the factors that influence clinical quality and safety.

This Action Plan, advocates the establishment of a co-ordinating body at the provincial and district levels. The establishment of a Quality Department in the existing Planning Unit of the Provincial Development of Health Services (PDHS) is a foremost priority in this project. Once a pool of trainers and model hospitals are created within the province/district, the Quality Secretariat could take up a more strategic role as the central support unit for guiding, training in quality

management, evaluation of the programme, and advocating quality and safety issues in the clinical dimensions.

At the ground level, the health service institutions including MOH offices, will establish a Quality Management Unit (QMU) and Work Improvement Teams (WIT) in their respective institutions. The responsibilities at each level will be defined and quality management cycles will be practiced at the hospitals. Regular and continuous training is a key driver to improve employee participation.

A.2 IMPLEMENTATION OF NATIONAL CLINICAL GUIDELINES IN THE MOH HOSPITALS.

The National Policy on Hospital Quality and Safety, identifies clinical practice as the third policy area with the objective of promoting evidence-based as well as ethically-accepted clinical practices. The first of the four strategies proposed, is “to minimize variation by developing evidence-based clinical protocols and guidelines on clinical procedures”. The second strategy suggested is “to develop a mechanism for professional oversight and per review and audit of clinical practices”.

This project intends to follow up on the above policy directions by effective use of the recently launched National Clinical Guidelines, and develop additional guidelines when necessary and launch a process of implementing those guidelines in the clinical practice of all hospitals.

Initially the hospitals manned by specialists, will be targeted with the intention of extending to other hospitals. These guidelines are developed with the assumptions that the expected facilities are available in all hospitals of the country, banking on the experience of the experts responsible for their development.

A.3 ESTABLISHMENT OF A RISK MANAGEMENT SYSTEM TO ENSURE PATIENT AND STAFF SAFETY IN THE MOH HEALTH INSTITUTIONS

This project is based on the recently developed National Policy on Hospital Quality and Safety. The policy identifies Risk Management and Safety as the fourth policy area to be addressed in order to achieve the goal of risk identification, analysis and control, which would ensure a positive environment that guarantees patient and staff safety in the MOH hospitals.

This project intends to achieve improvement with integrated patient and staff safety as the ultimate goal. Its primary target is to minimize preventable adverse events and to encourage a systematic approach in examining contributory factors that lead to these events.

The project is planned, to initially establish Risk Management Units (RMU) at two levels: Central and Regional, but as the system expands, setting up a Provincial level Unit is to be considered.

Chapter 6

WAY FORWARD

Key Messages

- The recently drafted National Policy on Hospital Quality and Safety advocates a wider spectrum of quality improvement in public hospitals. The proposed three projects correspond to its three policy goals; management systems; clinical practice; and risk management and safety.
- The absence of adequate institutional initiatives is the main factor inhibiting efforts aimed at improving quality of hospital care. To overcome this challenge, leadership at the institutions needs to be strengthened and skill levels need to be improved. In addition, systems such as regular review mechanisms, setting standards, etc. also need to be strengthened.
- There are ample models in Sri Lanka, which illustrate that public hospitals can replicate practical lessons learnt from elsewhere (e.g.: GH Ampara and CSHW). However, replication is still a significant challenge because most of the successful replications relied on strong and determined initiatives by individuals. However, this is often an unrealistic expectation. A systematic support network is essential for successful replication across the country, and currently, such a network (including systems and processes) is missing. Future efforts need to focus much attention on developing such support networks.

6.1 DEVELOPMENT OF NATIONAL POLICY ON QUALITY AND SAFETY IN HOSPITALS

6.1.1 BACKGROUND

- **Rationale for a policy on quality**
Policy makers and health administrators have attempted to address the quality problems to a certain extent in hospitals in the past by instituting a quality assurance programme and more recently through the 5S programme. However these attempts have not taken off the ground in the past. Though many initiatives are currently undertaken to improve quality of care, they are scattered and uncoordinated. The reason for this is the lack of comprehensible policies and strategies that could trigger a coordinated set of actions for quality improvement through out the Sri Lankan hospitals. Even the current efforts of the 5S programme will not succeed unless there is an unambiguous policy. Hence, the need to develop a hospital quality policy and a strategic plan was felt as a dire need for the sustenance of quality improvement.
- **Appointment of a formulation committee**
A policy formulation committee consisting of policy makers at central and provincial levels along with experts on hospital quality improvement was appointed by the Secretary of Health. The committee work commenced in December 2006 with the reviewing of draft quality policy that was developed in 2005, and ended in June 2007.
- **Process of development**
The committee's tasks included reviewing of existing policies and studying of priorities and performances of various dimensions and domains that surround quality. The review of previously drafted policies resulted in understanding the dimensions of quality and gaps in the draft policy. The preliminary step for the formulation of strategies was taken by the committee who proceeded to conduct a SWOT analysis on the dimensions that were chosen as objectives for satisfactory quality. SWOT analysis resulted in the identification of current weaknesses and opportunities for improvement. Then, the committee followed up with selection of policy goals and analysis of policy options in the context of the selected goals. The policy and strategies in this exercise is the outcome of analysis and discussions leading to possible interventions described under the selected strategies
Evidence gathered from the Baseline Survey, case studies and other surveys conducted by the EBM study, were used as background materials.
The formulation of quality policy was based on the framework of structure-process-outcome and also on the quality dimensions described in the USA Institute of Medicine's (2001) report which draws attention to six key areas where process changes can

