INEQUALITIES IN HEALTH SYSTEM RESPONSIVENESS

Joint World Health Survey Report Based on Data from Selected Central European Countries

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CHAPTER 3: Ratings on importance of responsiveness domains

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CHAPTER 5: Section 5.1 Introduction; 5.2.2 Ratings on experiences, 5.2.3 Rating of responsiveness in inpatient care, 5.2.4 Rating of responsiveness in outpatient care; 5.3 Discussion

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CHAPTER 1: Introduction

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CHAPTER 2: Methods

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CHAPTER 1: Section 1.3: Model on responsiveness

CHAPTER 4: Ratings on vignettes for perception of responsiveness

CHAPTER 5: Section 5.1 Introduction; 5.2.1 General evaluation of the health system; 5.3 Discussion

CHAPTER 6: Conclusions

CONTENT

1. INTRODUCTION[1]

Different countries have different health outcomes that are in part due to the way respective health systems perform. Regardless of the type of health system, individuals will have medical and non-medical expectations in terms of how the institution responds to their needs. In many countries, however, health systems do not perform effectively and this is in part due to lack of information on health system performance and on the different service providers.

1.1 WORLD HEALTH SURVEY

The World Health Survey (WHS) was developed by World Health Organization (WHO) to address the need for valid, reliable and comparable information and to cater the increased attention to the role of health in economic and human development that has led to greater resources being committed to improving health in all settings.[2]

The overall WHS objectives encompassed the need to develop a means of providing low-cost, valid, reliable and comparable information, to build the evidence base to monitor whether health systems were achieving the desired goals, and to provide policy-makers with the evidence they needed to adjust their policies, strategies and programs as necessary.[3]

As the result of listed needs, the health policy-makers at the national and international levels faced up, seventy countries implemented various forms of the WHS in 2002. Each country could decide the most practical and cost-effective survey methods of data collecting, thus three various WHS forms were implemented (all countries presenting the Joint WHS Report collected data using the Household Survey).[4]

- Household Face-to-Face (long or short form) Surveys (randomly selected households were contacted and a person from that household was interviewed)
- Computer Assisted Telephone Interview (CATI) (surveys were conducted via phone using computerized systems when there was good coverage of the telephone network)

[1] In this chapter we took over some paragraphs from the WHO' texts on WHS; http://www.who.int/responsiveness/en/, http://www.who.int/healthinfo/survey/whslongversionsurveymanual.pdf
[2] Üstün TB et al. Chapter 58. The World Health Surveys. In: Murray CJL, Evans DB, eds. Health systems performance assessment: debates, methods and empiricism. Geneva, World Health Organization, 2003.
[3] World Health Organization. World Health Survey. Geneva, World Health Organization. http://www.who.int/whs
[4] World Health Organization. The World Health Surveys WHS Brochure. Geneva, World Health Organization. http://www.who.int/healthinfo/survey/whsbrochure.pdf

- Computer Assisted Personal Interview (CAPI) (computer assisted data collection method for replacing paper-and-pen methods of data collection using a portable personal computer)

The WHS was implemented in modular approach (A – Household Questionnaire and B - Individual Questionnaire) where each country could choose from the following modules or had the option to add additional ones.

- A - Household Questionnaire
- Malaria prevention (use of bed-nets)
- Household care
- Health insurance and community health insurance
- Permanent income indicators
- Household expenditure
- Health occupations
- B - Individual Questionnaire
- Health state descriptions
- Health state valuations
- Risk factors (e.g. tobacco, alcohol, pollution)
- Mortality
- Coverage, access and utilization of key health services (e.g. immunization, treatment of childhood illness, STD and HIV/AIDS)
- Health system responsiveness
- Health goals and social capital

The WHS results are important not only to the policy makers or experts, but also to the public. The overall goal of WHS was to promote and strengthen evidence-based decision making in the field of health care, on both national and sub-national levels.

1.2 RESPONSIVENESS OF HEALTH SYSTEMS

The concept of responsiveness was developed as part of WHO's broader conceptual framework on health systems developed in 2000, which identified three focuses for health system goals: health, responsiveness and financing fairness. The reasoning for including responsiveness was that the health system, like other social systems, was expected by the population to meet its core goals, plus a number of common social goals expected of all social systems. The work on health systems responsiveness aimed to develop the technical tools to assess, monitor, and raise

awareness of how people are treated, and the environment in which they are treated when seeking health care.[5]

Thus, we define non-clinical aspects related to the way individuals are treated and the environment in which they are treated as responsiveness.[6] WHO's review of the literature on patient satisfaction and quality care led to the identification of eight domains of responsiveness (Table 1).

Table 1: Responsiveness domains and description[7]

DOMAIN LABEL	DOMAIN NAME	SHORT DESCRIPTION
Dignity	Respectful treatment and communication	being shown respect having physical examinations conducted in privacy
Autonomy	Involvement in decision making; respect for the right to make informed choices	being involved in deciding on your care or treatment if you want to having providers ask your permission before starting treatment or tests
Confidentiality	Confidentiality of personal information	having conversations with health care providers where other people cannot overhear having your medical history kept confidential
Communication	Clarity of communication	having health care providers listen to you carefully having health care providers explain things so you can understand giving patients and family time to ask health care providers questions
Prompt attention	Convenient travel and short waiting times	getting care as soon as wanted having short waiting times for having tests done
Social support	Access to family and community support	being able to have family and friends bring personally preferred foods, soaps and other things to the hospital during the patient's hospital stay being able to observe social and religious practices during hospital stay access to newspapers and TV interacting with family and friends during hospital stay
Basic amenities	Quality of basic amenities	having enough space, seating, furniture, clean water and fresh air in the waiting room or wards having a clean facility
Choice of provider	Choice of health care provider	being able to get to see a health care provider you are happy with being able to choose the institution to provide your health care

[5] World Health Organization. Health System Responsiveness. Geneva, World Health Organization. http://www.who.int/responsiveness/

[6] Valentine NB, de Silva A, Kawabata K, Darby C, Murray CJL, Evans DB. Health system responsiveness: concepts, domains and measurement. In: Murray CJL, Evans DB, eds. Health systems performance assessment: debates, methods and empiricism. Geneva, World Health Organization, 2003.

[7] Source: Letkovicova H et al. The Health Systems Responsiveness Analytical Guidelines for Surveys in the Multi-country Survey Study. Geneva, World Health Organization, 2005

These domains or broad areas of non-clinical care quality are relevant for all types of health care including personal and non-personal health services, as well as the population's interaction with insurers and other administrative arms of the health system. The responsiveness domains are then the non-therapeutic aspects of health related activities that affect a person's experience of health care. They do not refer to medical procedures, but nonetheless impact on health outcomes. There is, however, a human rights context for the recognition of these domains in the provision of health services to the public. Human rights principles and the domains of health system responsiveness share a common goal: furthering the rights of individuals and communities in the context of the health system. These principles include rights to security, health, life, privacy, free expression and association, nondiscrimination, and respect for human dignity. [8]

Health systems responsiveness, which is the focus of this Report, was one of the modules of the WHS. The Responsiveness module contained 143 questions in the long form of the survey and 78 questions in the short survey. Cutting the short version of the questionnaire was carried out by reducing by half the number of questions targeted at evaluating the eight core domains of quality of care. The long survey contained six sub-sections to assess responsiveness.

1) Needing health care and general evaluation of health systems (Q7000 - Q7031)
2) Importance of domains of responsiveness (Q7100 - Q7107)
3) Seeing health care providers (Q7200 - Q7207)
4) Outpatient care and care at home (Q7300 - Q7334)
5) Inpatient hospital care (Q7400 - Q7439)
6) Vignettes for health system responsiveness

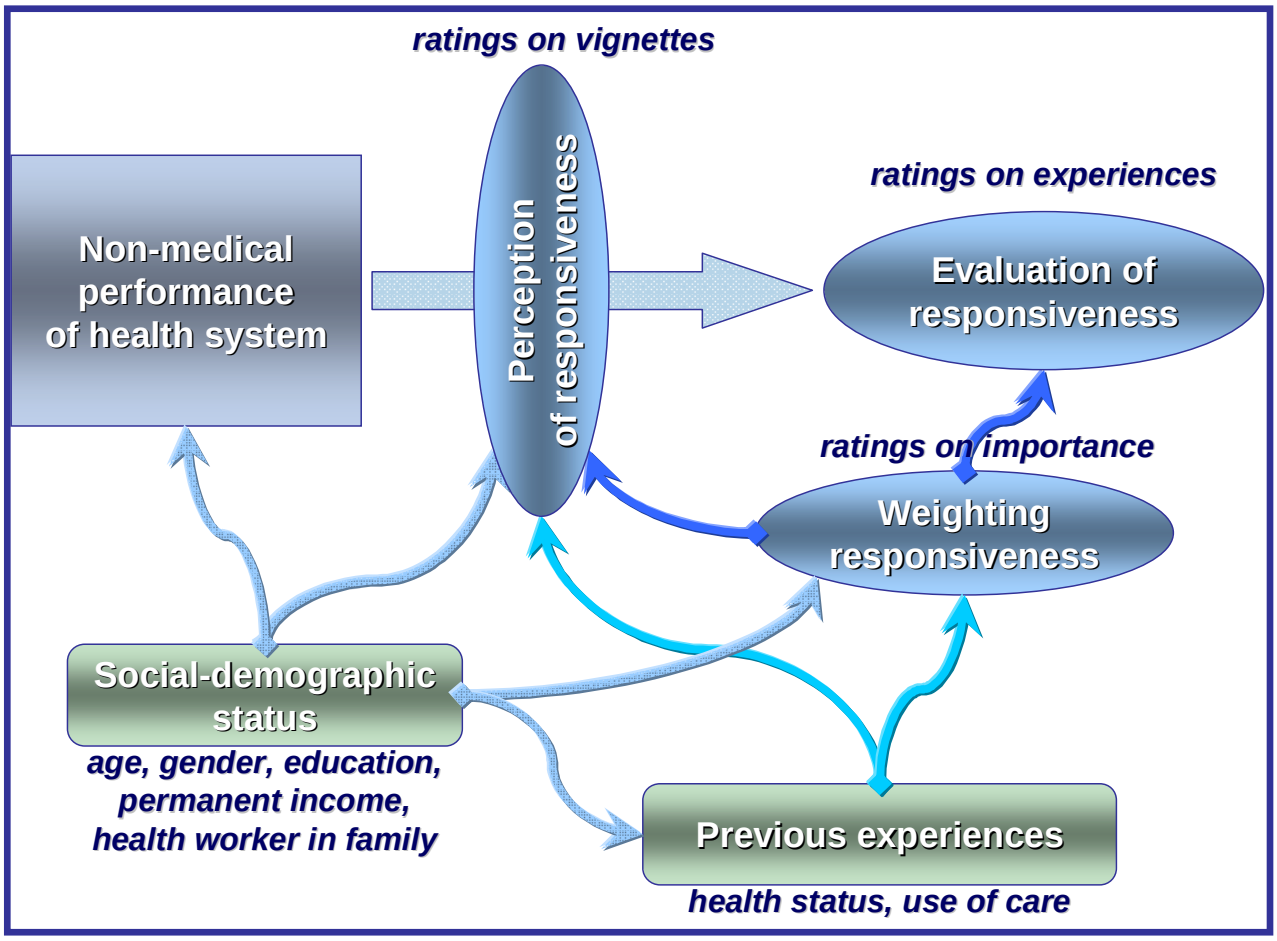
1.3 MODEL ON RESPONSIVENESS

To interpret the findings on responsiveness provided by the analysis of the WHS one needs to consider the several factors that determine how people evaluate the responsiveness of their health system. Primarily, the health system is evaluated based on the health system's non-medical performance during a person's contact with it. Secondly, the health system's performance is seen through an individual "goggle", that is perceived by the consumer. Finally, evaluation of the health system's performance is affected by weights that consumers attach to the aspect of

[8] Gostin L, Hodge JL, Valentine N, Nygren-Krug H. The domains of health responsiveness: a human rights assessment. EIP Discussion Paper No. 53. Geneva, World Health Organization, 2003. http://www.who.int/responsiveness/papers/human_rights.pdf

responsiveness. The personal factors (i.e. perception and weighting) are influenced by the individual's social-demographic status, and previous experience with the health system (Figure 1).

Figure 1: Simplified model of satisfaction with responsiveness, its determinants, and variables used in the Report (in Italic)



Arrows representing the effects of the factors do not need much explaining. The effect of social-demographic status on health care performance is perhaps less obvious. Higher social status or the presence of a health worker in the family often means better access to good quality care and, in some settings, bigger out-of-pocket money for the health professionals. The arrow running from social-demographic status to previous experiences represents the same effect.

The WHS included blocks of questions for collecting information on the evaluation of responsiveness (a variable herein referred to as 'ratings on experiences') and its determinants. There were sets of vignettes for collecting data on perception (variable herein referred to as 'ratings on vignettes') and a series of questions on weighting (variable herein referred to as 'ratings on importance'). Information on social status, cultural background and previous experiences were probed using a number of questions collecting background data on the respondents and their households.

Since there were no questions on one of the main determinants of ratings on experiences (i.e. the performance of health care system during contact with health system), results from a comparison of satisfaction in different countries should be interpreted very cautiously. A further limitation - this Report's simple approach to a complex phenomenon – the methods used in this Report are not able to handle all the possible associations among satisfaction with responsiveness and its determinants.

1.4 INEQUALITY OF HEALTH SYSTEMS

Average health performance of a country is no longer considered a sufficient indicator; the task is to assess the distribution of health within the population. The WHO is interested in measuring health inequality as a distinct dimension of health system performance. Accordingly, the WHO defines health inequality as the variations in health status across individuals in a population.[9]

Despite widespread recognition of distribution in many countries, there is considerable debate about the meaning and measurement of health inequalities, social group health differences and inequities. The lack of standard definitions, measurement strategies and indicators has and will continue to limit comparisons between and within countries of health inequalities, and perhaps more importantly comparative analyses of their determinants.

However, particular measures of health inequalities reflect the range of variation from best to worst or the distribution of individuals within that range. Social group health differences are considered the differences across subgroups of the population, which may be based on biological, social, economic or geographical characteristics. In much of the published literature, health inequalities are taken to be synonymous with social group differences in health. When social group health differences are equated with health inequality, the critical choice is that of the variable used to distribute the population into social groups.[10]

A substantial amount of work needs to be done to refine the measurement of the distribution of responsiveness. Currently the measurement is based on identifying vulnerable groups and

[9] Gakidou EE, Murray CJL, Frenk J. A framework for measuring health inequality. Global Programme on Evidence for Health Policy Discussion Paper Series: No. 5. World Health Organization.

[10] Murray CJ, Gakidou EE, Frenk J. Health inequalities and social group differences: what should we measure? *Bulletin of the World Health Organization*, 1999, 77(7):537-43.

assessing responsiveness for them versus non-vulnerable groups.[11] The methodology used in this Report implicitly gave equal weight to distribution across elements.

Nevertheless, an important aspect of the WHS was the use of vignettes to enhance the comparability of self-responses for health state descriptions, responsiveness and social capital. Anchoring vignettes were meant to help understand how respondents in diverse socioeconomic, demographic and cultural settings might use response categories in different ways. Using the vignettes we were able to characterize (on the basis of self-responses) individual perceptions of respondents in fixed situations of responsiveness domains. If we wanted to compare the "real" responsiveness or quality of care, we had to take into account differences in perceptions. To facilitate the comparisons across the countries involved, evaluation should be adjusted to subjective perceptions. The information collected through vignettes could be used non-parametrically or with appropriate statistical models. For the purposes of present Report, we characterized the similarity/dissimilarity of perception in responsiveness domains measured in WHS.

Beyond the research questions starting each chapter of this Report, we analyzed the inequality in health system responsiveness across various socio-economic groups and the health system users. Defined socio-economic status (SES) was based on variables such as *sex* with categories "Female" or "Male", *age* classified into three categories "Young" (18-34 years), "Middle aged" (35-64y) and "Elderly" (65+y), *education* with categories "Low", "Middle" and "High", and *permanent income* with its quintiles. Other background variables used in the Report were *use of health care* with categories "User" or "Non-user", *self-rated health status* with its 5 categories, and the *presence of health worker in the household* in the Household questionnaire (for detailed definitions see the Annex).

Other variables used in the Report are introduced at the beginning of each chapter. Chapter 2 provides description of the analysis in detail.

1.5 JOINT WHS REPORT OBJECTIVES

Joint World Health Survey Report for Selected Central European Countries is a common project of Croatia, the Czech Republic, Hungary, Slovenia, and Slovakia and focused on one of five WHS module – Health system responsiveness. Reasoning for selecting responsiveness module

[11] Darby C, Valentine N, Murray C, de Silva A. WHO strategy on measuring responsiveness (GPE discussion paper no 23). Geneva: WHO, 2000. URL: http://www.who.int/responsiveness/papers/paper23.pdf

and analyzing inequalities in responsiveness was that in addition to making and keeping population healthy, consumers said that the health system should treat them with dignity, facilitate their role in decisions about their care, provide for clear communication with their health care providers and assure that their medical encounters were kept confidential. Consumers have also called for the systems to provide prompt attention, access to social support, choice of provider and basic amenities of adequate quality.

Further, significant differences observed in responsiveness showed weak points of health care provision. As policy makers attempt to develop health systems that are responsive and fair to people they serve, it is important to understand the perceptions of those people. Thus, policy makers need to have information what factors are contributing to this perception and to address them appropriately when they form health policy aiming to improve health system performance.[12] Many studies suggest that patients want a more autonomous role in health care decision-making. Policy-makers and clinicians should consider how to narrow the gap between public expectations and patients' experience.[13]

The main objective of the Report was to prepare a joint report on inequalities in health system responsiveness using WHS data pooled from countries involved in the project. Next, each country prepared a country specific summary of the joint report aiming decision makers in the given country. Obtained results informed them on inequality in health system responsiveness and should help them in forming health policy that will improve health system performance.

Joint WHS Report evaluated three areas across and within countries involved in the project:

- Importance of responsiveness domains (Chapter 3)
- Perception of responsiveness (Chapter 4)
- Rating health system responsiveness (Chapter 5)

Each area created an individual chapter that put forward exact research questions and the list of evaluated indicators together with agreed socio-economic division. Each chapter presented achieved results and in discussion summarized the main findings.

[12] Cockcroft A, Andersson N, Milne D, Hossain MZ, Karim E. What did the public think of health services reform in Bangladesh? Three national community-based surveys 1999-2003. Health Research Policy and Systems 2007;5(1):1

[13] Coulter A, Jenkinson C. European patients' views on the responsiveness of health systems and healthcare providers. Eur J Public Health 2005 Aug 1;15(4):355-60

2. METHODS

2.1 DATA

The databases were provided by the WHO, they had already performed quality checks and pre-analysis on the data. Main principles of our analysis – i.e. selection of the statistical software package, features of the design-based analysis – were also determined based on the WHO's guidelines. When additional analytical steps were taken (e.g. truncating the weights), we followed scientifically accepted methodological considerations.

Joint use of data from five countries makes it necessary to pool and standardize the data, making it comparable. For this reason, it was necessary to recode the original variables in some cases. The analysis used derived variables mostly, derived from the original questions of the questionnaire. In order to make their preparation controllable, a Data Dictionary was created containing all the information about the method of the derivation, e.g. way of handling missing values, universe of the variables, variable- and value labels.

2.2 ANALYSIS

2.2.1 Pre-analysis

During pre-analysis, the extent of item-nonresponse[14], the frequency of "Does not know/not sure" and "Refused" answers, as well as the outliers and the distribution of the variables were checked. Variables with more than 15-20% non-response rate per country were handled with care. Adjustment of non-response items (i.e. weighting to account for item-nonresponse) was not applied in the analysis.

We also checked whether the database is in accordance with the logical structure of the questionnaire. In some cases, the semantic consistency of the answers was also examined.

[14] The report follows internationally accepted statistical terminology; see for example: Särndal C-E, Swensson B, Wretman J. Model Assisted Survey Sampling, Springer-Verlag New York, 1992. or Levy P S, Lemeshow S. Sampling of Populations, John Wiley &Sons, 1999.

2.2.2 Design-based analysis in Stata

The data originates from stratified multistage designs with unequal selection probabilities. Not taking into account these features often leads to underestimated variance estimation and biased point-estimators.[15] For that reason, we used Stata version 8.1, since its survey analysis module is able to compute design-based estimations. Stata takes into account three main features of the survey design: strata, primary sampling units (PSUs) and sampling weight.[16] These auxiliary variables were included in the databases provided by the WHO, with the exception of the Slovenian database. Therefore, we were obliged to treat the Slovenian sample as if it had been selected by simple random sampling.

Because of error and failed interviews, the collected sample does not yield a precise representation of the target population. This deviation was corrected by weighting. The WHO defined weight used for our analysis was defined as the product of base weight (inverse of the probability of selecting an individual), nonresponse adjustment and poststratification. Croatia is an exception; the weight for its data was defined without the third factor. As it was mentioned previously, there was no information for Slovenia's data, so the weight was also missing. In case of the Czech Republic, Hungary and Croatia, all the pieces of information needed were readily available, and the weights were defined as the product of the three factors.

In sample surveys, very large sampling weights are often truncated[17] since the few observations having very large weights may contribute unduly to the overall estimate. Although a trimming procedure reduces the variance of the estimates, it may cause increased bias in the estimates. Hence, it is advisable to minimize trimming as much as possible. Various methods of weight trimming are practiced. We followed one of the common procedures, which is to identify outlier weights (any weight larger than four times the mean weight) and trim them by bringing them to equal value with the set limit (i.e. four times mean weight).

When setting the design variables in the pooled dataset, the normal way would be to append the country-specific variables coding the weights, similarly to the variables coding the PSUs, and to define strata by cross-classifying two variables, country and country-specific strata (since the sampling was independent both by countries and by strata). Considering the above deficiencies, instead of the normal way, the three features were defined according to Table 2.

[15] Wolter, K. M. Introduction to Variance Estimation. New York, Springer-Verlag, 1985.
[16] Stata Reference Manual, Release 6, Vol 4. Stata Press, College Station, Texas 1999.
[17] See, for example Blumberg SJ, Olson L, Frankel MR, Osborn L, Srinath KP, Giambo P. Design and operation of the National Survey of Children's Health, 2003. National Center for Health Statistics. Vital Health Stat 1(43). 2005.

Table 2: Design features for analysis of joint datasets

STRATA	PSU	WEIGHT
countries*strata	No PSU defined	equals to 1 in case of Slovenia; country-specific weights otherwise

Strata are defined by cross-classifying the countries and the country-specific strata, with the exception of Slovenia, which, because of the missing information, makes up a stratum by itself. No PSUs are defined, due to PSU information missing for Slovenia.

