Original Article

Human Resource Development Through Continuous Improvement : A Case Study of Yasothon Hospital, Thailand (1994-1997)

Dr. Kawee Chaisiri, MD. Yasothon Hospital, Yasothon Province, Thailand.

Abstract

Human Resource Development is a very important yet very difficult component for effective health care delivery, especially in the public sector. Bureaucratic barriers, discontinuity, ineffective leadership, and lack of systematic approaches are major reasons for failures. A package of strategies including QC, 5 S's, suggestion system, TQM and Hospital Accreditation were gradually and systematically introduced into Yasothon Hospital, a 320 bed public general hospital in Northeastern Thailand, from 1994 to 1997. Outcomes were measured on customer satisfaction, change in hospital revenues, as well as important outputs of activities such as QC groups and awards, implemented suggestions, number of trainers produced, and number of inbound study visits. This paper describes the detail of the implementation and evaluation of the results.

Key words : Continuous improvement, Human resource development, Public hospital.

Introduction

Yasothon is the seventy-first province of Thailand, located 531 kilometers northeast of Bangkok. With a population of 560,000, it is one of the ten poorest provinces of the country. There is one MoPH owned 320 bed general hospital, the Yasothon Hospital. It employs 650 personnel including 300 employees and 350 civil servants. There are 24 doctors and 250 nurses. As a public hospital, it has been subjected to all the inefficiency, low productivity, and low quality of services inherent in such facilities. In the early 1990s, two private hospitals were established in the province in response to the increasing demands from the rapid economic growth. People who could afford the price started to shift to these private care providers.

Its less competitive potential kept Yasothon hospital revenues idle at 21 million baht annually during 1991-1993. On the contrary, the outstanding expenses for over-time and salary for the employees increased to 30 million baht per year. This created a situation of financial crisis to the management of Yasothon Hospital, and forced them to put high priority on the organizational development of the hospital.

Although Organization Development (OD) is an efficient tool for Human Resources Development (HRD), concrete outcome of success in a public organization is rarely achieved. One of the secrets of the Japanese HRD is **"KAIZEN" or continuous improvement**. Although it is known worldwide, many obstacles were claimed for its application in the public organization. Yasothon Hospital has experienced the use of **'KAIZEN' for quite a while**, however success in its application was still remote. That was until 1994, when the new management team decided to apply a package of Total Quality Improvement (TQI), Quality Control (QC), 5 S's and a suggestion system with systematic planning and continuous improvement. This created new hopes for the future development of the hospital. This paper tells the story of this movement.

Background

1. Previous experiences in Human Resource Development (HRD)

1.1 No plan, no direction. Previously, HRD in the hospital had relied on the direction from the central administration. Training programs were sent to the hospital by various academic associations, colleges and universities. The HRD budget was set as part of the lumpsum operating expense without detailed HRD plans. This resulted in unplanned, uncoordinated, and inefficient HRD activities.

1.2 Weakness of leadership. There was no clear declaration of HRD policy. The administrators lacked vital visions and skills to apply progressive innovations. The hospital's staff prefered expensive equipment and instruments to personnel development projects.

1.3 Limited personnel. There were only two persons with full responsibilities in general personnel management. The hospital's **technical division** was responsible for HRD but without system wide planning, follow up and evaluation.

1.4 Little academic atmosphere. For example, not a single research project had been undertaken, very few standard journals existed, and very little budget was available for new books in the library. Most personnel rarely continued their professional studies judging from the paucity of use of the limited journals and texts.

1.5 Unqualified employees. The hospital employees (nurse aids and workers) had been assigned to positions without proper training courses and the budget for training was used only among the civil servants, not for the employees.

1.6 Lack of continuation. There were several organization development (OD) activities which consumed high expenses and involved many personnel, but due to the lack of continuity, the effects of OD were reduced to zero within a short period of time.

