The challenges of primary health care sector in the Federation of Bosnia and Herzegovina

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Abstract

In today's modern society innovating in every organization becomes a key of its competitive advantage and survival in the highly competitive market. This rule, sooner or later will have to be accepted by our primary sector health care organizations. All institutions must strive that by constant innovating, using in the best manner possible the limited and available resources, to, in the long term, ensure continuing business and better future. The scope of innovating activities must be all segments of the health care organizations. All employees must be involved in innovating process, and not only the research and development departments (R&D). The health care institutions, which constantly innovate, enjoy the permanent advantage in the competition with their competitors. They are able to produce products and services that are cheaper and of better quality. The innovation type, which the particular health care institution chooses, represents, in its essence, the nature of the innovation. It also includes the influence of change on the value chain participants, competence and firms' inclination in tedious fields of innovation and innovative management. The modern markets require from the health care organizations to be more dynamic, and the environmental changes demand comprehensive innovative orientations. The people who kick start innovations in health care field are in principle leaders.

The leadership variables become very important having in mind that almost all organizations, to a certain extent are built based on the hierarchical structure. As the result of this fact, the decision making centers tend to be concentrated in the hands of the leading individuals. The science has found the relationship between leaders' motivations and the frequencies of the innovations. The health care in Federation of Bosnia and Herzegovina (F.B&H), and its entry and Primary care sector are faced with the serious challenges. Thus, innovating in this sensitive service field becomes the imperative for society. Innovating and at the same time, managing these processes is necessary for more reasons. Financial resources allocated for health care in B&H are limited, and are expected to remain so in the future. The second part of the challenges the health care sector is facing is represented in the aging of the population. The people live longer, and as the consequence, for the health maintenance of population over 65, more and more resources are spent. By innovating, best practice checking and waste reducing the immense savings can be achieved in the health care. These actions, as well as the quality applications of best practices will enable that health care outlays, (which exceed ten percent of gross domestic product (GDP) for B&H for 2011), shall, either remain stable or decline.

Key words:

primary health care organizations, funding, innovative management, leadership, limited resources

Introduction

The health market is specific, sensitive and highly fragmented. This fragmentation is especially emphasized in the F.B&H, as a consequence of the constitutional arrangement by which the F.B&H is divided into ten cantons. From all of this, naturally arises the logical conclusion that the introduction of new technologies, especially information technology and information media and through adequate representation in their primary care systems is directly proportional to the level of improving health care. Cantons in making laws and decisions, including those in health care, enjoy high autonomy, so that the federal institutions and ministries have largely advisory role. This disunity often leads to irrational decisions, since each canton has the autonomy to procure and spend funds independently. It is not rare that, from modest and limited financial means, Cantonal Ministries of Health purchase expensive equipment with which on arrival there is no one to handle, because the necessary staff are not trained, nor can be provided in sufficient numbers. These examples and others, which have been burdening health care, require

our rational and efficient approach. Like any other business entity and organization of health care (OZZ) to successfully operate in a market, they must improve their organizational performance by improving the management of innovation. Innovation in the health care organizations becomes not only a factor of competitiveness, but increasingly a factor of survival (Joksimovic & Vujovic, 2005) (Masic, Novo & Toromanovic, 2009) (Jones & George, 2009).

Processes of innovation began in F.B&H immediately after the war, in 1996, but its implementation was not sufficiently diffused, it was narrowly focused and limited to a small number of primary health care entities. Innovation is an activity that is far more complex than it looks. Compared with developed countries, the process of innovation in healthcare in F.B&H began relatively late. In a country, where the war destroyed a significant number of production and infrastructure, no health facilities or personnel were spared. Although, the significant resources in the reconstruction of medical facilities and equipment were expended, a significant number of them was worse off as compared before the war. Implementing the reform of the health system aims to strengthen primary health care (PHC). Within the PHC teams the implementation of the family medicine (TOM) is one of its highest goals. At this level, the rehabilitation centers in the community have also been introduced. As part of the reforms the issues of financing health care have also been addressed. On the basis of the contributions, health insurance contribution is calculated on the gross salary of the employees at the rate of 16.5% (12.5% at the expense of employees and 4% at the expense of employers). Funding for health purposes are collected and distributed at cantonal levels (Katz & Green, 1997), (Masic, Novo & Toromanovic, 2009).