2.2.3 Descriptive analysis

In the descriptive stage, we estimated the indicators and examined the differences between countries. These indicators were defined as the function of one or more questionnaire-variables. The survey-module of Stata is capable of computing the point- and interval estimates while taking into account the complex sample design. Confidence intervals for the estimates are presented in the charts of the report by error bars. Non-overlapping confidence intervals indicate significant difference between two estimates.

2.2.4 Multivariate analysis

One of the aims of this Report was to estimate the effect of some potential background factors. Another question was whether the effect of these background factors is the same across the different countries. Multivariate regression models are capable to provide such information.

The background factors entering the models were the same in most cases: sex, age, country, education, income, use of health care, self-rated health and presence of health worker in the household (for detailed definitions see the Annex). In order to detect inter-country differences, some of them were entered in interaction with country.

Since inter-country differences were examined during the descriptive analysis as well, it is important to note that the two results (obtained by multivariate or descriptive analysis) may significantly differ. In fact, the effect of the country estimated by a multivariate regression model is adjusted for other factors involved in the model. For example if elderly are more likely to be satisfied with health care, and the only difference between country X and Y is that the population in X is in average older than in Y, then the descriptive analysis shows significant difference

between the two countries, while the difference vanishes in the multivariate analysis where age is among the explanatories.

It is worth to emphasize here the difference between associations (which were examined in the report) and casual relations (which were not). As the World Health Survey is a cross-sectional survey of the target population at a particular point in time, one can examine *associations* between, for example, current satisfaction with health care and personal social characteristics/types of behavior; one cannot however determine *causality*, because current satisfaction may reflect past, rather than present behavior and other conditions. Although (a limited number of) questions about past facts were included in the survey, these questions are subject to memory and other types of error and therefore are limited in their usefulness.

The survey-module of Stata allows us to fit regression models to our survey data, therefore designed-based point- and interval estimates were computed for the model parameters. We fitted multiple linear regression models for continuous dependent variables and logistic regression models for dichotomous dependent variables. Since Stata applies list-wise missing-data deletion when running regression models, it is advisable to check the number of cases used in the model. As a rule of thumb, only models using more then 75% of the observations were allowed.

We did not carry out model building, but interactions concerned were tested and they were omitted from the model if they were not significant. Goodness-of-fit was not tested neither, since our aim was not to make predictions, but rather to measure the associations.

2.2.5 Multidimensional scaling

Since the main goal of the Report is to present the similarities/dissimilarities between countries, we found multidimensional scaling (MDS) to be an appropriate tool to summarize the ratings on importance, on experiences and the vignettes in the eight domains of responsiveness. MDS assigns countries to specific locations in a conceptual two-dimensional space such that the distances between points in this space match the 8 domain-specific dissimilarities as closely as possible. The result is a representation of the countries, which may help to further understand the data.

The domain-specific dissimilarities between two countries were defined as follows:

- in section Ratings on Importance of Responsiveness Domains: absolute value of the difference in the proportion of ratings "extremely important" or "very important"
- in section Ratings on Vignettes for Perception of Responsiveness: the average absolute value of the difference of the average vignette ratings pertaining to the domain (for more details see the next subsection)
- in section Ratings on Experiences with Health System: absolute value of the difference in the proportion of ratings "very good" or "good".

2.2.6 Methodology applied in chapter Ratings on Vignettes for Perception of Responsiveness

Since the approach planned by the WHO to analyze perception data has not been available yet, this Report uses a simple method to analyze ratings of vignettes. Our aim was to characterize the similarity/dissimilarity of the perception of the domains of responsiveness measured in WHS.

When comparing two countries, we defined an overall dissimilarity measure (O) and one dissimilarity measure for the eight domains (D_l). For these indicators we computed:

1. for each vignette: the mean ratings for both countries[18] and the absolute value of their difference (d_{ijk} for vignette i and for countries j and k);
2. for each domain: the mean of d_{ijk}'s, averaged over i, pertaining to domain l (D_{ljk} for domain l and for countries j and k);
3. the overall dissimilarities: the mean of d_{ijk}'s, averaged over i (O_{jk} for countries j and k).

D_{ljk}'s define the domain-specific dissimilarity measures, while O_{jk} define the overall dissimilarity measures for two particular countries. Section Ratings on Vignettes for Perception of Responsiveness presents these values. Additionally, a multidimensional scaling was carried out which took the domain-specific D_{ljk}'s as between-country dissimilarities (for more details about MDS see the previous subsection).

2.3 LIMITATIONS

Despite our efforts, control over data quality, validity and reliability of our results is in some extent limited. The main characteristics of the samples that make it possible to judge their quality and the validity/reliability of the results are summarized in Table 3.

[18] See for computing the average of the vignette ratings: Salomon J A, Tandon A, Murray C J L: Comparability of self rated health: cross sectional multi-country survey using anchoring vignettes. BMJ, doi:10.1136/bmj.37963.691632.44 (published 23 January 2004)

Table 3: Characteristics of the samples of the five countries

COUNTRY	CROATIA	CZECH REPUBLIC	HUNGARY	SLOVAKIA	SLOVENIA
Sample size (achieved)	990	935	1,419	1833[a]	585
Std. Dev. of the standardized non-truncated weights	0.64[b]	1.2	0.51	2.68	NA
Percentage of weights needed truncation	0.3% [b]	3.00%	0.10%	7.90%	NA
Std. Dev. of the standardized truncated weights	0.61 [b]	0.94	0.51	1.14	NA
Statistical procedure not carried out due to missing information	poststratification				weighting, design-based analysis

[a] There are 1833 sample individuals who answered the most basic questions regarding education, marital status etc. We decided to involve only these individuals into the analysis.
[b] Comparability with the Czech, Hungarian and Slovakian data might be questionable due to the different computation of the weights.
NA: No information available to define weights.

The second column gives information about the achieved sample size. The Slovenian sample is the smallest, with a sample size of 585. The estimates are expectedly the least reliable in this case since reliability is judged with the help of the estimations' confidence interval.

Another important difference between Slovenia and the other countries is that we do not have information about its sample design. Therefore, the sample was treated as if it had been selected by simple random sampling. This procedure may lead to underestimated variance and biased point-estimators.

Croatia is another exception as post-stratification was not carried out (see the sixth column). Since post-stratification is used to adjust for known discrepancies between sample and population, this deficiency may cause a bias in the estimates.

The third, forth and fifth columns are related to the weights. It is usually advisable to check the distribution of the weights, since weights with higher variation may increase the variance of the estimates. Less variable weights refer to a better-fitting sample and a smaller-scale intervention by the analysts. In order to make the cross-country comparison easier, standardization was carried

out; the weights were divided by their country-specific mean. Since the weight defined for Croatia does not involve post-stratification, its comparability with the Czech, Hungarian and Slovakian weights is questionable. As it can be seen, the Slovakian weight is the most variable, 5% of the weights prior to truncation are greater then 4, and the greatest weight equals 44. Besides, the standard deviation of the truncated weights is still much greater then in the case of the other three countries. These findings may refer to an ill-fitting sample, which assumption is supported when we check the sample distribution of some basic variables, such as gender: only 38% of the sample is male. Our results are in line with the preliminary WHS results published by the WHO.[19] According to these reports, the sample deviation index shows Slovakia as the worst when comparing these five countries.

To sum up the above: there are certain limitations regarding the validity and comparability of the results. We think it is important to use these experiences when planning future international health surveys. On the other hand, the content and approach of the WHS is indubitably important enough to try to use the information gathered in it. This Report is such an attempt.

[19] WHS country report of Croatia, Czech Republic, Hungary, Slovakia, and Slovenia. http://www.who.int/healthinfo/survey/whsresults/en/index3.html

3. RATINGS ON IMPORTANCE OF RESPONSIVENESS DOMAINS

3.1 INTRODUCTION

The intrinsic goal of responsiveness is important because it deals with basic human rights of individuals, reflects a positive orientation to those the system is designed to serve and holds promise for meaningful improvement to be made in the well-being of the population. Generally, there are eight domains of responsiveness: dignity, autonomy, confidentiality of information, prompt attention, access to social-support networks, quality of basic amenities, and choice of health-care provider (eighth domain clarity of communication was finally added).[20]

The literature shows that elderly populations are more positive raters, and more satisfied with any given level of care compared with other groups.[21] In general, all people in bad health are more likely to rate responsiveness poorly for all domains. Related to sex, females in good health are in general the most positive raters of responsiveness.[22]

In the light of these evidences, the following research questions on importance were considered:

- How ratings on importance of responsiveness differ across countries?
- How ratings on importance of responsiveness differ across various socio-economic groups? Is this variability similar across countries?
- Does utilization of health care or health condition have an impact on ratings on importance of responsiveness?

To answer these questions, logistic and multiple linear regression models were used to analyze the combined effects between importance and socio-economic status (SES), sex and education level of the respondents from Czech Republic, Croatia, Hungary, Slovakia and Slovenia. The definitions of the indicators used in this chapter are listed under Annex 7.2.1 and the background variables under Annex 7.1.2.

[20] Charles Darby, Nicole Valentine, Christopher JL Murray, Amala de Silva: Strategy on Measuring Responsiveness GPE Discussion Paper Series: No. 23 EIP/GPE/FAR World Health Organization

[21] Health System Responsiveness (2001) Sample Report http://www.who.int/responsiveness/MCSS%20Sample%20Report.pdf

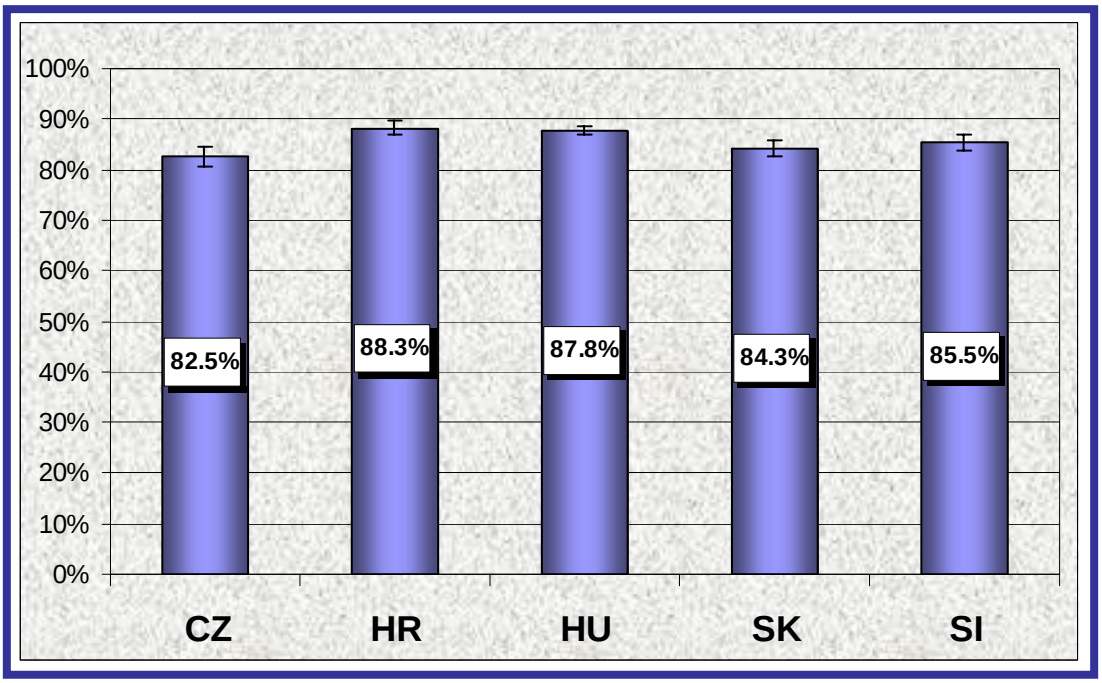
[22] The Health Systems Responsiveness Analytical Guidelines for Surveys in the Multi-country Survey Study, December 2005, WHO

3.2 RESULTS

3.2.1 Overall importance of the responsiveness

The proportion of "extremely important" or "very important" ratings on responsiveness was 86% in average and showed great variation across countries with the range of 83% in Czech Republic and 88% in Croatia (Figure 2).

Figure 2: Overall importance of the responsiveness

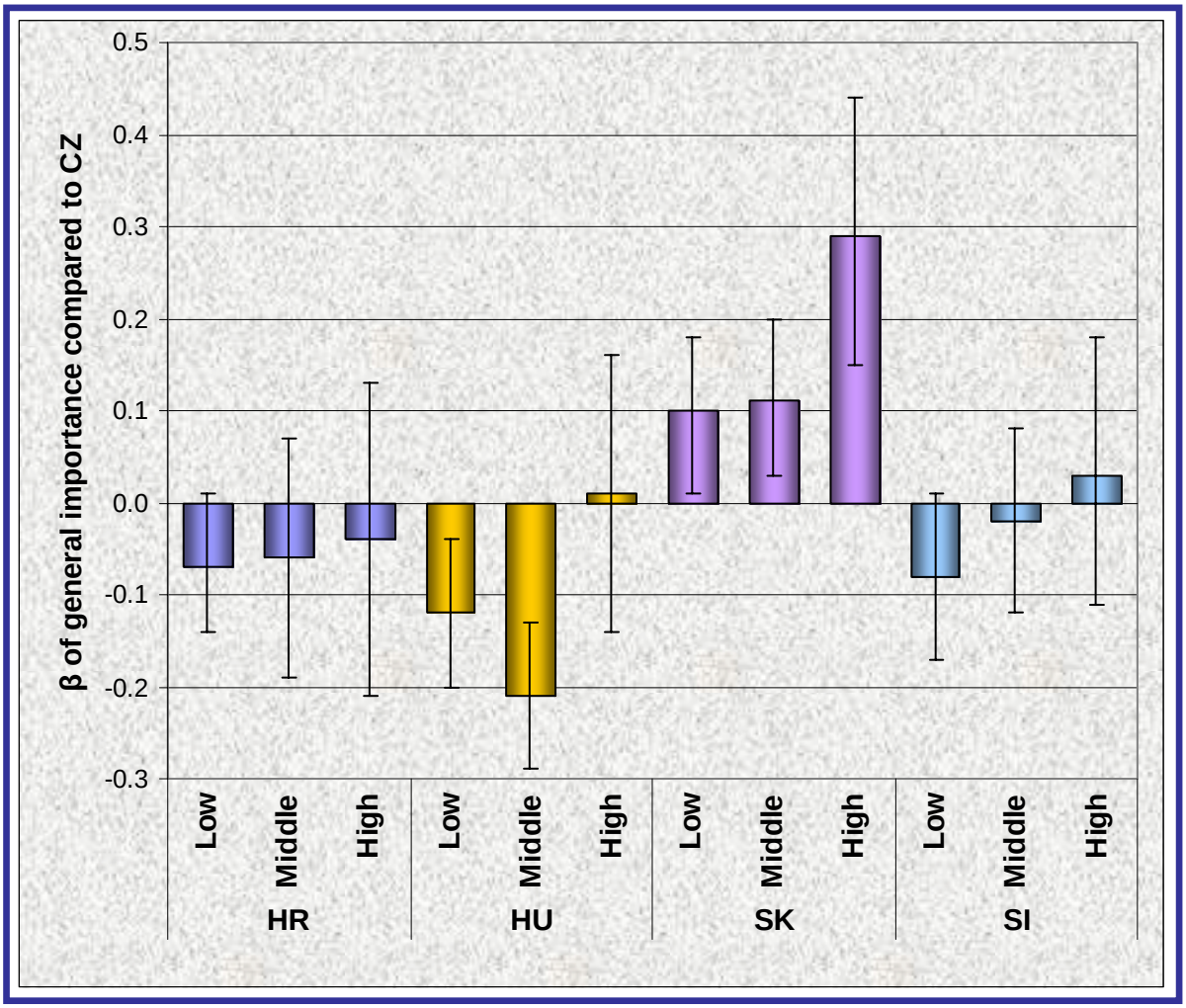


The mean importance (overall importance) was significantly associated with sex, permanent income, self-rated health status and the interaction of education level and country. After controlling for other factors, we found:

- Positive association (lower overall importance) in males compared to females (β=0,14);
- Inverse association (higher overall importance) in poorer quintiles compared to the best situated group (β =-0,06 for the 2nd, -0,10 for the 3rd, -0,10 for the 4th, -0,11 for the 5th);
- Positive association (lower overall importance) in people with good (β=0.06) and moderate (β=0.10) self-rated health status compared to very good.

See Figure 3 and Table 6 in the Annex for more details.

Figure 3: Association between overall importance and country by education level (lower β indicates lower importance mean and therefore higher overall importance)



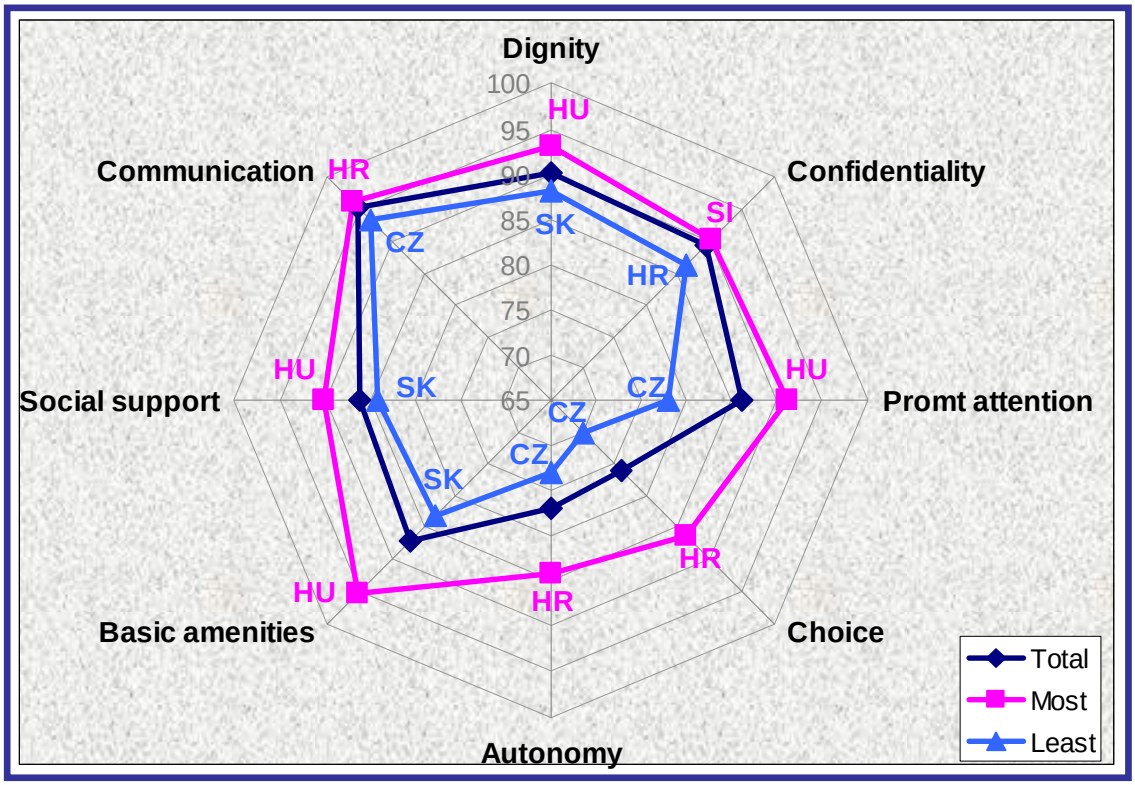
3.2.2 Importance of the domains of responsiveness

Maximum ratings of importance were frequently recorded in Hungary (dignity, prompt attention, basic amenities, social support) and Croatia (choice, autonomy, communication), while minimum ratings were frequently recorded in the Czech Republic (prompt attention, choice, autonomy, communication) and Slovakia (dignity, basic amenities, social support). Slovenia has the fewest oscillations, with results situated mostly at average (Figure 4).

The proportion of "extremely important" or "very important" ratings on respectful treatment (dignity) was 90% in average and showed some variation across countries. It ranged from 88% in Slovakia to 93% in Hungary. The proportion of "extremely important" or "very important" ratings on confidentiality of personal information was 89% in average and showed a little variation across countries. It ranged from 86% in Croatia to 90% in Slovenia.

The proportion of "extremely important" or "very important" ratings on convenient travel and short waiting times (prompt attention) was 86% in average, but showed great variation across countries and ranged from 78% in the Czech Republic to 91% in Hungary. The proportion of "extremely important" or "very important" ratings on choice of health care providers was 76% in average, but showed great variation across countries and ranged from 70% in the Czech Republic to 86% in Croatia.

Figure 4: Ratings in the domains of importance across countries



The proportion of "extremely important" or "very important" ratings on involvement in decision making (autonomy) was 77% in average; it showed some variation across countries and ranged from 73% in the Czech Republic to 84% in Croatia. The proportion of "extremely important" or "very important" ratings on good quality surroundings (quality basic amenities) was 87% in average, but showed a great variation across countries and ranged from 83% in Slovakia to 95% in Hungary.

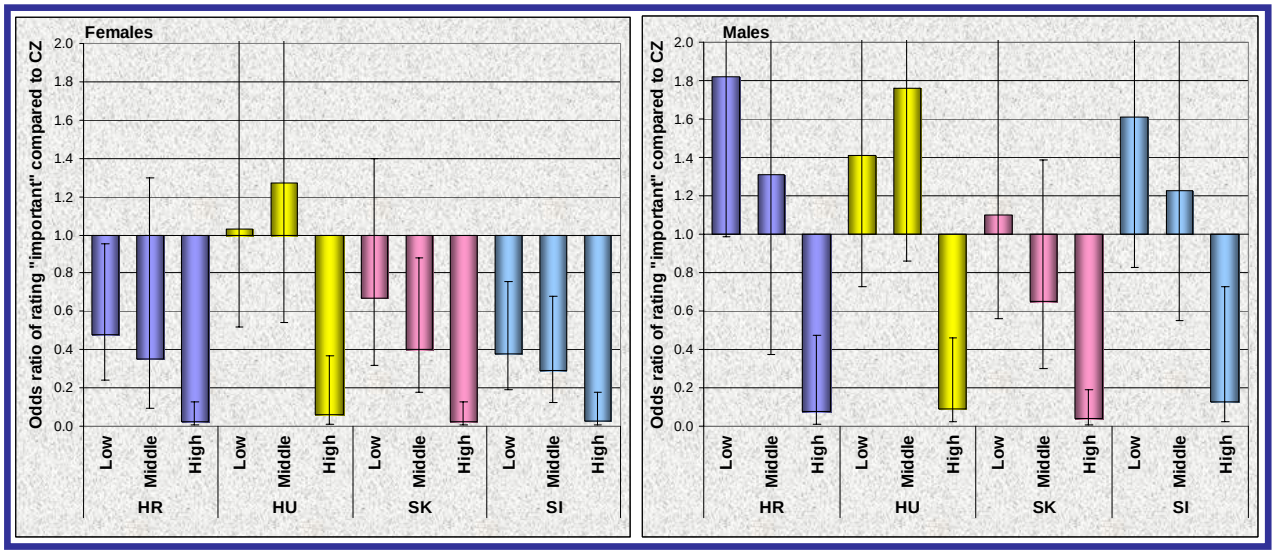
The proportion of "extremely important" or "very important" ratings on contact with the outside world (social support) was 86% in average and showed small variation across countries. It ranged from 84% in Slovakia to 90% in Hungary. The proportion of "extremely important" or "very important" ratings on clarity of communication was 95% in average, it showed almost no variation across countries and ranged from 93% in the Czech Republic to 96% in Croatia.

