

# HUMAN RESOURCES MANAGEMENT IN KAIZEN ASPECT

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## Abstract

This paper presents evaluation of human resources management in hospital with taking into consideration Kaizen and West approach to the quality. It was stated that there are many advantages of Japanese culture: economic effects, development of knowledge and qualifications of personnel, improving employee morale, identification of employees with the company and its problems, improved communication between employees, increased teamwork and teamwork problem solving. But there are also some problems with using Kaizen philosophy. There are connected with the need to change the mentality of employees at all levels, activation of employees to undertake improvement actions, enforce the use of solutions developed by the team. This kind of problems should be solved by trainings at hospital. It was showed that hospital should take some experience from Japanese approach to solve problems especially connected with personnel morale, motivation and effectiveness. Superior should trust its personnel in hospital and shouldn't be so official in contact with them. Data analysis emphasizes that in the hospital should be the management of human resources, it is important to show respect to employees, which is a condition for the success of the organization.

**Key words:** Kaizen, human resources, team, health care.

**Classification JEL:** M12 – Personnel Management.

## 1. Introduction

Kaizen's consignment states that no day should pass without making any improvement in any of the areas of the company. The Kaizen methodology is a system for communicating ideas throughout the company hierarchy, encouraging everyone to seek and exploit new opportunities and dismantling barriers to information flow. Kaizen looks at quality within the framework of an organization's existing processes, seeking to enhance these processes to achieve incremental improvement. The Kaizen process does not focus on massive reorganization change (*Skrzypek, 2010: 18–21*).

The lean management concept involves a change in the organizational structure. It is about 'lean organization' by reducing management levels (flattening the organizational structure). Management functions are partially taken over by teams (team management). Employees receive a broader range of responsibilities and powers. The model organization, formed after the process of "weight" started to be network structure.

People are the most important factor in the company accordance with Kaizen philosophy. Company accordance with Kaizen should be about employees' needs. Nowadays everything has changed also people needs.

The earliest and most widespread version of Maslow's (1943; 1954) hierarchy of needs includes five motivational needs, often depicted as hierarchical levels within a pyramid. This five stage model can be divided into basic (or deficiency) needs (e.g. physiological, safety, love, and esteem) and growth needs (self-actualization). The deficiency, or basic needs are said to motivate people when they are unmet (*Koltko-Rivera, 2006:302–317*). Nowadays means of social media we realize our needs, which in 1943 was united Abraham Maslow (Figure 1). For many people the most important needs nowadays there are battery and wifi. So very important nowadays is to know peoples' needs it makes easier to satisfy these needs.

