QUALITY FORMATION FACTORS IN ECONOMIC AND HEALTHY FIELDS - REVIEW AND COMPARATIVE CHARACTERISTICS

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Abstract: This publication aims to define the driving forces for the formation of quality knowledge and their practical role in the business and healthcare system, which is important for each manager in terms of quality development and quality management. Documentary and historical methods have been explored over many scientific publications. Quality concepts have been explored to give an insight into the nature of both types of needs - the manufacturer and the consumer, and how they have been managed over time so they have "altered" the quality of products and services by creating new features. Quality concepts deliver the first and most important factor in shaping quality - the needs of entrepreneurship and consumers. In the business sphere, the factors influencing the quality are manifested through the "Integrated Quality Control System and are: policy, information, design and construction, materials, equipment, labor resources, maintenance. The factors determining the development of the quality of products / services in the economic and medical spheres can be classified into five groups: needs, economic factors, market, achievements of science and technology - new technologies, education - development, level of professional qualities, public relationships, level, person and social environment and governance. They have different influence and strength in each of the two spheres. Among the factors for the development of quality there is dependence and mutual influence, arising from the relations in the society, based on the economic relations. Their core is built up by the two types of needs - those of the manufacturer and those of the user. By their very nature, they are antagonistic needs linked to different individual motives, which are the subject of a separate study. Combining and synchronizing individual and public interests is a factor in shaping the welfare state policy.

Keywords: systematic approach, motivation, quality, quality of medical activity, driving forces of knowledge, driving forces of practice

INTRODUCTION

The historical path of knowledge of quality goes through the discovery of individual aspects of quality, defining definitions and forming many concepts of essence and quality management, each of which prints the level of knowledge of various branches of science: philosophy, economy, statistics, management, social sciences, law, health. The purpose of this publication is to define the driving forces for building quality knowledge and their practical role in the business and healthcare system that is important to each manager in terms of quality development and quality management. Documentary and historical methods have explored numerous scientific publications on the results of research on nature and quality management in the context of the social processes that accompany, support and influence the understanding of quality.

1. QUALITY CONCEPTS

The classical concept of product / service quality is built on the principle of meeting consumer requirements (individual, organization, society) based on Abraham Maslow's hierarchy of needs. According to the concept of entrepreneurship for quality, society functions through two main types of needs: those of the society itself and those of the individual (the entrepreneur). Behind them are the two types of entrepreneurship objectives - internal (the entrepreneur - as an attempt to increase own income) and external (of society - related to the improvement of the quality of life). Society does not set a boundary between quality of life and quality at all. In order to solve its main task - "enhancing the quality of life", society supports entrepreneurship. By satisfying their own interest in profit, the developer creates products and services that meet the needs of individuals in society. It follows that the quality of these products (services) is respectively the quality of life, and making profit as a legitimate right is a socially responsible behavior. The unity between the internal and external goals of entrepreneurship determines the social nature and social responsibility of business, and the social focus of quality philosophy as part of the entrepreneurial philosophy is reflected in the international standard ISO 8402.

The modern paradigm is based on the definition of Quality Score, according to which "Quality is determined by the user, while the manufacturer's task is to form the conditions by which the user's quality requirements are met." K. Ishikawa points to a "true quality" defined by consumers and "substitute quality" - the conditions created by the manufacturer to achieve the actual [12].
Market competition has imposed a modification of the contemporary quality paradigm, through the so-called "Quality Profile for Consumers" or "Canoes Model" or "Attractive Quality Theory" where Kano defines three composite quality profiles: Basic quality, of the "mandatory" production characteristics. They are implied, and therefore do not represent the value to the consumer. Required (expected) quality corresponding to the technical and functional characteristics of the product (drug effectiveness!). User satisfaction increases when the quality of quality parameters exceed expectations. Attractive (unexpected) quality corresponding to the "surprising" performance features of admiration, hidden value [13].

Quality concepts deliver the first and most important factor in shaping quality - needs. The concepts of quality give us an idea of the nature of both the needs of the manufacturer and the consumer and how they have been managed over time so they have "altered" the quality of products and services by creating new features.