improve the care delivered. Namely, patient-safety, timeliness, effectiveness, efficiency, equity and patient centeredness.

6.1.2 KEY FEATURES

- **Vision :** Sri Lankan hospitals will be recognized for excellence in provision of high quality care adhering to international standards
- **Mission:** Provide hospitals, a service of demonstrable high quality through continuous improvement of quality and safety in response to customer / patient expectations with full involvement of the staff and stake holders

- **POLICY GOAL 1 -CUSTOMER / PATIENT SATISFACTION**
The organizational behavior will be changed towards more customer-centred care in a manner that is respectful and responsive to patient's preferences, expectations and values.
- **POLICY GOAL 2 -MANAGERIAL SYSTEMS**
Shared responsibilities and values, including team work will be instituted. Organizational development will be accelerated. Stakeholder participation in management of hospitals will be ensured.
- **POLICY GOAL 3 -CLINICAL PRACTICE**
Evidence based clinical practice will be established
- **POLICY GOAL 4 -RISK MANAGEMENT AND SAFETY**
Mechanisms for risk identification, analysis and control will be in place. A positive setting towards patient and staff safety in hospitals will be created.
- **POLICY GOAL 5 -STAFF COMPETENCE AND WELFARE**
Health staff will be regularly empowered with knowledge and technical competence through continuous education with a view of developing a culture of productivity, quality and safety. Staff welfare and satisfaction will be assured.
- **POLICY GOAL 6 -INSTITUTIONAL STRENGTHENING**
Ensure adequate co-ordination and sharing of resources among health institutions to enhance equity in improvement of quality.
- **POLICY GOAL 7 -HEALTH PROMOTION**
Create a network of health-promoting and environmental-friendly hospitals with full participation of the community.
- **POLICY GOAL AND -ENABLING AN INTERNAL ENVIRONMENT OF QUALITY**
Support leadership development at all levels. Encourage the hospitals to reach the level of 'learning organizations'. Spiritual health will be encouraged.

- Approval and adoption of policy document

It is worth noting that the policy is considered the final draft awaiting the approval of the Minister of Health and Nutrition.

- Next steps to advocate the functioning of the National Policy on Hospital Quality and Safety

The strategies listed above have addressed the key quality issues and given the direction for key interventions. A framework of implementation has to be developed next. The success of the strategies depends on the commitment of all employees, strong leadership with the capacity to make decisions to revise the activities in response to the feedback.

Policies such as setting up of a viable organizational structure with a steering committee at national level and similar committees at provincial/district levels would help them to play a leadership role in sustainability of the programme. This is also essential for future expansion of the EBM study. The policy also urges the stakeholders to play a major role actively involving themselves in the development of the system and monitoring of the progress.

For scaling up and expansion of EBM study to cover the whole country, a phased approach has to be sought. The evidence gathered in the process of implementation of the EBM study should be reviewed regularly and this evidence has to be taken into account to revise the plans.

6.1.3 POLICY CONSIDERATIONS FOR IMPLEMENTATION

A. STRENGTHENING THE ROLE OF THE QUALITY SECRETARIAT (QS)

- Reviewing and updating the position of the QS in the MoH organogram and its financial situation.
- Reviewing and updating the organization chart of the QS.
- Continuous reviewing and updating of the functions of the QS.

B. BUILDING UP CAPACITIES FOR QUALITY IN ALL HEALTH PROVINCES

- Develop a quality structure at the provincial level and at the district level
- Training of Trainers (TOT) at the provincial level aiming at the expansion to the district level

C. CREATING DEMAND FOR QUALITY IN HEALTH SERVICES

- Disseminate quality concepts to increase quality awareness among all stakeholders.
- Announce and nominate the best performing facilities periodically to the public.