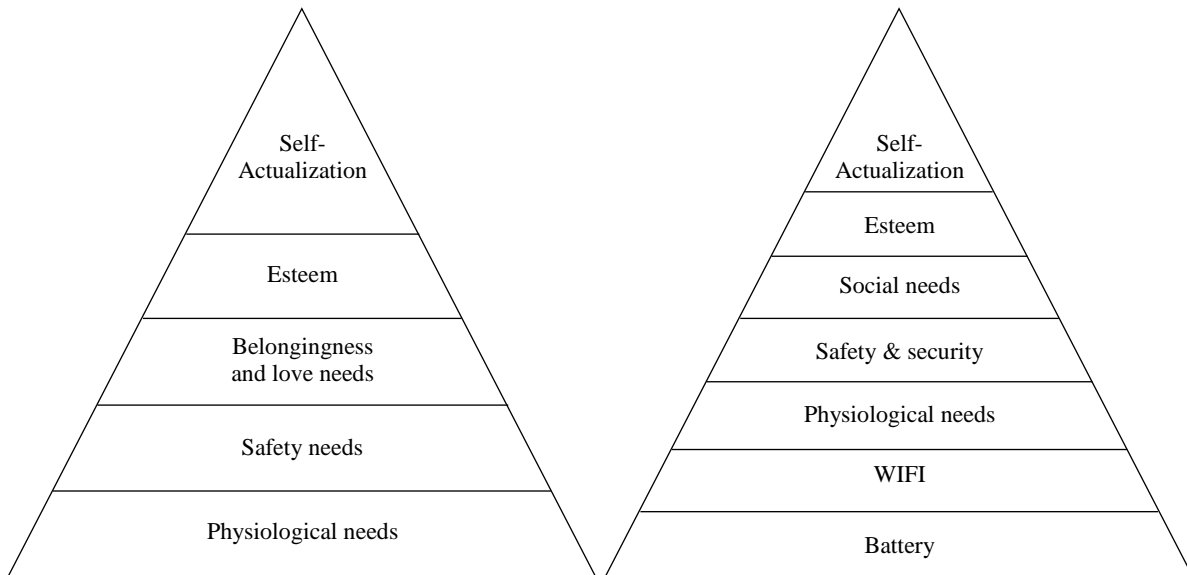


Figure 1. Maslow's hierarchy of needs and new hierarchy of needs (own study based on: Dondajewska, A. 2016. *Co robi Maslow na Instagramie. Marketing w Praktyce*, 2: 49)

## 2. Kaizen in the healthcare

Quality improvement activity in industrial fields is famous in the health care especially in Japan and in USA. In the Table 1 are presented differences between Japanese and Western approach to the quality.

Table 1. Differences between Japanese and Western approach to the quality (own study)

Factor	Japanese approach	Western approach
<i>Quality</i>	It is not defined but treated as an approach. It associates with everything that can be improved.	Quality is the technical characteristics of products. Such an understanding is closely related to technical control.
<i>Condition of work</i>	Based on teamwork and joint decision-making.	Great importance is placed on the performance of an individual worker, thereby increasing competition and competition.
<i>Promotion</i>	Companies invest in subordinates, and although there are no big payoffs here, and the promotion is slow, the employee is guaranteed a lifetime job.	Employees have the option of fast promotion, which is associated with significant wage increases, but does not provide stability and confidence in maintaining a workplace position.
<i>Control</i>	Values engagement, ingenuity, activity and creativity, and the employee is continually assessed by management.	A system of penalties and rewards is used, the employee is constantly monitored, evaluated according to established standards.
<i>Technical development</i>	In Japan technical progress is a constant change of all processes only supported by existing technologies. Everything here is oriented towards people rather than technology.	Companies in the western approach are oriented towards a technology that develops continuously and dynamically. Visible effects are most important. Constantly looking for new technologies.
<i>The most important element</i>	Japanese companies take into account the need for innovation without forgetting the need to continually improve existing standards.	The Western approach is focused on rapid changes that bring immediate results, focus on technology and goals – not on people.

Kaizen was implemented first time in the health care in the Mayo Clinic in the USA in 2003. Since then, it was introduced in many hospitals in the United States, Canada, the United Kingdom and Portugal. In all of these places it was started with administration and logistics, because implementation in these departments is relatively simple (*Nembhard & Edmondson, 2006: 941–966*).

To make Healthcare Kaizen successful there should be undertaken following steps:

- Everybody should know that Kaizen is becoming a critical part of the workplace. There should be used visual communication throughout the hospital to remind healthcare professionals to practice continuous improvements.
- Someone should be ensure that all department heads and supervisors know what Kaizen is, how to facilitate engagement, and how changes should be implemented. Everybody should be trained before Kaizen starts.
- There should be prepared a plan for getting everybody involved.
- There should be prepared a plan for sharing improvements. Workers place their suggestions on the board, and supervisors, in turn, put their response on the board. This continues until each improvement is completed.
- There should be made a plan for keeping people involved. This could mean allowing people to implement their own suggestions, as well as letting people see the results (metrics) of the change.
- There should be made a plan for responding to every suggestion. Responses should go into detail about how the suggestion is being implemented. No change is too small to be implemented.

### 3. Kaizen – literature review

Kaizen events have been widely reported to produce positive change in business results and human resource outcomes (*Glover et al., 2011: 197–213*). The Lean initiatives typically have been implemented using the Kaizen Breakthrough Methodology concept, where cross-functional teams are guided by business improvement objectives to reduce overall lead times via the elimination of waste in the process (*Ten Step Inc. Supplemental Paper, “The Birth of Lean Sigma,” www.tenstep.com, November 2003*). Authors (*Behensky, Janet Roe & Bolton, 2005*) realize that Kaizen concept uses the Lean Management approach to eliminate nonproductive processes as well as promotes creating the ‘good change’. The team had the autonomy to make changes in the organization and the ability to build relationships with people within the organization—other members of the team they may not associate with during their normal course of business. This relationship-building enhances overall communication within the organization. Kaizen is treated as a continuous search for opportunities to improve all processes (*Imai, 1986; Berwick, 1989; Joint Commission on Accreditation of Healthcare Organizations. Agenda for Change*).