2. The development policies of the central ministries in support of HRD

2.1 New National Development Policy. The previous National Economic and Social Development Plans focused mainly on economic growth. Human dignity and quality of life were only of secondary importance. Besides, the development projects were fragmented. This resulted in worsening of income distribution, natural resource and environmental degeneration, and moral deterioration, etc. The 8th Economic and Social Development Plan (1997-2001) shifted the emphasis to focus on human resources as the main development target.⁽⁵⁾

2.2 The policies of the Ministry of Public Health

- During 1993-1995, the Policy of the Three S's, (Smile, Smell and Surrounding) was well responded to and led to "The Face Lift Project".
- (2) **The Quality Hospitals Policy** using TQM (Total Quality Management) as the strategy, was announced by the Permanent Secretary on October 5 1995.
- (3) In October 1996, the Ministry announced "The Front Liner **Project.**"
- (4) The development of the **Diagnosis Related Group** (**DRG**) project for measuring hospital efficiency in 1995.
- (5) The **Hospital Accreditation** project aim at promoting the self improvement of both public and private hospitals.

3. Human Resources Development (HRD) philosophy and concepts

3.1 HRD means activities to provide personnel with knowledge, capability, attitude and experience by training, education, employee development, career development and organization development (OD) aiming at an effective and more competitive organization.^(1, 2)

3.2 Human Resource Management (HRM) aims at the organization's effectiveness to respond to personnel needs, management expectations, and social needs. (6, 12)

3.3 Organization Development, aims at changing the organization into a **learning organization,** currently following two main directions :-

- (1) **The Continuous Improvement (CI) or gradual change** through the use of tools, e.g., TQM, ISO 9000. The CI is known as "**KAIZEN**" in Japan.^(1, 5, 7, 8)
- (2) **The Process Innovation** means either the **radical change of process,** e.g., **Re-engineering,** or the less radical change, e.g., **Time-Based Strategy.**^(7, 9-11)
- 3.4 Some assumptions on HRD of the government hospitals
 - (1) There are many qualified personnel and modern equipment waiting to be mobilized and used effectively.
 - (2) If encouraging environments are properly provided for in public organizations, the personnel will dedicate their hands, heads, and hearts for the effective organization development.^(11, 12)

Developmental Processes

Packages of developmental strategies were gradually developed in the hospital :

1. Development of Hospital Policies. The clear and participatively defined hospital policies were developed (Table 1) and publicly declared. In October every year all personnel acknowledge the hospital's policy directly from the director and vicedirectors of the hospital. A clearly defined and sufficient HRD budget, comprising 10 percent of the hospital's non-salary operating expense, was provided. All development achievements were quantitatively and clearly related to annual rewards and promotions.

10 S 2 R					
1994	S 1	Smile	1996	S 8	Suggestion system
	S2	Smell	1997	S 9	Security system
	S 3	Surroundings		S10	Standardization including
	S4	Service			Hospital Accreditation
1995	S5	Semiprivatization	1995	R1	Re-engineering
	S 6	Satisfaction system	1996	R2	Research
	S 7	5 S's technique			

 Table 1
 Yasothon Hospital Policies

2. Institutional Strengthening

2.1 Technical offices. Several technical offices were set up with full time staff and adequate supports, i.e., Technical Office of the nursing section, Research Center, Computer Center, and Standardization Center.

2.2 Working teams. One hospital working group and working groups in each of the 30 functional units were set up. The working groups were established to promote, follow up, and evaluate all development projects and present the results to the hospital administrative committee every month.

2.3 Hospital administrative committee. There were 2 groups of administrative committees. The first core committee consisted of 28 key persons and the second general committee was composed of ninety-nine persons. The latter group included heads of all divisions/units, doctors, dentists, pharmacists, and academic experts. The core committee functions as the administrative committee while the bigger general committee acknowledges the results of the continuous development and the concepts and methods used in their units.

2.4 Hospital resources persons. Competent personnel were sent for appropriate training and external resource persons were invited for in house training. After the training, follow up activities, e.g., more training, team building, were carried out to build up in-house resource persons for future internal and external training courses.

3. Formulation of annual HRD action plan

In 1996, a hospital HRD action plan was developed (Table 2) as a guideline for every division/unit to build up their own HRD subplans. There was a gradual shift of strategies and targets towards more diversity, i.e., from training by external trainers to training by in-house trainers; from civil servant focus to more employee focus; from individual development to group development; from lecture room orientation to on the job training and study visits; from only physical dimension to more psychological dimension; from activities for hospital personnel to activities for patients and relatives; from internal hospital activities to more coordinated external activities; and from a passive approach to a more progressive active approach.

