THE PARADIGM OF PATIENT-CENTERED CARE IN THE PUBLIC HEALTH DECISION-MAKING*

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Abstract

Equitable provision of health care has been a longstanding goal in many European countries. Provision of such universal coverage comes with the problem of growing health expenditures that is recognized globally. This article argues that patient-centered care (PCC), which has become a new promising paradigm for cost-effective provision of health care, should also become the new paradigm in the public health decision-making. PCC relates to the notion that patients’ preferences, objectives and values should be considered in the process of decision-making and delivery of health care. If we apply the PCC paradigm to the public health issue, it can be argued that any public health program or health policy should be created and evaluated considering patients’ preferences.

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Therefore, the aim of this paper is to elaborate the importance of preference elicitation in health care decision-making as a part of PCC.

Keywords: health care; health decision-making; patient-centered care; stated preference

1. INTRODUCTION

In Europe health care systems are struggling with ever-growing health care costs that are largely accelerated by unfavorable trends. Most important are aging population and increase in chronic diseases. Currently, Europe has the highest proportion of elderly population and by 2050 it is expected that more than 37% of the European population will be older than 60. On the other hand, it is estimated that only 10% of African population will be older than 60 (Deloitte, 2014). Due to the growing need to meet all desired goals with limited resources, the health care decision-making has become increasingly complex. Additionally, due to a gap in knowledge and information, especially between physicians and patients, the agency problem is pronounced in health care systems. Consequently, integrated care has become the new promising model for redesigning health care (Busse, Blümel, Scheller-Kreinsen & Zentner, 2010; McKee & Nolte, 2004). The goal of integrated care is to enhance consumer satisfaction and system efficiency by cutting across multiple services, providers and settings (World Health Organization [WHO], 2016). Therefore, a high degree of collaboration and communication among health professionals is needed. Hence, the importance of evidence-based medicine and patient-centered care (PCC) is rightly emphasized (Barratt, 2008; Barry & Edgman-Levitan, 2012).

When evidence-based medicine, which is based on conducted empirical research and the efficiency of medical interventions, was at its beginnings (Barratt, 2008), the involvement of patients in the decision-making was neglected (Evidence-Based Medicine Working Group, 1992). However, the importance of shared decision-making in health-care, as well as the integration of medical evidence with patients’ preferences (Sackett, Rosenberg, Gray, Haynes & Richardson, 1996) has soon been recognized. In fact, the study of preferences is in the focus of PCC that is no longer aimed on diseases, but rather on patients and their families (Barry & Edgman-Levitan, 2012).

Hence, the aim of this paper is to elaborate the importance of preference elicitation in health-care decision-making as a part of PCC. This paper consists of five parts. After the Introduction, in Section 2 we discuss the role of preference elicitation in patient-centered care, followed by Section 3 in which preference elicitation in creating the optimal health-care programs is elaborated. Section 4 explains the role of preferences in economic evaluations in health. Finally, Section 5 is the paper conclusion.
2. THE ROLE OF PREFERENCE ELICITATION IN THE PATIENT-CENTERED CARE

The concept of PCC was accepted as a fundamental approach in improving the quality of health-care in the United States (National Research Council, 2001), emphasizing the importance of collaboration between physicians and patients. Respectively, evidence-based medicine and shared decision-making should lead to better health outcomes and result in cost-effective utilization of health resources. This approach is in accordance with medical ethics indicating that patients’ autonomy should be respected (Sheridan, Harris & Woolf, 2004).

The most important characteristic of PCC is patients’ active involvement in the decision-making process (Barry & Edgman-Levitan, 2012). Gerteis, Edgman-Levitan, Daley & Delbanco (1993) argue that consideration of patients’ values, preferences and needs is significant indicator of health-care quality. Consequently, implications of preference valuation are comprehensive as they give important insights into factors influencing health-care utilization (Merino-Castelló, 2003). This has important role in health-care rationalization. For the purpose of studying patients’ preferences, different stated preferences methods are used and improvements of health-care services are made accordingly.

Economist Intelligence Unit (2011) proposed a scenario for the development of health-care systems by the year 2030 that is based on the primacy of preventive medicine and healthy life promotion over curative health-care. Namely, according to the WHO (2005), at least 80% of all forms of heart diseases and diabetes are preventable. However, their prevention requires a change in lifestyle, which is attainable through combination of various policies of education, prices and taxation, as well as by encouraging healthy habits of population. Such changes require at least alignments at the state level, since they involve various government sectors (from education to tax policies).