‘Kaizen’ is a small improvement that is made by those who do the work (*Wolniak, 2013, Wronka, 2013; Skrzypek, 2012*). It is a small, low-cost, low-risk improvement that can be easily implemented (*Burchart-Korol & Furman, 2009; Nowicka, 2013; Tesler, 2007a; Tesler, 2007b*). Kaizen is an ongoing methodology and philosophy for challenging and empowering everyone in the organization to use their creative ideas to improve their daily work. The word Kaizen, the way it is typically used, is synonymous with the phrase ‘continuous improvement’. An effective Kaizen approach is about making improvements that are connected to measurable results and a deeper purpose. Hospitals around the world are using this concept, often as part of a broader “Lean management” initiative. Kaizen principles are following (*Schaefer, Helmreich & Scheidegger, 1994: 221–225*):

- Continually improve.
- No idea is too small.
- Identify, report and solve individual problems.
- Focus change on common sense, low-cost and low-risk improvements, not major innovations.
- Collect, verify and analyze data to enact change.
- Problems in the process are a major source of quality defects.
- Decreasing variability in the process is vital to improving quality.
- Identify and decrease non-value-added steps.
- Every interaction is between a customer and a supplier.
- Empower the worker to enact change.
- All ideas are addressed and responded to in some way.
- Decrease waste.
- Address the workplace with good housekeeping discipline.

Authors (*Suarez-Barraza & Ramis-Pujol, 2010: 388–410; Wiśniewska, 2005*) noticed that Kaizen helps this public service organization to improve cycle times in the human resource selection and hiring process. Kaizen also accordance with authors (*Liker, 2004; Taylor & Brunt, 2001*) focuses on improving the quality of processes in organizations thanks to reducing their cycle time, operating costs, but also by creating continuous flows, satisfying customers and eliminating waste. Term Kaizen, is a Japanese word that basically means “continuous improvement or the principles of continuous improvement” (*Lillrank & Kano, 1989*). It was coined and disseminated within the field of operational management by Masaaki Imai (*1986*), in his well-known book *Kaizen, The Key to Japan’s Competitive Success*.

Authors (*Furterer & Elshennawy, 2005; Rembowski, 2011; Tesler, 2009*) claims that Kaizen can be implemented in service processes in a public context when it concentrates on eliminating “activities that do not add value” (*muda*).

Researchers carried out by (*Suarez-Barraza & Ramis-Pujol, 2010: 388–410*) showed that Kaizen is able to help to reduce the cycle time of human resource selection and hiring process, maintaining its performance, adopting a standard set by listening to the customer as well as this is an excellent way of improving the performance of service processes, and the corresponding quality of the public services provided to internal and/or external customers.

The kaizen strategy is based on the process of gradual change bringing improvements to all area of management and production. It is a people based system with standardization being an essential feature (*Wittenberg, 2010*).

The Kaizen event is a way of learning by doing (*Dickson et al., 2009: 504–510*) as well as noticed (*Kim, Spahlinger & Kin, 2006: 191–199*) it is a system of continuous improvement all processes. Kaizen places the emphasis on process rather than outcome, as the most effective means of improving a service. Fear must be abolished (*Smith, 1990: 679–680*). The essential features kaizen can indicate (*Witkiewicz, Cymbala & Fiałkowska, 2012; Ito et al., 1998: 361–363*): basing on existing technologies; human orientation, problems, processes, customer; perform all processes with sincere dedication; attaching importance to the process details; teamwork; strong feedback; long-term effects. Kaizen advantages (<http://www.leanhospitals.pl/project/kaizen>) are following:

1. Medical and non-medical staff as a valuable source of ideas for the medical unit.
2. Improve communication in your organization.
3. Increased involvement not only top management but above all operational staff.
4. Improving patient safety.
5. Knowing how to solve problems
6. Eliminate waste.

7. Reduction of operating costs of the facility.
8. Improving the quality of patient care.
9. Prevention of infection.

It is also important to underlying that Kaizen is an endless process.

