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MASTER'S THESIS

**AN ANALYSIS OF INFORMAL PAYMENTS IN HEALTH CARE
SECTOR IN BOSNIA AND HERZEGOVINA**

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TABLE OF CONTENTS

INTRODUCTION	1
1 INFORMAL PAYMENTS IN HEALTH CARE SECTOR.....	5
1.1 Literature review	5
1.2 Definition of informal payments in health care sector.....	6
1.2.1 Determinants of informal payments	10
1.2.2 Presence of informal payments	13
1.3 Types of informal payments	17
1.3.1 Informal cash payments	17
1.3.1.1 Informal cash payments before treatment.....	17
1.3.1.2 Informal cash payments after treatment.....	19
1.3.2 In-kind payments.....	20
1.3.2.1 Informal in-kind payments before treatment	21
1.3.2.2 Informal in-kind payments after treatment	22
1.3.3 Service payments.....	23
1.3.3.1 Informal service payments before treatment	23
1.3.3.2 Informal service payments after treatment	24
2 HEALTH CARE SYSTEM IN BOSNIA AND HERZEGOVINA	25
2.1 Organization of the health care system in Bosnia and Herzegovina	25
2.1.1 Health care system in the Federation of Bosnia and Herzegovina.....	26
2.1.2 Health care system in the Republic of Srpska.....	27
2.1.3 Health care system of Brcko District	28
2.2 Historical background of informal payments in Bosnia and Herzegovina.....	28
3 EMPIRICAL RESEARCH	31
3.1 Introduction.....	31
3.2 The sample and the data.....	32
3.3 Regression Analysis.....	46
3.4 Discussion.....	50
CONCLUSION	53
REFERENCE LIST	58
APPENDIXES	

LIST OF FIGURES

Figure 1. Factors influencing informal payments.....	12
Figure 2. Distribution of household income by entities/district.....	34
Figure 3. Density plot of age by entities/district	36
Figure 4. Box plot of total money and gifts/services given to medical staff as part of informal payments in public health institutions.....	42
Figure 5. Number of respondents providing gifts/services to medical staff by type of gift	42
Figure 6. Number of respondents in reference to the reason for providing informal payments	43
Figure 7. Percentage of respondents by time when informal payment is provided	43
Figure 8. Percentage of respondents who believe that informal payment is imposed by medical staff.....	44
Figure 9. Scatter plot between attitudes toward informal payments and amount of money given as informal payment.....	1
Figure 10. Scatter plot between attitudes toward informal payments and amount of money given to medical staff as informal payments.....	2
Figure 11. Scatter plot between attitudes toward informal payments (dichotomous) and amount of money paid as informal payment.....	3
Figure 12. Scatter plot between attitudes toward informal payments and value of gifts paid as informal payment.....	4
Figure 13. Scatter plot between attitudes toward informal payments (dichotomous) and value of gifts paid as informal payment.....	4
Figure 14. Scatter plot between Disease severity and Amounts of money as informal payment.....	4
Figure 15. Scatter plot between Disease severity (dichotomous) and Amounts of money as informal payment.....	4
Figure 16. Scatter plot between disease severity and Value of Gifts as informal payment ..	5
Figure 17. Scatter plot between disease severity (dichotomous) and value of gifts as informal payment	5
Figure 18. Scatter plot between household income and amount of money as informal payment.....	6
Figure 19. Scatter plot between household income and value of gifts as informal payment	6
Figure 20. Scatter plot between number of household members and amount of money as informal payment	7
Figure 21. Scatter plot between number of household members and value of gifts as informal payment	8
Figure 22. Scatter plot between gender and amount of money as informal payment	8
Figure 23. Scatter plot between gender and value of gifts as informal payment	9
Figure 24. Scatter plot between age of the sick person and amount of money as informal payment.....	9

Figure 25. Scatter plot between age of the sick person and value of gifts as informal
payment 10

LIST OF TABLES

Table 1. Type of informal payments	9
Table 2. Typology of informal payments for health care.....	24
Table 3. Structure of the sample	33
Table 4. Number of respondents by municipality/city.....	33
Table 5. Number of respondents by the sample structure and the average household income.....	34
Table 6. Descriptive statistics: number of household members by entities/district and gender	35
Table 7. Gender of the sick persons by entities/district	35
Table 8. Descriptive statistics: age of the sick persons by entities/district.....	35
Table 9. Number of persons requesting health services in public institutions, by duration of illness.....	36
Table 10. Number of persons requesting health services in public institutions, by seriousness of illness.....	37
Table 11. Number of persons requesting health services in public institutions by duration of illness before seeking medical help.....	37
Table 12. Number of respondents by different type of health services requested in public institutions.....	38
Table 13. Number of respondents by the underlying reasons for requesting health services.....	38
Table 14. Effectiveness of the medical treatment assessed by respondents	38
Table 15. Number of respondents who provided informal payment by type of informal payment.....	39
Table 16. Descriptive statistics on given money as form of informal payment by type of health services, in BAM.....	39
Table 17. Descriptive statistics on given gifts as form of informal payment by type of health services, in BAM.....	40
Table 18. Descriptive statistics on given services as form of informal payment by type of health services, in BAM	40
Table 19. Descriptive statistics of total money, gifts/services provided to medical staff in public health institutions as part of informal payments	41
Table 20. Attitudes of respondents toward informal payments	44
Table 21. Attitudes of respondents toward informal payments by the type of informal payment provided.....	45
Table 22. Regression coefficients for the model I	47
Table 23. Regression coefficients for model II.....	49
Table 24. Bivariate correlation between independent and dependent variables in Model I and II.....	11

INTRODUCTION

There is increasing interests in the issue of informal payments for health care sector, particularly in the context of health care reforms in the transition countries. The transition from a central planning to market economy is a difficult period for all countries, especially for those that are middle- and low-income. Transition has led to enormous social and economic changes, in face of structural reforms and institutional transformations which were unprecedented in terms of scale and scope. Along the public sector reforms, health sector reform was challenging from many perspectives as full-length financing of public health care service was considered unsustainable in the long run (Thompson & Witter, 2000; Chawla, Berman, & Kawiorska, 1998; Adeyi, Chellaraj, Goldstein, Preker, & Ringold, 1997; Creese, 1991; Hassan & Peters, Jr, 1996).

Bosnia and Herzegovina (hereinafter: BiH), as a transition country, also faces similar problems. In addition to this, there is another serious issue. Differences in health system organization and health policies among two entities and cantons led to the fact that BiH citizens do not have the same rights regarding the health care services, including health care access and scope of services that are free of charge and are covered by the health care program. The health care system in BiH is mostly financed through the health insurance contributions of the employees. Additionally, the health care system is also funded by official fees given by those who use health services - co-payments, as part of total out of pocket payments (hereinafter: OOPs). However, it is widely believed that there are also informal ways of financing health care sector in addition to official and legally prescribed funding methods (European Commission, 2008).

Cross-national research is hampered by the lack of consensus among researchers on the definition of informal payments. Fact that informal payment is complex phenomenon contributes to the lack of consensus. Informal payment includes the following dimensions: who gives the payment - individuals or institutions? Whom the payment is intended for –to individuals or health institutions? What form of payment is given - money, in-kind or service payment? How much is given - the value of informal payment? When the payment is made - before, during or after the medical service? Where the payment is made – on the site of public health facility or outside that locality? Why the payment is made - payment is required from the patient or the payment is voluntary made?

Chereches, Ungureanu, Rus and Baba (2011) define informal payments as any payment made outside the official and legal funding framework in the public health system. According to Thompson and Witter (2000) informal payments are donations made by individuals/patients to state health care personnel or to public health care institutions, which are not sanctioned by the authorities. Also, Lewis (2000) finds that informal payments can be defined as payments intended to be given to the health care individuals

and institutional providers, in the cash or in-kind form, made outside official payment channels, as well as purchases that should be covered by the health care system. Further, informal payment, according Lewis, is a form of health corruption.

Stepurko et al. (2010) define informal payments as expenditures made through unofficial payment channels, intended to be given to service providers. They describe it as gratuity for doctors, referring to any type of material or non-material benefits. More precisely, patients pay for medical services and goods that should be free of charge, to medical personnel or public health institutions.

According to these authors, unofficial payments are classified as follows:

- informal cash payments;
- informal in-kind payments;
- informal service payments.

Informal cash payments are usually seen as a direct monetary contribution to those who provide health care services, mostly doctors. These payments can be given voluntarily, but mostly are directly or indirectly required by health care providers. The second form of informal payments is in-kind payments, usually presented as patients' gratitude in the form of a gift, in most cases given at the end of the treatment process. This type of gratitude in most cases is the product of habits and customs of the former socialist countries nations. Williams, Horodnic and Horodnic (2016) observe informal service payments as some type of preferential treatment, such as trips intended for health care personnel who provide medical services. Furthermore, informal service payments also include sponsorships and donations.

Stepurko et al. (2010) state that practice has shown that informal cash payments are usually given at the request of medical personnel, while in-kind payments are mostly voluntarily given as an expression of gratitude by those who are treated. Therefore, it is exceptionally important to determine the emergence moments of informal payments:

- before medical treatment;
- after medical treatment.

It is widely believed that if informal payments occur before the doctor starts the treatment process, it is describe as a prerequisite for medical service. On the other side, if the informal payments occur after the treatment process, it is usually considered as gratitude for obtained medical services.

Stringhini, Thomas, Bidwell, Mtui and Mwisongo (2009) convey that although informal payments are fairly common in many countries, especially those that are middle- and low-income, such payments are not only intended to be given to institutions, but also to individuals within these institutions. This type of payments usually affects the higher salaries of health care workers, greater motivation of the employees, as well as the reason for staying in employment in the public health institution (such functioning will not drive workers into the private sector, which usually offers greater profits).

Stepurko (2013) presents the results of research on informal payment emergence in some Central and Eastern Europe countries and concludes that informal payments in transition countries occur as a result of cultural, economic and political factors. Overall, informal payments are most present in hospitalization – inpatients pay more than outpatients, especially to surgeons and gynaecologists - in case of serious diseases.

In this master's thesis we are interested in the reasons for the emergence of informal payment given by health care consumers (inpatients and outpatients), which are intended to be given to physicians and nurses or to medical institutions in the public health sector in BiH. An attempt will be made to identify all the reasons that are behind the informal component of payments intended to be given to the health care personnel and public health facilities. Along these lines, the final goal of this master's thesis will be to analyze and identify the determinants of informal payments by the users of health care, that are intended to be given to the service providers - persons and institutions, within the public health sector of BiH.

Ultimately, if health insurance is used to guarantee to all sick people the same rights and access to the treatment process (Folland, Goodman, & Stano, 2016; DeNavas-Walt, Proctor, & Smith, 2011), why would in that case the persons covered by insurance wish or have to give a part of money/gift/service that is not legally required from them? This is one of the basic questions to be considered during the analysis in this master's thesis.

Along these lines, the main objective of this master's thesis is to analyze the determinants and reasons that affect the emergence of informal payments, given by health care consumers to health care providers in the public health care sector in BiH. Furthermore, special attention will be given to the analysis of the population's attitudes relating to informal payments and differences in attitudes between certain socio-economic groups of respondents - to identify the possible associations between the informal payment component and socio-economic characteristics of the respondents.

Results of a study conducted by Kaitelidou et al. (2013) show that the level of informal payments is very high in the area of obstetric services in public hospitals. The data show that 74.4 percent of women who used public maternity services in the public health sector

in Greece had to pay through informal payment channels, in the amounts corresponding approximately to the net salary of an intern physician. It follows another assumption and question - how much does the health care consumers' perception of the severity of disease affect the value of informal payments? This is another question that we tend to answer through this master's thesis - whether patients with serious diseases are more inclined to informal payments in relation to patients with benign diseases.

As far as we know, there are no studies that have been published on the factors that influence the creation of informal payments in the health sector in BiH. In view of this it seems worthwhile to analyse the characteristics and the scope of informal payments in health sector in BiH, as well as deepen our understanding on factors that explain this phenomena.

The research methods of this master's thesis consist of literature review and empirical study. The first part is based on the presentation of all informal payment types in public health sectors worldwide, with a special focus on transition countries and factors affecting the payment creation. Furthermore, the historical background of unofficial payments, as well as the tradition and habits of the nation are also presented. Relevant literature related to the definitions and reasons for the emergence of informal payments, intended to be given to health care individuals and facilities, are represented through the literature review as a secondary source.

The second part of this master's thesis is focused on the empirical research. All primary data were obtained through a questionnaire, based on issues defined in the already existing questionnaire developed by "Formal and informal household spending on health: a multicountry study in Central and Eastern Europe", conducted by the Central and Eastern European Health Network (2002). The questionnaire sampling units were BiH residents, who were randomly selected in the household (hereinafter: HH) survey on a sample of 468 participants (households). This questionnaire has covered issues related to basic socio-economic characteristics of respondents, such as number of household members, gender and age of the sick person, average monthly household income and certain general questions related to attitudes towards informal donations, as well as their actual behaviours in situations when they wish to or must pay through informal payment channels or even believe that such payment is required from them. To summarize, patient attitudes and behaviors were examined, as well as situations affecting readiness to pay, which determine the informal payment component in the public health sector of BiH.

Bearing in mind the severity and purpose of the research, the main hypothesis (hereinafter: MH) is:

- Socio-economic factors, attitudes toward informal payment and perceptions of disease severity of the respondents have a statistically significant effect on the value of informal payments.

The MH was tested using the following auxiliary hypotheses:

H1 Attitudes toward informal payment have a statistically significant effect on the value of informal payments.

H2 Perception of disease severity has a statistically significant effect on the value of informal payments.

H3 Socio-economic factors have a statistically significant effect on the value of informal payments.

The hypotheses were tested by means of regression analysis: the dependent variable is the value of informal payment, whereas the independent variables refer to socio-economic factors, attitudes towards informal payment and perception of disease severity. All the data collected through the questionnaire were processed using SPSS software.

Accordingly, the first chapter of the master's thesis deals with general definitions and types of informal payment in the public health sectors - existing literature relating to the definitions, presence and determinants of informal payments. The second chapter deals with the health system of BiH, the country where the survey was conducted. The functioning of the state health system, but also entities and BD, are explained through this chapter. Further, historical background of informal payments on the territory of BiH is also presented. The third chapter refers to the empirical research - presentations, descriptions and discussions related to the obtained results.

1 INFORMAL PAYMENTS IN HEALTH CARE SECTOR

1.1 Literature review

In order to determine which variables might be relevant to this research related to the value of informal payments, it was essential to select relevant literature that indicates the existence of informal payments worldwide. Selected literature within the section below primarily addresses definitions and divisions of these payments, but also the factors that influence the emergence, as well as value of informal payments. According to existing literature, the basis for research for geo-space of BiH was made. These selected definitions and obtained data have helped to set a good basis for research within this master's thesis.

The literature that is used contributes to better understanding of the problem of illegal payments within the public health sector.

1.2 Definition of informal payments in health care sector

According to World Health Organisation (hereinafter: WHO), which is a specialized agency of the United Nations, that deals with issues of international public health (World Health Organization, n.d.), OOPs viewed as direct payments made by those who consume health service to those who provide such services, at the time of service use. This excludes any prepayment for health services, for example in the form of taxes or specific insurance premiums or contributions and, where possible, net of any reimbursements to the individual who made the payments. According to Arsenijevic et al. (2015), total OOPs comprise the formal and informal part.

Moreno-Serra and Wagstaff (2009) emphasize that OOPs (both the formal and informal part) became an important part of health care financing during the 1990s, due to underfunded health system budgets of transition countries - these payments began to fill the gaps of medical institutions budgets. Many authors believe that after Soviet Union disintegration and transition to market economy, former soviet countries met with problem of financing the public sectors, including the health care sector. Reforms within the health sector are no longer free of charge, as it used to be earlier. Nowadays, patients have to pay a certain percentage of total treatment costs, which is sometimes formal and sometimes informal (Aarva, Ilchenko, Gorobets, & Rogacheva, 2009; Balabanova, McKee, Pomerleau, Rose, & Haerpfer, 2004). Not only do informal payments negatively affect access for poorer categories of society, but also total out-of-pocket may have a negative impact on the equality principle. But, unfortunately, without this type of expenditures, some health care systems may not be functional and self-sustainable (Garg & Karan, 2009).

Payments that are not officially required affect access to the health care system and make it difficult for poorer categories of society. Peters et al. (2008) find that the link between poverty and access to the health care system can be represented in a circular form - poverty leads to severely or completely restricted access to health care, which leads to ill health, and ill health maintains poverty. Accordingly, a large percentage of health care expenditures paid by households have a negative effect on the equality principle, which is particularly felt by poorer categories of the society. This issue is exceptionally important because health care, as a public good, should be accessible to anyone seeking it, regardless of financial power and social status.

Fotaki (2009) presents the results of the conducted survey in four regions in the Russian Federation, which show that as high as 80.9 percent of the total number of respondents has spent their own funds for the purpose of treatment. These payments include both, official

payments (for pharmaceuticals or additional diagnostic procedures, which had to be officially paid), as well as informal payments. Accordingly, the question is - if the patients are forced to pay official fees as part of the total treatment costs, why do they wish or have to pay some type of a tip to the physicians?

Moreover, Sun, Jackson, Carmichael and Sleight (2008) provide information that one-third of the sick population in rural China areas did not seek medical care because the process was too expensive for their standard of living. Thus, another question to be asked is - is there any association between readiness for making informal payments and the socio-economic characteristics of health care consumers? Hence, the law has obliged patients to pay a certain percentage of the total amount of cost that is related to medical treatment and these official fees are called co-payments. These formal payments were introduced in developing countries because of the increased need for medical care on one side, and the need to pay for services that the health care system could not cover on the other side. All other payments within total out-of-pocket payments are informal (Opwora et al., 2014; Augurzky, Bauer, & Schaffner, 2006; Helms, Newhouse, & Phelps 1978; Atanasova, Pavlova, & Groot, 2015; Balabanova & McKee, 2004; Shishkin, Potapchik, & Selezneva, 2014).

Informal payments include the following dimensions affecting the definition and meaning of payment: it is needed to determine who makes the payment, whom the payment is intended for, what form of payment is given, what is the value of informal payment and to identify the moment, place and reason of informal payment emergence. Arsenijevic et al. (2015) emphasize that informal payments are not registered within medical institutions and are not necessarily connected to medical treatment. These illegal payments are made before or after medical treatment, usually required by medical staff or voluntarily given by patients in illegal ways. However, Miller and Vian (2010) consider that is not always easy to notice and mark payment as informal, because the things in practice are not as simple as in the literature.

Ultimately, Souliotis et al. (2015) conclude that informal payments could be categorized as:

- **Black informal payments:** the worst form of informal payments, often labeled as health corruption. These black donations are given illegally by health consumers to personnel, without being recorded in official administration records. The purpose of this payment is usually to obtain better medical treatment, to jump the queue or even a prerequisite to begin treatment. Black informal payments viewed as a black field of medicine, which is closely associated with the concept of "shadow economy".

- Gratitude informal payments: the purpose is not strictly connected to the fact that patients wish to obtain better medical treatment or use health services. These payments are usually made at the end of treatment and viewed as appreciation in the gift form.

Lewis (2000) defines informal payments as contribution to health care staff or a contribution intended to be given to the health institution. These payments can be presented in cash or in kind form, made outside official payment channels. Another form of informal payments is purchases meant to be covered by the health care system and which should be free of charge for consumers. Tatar, Ozgen, Sahin, Belli and Berman (2010) define these purchases as in-kind contributions. This type of informal payments is presented in the form of goods and services, such as drugs, laboratory tests, food and bed linens. Accordingly, distribution of informal payments is not always defined in the same way in literature. Sometimes is difficult to group and categorize these payments in practice. However, one division is clearly defined - only co-payments are the formal part of total out-of-pocket patient expenditures, while all other types of payments are unofficial and illegal.

Chereches et al. (2011) define informal payments as any form of payment which is not made officially through legal frameworks. According to Thompson and Witter (2000) informal payments are health expenditures made by health care consumers, intended to be given to the public health care personnel or institutions, which are not sanctioned by the authorities.

Stepurko et al. (2010) define these unofficial payments as private health expenditures made through unofficial payment channels, intended to be given to service providers. These authors define it as gratuity for doctors, referring to any type of material or non-material benefits. More precisely, those who consume public health pay for services and goods that should be free of charge, to those who provide these services and goods. According to these authors, unofficial payments are classified as follows: a) informal cash payments; b) informal in-kind payments; c) informal service payments. These informal payment forms will be described in following chapters.