3. PREFERENCE ELICITATION IN CREATING OPTIMAL HEALTH PROGRAMS

Since in the future the main health activity will be changing unhealthy habits and early detection of disease, successful implementation of promotion and prevention health programs will be of great importance. Aimed at providing useful services to end users, preventive health programs should be oriented towards their preferences. While the study of consumer preferences is very important in the real sector, its importance is not recognized in the public sector. This has negative influence on public health-care spending. This is evident in low response rate to preventive programs in Croatia.
Considering the results of many international studies (such as Brown, Lipscomb & Snyder, 2001; Mandelblatt, Lawrence, Mizell Womack, Jacobson, Yi, Hwang, Gold, Barter & Shah, 2002; Eichler, Kong, Gerth, Mavros & Jonsson, 2004), the importance of cost-effective preventive programs was recognized in Croatia and three screening programs had been introduced at the national level: National Breast Cancer Screening Program, National Colon Cancer Screening Program and National Cervical Cancer Screening Program. However, Croatia did not benefit from positive economic and other effects of these programs due to low response rate. Reason for this can be found in poor compatibility with population preferences. Under these circumstances cost-efficiency cannot be achieved, since its achievement depends on the high response of the target population (target response rate for breast cancer screening is 70%, for colon cancer screening is 45% and for cervical cancer screening is 85% (Croatian Health Insurance Fund [HZZO], n.d.). Screening response rates differ between different counties but overall response to breast cancer screening program is around 60% (Šiško & Šiško, 2017), for colon cancer screening is around 18% (Bergman Marković, 2015) and for the cervical cancer screening data are inconclusive.

According to the Australian Population Based Screening Framework (Community Care and Population Health Principal Committee of Australian Health Ministers’ Advisory Council, 2016), the implementation of screening programs primarily depends on the need for organizing screening. The program success depends on appropriate implementation and program management since it is an integrated process where all activities should be carefully planned, coordinated, monitored and evaluated in order to assure quality. In order to obtain maximum benefits from the program all activities must be adequately supported and financed. The screening process consists of four basic activities outlined in the following scheme.
From the Scheme 1, it is evident that the most comprehensive process of screening is target population recruitment. If the initial screening phase is not conducted successfully, there will be no positive outcomes from early disease prevention. Even though there are many screening guidelines, they are not sufficiently emphasizing the importance of the target population preferences evaluation. It is because countries involved in the development of the guidelines do not have target population response problem. Additionally, these countries have sufficient resources to change unfavorable behavior and promote preventive activities.

Among EU countries that have introduced cervical cancer screening, Finland, Iceland, the Netherlands, Norway, the United Kingdom and Sweden have a screening response rate of 100% (Anttila, 2004), whereas Croatia is at a very low level of 10%, which led to a termination of the program. Therefore, Croatia must improve the activities related to the initial screening phase – recruitment of the target population. Also, the remaining national preventive programs in Croatia failed to achieve a satisfactory level of response.

Phillips (2002) has shown that patients’ preferences may influence their willingness to utilize health services as well as their health outcomes. Also,
understanding preferences is important due to a growing interest in patient involvement in the health-care decision-making (Coulter & Collins, 2011; Epstein & Street, 2011; Barry & Edgman-Levitan, 2012). There are surveys specifically designed for this purpose (utility-based preference surveys), which give insight into the way how individuals “weigh” harms and benefits of health interventions (Phillips, 2006). Thus, when designing and improving preventive programs and health-care policies, target population preferences should be evaluated. Although the terms “attitudes” and “preferences” are sometimes used as synonyms, here the meaning of “preferences” is taken from the economic theory: patients have preferences concerning health-care and seek to maximize them within their budget.

As public health cannot rely on revealed preference (price and quantity signals), the methods of stated preferences are a reliable way for determining benefits of public health-care programs. Consequently, it can be concluded that there is a need for the implementation of stated preference methods in the design of preventive public health-care programs to ensure their greater efficiency. Dukić (2014) proved the correlation between the level of respondents’ preferences with the screening program and the decision concerning the participation in the screening. Therefore, planning and implementation of national preventive programs in accordance with the preferences and needs of the target population is a way to go against a trend of poor response to preventive programs in Croatia.