Exploring innovation in primary health care sector in F.B&H is just in the beginning. The reason for this is serious resistance to the introduction of changes and its monitoring. Analysis of recent research shows that innovation deals with only a very small number of primary health care institutions, that this process is not planned and organized broadly, that radical innovations are more the exception than the rule and that they were practiced in only a small number of health care institutions. As pioneers in innovation, we can mention the Agency for Quality and Accreditation in Health Care (AKAZ) F.B&H, Clinic for Heart at clinical centers in Sarajevo and Tuzla, Institute of Radiology at the University Clinical Centre in

Sarajevo (KCUS), some private clinics and clinics, etc . (Narayan, 2001), (Valjevac-AKAZ, 2009).

As an interesting example of innovation we note the Department of Radiology KCUS, who was among the first began with the introduction of electronic medical records (EMR). Electronic card designed to replace existing paper medical records. It has several important advantages, such as the absence of errors, cost savings, the ability to exchange medical information in a short period of time, easier diagnosis, reducing administrative costs and more. Unfortunately, the card shows its full advantage only if it is adopted by all health institutions and if all institutions are bound into a single information system. Cards that introduce individual institutions can not fully show its effects. Private healthcare facilities make significant results in innovation. Results are reflected mainly in the approach to the patient, speed of service and different environment, which resembles a small hospital in which reluctant to plunge, and less in top medical results (outcomes). Private clinics, in general, does not constitute a significant percentage compared to the total percentage of healthcare services (Lighter & Fair, 2000), (Levi-Jaksic, 2008).

Discussion:

Historical overview of health care development and challenges

The health care system in B&H is rooted in the 1995 Dayton Peace Agreement, after which the B&H was composed of two entities; Federation of Bosnia and Herzegovina (F.B&H), Serbian Republic (RS) and Brcko District. According to the B&H Constitution, health care is the responsibility of the two entities and one (Brcko) District. F.B&H has a decentralized health care system, which was organized at the cantonal level. F.B&H has ten cantons, each canton has its own Ministry of Health, which is responsible for the organization of health care at the primary (health centers - health centers with general practitioners and family health units), secondary (cantonal hospitals and clinics) and tertiary level (general hospitals, special hospitals and university-university clinical centers). Each entity has its own district and the Law on Health Care and Health Insurance Act. Unlike F.B&H, RS has a centralized health care system. Changes in the health system began in 1996, immediately after the signing of the Dayton Peace Agreement, with a view to reform the Primary Health Care (PHC), the inclusion of family medicine. This concept was aimed at rationalizing health care based on the

strengthening of primary health care. With the help of the Canadian Association (CIDA) and Queens University, the Canadian federal government of Ontario, introduced family medicine teams. At the PHC level, at the level of municipalities and communities, municipalities, and because of the large number of injured and disabled persons, as a result of the war in 1992-1995, the medical centers and mental care centers for physical rehabilitation were introduced. Strengthening of PHC was monitored by rationalizing the hospital care with the help of the Australian Health Insurance Commission, and the World Bank's loan. Hospital capacity was reduced in accordance with the federal program of reconstruction of the health-care system, established in 1996 (Masic, Novo, Pilaf, Jokic, Toromanović, 2006) (Masic, 2007), (Masic, Novo, Toromanović, 2009).

The use of hospital capacity showed a slight increase, and it is still below the acceptable level of occupancy. At the level of F.B&H the cantonal authorities are seeking ways to improve the uniformity, effectiveness, efficiency, speed and quality of service. In 2005, most cantons established a strategy for health care reform to be implemented by 2015.

The main objectives of this strategy are: equal access to health care services, efficient delivery of health care through adequate health financing through adequate structure of human resources, effective monitoring of demographic changes, as well as improving the limited and fragmented institutional capacity. The strategic objectives are: to improve the health of the population and the creation of satisfaction with services through the delivery of affordable, effective, high-quality, cost-effective programs and interventions in the care, health promotion and disease prevention. The new practice of health care would be based on the concept of family medicine, enabling patients' registration and free choice of doctor. This would create a basis for the entire health care organization. Health care organizations (OZZ) must be restructured and health centers must begin using a common and acceptable practice adopted by other organizational units, which can provide services to the widest strata of the population. Within family medicine teams, except family doctors, a major role has to have general and visiting nurses for active control and health promotion. All consulting services should be provided for consultation with family doctors and specialists (with the possibility of electronic and tele-consultation) Mihajlovic & Kostic, 2005) (Masic, Novo & Toromanović, 2009) (WHO, 2013).