The odds of "extremely important" or "very important" ratings on the importance of respectful treatment (dignity) were significantly associated with self-rated health status and interaction of sex, education and country. After controlling for other factors, we found:

- Lower rating in people with moderate self-rated health compared to those with very good self-rated health (61%);
- Lower rating in males compared to females in the Czech Republic (22%), Hungary (30%) and Slovakia (36%);
- Lower ratings in females with low education level in Croatia (48%) and Slovenia (38%) compared to the Czech Republic;
- Lower ratings in females with high education level in Croatia (2%), Hungary (6%), Slovakia (2%) and Slovenia (3%) compared to the Czech Republic;
- Lower ratings in males with high education level in Croatia (8%), Hungary (9%), Slovakia (4%) and Slovenia (13%) compared to the Czech Republic.

See Figure 5 and Table 7 in the Annex for more details

Figure 5: Inter-country differences in importance of dignity within education/sex categories



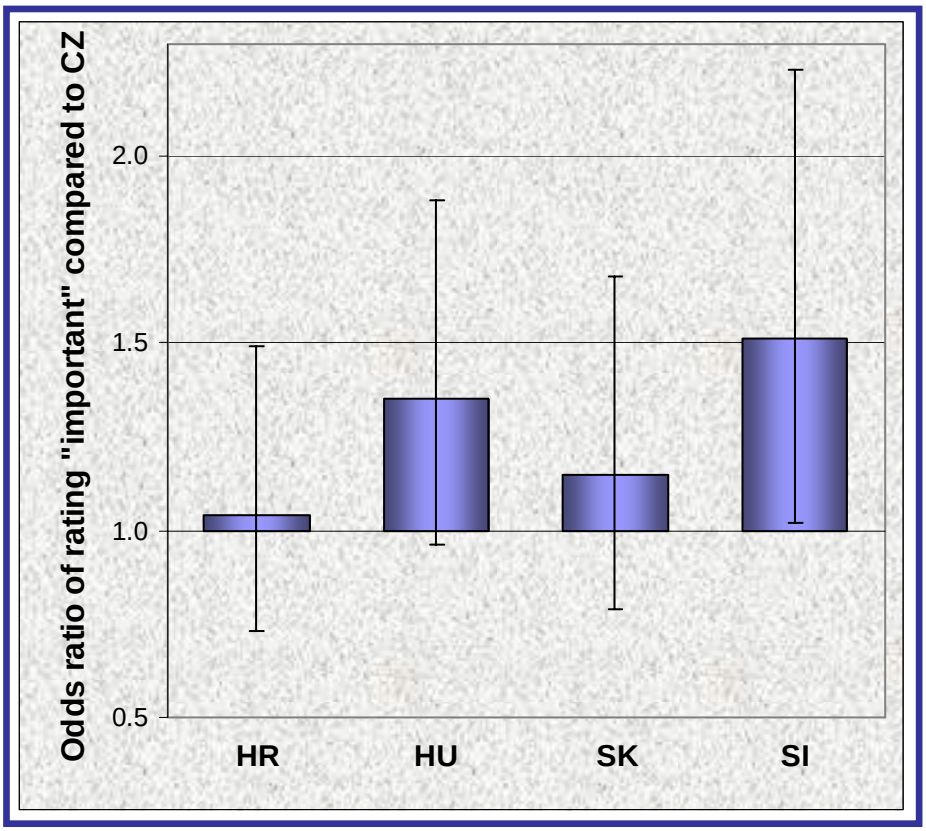
The odds of "extremely important" or "very important" rating on the importance of confidentiality of personal information (confidentiality) were significantly associated with sex, age and country.

After controlling for other factors, we found:

- Lower rating in males compared to females (50%);
- Lower rating in elderly compared to young people (64%).

See Figure 6 and 8 in the Annex for more details.

Figure 6: Inter-country differences in importance of confidentiality



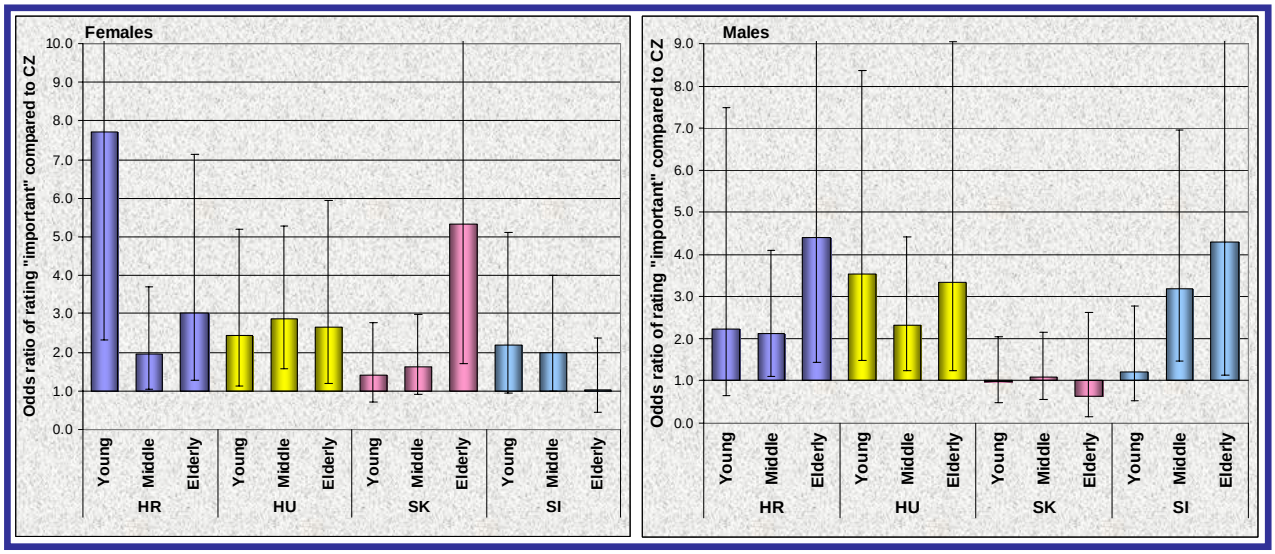
The odds of "extremely important" or "very important" rating on the importance of convenient travel and short waiting times (prompt attention) was significantly associated with permanent income, self-rated health status and with interaction of sex, age and country. After controlling for other factors, we found:

- Higher ratings in poorer quintiles compared to the best well-off group (152% for the 3rd, 170% for the 4th, 165% for the 5th);
- Higher rating in people with very bad self-rated health compared to people with very good self-rated health (254%);
- Higher ratings in young and middle-aged females in Croatia (771%; 197%) and Hungary (243%; 288%) compared to the Czech Republic;

- Higher ratings in elderly females in Croatia (300%), Hungary (265%) and Slovakia (534%) compared to the Czech Republic;
- Higher ratings in middle-aged and elderly males in Croatia (213%; 441%), Hungary (233%; 333%) and Slovenia (318%; 431%) compared to the Czech Republic;

See Figure 7 and Table 9 in the Annex for more details.

Figure 7: Inter-country differences in importance of prompt attention within age/sex categories

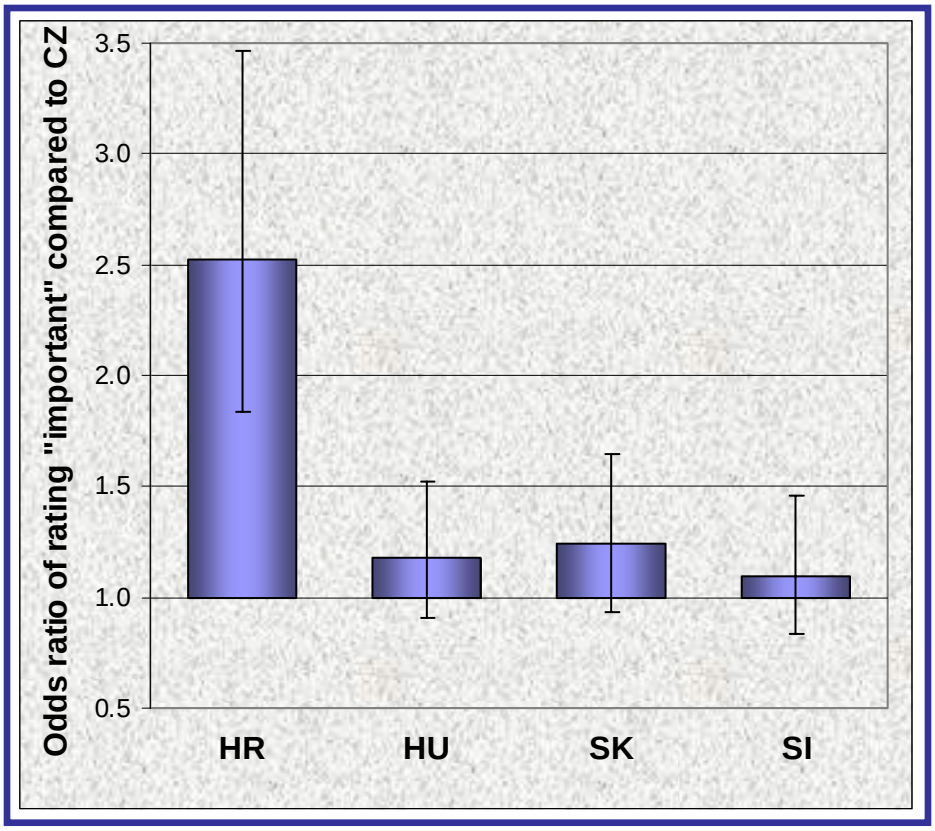


The odds of "extremely important" or "very important" ratings on the importance of choice of health care providers (choice) were significantly associated with sex, permanent income and country. After controlling for other factors, we found:

- Lower rating in males compared to females (57%);
- Higher ratings in poorer quintiles compared to the best well-off group (165% for the 3rd, 162% for the 4th, 148% for the 5th).

See Figure 8 and Table 10 in the Annex for more details.

Figure 8: Inter-country differences in importance of choice

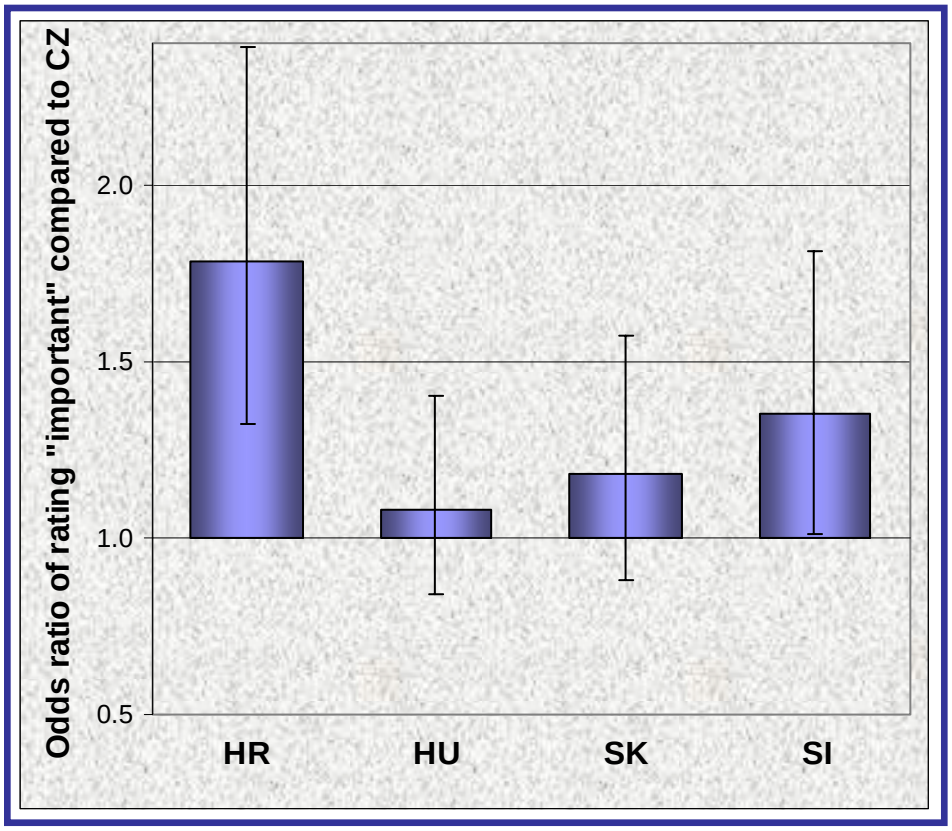


The odds of "extremely important" or "very important" ratings on the importance of involvement in decision making (autonomy) were significantly associated with sex, age, permanent income and country. After controlling for other factors, we found:

- Lower rating in males compared to females (68%);
- Lower rating in elderly compared to young (62%);
- Higher ratings in poorer quintiles compared to the best well-off group (156% for the 3rd, 124% for the 4th, 139% for the 5th);
- Higher ratings in Croatia (178%) and Slovenia (135%) compared to the Czech Republic.

See Figure 9 and Table 11 in the Annex for more details.

Figure 9: Inter-country differences in importance of autonomy

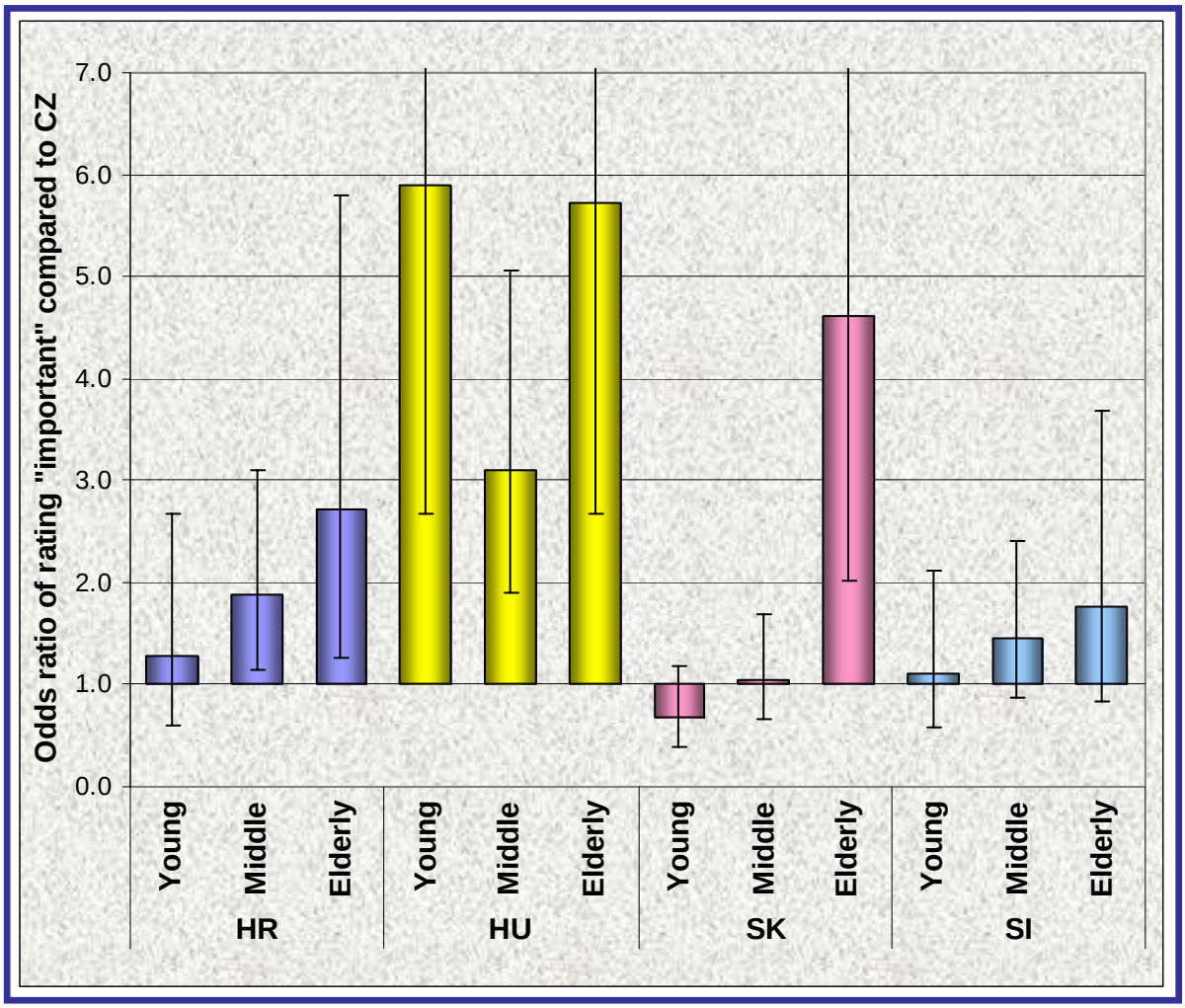


The odds of "extremely important" or "very important" ratings on the importance of good quality surroundings (quality basic amenities) were significantly associated with self-rated health status and with interaction of sex, age and country. After controlling for other factors, we found:

- Lower rating in people with moderate self-rated health compared to people with very good self-rated health (66%);
- Lower rating in young male compared to female (51%) and in middle-aged male compared to female (64%);
- Higher ratings in middle-aged in Croatia (189%) and Hungary (310%) compared to the Czech Republic;
- Higher ratings in elderly in Croatia (272%), Hungary (572%) and Slovakia (461%) compared to the Czech Republic.

See Figure 10 and Table 12 in the Annex for more details.

Figure 10: Inter-country differences in importance of quality basic amenities within age categories

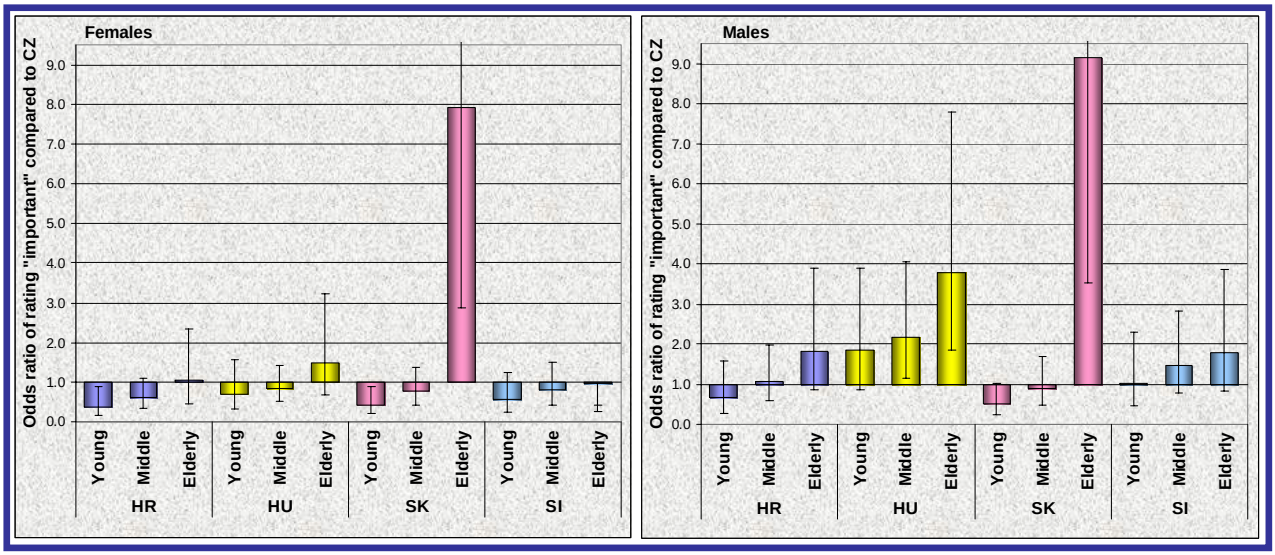


The odds of "extremely important" or "very important" ratings on the importance of contact with the outside world (social support) were significantly associated with educational level and interaction of sex, age and country. After controlling for other factors, we found:

- Lower rating in people with high education level compared to people with low education level (56%);
- Lower ratings in young females in Croatia (39%) and Slovakia (43%) compared to the Czech Republic;
- Higher ratings in elderly males in Hungary (378%) and Slovakia (916%) compared to the Czech Republic.

See Figure 11 and Table 13 in the Annex for more details.

Figure 11: Inter-country differences in importance of social support within age/sex categories

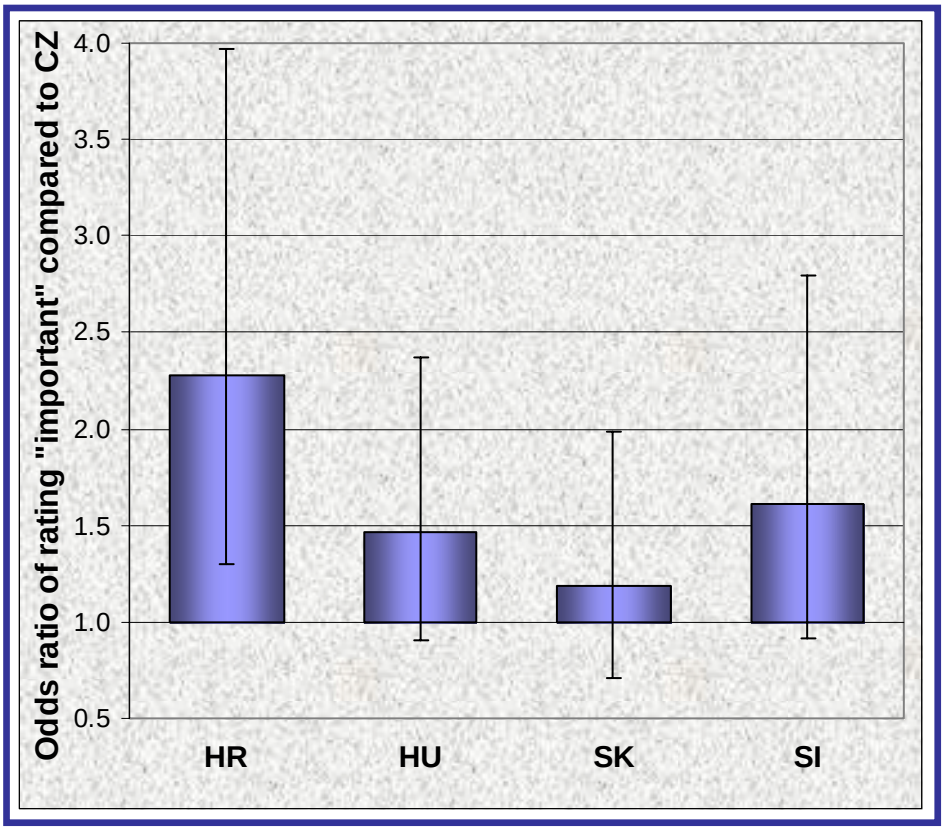


The odds of "extremely important" or "very important" ratings on the importance of clarity of communication (communication) were significantly associated with country and interaction of sex and age. After controlling for other factors, we found:

- Lower rating in middle-aged males compared to females (41%);
- Lower rating in elderly compared to young females (46%).