D. ENSURING CO-ORDINATION AMONG MAIN PARTNERS OF HEALTH CARE

- Establish networks between partners of health.

- Establish a data base for quality management.
- Establish a multi-institutional quality committee to co-ordinate activities of quality among different partners.
- Establish a central committee from different sectors of MOHN to co-ordinate quality activities, unify concepts, and approaches among different sectors.

E. ESTABLISHMENT OF A MONITORING SYSTEM

- Establish a system for data collection and comparative analysis.
- Develop selected sets of quality indicators to measure performance for primary, secondary, and tertiary health care.

F. INTRODUCING HEALTH CARE ACCREDITATION SYSTEM IN SRI LANKA

- Enhance leadership commitment towards the new programme.
- Formulate committees to establish standards, accreditation tools, and training activities on relevant topics.
- Involvement of professional Collages to support the system.

6.2 CHALLENGE OF SUSTAINABILITY AT PILOT HOSPITALS

Focus Group Discussions (FGDs) were carried out in the five pilot hospitals at NWP, where 10 to 14 staff members from all categories of each hospital were questioned about their opinion concerning the sustainability of the Quality Improvement programme in their respective hospitals at the end of the EBM study.

Results of the discussion addressed the following main areas:

- Overall analysis
- Specific findings
 - Demands
 - Institutional capacity
 - Enabling environment.

Thirteen indicators were selected to arrive at a clear response on the main aspects of those domains.

Based on the overall results of the discussions, a critical policy implication has emerged. This implication is drawing the attention to a coordinated network that should be established at central and regional levels to assist the hospitals in managing their quality programmes.

6.2.1 OVERALL ANALYSIS

All five hospitals indicate that they have potential to sustain the 5S-TQM activities. However, human factors, training, policy and RDHS support are inadequate in most hospitals.

Human factors are related to the lack of sufficient minor staff and support from Consultants. Three out of five hospitals find it difficult to continue organizing training programmes for their staff. All hospitals acknowledge the lack of policy-support to enforce and sustain the activities. Finding sufficient funds to initiate activities was a challenge to the pilot hospitals. This indicates that timely support from the RDHS office will be crucial for the sustainability of their activities. Clear guidelines to enforce quality requirements to the hospitals would be fundamental to ensure the sustainability of the programme.

How likely will they be able to sustain activities? If the five pilot hospitals could not overcome the above-stated problems, their probability of sustaining their activities would most probably decline.

Policy Implications

- Guidelines should be developed to set up quality requirements of the hospital.
- A coordinated network should be established at central and regional levels to help the hospitals in sustaining their quality management programme.
- A mechanism to provide systematic and continuous training should be in place.

6.2.2 SPECIFIC FINDINGS

A. DEMANDS

Table 6- 1: Demands of the pilot hospitals

Indicators	Kuliyapitiya	Chilaw	Dankotuwa	Madampe	Kurunegala
1. Initiation	Director	MS	DMO	MOIC	Director
2. Leadership Qualities	>Planning on training programmes >Good listener >Good Willingness	>Enthusiasm >Positive attitudes >Good listener >Ability to work with everyone in the staff	>Enthusiasm >Good listener >Willingness	>Ability to plan events >Guiding others >Organization >Motivation >Team work	>Ability to identify others capabilities >Good listener >Like challenges >Inspection >Ability to get donations
3. Internal Support	>Overall Satisfactory >Less from Consultants	>Good support from the staff except the medical officers	>Good support from the whole staff.	>Good support from the whole staff.	>Good support from the whole staff.

- **Initiation**

There is a consensus among all hospitals that the Institutional Head is the ideal person to initiate quality improvement, and probably a contributing factor to the continuation of the programme.

- **Leadership qualities**

In all hospitals the institutional heads have similar qualities that help maintain the programme. Good leadership leads to success.

- **Internal support**

Satisfactory support is given by the majority of the staff, although the enthusiasm displayed by the the medical officers toward the programme is not satisfactory.