In the action plan a definite HRD budget was set at **10 percent of the hospital's non-salary operating budget**. A monitoring and evaluation system was established. The list of personnel who attend HRD activities was reported to the hospital committee every month. At the end of each year, personnel who did not take any courses of the HRD program received questionnaires to collect their reasons for not joining in HRD activities.

An academic environment was established, e.g., improved capacities, facilities, and working hours of the library ; increased budget for learning materials from less than 100,000 to one million baht; and additional reading materials for patients and relatives.

4. Specific development activities

4.1 QC Activities

1988-1993	• 150 Hospital trainers were trained by the trainers from the Khon Kaen branch of the Bangkok Bank followed by several QC
	refresher courses. 15 QC groups were set up without presentation of the results.
	the results.
1994	• Several QC training and meetings for QC promotion committee
	were held with 72% participation rate. 37 QC groups with budgetary
	support for meetings. 2,131 members participated in 222 meetings.
	The first QC festival was carried out with presentations by 28 QC
	groups (75.67% of total QC groups) and 200 participants.
1995	• QC training for 60 new members with more meetings of the QC promotion committee head of QC groups achieving a 70%
1775	• OC training for 60 new members with more meetings of the C promotion committee, head of QC groups, achieving a 70

- promotion committee, head of QC groups, achieving a 70% participation rate. Internal meetings of 450 QC members in all 44 QC groups (12 meetings/group), for a total of 528 meetings. The 2nd QC festival was organized with 200 participants.
- More QC training meetings and refresher courses. The 3rd QC festival was more successful with more than 250 participants.
- Continuous training, meetings and implementation. The 4th QC festival was carried out with 541 participants.

Activities/target	Target groups and budget	Responsible divisions	
 External training twice per year/person 	All civil servants and employees,Total budget 3,000,000 baht		
 2. Study visits monthly study visits specific visits for half of the hospital units. 	 All personnel for monthly study visits Personnel of specific units for specific visits Total budget 1,275,000 baht 	planned by all divisions, coordinated by the Technical division	
3. Academic conference• monthly	All personnelTotal budget 360,000 baht		
 4. In house training • 30 trainings, 100 trainees each 	 Training on specific development activities e.g. TQM, QC. All personnel Total budget 300,000 baht 	 Technical division Office for nursing technique development Administrative division 	
 5. Training/meeting within division/unit 1 hour/week 	 For monitoring as well as technical discussion on innovative development All personnel Total budget 864,000 baht 	• all divisions/units	
6. Specific group activities	 Activities for special interest groups e.g. English club, fitness club, alternative medicine, etc. A special training program on Transcendental Meditation and temple activities for all personnel Total budget 900,000 baht 	 Technical division Ethics club All specific clubs 	
7. Health Education and learning materials for patients and general public	 Group Health Education activities Reading corners at each service unit Total budget 552,000 baht. 	• Social medicine division	
8. Research supports	 All service units Total budget 300,000 baht.	• All divisions/units	
9. Activities with Provincial Health Office	Technical SupervisionTotal budget 100,000 baht.	 Social medicine division Nursing division 	
10. Community development	 Herbal and Traditional medicine club, Thai massage, non-toxic vegetable, horticulture, occupation training Total budget 300,000 baht. 	 Traditional medicine division Administrative division 	
11. Primary Health Care Promotion	 Workshops with volunteers and community leaders. Total budget 200,000 baht. 	• Social medicine division	
12. Customer Relationsweekly visits	All public and private institutesTotal budget 90,000 baht.		
Total budget	8,207,000 baht (10% non-sal	ary operating budget)	

 Table 2 HRD Plan of Yasothon Hospital (1997)

4.2 5 S's Activity (Seiri, Seiton, Seiso, Seikietsu, Shitsuke)

August 1995	• The Director declared 5 S's to be one of the hospital policies.			
22-24 August 1995 • The 5S's training for hospital personnel by the trainers				
	Petroleum Authority of Thailand (PTT).			
5 October 1995	• The first big cleaning day by all divisions/units in Yasothon			
	hospital, with competition among all units.			
November 1995	• The 5 S's standardization and area responsibilities were			
	specified down to individual level.			
5 December 1995	• The 2 nd big cleaning day, followed by visits and evaluation			
	from the 5S's committee and the hospital directors.			