See Figure 12 and Table 14in the Annex for more details.

Figure 12: Inter-country differences in importance of communication



3.3 DISCUSSION

Usually, the elements of responsiveness are not of equal importance. Socioeconomic factors in particular determine the importance attributed to different elements in different countries.[23] Other possible factors include cultural, historic, political and geographical factors. Importance of responsiveness domains was included in the study because the way people are treated when they encounter the health system can improve or reduce their well-being independently of health outcomes. This questionnaire measures expectations as ideal (similar to aspirations, desires or preferred outcomes) or predicted (realistic, practical or anticipated outcomes that result from personal experiences, reported experiences of others and information sources such as the media) rather than normative (based on what should or ought to happen) as measured in traditional patient satisfaction surveys. Importance of responsiveness was included in order to weight performance. It is a very recent way of measuring non-medical aspects of health systems and there is very little data on cross-country differences regarding the importance of the domains available.

[23] De Silva A. *A framework for measuring responsiveness.* Geneva, World Health Organization, Global Programme on Evidence for Health Policy, 1999

Let's summarize the answers to the research questions posed in relation to ratings on importance of responsiveness:

- About 86% of the people think responsiveness is important with a range of 83-88% across countries.
- Domains of responsiveness rated with different importance across socio-economic groups formulated according to age, gender, education and income. This variability is dissimilar across countries.
- Health condition has an impact on ratings on importance of responsiveness while utilization of health care hasn't.

Communication was the highest ranking domain in all 5 countries. The domain with lowest importance is choice for all countries except Croatia (Annex Table 15).

Importance of dignity showed least variations across countries, in line with current understandings in literature saying that it is the most universal domain above all others related to human rights, and it is not much influenced by socioeconomic or other country specific factors. The differences were mainly influenced by sex, education level and self-rated health.

On average, 90 per 100 people felt dignity was the most important domain when they sought health care. Dignity came out as second most important domain in the Czech data, and 3rd for all other countries.

Importance of confidentiality, social support and communication domains varied moderately and they were mainly influenced by sex and age (social support additionally influenced by education level). Confidentiality of personal information is very important and important for 88.8% of all respondents. It seems this domain is more important to Slovakians, Slovenians and Czechs, and less important to Hungarians and Croats. In Western developed societies, confidentiality is given far more importance than in developing countries. Our results were in accordance: minimum rating of importance of confidentiality was recorded in Croatia (country with the lowest GDP per capita) and maximum in Slovenia (country with the highest GDP per capita).

Importance of choice of care provider, prompt attention, quality of basic amenities and autonomy showed great variations in its ratings, with Croatia mostly at the top and the Czech Republic continuously at the bottom of scale, the two most different countries by influential

factors mentioned above. The differences were mainly influenced by sex, age, economic status and self-rated health.

Choice of health care providers seems to be the most important to Croatians and of the lowest importance to all other countries. In all domains, choice ranked worst in all countries except Croatia.

Prompt attention, the second most important domain, had highest percentage in Hungary (90.6%), Croatia (90.1%) and Slovenia (87.2). On the other hand, respondents found this domain of low importance in the Czech Republic 22.4% and Slovakia 18.2%. This domain was ranked in the 4th place of all domains in Croatia, Hungary and Slovenia and in 6th place in the Czech Republic and Slovakia.

Autonomy does not seem to be a very important domain. Respondents from Croatia put it at the bottom, while respondents from the other 4 countries ranked it at the 7th place.

Quality of basic amenities showed substantial difference between ratings in all 8 domains in all 5 countries: it differs from 82.6% in Slovakia to 94.5% in Hungary. This domain is second most important domain to Hungarians and Croats and 5th for the other 3 countries.

Overall, social support came in at the 5th place. This domain is more important to Czechs and Slovaks (4th place) than to Croats, Hungarians and Slovenians (on the 7th and 6th place of all domains).

Respondents from the Czech Republic and Slovakia had the same ranking for 6 domains. They differ only in 2 domains (dignity and confidentiality). Hungary and Slovenia are also in conformity with 6 domains but they differ in confidentiality and quality. Croatia had the most similarity with Hungary (in 4 domains) and Slovenia (in 3 domains).

The best performing domains (total for all 5 countries) were communication (95.0%), dignity (90.1%), confidentiality (88.8%), quality basic amenities (87.4%), social support (86.0%), and prompt attention (85.3). The worst performing domains were autonomy (76.7%), and choice (76.0%). (Annex: Figure 24). The domains rated as important with less frequency should not be

interpreted as marginal. In most cases, these ones perform relatively well.[24] The best conformity between the countries, except communication, was for dignity (all countries except the Czech Republic), autonomy and choice (all countries except Croatia) and quality (except Croatia and Hungary).

Considering known historical facts regarding health system organization and performance similarities, one would expect similar results in Croatia and Slovenia on one side and the Czech Republic and Slovakia on the other. This was completely confirmed for the Czech Republic and Slovakia, but only partially for Croatia and Slovenia. Hungary also failed to show greater similarity with Slovakia and the Czech Republic despite similar history during last few decades. Probably recent social transitions influenced these differences.

Use of health care has not been found to be associated with importance of any responsiveness domain.

In general, women rated responsiveness more important than men -- in accordance with previous researches. People with good and moderate self-rated health rated responsiveness more important than people with very good self-rated health, which has also been observed previously. Elderly rated several dimensions of responsiveness lower than young people did, although in general they didn't differ from the young in the rating of overall importance of responsiveness. Poorer people rated responsiveness as more important than the best well-off.

Increasing quality of care is associated with raised expectations and therefore lower overall patient satisfaction. This could be the additional reason for cross-country differences in importance of the domains.[25]

[24] Bramesfeld A, Wedegärtner F, Elgeti H, Bisson S. How does mental health care perform in respect to service users' expectations? Evaluating inpatient and outpatient care in Germany with the WHO *responsiveness* concept. BMC Health Serv Res. 2007; 7: 99. Published online 2007 July 2. doi: 10.1186/1472-6963-7-99.

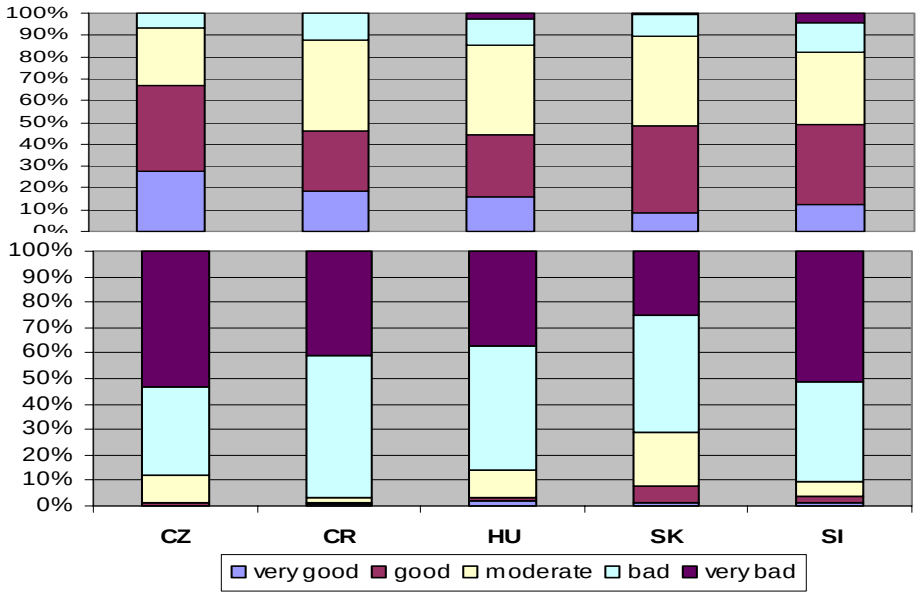
[25] Bond S, Thomas LH. *Measuring patients' satisfaction with nursing care*. J Adv Nurs. 1992 Jan;17(1):52-63.

4. RATINGS ON VIGNETTES FOR PERCEPTION OF RESPONSIVENESS

4.1 INTRODUCTION

Judging responsiveness is influenced not only by the experiences with health services but also by the expectations and perceptions of the public. To take into account the effect of perception the WHS questionnaire contained a block for rating vignettes describing hypothetical scenarios about other peoples' experiences with the health system. Respondents were asked to rate the hypothetical situations describing treatment of people by health providers using the same rating scale as used in the responsiveness description questions (from "very good" to "very bad"). For example, respondents were asked to report the level of dignity, with which the person in the vignette was treated, answering on a scale of "very good", "good", "moderate", "bad", and "very bad". This information provides a record of differences in the way people use verbal categories to evaluate a common stimulus. For example, one person might categorize the scenario described in a vignette as "good", while another might consider that the same scenario is "very good". The vignettes potentially address cross-population measurement comparability, as they provide a means of adjusting self-reported ordinal responses by taking into account the effects of different cultures, languages, beliefs and so on (see examples in Figure 13).

Figure 13: Distributions of ratings on vignettes for perception of responsiveness across countries



Set A Q1: Niels woke up with a sore back so he decided to go to the clinic. It took 30 minutes to travel to the clinic and he was seen within 5 minutes. How would you rate his traveling time?

Set A Q4: Anya took her baby for a vaccination. The nurs said hello but did not ask for Anya's or the baby's name. The nurse also examined Anya and made her remove he shirt in the waiting room. How would you rate the way her privacy was respected during physical examinations and treatments?

Unfortunately, the approach WHO has planned to analyze the data using information derived from the vignettes hasn't been available yet. Therefore, in this Report we used a simple method to analyze the ratings of vignettes: instead of taking into account individual differences to compare people's perception in different countries, we calculated similarity indexes to measure the similarity of perceptions for all pairs of the 5 countries (see details in Methods). These indexes provide a general view on the similarities in perception of responsiveness for the selected two countries based on comparison of ratings on the same vignettes. Dissimilarity indexes for each domain of responsiveness were calculated using the vignettes belonging to the given domain, and an overall similarity index was calculated using the whole set of vignettes.

Additionally, multidimensional scaling was used to help further understand the relationships among the countries. This was accomplished by assigning countries to specific locations in a conceptual two-dimensional space such that the distances between points in the space match the 8 domain-specific dissimilarities as closely as possible (for detailed descriptions see Section Methods). The definitions of indicators used in this chapter are listed in Annex 7.3.1.

Four different sets of vignettes were used in the WHS and only one set was randomly selected for the respondents. Each set of vignettes was to explore two domains of responsiveness with ten questions for each. Table 4 shows proportions of respondents who actually answered the given domain for each country; calculated as the ratio of number of those who answered at least one question pertaining to the given domain and the achieved sample size.

Table 4: Proportion of respondents (%) per domain and country

DOMAINS	CROATIA	CZECH REPUBLIC	HUNGARY	SLOVAKIA	SLOVENIA
Dignity	19	21	24	21	24
Autonomy	41	38	47	40	39
Communication	23	22	24	23	18
Confidentiality	20	20	24	21	17
Prompt attention	20	21	24	21	24
Social support	21	18	25	19	22
Basic amenities	23	22	24	23	18
Choice	20	20	23	21	17

The questions concerning the perception of responsiveness we want to answer are listed below:

- How ratings on vignettes for perception of responsiveness differ across countries?
- Does any domain of responsiveness play a specific role in differentiating the countries based on ratings on vignettes for perception of responsiveness?

4.2 RESULTS

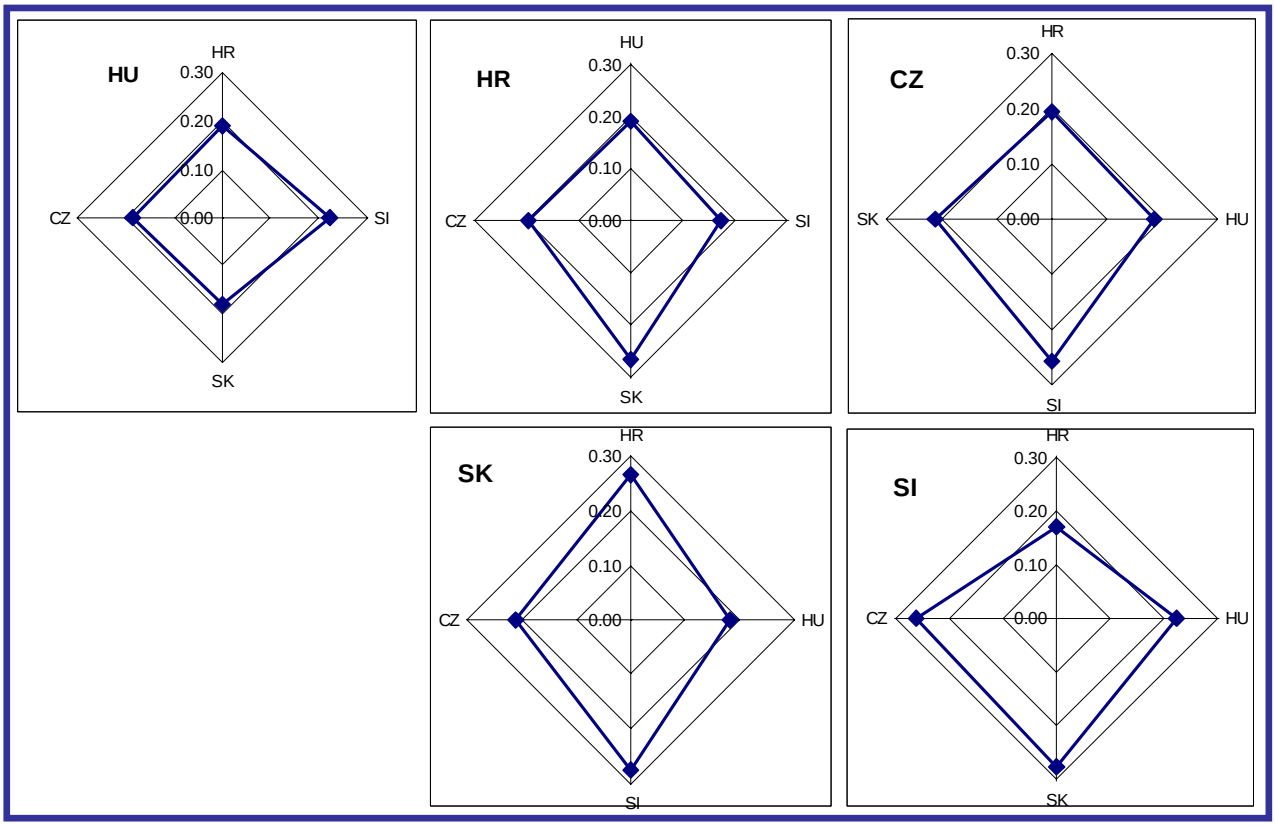
Findings for the overall dissimilarity index show that regarding the perception of responsiveness the most similar pair of countries is Slovenia-Croatia (0.17) and the most dissimilar one is Slovenia-Slovakia (0.27; Table 5). Based on the overall dissimilarity index, three types of cross-country dissimilarity patterns can bee identified. Uniform: Hungarians rated the vignettes very similar to people in all the other four countries; unipolar: the Czech Republic and Croatia were similar to three other countries but one country was more dissimilar; bipolar: Slovakia and Slovenians had two similar countries and two dissimilar ones (Figure 14).

Table 5: Cross-country dissimilarity index for perception of responsiveness

	Croatia	Hungary	Slovenia	Slovakia
Czech Republic	0.19	0.19	0.26	0.21
Croatia		0.19	0.17	0.26
Hungary			0.22	0.18
Slovenia				0.27

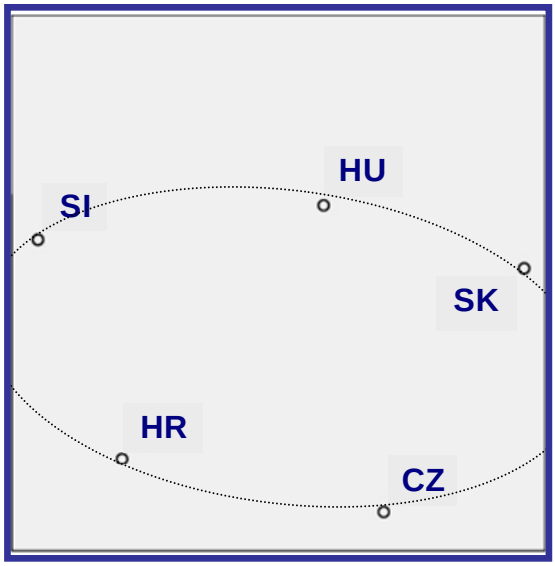
The domains of responsiveness did not behave uniformly across the pairs of countries: the highest dissimilarity index was observed in Dignity (0.41), the lowest in Social support (0.05; see Annex Table 16). The mean differences by domain ranged from 0.19 to 0.27. Communication and Confidentiality showed high variability with a range of 0.1-0.35 and 0.09-0.35, respectively. The highest values occurred in comparisons in Dignity of Slovakia with Croatia, Slovenia, and the Czech Republic. The lowest values were observed between the Czech Republic and Hungary in Social support and Confidentiality.

Figure 14: Different types of cross-country dissimilarity pattern



Cross-country dissimilarities are summarized by using multidimensional scaling in Figure 15 where countries are placed on a two-dimensional plane – the closer two countries are the more similar ratings their population performed taking account all the domains. The countries are approximately located on an ellipsoid with Slovenia and Slovakia in the more distant positions. The circular arrangement results in a smaller distance between the two neighboring countries and a greater distance between the remaining two countries.

Figure 15: Cross-country dissimilarity of perception of responsiveness based on multidimensional scaling.



4.3 DISCUSSION

When interpreting the above results on perception of responsiveness, one has to keep in his mind that the method of analysis in this report was different from the planned one. The original approach was to take into account the individual variability of respondents' perceptions in connection to their experiences during contact with health services. The aim of the analysis here however was to compare the similarity of the respondents' perception in different countries in general.

The answers to our research questions on perception of responsiveness are listed below:

- Ratings on vignettes do differ across countries: Slovakians perceive most dissimilar to the Slovenians, to them Czechs and Croatians are closer, respectively, while Hungarian respondents' views are in the middle that is the less dissimilar compared to the other four.
- In the different domains of responsiveness, the countries showed various similarities. The highest dissimilarities were found in Dignity and lowest in Social support. No particular domain showed exceptional role in differentiating the countries.

It seems that historical/cultural background and previous contacts with the health system generate an axis of perception with Slovakia and Slovenia at the ends and Hungary in the middle, while respondents in the Czech Republic perceive responsiveness similarly to Slovakians, and Croatians' view is closer to Slovenians. This similarity pattern can be also explained by the different development in the period of socialism in connection with effects on people's expectations and the health system.

5. RATINGS ON EXPERIENCES WITH THE HEALTH SYSTEM

5.1 INTRODUCTION

Responding to people's non-medical expectations is one of the three main goals of operating a health system in a country. Responsiveness however is a complex notion: it depends on values, perception, and experience relating to the performance of the health system. To handle this complexity, beyond asking respondents' overall opinion on health system, separate blocs of questions were used in the WHS to collect information on values, perception, and experience applying to the same domains of responsiveness.

Using the WHS data coming from 5 former socialist countries one would expect considerable similarity in the domains of responsiveness. Close relations between satisfaction and socio-economic status (SES), and the use of health system can be also anticipated. To investigate these hypotheses the following questions were considered:

- Do users of the health system think that their needs have been met?
- How satisfied are people with their involvement in decision making processes regarding the provision of health services in their country?
- How satisfied are people with the way health care is run in their country?
- How do users rate responsiveness of health services in outpatient and inpatient setting?
- Do health status, country, SES and health care use have an impact on ratings on experiences with health system?

To answer these questions while controlling the combined effect of background factors, logistic and multiple linear regression models were used to analyze the data. The dependent variable was ratings of health system in general and domains of responsiveness, background variables served as explanatories. The definitions of indicators used in this chapter are listed in Annex 7.4.1, the background variables are listed in Annex 7.1.2.

5.2 RESULTS

5.2.1 General evaluation of the health system

In the average only 7 per 1000 people felt their need wasn't met when they sought health care. The needs that remained unsatisfied however showed a huge variation; it ranged from 0.1% in the Czech Republic to 1.9% in Hungary. See details in Table 17 in Annex.

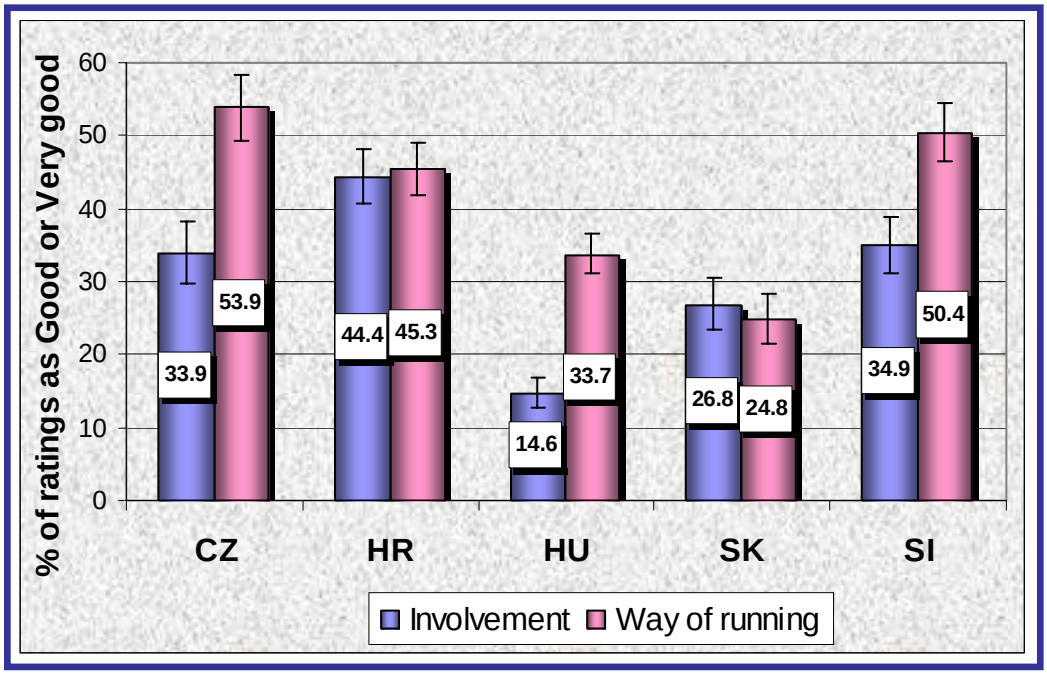
When health service users received health care and medicine was prescribed, it was not available in 9 per 1000 cases, with the range from 0.6% in the Czech Republic to 1.5% in Slovenia (Annex Table 18).