Skrzypek (2010) showed that use of Kaizen technology in enterprises brings huge benefits. As examples of positive effects that can occur when using the Kaizen technique can be mentioned: 85% shortening of production cycles; 75% reduction in assembly time; 50% reduction in storage space utilization; 40% increase in productivity; 97% reduction of waste; 80% reduction in development time for new projects; 75% reduction in capital expenditure; 93% reduction of complaint.

The use of Kaizen in the company depends to a large extent on the specific nature of its business and the openness of the board to changes in its organizational culture. Kaizen creates an atmosphere conducive to problem-solving through collaboration. The effectiveness of kaizen depends on the director mentality and corporate culture. The problem is that many business bosses have a problem in trusting their employees, which is the basis of the Kaizen's productive implementation.

Kaizen is basing in introduction of hundreds small improvements in different areas. Many companies, thanks to the introduction hundreds of small improvements in operation, experienced significant qualitative and quantitative changes as well as they have undergone systematic global improvements, which further improved their operations. There are a lot of companies using Kaizen philosophy like: Toyota, Sumitomo Electric, Esselte, Mitsubishi, Masterfoods. As an example it is important to underlie that at Toyota, employees annually report 1.5 million applications, of which 95% are implemented. Manager care about human resources first of all and about hospital quality should take into consideration key values of Japanese culture that are following: high value of work; respect for education and personal development; the prestige of the managers; emphasizing group membership; recognition of cooperation and harmony; and the importance of adaptation to the environment.

As the Global Workforce Happiness Index shows that happy and loyal employees influence on innovation in the organization, contribute to its development, and shape the direction to build a strategy (Walenda, 2017: 6–7).

#### 4. Research methodology

To determine what type of approach is used in the hospital, a survey was conducted. Number of 34 respondents was taking into consideration ( $n = 34$ ). There were hospitals' workers (nurses, doctors) with different education and number of specialization (as well as I and II level of specialization). The subject of research was hospital located in Silesia province. Hospital possess Integrated Management System compliant with international standards ISO 9001: 2008 and ISO 14001: 2004 standards.

Researchers were conducted among hospitals' personnel. They were asked following questions:

**P1. What factors determine the concept of hospital development?** In the box type 1, 2, 3, 4, 5, 6, 7 (7 = most important): DK – customer good; IP – independence and employee responsibility; WK – care of hospital culture; SP – new treatment/surgery methods; ZP – trust in relationships with employees.

**P2. What are the most important elements in the implementation of medical services?** In the box type 1, 2, 3, 4 (4 = most important): RO – regular load on workers; RM – regular load equipment, machines; KW – efficiency of equipment, machines; RD – systematic training.

**P3. Evaluate supervisor on a scale from 1 to 8 in terms of:** QA – source of influence (1 owner, 8 – senior superior); QB – Nature of influence (1 – companion, 8 – business).

**P4. Evaluate in the scale from 1 to 9 important in the hospital** (1 – no interest, 9 – high interest): SL – human affairs; ZP – service issues.

**P5. What is your most important hospital?** In the entry window 1, 2, 3, 4, 5 (5 most important element): JA – quality; KO – costs; CR – time of treatment; BP – safety of patient; MZ – personnel's morale.

In Table 1 are presented results for the first question P1.

*Table 1. Results for the first question P1 (own study)*

Respondents' number	Question symbol				
	DK	IP	WK	BP	ZP
1	4	2	1	5	5
2	3	4	5	1	2
3	5	3	2	4	1
4	4	1	3	5	2
5	2	5	3	4	1
6	2	5	3	4	1
7	3	4	5	1	2
8	5	4	2	3	1
9	5	4	3	2	1
10	5	6	4	2	1
11	5	2	4	3	1
12	5	5	5	5	4
13	5	3	4	2	1
14	5	4	1	3	2
15	4	5	2	3	1
16	5	6	4	2	1
17	4	3	1	5	2
18	4	3	1	2	5
19	4	2	1	5	3
20	4	2	1	5	3
21	4	3	2	5	1
22	2	5	3	4	1
23	5	4	5	5	5
24	5	4	3	2	1
25	3	5	4	2	1
26	4	5	3	2	1
27	2	1	5	3	4
28	3	1	2	5	4
29	5	2	3	4	1
30	5	3	1	4	2
31	4	5	3	1	2
32	3	2	4	5	1
33	5	4	1	3	2
34	3	2	4	5	1

In Table 2 are presented results for the question P2, for the questions P3 and P4 and for the question P5.