All these types are marked as informal payments because are made outside official payment channels. Such illegal payments differ from country to country - what may be completely legal in one country is acceptable or even desirable in some other country. Despite the fact that informal payments are differently treated in different countries worldwide, Habibov (2016) presents that all forms of informal payments affect health care satisfaction and provision. Consumers of health care within the public sector are less satisfied with the service if an informal payment was part of the treatment process.

Table 1. Type of informal payments

Type of informal payments	Illustrative quotes from patients
Contribution to care	<i>The doctor must earn a living. He/she needs money to pay for children's education.</i>
Additional services	<i>You need to send olive oil to the doctor's house, because you can receive better service this way. The timing of the payment influences quality, and speeds up the process.</i>
Abuse of power	<i>Nurses do not clean your wound if you don't pay them. There have been cases in which doctors say that a pregnant woman needs to be operated even though that is not true. They invent reasons to have an operation.</i>
Gifts	<i>We are really happy when the baby is a boy and it is because of this feeling that we give money to the person who makes the announcement.</i>

Source: K. Miller & T. Vian, *Strategies for reducing informal payments*, 2010, Table 1.

Stepurko, Pavlova, Gryga and Groot (2013) conclude that patients nowadays usually wish to avoid waiting lists or to obtain faster and better quality treatment. On the other side, health providers receive or even demand illegal payments from the patients because their salaries are too low and the life standard is poor, especially if the seriousness and responsibility of their jobs are taken into account. Thus, informal patient payments are not just a way of expressing gratitude as it used to be earlier, but also one of the ways of financing health care institutions. Informal payments can be directly observed as health corruption (Sundell, 2013; Ensor & Duran-Moreno, 2002; Lewis, 2006). This topic is sensitive in its nature and is an interesting topic for analysis, especially given the fact that this area remains unexplored in BiH.

However, Onwujekwea, Dikec, Uzochukwua and Ezeokeb (2010) claim that unofficial payments are a widespread negative phenomenon in health care sectors and have been estimated to constitute from 10% to 45% of total out-of pocket payments in many low-income countries. Such illegal payments are precisely the subject of this master's thesis, because according to information and data presented by the above mentioned authors, a significant proportion of total household health expenditures is informal, mostly in transition and insufficiently developed countries in terms of economic development, such as BiH.

1.2.1 Determinants of informal payments

To enter the very core of the issue of emergence and determinants of informal payments, it is necessary to start from the very beginning. The conclusions of relevant authors in their research will be presented- the reasons behind informal payments. Hope Sr (2015) points out that health care corruption is most common in developing countries, where public resources are constrained. Baji, Pavlova, Gulacsi and Groot (2013) find that reasons for informal payment emergence are related to lack of control and accountability of government structures - from the legal point of view. Looking at the situation from an economic perspective, it is clear that the lack of resources in the public health sector determines the occurrence of informal payments. In middle- and low-income countries, informal payments have become an important source of health sector financing. Ultimately, in Central Europe countries, informal payments contribute to higher wages and increased satisfaction of health providers. The factors which are not associated with countries' economic power, but are mentioned as determinants of informal payments, are presented in the form of habits and customs of the population living in former socialist countries. These authors perceive this phenomenon as a heritage of the socialist state organization. Despite the fact that over twenty years have passed since the fall of the communist regime, it is still customary among the population to give gifts as an expression of gratitude to medical staff after treatment has been completed.

Stepurko et al. (2013) find that basic determinants of informal payments are underfunded public health budgets, lack of health workers accountability within public health institutions, low level of transparency, as well as the patient's attitudes towards informal payments - they wish to pay or consider that informal payment is required. Such attitude could be defined as a "gift giving" tradition. Thus, determinants that affect informal payment creation can be caused by those who deliver medical care, as well as by those who seek medical care.

Vian and Burak (2006) find that Albania, similar to many other transition countries, felt the negative effects of the existence of informal payments, as it prevents access of certain social categories to the health care system. Research has shown that approximately 50% of the total number of patients pays an informal part of OOPs in addition to the official payments. The results of the survey indicate that the majority of respondents believe that informal payments are unethical, but despite that fact many of them stated that they give informal payments because it is part of the culture and customs, while a significant number of the respondents considers that they "must" pay informally to obtain the necessary health services or to achieve better medical treatment. These authors believe that socio-cultural determinants include gifts as an expression of gratitude, tips and resistance to change. This is the basis for researching the emergence of informal payments in the public sector of BiH - do the attitudes on informal payments affect the actual payments? Some of the key

factors affecting the formation of informal payments in Albania are very low salaries of health workers, lack of medical resources within health budgets and the fact that health is exceptionally important, so patients even pay informally to make sure they will be healthy. Fear is also very often a deciding factor - they are afraid how serious the consequences might be if they refuse to be part of illegal payment process (Vian, Gryboski, Sinoimeri, & Hall Clifford, 2004).

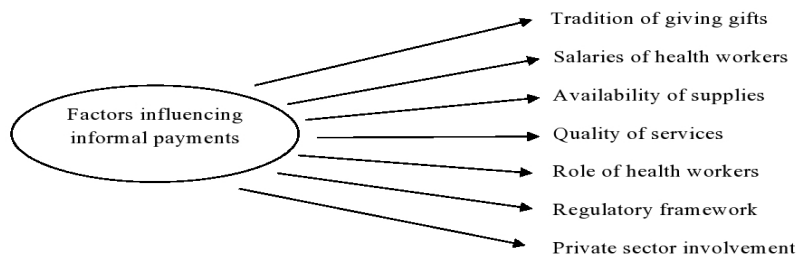
As Tomini and Maarse (2011) state that causes of non-formal payment are: a culture of giving gifts, low salaries of employees in public medical institutions, shortage of necessary resources, misuse of medical personnel power, poor enforcement of legislation and lack of regulation. All these factors could be grouped into three main groups – the cultural, economic and poor governance group of factors.

The cultural group of factors that influence informal payment creation includes all those health care seekers and consumers who wish to express gratitude in the form of a gift for obtained medical treatment. This cultural group is most widespread in Mediterranean, Central and Eastern Europe (hereinafter: CEE) and Former Soviet Union countries, as a heritage of socialism habits. This type of informal payments is usually made on a voluntary basis, and accordingly it is believed that the gift value depends on a patient's financial situation - everyone should buy a gift in accordance with the financial capacity of the individual.

The economic group of factors that affect the formation of informal payments is connected to shortages in resources and medical supplements, which are crucial for medical therapy. After World War II, the communism system established in CEE and Former Soviet Union countries propagated free access to health care under the legacy of the 'Shemasko' health care system. Such a system had allowed free access to all health care seekers who needed medical assistance. However, the transition has led to changes in the sphere of public good use and thereafter public health budgets become underfunded. This phenomenon resulted in the creation of an economic group of factors that influence the generation of informal payments - informal budgeting performed by those who need medical care.

According to the same authors, poor governance group factors have led to informal payment creation on the basis of poor governance and a poorly functioning state system. The second problem relates to larger financial investments in urban health areas compared to rural areas, where the health customers are faced with the problem of inequality in access to the health care. This problem has led to shortages in resources and medical supplements in rural areas. The third problem within this group is related to informal payment creation as a result of under-funded health care systems. Underpaid physicians on one side and patients who wish to use public health services on the other side have led to the establishment of the informal payment process.

Figure 1. Factors influencing informal payments



Source: R. Thompson & S. Witter, *Informal payments in transitional economies: Implications for health sector reform*, 2000, p. 174.

Cohen and Filc (2015) group the determinants of informal payment emergence in the same way as the aforementioned authors, i.e. cultural, economic and institutional. The cultural determinant describes under-the-table payments as a habit and custom rooted in the society, dating back to the communist times. The economic determinant refers to the low salaries of health care workers, under-developed private health sector as a still poor alternative to the public health sector. The institutional determinant is defined by poor transparency, lack of valid information and lack of accountability among medical staff. Fidler, Bredenkamp and Schlippert (2009) state that many Europe and Central Asia countries have suffered great economic and political reforms, which have left negative effects on the public health sector. In particular, Southeast Europe countries, such as BiH, Macedonia, Montenegro, Hungary, Serbia and Albania suffered economic difficulties during the period of reforms that have taken place in the process. Economic and political changes have led to the lack of governance and transparency, which resulted in a higher degree of corruption in many public health areas. As follows, economic and socio-political developments are the main factors that influence the emergence of corruption in the public health sector.

Liaropoulou, Siskou, Kaitelidou, Theodorou and Katostaras (2008) also consider that informal payments are very closely related to the corruption concept, i.e. the use of public office for private gains. Their study, which was conducted in the Greece public health sector, has shown that patients mostly payout through unofficial payment channels to obtain better treatment. Health care users are often concerned that medical services may be performed below the standards unless an additional payment is provided for these services beyond what is legally required. Another survey shows that surgical patients are more inclined to informal payments than –non-surgical patients. Precisely this result has led the question of how illness seriousness and severity affect the patients’ willingness to pay informally.

Abdallah, Chowdhury and Iqbal (2015) present that the informal part of OOPs is a significant share of patients' total private health expenditures. They compared the characteristics of those who pay and those do not pay informally and obtained the following results: patients who pay are more frequently those come from farther places compared to those who do not pay, which is explained by the fact that they need more time and money to reach the required institutions and therefore do not complain in relation to bribery. Furthermore, health care consumers who pay informally are more likely to visit a public medical facility for better medical treatment and quality service than those who do not pay informally. Hence, people who live in areas closer to major medical institutions pay less than those who live in remote places. Moreover, patients have the attitude that obtaining good medical care requires an informal payment. This thesis is also confirmed by Hunt (2007) who says that wealthier consumers of public health are more likely to bribe than those who live in poverty and difficult living conditions. These situations have led to the poor patients being denied access to necessary treatment, which creates discrimination among health care users - wealthier patients pay more and get more. This arrangement negatively affects the solidarity and equality principle. Aboutorabi et al. (2016) find that the health care system must be responsible for the protection of individuals against private health expenditures. Under-the-table payments are presented as system failures and have a negative impact on the functioning of the health system. Finally, Nekoeimoghadam, Esfandiari, Ramezani and Amiresmaili (2013) state that patients believe there is nothing more important in life than health, and being healthy is the greatest benefit. Precisely this attitude is the deciding factor for informal payment creation - health is priceless. Therefore, this master's thesis will be examines the attitudes and socio-economic characteristics of the respondents, in order to present the reasons and preconditions for informal payment formation. Taking into account all the factors which are the result of numerous studies, the factors which are the most dominant in the public health sector of BiH will be analysed through this master's thesis.

1.2.2 Presence of informal payments

Different forms of informal payments have existed on the territory of Europe for many years. This negative phenomenon in the health area has been reported from at least twenty-two countries across Europe, Asia, and Africa (Gaal, Belli, McKee, & Szocska, 2006; Chiu, Clegg Smith, Morlockc, & Wissowd, 2007). Many studies have proven the existence of unofficial patient expenditures across Europe, as a result of traditional customs, but also the result of insufficiently funded health care budgets. One of the major problems is people's perception related to informal giving in the public health sector - people usually tend to pay informally. This is one of the reasons why the willingness to make informal payments will also be examined through this master's thesis - what the patients' attitudes towards informal payments are and whether their attitudes affect the value of informal donations. Informal health fees are present not only in the health care sector, but also in

other public spheres, such as education, court, police, so it is necessary to point out the problem of corruption in the public sector in general. All spheres of public administration are susceptible to corruption, including the public health sector, as one of the most vulnerable areas (Stepurko et al., 2014a).

Tambor et al. (2014) believe that the transition process in CEE caused great changes, which have led to economic crisis, inflation, high unemployment and lower wages of the employees in the public sector. The economic crisis caused difficulties in the functioning of the public sector, including the public health field, which led to the creation of informal patient expenditures. This form of corruption is the result of an unregulated state system and lack of public resources. Nowadays, patients within transition countries are faced with numerous payment obligations, which did not exist previously, because the state system used to cover all the costs. Informal payments have also appeared alongside legal fees that were imposed as a legal obligation to the consumers of public health services. According to these authors, precisely these facts explain the widespread presence of corruption in the public health sector.

Pavlova et al. (2010) find that unofficial health payments are rather new in analysis and research, although this negative phenomenon has existed for decades. Analyses and studies that have been conducted on the subject of unofficial payments refer mainly to the period after 1990 and mainly to former socialist countries. It can be assumed that under-the-table payments are a heritage of the communism period, and are the most dominant in transition countries. However, this negative phenomenon has also been observed in countries that are not countries in transition and not former socialist countries. Informal patient payments have been also reported in some high-income Europe countries, such as Austria. According to these data, this phenomenon is not closely connected only with transition or lack of financial resources in public budgets. Prevalence and value of informal giving have to be viewed from multiple perspectives, because it can be result of many factors, not only political and economic factors.

Falkingham, Akkazieva and Baschieri (2010) explain that informal payments were the mostly made in the former Soviet Union countries during the late 1990s. Informal payments have been widespread in the period of great reforms and difficulties in the field of public sector financing. This has led to the situation of the patients' self-financing – official payments for referral to medical institutions and a certain percentage of total costs of medical services, as well as informal payments directed to increasing the salaries of health workers. The reason for these changes is linked to local budgetary constraints and petrol shortages. Therefore, another question is asked - to what extent do financial power and household income affect the willingness to pay? Barber, Bonnet and Bekedam (2004) also claim that growing evidence indicates that the presence of informal payments is registered in many countries within the public health sector. A large proportion of total

health spending by patients is seen as informal health fees, and the only appropriate way to reduce the great presence of these payments is to formalize such payments. This would ensure that the illegal part of total out-of-pocket expenditures would be directed to specific and legally chosen fields.

Vian (2008) presents corruption in the public sector as a global problem. He finds that the presence of corruption in health systems and the private gain of individuals are the result of government monopoly over clients. On the other side, a higher level of transparency, citizens' voices and law enforcement can help in the fight against corruption in the public health sector. The first step in problem solving should be identifying the factors that influence the formation of unofficial payments. Rispel, de Jager and Fonn (2015) assert that health care corruption (any type of informal payments) is present in health sectors of countries worldwide. According to these authors, 60 billion US dollars are lost every year due to problems relating to corruption in the health care sector. More precisely, it represents 3 % of total annual US health expenditures. On the other side, the European Union is losing 50 million Euros per year for the same problem. These data indicate that informal payments are present in health systems around the world, both in less developed and well-developed countries.

Vian, Grybosk, Sinoimeri and Hall (2006) present data related to the existence of informal payments in the Albanian public health sector and conclude that such payments are still most common in transition countries. The conducted study shows that the presence of informal payments has increased due to low salaries of health staff, patients' perception that health is worth any price and fear of being denied a medical treatment. The tradition of giving gifts also affects the presence of informal payments. Furthermore, providers find that their work is undervalued by the government and that they are underpaid for their work, while patients believe that informal payments are often a prerequisite for the treatment. All these factors affect the widespread presence of informal payments in the public health sector in Albania.

The issue of the presence of informal payments has become an important health policy issue in many countries in recent years and it is particularly evident in countries with a complex and fragmented health care system. In spite of that, many studies have proven that such presence is at a high level in some developed and welfare countries worldwide: for example, total OOPs, including the informal component, are to a very small extent present in the Czech Republic. Hungary and Poland have a higher level of presence of total OOPs in comparison with the Czech Republic. This is particularly evident in the case of outpatients and pharmaceuticals. On the other side, informal payments are not present to a great extent in these areas. However, in the case of outpatients and surgery, a higher percentage of informal payments are present. Romania has the highest level of informal payments - 40% of total OOPs are informal (Tatar et al., 2007). Another conducted

research by Arsenijevic, Pavlova and Groot (2015) shows that total out-of-pocket patient payments in Serbia create a burden for individuals seeking medical care. OOPs, including the informal part, can lead to prohibitive costs, which could prevent patients' health care access. The same author argues that majority of health care consumers in Serbia (84.7%) reported official co-payments. 61.1% reported "bought & brought goods" payments (quasi-informal payments - socially acceptable payments intended to be given to institutions) and 5.7% health care consumers reported they have made "black" informal payments - pure informal payments intended to be given to employees. It should be noted that "bought & brought goods" are definitely informal, refer to filling the gaps of medical institution budgets (if the patients buy food, hygiene items, medication and all other items that should be covered by insurance). Accordingly, informal payments are very widespread in Serbia's health care system, although "envelope payments" are less present in comparison with "bought & brought goods".

Also, Tomini, Groot and Pavlova (2012) find that the informal component of total patient expenses is very much present in public health sectors of many Central, Eastern and Southern European countries, and health care users are often forced to pay through informal channels of payment to get the necessary treatment. Prevalence of informal payment is also the result of the patients' awareness that health is very important, so "health is bought" not only by rich patients, but also by those who are not wealthy. Not very affluent patients find alternative ways to access the treatment system - using savings, selling assets or borrowing money. Moreover, Xu, Evans, Carrin, Aguilar-Rivera, Musgrove and Evans (2007) conclude that healthcare corruption leads to exclusion of certain social categories in the possibility of treatment, precisely because of the inability to pay for treatment. Tatar et al. (2007) present that poor society categories sometimes even pay more per capita than rich categories.

Informal budgeting is particularly high in developing and transition countries, where payments through unofficial payment channels are endemic (Lewis, 2007; Delcheva, Balabanova, & McKee, 1997; Ensor, 2004). Although the presence and emergence factors of informal payments have not yet been analysed in BiH, according to what is stated in the above mentioned literature, it can be assumed that this country suffers certain consequences of transition from a central planning to a market economy. Kahvedzic and Losic (2010) present BiH as a developing country, which was part of communist Yugoslavia, with a tendency to make an economic movement from the wartime period to peacetime, as well as from a central planning to market economy. Complicated political and economic processes within this country could lead state administration and public sector to great corruption. The public health sector, as one of the most sensitive and most susceptible to corruption, is the subject of this master's thesis, with a special focus on informal payment determinants.

1.3 Types of informal payments

1.3.1 Informal cash payments

One of the types of informal payments is informal cash payments. Ensor and Savelyeva (1998) find that this type is usually intended to be given to employees, but also to institutions. Informal cash payments are the most sensitive area of under-the-table donations, especially those intended to be given to individuals. Physicians and nurses take monetary informal payments for those services which should be performed free of charge. Such informal cash payments are considered as the worst form of health corruption within public health systems. On the other side, informal cash payments intended to be given to medical institutions are considered as a less serious form of informal payments than the previously mentioned black payments. It is widely believed that illegal donations for facilities are most common in transition countries, due to under-funded budgets of public health institutions and restriction of necessary resources. This form of informal payments, which aims to increase the budgets of public health facilities, Polese (2014) is considered to be a “necessary evil”.

Moldovan and Van de Walle (2013) state that is very important to determine the time of payment to better understand its nature. In particular, it is necessary to define whether the moment of payment was before or after the provided treatment. Tatar et al. (2007) present the results of the conducted study related to payment type and purpose during which the moment of informal payments was taken into account. The study showed that 85.1% of the respondents made a payment before starting medical treatment, whereas 14.9% answered that they paid after the provided service. These data show that informal payments are generally a prerequisite for access to treatment, while a significantly smaller percentage of informal payments refers to payment in gratitude form – in kind payments. Hence, it is important to determine the moment of payment, and to estimate the nature and purpose of informal donations based on that.

1.3.1.1 Informal cash payments before treatment

As Williams et al. (2016) state, informal payments for health services may occur in many forms and one of the most common is the cash form. These payments are made outside the official payment system, labelled as “envelope” or “under-the-table” payments. The moment of informal payments significantly affects the definition and meaning of such donations. Consequently, it is established that informal cash payments that were made prior to the onset of treatment were the worst form of informal donations, especially if made at the request of those who provide care. Van Damme, Van Leemput, Por, Hardeman and Meessen (2004) claim that health care users are sometimes left with no choice but to pay the required informal fees, even if the fee amount exceeds their financial limits. Kruk,

Goldmann and Galea (2009) provide information on the study of frequency of borrowing money or selling assets in order to access the health care system. The study included a population of 3.66 billion, which represents 58 percent of the world's population. On average, 25.9 percent of households were in a position to sell assets or borrow money to be medically served. Also, the most vulnerable are poor households in those countries where health insurance is not as high as it should be.