Almost every 20th person felt that they were treated worse because of their sex, age, lack of money, social class, ethnic group, type of illness, or nationality. Discrimination in health care ranged between 2% in Slovakia and 8% in Hungary (Annex Table 19).

When getting inpatient or outpatient care, one of the following, the skill of the health care providers, the equipments, or the drug supplies were found inadequate in the average of 14% of encounters. The Czech Republic (7%) and Slovenia (8%) reported significantly smaller proportion of persons frustrated by inadequacy compared to other three countries, i.e. Slovakia (15%), Croatia (16%) and Hungary (17%; Annex Table 20).

The proportion of "Good" or "Very good" ratings on involvement in decision making on health care provision was 29% in average but it showed a great variation in the countries from 15% (Hungary) to 44% (Croatia) (Figure 16). The average proportion of people being "very satisfied" or "fairly satisfied" with the way health care is run was 38%, and varied from 25% (Slovakia) to 54% (the Czech Republic). There was a substantial difference between ratings in these two issues: about 20% more Czechs, Hungarians, and 15% more Slovenians were satisfied with the way their health systems were run than the proportion of respondents who found involvement in decision making satisfactory (Annex Table 21 and 22).

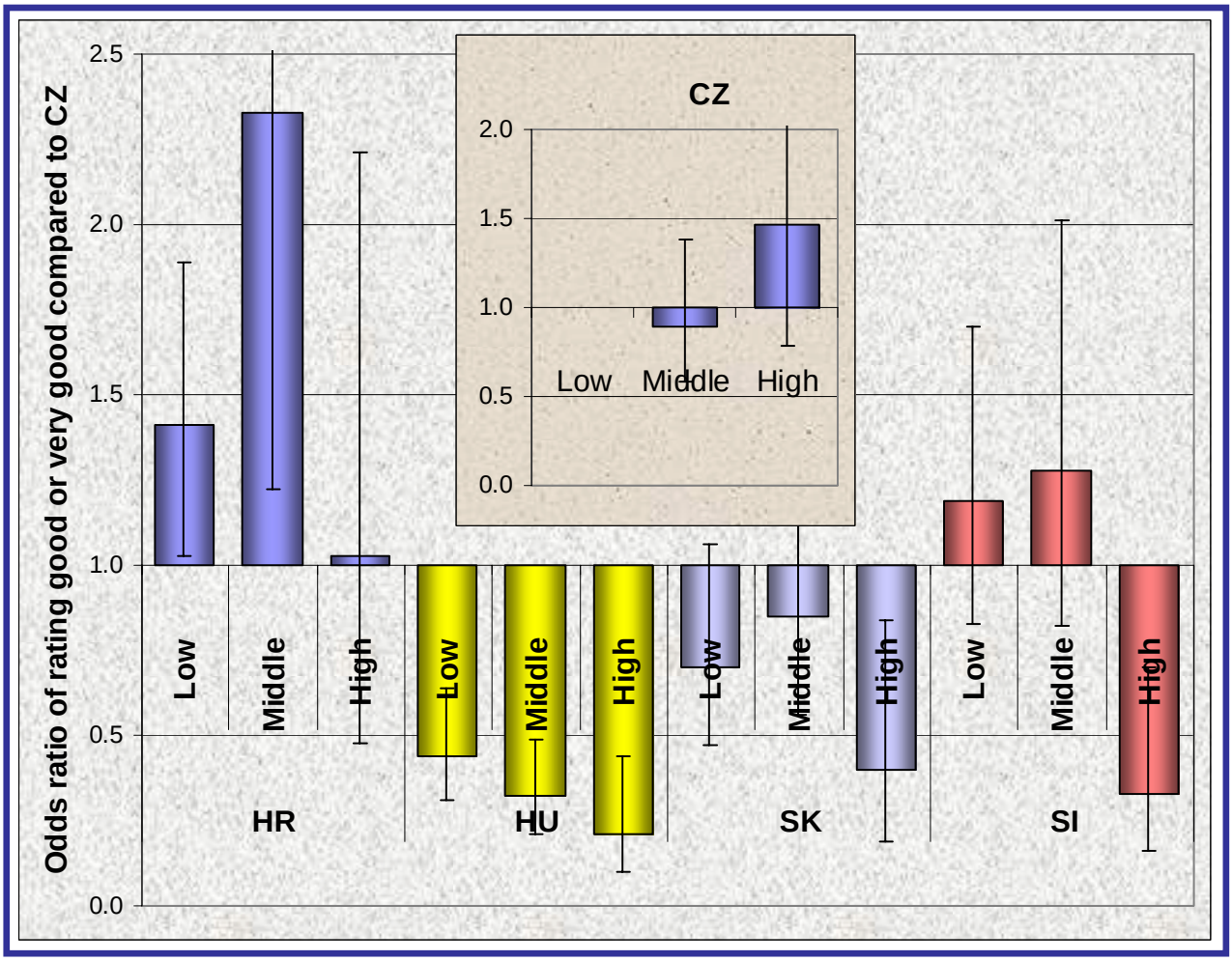
Figure 16: General evaluation of the health system



The odds of "Good" or "Very good" ratings on the way health care involves people in deciding what services it provides and where it provides them was significantly associated with the age, having health worker family member, self-rated health status and with the interaction of education and country. After controlling the effects of other factors, we found:

- increasing rating in middle and elderly compared to the young age group (132% and 174%, respectively);
- lower rating in people with no health workers in their family (76%);
- higher rating in people with "very good" self-rated health (from 56% to 73% in other health categories);
- lower rating in people with middle or high education level in Hungary and Slovenia (64%, 70% and 96%, 41%) compared to people with low education;
- in people with low education level Croatians have highest (141%), Hungarians have lowest (44%) rating compared to the Czech equivalent groups;
- in people with middle education level Croatians have highest (233%), Hungarians have lowest (32%) rating compared to the Czech equivalent groups;
- in people with high education level, Hungarians, Slovakians and Slovenians have lower (21%, 40%, 33%, respectively) rating compared to the Czech equivalent groups with exception of Croatia. See Figure 17 below and more details in Table 23 in the Annex.

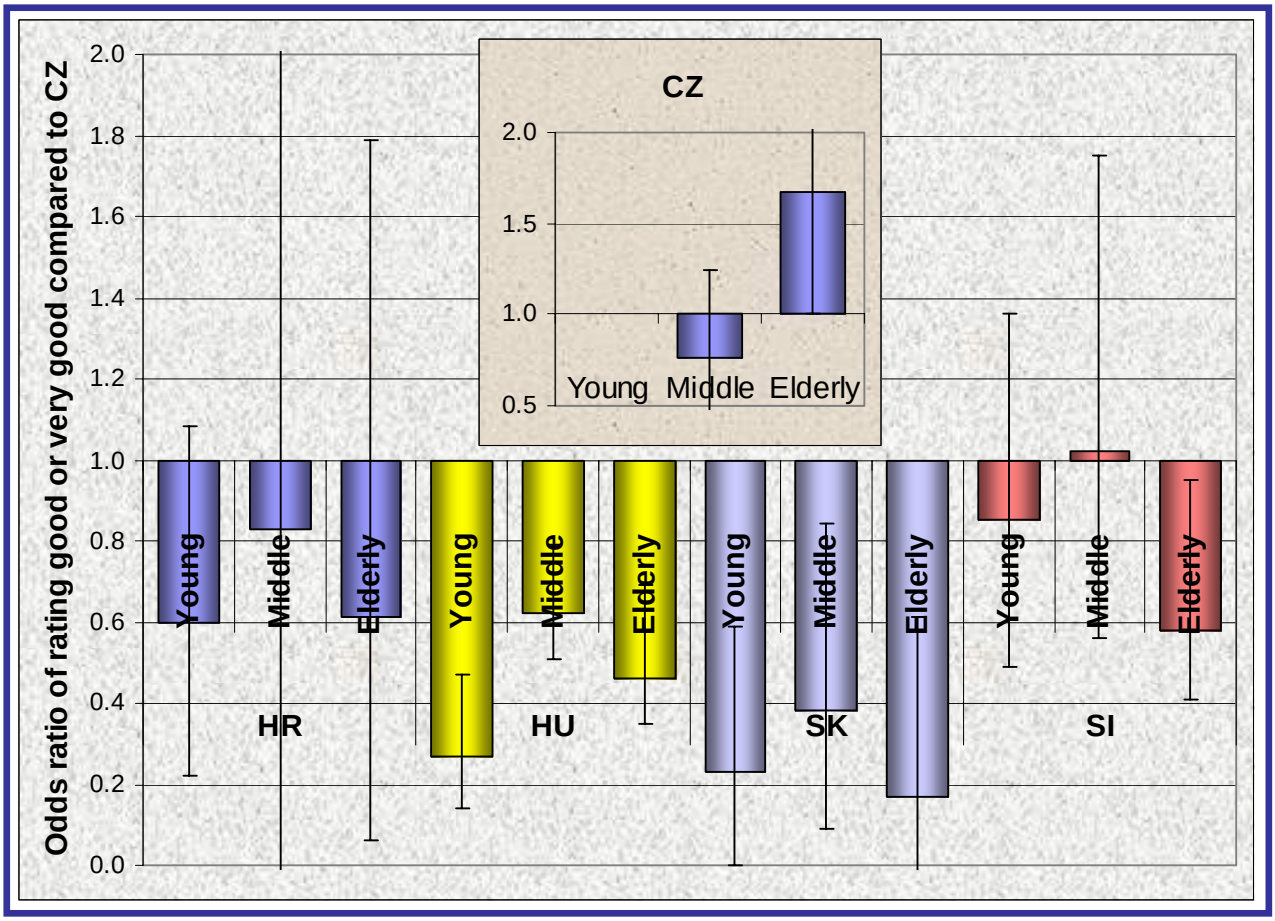
Figure 17: Association between rating of involvement in decision making and country by education level



The odds of "Very satisfied" or "Fairly satisfied" ratings regarding the way health care runs in their country was significantly associated with education, permanent income, self-rated health status and with the interaction of age and country. After controlling the effects of other factors, we found:

- lower rating in people with middle (97%) and high (74%) educational level;
- lower rating (60%-85%) in poorer quintiles compared to the well-to-do population group;
- higher rating in people with very good self-rated health (58%-68% in others);
- higher rating in the older age groups compared to the young in Croatia (172% in the elderly) and in Hungary (173% in the middle, 283% in the elderly);
- except middle aged Slovenians, in each country for all age groups has lower rating than the reference age groups in the Czech Republic. See Figure 18 below and more details in Table 24 in the Annex.

Figure 18: Association between rating the way of running health system and country by age



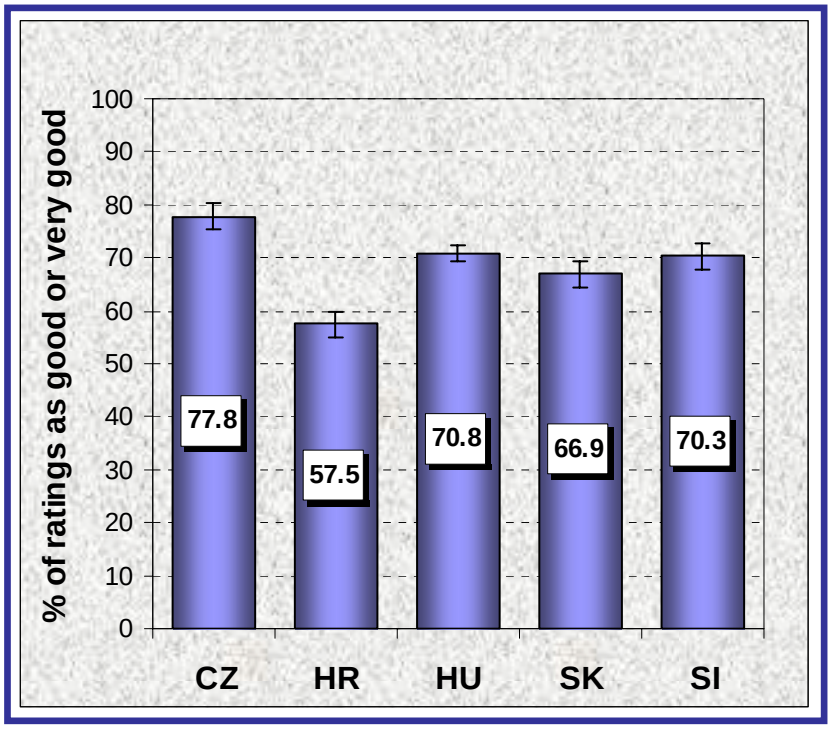
5.2.2 Ratings on experiences

In contrast to the concept of satisfaction, the WHO introduced the concept of responsiveness. One of the ways to reduce the effect of individual expectations is that in responsiveness "experience of people" in their contact with the health system is measured. In WHS it was observed by rating experience in eight domains composed in total from 15 subdomains separately for inpatient and outpatient care using the five-item scale: "very good", "good", "moderate", "bad", "very bad". When dichotomizing the variables only answers "very good" and "good" were considered as good responsiveness. The questions were asked to people who stayed overnight in the previous 5 years in inpatient health establishment for their own health or whose child aged up to 12 years stayed overnight in hospital. If this was not the case the same questions were asked and related to people who received in the previous year any outpatient health care or who accompanied one of their children aged up to 12 years of age for outpatient health care. There were 80% (from 75-90% in individual countries) of respondents who reported contact with health care providers; 45% (from 35-56% in individual countries) received inpatient and 55% outpatient care. On the basis of responses to questions in 8 domains a composite indicator of

overall responsiveness was constructed as percentage of domains in which respondents rated their experience as "very good" or "good", combining results for inpatient and outpatient care.

The level of overall responsiveness in all countries reached 68% (on the scale 0-100%, where 100 means the best responsiveness available). In other words, on average the experiences of people in two thirds of all domains were rated as "very good" or "good". The best rating of overall responsiveness reported patients in the Czech Republic (78%) and the worst in Croatia (58%). The remaining three countries did not differ significantly from each other with rating of 71% for Hungary, 70% for Slovenia and 67% for Slovakia (Figure 19).

Figure 19: Overall rated responsiveness



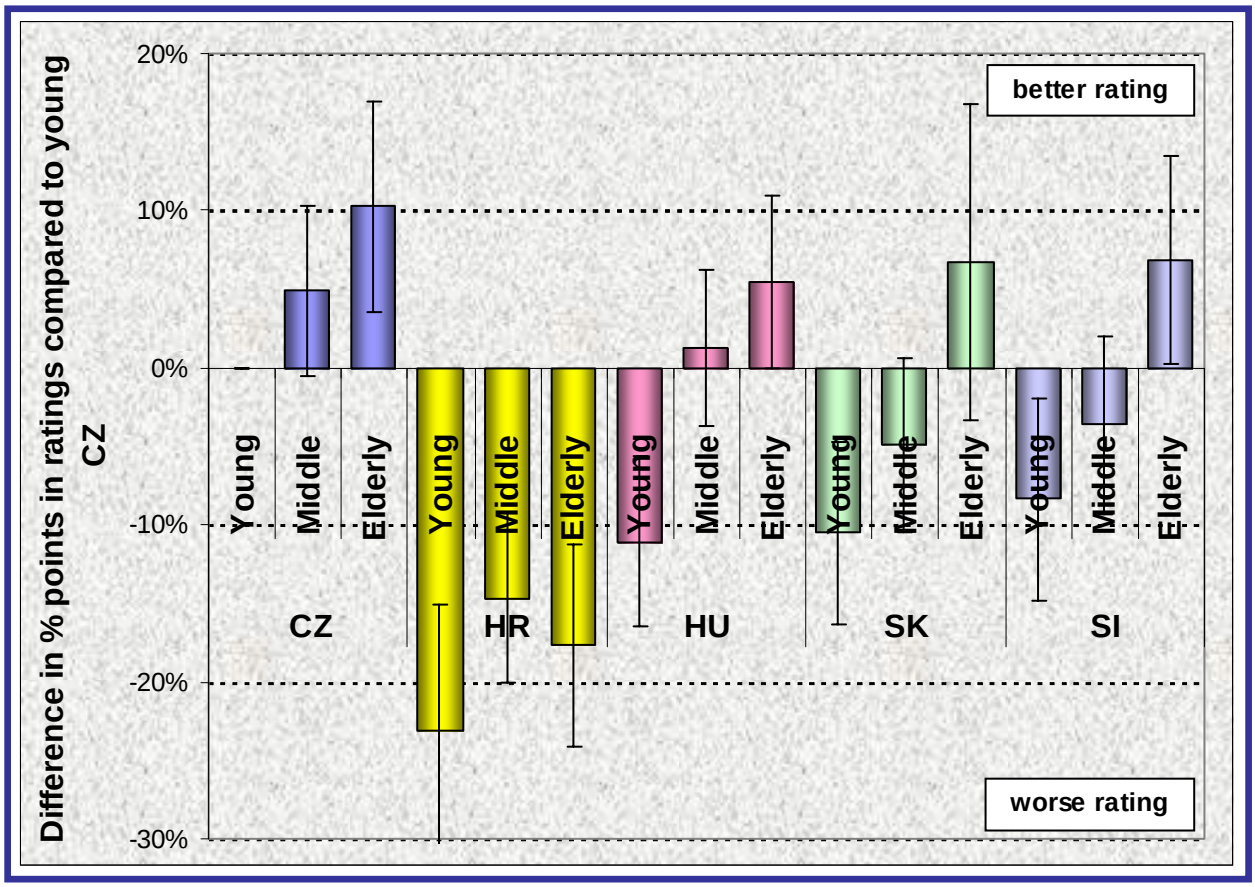
Applying multiple linear regression we can see that education, self-rated health, health worker in the family and age (with country specific patterns) were significantly associated with overall responsiveness. No significant effect was observed related to gender and permanent income. After controlling the effects of other factors, we found (Annex Table 25):

- people in high education group rated their experience worse (by 6 percentage points) than people with low education;
- people rating their health as very good reported better responsiveness in comparison to other health groups (by 7-17 percentage points);
- people from households where a household member worked or was trained in health field experienced better overall responsiveness than people without these contacts (by 6 percentage points);

- in all countries except Croatia there was an obvious pattern of age (Figure 20): better rating of responsiveness by people at age 65 and more years (by 10-17 percentage points in individual countries) and less evident better responsiveness reported by middle aged (by 5-12 percentage points) compared to people at age 18-34 years;

- young people in the Czech Republic experienced better responsiveness than in other countries (by 8-23 percentage points). People in Croatia reported worse responsiveness in all age groups compared to all other countries.

Figure 20: Association between overall rated responsiveness and country and age



5.2.3 Rating of responsiveness in inpatient care

In total, 6% of people in all countries reported experienced discrimination in inpatient encounter with health care services. With 10%, Hungarians perceived significantly more discrimination in inpatient care in comparison to overall average.

Inadequate inpatient care was provided to 18% of all people in the countries. The Czech Republic (12%) and Slovenia (12%) reported better results in comparison to other three countries, Slovakia with 20%, Croatia with 21% and Hungary with 22% (Annex Table 26).

An average level of responsiveness of inpatient care for all countries reached 67% (out of 100% reserved for the best value possible). The Czech Republic reported best performance with 76%.

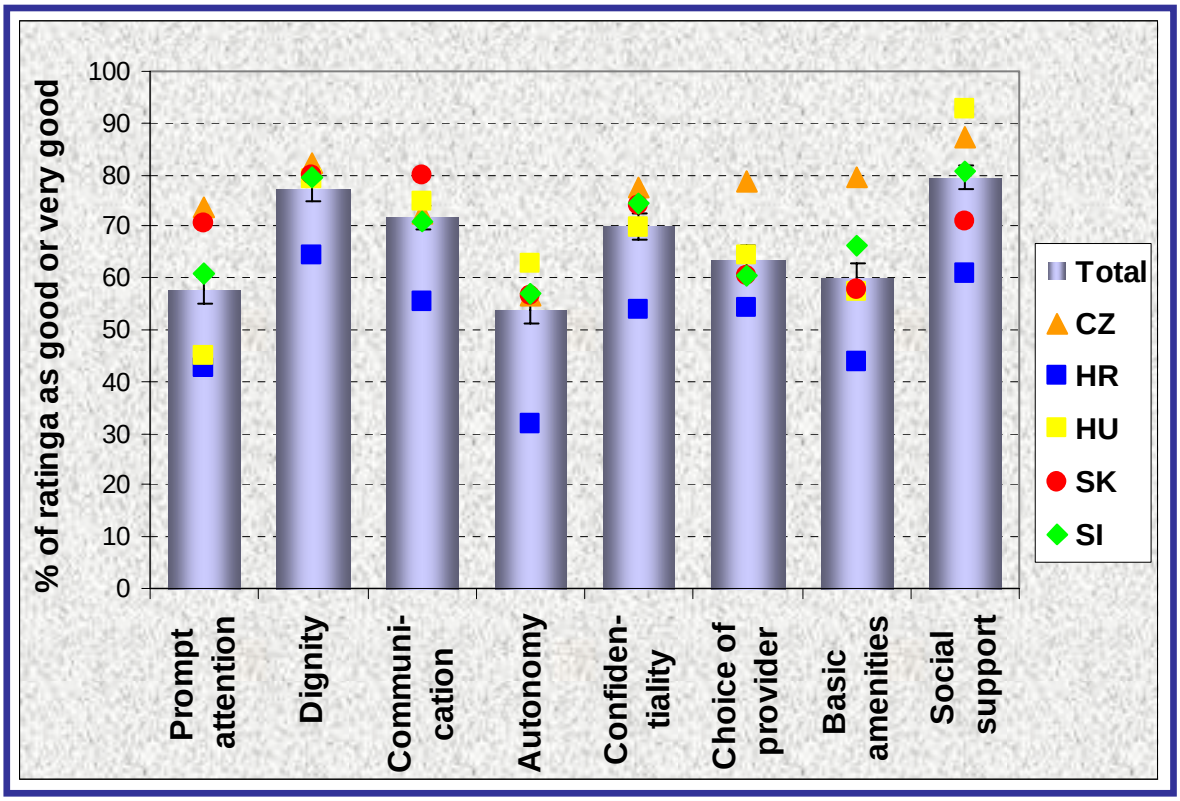
Significantly worse performance of responsiveness than the average was reported in Croatia (51%). Other three countries did not significantly differ from the average and between each other: Slovakia and Slovenia with 69% and Hungary with 68%.

Using linear regression, there were found significant effects of age, education and self-rated health on rating of responsiveness. After controlling the effects of other factors, we found these significant differences (Annex Table 27):

- better experience in middle aged population (by 11 percentage points) and seniors (by 15 percentage points) in comparison to young people;
- worse ratings in people with high education (by 9 percentage points) compared to people with low education;
- higher rating of responsiveness in people with very good health compared to people reporting other health conditions (by 4-15 percentage points).