Table 2. Results for the second question P2, P3, P4 and P5 (own study)

Respondents' number	Question P2				Question P3 and P4				Question P5				
	Question symbol												
	RO	RM	KW	RD	QA	QB	SL	ZP	JA	KO	CR	BP	MZ
1	7	6	5	4	6	7	4	8	4	2	1	5	5
2	3	5	6	2	6	8	4	7	3	4	5	1	2
3	6	5	7	4	6	7	3	8	5	3	2	4	1
4	7	6	2	3	3	2	6	6	4	1	3	5	2
5	3	4	7	1	8	8	4	4	2	5	3	4	1
6	3	4	7	1	8	8	7	7	2	5	3	4	1
7	5	4	7	6	7	7	3	7	3	4	5	1	2
8	6	5	7	4	7	8	7	4	5	4	2	3	1
9	3	4	6	1	8	8	7	7	5	4	3	2	1
10	7	5	6	4	6	7	5	6	5	6	4	2	1
11	7	5	6	4	7	7	7	5	5	2	4	3	1
12	7	7	6	5	5	8	7	4	5	5	5	5	4
13	6	7	4	5	7	6	4	3	5	3	4	2	1
14	1	5	6	7	6	7	5	4	5	4	1	3	2
15	2	6	5	4	5	8	6	8	4	5	2	3	1
16	7	5	6	4	7	7	7	7	5	6	4	2	1
17	7	6	5	4	5	8	5	4	4	3	1	5	2
18	7	5	6	4	5	7	8	8	4	3	1	2	5
19	5	7	6	4	6	6	4	5	4	2	1	5	3
20	7	6	5	4	5	8	8	2	4	2	1	5	3
21	7	6	5	4	8	6	5	8	4	3	2	5	1
22	3	4	7	1	8	8	6	7	2	5	3	4	1
23	7	6	6	7	7	6	5	4	5	4	5	5	5
24	7	2	6	5	7	7	4	4	5	4	3	2	1
25	6	5	3	4	3	4	8	7	3	5	4	2	1
26	7	5	6	1	5	5	4	5	4	5	3	2	1
27	6	3	4	5	7	6	6	5	2	1	5	3	4
28	6	7	1	2	4	6	6	5	3	1	2	5	4
29	5	2	1	4	4	6	6	4	5	2	3	4	1
30	6	5	4	2	6	5	2	5	5	3	1	4	2
31	6	7	2	5	8	6	8	7	4	5	3	1	2
32	6	5	4	3	6	4	2	4	3	2	4	5	1
33	7	3	5	2	6	5	7	8	5	4	1	3	2
34	7	5	3	4	6	5	2	5	3	2	4	5	1

Table 3 shows evaluation of questions by respondents. Table 4 shows results for questions P2, P3, P4 and P5.

Table 3. Evaluation of questions by respondents P1 (own study)

Estimation scale 1–7	Question symbol				
	DK	IP	WK	SP	ZP
1	1	0	2	5	1
2	0	2	2	4	6
3	5	2	2	2	11
4	0	5	4	15	4
5	3	13	6	5	4
6	9	7	12	1	2
7	15	4	6	2	5

Table 4. Evaluation of questions by respondents P2, P3, P4 and P5 (own study)

Estimation scale 1–5/7/8	P2				P3 and P4				P5				
	Question symbol												
	RO	RM	KW	RD	QA	QB	SL	ZP	JA	KO	CR	BP	MZ
1	1	0	2	5	0	0	0	0	0	3	8	3	18
2	1	2	2	4	0	1	2	1	4	7	5	8	7
3	5	2	2	2	2	0	2	1	6	6	9	6	2
4	9	5	4	15	2	2	7	9	10	8	7	6	3
5	3	13	6	5	6	4	5	7	14	8	5	11	3
6	9	7	12	1	10	8	6	2					
7	15	4	6	2	8	9	7	8					
8					6	10	4	6					