2. FACTORS INVOLVING THE DEVELOPMENT OF QUALITY IN THE ECONOMIC SPHERE

The development of the concept of quality is conditioned by two main factors: the way of production and the development of the market.

The mode of production is related to the achievements of science and technology, which are the reason for the improvement of the product, respectively - increasing the number of evaluated properties. Thus, in industrial production, the quality assessment is based on the accuracy of the dimensions and the strength of the matter. With an increase in valued properties, the focus of assessment is shifted to product functionalities, serial production - from one product to a whole batch, and automation checks for reliability.

Throughout the different stages of market development, its role reflects the different product requirements. At seller's market (1770 - 1960) - on production and quantity. At buyer market (1970) - on demand and supply, competition between suppliers, statistical procedures, application of system approach to organization of the production process and certified quality assurance systems. Services Market (1980) - user orientation, implementation of certified quality management systems and TQM as a management approach. Network Market (2000), Environmental Information, Many Suppliers, TQM as a Selective Environment Approach and Information and Knowledge Management. From the point of view of the development of the exchange process, it is considered that the first simple quality requirements arise at the buyer's market. [7] With the development of quality management systems, the role of market relations becomes so important that it is "embedded" in the organization strategy and quality policy.

In the business sphere, the factors influencing the quality are manifested through the "Integrated Quality Control System and are: policy, information, design and construction, materials, equipment, labor resources, maintenance.

3. FACTORS INVOLVING THE DEVELOPMENT OF QUALITY OF THE HEALTHCARE SPHERE

The issue of quality in healthcare is related to factors from different areas of human progress such as: the degree of scientific knowledge in general and medical theory and practice, the education of doctors, the degree of development of social relations, in particular social and health insurance. There is a strong influence

Historically, the problem passes through three phases. The first phase - applied - empirical - is associated with the names of Abraham Flexner (Flexner Report, 1910) and E. Codman (suggests a method of measuring and evaluating hospital outcomes in the United States). The second phase - structural - evaluation is associated with the establishment of a structure for assessment and guarantee of work in hospitals. The third phase (after 1950) - institutional, establishment of accreditation quality assessment bodies in the US, Canada, Australia, the Netherlands, Spain, France and the UK. In the 1990s, with the Concept of Continuous Quality Improvement, a fourth phase is allowed. Fleksner's report is considered as a "road map" for state medical education, public health, research and public hospitals, linking practical medical skills with scientific methods, which has led to an increase in the quality of doctors' professionalism [7, 8, 9].

The main factor for the formation of quality in the health sphere is the medical education and the conditions of the medical practice.

4. COMPARATIVE CHARACTERISTICS OF THE QUALITY FACTORS IN THE TWO FIELDS - THE ECONOMIC AND HEALTHCARE

The factors determining the development of the quality of products / services in the economic and medical spheres can be classified into five groups: (1) needs; (2) economic factors; (3) market; (4) achievements of science and technology - new technologies; (5) education - development, level of professional qualities; (6) public relations, level; (7) man and the social environment; (8) management. However, they have different influence and strength in each of the two spheres (Table 1, Figure 1).
Table 1: Comparison of the impact of driving factors. The sign (+) indicates the influence of the driving factor.

| №  | Driving forces                        | Field of material production                                    | Field of production of medical services |
|----|--------------------------------------|-----------------------------------------------------------------|----------------------------------------|
| 1. | Needs                                | The manufacturer as a profit and the consumer - satisfaction of something that is missing. | Satisfying health needs. Missing goal - profit. |
| 3. | Market                               | Market relationships are "embedded" in the organization's strategy. | +/- Potential imperfection in the health market. |
| 4. | Achievements of science and technology - new technologies | Improving the product, increasing the number of properties evaluated. Greater productivity and profit. | + New technologies for diagnostics and therapy. |
| 5. | Education-development, level of professional qualities | ++ Level of qualification. | ++ Level of qualification. The medical mistake is more expensive. |
| 6. | Public relations, level               | Social security - reduction of social risk.                      | ++ Health insurance - reduction of health risk. |
| 7. | Man and social environment            | Changing needs.                                                  | + Changing needs |
| 8. | Management factors                   | ++ Strongly expressed due to the application of an integrated quality system. | +/- Slightly pronounced: due to the individuality of medical work. |