Comparison of ratings of experience in all domains of inpatient care is depicted in Figure 21. Social support (with 80% of "very good" or "good" experience) and dignity (77%) received the best ratings. These two domains were followed by slightly worse performance in communication (72%) and confidentiality (70%) that were still significantly better rated then the rest: choice (64%), quality of basic amenities (60%), prompt attention (58%) and autonomy (54%).

Figure 21: Rating responsiveness in countries by domains of inpatient care



Looking at the country specific variations in the order of the domains of responsiveness by their rating, we found (details in Annex Table 28):

- In the Czech Republic the rank of communication (last but one) seemed to be very bad in comparison to ranking of other domains in other countries (third best rated domain in total) and the rank of quality of basic amenities quite good (third best in comparison to sixth rank in all countries) but this can't be confirmed by statistical significance;
- Slovakia seemed to rank prompt attention better and social support worse than other countries but these results are not supported by statistical significance;
- Croatia and Hungary showed the highest inequality measured by difference in rating between the best and the worst domain. Autonomy, the worst rated domain in Croatia, received only 32% of positive responses compared to the highest rated dignity with 64% and people in Hungary rated worst prompt attention with 45% compared to best social support (93%). In addition, prompt attention is significantly the worst rated domain in Hungary.

Looking in detail at each domain of responsiveness of inpatient care, we could see:

- ***prompt attention*** (rated as "very good" or "good" by 58% of people in all countries): the Czech Republic (74%) and Slovakia (71%) were significantly above and Croatia (43%) and Hungary (45%) below the overall average;
- ***dignity*** (77%): Croatia reported lack of dignity (only 64% population experienced good dignity); all other countries followed the overall average;

- ***communication*** (72%): only Croatia (56%) reported significantly worse performance compared to the average;
- ***autonomy*** (54%): Croatia (with 32%) performed worse than the average whereas Hungary (63%) reported significantly better than the overall average.
- ***confidentiality*** (70%): Croatia (54%) is the only country that reported significantly lower confidentiality compared to the overall average.
- ***choice of provider*** (64%): only population in the Czech Republic reported choice of provider better than the overall average (79%).
- ***quality of basic amenities*** (60%): people in Croatia (44%) more often reported worse experience in this domain in comparison to the overall average whereas the Czech Republic reported better experience (80%).
- ***social support*** (80%): Hungary (93%) reported significantly above-average responsiveness in social support whereas Croatia (61%) reported significant under-average performance.

5.2.4 Rating of responsiveness in outpatient care

In total, 3% of people in all surveyed countries reported any of the reasons of discrimination in outpatient care. There were no significant differences between countries.

One tenth of people experienced inadequate outpatient care in all the countries. The Czech Republic (3%) and Slovenia (5%) reported better results compared to other three countries: Hungary (10%), Croatia (13%) and Slovakia (13%) (Annex Table 29).

The composite indicator of responsiveness in outpatient care is based on seven domains of responsiveness (social support was not defined). Two countries reported performance in outpatient responsiveness significantly better than the overall average: the Czech Republic (79% out of 100% representing best responsiveness available) and Hungary (74%) whereas Croatia reported a significantly worse performance (63%). The performance for Slovenia (71%) and Slovakia (66%) was close to the overall outpatient average (70%).

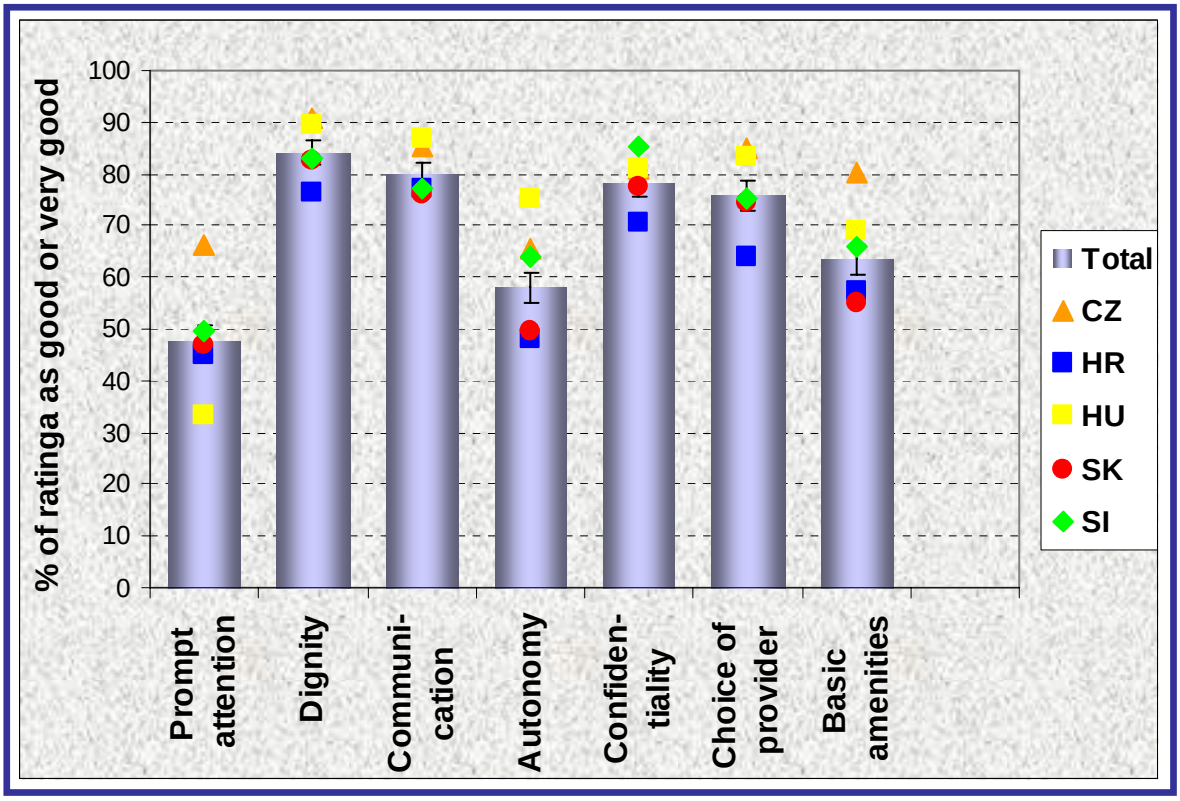
Concerning characteristics of individuals or their households, significant differences in overall outpatient responsiveness were found in age, education, close relation of a household member to health sector and self-rated health. No significant differences were found by permanent income and gender. After controlling the effects of other factors, we found (Annex Table 30):

- middle aged (by 4 percentage points) and seniors (by 11 percentage points) experienced better responsiveness than young people;
- people with middle and high education reported worse responsiveness (by 4 percentage points) than people with low education;
- people from households with someone working or being trained in health field rated responsiveness in outpatient care better than people with no such contacts (by 6 percentage points);
- people with very good self-rated health expressed significantly better experience in outpatient care than people with worse self-rated health (by 9-14 percentage points).

Comparing experience between domains, we can see from the Figure 22 that Dignity received significantly higher ratings (with 84% of "very good" or "good" rating). Quite good performance was observed in communication (80%), confidentiality (78%) and choice of provider (76%), followed by significantly worse rating of quality of basic amenities (64%) and autonomy (58%). Significantly, worst rated domain was prompt attention (48%). No big differences in order of domains by their rating were observed between countries. Only these interesting results were observed:

- there was very high variability of responses between domains caused by bad rating of prompt attention compared to other domains in Hungary (only 1/3 of people rated it positively, compared to the second worst domain quality of basic amenities with 2/3 of people rating it positively);
- in Slovenia, confidentiality (85%) was ranked higher by ratings of experience than in other countries.

Figure 22: Rating responsiveness in countries by domains of outpatient care



Looking in sequence at each domain of responsiveness in outpatient care, we may found (Annex Table 31):

- ***prompt attention*** (rated as "very good" or "good" by 48% of people in all countries): only the Czech Republic (66%) was significantly above and Hungary (33%) below the average;
- ***dignity*** (84%): Croatia reported worse performance in dignity (77%); no significant differences were observed in other countries but the Czech Republic (91%) and Hungary (90%) seem to perform quite well.
- ***communication*** (80%): Hungary (87%) reported better performance compared to the average;
- ***autonomy*** (58%): Hungary (75%) reported significantly better than the overall average.
- ***confidentiality*** (78%): Croatia (71%) was the only country that rated lower confidentiality compared to the overall average.
- ***choice of provider*** (76%): the Czech Republic (85%) and Hungary (83%) reported better choice of provider than the overall average.
- ***quality of basic amenities*** (64%): Slovakia (55%) reported significantly worst autonomy whereas the Czech Republic reported better performance (80%) compared to the overall average.

5.3 DISCUSSION

Let's summarize the findings answering the questions posed in the beginning of this chapter:

- Less than 1 % of the users of health care system think that their needs have been met.
- About one third of people are satisfied with their involvement in the decision making on health care service provision in their country.
- Less then 40% of the people are satisfied with the way health care is run in their country.
- Two third of users of outpatient or inpatient health care rate responsiveness as good or very good.
- All background factors have an impact of different size on ratings on experiences.

General evaluation of the health system was found satisfactory for most of the people but it showed a great variation among the countries in the study. In most cases, the best ratings occurred in the Czech Republic and the worst in Hungary – sometimes with substantial differences. The different history of these five countries, despite of the relatively short common period of socialism, can explain this variability.

In countries that have advanced furthest in their economic-political transition, much more people would claim more involvement in decision making in health care provision than satisfaction with the general level of performance of the health system. Czechs, Hungarians, and Slovenians might expect more democracy in general but not in health specific issues as it turned out in the questions on domains of responsiveness.

Rating the performance of the health system in general and responsiveness experienced during contact with a health service was intricately associated with numerous background variables; in most cases older, healthier, less educated people and people with health worker in their family rated better – depending on which country they lived in. Again, the different cultural-historical background of these societies colored the effects of the individual factors.

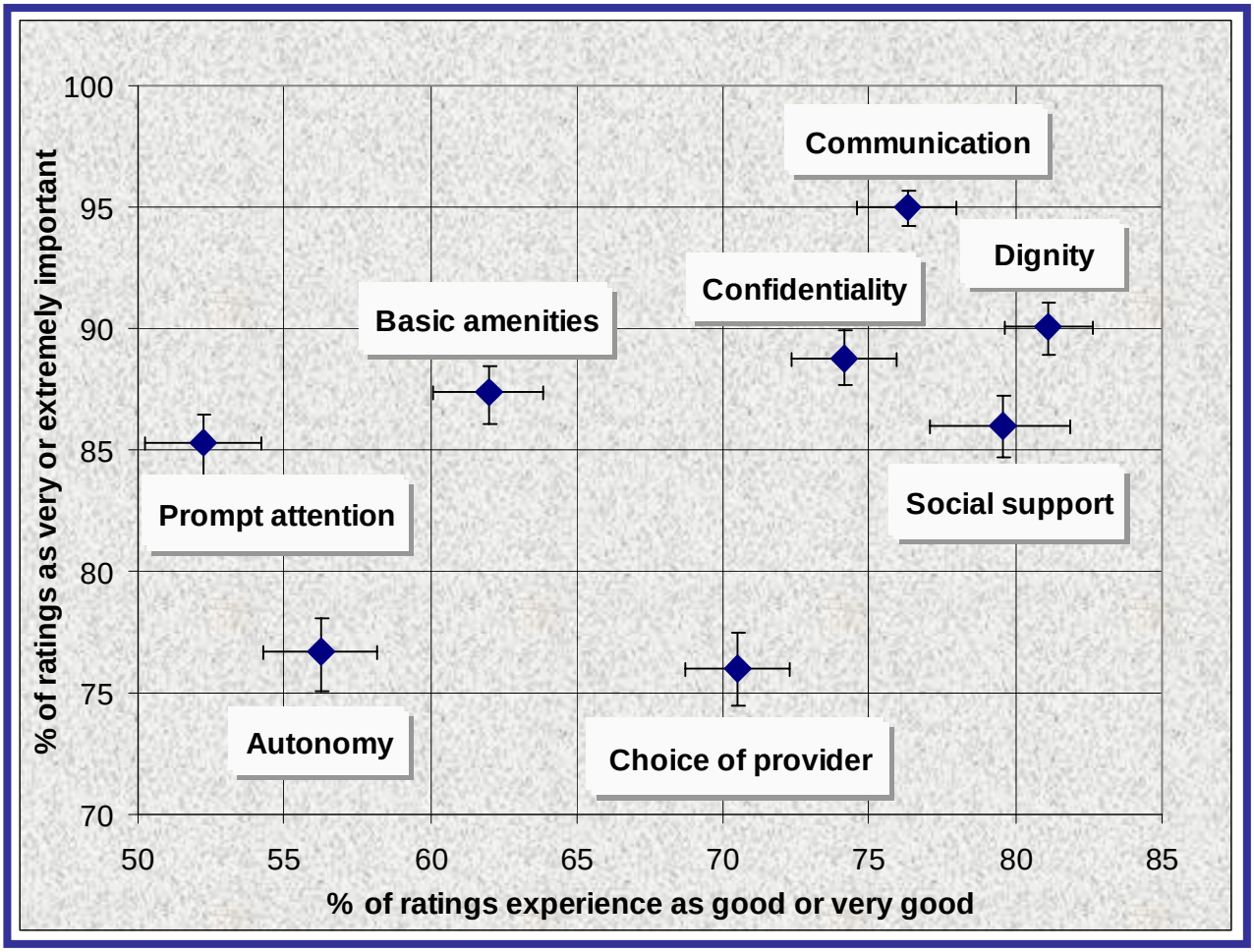
The people in the Czech Republic were not only most satisfied with the way health care system performs but also their experience on responsiveness was the best. People in Croatia rated responsiveness significantly worse than other countries whereas the satisfaction with health care system in general was above the overall average. Hungarians rated responsiveness in many domains above the overall average (best rating of social support and autonomy) but had significantly the worst rating of prompt attention (that can't be explained by the different rating

of importance or perceptions by Hungarians). Huge differences in satisfaction with the health system in general and in domains of responsiveness were found between the Czech Republic and Slovakia. With the two countries forming one state until 1993, this brings in one's mind questions whether this might be caused by different socio-economic development in these two countries in the last 10 years.

Best rated domains of responsiveness were dignity and social support whereas the worst rating concerned prompt attention (in particular in outpatient care) and autonomy. Fall-backs or good achievements can be seen in both client orientation domains (quality of basic amenities, prompt attention, choice of provider, social support) and respect for persons domains (dignity, confidentiality, communication, autonomy).

Interesting overview of satisfied and unsatisfied expectations may be illustrated by relation of importance of the domains and rating their performance (see Figure 23). Autonomy and choice of provider were considered as least important. Autonomy was at the same time very badly rated domain and that might show persistent paternalistic perceptions of both patients and health care providers regarding their position and relation in the health system. Rating of prompt attention and quality of basic amenities are below the average but were rated with average importance. These two domains can be seen as domains with not satisfied expectations. On the other hand, the most important domain, communication, was rated quite well. Confidentiality, dignity and social support are slightly above the average of importance and significantly above the average of rating.

Figure 23: Relation of importance and rating of responsiveness domains



There seems to be no evident relation between the use of health care and rating of responsiveness. The Czech Republic and Slovakia reported the highest proportions of users of health care (defined as people being in contact with health provider in the past year) but the Czechs using health care reported better experience in domains of responsiveness. About the same difference in responsiveness was observed between Croatia and Hungary, which both reported similar use of health care (lower than the countries mentioned above). Moreover, Slovenia, with lowest percentage of users of health care, rated responsiveness very close to the overall average. Nevertheless, these findings might only be due to inappropriate measuring of the use of health care, as it does not say anything about frequency or characteristics of providers of health care.

We deliberately avoided comparisons of results between inpatient and outpatient care because of the different reference periods (5 years in inpatient and 1 year in outpatient care) and non-random selection of people responding to each mode of provision of care (inpatient care, whose users have different socio-demographic profile, was preferred). However, we may conclude that

the ranking of performance of individual domains and inadequacy of care seems to follow the same pattern in both inpatient and outpatient care.

6. CONCLUSIONS

When interpreting our findings we use the model on responsiveness presented in the Introduction as a framework. Let's start with the notion of evaluation of responsiveness. In the WHS, it was measured by ratings on experiences with the health care system. According to our results, most of the people in these five countries are satisfied with the responsiveness of the health care system. They think their need was met when they contacted a health care service provider last time and, based on some questions on the heath system in general, they are satisfied with their involvement in the decision making on health care service provision. On the contrary, most of the people are not satisfied with the way health care is run. It seems that while people expect much better performance from the health system in general, they are satisfied with what they get when contacting the health system.[26] Since there were no questions on the factual performance of the health care provider during contact with health system in the WHS, we cannot confirm the hypothesis that people accept less for themselves than they think it would be expected to others. This kind of thinking could be explained by their common experience of the infantile existence coerced by the socialism during several decades.

The discrepancy between satisfaction with the health system in general and in a particular personal experience is affected by the perception and the weighting of the domains of responsiveness. The effect of the first factor was estimated in the WHS by the ratings on vignettes, the second one by the ratings on importance.

Firstly, the results of our analysis show a marked transition of similarity in peoples' perception of responsiveness across countries from North to South, from Slovakia to Slovenia. It can be interpreted by similar history and development of the society of neighboring countries.

Secondly, people think that responsiveness is important by and large in all the five countries, but domains of responsiveness show a great variability by countries. Again, in neighboring countries people attach similar importance to the domains.

As it was predicted in the model on responsiveness, both perception and weighting are affected by several background factors belonging to social-demographic status and previous experiences

[26] In contrary to Australia, Canada, New Zealand, the United Kingdom, and the United States. See: Donelan K, Blendon RJ, Schoen C, Davis K, Binns K."The Cost of Health System Change: Discontent in Five Nations," Health Affairs (May/June 1999): 206–216.

with the health system. The interactions found among associations may signal effects of the historical-cultural diversity of the five countries and the structural-functional divergence in their health systems as well.

It should be noted that in the Report we applied a relatively simple approach to a very complex phenomenon; the methods used in the Report are not able to handle all the possible associations among satisfaction with responsiveness and its determinants.[27] Methods that support analyzing individual associations between evaluation of responsiveness on one hand and perception and weighting on the other could provide consistent results on inequality in responsiveness of the health system. Our inconsistent results on inequality in responsiveness therefore should be interpreted very cautiously.

We have two key messages for decision makers working on improving the performance of the health system. First, they should keep in mind, as our findings reinforce, that in designing intervention on responsiveness one need to adapt the best practices to the country's historical-cultural specialties. Second, to reach the highest effectiveness they also need to take into consideration how different population groups perceive and weight the improvement in non-medical performance of the health system. Future research will provide more detailed results on the role of the human factors in evaluating responsiveness. In turn, it will allow decision makers to exploit all the possibilities for improving responsiveness of the health system significantly.

Our results may contribute to reducing the inequalities in these five countries providing bases for pro-equity health system development since responsiveness is one of the key contextual factors influencing the "opportunities for democratic influence over decision making".[28]

[27] Similar conclusion: "…the conventional methods that we used to understand critical issues of population health, population health disparities and trends in both of those, were simply -- we had simply lost touch with the complexity and richness of these phenomena…" Complex Systems Approaches to Population Health. Center for Social Epidemiology and Population Health and The Center for the Study of Complex Systems; May 2007 http://videocast.nih.gov/doc/complex053007.doc

[28] L Gilson, J Doherty, R Loewenson, V Francis. Challenging Inequity through Health Systems. Final Report of the Knowledge Network on Health Systems. WHO Commission on the social determinants of health 2007.

7. ANNEX

7.1 METHODS

7.1.1 Domains and sub-domains in the WHS:

1. Dignity with sub-domains:
    a. Talked respectfully
    b. Privacy

   Dignity evaluates the perception of respectful attitude of the health professionals to patients and his/her privacy during examination and treatment.

2. Autonomy with sub-domains:
    a. Treatment information
    b. Involvement

   Autonomy evaluates the perception of patient information about different treatments and tests as well as his/her possibility and potential to make decisions about own treatment.

3. Communication with sub-domains:
    a. Clear explanation
    b. Time for questions

   Communication evaluates the perception of the way the patient understood the explanations received by the health professionals and the time he/she was given to the questions asked about treatment.

4. Confidentiality with sub-domains:
    a. Talk privately
    b. Confidentiality of records

   Confidentiality evaluates how it was taken care of the confidentiality of the patient's conversation with the physician and of the data protection.

5. Prompt attention with sub-domains:
    a. Traveling time
    b. Wait time

   This domain evaluates the time the patient needs for the trip to arrive to the nearest surgery and for the time needed to get the expected care.

6. Social support with sub-domains:
    a. Family visit
    b. External contact

   This domain explores the possibility of family and friends visiting and other external contacts while being hospitalized.

7. Quality basic amenities with sub-domains:
    a. Cleanliness
    b. Space

   This domain explores the cleanliness of rooms in a health institution and the size of premises, which are available to the patient.

8. Choice with sub-domain:
    a. Choice of health provider

   This domain explores patients' choice of health provider

7.1.2 Definition of the background variables

We used the following background variables in the analysis (the name of the original WHS variable can be found in the brackets):

- sex [Q1001] with categories "Female", "Male",
- age [Q1002] classified into categories "Young" (18-34), "Middle aged" (35-64), "Elderly" (65+),
- education [Q1009] with categories "Low" (less than high school completed or no formal schooling), "Middle" (high school completed), "High" (college, university or post graduate degree completed),
- permanent income in the household with its country-specific quintiles [quintile_c], 1=Poorest households in the country, …, 5=Richest households in the country,
- use of health care: [Q7000, Q7004] with categories "User" (the respondent or his/her child got health care less than 1 year ago), "Non-user" (the respondent or his/her child got health care more than 1 year ago or never needed health care).
- any of the household members worked or trained in health field [Q0400f-Q0413f]: "Yes" or "No",
- self-rated health status [Q2000] with 5 categories: "Very good", "Good", "Moderate", "Bad", "Very bad".