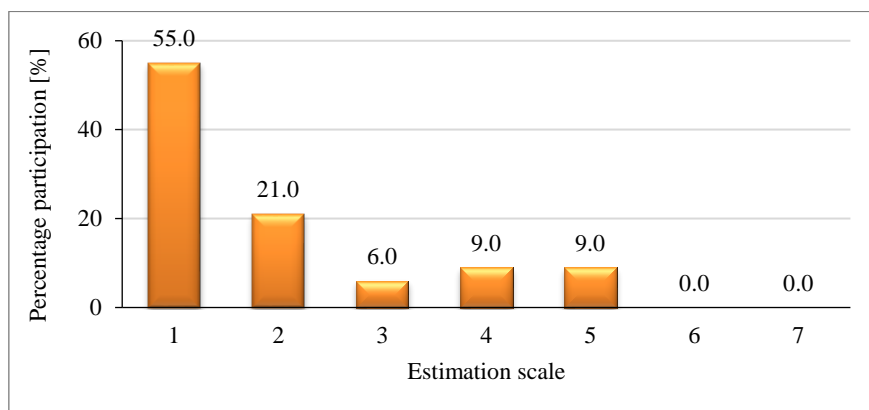


Figure 1. Data connected with factor MZ – morale of the crew (own study)

#### 4. Data analysis and discussion

As it was said in the previous part of the paper the most important factor in the Kaizen philosophy are posing human resources. In the figures 1–5 were presented results that are very important according to Kaizen. These factors are as follows:

- MZ– morale of the crew.



- IP – independence and responsibility of employees.
- WK – caring the culture of the hospital.
- ZP – trust in relationships with employees.
- QB – influence character of superior.
- SL – human matters importance.

Figure 1 presents data connected with factor MZ – *morale of the crew*.

The first factor that is MZ – staff morale seems to be very low in the level 1. It means that hospital personnel's performance, motivation and employee satisfaction is low. Superior don't care about personnel and its motivation. The most important to him is patient treatment result. Figure 2 presents data connected with factor IP – *independence and responsibility of employees*.

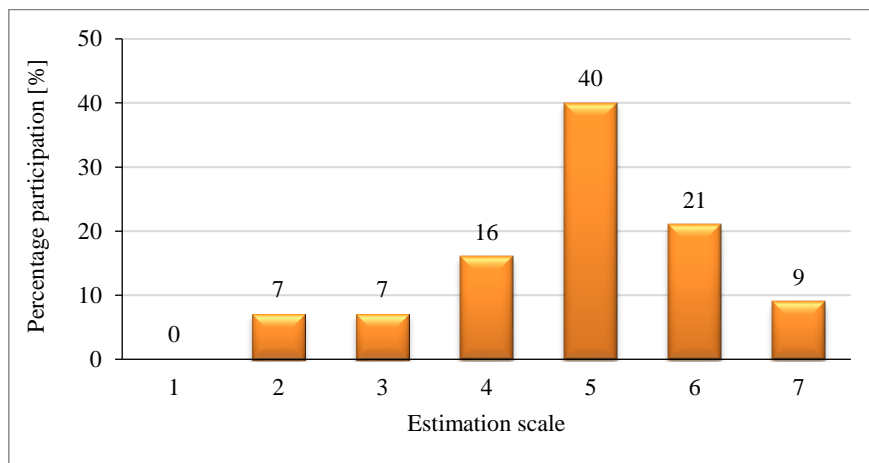


Figure 2. Data connected with factor IP – *independence and responsibility of employees* (own study)

As it was presented in the Figure 2 employees have independence in the area of undertaking decision connected with their profession. It is very important information that influence on their engagement of work. They fell important for patient and their state of health. Based on these factor it is possible to claim that this is typical for Kaizen approach to the quality.