Balabanova and McKee (2002) find that most monetary payments with informal features are given before or during delivering of health services. Accordingly, informal cash payments are usually seen as a guarantee that the treatment will be carried out successfully or the only way to access the health system. Some of the respondents in their study say they were not directly required to pay in cash, but they felt that this act was often inevitable. Furthermore, Stepurko, Pavlova, Levenets, Gryga and Groot (2013) present data from a conducted study on informal payments in the maternity hospital in Kiev, which show that informal cash payments are very present in the obstetric field. The majority of patients indicate that the amount of such payment was negotiated before the childbirth. This indicates that informal payments are very present and mostly made in monetary form for more serious medical interventions, as well as in medical fields in which patients are particularly vulnerable, such as maternity. Patients tend to pay before starting treatment, to make sure that intervention will be carried out in the best way. Another conclusion given by Falkingham (2004) is that informal cash payments are usually made as a prerequisite for treatment, where the wealthier social categories are more inclined to informal cash payments- 53%, while poor social categories less frequently pay in cash - 38%. These data point to the fact that access to the health care system is limited for poor households and individuals, which is contrary to the solidarity and equality principle.

Vian et al. (2006) describe different direct and indirect ways to demand money from patients, as a precondition for a medical service or even more attention. Health care providers often have a tactic of mentioning very poor conditions in which they work, such as low wages, thus indirectly seeking an “envelope” for greater effort and better conditions for hospitalized patients. Some patients' experiences show that physicians sometimes even directly ask for money. A physician who has the authority will sometimes refuse to do surgery without being paid cash in advance. Physicians are not the only ones who take money, but also nurses. Unlike doctors who have the power to refuse surgery without being paid in advance, nurses mostly take money for benign things, such as attention and care of the patient. Patients claim that nurses do not ask directly for cash, but if patients do not discreetly put money into the nurses' pockets, the nurses will “forget” to visit the patient.

Falkingham et al. (2010) explain the economic and social situation in countries that have gone through many reforms, such as former Soviet Union countries. In such countries, it

was customary to thank the doctor for the job he/she is doing, usually in the gift form. These payments were usually voluntarily given by patients as an expression of gratitude. However, economic and politic changes have led to a shortage of public resources, petrol shortages and lack of funding in the state budget, which gave rise to the practice of doctors requiring money from the patients. Socio-political changes have replaced in-kind payments with cash payments.

Accordingly, informal cash payments made before treatment are generally seen as a prerequisite for the required treatment. European Commission (2013) presents research results related to the moment of informal payment formation, which show that fees for services are generally paid before starting medical treatment: fee-for-service, fee-for-commodity, fee-for-access or fee-for-better quality. These unofficial fees, which are related to cash payments and marked as a precondition for access to the health care system (fee-for-access) is usually formed at the request of the medical staff. The second payment type is made at the patient's insistence in order to improve the service quality or to speed up the treatment process (fee-for-better quality). There are also less risky fees that are made at the patients' insistence (if the patients wish to obtain an additional service or commodity which is not offered within the basic treatment form etc.). In summary, all these fees mainly arise before the treatment process and usually are made in cash form. Gordeev, Pavlova and Groot (2014) find that is extremely important to consider who initiate these payments. It is believed that informal cash payments that occur at the patients' initiative mainly aim to provide a better care quality or speed up the queuing procedure. In contrast, informal cash payments created at the request of medical staff are generally defined as accessing the treatment process. Lampropoulou (2013) believes that doctors who demand to be informally paid are involved in unethical behaviour and degradation of the medical profession. After all, a study conducted by Balabanova, Roberts, Richardson, Haerpfer and McKee (2011) shows that the costs of medical treatment were the reason why 55 % of the respondents did not seek treatment at the time they needed it, but decided to opt for self-treatment. As follows, prerequisite payments are commonly seen as the worst form of informal payments, as it prevents treatment opportunities for those who are not financially able to pay for processes that should be free of charge.

1.3.1.2 Informal cash payments after treatment

All types of informal payments that occur after having received medical treatment are less serious and risky than those made before the treatment. Monetary form of such payments is also observed in this manner. Research results show that three-quarters of informal payments are given at the end of treatment, whereas the cash form of such payments are usually given before the start of treatment. There is a small amount of informal cash payments paid at the end of the treatment. The reason is belief that cash donations are

related to the pre-condition for medical examination, surgery and medical care, while informal in-kind payments are mainly related to expression of gratitude. The very time of payment determines the difference between a bribe and an expression of gratitude. Patients and doctors usually have conflicting opinions when it comes to informal payments. The physicians claim that informal payments generally occur after medical treatment, while this attitude is supported by only a quarter of health care users. Some health care users even claim that informal cash payments are sometimes paid both at the beginning and end of the treatment. If a sick person pays before the treatment started, it is believed that the treatment process will be effective and well done. If an informal donation is made after treatment, it is presented as an expression of gratitude. Based on all the above mentioned data, it is clear that the moment of informal cash payments influences the classification of these donations the most. However, a very small percentage of cash payments is given to employees after treatment, while the largest number of these donations are made before the intervention starts, as a kind of security and guarantee for the sick person (Balabanova & McKee, 2002).

Despite the belief that in-kind payments are usually made after having received treatment, doctors sometimes have a habit of asking for money. Some health providers consider that a gift is a poor and insufficient form, so they demand money as a reward for the hard labour. The patients who have experienced this situation claim that some doctors openly and transparently expressed the view that a cash payment is a more desirable gratitude form than just a gift. Some patients also feel that is easier to show gratitude in cash form after the intervention is made, but as a gift. However, these situations are not so often compared to informal cash payments prior to start of treatment (Shahriari, Belli, & Lewis, 2001).

It has already been stated that payments made after treatment are usually motivated by gratitude and made voluntarily. As opposed to that, informal payments made before treatment are seen as a condition for the treatment process, usually directly or indirectly required from the patient. It is sometimes difficult to determine the moment in which an informal payment was made, especially in the context of chronic diseases (Gaal, Jakab, & Shishkin, 2010).

1.3.2 In-kind payments

Lewis (2000) claims that informal payments are not always illegal and punishable by law in the former Soviet Union countries. This stems from the fact that some informal in-kind payments are not legally required, but as a part of the tradition are not generally sanctioned. More precisely, tradition of gift-giving is an expression of gratitude by those patients who still behave according to socialist organization rules. Mokhtari and Ashtari (2012) state that some informal payment types have taken root in the socialist period and were transferred to the present as national habits. As Shahriari et al. (2001) conclude,

informal in-kind payments are usually paid with the purpose to show gratitude, but can also represent a bribe for ancillary medical services. These payments are intended to be given to service providers: persons or institutions. In-kind payments given to institutional providers are linked to food, medical supplies or bedclothes. In some countries, especially those that have been impoverished by transition, almost all in-patients had to provide their own food, clean laundry, hygiene items and many other items necessary for hospitalization. Patients are sometimes forced to pay for medical assistance themselves, although it should be free of charge for those who are insured. On the other side, in-kind payments intended to be given to health workers are mainly related to gifts of lower monetary value - chocolate, flowers, drinks and cosmetics items.

Gaal et al. (2010) find that informal payments intended to be given to health workers are considered as the remainings of the socialist heritage, while payment intended to be given to institutions could not be presented as a custom, but as a result of an insufficiently funded budget of the medical facilities. However, Caddell and Hazelton (2013) state that is also a meaningful step to assess the gift value (price) given to a doctor, because it helps in determining the nature and purport of these donations. It is believed that the lower value gifts are socially acceptable and their presence is almost non-debatable. On the other side, expensive gifts can prevent access to certain social categories to the health care system, especially if the gifts are required by the employees. Thus, for in-kind payments, it is not only important to determine the moment of payment, but also the gift price. Further, Stepurko et al. (2014b) claim that it is necessary to evaluate patient perception related to gift giving. Accordingly, the questionnaire developed for the purposes of this master's thesis contains questions related to the monetary value of gifts, as well as the patient's perceptions related to these payments - whether the patients felt that they had been forced to make an informal payment and their attitude toward this negative social phenomenon. These authors also believe that is harder to refuse to pay informally if the disease is difficult to treat. Accordingly, the extent to which disease severity affects the willingness to pay informally will be also analysed.

1.3.2.1 Informal in-kind payments before treatment

Balabanova and McKee (2002) state that monetary payments are usually given before or during treatment, while gifts are typically given after the treatment process. In-kind payments are mostly motivated by gratitude. Three-quarters of gifts are generally donated after the hospitalization process, while a very small percentage of in-kind payments are made at the beginning of the treatment process. Stepurko et al. (2010) claim that the definition of informal payments depends on the payment initiator. Furthermore, it is important to determine who receives the payment and the monetary gift value. These authors also argue that a very small percentage of in-kind payments are provided at the beginning of the treatment process, as it is not a common practice. Gifts represent patients'

gratitude and are rarely given before the commencement of medical intervention. Gaal and McKee (2005) also consider the payment before treatment as a form of corruption, while payments after receiving treatment are benign in their nature and do not represent a threat to the functioning of the health care system.

1.3.2.2 Informal in-kind payments after treatment

Stepurko et al. (2010) claim that informal in-kind payments are in most cases done after service was provided. Shahriari et al. (2001) describe such payments as part of the tradition, which include cosmetics, chocolate, coffee, wine, flowers and other lower value gifts. Most respondents said they were in a position to give gifts to health staff due to the need to express appreciation. In fact, in-kind payments were customary in the socialism period and even more present than cash payments. Balabanova and McKee (2002) emphasize that majority of gifts are given after the treatment process is completed. Pitea, Cojocaru and Oprea (2014) also claim that informal payments made before/during the treatment process could indicate a higher level of coercion than those payments made after treatment. In general, informal payments that were made after having received treatment are seen as willingly given donations.

Caddell and Hazelton (2013) argue that gift giving is quite common practice in health institutions. Some believe that the practice of giving gifts should be abolished, because this negative phenomenon could affect the quality of provided medical care. Some other participants have the attitude that patients should be allowed to express gratitude by means of a modest gift in specific circumstances. Some gifts given to doctors are conditioned by culture and tradition, while some other givings are not only gratitude after the treatment is completed, but also the patients' desire for better care in the future. Avdyli (2010) presents the results of the conducted study in Kosovo which prove that the highest percentage of cash payments is given before medical intervention started, while in-kind payments are generally given after the intervention is done, as an expression of gratitude. While the gift giving practice after intervention is completed is mostly benign in its nature, informal payments marked as fee-for-service have potentially serious implications. Hence, this conducted study in Kosovo concluded that in-kind payments are less dangerous and in most cases voluntarily given to those who are responsible for treatment. Gaal et al. (2006) believe that in-kind payments are motivated by health care consumer appreciation for being treated. Such an attitude towards benign informal payments stems from the belief that this type of donations does not affect efficiency and equity, but may have a positive effect on accountability and a better mood among the employees. Bartha, Eross and Fernezelyi (2015) even find that gift donations at the end of treatment should be regulated by law as acceptable, because such acts are completely benign. Nonetheless, this regulation was never been implemented because the majority believes that informal payments must not be legally acceptable.

1.3.3 Service payments

Williams et al. (2016) present informal service payments as donations, trips, sponsorships and similar forms of unofficial giving. These payments are not the common form of cash or in-kind donations, but services and goods intended to be given to individuals within public health institutions in exchange for the service in the health field. If a person has a travel agency, he/she may offer a trip in exchange for treatment that will include additional privileges or conditions. Shahriari et al. (2001) define these donations as services offered to medical staff in return for over-average medical care. The services offered by the patient depend on his/her profession, because a service from the patient's business range will usually be offered.

1.3.3.1 Informal service payments before treatment

As Balabanova and McKee (2002) conclude that payments before the start of medical treatment are more serious and risky than those which are made after the treatment is finished. The reason for this stance comes from the conviction that payments before treatment are usually made at the doctor's request or voluntarily given by those patients who are afraid that they will be denied the services if they do not pay. Consequently, these payments may also represent a guarantee that treatment will be offered in the best manner. To summarize, service payments which occur before treatment has been completed (services, donations, travel, sponsorships) are seen as some type of condition and are made with the purpose of bribing the staff. Pitea et al. (2014) state that service payments are less described in the literature, but existing data imply that these payments are mostly related to sponsorships. These authors also advocate that informal service payments made before or during treatment are generally seen as forced payments. Contrary to the above, informal service payments made after completion of medical treatment are mostly generated voluntarily. Stepurko, Pavlova, Gryga, Murauskiene and Groot (2015) also agree that informal payment emergence is an important factor influencing the definition and nature of all informal payment types. Stepurko et al. (2010) present informal service payments in the form of dinners, trips, sponsorship or some services in the sphere of the patient's profession.

Yang (2016) mentions drug kickbacks, as one of the informal payment types in the bribe form, which pharmaceutical companies or their representatives give to doctors in order to prescribe drugs of their pharmaceutical companies. The health care system in China has identified and named this payment type as commercial corruption. Patients believe that drug recipes prescribed by illegally paid doctors are overestimated and too expensive. In their opinion, expensive drugs should be replaced by cheaper, but equally effective drugs. On the other side, physicians who are in cahoots with the pharmaceutical company representatives receive certain benefits for these services-donations, sponsorship and

travels. Hence, informal service payments are not presented in classical cash or in-kind payment forms, but *quid pro quo*. Informal service payments are paid both by patients and representatives of pharmaceutical companies. These are mostly patients who are able to provide some of their services in return for received health care or they could be damaged as a third party in the arrangement between physicians and pharmaceutical companies. This payment type mostly arises before starting medical treatment. Nevertheless, the focus of this master's thesis is on the relation between doctors and patients, rather than doctors and representatives of pharmaceutical companies, and therefore only payments made in health institutions by consumers of public health services will be examined.

1.3.3.2 Informal service payments after treatment

As underlined before (Pitea et al. 2014) the moment of informal payments better describes the nature and purpose of the payment than pure definitions. Payments made after the treatment has been completed are less dangerous and more acceptable in the society. Also, informal service payments made after the treatment has been completed are generally presented as gratitude payments. However, service payments do not often happen after treatment has been finished. Such payments usually occur before or during the provision of health services. But, according to a study conducted by the Central and Eastern European Health Network (2002), whose goal is to influence health care changes in CEE countries for the benefit of the health users, cash informal payments were directly involved in various forms only in three cases - tips, sponsorships or donations. The last two payments are considered as informal service payments. If Tengilimo, Guzel, Toygar, Akinci and Dziegielewski (2015) argue that majority of the monetary payments are made before the medical service started, it means that sponsorships and donations, as direct service payments in the cash form, are also mainly made before treatment. Based on these data, it can be concluded that informal service payments mostly occur before treatment has been started, as an agreement between health providers and patients (Gordeev et al., 2014) or an agreement between doctors and representatives of pharmaceutical companies (Yang, 2016).

Table 2. Typology of informal payments for health care

	Illegal activity	Legal or vague activity
Better treatment	Black payments	Grey payments
Equal/worse treatment	Lost payments	Gratitude payments

Source: N.Cohen, *Informal payments for health care-the phenomenon and its context*, 2011, p. 290, Table 1.

2 HEALTH CARE SYSTEM IN BOSNIA AND HERZEGOVINA

2.1 Organization of the health care system in Bosnia and Herzegovina

BiH is a transition country in South East Europe. According to the latest official data from the Census held in 2013 (Agency for Statistics of Bosnia and Herzegovina, 2013), BiH has a population of 3.531,159, and is defined as an upper middle-income country according to the World Bank data (2016). The administrative set-up of BiH consists of two entities: the Federation of Bosnia and Herzegovina (FBiH) and Republika Srpska (RS), as well as a district: Brcko District (BD). FBiH has ten cantons and each + has its own laws and jurisdictions. The organization, financing, health care delivery and entire health care system of BiH are under the jurisdiction of the two entities, ten cantons within FBiH and BD. The Ministry of Civil Affairs at the state level is the only official body of public administration with responsibilities which are directly related to health, as there is no independent Ministry of Health at the state level. The organizational structure of the Ministry of Civil Affairs consists of nine departments with different objectives and tasks related to laws and its enforcement. One of nine departments is the Health Department, which has a coordinating role between the entities and BD. However, there are no real functions and authorities at the state level that can provide macroeconomic sustainability of the health sector in BiH, especially if the fact that only 1.5% of the total employees in the Ministry of Civil Affairs is dealing with health care issues is considered (European Commission, 2004). Therefore, all laws related to health care and its enforcement are defined by the two entities, as well as separate laws within each of the ten cantons in FBiH and BD with its own laws.

Mujikic (2011) finds that the health care system in BiH is only normatively based on the principles of solidarity, availability and equity. Practice and experience show that certain social categories have limited access to the health care system, due to lack of funds that are needed for treatments, as well as different approaches to the health sectors in different geographical areas. Health care is organized at the primary, secondary and tertiary health care levels. The division of medical tasks between these three levels is organized according to the purport, complexity of medical procedures, doctor specializations and available medical equipment within institutions. This division is within the competence of two entities and BD. According to the latest data of the WHO (2014), private OOPs, as a percentage of total health expenditures, amount to 27.9 % in BiH. Although the focus of this master's thesis is on the determinants and factors behind informal payments in the context of BiH, it is important to know the percentage of total OOPs, because the informal component is a part of these total expenditures.

Referring to the historical background, Cain, Duran, Fortis and Jakubowski (2002) state that the war in BiH led to the fact that health care was below the satisfactory level in that

period. The Dayton Agreement has destroyed the existing concept of the health care system and divided it into two parts. This division has also reflected on the complete health care organization, financial resources and medical supplements. Accordingly, entities have adopted their own laws and regulation related to public health care. A few years later, BD was created in 2000 with its own laws related to health care, organizations within public health institutions, and funding from the budget allocated to health care, independently of both entities. In RS, the health care system is centralized, while FBiH has a decentralized health care system, which is the main difference in organisation of health care between the entities. FBiH has ten cantonal administrations which are responsible for health care delivery at the primary and secondary health care level, through their own ministries. BD, as the third administrative unit in the state, provides health care at the primary and secondary level to all of its residents. Before the collapse of the former Yugoslavia, the health care system was centralized at the level of the Republic of Bosnia and Herzegovina. After the war and the Dayton Agreement, the country was divided into two entities and one district as described above. Such decentralized health care and health insurance systems in BiH at all levels present a major difficulty in achieving equal health care access for all citizens of BiH and thus negatively affect the principle of equality and solidarity.

As already mentioned, the health care systems and provision intended to cover insured persons in BiH are under the jurisdiction of the two entities (and cantons in FBiH) and BD. This type of health care provision is non-transferrable between the two entities, BD or within ten cantons in FBiH. Residents of BiH have different privileges and benefits, as well as the right to access the health care system in different parts of the country, even if they pay equal amounts of contributions. Since total health revenues and expenditures associated with health insurance are enormous, the functioning of the health care system in transition countries, such as BiH, is a very complicated process. Although the health care system should be based on the equality and solidarity principle, and at least a basic health care package should be available to all social categories, in practice it is not so. The authorities in BiH have made efforts to cover the majority of the population with a health insurance program, financing it in different ways and from different sources, in order to comply with international obligations related to health care, but in spite of these attempts, a large part of the population of BiH remained uninsured (Zukic, 2010). To further clarify this, the functioning of the health care system in both entities and BD will be further explained in more detail.

2.1.1 Health care system in the Federation of Bosnia and Herzegovina

FBiH, as one of two entities within BiH, covers approximately 51% of the total territory of the country. It is divided into ten administrative cantons, where each has its own governments and assemblies, as well as its own laws, including the health care law. The health system in FBiH is decentralized, and most of the functions and responsibilities are

under the jurisdiction of cantons. The Ministry of Health at the entity level and the Health Insurance and Reinsurance Institute of FBiH play the key role in the health network. While the Ministry of Health of FBiH is responsible for formulating health policies at entity level, the cantons have the same responsibilities for these lower government levels. Consequently, the health care sector in FBiH consists of eleven ministries of health (Ministry of Health at the entity level and ten health ministries at the cantonal level), eleven health insurance institutes (Health Insurance and Reinsurance Institute at the entity level and ten health insurance and reinsurance institutes at cantonal level) and eleven Institutes of Public Health by the same principle (European Commission, 2004).

In accordance with constitutional provisions, health insurance in FBiH is regulated by the Law on Health Insurance of FBiH. This Law officially entered into force in 1998. Furthermore, ten health insurance funds have been established at the cantonal level for each of the ten cantons, independent of each other. It is highly important to mention that the Federal Solidarity Fund has also been established in order to provide health care access to all social categories in this entity. The inequality in revenue inflows in the form of health insurance contributions of the cantonal health care funds led to the establishment of such a fund at the entity level. More specifically, due to differences between wealthier and poorer cantonal health care funds, inhabitants within this entity did not have the same health access and rights to treatment. These differences thus resulted in inequalities in the process of seeking/providing medical services at the cantonal level. Consequently, a single fund, as a coordinating body at FBiH level, was established in order to coordinate and harmonize the imbalances at the cantonal level (Zukic, 2010).