Since then the big cleaning day has taken place every 3 months, followed by evaluation and reports to meetings of the hospital administrative committee.

4.3 Suggestion system

The suggestion system as a channel to gain participation for hospital development started in October 1995 when the hospital director declared the suggestion system as one of the hospital policies, followed by training of all Yasothon personnel by trainers from PTT.

4.4 Improvement of service behaviour towards customer satisfaction

At the beginning of every year several training sessions were carried out for all personnel on good service behaviour. Examples of the training topics covered were, service with a smile; customer impressive service behaviour; excellent service behaviour; personality development; and ethical conference.

4.5 Total Quality Management (TQM) and Hospital Accreditation

After the success of the QC System, Yasothon hospital declared TQM/Total Quality Control (TQC)/Continuous Quality Improvement (CQI), or KAIZEN as hospital policies in 1995, with the following development activities :

4.5.1 Front Liner Services Development

The director declared the policy on 11-12 March 1995. The deputy director for medical affairs of Yasothon Hospital was then appointed as the head of the working team. Six objectives were set up, i.e., standardization, customer satisfaction, problem preventions, participation of all personnel, quality of working life, and continuous improvement (CI).

More than 100 development projects were carried out to improve the external physical image. Ten divisions/units were selected as Front Liner teams involving 153 personnel (25% of all hospital personnel) from the guarding unit, vehicle service unit, emergency room, out patient department (OPD), pathology, radiology, drug dispensary division, stretcher unit, medical registration and public relation unit. Customer surveys were carried out before implementation. Implementation was achieved by several individual unit meetings, and meetings of the heads of the 10 units to brainstorm on concepts, develop slogans for each unit, and set up 5 standard indicators on service behaviour, service delivery systems, personnel policy, building management, and equipment support. An evaluation system was also set up. Subsequent customer surveys were then carried out.

4.5.2 TQM for blood service system

Although blood donation is a very complicated duty involving nearly all divisions/units in Yasothon hospital and consists of many problems to be solved, the TQM on blood service system was achieved within 6 months in 1995.

4.5.3 TQM for nursing services

Nursing services include 75% of hospital personnel in 12 units. The TQM process of the nursing services was completed in March 1997.

4.5.4 Hospital Accreditation

Yasothon hospital is one of the twenty public hospitals selected to participate in the 1997-1998 Hospital Accreditation project of the Ministry of Public Health and the Health Systems Research Institute. The aim of this project is to develop a system of accrediting hospitals in Thailand in order to achieve self improvement in the quality of services.

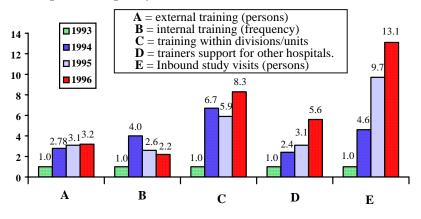
Evaluation of the development activities

1. The training and study visits

Not only did the training and study visit activities increase, Yasothon hospital trainers were also invited more and more to participate in training activities at other hospitals. This implies a stronger and better quality of hospital workforce (Figure 1).

Figure 1 Relative persons involved, and frequency of training, study visits

Relative person/frequency (1993 = 1)



2. QC group activities

Although QC group activities have had the longest evolution since 1988, the support was quite poor during the first 6 years. Not until the first successful QC festival in 1994, did the QC activities get off the ground and since then the QC festival has been well arranged every year (Table 3).

Issues	1994	1995	1996	1997
Total QC Team	37	44	50	62
QC Team Presentation	28	36	35	54
Attendants per day - Yasothon hospital	192	179	200	181
- Other hospitals	22	26	66	-

The success of QC activities was based on the continuous support from the hospital director, supervision by QC experts from Bangkok, the continuous development of hospital trainers, the development of infrastructures to monitor and evaluate the progress, and the special promotional incentives given to those who participated in QC activities. In September 1995, 300 questionnaires were sent to relevant personnel for their opinions on the QC efforts. The response rate was 50% with 82% of the respondents reflecting a good to very good impression.

The outstanding success of QC in Yasothon hospital was reflected by its winning of the national QC festival award every year (Table 4). This National QC festival was arranged by the Nursing Quality Administration Club and the Civil Service Commission. **On 20 March 1997** the Technology Promotion Association (Thailand - Japan) granted the **QC Facilitator Award** to the Director of Yasothon Hospital.