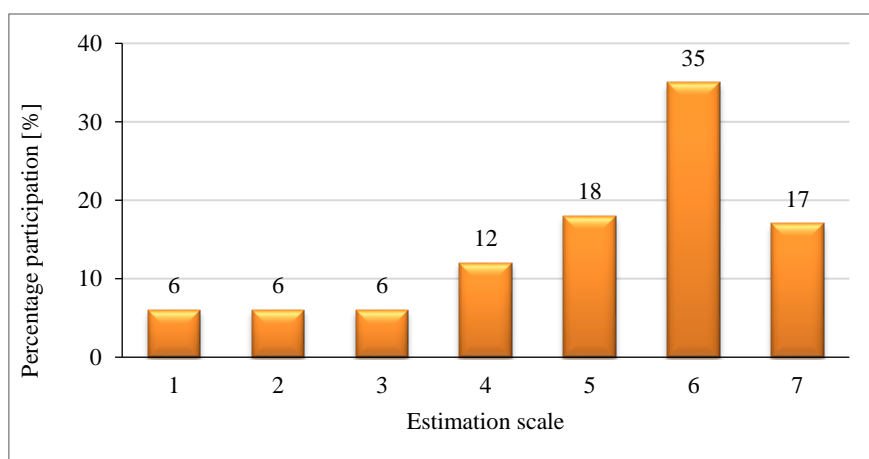


Figure 3. Data connected with factor WK – *caring the culture of the hospital* (own study)

Figure 3 presents the next factor shaping which is WK – *caring the culture of the hospital*. WK factor was evaluate high in the 6 scale by employees, which means that hospital care about the main business factor that include: culture, norms, standards and procedures. Culture decide

about hospital's identity. It is worth to underline that evaluation culture in the scale 6 means that workers know hospital mission, worth's and their respect them in their work – that is typical also to Kaizen approach. Caring for organizational culture is designed to: integrate employees, understand missions and organizational strategies, create uniform measurement methods and evaluation criteria, create a common language and conceptual apparatus, and avoid conflicts and negative emotions.

Figure 4 presents the next factor that is ZP – *trust in relationships with employees*. Factor ZP was evaluated in the lowest level 3 which means that leadership don't trust its workers. They don't give freedom as well as they trust in workers' ideas. It means that workers' potential is closed which is able to influence on hospital effects. This result is typical to West approach.

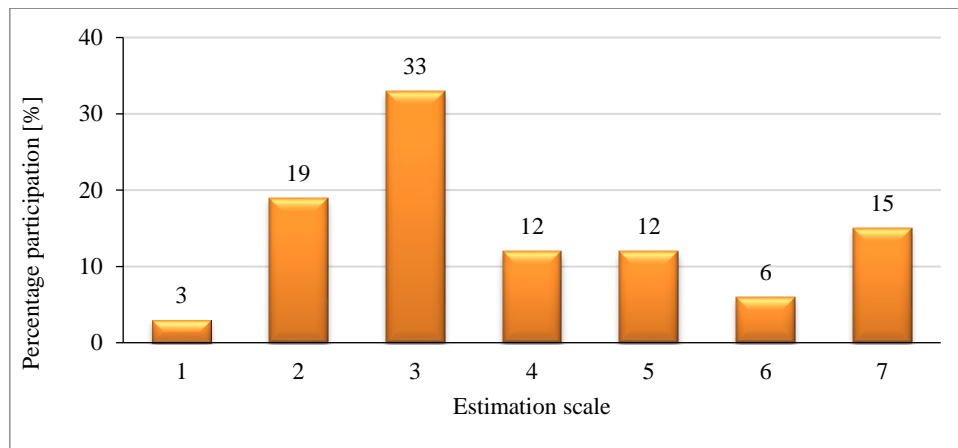


Figure 4. Data connected with factor ZP – *trust in relationships with employees* (own study)

The most important there are result of patient treatment than human resources. This is good from the one way – in case of hospital which is concentrated on patient health problem or even life but on the other hand leadership should remember that respect human resources is more effective and engage. Figure 5 shows creating the next factor QB – *influence character of superior*.

As it can be seen from the Figure, there is typical senior influence. Worker is able not to feel comfortable in such a situation.