Reform of primary health care should be based on a solid financial basis with the aim to protect the population from the high costs, ensure redistribution and guaranteeing access to those who need basic services. For this reform, cantonal ministries and fund health care reform law must prepare and regulation in the style of movement of financial resources, including methods of payment services and payment of staff and institutions. HCO in F. B&H continue to work with the organizational structure that existed before the war in Bosnia and Herzegovina (1992).. The new legislation, which is based on the Dayton Peace Accords (1995). The former socialist-centralized system, became increasingly decentralized with a tendency to become completely fragmented at the local level. Currently in F.B&H there is the ongoing process of reconstruction of PHC. Accordingly, the Ministry of Health of F.B&H, in cooperation with international institutions, has prepared a document for the reform of the primary health care system, with the aim to increase: effectiveness, efficiency and rationalization of health care. At the same time, structural changes in the system OZZ occur in the RS (Masic, Novo, Pilav, Jokic, Toromanović, 2006), (Miljkovic, 2006), (Masic, Novo & Toromanović, 2009).

The innovative approach to the development of primary health care in the Federation of Bosnia and Herzegovina

The dynamics of the key development trends and characteristics of health care in the Federation of Bosnia and Herzegovina

Health care is a complex and open macro system of special social significance. The health care system is made up of large number of its sub-systems (microsystems). These are primarily:

- Organization of the human population and community (i.e. social-medical diagnostics and health indicators),
 - Health Ecology,
 - Scientific research,
 - Medical Education,
 - Medical staff,
 - A network of health care institutions,
 - Pharmaceutical and sanitation production and supply,
 - The role of government in health care-the Ministry of Health and
 - Health economics (health care financing)
- (North & Bradshaw, 1997), (Porter, 1998), (Masic, Novo & Toromanović 2009).

Each of these subsystems has its own line of microsystems, such as: health facilities (health centers with health centers, and a network of outpatient clinics, laboratories, etc.). The value and quality of any social system is estimated degree of mutual harmonious functioning of its subsystems, individually and all together. Unfortunately, today, in many countries, including the entity F.B&H, we have a very low and uncoordinated degree of complementarity and harmony health system (Porter & Teisberg, 2006).

Illustrations for this situation are:

- A large number of dissatisfied customers (citizens) in health care facilities,
 - A large number of unemployed educated health professionals,
 - Uncontrolled spending in health care,
 - Inadequate and insufficient production of necessary medicines,
 - Lack of quality control (i.e. insufficient scientific solutions to better organization system)
- (Porter & O'Grady, 2007).

F.B&H is divided into 10 cantons, each canton has practically its own government. The cantons are composed of municipalities that have the property of socio-political communities. Health jurisdiction in F.B&H are divided between the federal and cantonal authorities, which has decentralized health. Federal level usually has a coordinating function. Health services by health institutions founded by the Federation, cantons and municipalities, in accordance with the law on health care F.BiH. Reforming health care is started immediately after the war (1996). Reform commitments are focused primarily on strengthening primary health care to the principles of family medicine, the rationalization of higher levels of secondary and tertiary health care, and more uniform distribution in the health facility and staff. Health care reform was agreed that the highest percentage of requests and needs of the population in the area of health care addresses the primary care level, through family medicine and specialist consultation service, which existed in the area of the primary health care. The reform also foresees that a small portion (15%) requests and needs of the population solves the secondary and tertiary levels of care. In this manner would be rationalized spatial and human capacities at secondary and tertiary levels of health care, and rationalize the overall cost of health care (Masic, Novo & Toromanovic, 2009), (Federal Ministry of Health, 2012).

In accordance with the socio-political and socio-economic changes in society, the actual process of privatization in health care is modified, too. The privatization process will open the competition between the state (canton) and private hospitals. Because of legal restrictions that process still runs very slow. Some private hospitals already have an enviable reputation, while the rest are just trying to achieve the reputable results. One of the objections to private hospitals and those that are open are the individuals whose medical experience is rather questionable and that there is no transparency in their work. According to the Law on health protection at the municipal level, the following health entities are formed: a regional community health clinics, pharmacies and general hospitals. At cantonal level are formed: Ministry of Health, cantonal hospitals, special hospitals, Institute of Transfusion Medicine, Institute of Public Health and Institute of Insurance. At the federal level are formed: Ministry of Health, Clinical Centers, Institute of Transfusion Medicine, Institute of Public Health, Bureau of Drug Control and the National Institute for Insurance and Reinsurance. The objective of health system reform F.BiH the strengthening of primary health care (PHC), which monitors the rationalization of higher levels of protection. Within the PHC will deploy teams of family medicine (TOM). At this level are introduced and rehabilitation centers in the community care (Masic, Novo & Toromanovic, 2009), (Federalno Ministarstvo Zdravstva, 2012).