2.1.2 Health care system in the Republic of Srpska

RS is one of two entities in BiH that covers almost 49% of total territory. Unlike the decentralized health care system of FBiH, the health care system in RS is highly centralized, with the overall power concentrated in the Ministry of Health and Social Welfare, Institute of Public Health and the Health Insurance Fund. RS does not have lower level administrative units in the form of cantons. In fact, the Ministry of Health and Social Welfare of RS has the key role in proposing and implementing health care laws, which means that this Ministry is responsible for the entire health sector for this entity. In addition to the main functions relating to laws and their enforcement, this institution also has other functions related to health policy making, developing health care strategies, sanitary inspection, health inspection and coordination between health institutions at all health care levels (primary, secondary and tertiary health care). The Institute of Public Health of RS is responsible for functions such as research and education in the public health field, health promotion and monitoring of the population. The Health Insurance Fund of RS is responsible for collecting health insurance contributions (European Commission, 2004). Health insurance in RS is centralized and exists at the entity-wide

level. The Health Insurance Fund comprises 8 branch offices for 8 larger and more important urban centers in RS. According to this author's opinion, such centralized organisation of health care that covers the entire entity is more acceptable for the insured citizens and those seek treatment, compared with the health care organisation at the FBiH level (Zukic, 2010).

2.1.3 Health care system of Brcko District

The third administrative unit in BiH is BD, which covers about 1.5% of the total BiH territory. BD has its own Government with several departments and one of them is the Department of Health and Other Services. This department is responsible for the provision and management of primary and hospital health care and public health activities. In summary, the Department of Health and Other Services within the BD Government is the only responsible public health body for this part of the country (European Commission, 2004). Cain et al. (2002) state that BD was established in 2000 as a result of changes at the state level. BD has adopted its own laws, procedures and regulations, independent of both entities. Accordingly, BD provides primary and secondary health care for all residents of this geographical area. The Health Insurance Fund of BD covers the entire territory of this territorial unit.

2.2 Historical background of informal payments in Bosnia and Herzegovina

BiH was a part of the Socialist Federal Republic of Yugoslavia (hereinafter: SFRY). In the period between 1960 and 1990, SFRY was experiencing economic growth. However, the economic growth was not equal in all the republics within SFRY (European Commission, 2008). Nowadays, BiH is one of six independent states, created out of the SFRY dissolution, which became an independent state in 1992 (Hurtic, Sapcanin, & Woodward, 2000). These authors say that the war interrupted transition from a socialist to a market economy. War events during the 1990s led to greater decline in the economy of BiH. As Zupcevic and Causevic (2009) conclude, economic decentralization has led to the rise of corruption, as a result of the weak state system and underfunded public sector. This is precisely one of the main goals of this master's thesis – researching informal payments in the public health sector in BiH. Simunovic (2007) claims that the existing health care system in BiH felt the negative effects of the war and post-war period. After all, in order to become familiar with the current issues related to the informal payment component in the health care system of BiH, it is necessary to introduce the historical background of the problem. It is necessary to elaborate the functioning of the health insurance and payment methods from the very beginning. Salihbasic (2009) explains that BiH was part of the Ottoman Empire since 1463, when it lost its independent state status, to 1878. This period

under Ottoman administration, which lasted for 400 years, was described as a backward feudal society. In that period, trade and commerce were better organized, while health was very poorly regulated. There was no form of health insurance. Such government form which functioned without health insurance was mainly based on the principle of charity given to the poor social categories by a smaller number of municipal and religious organizations and did not require any formal payment form. Therefore, if there was no formal form of payment required by legal norms, it can be concluded that all payments during that period were informal. Cain et al. (2002) claim that the earliest state forms of BiH date back to the period between the tenth and twelfth century. Looking at the historical background, it is necessary to explain the functioning of the health system of BiH during that period.

The Austro-Hungarian administration had first initiated the development of a health care system in a model that was similar to the systems of other countries that belonged to the Austro-Hungarian Empire. The first law introducing health insurance was adopted in 1888, but it was not intended for everyone, rather only for certain social groups. After that, compulsory insurance in 1910 was introduced for all workers. The public health care system and health care provision in BiH was further developed after 1918, during the period of establishment of the Kingdom of Yugoslavia. A ministry of health was established in 1920 for the first time in the history of BiH. Social insurance for workers was introduced in 1946. Furthermore, a law related to “health insurance” and “mandatory health protection” was adopted in 1970. This law guaranteed free health care provision and protection for vulnerable population groups, such as pregnant women, children, patients suffering from a specific disease and health users in special living conditions. The existing compulsory insurance existed as part of the health care system until the beginning of the war. According to Bredenkamp, Mendola and Gragnolati (2011), Western Balkans countries, such as BiH, Montenegro, Kosovo, Serbia, Macedonia, Croatia and Slovenia, had a Stampar health system model, in the period when these countries were part of the former Yugoslavia. It was a method of financing from the compulsory social insurance contributions, rather than financing through the state budget. Such a health care financing method was specific to Eastern Europe countries. Today, social health insurance financing is the dominant health care financing method in BiH, as well as in Serbia and Montenegro.

In most CEE countries, unofficial payments were the heritage of the Hungarian health system and prevailed during the socialist regime. Accordingly, these payments were recorded in the Soviet Union countries at earlier times (Szende & Culyer, 2006; Feeley, Sheiman, & Shishkin, n.d.). Atanasova, Pavlova, Moutafova, Rechel and Groot (2013) also emphasize that payments made through unofficial channels have existed before the transition process, even in the period of socialism. But in that period, these payments were mostly gifts in kind, intended to be given to physicians at the end of successful medical treatment. According to Stepurko et al. (2014b), the existence of the custom of giving gifts

to medical staff has been observed since the 1970s. It was customary to give gifts to the physicians, as a sign of good intent. However, the transition led to certain changes, including the way of understanding gift giving to the health staff. "Gratitude gifts" that existed in the socialism period became the "general practice", due to lack of finances and medical resources within health facilities. Nowadays, informal donations are not only the habit or custom as it used to be in socialism, but also a way of financing the public health sector. Baschieri and Falkingham (2006) state that economic turnaround of former socialist countries has led to the existence of informal payments in the form in which they exist now. During the transition from a central planning to market economy, almost all transition countries experienced a decline in GDP and a difficulty in public sector financing, including the health sector. Lack of financial resources within the public sector in these countries has led to increases in both - informal payments and the percentage of health service co-payments. Nowadays, these payments are not only gifts, but also a cash payment requested by health care providers.

McKee and Nolte (2004) state that many health care reforms were the result of the political, social and economic transition of the 1990s in CEE. After many changes that occurred as the result of transition, it was not possible to maintain the health care system on the full-coverage principle. These authors argue that the Soviet model was able to provide basic medical care to all residents in need of such care. Within such a health care system, costs paid by the health care users were very low. But such functioning of the health care system could not be maintained due to changes in the health care environment. All subsequent changes that had to be implemented were mostly transferred as a burden to health care consumers. Consequently, health care provision has changed in recent years in many European countries. The Soviet health care model has been replaced by the new health insurance systems in all transition countries through number of reforms.

Baji et al. (2013) postulate that attitudes related to the emergence of informal payments are divided in many European countries. Many authors believe that informal payments are a heritage of the socialist regime, while some others consider that this negative phenomenon had existed even before socialism. The fact is that 20 years after fall of the communist regime informal payments are still present in public health institutions. Stepurko (2013) states that economic and socio-political changes have influenced the provision of public health care. Indeed, there are many studies, such as the one conducted by Gotsadze, Bennett, Ranson and Gzirishvili (2005), which reveal the fact that informal payments existed during the socialism period in the gratitude form. In the period when most countries moved away from a state-funded financing model to a purchaser-provider model, the informal component of total OOPs has become more common in public health sectors. Also, Lewis (2000) argues that misuse of private donations given by health care consumers were documented early in the transition period in many European countries. The area of informal payment gained interest at the beginning of the 2000s. Health policies began to

seriously deal with this issue and then to present it as corruption in the health care sector, not just as part of the customs and culture. Former socialist countries were faced with the problem of health sector financing, so informal payments became the complementary funding source for many health care workers (Cohen, 2011; Tediosi, Aye, Ibodova, Thompson, & Wyss, 2008).

To conclude, Stepurko et al. (2014b) claim that unofficial payments voluntarily given by health care users to health care providers have been observed to exist since the 1970s in post-Soviet European countries. They argue that such illegal forms of payment have existed prior to the socialism. As the transition changed the intent and purpose of informal payments, it also has changed the phrases that referred to this phenomenon. Originally, it was only “gratitude”, while now it is “envelope“, “under-the-table payment” or even “corruption“. Also, they argue that payments outside the official payment channels are not specific to post-Soviet countries, but also countries worldwide. Gauthier and Wane (2007) claim that a growing body of analysis demonstrated that allocating more budgetary resources to the public health care sector will not affect the better final outcome if there are other malignancies and irregularities within the system which hinder its functioning. This way of thinking leads to the conclusion that is important to increase the transparency and accountability levels within the public health sector. This area of health related corruption, which will be analyzed through this master's thesis, should be a good starting point for all future strategies which could reduce the level of informal payments.

3 EMPIRICAL RESEARCH

3.1 Introduction

Considering the existing and previously reviewed literature, we conclude that the phenomenon of informal health care is insufficiently explored in the specific context of BiH and at the level of all its administrative units. This topic is multifaceted and sensitive in its very nature, particularly considering the complex and interrelated historical and cultural features which play important role in understanding the nature of informal health care payments explored earlier in the thesis. In view of this, the empirical part of this master's thesis attempts to analyse the factors that influence these payments while integrating the theoretical propositions previous literature, as well as considering the specificities of BiH context and culture. The research design and operationalisation of the research, including the questionnaire used in this empirical analysis, were principally developed on the basis of the following study - “Formal and informal household spending on health: a multicountry study in Central and Eastern Europe”, conducted by the Central and Eastern European Health Network (2002). Worthwhile noticing is that the original questionnaire was only marginally modified and adopted to reflect on the specificities relating to culture, customs and health care system within BiH. The data used in this

analysis have been collected through the primary research. We relied on a stratified random sampling method to ensure the proper geographical coverage given the differences in the health care systems across BiH territory. A primary study was conducted on a total of 468 respondents (total structure of the sample). The sampling was done in two phases. The respondents were selected randomly within the selected local communities (municipalities/cities) and the probability of being selected in accordance with the size of the population and geographical stratification criteria. The HH survey was carried on the basis of household survey method. The data were collected through the questionnaire and an in-depth interview with each respondent.

The analysis has been performed on primary data for the final sample consisting of 368 respondents. The hypotheses were tested by the means of regression analysis: where the dependent variable is the value of informal payment and independent variables refer to the multifaceted socio-economic factors, attitudes towards informal payment and perception of disease severity. All the data were processed using SPSS software.

3.2 The sample and the data

Out of 468 respondents (households) selected for the survey, the data relating to informal payments were collected for 446 households in total. In view of this, the total sample consists of 446 households, such that 22 households have not been interviewed and were excluded from the sample as they have not satisfied the basic sampling criteria i.e. the household member (having or) has had a sick person who was treated in a public health institution/private health institution/self-treated. The household members that did not request health care services in public institutions provided information about their socio-economic status. Noteworthy, they were not able to provide answers related to informal payments within public health care sector. Socio-economic data were segregated by selected research criteria groups (respondents who used public health sector, respondents who used private health sector, respondents who did not have a sick household member in the past 24 months and self-treated household members group) in order to provide an overview of differences between these groups (see Table 3).

Notwithstanding this, the final sample consists of 387 respondents in view of additional selection criteria developed for the purpose of this analysis. Specifically, in order to participate in the research, at least one household member had to be sick during the last 24 months and had to request health services in public health institutions, as opposed to private health care institutions, so additional 59 households were excluded from the analysis. If multiple persons had been sick, information about informal payments were collected in relation to a person whose medical situation was perceived as the most severe. The questionnaire has included issues related to the basic socio-economic characteristics of the respondents, such as number of household members, average monthly household

income, age and gender of the sick person. Also, a part from traditional factors affecting informal payments, such as income, severity of illness and patient attitudes were examined.

Table 3. Structure of the sample

			Entity			Total
			Republika Srpska	Federation of BiH	Brcko District	
Sample structure	Requested health services in public institutions	Number	140	237	10	387
		% within Entity	85.4	81.2	83.3	82.7
	Self-treating	Number	1	15	0	16
		% within Entity	0.6	5.1	0.0	3.4
	Requested health services in private institutions	Number	20	23	0	43
		% within Entity	12.2	7.9	0.0	9.2
	There were no sick household members in the last 24 months	Number	3	17	2	22
		% within Entity	1.8	5.8	16.7	4.7
	Total	Number	164	292	12	468
		% within Entity	100.0	100.0	100.0	100.0

About 61% of respondents are from FBiH, 36% from RS and 3% from BD. The respondents were selected from seven municipalities/cities within FBiH, eight municipalities/cities within RS and BD. The sample size within each municipality/city was based on the proportion of population as per the 2013 BiH Census (Table 4).

Table 4. Number of respondents by municipality/city

		Sample structure				Total
		Requested health services in public institutions	Self-treating	Requested health services in private institutions	There were no sick household members in the last 24 months	
City	Mrkonjic Grad	17	0	1	0	18
	Milici	12	0	1	0	13
	Vlasenica	12	0	1	0	13
	Derвента	28	0	2	0	30
	Foca	19	0	2	0	21
	Laktasi	34	1	8	3	46
	Petrovo	7	0	0	0	7
	Istocno Novo Sarajevo	11	0	5	0	16
	Dobretici	3	0	0	0	3
	Teocak	11	2	0	0	13
	Busovaca	31	0	3	2	36
	Kakanj	57	7	5	7	76
	Zavidovici	58	3	1	0	62
	Capljina	45	0	7	5	57
	Posusje	32	3	7	3	45
	Brcko Distrikt	10	0	0	2	12
Total		387	16	43	22	468

Among respondents who requested health services in public institutions, 35.7% of them have an average household income up to 1,000 Bosnian mark (hereinafter: BAM), 41.6% of them have an average household income in the range between BAM 1,001 to 2,000, while 21.4% of them responded to have an average household income between BAM 2,001 and 4,000. In the group which requested health services in private institutions there

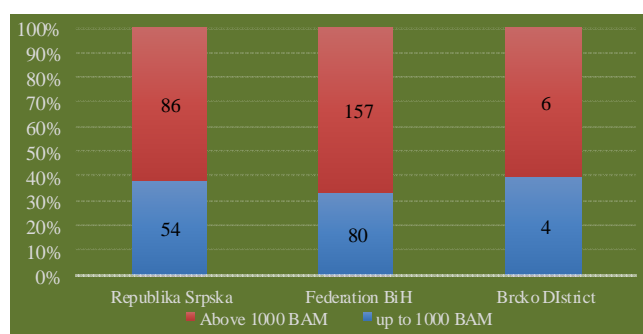
is a much larger share of households with an income ranging between BAM 2,001 and 4,000 (81.4%). In Table 5 frequencies of household income are presented by sample structure.

Table 5. Number of respondents by the sample structure and the average household income

		Sample structure				Total	
		Requested health services in public institutions	Self-treating	Requested health services in private institutions	There were no sick household members in the last 24 months		
Average house income	under 300	Number	21	0	2	0	23
	BAM	% within Group	5.4	0.0	4.7	0.0	4.9
	301-600	Number	49	4	0	0	53
	BAM	% within Group	12.7	25.0	0.0	0.0	11.3
	601-1,000	Number	68	6	0	0	74
	BAM	% within Group	17.6	37.5	0.0	0.0	15.8
	1,001-2,000	Number	161	5	5	7	178
	BAM	% within Group	41.6	31.3	11.6	31.8	38.0
	2,001-4,000	Number	83	1	35	15	134
	BAM	% within Group	21.4	6.3	81.4	68.2	28.6
	above 4,000	Number	5	0	1	0	6
	BAM	% within Group	1.3	0.0	2.3	0.0	1.3
	Total	Number	387	16	43	22	468
		% within Group	100.0	100.0	100.0	100.0	100.0

Noteworthy, there is no statistically significant difference in the levels of income between the respondents (households) from the two entities, who requested services in public institutions (Chi square=0.974; df=2; p=0.614). In BD, the percentage of respondents with average household income above BAM 1000 is 60%, in FBiH 66.2% and in RS 61.4% (Figure 2).

Figure 2. Distribution of household income by entities/district



The average number of people per household is 3.74 (above 3.5 for each entity/district). The average number of male household members is about 4% higher comparing to the number of female household members (Table 6).

Table 6. Descriptive statistics: number of household members by entities/district and gender

	Entity	Mean	Std. deviation	N
Number of male household members	Republika Srpska	1.93	.921	164
	Federation BiH	1.89	.877	292
	Brcko District	1.83	1.030	12
	Total	1.91	.895	468
Number of female household members	Republika Srpska	1.85	.833	164
	Federation BiH	1.83	.781	292
	Brcko District	1.75	.754	12
	Total	1.83	.797	468
Number of household members	Republika Srpska	3.78	1.339	164
	Federation BiH	3.72	1.170	292
	Brcko District	3.58	1.443	12
	Total	3.74	1.237	468

About 59% of the total sick persons (sick persons who were treated in a public health institution/private health institution/self-treated) are females. This is presented in Table 7.

Table 7. Gender of the sick persons by entities/district

Entity		Gender of the sick person		Total
		male	female	
Republika Srpska	Number	64	97	161
	% within Entity	39.8	60.2	100.0
Federation BiH	Number	114	161	275
	% within Entity	41.5	58.5	100.0
Brcko District	Number	5	5	10
	% within Entity	50.0	50.0	100.0
Total	Number	183	263	446
	% within Entity	41.0	59.0	100.0

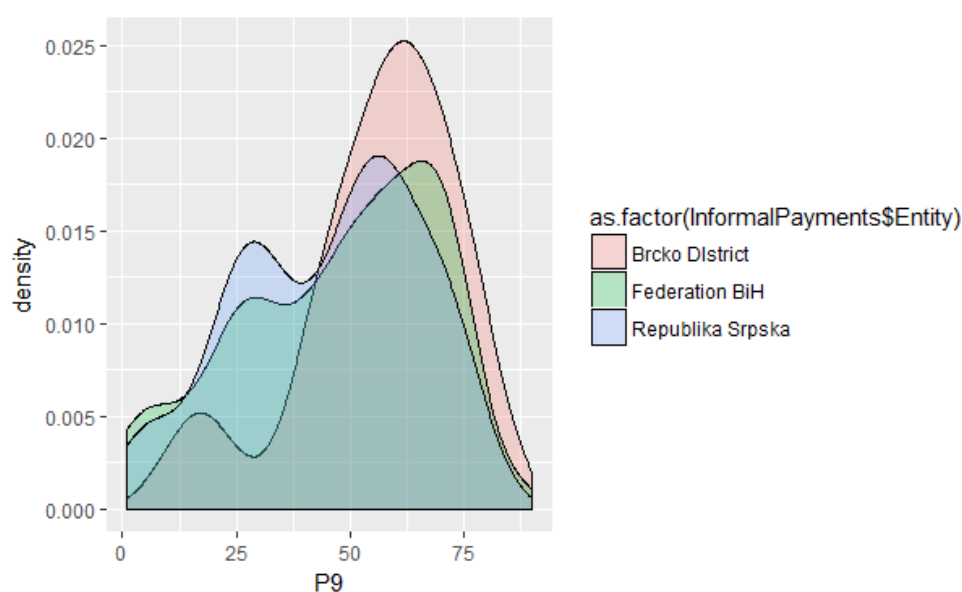
In BD, the average age of sick persons is 56.30, while the average age of sick persons in FBiH and RS is lower (47.28 in FBiH and 45.54 in RS). This is shown in Table 8.

Table 8. Descriptive statistics: age of the sick persons by entities/district

Entity	Mean	Std. deviation	N
Republika Srpska	45.54	20.067	161
Federation BiH	47.28	21.520	275
Brcko District	56.30	17.487	10
Total	46.85	20.949	446

Figure 3 presents the sample structure by age and by entity. The density plots show that age distributions for persons requesting health services in public institutions in all three entities is leaning toward older people, while in BD there is a lower number of young people (however, the BD sample is smaller and the distribution is less likely to represent the distribution in population).