7.2 RATINGS ON IMPORTANCE

7.2.1 Definitions of indicators for perception of responsiveness domains

- Importance of responsiveness: by domains [Q7100-Q7107] with categories "Important" (1-2), Not important" (3-5); overall importance: for all domains percentage of "Important" and average score

Table 6: Association of overall importance with different factors

FACTOR	COMPARISON	ODDS RATIO	95% LL	95% UL	SIGN
Sex	Male vs. Female	0.14	0.11	0.17	<0,001
Permanent income	2nd vs. 1st	-0.06	-0.11	-0.02	0.041
	3rd vs. 1st	-0.10	-0.16	-0.04	0.001
	4th vs. 1st	-0.10	-0.16	-0.04	0.001
	5th vs. 1st	-0.11	-0.17	-0.06	<0,001
Self-rated health status	Good vs. Very good	0.06	0.01	0.10	0.022
	Moderate vs. Very good	0.10	0.04	0.15	<0,001
	Bad vs. Very good	0.04	-0.04	0.11	ns
	Very bad vs. Very good	0.06	-0.09	0.22	ns
Education differences within countries					
CZ	Middle vs. Low	-0.01	-0.10	0.09	ns
	High vs. Low	-0.12	-0.25	0.02	ns
HR	Middle vs. Low	0.001	-0.11	0.11	ns
	High vs. Low	-0.09	-0.22	0.04	ns
HU	Middle vs. Low	-0.10	-0.17	-0.30	0.003
	High vs. Low	0.01	-0.09	0.11	ns
SK	Middle vs. Low	0.01	-0.06	0.08	ns
	High vs. Low	0.08	-0.01	0.17	ns
SI	Middle vs. Low	0.05	-0.04	0.15	ns
	High vs. Low	-0.01	-0.11	0.10	ns
Inter-country differences within education categories					
Low	HR vs. CZ	-0.07	-0.14	0.01	ns
	HU vs. CZ	-0.12	-0.20	-0.04	0.004
	SK vs. CZ	0.10	0.01	0.18	0.022
	SI vs. CZ	-0.08	-0.17	0.01	ns
Middle	HR vs. CZ	-0.06	-0.19	0.07	ns
	HU vs. CZ	-0.21	-0.29	-0.13	<0,001
	SK vs. CZ	0.11	0.03	0.20	0.010
	SI vs. CZ	-0.02	-0.12	0.08	ns
High	HR vs. CZ	-0.04	-0.21	0.13	ns
	HU vs. CZ	0.01	-0.14	0.16	ns
	SK vs. CZ	0.29	0.15	0.44	<0,001
	SI vs. CZ	0.03	-0.11	0.18	ns

Table 7: Odds ratio of rating Dignity as extremely important or very important

FACTOR	COMPARISON	ODDS RATIO	95% LL	95% UL	SIGN.
Self-rated health status	Good vs. Very good	0.80	0.55	1.16	ns
	Moderate vs. Very good	0.61	0.40	0.92	**
	Bad vs. Very good	0.62	0.35	1.09	ns
	Very bad vs. Very good	0.92	0.29	2.97	ns
Sex differences within countries					
CZ	Male vs. Female	0.22	0.12	0.41	***
HR	Male vs. Female	0.83	0.48	1.42	ns
HU	Male vs. Female	0.30	0.18	0.50	***
SK	Male vs. Female	0.36	0.22	0.58	***
SLO	Male vs. Female	0.93	0.54	1.60	ns
Education differences within countries					
CZ	Middle vs. Low	1.36	0.68	2.74	ns
	High vs. Low	23.43	4.86	112.81	***
HR	Middle vs. Low	0.98	0.32	3.02	ns
	High vs. Low	1.08	0.48	2.43	ns
HU	Middle vs. Low	1.69	0.97	2.93	ns
	High vs. Low	1.46	0.67	3.20	ns
SK	Middle vs. Low	0.80	0.46	1.41	ns
	High vs. Low	0.79	0.39	1.59	ns
SLO	Middle vs. Low	1.04	0.58	1.87	ns
	High vs. Low	1.84	0.73	4.63	ns
Inter-country differences within education*sex categories					
Female					
Low	HR vs. CZ	0.48	0.24	0.95	*
	HU vs. CZ	1.03	0.52	2.03	ns
	SK vs. CZ	0.67	0.32	1.40	ns
	SLO vs. CZ	0.38	0.19	0.76	***
Middle	HR vs. CZ	0.35	0.09	1.30	ns
	HU vs. CZ	1.27	0.54	3.02	ns
	SK vs. CZ	0.40	0.18	0.88	*
	SLO vs. CZ	0.29	0.12	0.68	***
High	HR vs. CZ	0.02	0.004	0.13	***
	HU vs. CZ	0.06	0.01	0.37	***
	SK vs. CZ	0.02	0.004	0.13	***
	SLO vs. CZ	0.03	0.005	0.18	***
Male					
Low	HR vs. CZ	1.82	0.99	3.36	ns
	HU vs. CZ	1.41	0.73	2.75	ns
	SK vs. CZ	1.10	0.56	2.18	ns
	SLO vs. CZ	1.61	0.83	3.13	ns
Middle	HR vs. CZ	1.31	0.37	4.68	ns
	HU vs. CZ	1.76	0.86	3.60	ns
	SK vs. CZ	0.65	0.30	1.39	ns
	SLO vs. CZ	1.23	0.55	2.78	ns
High	HR vs. CZ	0.08	0.01	0.47	***
	HU vs. CZ	0.09	0.02	0.46	***
	SK vs. CZ	0.04	0.01	0.19	***
	SLO vs. CZ	0.13	0.02	0.73	**

Table 8: Odds ratio of rating Confidentiality as extremely important or very important

FACTOR	COMPARISON	ODDS RATIO	95% LL	95% UL	SIGN.
Sex	Male vs. Female	0.50	0.39	0.63	***
Age	Middle-aged vs. Young	0.84	0.62	1.13	ns
	Elderly vs. Young	0.64	0.44	0.93	**
Inter-country differences	HR vs. CZ	1.04	0.73	1.49	ns
	HU vs. CZ	1.35	0.96	1.88	ns
	SK vs. CZ	1.15	0.79	1.68	ns
	SI vs. CZ	1.51	1.02	2.23	*

Table 9: Odds ratio of rating Prompt attention as extremely important or very important

FACTOR	COMPARISON	ODDS RATIO	95% LL	95% UL	SIGN
Permanent income	2nd vs. 1st	1.23	0.87	1.74	ns
	3rd vs. 1st	1.52	1.05	2.19	0.025
	4th vs. 1st	1.70	1.16	2.51	0.007
	5th vs. 1st	1.65	1.11	2.47	0.014
Self-rated health status	Good vs. Very good	1.10	0.80	1.52	ns
	Moderate vs. Very good	1.03	0.73	1.45	ns
	Bad vs. Very good	1.56	0.94	2.58	ns
	Very bad vs. Very good	2.54	1.003	6.43	0.049
Inter-country differences within age*sex categories					
Female					
Young	HR vs. CZ	7.71	2.33	25.46	0.001
	HU vs. CZ	2.43	1.13	5.20	0.023
	SK vs. CZ	1.41	0.72	2.75	ns
	SI vs. CZ	2.18	0.93	5.12	ns
Middle-aged	HR vs. CZ	1.97	1.05	3.69	0.035
	HU vs. CZ	2.88	1.58	5.27	0.001
	SK vs. CZ	1.64	0.90	2.98	ns
	SI vs. CZ	2.00	1.00	4.00	ns
Elderly	HR vs. CZ	3.00	1.27	7.12	0.013
	HU vs. CZ	2.65	1.18	5.95	0.018
	SK vs. CZ	5.34	1.71	16.68	0.004
	SI vs. CZ	1.01	0.43	2.38	ns
Male					
Young	HR vs. CZ	2.22	0.66	7.48	ns
	HU vs. CZ	3.54	1.50	8.36	0.004
	SK vs. CZ	0.99	0.47	2.05	ns
	SI vs. CZ	1.22	0.54	2.77	ns
Middle-aged	HR vs. CZ	2.13	1.11	4.10	0.023
	HU vs. CZ	2.33	1.23	4.42	0.010
	SK vs. CZ	1.08	0.55	2.15	ns
	SI vs. CZ	3.18	1.46	6.95	0.004
Elderly	HR vs. CZ	4.41	1.45	13.47	0.009
	HU vs. CZ	3.33	1.23	9.04	0.018
	SK vs. CZ	0.64	0.15	2.63	ns
	SI vs. CZ	4.31	1.15	16.10	0.030
Sex differences within age*country categories					
CZ					
Young	Male vs. Female	1.20	0.54	2.67	ns
Middle-aged	Male vs. Female	0.76	0.39	1.46	ns
Elderly	Male vs. Female	1.04	0.37	2.89	ns

HR					
Young	Male vs. Female	0.35	0.08	1.56	ns
Middle-aged	Male vs. Female	0.82	0.44	1.52	ns
Elderly	Male vs. Female	1.52	0.58	3.99	ns
HU					
Young	Male vs. Female	1.76	0.78	3.98	ns
Middle-aged	Male vs. Female	0.61	0.34	1.09	ns
Elderly	Male vs. Female	1.30	0.60	2.82	ns
SK					
Young	Male vs. Female	0.84	0.48	1.50	ns
Middle-aged	Male vs. Female	0.50	0.27	0.94	0.031
Elderly	Male vs. Female	0.12	0.03	0.55	0.006
SI					
Young	Male vs. Female	0.68	0.28	1.61	ns
Middle-aged	Male vs. Female	1.21	0.53	2.74	ns
Elderly	Male vs. Female	4.41	1.35	14.35	0.014
Age differences within sex*country categories					
CZ					
Female	Middle-aged vs. Young	1.38	0.68	2.79	ns
	Elderly vs. Young	1.07	0.45	2.54	ns
Male	Middle-aged vs. Young	0.86	0.41	1.84	ns
	Elderly vs. Young	0.92	0.34	2.51	ns
HR					
Female	Middle-aged vs. Young	0.35	0.11	1.10	ns
	Elderly vs. Young	0.41	0.12	1.43	ns
Male	Middle-aged vs. Young	0.83	0.26	2.63	ns
	Elderly vs. Young	1.83	0.49	6.80	ns
HU					
Female	Middle-aged vs. Young	1.64	0.83	3.21	ns
	Elderly vs. Young	1.17	0.55	2.49	ns
Male	Middle-aged vs. Young	0.57	0.27	1.21	ns
	Elderly vs. Young	0.87	0.36	2.08	ns
SK					
Female	Middle-aged vs. Young	1.60	0.92	2.78	ns
	Elderly vs. Young	4.06	1.41	11.65	0.009
Male	Middle-aged vs. Young	0.95	0.49	1.83	ns
	Elderly vs. Young	0.60	0.17	2.11	ns
SI					
Female	Middle-aged vs. Young	1.26	0.54	2.96	ns
	Elderly vs. Young	0.50	0.21	1.20	ns
Male	Middle-aged vs. Young	2.25	0.96	5.24	ns
	Elderly vs. Young	3.24	0.97	10.83	ns

Table 10: Odds ratio of rating Choice as extremely important or very important

FACTOR	COMPARISON	ODDS RATIO	95% LL	95% UL	SIGN
Sex	Male vs. Female	0.57	0.48	0.68	<0,001
Permanent income	2nd vs. 1st	1.29	0.98	1.70	ns
	3rd vs. 1st	1.65	1.24	2.20	0.001
	4th vs. 1st	1.62	1.20	2.18	0.002
	5th vs. 1st	1.48	1.10	2.00	0.010
Inter-country differences	HR vs. CZ	2.52	1.84	3.46	<0,001
	HU vs. CZ	1.18	0.91	1.52	ns
	SK vs. CZ	1.24	0.93	1.65	ns
	SI vs. CZ	1.1	0.83	1.46	ns

Table 11: Odds ratio of rating Autonomy as extremely important or very important

FACTOR	COMPARISON	ODDS RATIO	95% LL	95% UL	SIGN
Sex	Male vs. Female	0.68	0.57	0.81	<0,001
Age	Middle-aged vs. Young	1.06	0.85	1.31	ns
	Elderly vs. Young	0.62	0.47	0.81	0.001
Permanent income	2nd vs. 1st	1.16	0.89	1.52	ns
	3rd vs. 1st	1.56	1.17	2.07	0.002
	4th vs. 1st	1.24	0.93	1.67	ns
	5th vs. 1st	1.39	1.02	1.88	0.037
Inter-country differences	HR vs. CZ	1.78	1.32	2.39	<0,001
	HU vs. CZ	1.08	0.84	1.40	ns
	SK vs. CZ	1.18	0.88	1.57	ns
	SI vs. CZ	1.35	1.01	1.81	0.043

Table 12: Odds ratio of rating Quality basic amenities as extremely important or very important

FACTOR	COMPARISON	ODDS RATIO	95% LL	95% UL	SIGN
Self-rated health status	Good vs. Very good	0.76	0.53	1.07	ns
	Moderate vs. Very good	0.66	0.45	0.97	0.032
	Bad vs. Very good	0.77	0.44	1.35	ns
	Very bad vs. Very good	0.54	0.22	1.35	ns
Age differences within sex*country categories					
CZ					
Female	Middle-aged vs. Young	0.82	0.43	1.56	ns
	Elderly vs. Young	0.59	0.28	1.26	ns
Male	Middle-aged vs. Young	1.03	0.53	2.01	ns
	Elderly vs. Young	1.42	0.62	3.24	ns
HR					
Female	Middle-aged vs. Young	1.21	0.59	2.47	ns
	Elderly vs. Young	1.25	0.51	3.07	ns
Male	Middle-aged vs. Young	1.52	0.75	3.09	ns
	Elderly vs. Young	3.00	1.25	7.23	0.014
HU					
Female	Middle-aged vs. Young	0.43	0.2	0.93	0.032
	Elderly vs. Young	0.58	0.23	1.43	ns
Male	Middle-aged vs. Young	0.54	0.26	1.13	ns
	Elderly vs. Young	1.38	0.54	3.5	ns
SK					
Female	Middle-aged vs. Young	1.28	0.79	2.1	ns
	Elderly vs. Young	4.06	1.85	8.9	<0,001
Male	Middle-aged vs. Young	1.61	0.98	2.67	0.062
	Elderly vs. Young	9.71	4.07	23.14	<0,001
SI					
Female	Middle-aged vs. Young	1.07	0.57	2.03	ns
	Elderly vs. Young	0.94	0.41	2.14	ns
Male	Middle-aged vs. Young	1.35	0.74	2.47	ns
	Elderly vs. Young	2.25	1.05	4.82	0.037
Sex differences within age categories					
Young	Male vs. Female	0.51	0.33	0.77	0.002
Middle-aged	Male vs. Female	0.64	0.46	0.88	0.005
Elderly	Male vs. Female	1.21	0.7	2.1	ns
Inter-country differences within age categories					
Young	HR vs. CZ	1.28	0.61	2.68	ns
	HU vs. CZ	5.89	2.67	12.99	<0,001
	SK vs. CZ	0.67	0.38	1.18	ns
	SI vs. CZ	1.11	0.58	2.11	ns
Middle-aged	HR vs. CZ	1.89	1.15	3.11	0.013
	HU vs. CZ	3.10	1.9	5.06	<0,001
	SK vs. CZ	1.05	0.65	1.69	ns
	SI vs. CZ	1.45	0.87	2.41	ns
Elderly	HR vs. CZ	2.72	1.27	5.8	0.010
	HU vs. CZ	5.72	2.68	12.21	<0,001
	SK vs. CZ	4.61	2.02	10.49	<0,001
	SI vs. CZ	1.76	0.84	3.69	ns

Table 13: Odds ratio of rating Social support as extremely important or very important

FACTOR	COMPARISON	ODDS RATIO	95% LL	95% UL	SIGN
Educational level	Middle vs. Low	0.85	0.65	1.12	ns
	High vs. Low	0.56	0.4	0.77	<0,001
Inter-country differences within age*sex categories					
Female					
Young	HR vs. CZ	0.39	0.17	0.88	0.024
	HU vs. CZ	0.71	0.33	1.55	ns
	SK vs. CZ	0.43	0.21	0.9	0.024
	SI vs. CZ	0.56	0.25	1.24	ns
Middle-aged	HR vs. CZ	0.62	0.35	1.11	ns
	HU vs. CZ	0.84	0.5	1.43	ns
	SK vs. CZ	0.77	0.43	1.36	ns
	SI vs. CZ	0.81	0.43	1.51	ns
Elderly	HR vs. CZ	1.05	0.47	2.34	ns
	HU vs. CZ	1.48	0.68	3.23	ns
	SK vs. CZ	7.91	2.87	21.82	<0,001
	SI vs. CZ	0.98	0.43	0.28	ns
Male					
Young	HR vs. CZ	0.67	0.28	1.57	ns
	HU vs. CZ	1.83	0.86	3.89	ns
	SK vs. CZ	0.50	0.24	1.02	ns
	SI vs. CZ	1.02	0.45	2.3	ns
Middle-aged	HR vs. CZ	1.08	0.59	1.98	ns
	HU vs. CZ	2.16	1.16	4.05	0.016
	SK vs. CZ	0.89	0.47	1.67	ns
	SI vs. CZ	1.48	0.77	2.83	ns
Elderly	HR vs. CZ	1.82	0.85	3.89	ns
	HU vs. CZ	3.78	1.84	7.8	<0,001
	SK vs. CZ	9.16	3.52	23.79	<0,001
	SI vs. CZ	1.80	0.83	3.87	ns
Sex differences within countries					
CZ	Male vs. Female	0.44	0.26	0.76	0.003
HR	Male vs. Female	0.77	0.50	1.19	Ns
HU	Male vs. Female	1.13	0.76	1.69	Ns
SK	Male vs. Female	0.51	0.33	0.79	0.003
SI	Male vs. Female	0.81	0.50	1.3	ns
Age differences within countries					
CZ	Middle-aged vs. Young	0.66	0.33	1.31	ns
	Elderly vs. Young	0.35	0.16	0.77	0.009
HR	Middle-aged vs. Young	1.06	0.58	1.93	ns
	Elderly vs. Young	0.96	0.48	1.93	ns
HU	Middle-aged vs. Young	0.78	0.48	1.28	ns
	Elderly vs. Young	0.73	0.41	1.31	ns
SK	Middle-aged vs. Young	1.17	0.76	1.82	ns
	Elderly vs. Young	6.50	2.86	14.76	<0,001
SI	Middle-aged vs. Young	0.96	0.53	1.71	ns
	Elderly vs. Young	0.62	0.32	1.23	ns

Table 14: Odds ratio of rating Communication as extremely important or very important

FACTOR	COMPARISON	ODDS RATIO	95% LL	95% UL	SIGN
Inter-country differences	HR vs. CZ	2.28	1.3	3.97	0.004
	HU vs. CZ	1.47	0.91	2.37	ns
	SK vs. CZ	1.19	0.71	1.99	ns
	SI vs. CZ	1.61	0.92	2.8	ns
Sex differences within age categories					
Young	Male vs. Female	0.59	0.29	1.19	ns
Middle-aged	Male vs. Female	0.41	0.26	0.64	<0,001
Elderly	Male vs. Female	1.18	0.58	2.42	ns
Age differences within sex categories					
Female	Middle-aged vs. Young	1.08	0.59	1.97	ns
	Elderly vs. Young	0.46	0.23	0.94	0.033
Male	Middle-aged vs. Young	0.74	0.42	1.29	ns
	Elderly vs. Young	0.92	0.43	1.95	ns

Figure 24: Ratings on importance of responsiveness domains

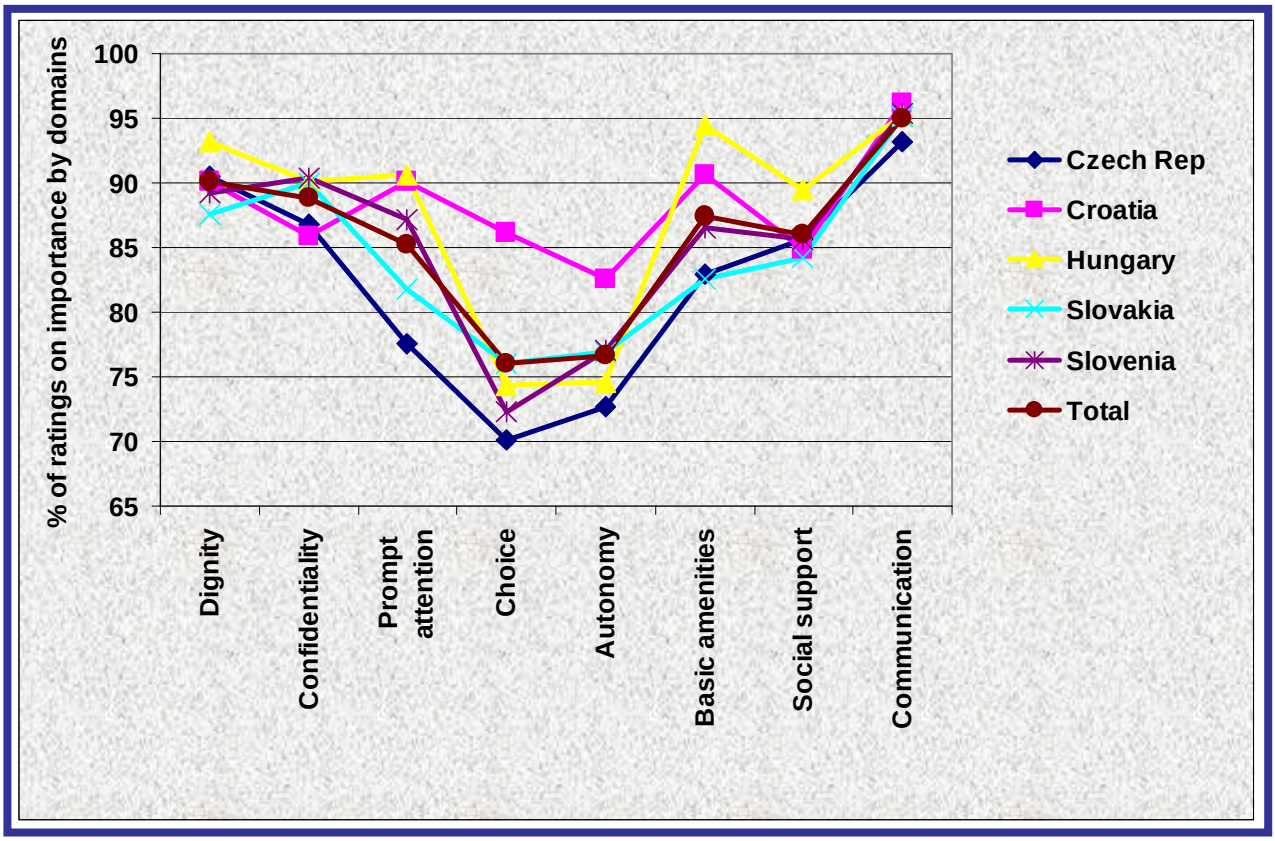


Table 6: Rank of importance of responsiveness domains by countries*

DOMAINS	CROATIA	CZECH REPUBLIC	HUNGARY	SLOVAKIA	SLOVENIA
Dignity	4	2	3	3	3
Confidentiality	6	3	5	2	2
Prompt attention	3	6	4	6	4
Choice	5	8	8	8	8
Autonomy	8	7	7	7	7
Quality	2	5	2	5	5
Social support	7	4	6	4	6
Communication	1	1	1	1	1

Gray scale from light (1) to dark (8) marks ranks

7.3 RATINGS ON VIGNETTES

7.3.1 Definitions of indicators used

- Overall dissimilarity index: Dissimilarity of perception for each pair of countries was characterized as the average of the absolute between-country difference in average vignette ratings, where the latter quantities were averaged within countries. (More formally see Section Methods).