The reform included the financing of health care. Allocations for health amounted to 16.5%, of which 12.5% are allocations of gross personal income workers, and 4% of the allocations by employers. The funds are collected and distributed at the cantonal level. “The package of health rights” for federal, cantonal and municipal level came into force on 1 April 2009th Unfortunately, the Charter of Patients’ Rights was adopted even in F.BiH, neither the Serbian Republic (Initiative and Civil Action, 2009), (Masic , Novo& Toromanović 2009) (Federal Ministry of Health, 2010).

Despite all the efforts that were done, there is no universal approach to health care (HC) in the entire territory of Bosnia and Herzegovina, as required by the European Social Charter and other international documents. The estimated inequality in access to HC, both in geographical and in financial terms, depending on the canton in which this patient lives. HC benefits are unfortunately not enjoyed equally by all citizens, because the current way of providing protec-

tion concentrated in cities, and access to care is difficult especially for the rural population. Persons insured in different cantons have different rights and different access to services ZZ, especially tertiary HC. Modern hospitals should answer the many demands and challenges posed by increasingly complex medical conditions and diseases, and more demanding patients on the one hand and limited material and financial resources on the other (OECD, 1991), (Miha-jlovic & Kostic, 2005), (OECD, 2012).

A similar situation is with the health insurance system in F.B&H. I still have health insurance funds of state institutions, or the entity and cantonal. The transition from one state to another system, that is, from a planned economy to a market economy, requires a reform of the health insurance system in F.B&H. Reform orientation development of family medicine was introduced as a fundamental objective. The privatization process has been made some progress, but not yet defined key trends. There is no country in the world today that meets all the health needs of its population, since the demand is greater than the available funds to meet all your health needs. Therefore, in order to make the optimal choice, we need to define priorities. This is an exceptional and difficult task, and therefore the planning of health services with its wide range of activities belonging scientific disciplines (Stosic, 2007), (Orszag-CBO, 2009), (Prester, 2009).

The problems of even larger, and in most instances, non-transparent cost-inflation consequences can be seen even in the most developed industrialized countries in the world. The usual culprit is the liberalization of for –profit insurance market, which, through its lobbying power can strongly influence the power of the insurance factor (which can even exceed the power of patients and providers), as seen in Figures 1. and 2.

Source: (Orszag – CBO, 2009)

Figure 1. – Projected spending on health care in the United States of America under an assumption that excess cost growth continues at historical averages

Figure 2. International Comparison of Spending on Health 1980 to 2009

Source: (Commonwealth Fund National Scorecard on U.S. Health System Performances, 2011)

Table No.1 represents the ultimate criteria of performance in the health sector. The picture shows that financing, payment, organization, regulation, and social marketing are determined intermediate performance criteria in the health sector, and they affect the efficiency, effectiveness and quality of ZZ. Intermediate criteria affect the ultimate criteria, namely protection against financial risks, health status of patients and their satisfaction with services (Gavrankapetanović, 2010).

Table 1: The ultimate performance criteria in the health sector

The ultimate performance criteria in the health sector	
1. Protection/Insurance from Financial Risks/Loss/Bankruptcy 2. Health Status of the Population and 3. Patients' Satisfaction	
are influenced by	
Intermediary performance criteria in the health sector:	
1. Effectiveness 2. Efficiency and 3. Quality	
1. Financing, 2. Payment, 3. Organization, 4. Legislation-Regulation & 5. Social Marketing	

Source: (Gavrankapetanović, 2010).

Analyzing human resources in health care of F.B&H compared to the European population at 100,000, we can conclude the following:

- The total number of doctors in F.B&H is 165, and the European average is 358,
 - The number of general practitioner in F.B&H is 22, and the European average is 102,
 - The number of dentists in F.B&H is 20, and the European average is 166,
 - The number of pharmacists is 11, and the European average is 82 and
 - The number of nurses / technicians in F.B&H is 498, and the European average is 818
- (Federal Ministry of Health, 2012)