Figure 3. Density plot of age by entities/district



About 99.2% of the persons requesting health services in public institutions have health insurance. About 60% of persons requesting health services in public institutions in both entities and BD had been sick from 1 to 14 days. In BD, there were no persons requesting health services in public institutions with duration of illness from 14 days to 3 months (Table 9).

Table 9. Number of persons requesting health services in public institutions, by duration of illness

		Entity			Total	
		Republika Srpska	Federation BiH	Brcko District		
Duration of illness	1 to 7 days	Number	49	75	3	127
		% within Entity	35.0	31.6	30.0	32.8
	7 to 14 days	Number	36	74	3	113
		% within Entity	25.7	31.2	30.0	29.2
	14 days to 1 month	Number	28	29	0	57
		% within Entity	20.0	12.2	0.0	14.7
	1 to 3 months	Number	11	15	0	26
		% within Entity	7.9	6.3	0.0	6.7
	More than 3 months	Number	16	44	4	64
		% within Entity	11.4	18.6	40.0	16.5
Total		Number	140	237	10	387
		% within Entity	100.0	100.0	100.0	100.0

About 9% of the persons requesting health services in public institutions had a terminal illness. The share of terminally ill is similar across entities/district with a somewhat lower share in RS (Table 10).

Table 10. Number of persons requesting health services in public institutions by seriousness of illness

			Entity			Total
			Republika Srpska	Federation BiH	Brcko DIstrict	
Seriousness of the illness	Low grade illness	Number	47	76	3	126
		% within Entity	33.6	32.1	30.0	32.6
	Average grade illness	Number	64	98	3	165
		% within Entity	45.7	41.4	30.0	42.6
	Severe illness	Number	20	37	3	60
		% within Entity	14.3	15.6	30.0	15.5
	Terminal illness	Number	9	26	1	36
		% within Entity	6.4	11.0	10.0	9.3
Total	Number	140	237	10	387	
	% within Entity	100.0	100.0	100.0	100.0	

The majority of persons requesting medical help in public institutions had been sick for more than a week before requesting health services (about 45%). The lowest number of persons requesting health services sought medical help in the few hours of occurrence of the first symptoms. The reason for the low number of responses related to seeking medical help in the first few hours might be that the respondents did not differentiate between the responses *few hours* and *as soon as symptoms occurred*. Both answers indicate a quick reaction in seeking medical help (Table 11).

Table 11. Number of persons requesting health services in public institutions by duration of illness before seeking medical help

			Entity			Total
			Republika Srpska	Federation BiH	Brcko DIstrict	
Duration of illness before seeking medical help	As soon as symptoms occurred	Number	56	77	4	137
		% within Entity	40.0	32.5	40.0	35.4
	A few hours	Number	1	1	0	2
		% within Entity	0.7	0.4	0.0	0.5
	Less than a week	Number	28	46	1	75
		% within Entity	20.0	19.4	10.0	19.4
	More than a week	Number	55	113	5	173
		% within Entity	39.3	47.7	50.0	44.7
Total	Number	140	237	10	387	
	% within Entity	100.0	100.0	100.0	100.0	

The services commonly requested by respondents from health professionals relate to primary care, specialist exams and hospitalization. The least number of respondents requested dentistry services in public institutions and emergency help (Table 12).

Table 12. Number of respondents by different type of health services requested in public institutions

	Entity					
	Brcko District		Federation BiH		Republika Srpska	
	Number	N %	Number	N %	Number	N %
P17.1 Primary care	2	20.0	105	44.3	58	41.4
P17.2 Emergency help	0	0.0	10	4.2	9	6.4
P17.3 Specialist exam	3	30.0	115	48.5	56	40.0
P17.4 Lab and diagnostic	0	0.0	40	16.9	16	11.4
P17.5 Hospitalization	4	40.0	94	39.7	71	50.7
P17.6 Dentistry	0	0.0	4	1.7	2	1.4

In FBiH and RS, the most frequent reason for requesting health services in public institutions is that respondents are directed to such institutions by the family physician. The second and third most frequent reason for requesting health services in public institutions were related to the availability of family physicians in these institutions and their good reputation. Distribution of answers related to reasons for visiting the public institution is similar across entities/district with the exception of BD where about 20% of research participants indicated vicinity of public institutions as one of the key reasons (Table 13).

Table 13. Number of respondents by the underlying reasons for requesting health services

	Entity					
	Brcko District		Federation BiH		Republika Srpska	
	Number	N %	Number	N %	Number	N %
P18.1 Nearest health institution	2	20.0	2	0.8	0	0.0
P18.2 Family physician	3	30.0	78	32.9	65	46.4
P18.3 Good opinion about particular physician	3	30.0	54	22.8	30	21.4
P18.4 Good reputation of health institution	0	0.0	1	0.4	3	2.1
P18.5 Previous experience in health institution	0	0.0	1	0.4	3	2.1
P18.6 Less expensive	0	0.0	1	0.4	2	1.4
P18.7 Directed to that institution	2	20.0	95	40.1	66	47.1
P18.8 Only institution for specific illness	0	0.0	5	2.1	5	3.6
P18.9 Some other reason	0	0.0	2	0.8	4	2.9

About 89% of the respondents assessed medical treatment to be effective. Assessment of effectiveness is similar in the entities with a 6.1% higher share of participants in FBiH assessing treatment as successful compared to RS (Table 14).

Table 14. Effectiveness of the medical treatment assessed by respondents

		Entity			Total
		Brcko District	Federation BiH	Republika Srpska	
Successful	Number	9	216	119	344
	% within Entity	90.0	91.1	85.0	88.9
Not successful	Number	1	21	21	43
	% within Entity	10.0	8.9	15.0	11.1
Total	Number	10	237	140	387
	% within Entity	100.0	100.0	100.0	100.0

The share of respondents in FBiH who offered money to medical staff as part of informal payment is almost double compared to the share of respondents from RS. The share of respondents from BD who offered money as part of informal payment is closer to the share in FBiH. Respondents in RS more often provided gifts as part of informal payment compared to respondents from FBiH. Gifts were more often provided to medical staff compared to money and services. Provision of personal services to medical staff as part of informal payment was very rare and happened only in 4 cases in FBiH and 1 case in RS (Table 15).

Table 15. Number of respondents who provided informal payment by type of informal payment

Type of informal payment	Brcko District		Federation BiH		Republika Srpska		TOTAL	
	Number	N %	Number	N %	Number	N %	Number	N%
Money	3	30.0	57	24.1	18	12.9	78	20.2
Gift	5	50.0	105	44.3	76	54.3	186	48.1
Services	0	0.0	4	1.7	1	0.7	5	1.3

Respondents in most of cases provide money as a form of informal payments when requiring hospitalization (14.5% of the sample), whereas none provided informal payments while requesting emergency help, and only 2 participants (0.5%) gave money to dentists. This is presented in Table 16.

Table 16. Descriptive statistics on given money as form of informal payment by type of health services, in BAM

INFORMAL PAYMENT - MONEY		Primary care	Emergency help	Specialist exam	Lab and diagnostics	Hospitalization	Dentistry
N	Valid	1	0	8	1	56	2
	%	0.3	0.0	2.1	0.3	14.5	0.5
Mean		15.00	0.00	220.00	3.00	208.04	100.50
Mode		15	0	5 ^a	3	100	1 ^a
Minimum		15	0	5	3	50	1
Maximum		15	0	500	3	3,000	200
Percentiles	25	15.00	0.00	16.25	3.00	100.00	1.00
	50	15.00	0.00	250.00	3.00	100.00	100.50
	75	15.00	0.00	375.00	3.00	200.00	

Note.^a Multiple mode exists; * Participants that did not give money as form of informal payment are excluded from the statistical descriptive as they distort all statistical parameters to zero (zero results are omitted)

Gifts as a form of informal payment are most often given in case the respondent requires hospitalization services. In general, gifts are given more often compared to money. 12.9% of respondents more often provided gifts compared to money when requiring

hospitalization, 11.3% for specialist exams, 8.2% for primary care, 1% for lab and diagnostics services, emergency help and 0.2% for dentistry (Table 17).

Table 17. Descriptive statistics on given gifts as form of informal payment by type of health services, in BAM

INFORMAL PAYMENT – VALUE OF GIFTS		Primary care	Emergency help	Specialist exam	Lab and diagnostics	Hospitalisation	Dentistry
N	Valid	33	4	52	5	106	1
	%	8.5	1.0	13.4	1.3	27.4	0.3
Mean		8.85	12.00	27.37	9.20	27.04	20.00
Mode		5	3 ^a	20	10	20	20
Minimum		3	3	3	1	1	20
Maximum		50	20	250	20	200	20
Percentiles	25	5.00	4.75	10.00	3.00	10.00	20.00
	50	5.00	12.50	15.00	10.00	20.00	20.00
	75	10.00	18.75	27.50	15.00	22.50	20.00

Note: ^a Multiple modes exist; *Participants that did not give gifts as form of informal payment are excluded from statistical descriptive as they distort all statistical parameters to zero (zero results are omitted)

Only 6 respondents provided services as a form of informal payment to medical staff. Most of them were given while requiring specialist exams, followed by hospitalization, and one was provided to a dentist (Table 18).

Table 18. Descriptive statistics on given services as form of informal payment by type of health services, in BAM

INFORMAL PAYMENT – VALUE OF SERVICES		Primary care	Emergency help	Specialist exam	Lab and diagnostics	Hospitalisation	Dentistry
N	Valid	0	0	3	0	2	1
	%	0	0	0.8	0	0.5	0.3
Mean		0	0	21.67	0	50	1
Mode		0	0	5 ^a	0	50	1
Minimum		0	0	5	0	50	1
Maximum		0	0	50	0	50	1
Percentiles	25	0	0	5	0	50	1
	50	0	0	10	0	50	1
	75	0	0	0	0	50	1

Note: ^a Multiple modes exist; *Participants that did not give services as form of informal payment are excluded from statistical descriptive as they distort all statistical parameters to zero (zero results are omitted)

Although the statistics reflecting on money, gifts and services given to medical staff as part of informal payments varies with respect to differences in the type of health service required, for the purpose of this analysis we rely on two variables: total money paid, total gifts and services given, irrespective of the type of health service required. Since only 6 research participants provided informal payments in the form of services, gifts and services

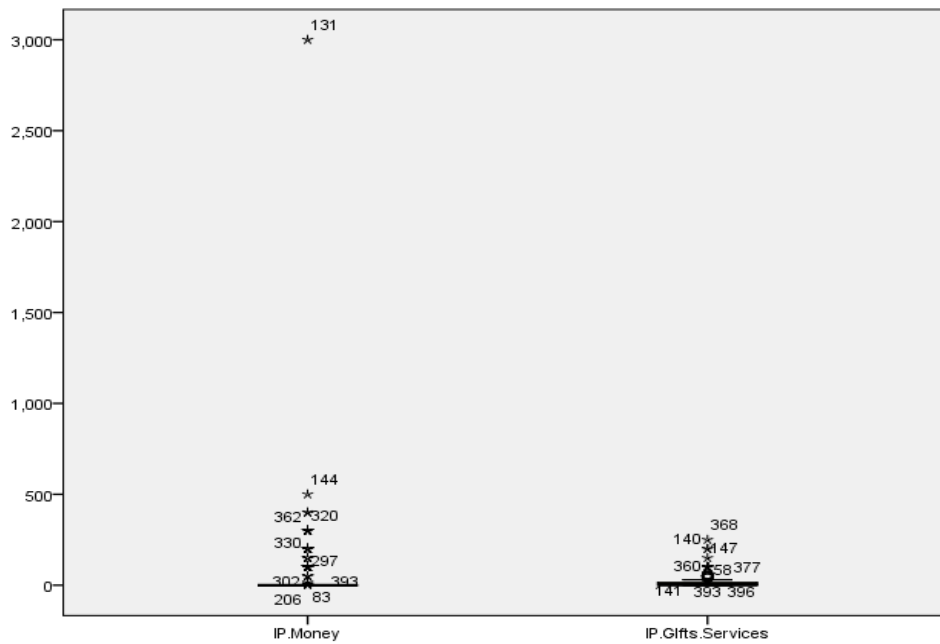
were joined into single variable. The distributions of total money and gifts/services given to medical staff as part of informal payments were significantly different from normal distribution, with the total mean for money given to medical staff being 2.29 times larger compared to the trimmed mean (5% outliers removed), 1.5 times larger for gifts/services given. This indicates that outliers significantly affect the statistical description. Before conducting the regression analysis on the amount of informal payments, influence of the outliers on the regression line was inspected in order to avoid biased estimates of coefficients.

Respondents provide gifts/services as part of informal payments three times more often than money. The percentage of respondents who did not give money as part of informal payment was 82.7%, while the percentage of respondents who did not give gifts/services was about 48.8%. The percentage of respondents who did not give money nor gifts/services to medical staff as part of informal payments was 44.7% (calculation is based on the figures provided as values of money and gifts/services provided to medical staff, and not on the answers to the question “did you provide any informal payments to medical staff - YES/NO”) (Table 19/Figure 4).

Table 19. Descriptive statistics of total money, gifts/services provided to medical staff in public health institutions as part of informal payments

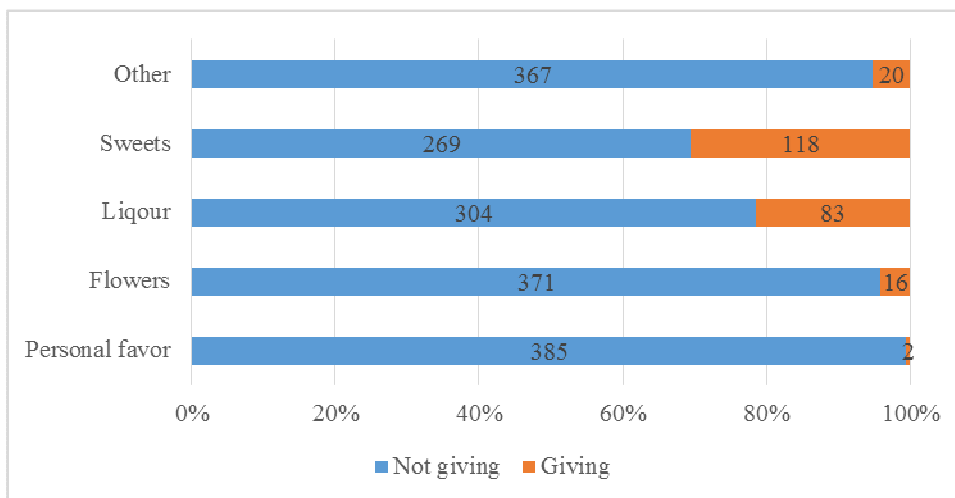
	IP.Money	IP.Gifts/Service
Share of zero results	320 (82.7%)	189 (48.8%)
Mean	35.22	12.56
Std. Error	8.539	1.341
95% Confidence Interval for Mean	Lower Bound	9.924
	Upper Bound	52.00
5% Trimmed Mean	15.39	8.06
Median	.00	1.00
Variance	28,214.797	660.550
Std. Deviation	167.973	25.701
Minimum	0	0
Maximum	3,000	250
Range	3,000	250
Interquartile Range	0	15
Skewness	14.557	5.058
Kurtosis	252.813	34.477

Figure 4. Box plot of total money and gifts/services given to medical staff as part of informal payments in public health institutions



The respondents were offered to select gifts from the following list: personal favour, flowers, liquor, sweets or to specify a special type of gift/service provided to medical staff. In the majority of cases, research participants gave sweets (30.5%) and liquor (21.4%) to medical staff as part of gifts (informal payments). In the category of other gifts, research respondents mainly gave coffee, lunch/breakfast and perfumes (Figure 5).

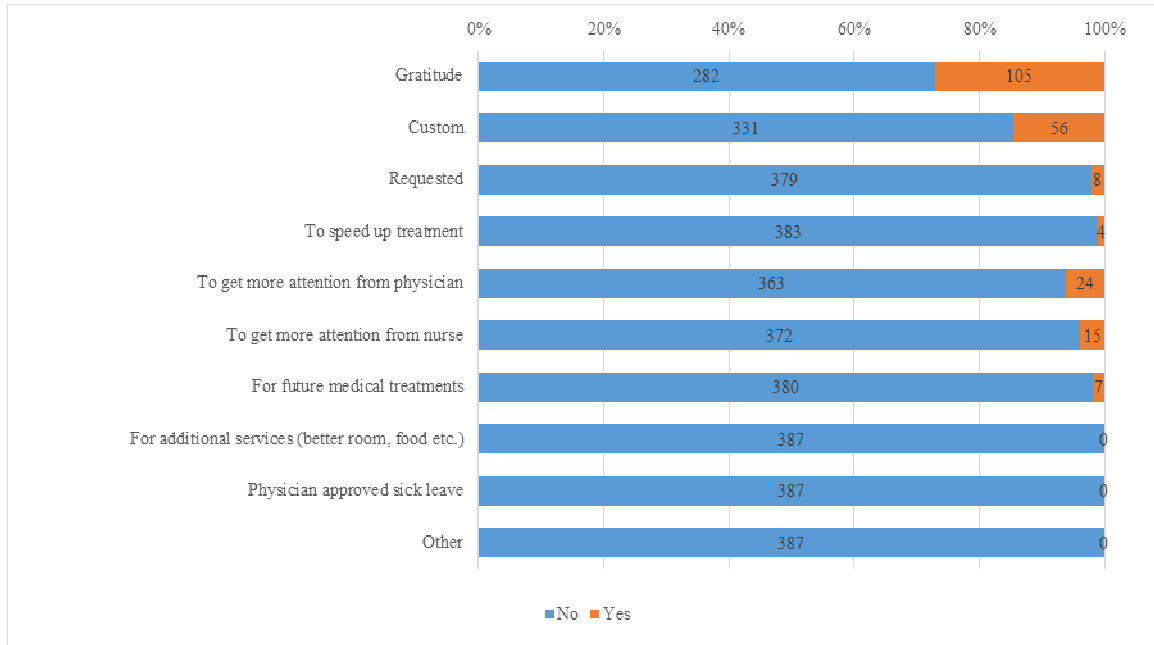
Figure 5. Number of respondents providing gifts/services to medical staff by type of gift



The majority of respondents indicated that the key reasons for providing informal payments (money and gifts/services) to medical staff are gratitude (27.1%) and customs (14.5%). About 6.2% of respondents believe that by providing informal payment to

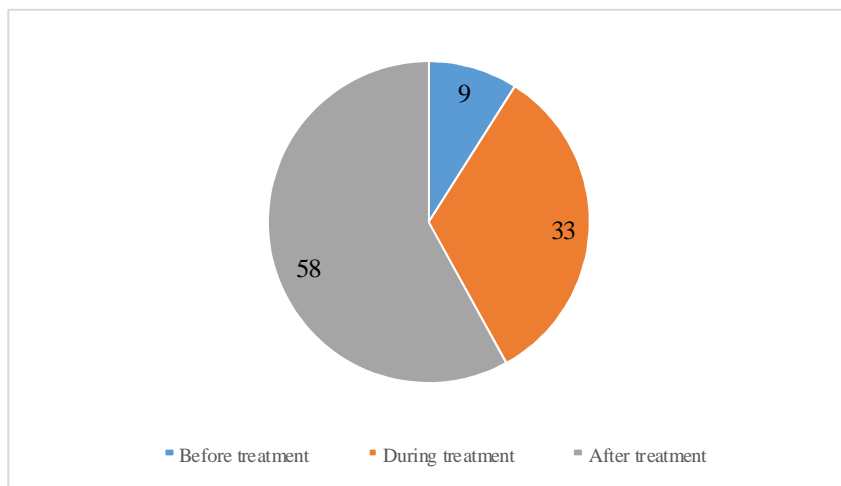
physicians they will receive better care, and 3.9% believe that better care will be provided by nurses if informal payment is provided (Figure 6).