B. INSTITUTIONAL CAPACITY:

TABLE 6- 2: INSTITUTIONAL CAPACITY OF PILOT HOSPITALS

Indicators	Kuliyapitiya	Chilaw	Dankotuwa	Madampe	Kurunegala
1. Person in charge	QMU with guidance of MS	QMU with guidance of MS	QMU with guidance of DMO	QMU with guidance of MOIC	QMU with guidance of Director
2. Staff adequacy	Adequate except minor staff	Adequate except minor staff	Lack of staff is a major problem	Staff is lacking in all categories	Staff is lacking in all categories, esp. minor staff
3. Quality assurance body	QMU established	QMU established	QMU established	QMU established	Well structured QMU established.
4. System for performance review	<ul style="list-style-type: none"> >Regular supervision >Monthly review meetings with unit in-charges >Monthly drug review meeting >Surveillance studies for both Patient & Staff, >Rewarding good performance 	<ul style="list-style-type: none"> >Regular in -charge meetings >Regular supervision >Rewarding good performance 	<ul style="list-style-type: none"> >Daily visits from the secretary of the Steering committee. >Regular inspections >Rewarding good performance 	<ul style="list-style-type: none"> >Daily inspections by the MOIC >Praising good work >Discussing about problems as soon as possible 	<ul style="list-style-type: none"> >5S review meetings >Good communication between Director & staff >Regular inspections >Praising & rewarding good work
5. Training programmes	<ul style="list-style-type: none"> > Adequate on theory > Field visits to other hospitals > Basic 5S for Majority of staff 	<ul style="list-style-type: none"> >Training not equally given (esp. minor staff) >Better if field visits were organised 	<ul style="list-style-type: none"> >Some staff received lectures, field visits, visuals of other hospitals >Better if training could be provided to all staff members. 	<ul style="list-style-type: none"> >All have got training equally. >Staff are satisfied with training 	<ul style="list-style-type: none"> >All the staff has received training on 5S at least once.
6. Availability of initial resource	>Not adequate, Small extra budget required to cover	>Not adequate, Small extra budget required to cover	>Not adequate, Small extra budget required to cover	>Not adequate, Small extra budget required to cover	>Not adequate, Small extra budget required to cover
7. External Financial Source	<ul style="list-style-type: none"> * Provincial Fund * Fund raising through-Welfare, Lottery, Drama, Hospital fund, Donations from business community 	<ul style="list-style-type: none"> *JICA *Patients *Lottery *Well fare society *Businessmen 	<ul style="list-style-type: none"> *Patients *Steering committee 	<ul style="list-style-type: none"> *RDHS office *Sanasa bank *Hospital dev.committee *Well wishers 	<ul style="list-style-type: none"> *Donations from patients *Surrounding community

- Leadership & human factor
 - There is a consensus that the QMU with the guidance of the Institutional Head should carry on the 5S programme. In all five hospitals a QMU was established.
 - Another obstacle was the lack of staff, mainly minor staff. However, their enthusiasm enabled the programme to be continued effectively to date.

- Performance review
 - Various methods to review performance are in place at respective hospitals.
 - All these devices motivate the hospital staff and uplift their enthusiasm to maintain the good work. Majority of them prefer regular inspections which help to identify their shortcomings.
 - Occasional rewarding, boosts the performance of the staff.

- Training
 - Most of the staff members have received at least a basic training on 5S which urges them to make changes in their working environment. Others are anxiously awaiting training. Most prefer to have field visits to model hospitals to nurture their own.

- Initial resources
 - Initially, all five hospitals lacked basic resources to initiate the programme. After a strenuous effort they managed to obtain the basic resources from the Ministry of Health, JICA, and the community.
 - All agreed upon sustaining the programme without an extra budget.

- External resource
 - All five hospitals receive adequate external financial support which is a positive sign towards the sustainability of the programme.
 - External support is likely to increase upon the witnessing of the progress at the hospital.

c. ENABLING ENVIRONMENT

Table 6- 3: Enabling environment at pilot hospitals

Indicators	Kuliyapitiya	Chilaw	Dankotuwa	Madampe	Kurunegala
1. Enforcement of regulations/ Policies	A need	A need	A need	A need	A need
2. Support from RDHS office	Not adequate	Not adequate	Not adequate	Receives good support	Not adequate
3. External Support	>Hospital dev. Committee (Divisional Secretary – Political, Business Com.- Donations, Religious Leaders– Advice,)	>Hospital dev. committee (Divisional secretary, religious persons, businessman)	>Steering committee(Ministry, businessman, various societies...) >Adequate donations but don't receive on time	>Hospital dev. Committee >AGA office >Banks in the area >Businessmen	>Received many donations from the community after seeing the progression

- Enforcement
 - There was a consensus among all hospitals for a National Policy for Quality Management in hospitals at the Ministry level. This will not only facilitate island-wide extension of the programme but will prove to be cost-effective as well.
- Support from RDHS office
 - Except for Madampe hospital, the support received from the RDHS office is not satisfactory.
- External support
 - Despite the lack of support from the RDHS office, the backing received from the community, especially from the hospital development committee is noteworthy. This is a promising sign for the sustainability of the programme.
 - According to the hospital staff there is a visible increase in various types of donations from the community, after witnessing the progress of these hospitals.