

## IMPLEMENTATION OF 5S – KAIZEN- TQM IN BANGLADESH HEALTH SECTOR

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Health service provided in health facilities in the country leave much to be desired in terms of quality. Inadequate finding, shortage of human resources and other key health resources, poor infrastructure and other key health resources, poor infrastructure, uncoordinated quality improvement program and lack of comprehensiveness on the quality improvement initiatives, have been the stumbling blocks [1,8]. In 1960 Total Quality of Management (TQM) was started in industrial sector of Japan. Later on it was introduced in health sector [2,10]. This ideology was adopted in Sri Lanka from 1993. In 1996 TQM ideology was bestowed with “Malcolm Baldrige National Quality Award” of America [2,8]. In 2007, the 5S activities, in the first step out of 5S-KAIZEN-TQM stepwise approach of program, was applied to 8 African countries: Eritrea, Kenya, Tanzania, Madagascar, Malawi, Nigeria, Senegal and Uganda [3,9]. UNICEF & JICA showed interest to introduce TQM in health sector of Bangladesh, from 2010 and started piloting few Medical Collage Hospital, District Hospital & Health Complex. The piloting place in Chittagong Medical Collage Hospital are Neonatal & obstetrics wards. Now, sharing of TQM frame work running in Japan-Asia-Africa. Approach of 5S – KAIZEN (CQI)- TQM in 3 steps. 1st step: 5S, 2nd step: Kaizen (Continuous Quality Improvement) 3rd step: TQM. Common problems in Hospitals are Increased work load, High absenteeism, High turnover, De-motivated employees, Disorganized environment, Mistakes / errors, Accidents, Dissatisfied patient’s (Patient complaint’s), Stress and Strenuous. The solution all of these problems is a gateway to improve quality of care in Hospitals. 5S (Sort, set, shine, standardize and sustain)[4,10].

It is the stepwise approach aimed to create this value co-creation organization to provide better services by promotion organizational changes of a hospital. Idea behind 5S in order to achieve high levels of quality, safety and productivity all Hospital or Collage employee must have a conducive working environment. Sort involves classification process medicines, surgical instruments and other equipments. Materials or Items are Classified as: Red tag: Not needed and dispose it. Orange tag: We may / may not need this Green tag: We do need and it keeps it. Orderliness / Systemize, once you have eliminated all the unneeded items, now turn to the left over items. Organize layout of drugs, tools and equipments in designated locations, use tapes and labels, ensure everything is available as it is needed and at the “Point of use”. Seiso is cleaning up one’s work palace completely so that there is no dust on floors, machines or equipment. Individual cleaning responsibilities assigned, make cleaning and inspection easier, clean the places where most of the people do not notice and cleaning inspections and correct minor problems and regular sparkling cleaning campaigns. Standardize done by generate a maintenance system for the first three, develop procedures, schedules, practices with continue to assess the use and disposal of items & regularly audit using checklists and measures of housekeeping. Training & self discipline (Sustain) is training people to follow good work habits and the strict observation of workplace rules. To Sustain: Periodic training, Poster display, Essay & Quiz competitions and on the job training[5,10]. 5S is becoming popular for: It is within the reach of organizations of any size of hospital small, medium and large. Results are visible to everyone insiders and outsiders. Visible results enhance the generation of more and new ideas. 5S is an Organization wide participation program for Kaizen: 5S is an organization wide participation program involving everyone in the organization.

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It is recommended to start implementing 5S in a well chosen pilot unit or pilot process, and spread to the others step by step. Four key factors for successful 5S: i) Continued commitment and support by top management ii) 5S starts with education and training iii) There are no observers in 5S, every one participates iv) Repeat the 5S cycle in order to achieve a higher standard[6,8,10]. An organization that is implementing 5S successfully is always: High in productivity, Consistent in quality, Costeffective, Accurate in delivery & Safe for people to work in with high in morale. What we have come across at the end of day by 5S: i) Neat & clean workplace ii) Smooth working iii) No obstruction iv) Safety increases v) Productivity improves. KAIZAN-continuous quality improvement is a process to secure “Productivity” of our work. This is a nonstop, day to day process to improve the standard of work, followed by all members of the work force for achieving the best in outcomes and outputs of health service. Quality of care is the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge. Main reasons to implement quality assurance strategies are: Unsafe health systems, Unacceptable levels of variations in performance, Practice and outcome, Ineffective or inefficient (Overuse, misuse of underuse) healthcare technologies and / or delivery, User dissatisfaction, Waiting lists, Unaffordable costs to society, Waste from poor quality. “Quality fails when system fails”[7,8,10]. Patient safety systems depend on service: Emergency room, Admissions, Laboratory, Physicians, Pharmacy, Nurse, Patient / Family. Patient safety is not a law or regulation it is a culture. Success factors of the Quality improvement (QI): i) Leadership will be vigorous and proactive ii) Motivation with management passion and enthusiasm iii) Patient satisfaction and Employee satisfaction from direct benefit to worthwhile work iv) Involve emotionally

v) Step by step success experience from small success. In 2000, Castle Street Hospital for Women (CSHW) in Sri Lanka first applied this industrial tool to health sector to decrease the high in hospital mortality ratio. As a result of introduction of the approach it reduced the consumption of antibiotics after decline in nosocomial infections, improved the use of spaces through the disposal of unwanted goods[8,10]. Through this cycle of possible effects 5S, KAIZEN and TQM activities have gradually taken root as efforts conducted throughout the hospital.

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