Figure 6. Number of respondents in reference to the reason for providing informal payments



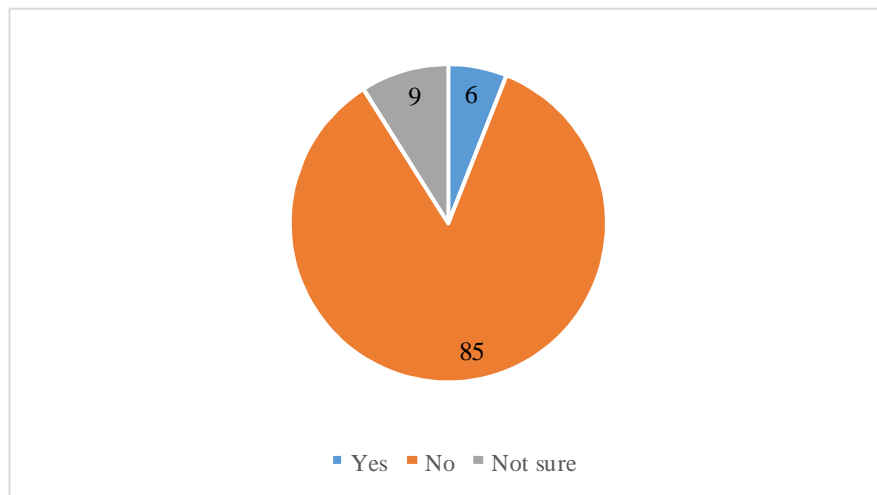
Out of 199 respondents who indicated that they made informal payments to medical staff, 58% made such payments after the medical treatment was completed (115 respondents), 33% during the treatment (66 respondents) and 9% before the treatment (18 respondents). Those respondents who provided informal payments to medical staff during or after the treatment mostly indicated gratitude and custom as reasons for the informal payment, while respondents who provided informal payments before the treatment mainly did so in order to improve the level of care provided by medical staff (Figure 7).

Figure 7. Percentage of respondents by time when informal payment is provided



Only about 6% of respondents believe that medical staff required them to make an informal payment in exchange for better medical care (22 respondents). About 9% of respondents are not certain about this issue (35 respondents) and most of them (85% - 330 respondents) believe that there is no individual imposing any informal payment by staff (Figure 8).

Figure 8. Percentage of respondents who believe that informal payment is imposed by medical staff



About 77.8% of respondents have a negative opinion about providing informal payments to medical staff. This is presented in Table 20.

Table 20. Attitudes of respondents toward informal payments

		Frequency	Percent	Valid Percent
Valid	Decisively against	102	26.4	26.5
	Negative	199	51.4	51.7
	Neither positive nor negative	81	20.9	21.0
	Support it - physicians and nurses are not payed enough	3	.8	.8
	Total	385	99.5	100.0
Missing		2	.5	
Total		387	100.0	

Having a negative opinion about informal payments does not mean that person will not make such payments to medical staff. Out of 102 respondents who have a decisive negative opinion about the informal payments, about 7% gave money as part of informal payment to medical staff, and about 20% gave gifts/services (Table 21).

Table 21. Attitudes of respondents toward informal payments by the type of informal payment provided

Acceptance of informal payments	Have they give any money to physician or nurse		Have they give any gift to physician or nurse		Have they provided any services to physician or nurse, as a counter service to physician or nurse	
	yes	no	yes	no	yes	no
	Number	Number	Number	Number	Number	Number
Decisively against	7	95	20	82	1	101
Negative	52	147	119	80	2	197
Neither positive nor negative	18	63	46	35	2	79
Support it - physicians and nurses are not paid enough	1	2	1	2	0	3
Support it - for other reasons	0	0	0	0	0	0

Testing the main research hypothesis which is that socio-economic factors, attitudes toward informal payment and perceptions of disease severity of the respondents have a statistically significant effect on the value of informal payments was conducted using the appropriate regression analysis. Before conducting regression analysis, the association between all regressors against informal payments was assessed mainly using Pearson Correlation Coefficient, but also by visual inspections, which can be seen in the appendix.

Correlation between attitudes toward informal payments and amount of money given as informal payments is very low and insignificant and this is due to the presence of an outlier in the variable IP. Money, BAM 3,000 - amount of money given to medical staff as part of informal payment. In order to reduce the impact of this outlier on the regression estimates, amount of money paid as informal payment was transformed using log₁₀+1 transformation. Correlation between amount of money provided as informal payment (log transformed) and attitudes toward informal payments (dichotomous) is statistically significant and positive. Further, correlation between attitudes toward informal payments (dichotomous) and value of gifts (log transformed) provided as part of informal payments is also statistically significant and positive.

Both, correlation between perception of disease severity (dichotomous) and log of amount of money paid as informal payment and correlation between perception of disease severity (dichotomous) and log of value of gifts given as informal payment are positive and statistically significant. The third auxiliary hypothesis refers to the socio-economic characteristics of research respondents. Four socio-economic factors were assessed as potential predictors of amount of money and value of gifts provided to health care personnel as part of informal payments: household income, number of household members, gender and age of the sick person.

Correlation between household income and log of amount of money paid as informal payment is positive and is statistically significant, as well as correlation between household income and log of value of gifts paid as informal payment. Correlation between number of household members and log of amount of money paid as informal payment is negative and is not statistically significant, while the correlation between number of household members and log of value of gifts paid as informal payment is positive and statistically significant. Correlation between gender of the sick person and log of amount of money paid as informal payment is negative and statistically significant. The correlation between gender and log of value of gifts paid as informal payment is positive and statistically significant. Correlation between the age of the sick person and log of amount of money paid as informal payment and correlation between the age of the sick person and log of value of gifts paid as informal payment are negative and are not statistically significant. Predictors in regression models for amount of informal payments and value of gifts/services provided are: attitudes toward informal payments (dichotomous), perception of disease severity (dichotomous), household income (dichotomous), number of household members (continuous variable), gender of the sick person (binary) and age of the sick person (continuous variable).

3.3 Regression Analysis

Based on the literature review, it is hypothesized that the key determinants of informal payments are attitudes toward informal payments and perception of disease severity, while household income is considered an important variable determining the size/value of the informal payment. The number of household members, gender of the sick person and age of the sick person are considered as main control variables.

For the purpose of investigating the causal relationship and the magnitude of these effects in relation to informal payments, we developed two models to be estimated. The first model attempt to analyse the determinants of informal payment measured (proxied) by the actual amount of money given as a type of informal payment (model 1), while model 2 examines the factors which explain the value of gifts as the type of informal payment. As it can be seen from the two equations below, the two models differ with respect to the dependent variable, namely amount of money provided to medical staff (Model I), and the value of gifts/services (Model II).

Model I regression equation is:

$$AM = \beta_0 + \beta_1 AIP + \beta_2 SI + \beta_3 IN + \beta_4 HM + \beta_5 GS + \beta_6 AS + \varepsilon_i$$

Model II regression equation is:

$$VG = \beta_0 + \beta_1 AIP + \beta_2 SI + \beta_3 IN + \beta_4 HM + \beta_5 GS + \beta_6 AS + \varepsilon_i$$

Where:

- AM - Amount of money given as informal payment – dependent variable Model I [Log10]
- VG - Value of gifts given as informal payment – dependent variable Model II [Log10]
- β_0 - Intercept
- β - Regression coefficient
- AIP - Attitudes toward informal payments [dichotomous: 0=“Decisively Negative”; 1=“Negative or Neither Negative or Positive”]
- SI - Seriousness of the illness [dichotomous: 0=“Low or Average Grade Illness”; 1=“Serious or Terminal Grade Illness”]
- IN - Average household income [dichotomous: 0=“Up to 1,000BAM”; 1=“More than 1,000BAM”]
- HM - Number of household members [continuous]
- GS - Gender of the sick person [binary]
- AS - Age of the sick person [continuous]
- ε_i - Residual variance

Given the nature of the dependant variables which are continuous and normally distributed, we proceed the analysis using the ordinary least square (hereinafter: OLS) regression method of estimation. OLS is a method for estimating the parameters (b) that define the model for which the sum of squared errors is the minimum it can be, given the data (Field, 2013).

Model I – regressional analysis results

Table 22 presents results of the regression analysis with respect to model I. All predictors are found to be significant determinant of the informal payments measured by the amount of money given, except for the household size variable (number of household members).

Table 22. Regression coefficients for the model I

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	SE	Beta			Tolerance	VIF
1 (Constant)	.415	.178		2.336	.020		
Attitudes toward informal payments	.348	.089	.187	3.911	.000	.979	1.021
Seriousness of the illness	.442	.094	.233	4.713	.000	.918	1.089
Average household income	.242	.092	.141	2.629	.009	.780	1.283
Number of household members	-.056	.034	-.086	-1.637	.103	.819	1.221
Gender of the sick person	-.335	.080	-.202	-4.171	.000	.959	1.043
Age of the sick person	-.004	.002	-.117	-2.279	.023	.847	1.180

The linear regression Model I (prediction of the amount of money as informal payment) explains about 13.9 % of the variance. The regression model is statistically significant ($F=11.301$; $df=6/378$; $p<0.001$).

The relationship between independent variables is not overly correlated, which indicates that multicollinearity is not present. Furthermore, Koenker test indicate that heteroscedascity in the model is present (Koenker LM=85.65; $p<0.001$). Normality of distribution is analysed by the shape of distribution. Dependent variable is transformed using the log transformation, while attitudes toward informal payments, seriousness of the illness and average household income are dichotomised. Number of household members and age of the sick person are normally distributed. Transformation of variables in regression model ensured that distributions do not produce biased regression coefficients.

As we expected seriousness of the illness is positively and significantly associated with the informal payment. Specifically, an increase in the seriousness of illness (from low or average to severe or terminal) is expected to result in an average increase in the amount of money given as a form of informal payment by 44%, *ceteris paribus*.

The results of this analysis further suggest that is on average likely to be given less money if the sick person is man compared to women by about 33%, *ceteris paribus*. For the change of attitude toward informal payment from negative/neutral toward decisively negative, it is expected that the amount of money given as informal payment reduces by about 35%, other things being constant.

Considering the income variable, the obtained results indicate that the respondents with an average income above 1,000 BAM give more money as a type of informal payment, by an average higher value estimated at 24%, compared to those whose income is less than 1,000BAM. This result is important and expected.

The age variable is also found to be significant. As anticipated, the results reveal that the higher the age of the respondent the lower the average amount of money given as type of informal payments. Precisely, an increase in the age of the sick person by the one year is associated with the decrease in the average amount of money given as informal payment by about 0.4%, on average, *ceteris paribus*.

Model II – regression analysis results

Table 23 presents results of the regression analysis for estimation of the value of gifts/services provided as informal payment to medical staff (model II). Attitudes toward informal payments, seriousness of the illness, average house income and gender of the sick

person are found to be significant determinant of the value of gifts/services provided to medical staff.

Table 23. Regression coefficients for model II

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	SE	Beta			Tolerance	VIF
2	(Constant)	.133	.139		.953	.341	
	Attitudes toward informal payments:	.513	.070	.339	7.341	.000	.979
	Seriousness of the illness	.274	.074	.177	3.720	.000	.918
	Average house income	.242	.072	.173	3.352	.001	.780
	Number of household members	.019	.027	.036	.716	.474	.819
	Gender of the sick person	-.164	.063	-.121	-2.604	.010	.959
	Age of the sick person	-.002	.002	-.070	-1.413	.158	.847

The linear regression Model II (prediction of the value of gifts/services as informal payment) explains about 19.9% of the variance. The regression model is statistically significant ($F=16.908$; $df=6/378$; $p<0.001$).

The independent variables in the Model II seem not overly correlated, indicating that multicollinearity is not present. Koenker test indicate that heteroscedascity in the model is present (Koenker $LM=21.56$; $p=0.001$). In addition to transformation explained in the regression model I, dependent variable is transformed using the log transformation in order to ensure that distributions do not produce biased regression coefficients.

For change of attitude toward informal payment from negative or neutral toward decisively negative, it is expected that the value of gifts/services given as informal payment reduces by about 51%, on average, *ceteris paribus*. An increase in the seriousness of illness (from low/average to severe/terminal) is expected to result in an average increase in the value of gifts/services given as a form of informal payment by about 27%, on average, *ceteris paribus*.

The results of this analysis further suggest that the value of gift is higher by about 16% in case if the woman is sick household member, compared to man household member. When it comes to the income variable, we obtain similar result as in the case of Model 1. The results of the Model II estimated suggest that the value of gift varies also with respect to household income, with 24% higher value of gifts provided by households who have income over 1,000BAM compared to the base category (i.e. those whose income is less than 1,000 BAM).

3.4 Discussion

The primary study was conducted on a total of 468 respondents - total structure of the sample (households) on the entire territory of BiH, but the final sample consist of 387 respondents, who have fulfilled the conditions to participate in this research-those respondents who had sought medical care in public health institutions in the past two years. The survey has provided numerous data that may be interesting for various comparisons within the region, but also worldwide. The results of the study have shown the accuracy of the assumption that informal payments are present within public health care sector of BiH, as in most other transitional countries which are struggling with economic and social barriers. According to the results obtained in their research, Stepurko et al. (2014) conclude that wealthier households, with more serious or chronic illnesses, especially women, are the most prone to informal payments. According to the above, our research has shown that informal cash payments are mostly made in cases where hospitalization is required – i.e., in cases of serious illness and intervention. However, this research has shown that health care consumers provide gifts/services as a type of informal payment about three times more often than informal cash payments. This result was also obtained through the study that represented the starting point for this master's thesis, where it was presented that most of the informal payments in the Czech Republic are in-kind payments - less valuable gifts (Central and Eastern European Health Network, 2002).

One of the interesting results is that top three services requested by those respondents who requested services in public health institutions (final sample which cons is of 387 respondents) were primary care, specialist exams and hospitalization in the both entities and BD. The least number of respondents requested dentistry services in public institutions and emergency help. About 9% of the persons requesting health services in public institutions, in this research, had a terminal illness. The share of terminally ill is similar across both entities/district, with a somewhat lower share in RS.

Further, many respondents indicated that the most common gifts were sweets (30.5%) and liquor (21.4%), followed by coffee, lunch/breakfast and perfumes. This data consistency shows that in most European countries, especially those with socialist characteristics, there is still a practice of gift giving as an expression of gratitude. Most of the respondents find that key reasons for informal payment provision in the public health care sector in BiH are gratitude and customs. Stepurko et al. (2015) also argue that the culture and tradition of giving gifts are the most dominant and most common in transition countries.

Some respondents also believe that informal payment provision will provide better care. This result is also confirmed by a survey conducted by Balabanova and McKee (2002) that shows the attitudes of respondents who believe that those who pay informally are better treated in practice. Also, according to Balabanova and McKee (2002), payments made

after treatment has been completed are benign and presented in gratitude form. This master's thesis has confirmed their results - respondents who made informal payments to health care providers during or after treatment mostly indicated gratitude and custom as reasons for these donations, while respondents who made informal payments before treatment mainly did so with the aim to improve medical care and service quality. Therefore, the data presented in this master's thesis relating to the moment of informal payments coincides with data obtained in the research of the above mentioned authors, which indicate that post-treatment payments are harmless, while pre-payments are serious and dangerous.

Despite the belief that informal payments are often imposed on patients within the public health sectors of transition countries, our study provides different data - only about 6% of the respondents find that health care providers impose the need for informal payments in exchange for medical care. Therefore, payments made before treatment has been started are not seen as a prerequisite for the treatment process, but as voluntary donations that will achieve faster and better treatment. Other studies presented in this work, such as the research conducted by Vian et al. (2006), indicate that patients generally believe that money given before treatment is a prerequisite for their treatment process. Thus, public health care consumers in BiH point to a less serious perception of pre-payments. It is also important to note that the opinion about informal payments does not always affect behavior in practice. Out of 102 participants in this research who have a decisive negative opinion about informal payments, about 7% made informal cash payments to health care providers, and about 20% gave gifts/services. So, attitudes and behavior in practice can be contradictory.

Patients' attitudes toward informal payments have statistically significant correlation with the amount of money paid as part of informal payment. Also, correlation between attitudes toward informal payments and value of gifts/services given as part of informal payment is statistically significant. A study conducted by Vian and Burak (2006) also shows that patients who have a positive opinion about informal payments are more inclined to make such payments and the consequences are not perceived as negative (they give more expensive gifts/the amount of given money is higher).

The correlation between perception of disease severity and amount of money paid as informal payment is statistically significant in this analysis, as well as correlation between perception of disease severity and value of gifts given as part of informal payment. This result is also shown in the study conducted by Kaitelidou et al. (2013) which presents that level of informal payments are extremely high in the area of obstetric services in public hospitals. The data in this study show that 74.4 percent of women who used public maternity services in the public health sector in Greece had to pay through informal payment channels, in amounts corresponding approximately to the net salary of an intern

physician. Such payments are observed as the worst form of informal payments. These data suggest that informal payments are very much present in medical fields which involve serious illnesses or sensitive health issues, such as maternity. Patients with a more serious illness pay more than those who suffer from less serious illnesses. So, based on their study, it can be easily concluded that disease severity is one of the key factors affecting amount/value of informal payments.

Four socio-economic factors are assessed as potential factors that determine the amount of money and the value of gifts as part of informal payments given to those who provide health care in public health facilities: household income, number of household members, gender of the sick person and age of the sick person. Both, the correlation between household income and amount of money paid as part of informal payment and correlation between household income and value of gifts paid as part of informal payment are positive and statistically significant, which means that households with higher income pay more/give gifts of greater cash value. So, household income has positive and statistically significant correlation with values of both types of informal payments, which is also proven by Stepurko et al. (2014) - wealthier households and individuals are more inclined to pay informally. They use this form of payment in the case of serious illness, but also in the case of benign interventions. Nevertheless, contrary to these results, Tatar et al. (2007) present that poor social categories pay even more per capita than wealthier categories. This is explained by the argument that attitudes toward informal payments and fear of illness affect informal payments more than patients' economic status. However, Tomini et al. (2012) conclude that in most countries wealthy patients have a greater chance to "buy health" compared to those who are not wealthy, as well as all other benefits within the public health sector. However, wealthier patients are more inclined to informal giving in the opinion of these authors.

The correlation between the gender of the sick person and log of amount of money paid as informal payment is negative and is statistically significant. It means that if the sick person is a female household member, the average cash amount provided to health care providers is higher compared to the situation if the sick person is male. Also, the correlation between gender and value of gifts paid as part of informal payment is negative and is statistically significant. This result was also obtained in the study conducted by Stepurko et al. (2014a) who present that informal payments are more characteristic for women than for men.

In addition, according to the results of Stepurko et al. (2014a) study, being older increases the probability of responding positively to informal payments. Hence, it is expected that informal payments of higher cash amount/more expensive gifts will be given to health care providers if the sick person is older household member. In this analysis correlation between the age of the sick person and amount of money paid as part of informal payment is negative and statistically significant - higher cash amount of informal payments will be

given if the sick person is younger household member. The correlation between the age of the sick person and value of gifts paid as part of informal payment is not statistically significant in this regression analysis. The number of household members does not have a statistically significant correlation with the amount of money given as part of informal payment, nor having a statistically significant positive correlation with value of gifts given to health care providers.

Based on all the presented results, it can be concluded that the behavior of those who use public health services in BiH is mostly predictable, due to the fact that similar behaviors have also been noticed in other transition countries. Although some correlations are insignificant, it can be concluded that the starting point of this master's thesis is still reached. It is important to point out that the hypothesis which refers to the perception of disease severity can not be denied, based on the currently available data obtained through the questionnaire-patients with sensitive health statuses, such as maternity, and patients with serious illnesses and interventions are most inclined to informal donations. This hypothesis has been proven in a large number of studies worldwide, which have also been presented through this master's thesis, pointing to the fact that it is one of the leading factors affecting the value of informal payments. It is also very clear that informal payments of higher cash amount/more expensive gifts will be given if the sick person is a woman, in comparison with the situation if the sick person is a man, not just in other countries across Europe and the world, but also in BiH, which shows the research in this master's thesis.

CONCLUSION

All relevant and previously mentioned literature has shown results that relate to the existence of informal payments, definitions as well as factors which determine it. The results obtained in this master's thesis confirm the proposition that informal payments are widespread in the transition countries, including BiH. The purpose of this research was to investigate and determine which factors affect the amount/value of informal payments. More specifically, to examine which factors affect the amount/value of informal payments that will be given in the form of money and gifts/services. All presented literature indicates that factors affecting informal payments differ among countries. It is also noted that is important to determine the moment of payment in order to present the nature and purpose of the payment.

However, the goal of this master's thesis was not to present pure definitions and patients' intent, but the factors that influence the creation of such payments. More precisely, the determinants of informal payments in the public health sector in BiH were analysed through this research. The research design and operationalisation of the research, including the questionnaire used in this empirical analysis, were principally developed on the basis of

the following study - "Formal and informal household spending on health: a multicountry study in Central and Eastern Europe", conducted by the Central and Eastern European Health Network (2002). The original questionnaire was only marginally modified and adopted to reflect on the specificities relating to culture and health care system within BiH. The questions were related to the socio-economic characteristics of the respondents, their attitudes and experiences, as well as their behavior in real situations when a patient have to/wish to make an informal payment.