Below is a conceptual diagram of the scientific experience and the factors for the quality development

Figure 1 Conceptual scheme of scientific experience in quality development

- Needs
  Based on quality concepts, they have emerged and shaped due to the needs of producers and consumers that correspond to a certain level of public relations. The emergence of new concepts is in the direction of understanding the needs of users and their satisfaction. The dependence of the manufacturer on the needs of the consumer is a leading factor throughout the historical period of quality development.

- Economic factors
  In the economic sphere, there is evidence of the influence of economic relations in the formation of quality already in the 13th century in Medieval Europe. In a pre-industrial revolution, the quality rules stem from the one that produces and this act is realized in the production process. There are claims that they are probably the prototype standard. "Signs of Inspection" and "Craft Signs" are the first tools to improve quality.
and the first form of control until the Industrial Revolution in the early 19th century, and later perfected as certification and quality awards [cf. Mineva E. dis. 2013. (5)]. The era of the Industrial Revolution is characterized by two trends - the dependence of manufacturers on consumer quality needs and the subsequent process of division of labor, resulting in higher productivity.

As a production system, the health sector is subject to the same economic laws, but is seen as part of the process of balancing the economy through its participation in the formation of gross domestic product. This means that healthcare is between industry and a sector that both generates costs and generates added value.

- **Market**

  In the business sphere, the market is real and natural. In the health sphere there is a quasi-market. Market forces in healthcare are much less pronounced than in the area of material production and services. The imperfection of the healthcare market is theoretically embedded in the concept of "Health Market Failure".

  The lack of "real" market relations is determined by the following reasons:

  - Buyers of health services are not independent because they are not well informed about the type, quantity and quality of the necessary healthcare service, so the doctor influences the consumer's decision and its irrationality.
  - There are no independent and competing sellers.
  - Lack of free market access to new sellers, presence of geographical, political and economic barriers.
  - In contrast to products in the field of material production and services, the healthy product / service is characterized by the individuality of the service, depending on the quality of the service provider and the condition and potential of the buyer / the patient /

  - Productivity factors between industries and companies (health establishments) are not mobile because they are profiled. Medical specialists, as a major production factor, are closely profiled and specialized.

  The quality of the health service can be regulated, to a lesser extent indirectly, through the economic conditions of regulation and directly - through direct intervention: by economic route / taxes and charges /, politically / state policy /, administratively / normative acts, ordinances / of the subjects: state, municipalities, sphere, health insurance and self-regulation.

- **Achievements of science and technology - new technologies**

  In the economic sphere, the way of production is related to the application of the achievements of science and technology leading to the improvement of the product / service and thus to the increase of the number of their evaluated properties. The goal is greater productivity and profit.

  Innovations in science and technology are a challenge to the qualification. They give science dynamism and "open" it to reassess the essence, nature, and quality assessment. The factor "Achievements of science and technology" is reflected in the development and level of other driving forces.

  In the sphere of healthcare, the achievements of science and technology are important for the introduction of new technologies in diagnostics and therapy

- **Education: development and level of professional qualities**

  Education is an important factor in both areas - economic and healthcare. In the context of the Health product’s participation in the creation of Gross Domestic Product (GDP), the medical error is more expensive.

- **Public relations - level**

  Consideration of "public relations as a hierarchically built organic system", in which "economic laws are manifested as phenomena, through their genetic structure and essence" [15], justifies that the laws governing the development of the quality of the health service are considered in the context of industrial relations, social security and health insurance as a component of social security. Similar aspects have been studied by Bulgarian authors (Popov M.) [16].