 Table 4 National QC Awards Granted to Yasothon Hospital (for public organization)

Year	Awards	
1994	Honorable award.	
1995	The 2 nd winner among employees	
1996	The 1 st winner among employees	
	The 3 rd winner among employees	
	The 4 th winner among civil servants.	

3. 5 S's Activity

5 S's Activity is an outstanding development activity because of its visibility and readiness to be perceived by all levels of personnel and the public. It is easily accepted, almost universal participation is possible, and the outcome is dramatic. It is a system of continuous and regular self development and evaluation supported by external supervision and evaluation.

The results of the activities are publicized and rewards are given publicly on a regular basis. The 5'S resulted in continuous development of hospital trainers who eventually become trainers for other hospitals. Inbound visits from other hospitals and customer satisfaction surveys resulted in more suggestions and motivation for improvement.

4. Suggestion System

Two years of implementation resulted in a total of 360 suggestions, of which 102 were acceptable (20-33%), of which 38 were considered practicable (37.25%).

In July 1996, the Yasothon hospital committee, with supervision from PTT trainers, evaluated the suggestion system from November 1995-May 1996 by analysing 80 selected suggestions. The results are shown in Table 5.

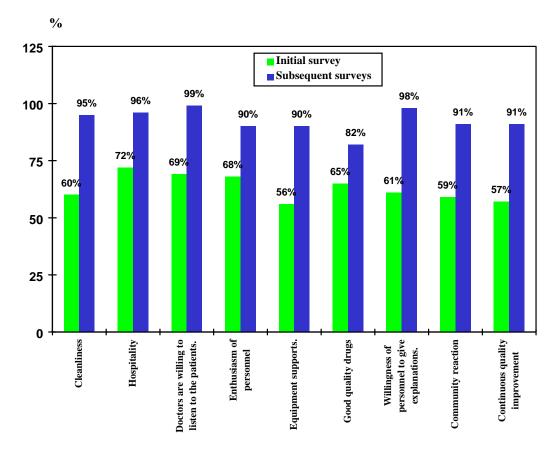
Results	No.	%
not practical	35	43.75
no response	10	12.50
implementing	4	5.00
implemented	1	1.25
no information	1	1.25
favorably implemented	12	15.00
well implemented	7	8.75
excellently implemented	10	12.50
total	80	100.00

 Table 5 Evaluation of the Suggestion System (November 1995-May 1996)

5. Customer Satisfaction (CS)

Customer satisfaction is the final indicator for any innovative development activity. There were 5 CS-surveys (Jan 94, Mar 94, Aug 94, Feb 95, Dec 95) conducted as shown in Figure 2. The results of the surveys show significant improvement of consumer satisfaction from the first survey to the subsequent surveys.

Figure 2 Comparison of the percentage of customer satisfaction from the first survey and subsequent surveys.



Conclusions

There are three influencing factors contributing to the success of these continuous organizational development activities, namely,

1. Vision

The concept of focusing on human resources as the center of development in the 8th National Economic Development plan, and the personnel development strategies of the Civil Service Commission are good, but how can we implement these initiatives successfully? Although it is difficult, it is possible if we implement them systematically and tirelessly.

Without implementing KAIZEN, Yasothon hospital would never have recovered from the low image crisis that resulted in those who could afford to pay refusing to use its services. In 1991-1993, the hospital income remained stagnant at 21 million baht per year, not enough even to pay for the 2 million baht per month overtime expenditure. After few years of successful development, the hospital income increased to 35, 58,75 and 83 million baht in 1994, 1995, 1996, and 1997 respectively. That financial crisis was overcome. Human centered development thus must be carried out through a holistic approach which encompasses all physical, psychological and social dimensions. At present, we can only mobilize one-third of our personnel potential. The truly effective development is "**internal development of the individual**".⁽¹²⁾ Most HRD activities focus only on the technical capabilities and behavior of personnel, omitting the holistic human aspect. Yasothon hospital used a new perspective, holistic health development for personnel and people, by setting up the "Health Promotion Center." This center provides meditation and exercise facilities which aims at sustainable and more holistic HRD.