4. PREFERENCE ELICITATION IN ECONOMIC EVALUATION OF HEALTH-CARE

If limited resources are used to meet a specific need, the opportunity to meet another need is lost. Therefore, the economic evaluation of different resource allocation with the purpose of informed decision-making is required. Economic evaluation includes cost-benefit analysis (CBA), cost-effectiveness analysis (CEA), cost-utility analysis (CUA) and cost-minimization analysis that is based on the concept of opportunity costs (Drummond, Sculpher, Torrance, O’Brien & Stoddart, 2005). Any economic analysis has to be done differently, depending on the subject who makes the decision (government, health insurance, hospital, etc.). Namely, every decision is made for a specific purpose and within a specific social and political context (Tsuchiya & Williams, 2010).

CBA explicitly expresses all benefits and costs in health-care program evaluation in monetary units. For this purpose, the human capital (Grossman, 1999) and willingness to pay (WTP) approach are the most commonly used. Within CBA it is possible to compare different health goals with each other and with other society goals. Furthermore, the possibility of expressing costs and benefits in the same unit (monetary) for different health-care users can address
the question of distribution (fairness) in the health-care system (Detels, McEwen, Beaglehole & Tanaka, 2002).

Since WTP for public health services cannot be determined on the basis of revealed preferences (market prices), the use of contingent valuation method (CV) is most commonly used. However, Ryan (2004) argues that discrete choice methods (DC) is more appropriate for determining WTP because they have multiple advantages over CV methods. They are more flexible in estimating marginal values of health services and policies. Furthermore, the use of WTP could lead to a potential problem in the health resource distribution in favor of the rich. Potentially successful approach in addressing the distribution problem is the use of DC methods (Scotland, 2011). By analyzing individual choices between different health-care scenarios which differ in terms of costs, benefits and beneficiaries, the efficiency-equity tradeoff can be determined. This possibility of DC method represents the future course of research, since the question of equity in health-care is of global importance. Due to the constant pressure on the sustainability of national health-care systems and ongoing reforms, which are mostly based on the rationalization of health spending, the question of fairness, as one of the explicit allocation criteria, requires health-care decision-makers attention. Although, evaluation of the stated preferences allows the quantification of WTP, it proved to be extremely demanding in practice, which is why CBA are less frequently used than CEA. Despite that, CUA method is more appropriate because it uses a generic health outcome measure comparable at the level of different programs, procedures and policies. The most commonly used outcome measure within CUA analysis is quality adjusted life years (QALY), which is a combination of years of life and health-related quality of life. QALY indicator allows preferences evaluation of the general public regarding health outcomes of the alternative health-care (Ali & Ronaldson, 2012).

Even though QALY has its advantages, primarily due to its generic nature, it is not applicable in all evaluation studies. Namely, QALY-based approach only evaluates outcomes that directly affect the health-related quality of life and/or years of life. At the same time, this is also a disadvantage of the QALY approach because process characteristics and non-health outcomes may be crucial information for decision-makers when evaluating different health-care programs. Accordingly, when making resource allocation decisions, process attributes, such as, patients’ autonomy in the decision-making process, should be considered (Moony, 1994). It is difficult to capture this within the QALY concept. Another criticism against the QALY concept (Nord, 1995) relates to neglecting of social preferences towards a fair distribution of health. Namely, an increasing number of studies emphasize that the society differently values the improvement of health status between different social groups. For example, higher weights are assigned for the improvement of health status of children, chronically ill and the poorest in society (Petrou, 2010; Baltussen, Stolk, Chisholm & Aikins, 2006; Jelsma, Shumba, Hansen, De Weerdt & De Cock, 2002; Cookson, Drummond & Weatherly, 2009). Most studies are focused on the
potential use of DC methods in determining weights for health outcomes of different social groups (Baltussen et al., 2006; Norman & Gallego, 2008; Lancsar, Wildman, Donaldson, Ryane & Bakers, 2011). Hence, it is possible to incorporate the component of fairness into the CUA analysis (Scotland, 2011).

5. DISCUSSION AND CONCLUSION

Many developed countries have accepted the concept of PCC as a fundamental approach for improving the quality of health-care. A key feature of the PCC–based health system is the active involvement of patients in the decision-making process. Its benefit are reflected at the macro level by creating the public health policies that are focused and specially tailored for sensitive groups in the society, like elderly people. Whereas, at the micro level the benefits are reflected in creating the optimal health programs and policies (e.g. preventive programs, health and health literacy promotion) that would generate savings in the overall health-care system and contribute to resolving the health issues of aging population.