The results show that the highest percentage of the respondents are treated in public health institutions (82.7%), while the percentage of those who have chosen the private sector as an alternative to public health is undoubtedly smaller – 9.2% of total respondents (total structure of the sample - 468 respondents). It can be concluded that the private health sector is still not a strong alternative to the public ones.

Many studies, as well as this research conducted in BiH, have proved that patients in transition countries, which are struggling with social and economic problems, have a problem accessing the health care system and informal payments make it more difficult. This is one of the reasons for dealing with this topic - the reasons for informal payments which affect the principle of equality and solidarity. Although informal payments, as part of corruption, are noticed in almost all areas belonging to the public sector, informal health payments are one of the most serious. The reason for this is that non-official payments affect access to health care system and quality of treatment. This health system functioning could prevent the poor part of the population from treatment when they need it in a manner that is required. This is one of the reasons why this topic is very important – to present factors affecting informal payments in the public health sectors of the transition countries, with a specific review of the geo-space of BiH. However, the data which presents that only about 9% of the respondents reported informal payments before the healing process indicates that black under-the-table payments are not much present in BiH. Also, only about 6% of the respondents believe that health care providers required them to make an informal payment in exchange for better medical care. This is still an encouraging data indicating that there is no much black informal payment, nor does the patient believe that such payments are imposed by the staff. One of the expected and alarming results in this research is that both, correlation between household income and amount of money paid as part of informal payment and correlation between household income and value of gifts given as part of informal payment are statistically significant. Precisely this information points to the danger - wealthy categories of society are able to "buy health".

The obtained results indicate that gifts were more often provided to health care providers compared to money and services. This is an expected result, considering the economic situation of BiH residents, as well as the socialist habits related to gratitude in the gift form after the treatment process is done -58% of 199 respondents (those who indicated that they

made informal payments to medical staff after the treatment was completed). So, gifts are mostly benign nature, created as a sign of gratitude. BiH is a transitional country, in which the socialist habits continue to be observed, which is evident in many segments, including in the health care sector. Under-the-table payments in the gift form are largely a socialist legacy. The majority of respondents indicated that the key reasons for providing informal payments to health personnel are gratitude and customs. After all, this has been proven through a large number of studies presented in this master's thesis.

Furthermore, respondents in this research in most of cases provide cash payments as a form of informal payments when requiring hospitalization, which is also an expected result. In many other researches, also presented in this master's thesis, it is presented that informal cash payments are associated with disease severity, during the hospitalization process. Also, the studies presented in this master's thesis indicate that serious illness and sensitive health status, such as maternity, produce the most frequent and highest informal donations. According to this data, the findings obtained in this research are completely expected, which suggests that disease severity is a deciding factor affecting the creation of informal payments.

About 77.8% of respondents have a negative opinion about providing informal payments to medical personnel, but 27% of them gave money and gifts/services as part of informal payments to medical personnel. This implies that attitude and behavior do not have to coincide - there are those who consider informal payments to be a negative social phenomenon, but still make such payments. The result of this research shows that patients' attitudes toward informal payments has a statistically significant correlation with amount of money paid as part of informal payment, as well as attitudes toward informal payments and value of gifts given as part of informal payment. Such behavior is a consequence of the patient's fear of being rejected if he does not give a tip to medical staff.

All these data point to the importance of the examining the reasons for the informal payment emergence - it is sometimes the patient's desire to reward the doctors with a gift, but it is also sometimes an obligation imposed on the patient. The encouraging result is that voluntary payments are more present among the respondents compared to those that are created by force.

In this master's thesis correlation between the age of the sick person and amount of money paid as part of informal payment is negative and statistically significant. This means that if the sick person is older household member, in that case it will be less paid in cash in comparison to the situation if the sick person is younger household members. The correlation between age of the sick person and value of gifts given as part of informal payment is not statistically significant. Also, according to the obtained data, it is presented that higher cash amount of informal payments/more expensive gifts will be given to those

who provide health care services in case if the sick person is woman compared to the situation if the sick person is man household member.

Based on the literature review and available data, it is hypothesized that the key determinants of informal payments are attitudes toward informal payments, as well as perception of disease severity. On the other side, household income is considered as an important variable determining the value of the informal payment. The number of household members, gender of the sick person and age of the sick person are considered as main control variables.

For the purpose of investigating the causal relationship and the magnitude of these effects in relation to informal payments, we developed two models to be estimated. The first model tends to analyse the determinants of informal payment measured (proxied) by the actual amount of money given as a type of informal payment (model 1), while model 2 examines the factors which explain the value of gifts as the type of informal payment. These two models differ with respect to the dependent variable, namely amount of money provided to medical staff (Model I), and the value of gifts/services (Model II).

The regression Model I (prediction of the amount of money on informal payment) is statistically significant ($F=11.301$; $df=6/378$; $p<0.001$) and explains about 13.9 % of the variance. All predictors are found to be significant determinant of the informal payments measured by the amount of money given, except for the household size variable (number of household members). The results show that seriousness of the illness is positively and significantly associated with the informal payment. Specifically an increase in the seriousness of illness (from low or average to severe or terminal) is expected to result in an average increase in the amount of money given as a form of informal payment by 44%, *ceteris paribus*. Also, it is evident that is on average likely to be given less money if the sick person is man compared to women by about 33%, *ceteris paribus*. Furthermore, for the change of attitude toward informal payment from negative/neutral toward decisively negative, it is expected that the amount of money given as part of informal payment reduces by about 35%, other things being constant. The results also show that the respondents with an average income above 1,000 BAM give more money as a type of informal payment, by an average higher value estimated at 24%, compared to those whose income is less than 1,000 BAM. And another important result in Model I points that an increase in the age of the sick person by one year the is associated with the decrease in the average amount of money given as informal payment by about 0.4%, on average, *ceteris paribus*.

In The Model II (prediction of the value of gifts/services as informal payment) the regression model is statistically significant ($F=16.908$; $df=6/378$; $p<0.001$) and explains about 19.9% of the variance. Attitudes toward informal payments, seriousness of the

illness, average house income and gender of the sick person are found to be significant determinant of the value of gifts/services provided to medical staff. Research results show that for change of attitude toward informal payment from negative or neutral toward decisively negative, it is expected that the value of gifts/services given as informal payment reduces by about 51%, on average, *ceteris paribus*. Furthermore, it is shown that an increase in the seriousness of illness (from low/average to severe/terminal) is expected to result in an average increase in the value of gifts/services given as a form of informal payment by about 27%, on average, *ceteris paribus*. Also, another important result points to that the value of gift is higher by about 16% in case of female member illness, compared to man household member illness. Furthermore, the results show that the value of gift varies also with respect to household income, with 24% higher value of gifts provided by households who have income over 1,000 BAM compared to the base category (i.e. those whose income is less than 1,000 BAM).

According to the obtained data, in the circumstances of this research, the results indicate that the most vulnerable to informal payments are respondents who perceive their illness as a serious, with a less negative attitude toward payments made outside the official payment channels, belonging to a higher social class (high income) and females. Compared with the studies of the relevant authors, mentioned in this master's thesis, main findings relating to the geo-space of BiH, in the context of informal health care payments, are expected.

All the hypotheses were tested by regression analysis. Factors affecting the value of informal payments (cash and gifts/services) vary by country, referring to customs and tradition, gender of the sick person, household income, the age of the sick person, and the severity of the illness. In the specific context of BiH, the most important factor that can be identified as being unique to most of the presented studies is disease severity. Each type of informal payment is given in cases when the patient is seriously ill or if the patient belongs to a sensitive category of health care consumers –such as pregnant women.

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APPENDIXES

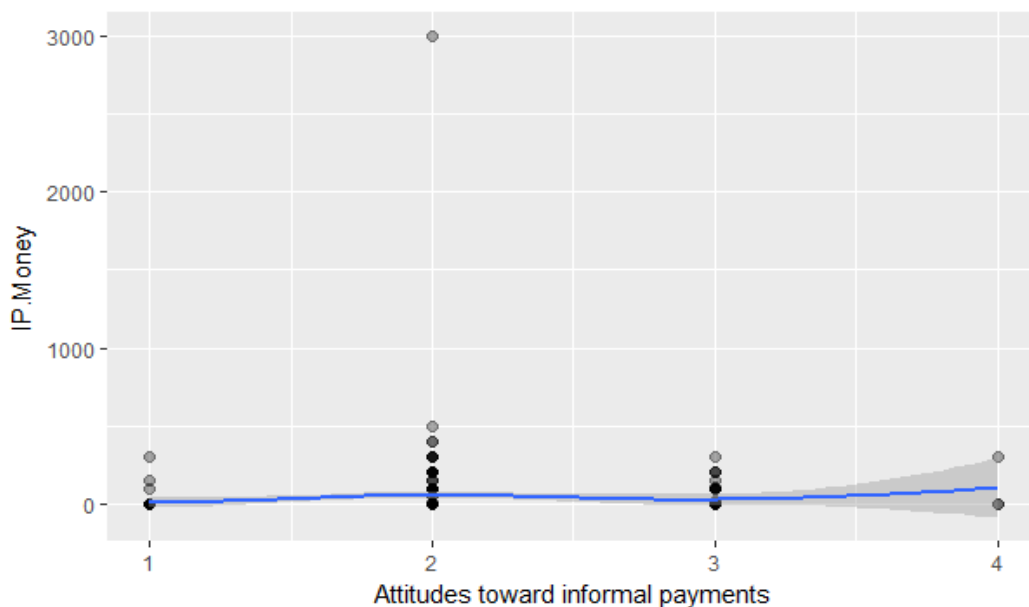
TABLE OF APPENDIXES

Appendix A: The association between all regressors against informal payments.....	1
Appendix B: List of abbreviations.....	12
Appendix C: Questionnaire.....	13

Appendix A: The association between all regressors against informal payments

Correlation between attitudes toward informal payments and amount of money given as informal payments is very low (Pearson Correlation Coefficient is used for all calculations of associations) and insignificant. Association between attitudes and money is characterized with a few specific notations. The first is the existence of an outlier in the variable IP.Money (amount of money given to medical staff as part of informal payment). In one case, a research participant gave BAM 3.000 as informal payment which has a 6 times higher score compared to the second largest amount (BAM 500) (Figure 9). In order to prevent a great influence of the outlier on the regression estimates, the dependent variable amount of money paid as informal payment was transformed using $\log_{10}+1$ transformation (+1 is added due to existence of zero values).

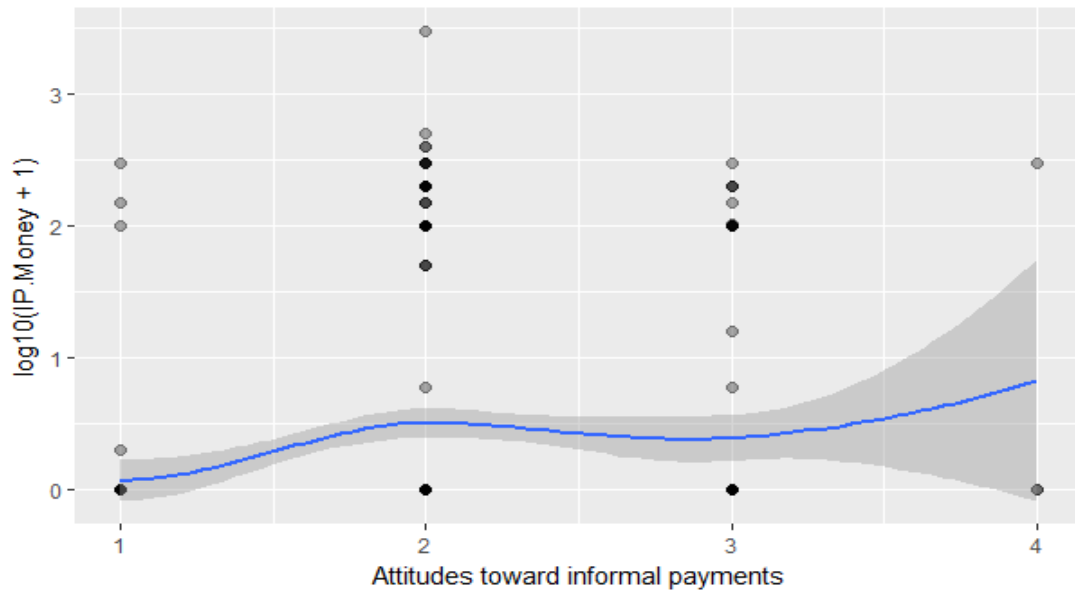
Figure 9. Scatter plot between attitudes toward informal payments and amount of money given as informal payment



Transformed amount of money paid as informal payment has a statistically significant and positive correlation with attitudes toward informal payments. While log transformation of the amount of money paid as informal payment decreased the influence of outliers on the relationship, the fitted regression line (based on the average scores per each x value) is a weak representative of Y values over the X values of two, three and four (negative attitude, neither negative nor positive and positive attitude). Furthermore, standard error for prediction of the amount of money given as informal payment for research participants who reported to have a positive attitude toward informal payment (score four) is much larger compared to standard errors for values from one to three (Figure 10). This is

happening as only three research participants answered that they support informal payments to medical staff due to their low wages. In addition to the problem of heteroscedascity, there is an issue of scale used to collect information about attitudes toward informal payments. The original scale for nominal (categories) with ordinal characteristics (for each change of score by one it is expected that the positive attitude becomes higher).

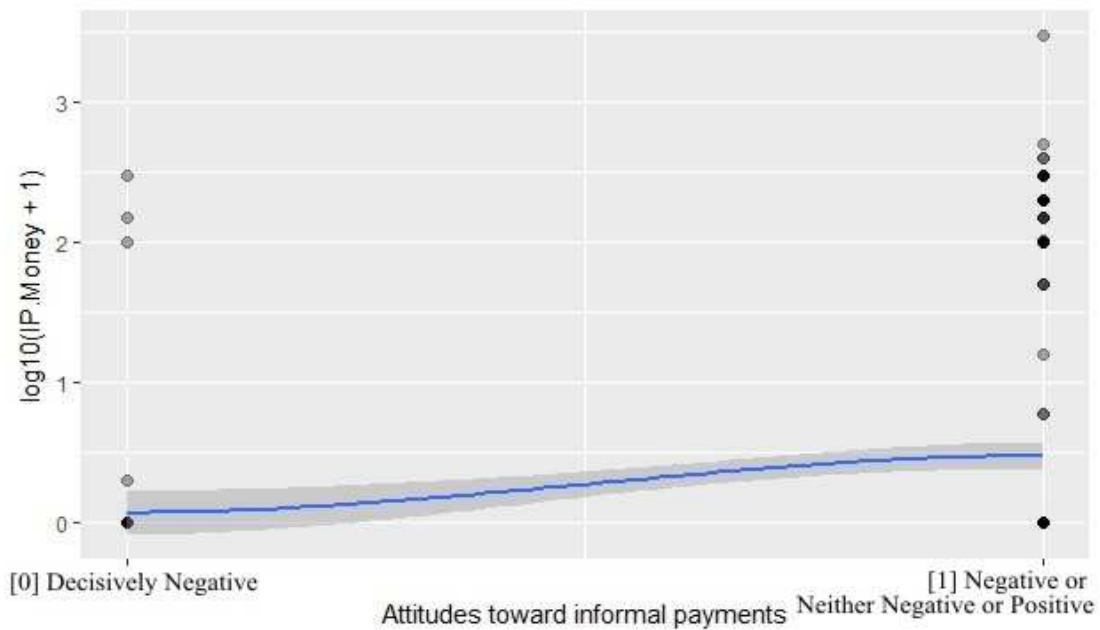
Figure 10. Scatter plot between attitudes toward informal payments and amount of money given to medical staff as informal payments



In order to ensure unbiased coefficients between attitudes toward informal payments and amount of money given as informal payments in a later regression with additional regressors, attitudes toward informal payments were transformed to a dichotomous variable (zero= decisively negative opinion; 1=negative or neither negative nor positive). Such division was done due to the low number of respondents who provided a positive opinion (Figure 11).

Correlation between amount of money provided as informal payment (log transformed) and attitudes toward informal payments (dichotomized) is positive and statistically significant. Transformed variables are associated at a somewhat higher level but the difference between correlation coefficients is not statistically significant.

Figure 11. Scatter plot between attitudes toward informal payments (dichotomous) and amount of money paid as informal payment



The relationship between attitudes toward informal payments and value of gifts provided as part of informal payments was analyzed using the log transformation of the value of gifts in order to preserve the equal interpretation of coefficients (percentage of change) that will be produced by multiple regression at the later stage of the paper. Because of the low number of research participants having a positive attitude toward informal payment, the standard error for prediction of value of gifts for research participants with attitudes with value of 4 is large (Figure 12). In order to ensure equal dispersion of standard error across different value of attitudes, variable attitudes were dichotomized (Figure 13). Correlation between value of gifts (log transformed) and attitudes toward informal payments is positive and statistically significant. Likewise, correlation between Value of Gifts (log transformed) and Attitudes toward informal payments (dichotomisation) is positive and statistically significant. Transformed variables are associated at a somewhat higher level but the difference between correlation coefficients is not statistically significant.

Figure 12. Scatter plot between attitudes toward informal payments and value of gifts paid as informal payment

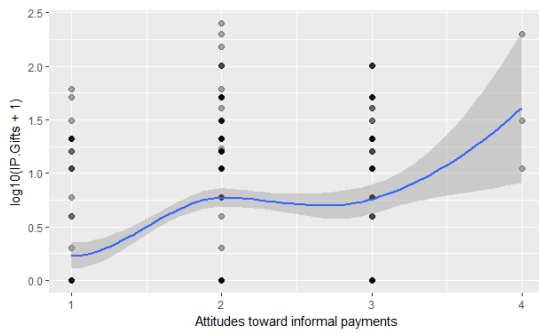
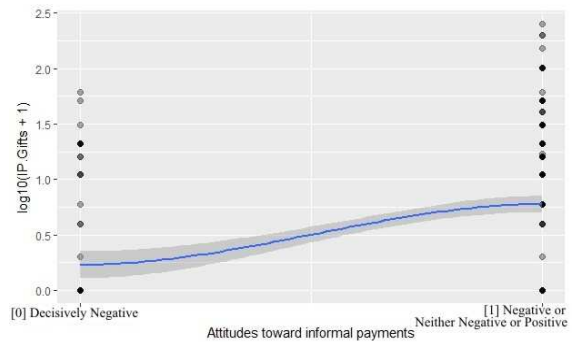


Figure 13. Scatter plot between attitudes toward informal payments (dichotomous) and value of gifts paid as informal payment



Association between perception of disease severity and value of informal payments:

The Pearson correlation coefficient (r) between perception of disease severity and log of amount of money paid as informal payment is positive and is statistically significant. Distribution of error term across different values of disease severity is similar, with a curve linear shape rather than linear (Figure 14). In order to ensure linearity of relationship between perception of disease severity and amount of money given as part of informal payment (log), variable perception of disease severity was also transformed into two categories (0 – low and average grade illness [75.2% of research participants] and 1- severe and terminal illness [24.8% of research participants]) (Figure 15). Correlation between such transformed perception of disease severity correlate (dichotomous) with amount of money as informal payment is somewhat greater than without transformation and is statistically significant. Difference between two coefficients is not statistically significant.

Figure 14. Scatter plot between Disease severity and Amounts of money as informal payment

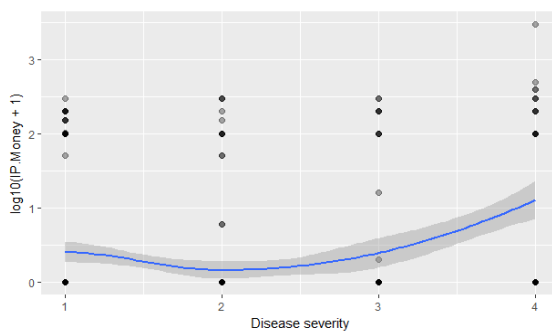
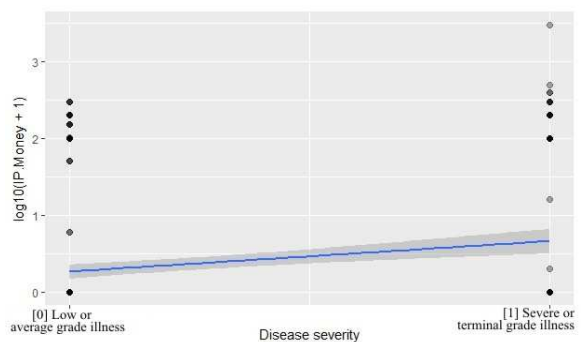


Figure 15. Scatter plot between Disease severity (dichotomous) and Amounts of money as informal payment



The correlation between perception of disease severity and log of value of gifts given as informal payment is positive and is statistically significant. Distribution of error term across different values of disease severity is larger for values of three and four of disease severity, with a curve linear shape rather than linear (Figure 16). In order to ensure linearity of relationship between perception of disease severity and value of gifts given as part of informal payment (log), variable perception of disease severity was used in its dichotomous form, as previously explained (Figure 17). Correlation between such transformed perception of disease severity correlate (dichotomous) with value of gifts as informal payment is somewhat greater than without transformation and is statistically significant. Difference between two coefficients is not statistically significant.