2. Participation

In order to motivate personnel to dedicate their hands, heads and hearts for the organization, an atmosphere of a learning organization needs to be developed.⁽⁷⁾ Wisdom will be developed through team activities ; creating a community of practices, with sharing of knowledge, skills and ideas leading to development of standard practices and skills.⁽¹²⁾ Some personnel are skillful enough to become experts, coaches or trainers for other hospitals.

The outstanding feature of Japanese organizational culture is team work.⁽¹⁾ Those individuals with free ideas and practices may be looked at as immature or egotistical. Thai people, although comfortable in social groupings, usually aim towards enjoyment without creative mutual learning. KAIZEN is thus important for human resource development since it is compatible with rules towards sustainable development found in Buddhism. The important part of the regimen is holding regular meetings and participation that leads to common organization opinions, or common organizational standards. Faced with problems, regular consultations will lead to continuous improvement of the standards of practice.

At present, the only one development policy of Yasothon hospital is job standardization that will lead to hospital accreditation. The strategies for standardization will rely on small group activities as a forum for brain storming towards innovative development.

3. Leadership

The leader is the final decision maker for HRD, as well as the change agent. Old style leaders do not like "Walking Around Management" and lack the skills of using brain storming as a simple administrative tool used in efficient problem solving processes. Learning organization leaders should be trained in exploiting appropriate strategies and management concepts with continuous learning attitudes.

Leaders who have attempted apply organizational development may have failed because those activities ended with the closing ceremony of the training workshop. TQM or KAIZEN is not a difficult skill to learn, but the results lead to continuous quality improvement (CQI). Yasothon hospital uses these activities to achieve sustainable development.

One of the required tools for the leaders are monitoring and control, including evaluation, through monthly reports, delegation of authority, and external auditors.

Recommendations

1. TQM, QC, 5 S's suggestion system, re-engineering, problem solving process and applied behavioral science should be included in the curriculum for all levels of management training. Practical training to build up workable skills are preferable. We can not afford to let those managers in the public service struggle endlessly by themselves in seeking these skills. Recruitment, and promotion processes must consider these development skills as part of the career development criteria. Previous negative administrative attitudes in doctors, dentists, and pharmacists led to underdeveloped skills. Declaration of these development policies will allow the recruitment of these technocrats into the development process of the country.

2. Atmospheres promoting HRD should be developed, e.g., decentralization, recruitment of hospital directors through their achievements in management rather than through achievements in medical services, merit system for career development, suggestion system, QC festival, etc. During the last 3 to 4 years, the Yasothon hospital management has implemented several innovative development strategies. If these developments are continued for over 10 years, human resource development of the hospital can be a learning model for HRD in the public organization. Technical support from central HRD and research institutes are required for further development and application of the model.

References :

- 1. Masaaki I. Kaizen : The Key to Japanese Competitive Success. New York : McGraw Hill ; 1986.
- Office of National Economic and Social Development Board. Guideline for the Implementation of the Eighth National Economic and Social Development Plan. Bangkok : Office of the prime Ministry, 1996. (in Thai)
- 3. Blanchard K, and Hersey P. Management of Organizational Behavior : Utilizing Human Resources 4th edition. New Joursey: Prentice Hall, Englewood Cliffs,1982.
- 4. Arjinsamajarn C. **Human resource development.** Bangkok : Bangkok Promotion Center, 1995. (in Thai)
- 5. Harvey D., Bowin R.B. **Human resource management**. New Jersey : Prentice Hall International, Inc., 1996.
- Sherman A.W., Bohlander G.W. Managing human resources. Cincinationio : South-Western Publishing Co., 1992.

- 7. Tienput D. Human resource development in the next century. Bangkok: Bangkok Promotion center, 1995. (in Thai).
- 8. Johnson L P. **ISO 9000 : meeting the new international standards**. New York : McGraw Hill, 1993.
- 9. George S, Weimerskerch A. Total quality management. New York : John Wiley & Sons, Inc., USA, 1994.
- 10. Feigmenbaum A V. Total quality control, 3rd ed. New York : McGraw Hill, 1991.
- 11. Jongwisarn P, Jongwisarn W. Guideline to QC Circle Handbook. Bangkok : Charoenphol, 1993. (in Thai)
- 12. Wongsarnsri P. **Human resource management**. Bangkok : Rachapat Suandusit Institute, 1995. (in Thai)