Although it is not possible to fully incorporate market principals into the public sector, in order to change unhealthy behavior, it is imperative to acknowledge the preferences of the population. This does not mean that decisions will be made solely on the basis of the population preference analysis, but will primarily depend on population epidemiology, scientific progress of medical diagnosis and cost-efficiency of the programs themselves. The evaluation of patients’ preferences aims at better adaptation and implementation of public health policies, which leads to savings due to reduced public health expenditures (the cost of hospitalization, medicines, sick leaves, and disability pensions or similar). Additionally, the elicitation of stated preferences is applicable in economic evaluations in health-care, especially for determining willingness to pay in cost-benefit analysis.

Although there are numerous methods of stated preferences evaluation, DC methods, eliciting preferences of respondents based on their choice, are theoretically and methodologically most acceptable. Namely, most judgments in everyday life consist of the choice between comparable alternatives. The compromises that consumers make by choosing smaller quantities of one good for larger quantities of other good reveal the essence of the marginal value they assign to that good. This allows for a wide application of DC methods in planning health-care policies.

Preference elicitation by DC methods has a growing importance in the field of economic evaluation. It has the possibility of improving QALY concept by accounting for the equity issues, which is of great importance regarding health policy concerns. Although economic evaluations are very useful and have multiple advantages, health-care decision-making process (especially when it comes to public health policies and health reforms) cannot solely be based on...
their results. Namely, there are factors that require equal attention from decision-makers. These often include (Sorenson, Drummond & Kanavos, 2008): need for health intervention, health policy implications, availability of alternative interventions, fairness, impact on the budget, expected use of the product or service, product innovations and cost-effectiveness. Finally, the success of any health policy or reform will largely depend on stakeholders’ acceptance, which will largely be affected by their preferences.

The main contribution of this paper is emphasizing the role of PCC in public health decision-making. This is especially important for national health preventive programs in Croatia as target population did not recognize their benefits, which is reflected in low response rate. We argue that in order to improve cost-effectiveness of national screening programs (or any other) it is inevitable to turn to PCC. Also, the principles of integrated health-care are of great use in the process of creating, adopting and enforcing health programs of public interest as they imply coordinated actions by numerous stakeholders and focus on life-long care.

In Croatia the first step towards integrated health-care was the introduction of integrated information system (Government of the Republic of Croatia, 2007) that connects different health-care services. Most recently the Ministry of Health (2018) introduced a National plan for the development of clinical hospital centers, clinical hospitals and general hospitals for the period 2018 – 2020, which is based on the principle of functional integration between different hospitals. It also proposes the establishment of the National University Hospital as the umbrella institution for the hospital sector.

Therefore, we can conclude that the importance of integrated health-care has already been recognized in Croatia but in order to fully apply integrated health-care model, on any level, the PCC will have to be emphasized and applied by health decision makers. One part of the solution could be in eliciting patients’ preferences by using DC methods in order to better understand health related behavior and alter the undesirable one. The other part of the solution must be faced towards the elevation of population’s health literacy as shared-decision making holds responsibility for both health-care providers and patients. Having that said, the future research should address these issues and provide empirical research on benefits of patient-centered care and integrated health-care on different levels of health-care in Croatia.

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PARADIGMA PRISTUPA USMJERENOG NA PACIJENTA PRILIKOM DONOŠENJA ODLUKA U JAVNOM ZDRAVSTVU*

Sažetak
Jedan je od dugoročnih ciljeva europskih zemalja kvalitetna i pravedna raspodjela zdravstvene zaštite. Pružanje takve zdravstvene usluge dovodi do problema rastuće potrošnje u zdravstvu. Ovaj rad ističe da pristup usmjeren na pacijente (PCC), koji je postao nova paradigma za troškovno-efikasno pružanje zdravstvenih usluga, treba postati i nova paradigma u stvaranju zdravstvenih politika i programa. PCC ističe da preferencije, ciljeve i vrijednosti pacijenata treba uvažavati prilikom donošenja odluka u vezi sa zdravljem. Ako se PPC primijeni na problematiku javnog zdravstva, može se reći kako se bilo koji zdravstveni program ili politika trebaju stvarati i evaluirati na temelju preferencija pacijenata. Sukladno s time, cilj je ovog rada elaborirati važnost vrednovanja izrečenih preferencija, kao djela PCC, u procesu donošenja odluka u javnom zdravstvu.

Ključne riječi: donošenje odluka u zdravstvu, izrečene preferencije, usluge usmjerene na pacijenta, zdravstvena zaštita.

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