- Dissimilarity indexes per domains: Dissimilarity of perception for each domain and each pair of countries was characterized as the average of the absolute between-country difference in average vignette ratings, where the latter quantities were averaged within countries and their vignette pertains to the given domain. (More formally see Section Methods).

Table 16: Between-country dissimilarity indexes for perception of responsiveness domains

DOMAINS	CZ-HR	CZ-HU	CZ-SI	CZ-SK	HR-HU	HR-SI	HR-SK	HU-SI	HU-SK	SI-SK	Mean
Dignity	0.15	0.21	0.26	0.37	0.19	0.15	0.41	0.22	0.30	0.41	*0.27*
Autonomy	0.15	0.17	0.22	0.18	0.19	0.16	0.19	0.24	0.16	0.22	*0.19*
Communication	0.29	0.24	0.35	0.16	0.10	0.11	0.26	0.14	0.21	0.32	*0.22*
Confidentiality	0.09	0.09	0.25	0.21	0.15	0.22	0.29	0.24	0.14	0.35	*0.20*
Prompt attention	0.30	0.24	0.25	0.25	0.12	0.25	0.22	0.15	0.13	0.11	*0.20*
Social support	0.23	0.05	0.25	0.17	0.23	0.16	0.26	0.24	0.14	0.23	*0.20*
Basic amenities	0.15	0.35	0.25	0.20	0.29	0.16	0.26	0.30	0.22	0.29	*0.25*
Choice	0.22	0.14	0.24	0.13	0.28	0.13	0.23	0.26	0.13	0.27	*0.20*
Mean	*0.19*	*0.19*	*0.26*	*0.21*	*0.19*	*0.17*	*0.26*	*0.22*	*0.18*	*0.27*	*0.21*

7.4 RATINGS ON EXPERIENCES

7.4.1 Definitions of indicators for ratings on experiences

- Involvement in decision making: [Q7020] with categories Good (1-2), Not good (3-5);
- Way of running: [Q7021] with categories Good (1-2), Not good (3-5);
- Unmet need: [Q7004] with categories Yes (1), No (5);
- Medicine availability: [Q7018] with categories Yes (1-2), No (3-5);
- Discrimination in inpatient and outpatient health care services [Q7328-7334, Q7433-7439] with categories Yes (any Yes), No (no any Yes);
- Adequacy of outpatient and inpatient care: [Q7304-6, Q7404-6] with categories Yes (1) for all Qs, No (any other cases);
- Prompt attention: [Q7315, Q7316] outpatient and [Q7418, Q7419] inpatient Good (both replies 1-2), Not good (at least one reply 3-5);
- Dignity: [Q7317, Q7318] outpatient and [Q7420, Q7421] inpatient Good (both replies 1-2), Not good (at least one reply 3-5);
- Communication: [Q7319, Q7320] outpatient and [Q7422, Q7423] inpatient Good (both replies 1-2), Not good (at least one reply 3-5);
- Autonomy: [Q7321, Q7322] outpatient and [Q7424, Q7425] inpatient Good (both replies 1-2), Not good (at least one reply 3-5);
- Confidentiality: [Q7323, Q7324] outpatient and [Q7426, Q7427] inpatient Good (both replies 1-2), Not good (at least one reply 3-5);
- Choice of provider: [Q7325] outpatient and [Q7428] inpatient with categories Good (1-2), Not good (3-5);
- Basic amenities: [Q7326, Q7327] outpatient and [Q7429, Q7430] inpatient Good (both replies 1-2), Not good (at least one reply 3-5);
- Social support: [Q7431, Q7432] inpatient Good (both replies 1-2), Not good (at least one reply 3-5);
- Composite indicator of responsiveness (overall, inpatient, outpatient): average score for all domain-specific indicators of responsiveness (i.e. percentage of domains in which respondents rated their experience as very good or good).

Table 17: Per cent of ratings on Unmet need

	CROATIA	CZECH REPUBLIC	HUNGARY	SLOVAKIA	SLOVENIA	Total
Yes	0.5	0.1	1.9	0.2	0.5	0.7
95% CI	[0.2,1.2]	[0.0,0.5]	[1.1,3.1]	[0.0,1.0]	[0.2,1.6]	[0.4,1.0]
No	99.5	99.9	98.1	99.8	99.5	99.3
95% CI	[98.8,99.8]	[99.5,100.0]	[96.9,98.9]	[99.0,100.0]	[98.4,99.8]	[99.0,99.6]
Total	100	100	100	100	100	100

Table 18: Per cent of ratings on Medicine availability

	CROATIA	CZECH REPUBLIC	HUNGARY	SLOVAKIA	SLOVENIA	Total
Yes	98.8	99.4	99.1	99.2	98.5	99.1
95% CI	[97.5,99.4]	[97.8,99.9]	[98.4,99.5]	[97.6,99.7]	[96.4,99.4]	[98.6,99.4]
No	1.2	0.6	0.9	0.8	1.5	0.9
95% CI	[0.6,2.5]	[0.1,2.2]	[0.5,1.6]	[0.3,2.4]	[0.6,3.6]	[0.6,1.4]
Total	100	100	100	100	100	100

Table 19: Per cent of ratings on Discrimination

	CROATIA	CZECH REPUBLIC	HUNGARY	SLOVAKIA	SLOVENIA	Total
Yes	3.9	3.3	7.6	2.3	5.8	4.4
95% CI	[2.6,5.8]	[1.8,6.0]	[5.9,9.7]	[1.3,3.9]	[4.0,8.4]	[3.6,5.2]
No	96.1	96.7	92.4	97.7	94.2	95.6
95% CI	[94.2,97.4]	[94.0,98.2]	[90.3,94.1]	[96.1,98.7]	[91.6,96.0]	[94.8,96.4]
Total	100	100	100	100	100	100

Table 20: Per cent of ratings on Adequacy of interventions

	CROATIA	CZECH REPUBLIC	HUNGARY	SLOVAKIA	SLOVENIA	Total
Yes	83.7	92.7	83.5	84.8	91.8	86.5
95% CI	[80.5,86.6]	[90.0,94.8]	[80.8,85.8]	[81.4,87.7]	[88.9,94.0]	[85.0,87.7]
No	16.3	7.3	16.5	15.2	8.2	13.5
95% CI	[13.4,19.5]	[5.2,10.0]	[14.2,19.2]	[12.3,18.6]	[6.0,11.1]	[12.3,15.0]
Total	100	100	100	100	100	100

Table 21: Per cent of ratings on Way of running health care system as fairly satisfied or very satisfied

	CROATIA	CZECH REPUBLIC	HUNGARY	SLOVAKIA	SLOVENIA	Total
Yes	45.3	53.9	33.7	24.8	50.4	38
95% CI	[41.7,49.0]	[49.2,58.4]	[31.0,36.5]	[21.5,28.4]	[46.4,54.5]	[36.3,39.7]
No	54.7	46.1	66.3	75.2	49.6	62
95% CI	[51.0,58.3]	[41.6,50.8]	[63.5,69.0]	[71.6,78.5]	[45.5,53.6]	[60.3,63.7]
Total	100	100	100	100	100	100

Table 22: Per cent of ratings on Involvement in decision making as good or very good

	CROATIA	CZECH REPUBLIC	HUNGARY	SLOVAKIA	SLOVENIA	Total
Yes	44.4	33.9	14.6	26.8	34.9	29.3
95% CI	[40.8,48.1]	[29.8,38.3]	[12.6,16.8]	[23.4,30.5]	[31.2,38.9]	[27.7,31.0]
No	55.6	66.1	85.4	73.2	65.1	70.7
95% CI	[51.9,59.2]	[61.7,70.2]	[83.2,87.4]	[69.5,76.6]	[61.1,68.8]	[69.0,72.3]
Total	100	100	100	100	100	100

Table 23: Odds ratios for rating good or very good the way health care involves people in deciding what services it provides and where it provides controlled by socio-demographic factors

FACTOR	COMPARISON	ODDS RATIO	95% LL	95% UL	SIGN.
Age	Middle vs. Young	1.32	1.07	1.63	**
	Elderly vs. Young	1.74	1.29	2.33	***
Health worker in family	Yes vs. No	0.76	0.59	0.99	*
Self-rated health status	Good vs. Very good	0.61	0.47	0.78	***
	Moderate vs. Very good	0.56	0.42	0.74	***
	Bad vs. Very good	0.64	0.44	0.93	**
	Very bad vs. Very good	0.73	0.40	1.34	n.s.
Education level within countries					
HR	Middle vs. Low	1.48	0.83	2.62	n.s.
	High vs. Low	1.08	0.61	1.90	n.s.
HU	Middle vs. Low	0.64	0.44	0.94	*
	High vs. Low	0.70	0.40	1.22	n.s.
SK	Middle vs. Low	1.08	0.71	1.64	n.s.
	High vs. Low	0.83	0.46	1.52	n.s.
SI	Middle vs. Low	0.96	0.65	1.42	n.s.
	High vs. Low	0.41	0.24	0.72	***
Countries within education levels					
Low	HR vs. CZ	1.41	1.03	1.89	**
	HU vs. CZ	0.44	0.31	0.64	***
	SK vs. CZ	0.70	0.47	1.06	n.s.
	SI vs. CZ	1.19	0.83	1.70	n.s.
Middle	HR vs. CZ	2.33	1.22	4.43	**
	HU vs. CZ	0.32	0.21	0.49	***
	SK vs. CZ	0.85	0.56	1.31	n.s.
	SI vs. CZ	1.28	0.82	2.01	n.s.
High	HR vs. CZ	1.03	0.48	2.21	n.s.
	HU vs. CZ	0.21	0.10	0.44	***
	SK vs. CZ	0.40	0.19	0.84	**
	SI vs. CZ	0.33	0.16	0.70	***

Table 24: Odds ratios for rating very satisfied or fairly satisfied with the way health care runs in their country controlled by socio-demographic factors

FACTOR	COMPARISON	ODDS RATIO	95% LL	95% UL	SIGN.
Education level	Middle vs. Low	0.97	0.80	1.17	n.s.
	Higher vs. Low	0.74	0.57	0.98	*
Permanent income	2nd vs. 1st	0.85	0.66	1.09	n.s.
	3rd vs. 1st	0.85	0.65	1.09	n.s.
	4th vs. 1st	0.82	0.63	1.08	n.s.
	5th vs. 1st	0.60	0.45	0.80	***
Self-rated health status	Good vs. Very good	0.66	0.52	0.83	***
	Moderate vs. Very good	0.58	0.45	0.76	***
	Bad vs. Very good	0.68	0.48	0.97	*
	Very bad vs. Very good	0.66	0.34	1.16	n.s.
Age groups within countries					
HR	Middle vs. Young	1.06	0.69	1.63	n.s.
	Elderly vs. Young	1.72	1.05	2.81	*
HU	Middle vs. Young	1.73	1.24	2.41	***
	Elderly vs. Young	2.83	1.93	4.15	***
SK	Middle vs. Young	1.23	0.81	1.86	n.s.
	Elderly vs. Young	1.21	0.58	2.55	n.s.
SI	Middle vs. Young	0.92	0.62	1.34	n.s.
	Elderly vs. Young	1.16	0.71	1.88	n.s.
Countries within age groups					
Young	HR vs. CZ	0.60	0.36	0.98	*
	HU vs. CZ	0.27	0.18	0.42	***
	SK vs. CZ	0.23	0.15	0.36	***
	SI vs. CZ	0.85	0.54	1.33	n.s.
Middle	HR vs. CZ	0.82	0.59	1.16	n.s.
	HU vs. CZ	0.62	0.45	0.85	**
	SK vs. CZ	0.38	0.26	0.55	***
	SI vs. CZ	1.02	0.71	1.46	n.s.
Elderly	HR vs. CZ	0.61	0.35	1.08	n.s.
	HU vs. CZ	0.46	0.27	0.78	**
	SK vs. CZ	0.17	0.07	0.38	***
	SI vs. CZ	0.58	0.32	1.06	n.s.

Table 25: Differences in percentage points in overall rated responsiveness

FACTOR	COMPARISON	REGRESSION COEFFICIENT	95% LL	95% UL	SIGN.
Sex	Male vs. Female	0.01	-0.01	0.04	0.239
Education level	Middle vs. Low	-0.03	-0.05	0.00	0.059
	Higher vs. Low	-0.06	-0.10	-0.03	0.001
Permanent income	2nd vs. 1st	0.00	-0.04	0.04	0.952
	3rd vs. 1st	0.02	-0.02	0.06	0.391
	4th vs. 1st	0.03	-0.01	0.07	0.115
	5th vs. 1st	0.02	-0.02	0.07	0.256
Health worker in family	Yes vs. No	-0.06	-0.09	-0.02	0.001
Self-rated health status	Good vs. Very good	-0.07	-0.11	-0.04	0.000
	Moderate vs. Very good	-0.09	-0.13	-0.06	0.000
	Bad vs. Very good	-0.12	-0.17	-0.08	0.000
	Very bad vs. Very good	-0.17	-0.25	-0.09	0.000
Country and age					
CZ	Middle vs. Young CZ	0.05	-0.01	0.10	0.076
	Elderly vs. Young CZ	0.10	0.04	0.17	0.003
HR	Young vs. Young CZ	-0.23	-0.31	-0.15	0.000
	Middle vs. Young CZ	-0.15	-0.20	-0.09	0.000
	Elderly vs. Young CZ	-0.18	-0.24	-0.11	0.000
HU	Young vs. Young CZ	-0.11	-0.16	-0.06	0.000
	Middle vs. Young CZ	0.01	-0.04	0.06	0.624
	Elderly vs. Young CZ	0.05	0.00	0.11	0.050
SK	Young vs. Young CZ	-0.11	-0.16	-0.05	0.000
	Middle vs. Young CZ	-0.05	-0.10	0.01	0.081
	Elderly vs. Young CZ	0.07	-0.03	0.17	0.189
SI	Young vs. Young CZ	-0.08	-0.15	-0.02	0.011
	Middle vs. Young CZ	-0.04	-0.09	0.02	0.211
	Elderly vs. Young CZ	0.07	0.00	0.14	0.042
	cons	0.86	0.79	0.92	0.000

Table 26: Population experienced discrimination in provision of health care or inadequate health care services (inpatient care)

INPATIENT CARE	CROATIA	CZECH REPUBLIC	HUNGARY	SLOVAKIA	SLOVENIA	TOTAL
Discriminated in provision of health care services	5.7 [3.5;9.2]	4.7 [2.4;9.1]	10.4 [7.8;13.7]	2.0 [0.7;5.3]	7.5 [4.7;11.9]	6.2 [5.0;7.6]
Inadequate services received	21.0 [16.4;26.4]	12.0 [8.2;17.3]	21.6 [18.2;25.5]	19.6 [14.4;26.0]	12.2 [8.4;17.3]	18.2 [16.1;20.5]

Table 27: Differences in percentage points in rating of responsiveness in inpatient care

FACTOR	COMPARISON	REGRESSION COEFFICIENT	95% LL	95% UL	SIGN.
Sex	Male vs. Female	0.03	0.00	0.06	0.087
Age	Middle vs. Young	0.11	0.07	0.15	0.000
	Elderly vs. Young	0.15	0.10	0.20	0.000
Education level	Middle vs. Low	-0.01	-0.05	0.02	0.460
	Higher vs. Low	-0.09	-0.14	-0.03	0.001
Permanent income	2nd vs. 1st	0.01	-0.04	0.06	0.736
	3rd vs. 1st	0.04	0.00	0.09	0.072
	4th vs. 1st	0.03	-0.02	0.08	0.242
	5th vs. 1st	0.06	0.00	0.11	0.045
Health worker in family	Yes vs. No	-0.05	-0.09	0.00	0.053
Self-rated health status	Good vs. Very good	-0.04	-0.09	0.02	0.182
	Moderate vs. Very good	-0.06	-0.12	-0.01	0.032
	Bad vs. Very good	-0.10	-0.16	-0.03	0.003
	Very bad vs. Very good	-0.15	-0.25	-0.05	0.004
Country	HR vs. CZ	-0.28	-0.34	-0.23	0.000
	HU vs. CZ	-0.08	-0.13	-0.04	0.000
	SK vs. CZ	-0.07	-0.13	-0.02	0.008
	SI vs. CZ	-0.08	-0.14	-0.03	0.002
	cons	0.76	0.67	0.84	0.000

Table 28: Performance in responsiveness in inpatient care by countries and domains

DOMAIN	CROATIA	CZECH REPUBLIC	HUNGARY	SLOVAKIA	SLOVENIA	TOTAL
Prompt attention	42.5 [36.7;48.6]	73.8 [67.6;79.1]	45.0 [40.6;49.6]	70.7 [63.2;77.2]	61.0 [54.3;67.4]	57.8 [55.0;60.6]
Dignity	64.3 [58.4;69.7]	82.2 [76.4;86.8]	79.2 [75.3;82.6]	79.7 [73.1;84.9]	79.3 [73.4;84.3]	77.2 [74.8;79.5]
Communication	55.6 [49.6;61.4]	72.6 [66.3;78.2]	74.8 [70.7;78.6]	79.7 [73.0;85.1]	70.9 [64.4;76.6]	71.8 [69.2;74.2]
Autonomy	31.6 [26.4;37.4]	56.7 [49.7;63.4]	62.8 [58.3;67.1]	56.4 [48.7;63.8]	57.1 [50.4;63.7]	53.9 [51.0;56.8]
Confidentiality	54.0 [48.0;59.8]	77.6 [71.5;82.7]	69.9 [65.6;73.8]	74.0 [66.9;80.0]	74.6 [68.4;80.0]	70.0 [67.3;72.5]
Choice of provider	54.3 [48.3;60.2]	78.7 [72.6;83.7]	64.2 [59.6;68.6]	60.6 [52.9;67.9]	60.4 [53.6;66.8]	63.5 [60.6;66.4]
Basic amenities	43.8 [38.0;49.9]	79.5 [73.6;84.3]	57.2 [52.6;61.6]	57.9 [50.3;65.2]	66.2 [59.6;72.2]	60.1 [57.2;62.8]
Social support	61.0 [55.1;66.6]	87.4 [81.7;91.4]	92.8 [90.2;94.8]	70.9 [63.5;77.3]	80.8 [74.9;85.5]	79.6 [77.1;81.9]
Overall inpatient	50.9 [47.2- 54.6]	76.3 [72.6-79.9]	68.3 [66.0-70.6]	68.7 [64.7- 72.8]	68.9 [65.2- 72.6]	66.9 [65.3- 68.5]

Table 29: Population experienced discrimination in provision of health care or inadequate health care services (outpatient care)

OUTPATIENT CARE	CROATIA	CZECH REPUBLIC	HUNGARY	SLOVAKIA	SLOVENIA	TOTAL
Discriminated in provision of health care services	2.5 [1.2;5.0]	2.2 [0.7;6.9]	4.1 [2.6;6.4]	2.4 [1.3;4.5]	4.4 [2.5;7.8]	2.9 [2.1;3.9]
Inadequate services received	12.6 [9.3;16.8]	3.3 [1.8;5.9]	10.0 [7.3;13.6]	12.8 [9.5;16.9]	4.8 [2.7;8.3]	9.8 [8.2;11.5]

Table 30: Differences in percentage points in rating of responsiveness in outpatient care

FACTOR	COMPARISON	REGRESSION COEFFICIENT	95% LL	95% UL	SIGN.
Sex	Male vs. Female	0.00	-0.03	0.03	0.795
Age	Middle vs. Young	0.04	0.00	0.08	0.034
	Elderly vs. Young	0.11	0.06	0.16	0.000
Education level	Middle vs. Low	-0.04	-0.08	0.00	0.031
	Higher vs. Low	-0.04	-0.09	0.01	0.109
Permanent income	2nd vs. 1st	-0.02	-0.07	0.04	0.512
	3rd vs. 1st	-0.01	-0.07	0.05	0.689
	4th vs. 1st	0.03	-0.03	0.08	0.384
	5th vs. 1st	0.00	-0.06	0.06	0.976
Health worker in family	Yes vs. No	-0.06	-0.11	-0.02	0.007
Self-rated health status	Good vs. Very good	-0.09	-0.13	-0.05	0.000
	Moderate vs. Very good	-0.11	-0.16	-0.06	0.000
	Bad vs. Very good	-0.12	-0.20	-0.04	0.004
	Very bad vs. Very good	-0.14	-0.28	0.01	0.060
Country	HR vs. CZ	-0.18	-0.23	-0.13	0.000
	HU vs. CZ	-0.04	-0.08	0.00	0.072
	SK vs. CZ	-0.11	-0.16	-0.06	0.000
	SI vs. CZ	-0.07	-0.12	-0.02	0.003
	cons	0.91	0.83	0.99	0.000

Table 31: Performance in responsiveness in outpatient care by countries and domains

DOMAIN	CROATIA	CZECH REPUBLIC	HUNGARY	SLOVAKIA	SLOVENIA	TOTAL
Prompt attention	45.1	66.4	33.2	46.8	49.6	47.8
	[39.8;50.4]	[59.7;72.5]	[28.7;38.1]	[41.3;52.4]	[43.4;55.8]	[45.0;50.5]
Dignity	76.5	90.6	89.5	82.7	82.8	84.2
	[71.6;80.9]	[85.9;93.8]	[86.0;92.2]	[78.4;86.3]	[77.6;87.0]	[82.2;86.1]
Communication	77.1	85.3	86.7	76.0	77.2	79.9
	[72.3;81.2]	[80.0;89.4]	[83.1;89.6]	[71.0;80.3]	[71.6;82.0]	[77.6;82.0]
Autonomy	47.9	65.4	75.2	49.6	64.1	58.1
	[42.6;53.3]	[58.3;71.8]	[70.6;79.3]	[44.1;55.1]	[57.9;69.8]	[55.3;60.8]
Confidentiality	70.5	80.9	81.1	77.6	85.2	78.3
	[65.2;75.2]	[74.6;86.0]	[77.0;84.7]	[72.7;81.9]	[80.2;89.1]	[75.9;80.5]
Choice of provider	63.9	85.0	83.2	74.3	75.1	75.9
	[58.4;69.0]	[79.0;89.5]	[79.0;86.8]	[69.4;78.7]	[69.3;80.1]	[73.5;78.2]
Basic amenities	57.4	80.1	69.1	54.9	65.7	63.5
	[52.0;62.6]	[74.0;85.1]	[64.3;73.6]	[49.4;60.4]	[59.6;71.4]	[60.8;66.1]
Overall outpatient	62.6	79.1	74.0	66.0	71.5	69.7
	[59.2- 66.0]	[76.0- 82.2]	[71.6- 76.5]	[62.8- 69.1]	[68.0- 74.9]	[68.2- 71.2]