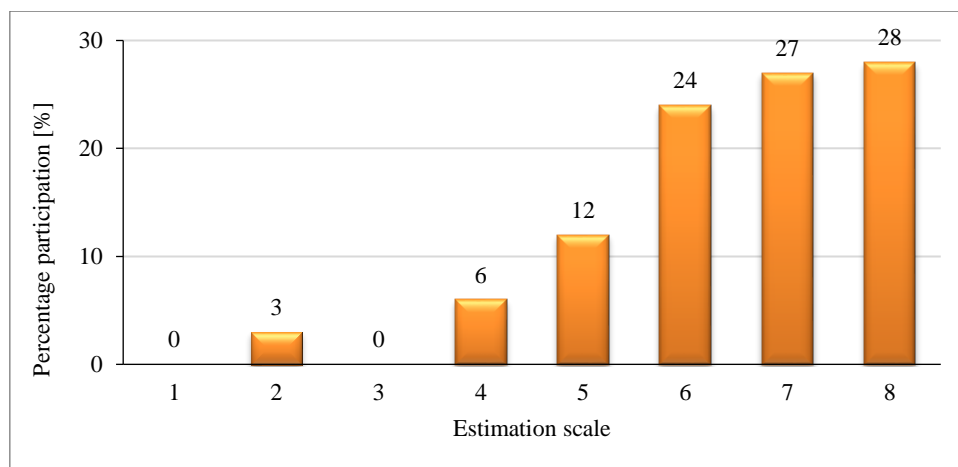


Figure 5. Data connected with factor QB – *influence character of superior* (own study)

Figure 6 presents creating the last factor SL – *human matters importance at hospital*. It can be seen that at hospital exist huge interesting of human resources. It means that leadership care about its employees, talk with them, listen their problems and cooperate in its solution.

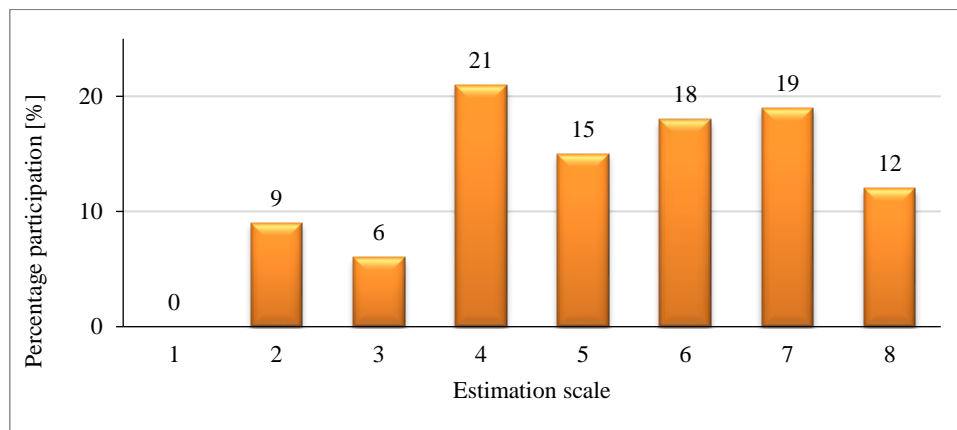


Figure 6. Data connected with factor SL – *human matters importance* (own study)

## 5. Conclusion

Figures and all obtained results showed that in hospital is using West approach with some elements coming from Kaizen approach.

Research carried out and their analysis with taking into consideration Kaizen philosophy as well as West approach showed that director of hospital is concentrated on hospitals' result. Data analysis showed that:

- Personnel's motivation, performance and satisfaction is low;
- Workers are independent and responsible in the hospital;
- Hospital care about its culture;
- Superior showed low trust in relationships with employees;
- Very formal influence of superior in the company;
- Human matters show great interest.

To change this result hospital should undertake a lot of steps to introduce Kaizen methodology in the company. The first and very important step there are trainings from the Kaizen methodology both to director as well for personnel. ***Very important recipe for hospital success is to remember by director that he should manage with human resource that human resources management. He also should show hospital's personnel respect.***

Kaizen means also that highly engaged workforce focused on providing value to patients and minimizing waste in the delivery of care.

Many authors (*Behensky, Janet Roe & Bolton, 2005*) suggest that Kaizen works in the health care especially in areas that are process-oriented. Kaizen also gives hospitals an alternative for making continuous quality improvements without massive expenditures.

The use of Kaizen in the company depends to a large extent on the specific nature of its business and the openness of the board to changes in its organizational culture. Kaizen creates an atmosphere conducive to problem-solving through collaboration.

Kaizen encompasses all aspects of business from the way an employee works in a particular workplace through the improvement of machinery and equipment.

In author opinion base on research carried out tested hospital seems to use Kaizen approach but this approach is not perfect in some areas. These areas are connected with morale of crew. Maybe it comes from the financial fact. Maybe there should be more trainings for leadership at

hospital to underlie the role of motivation and employees satisfaction from work. Presented data in the paper are the first step in researchers connected with Kaizen methodology. In the future there will be carried out researchers connected with statistical data.

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