  Compulsory health insurance reduces the financial risk when a need for a health service arises. The existence of relationships between three entities - a user of health services, a health service provider and an intermediary (health insurance fund), implies an assessment of the activities of these three entities. Citizens' rights as regards their health are assessed, such as mandatory health insured persons and patients who are guaranteed medical care in accordance with medical standards and good medical practice.

- **Man and the social environment: changing needs**

  The social environment is the set of social factors that affect people throughout their lives and their lives. Ensuring the safety of the life of the individual person, the social group and society is manifested through the logical connection between four units: (1) understanding and satisfying the needs of man and society, (2) motivation, (3) their actions and (4) the ability to combine and synchronize individual and public interests. The quality of medical activity can be seen as a "buffer" and as a guarantor of social security

- **Management factors**

  In the economic sphere, production is subject to the principles of scientific management entirely, but not in the healthcare system.
CONCLUSION

Among the factors for the development of quality there is dependence and mutual influence, arising from the relations in the society, based on the economic relations. Their core is built up by the two types of needs - those of the manufacturer and those of the user. By their very nature, they are antagonistic needs linked to different individual motives, which are the subject of a separate study. Combining and synchronizing individual and public interests is a factor in shaping the welfare state policy.

LITERATURE

[1] Болничен мениджмънт», под редакцията на Иванов, Л., Големанова, Ж., Издава НЦОЗ, 2005, стр. 260 - стр.261
[2] Болнично управление, теоретични аспекти и практически решения (избрани лекции)» ИК «Хераклит A&H”, под редакцията на проф. Мирослав Попов, ISBN 954-573-018-8, 13, стр. 224 – 232
[3] Болнично управление, теоретически аспекти и практически решения (избрани лекции”), ISBN 954-573-018-8, под редакцията на проф. д-р Мирослав Попов, ИК „Хераклит A&H”, стр. 233
[4] Врачовски Д., Йорданов Пл., „Социално осигуряване”, ISBN 954-23-0098-0, Академично издателство «Ценов», Свищов, 2003, стр. 7, по Здравомислов, А., „Потребности, интереси, ценности”, Москва, 1988;
[5] Димова А., „Управление на качеството в болницата”, ISBN 954-449-189-9, Издателска къща СТЕНО, Варна, 2004 стр. 30-стр.32
[6] Донъли мл., Джеймс Х., Гибърнс, Джемс, Л., Иванчевич, Джон, М., „Основи на менеджмънта”,ISBN 0-256-09790-9 (оригинално издание), ISBN 954-520-095-2 , Издателство «Отворено общество» ЕООД, София 1997; глава 16, стр. 459, 460;
[7] „История économique и учений“ ISBN 5-211-0023-4, Изд. Московскогого университета, 1989, стр. 80, 78-94
[8] Ишкиная Каору, „Тотално управление на качеството в Япония”, ISBN - 954-445-294-Х, ИК „Христо Ботев“, София, 1994г. стр. 91-92
[9] Костадинова, Т., „Маркетинови подходи в управление на болницата”, Зд. ик. менеджмън, 1, №2 2001
[10] Кузьмин, А.М. „Методът Модел на Кано” , http://www.inventech.ru/pub/methods/metod-0022/
[11] Класически философия на качествата”, по материалам компании Ланит, Адрес статьи: http://www.iteam.ru/publications/quality/section_57/article_832/
[12] Минева Дарина, „Нови подходи за оценка на качеството на медицинската дейност“, Дис., Медицински университет София, 2013г.
[13] Попов М. „Организация и управление на здравноосигурителните фондове и каси“, ISBN 954-449-198-8, Издателска къща СТЕНО, Варна, 2005, стр. 26 – 28
[14] Попов М. „Организация и управление на здравноосигурителните фондове и каси“, ISBN 954-449-198-8, Радев Начо, „Технологии за социална защита“, ISBN 978-954-616-181-9, Издателска къща ГорекПрес, София, 2007
[15] Стефанов Нако, Радев Христо, Буров Ивелин и други, „Управление на качеството“ ISBN 954-608-096-9, ИК „Труд и права“, София, 2004