These data suggest that in F.B&H human resources in the health sector are significantly lower than is the case with the European average. The same applies to the capacity of hospitals. At 100,000 residents of hospitals in F.BiH is 1, and the European average is 3.4. The number of hospital beds in F.B&H is 350, and the European average is 611. Number of annual reception for 100 residents in F.B&H is 9.6, while the European average is 18. Residents of F.B&H in average lay in hospital 9.2 days, while the European average is 10 days. Every fifth inhabitant of F.B&H visits the dentist, which represents an unsatisfactory statistic. The number of dental visits was 3.6, while the EU average of 7.8 visits per capita per year. On average, as employment status ZZ most used pensioners. The largest number of medical doctors present in the Canton of Sarajevo (87 per 100,000) and lowest in the Una-Sana Canton (35 per 100,000). Despite all efforts to develop PHC is disrupted, the proportionality general practitioner and specialist doctors at the expense of general practitioner. In order to reach European levels of quality in health care, F.BiH must necessarily strengthen their human and other medical facilities. This is not a short-term or easy task. In its implementation must include all the relevant stakeholders: Ministries, federal and cantonal authorities, health organizations and university institutions that educate medical staff (Masic, Novo& Toromanović, 2009).

The World Health Organization (WHO) defines primary care as “part of health care that is affordable comprehensive individual or

family in the community, in a manner that is acceptable to them, through full participation and the cost that the community and country can not bear.” PHC will be more effective if it is able to reduce the number of patients who are unnecessarily sent to secondary and tertiary levels. To meet the basic health care needs of the population, a wide range of health services must be made at the local level. If the family is actively involved in the protection of their own health and works closely with the health system, it will be economically highly cost effective manner, with the least effort, health care comprise the largest segment of the population. Health services, family oriented, also provide an opportunity to share responsibility for the health of the public, using the promotion of a healthy lifestyle. Reform Programme OZZ F.BiH in the future should be practiced conception, according to which the family doctor served as the starting point for the overall coordination of care. He played the role of “gatekeepers” whose goal is materially more efficient, coordinated and effective protection (Roberts, Hsiao, Reich & Berman, 1999). (Masic, New & Toromanović, 2009).

The patient should, when this first contact, got advice from your family doctor as the best and most effective can provide adequate protection. With this model, the implementation of PHC will be able to efficiently solve at least 80% of claims for medical services at this level. The reform program meets with significant problems. For complete coverage of all 2.4 million inhabitants in the territory F.B&H is necessary to equip the 1200 family medicine teams. Currently, this number is slightly less than 50%.

(Masic, Novo& Toromanović, 2009).

In terms of supply of medical equipment, medical institutions have so far been recorded and the following failures:

- Standardization and unification of medical equipment is not performed;
- Equipping of health facilities has flowed spontaneously, because they had not been consulted health institutions, nor are respected norms;
- Servicing and maintenance of equipment was not provided and
- Decreased amortization value of medical equipment, where her life grew shorter.

The new law on health care given the opportunity to organize private practice. Doctors are allowed to be contracted his services to the funds of health care through a “capitation system.” By law,

every insured person is entitled to a basic package of health services, regardless of the resources available in the county-Canton (Masic, Toromanović & Smajkić, 2009).

Conclusion:

Rationalization and continuing education, lower cost, competition, new technologies, better diagnosis and continuous improvement through the implementation of effective and efficient innovation policies give the PHC sector of F.B&H a reasons for hope. Reform of primary health care should be based on a solid financial basis with the aim to protect the population from the high costs, ensure redistribution and guaranteeing access to those who need basic services. For this reform, cantonal ministries and fund health care reform law must prepare and regulation in the style of movement of financial resources, including methods of payment services and payment of staff and institutions. Despite all the efforts that were undertaken, there is no universal approach to HC in the entire territory of Bosnia and Herzegovina, as required by the European Social Charter and other international documents. The estimated inequality in access to HC, both in geographical and in financial terms, depending on the canton in which this patient lives. HC benefits are not enjoyed equally by all citizens, because the current way of providing protection is concentrated in cities, and access to care is difficult, especially for the rural population. Persons insured in different cantons have different rights and different access to HC services, especially tertiary HC. Modern hospitals should answer the many demands and challenges posed by increasingly complex medical conditions and diseases, and more demanding patients on the one hand and limited material and financial resources on the other.

Reform orientation development of family medicine was introduced as a fundamental objective. The privatization process has been made some progress, but not yet defined key trends. There is no country in the world today that meets all the health needs of its population, since the demands are greater than the available funds to meet all your health needs. Therefore, in order to make the optimal choice, we need to define priorities. This is an exceptional and difficult task, and therefore the planning of health services with its wide range of activities belonging to scientific disciplines. Despite all efforts to develop PHC, undermined the equivalence general practitioner and specialist doctors at the expense of general practitioner. For optimal number of family medicine teams should be ensured

and associated equipment and space. It is estimated that over 90% of medical equipment is deemed obsolete

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