Figure 16. Scatter plot between disease severity and Value of Gifts as informal payment

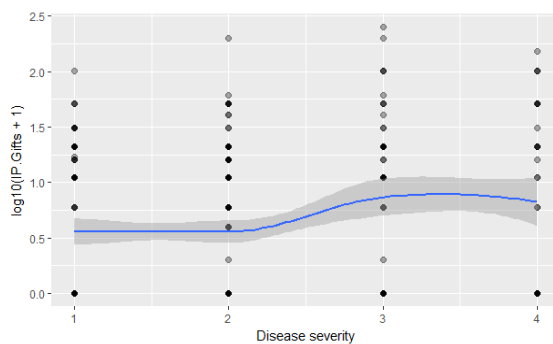
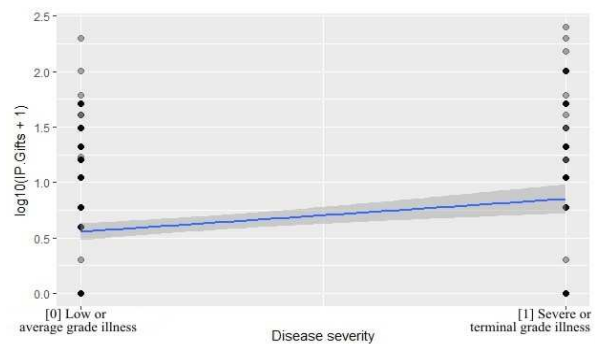


Figure 17. Scatter plot between disease severity (dichotomous) and value of gifts as informal payment



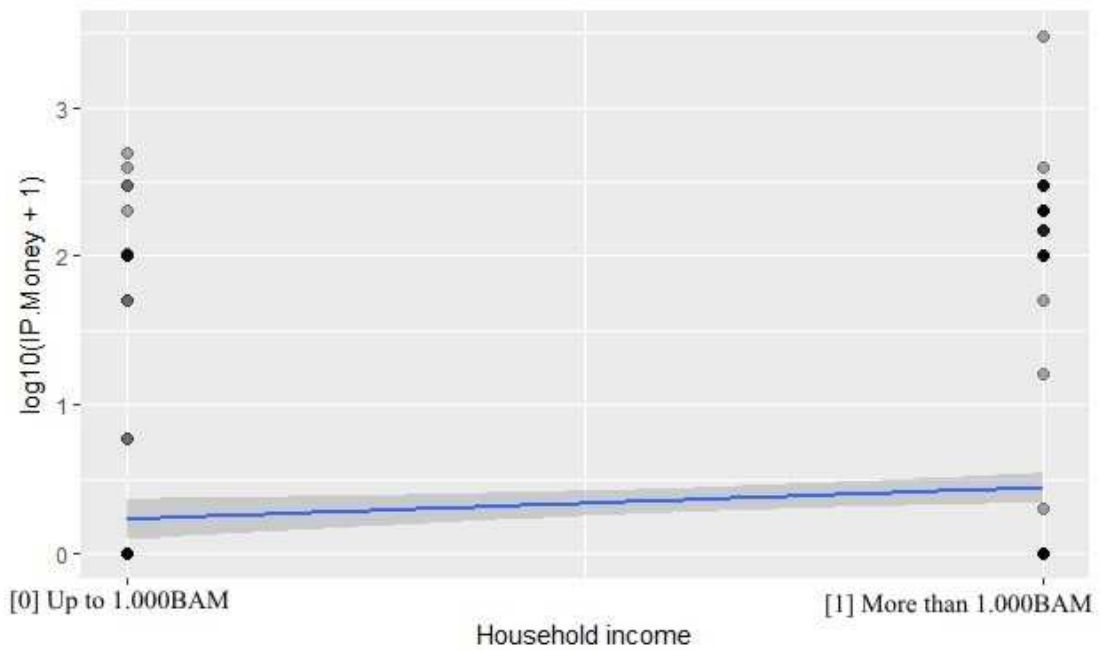
Socio-economic factors:

Four socio-economic factors were assessed as potential predictors of amount of money and value of gifts given to medical staff as part of informal payments: household income (dichotomous variable: up to BAM 1000 [0] and above BAM 1000 [1]), number of household members (continuous variable), gender of the sick person (binary variable: female [0] and male [1]) and age of the sick person (continuous variable).

Household income

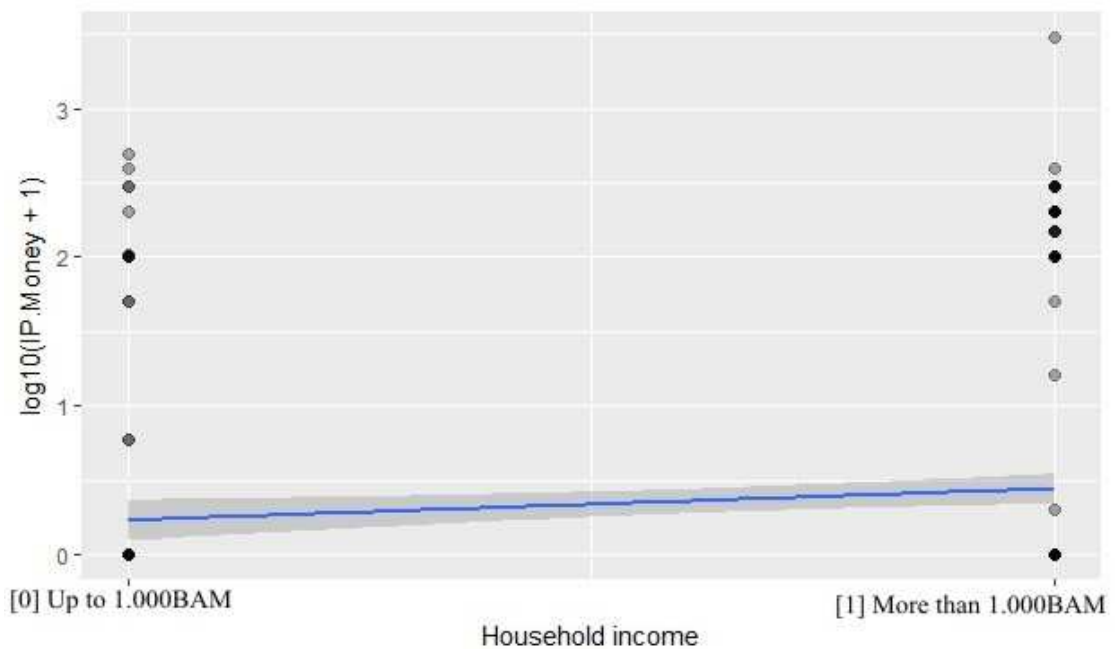
Pearson Correlation between household income and log of amount of money paid as informal payment is positive and is statistically significant. This is presented in Figure 18.

Figure 18. Scatter plot between household income and amount of money as informal payment



Correlation between household income and log of value of gifts paid as informal payment is positive and is statistically significant. This is presented in Figure 19.

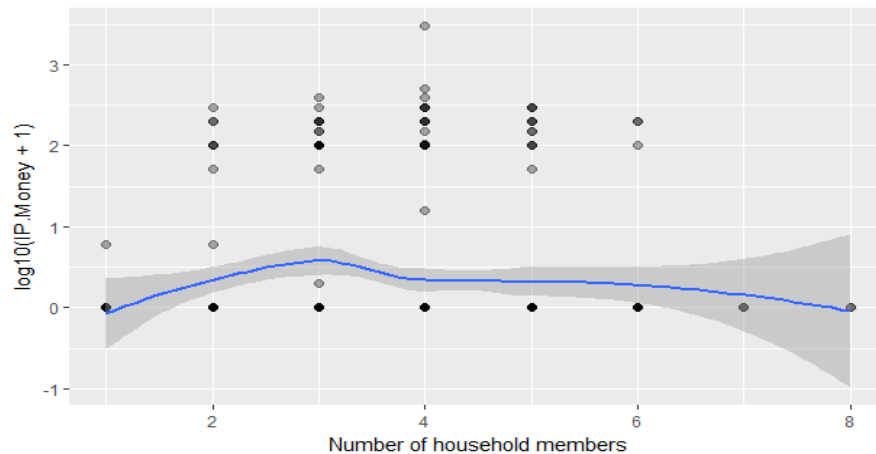
Figure 19. Scatter plot between household income and value of gifts as informal payment



Number of household members

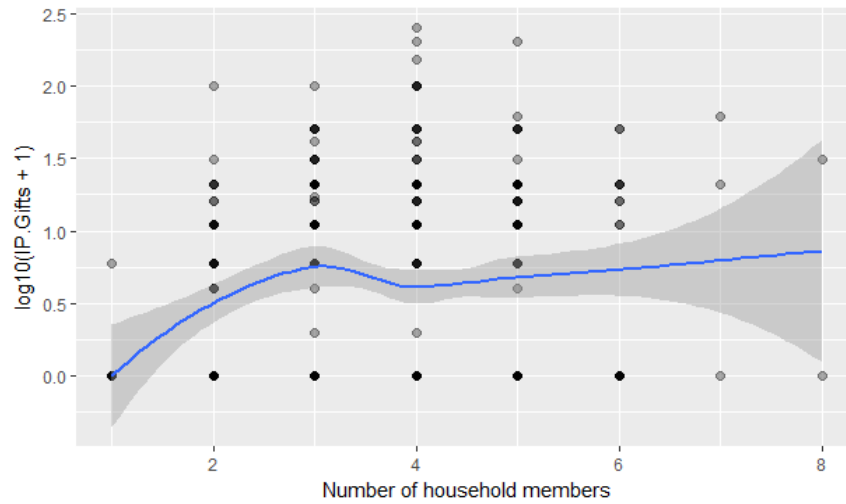
Correlation between number of household members and log of amount of money paid as informal payment is negative and is not statistically significant. The shape of relationship of the data indicates that there are two different groupings of data. One is related to research respondents who do not give money as part of informal payments and the second one is related to research participants who give money in the array of about $\log 2$. Beta estimates are biased toward those participants who do not provide informal payments and is an additional source of error in concluding the relationship between the number of household members and amount of money given as part of informal payment. Size of error term is much higher for households with number of members above six and below 2 (Figure 20).

Figure 20. Scatter plot between number of household members and amount of money as informal payment



The correlation between number of household members and log of value of gifts paid as informal payment is positive and is statistically significant. Shape of the relationship appears as a curve linear, with two different slopes for households with number of members from one to three and another slope for households with number of members above three. Error term for prediction of value of gifts given to medical staff is much larger for households having more than six members and with one household member (Figure 21).

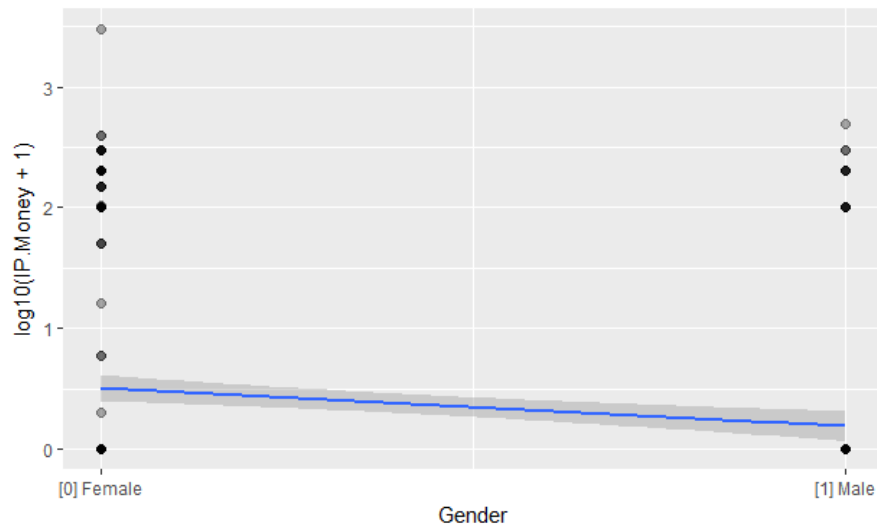
Figure 21. Scatter plot between number of household members and value of gifts as informal payment



Gender of the sick person

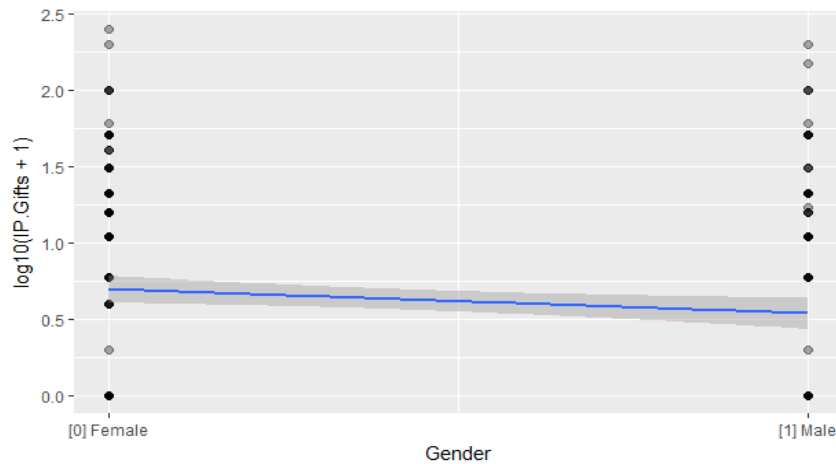
Correlation between gender of the sick person and log of amount of money paid as informal payment is negative and is statistically significant. This is presented in Figure 22.

Figure 22. Scatter plot between gender and amount of money as informal payment



The correlation between gender and log of value of gifts paid as informal payment is positive and is statistically significant. This is shown in Figure 23.

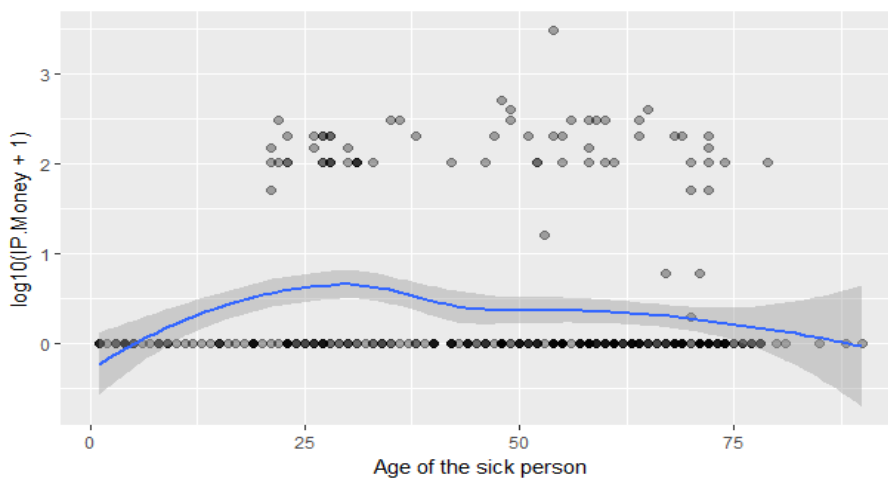
Figure 23. Scatter plot between gender and value of gifts as informal payment



Age of the sick person

Correlation between the age of the sick person and log of amount of money paid as informal payment is negative and is not statistically significant. The shape of relationship of the data indicates that there are two different groupings of data. One is related to research respondents who do not give money as part of informal payments and the second one is related to research participants who provide amounts of money in the array of about \log_2 (which is similar to the relationship between number of household members and amount of money paid as informal payment) (Figure 24). Amount of given money increases with the age of the sick person up to the age of app. 35, after which amount of money decreases with each subsequent year.

Figure 24. Scatter plot between age of the sick person and amount of money as informal payment



The correlation between the age of the sick person and log of value of gifts paid as informal payment is negative and is not statistically significant. The relationship between the age of the sick person and value of gifts provided look polynomial with several tendencies (Figure 25).

Figure 25. Scatter plot between age of the sick person and value of gifts as informal payment

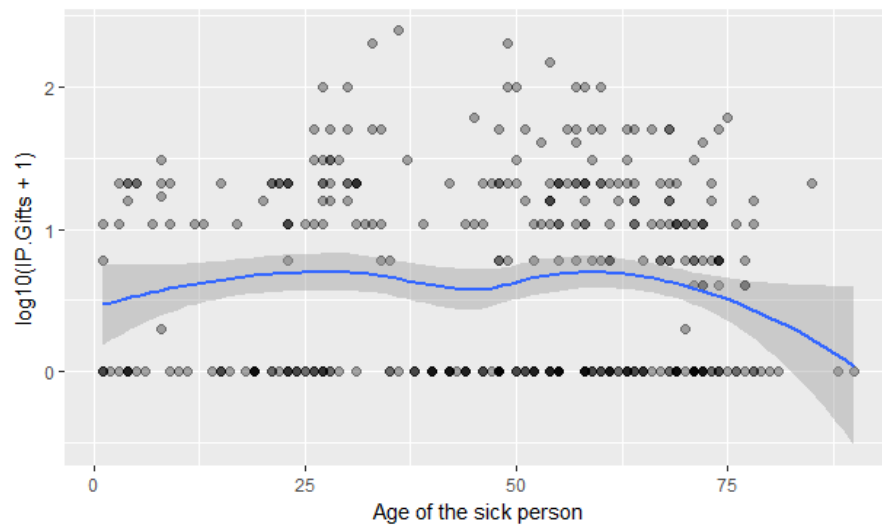


Table 24. Bivariate correlation between independent and dependent variables in Model I and II

		Attitudes toward informal payments	Seriousness of the illness	Average house income	Number of household members	Gender of the sick person	Age of the sick person	Log10.IP.Money	Log10.IP.Gifts
Attitudes toward informal payments	Pearson Correlation	1	.088	.009	-.004	-.095	.083	.219**	.361**
	Sig. (2-tailed)		.086	.866	.934	.062	.105	.000	.000
	N	385	385	385	385	385	385	385	385
Seriousness of the illness	Pearson Correlation	.088	1	.015	.067	.043	.246**	.209**	.191**
	Sig. (2-tailed)	.086		.763	.187	.397	.000	.000	.000
	N	385	387	387	387	387	387	387	387
Average house income	Pearson Correlation	.009	.015	1	.415**	.093	-.269**	.124*	.202**
	Sig. (2-tailed)	.866	.763		.000	.067	.000	.015	.000
	N	385	387	387	387	387	387	387	387
Number of household members	Pearson Correlation	-.004	.067	.415**	1	.112*	-.128*	-.018	.118*
	Sig. (2-tailed)	.934	.187	.000		.028	.012	.725	.020
	N	385	387	387	387	387	387	387	387
Gender of the sick person	Pearson Correlation	-.095	.043	.093	.112*	1	-.143**	-.190**	-.117*
	Sig. (2-tailed)	.062	.397	.067	.028		.005	.000	.021
	N	385	387	387	387	387	387	387	387
Age of the sick person	Pearson Correlation	.083	.246**	-.269**	-.128*	-.143**	1	-.042	-.030
	Sig. (2-tailed)	.105	.000	.000	.012	.005		.411	.552
	N	385	387	387	387	387	387	387	387
Log10.IP.Money	Pearson Correlation	.219**	.209**	.124*	-.018	-.190**	-.042	1	.271**
	Sig. (2-tailed)	.000	.000	.015	.725	.000	.411		.000
	N	385	387	387	387	387	387	387	387
Log10.IP.Gifts	Pearson Correlation	.361**	.191**	.202**	.118*	-.117*	-.030	.271**	1
	Sig. (2-tailed)	.000	.000	.000	.020	.021	.552	.000	
	N	385	387	387	387	387	387	387	387

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Appendix B: List of abbreviations

BiH	Bosnia and Herzegovina
FBiH	Federation of Bosnia and Herzegovina
GDP	Gross domestic product
RS	Republika Srpska
HH	Household
OOPs	Out-of-pocket payments
WHO	World Health Organization
CEE	Central and Eastern Europe countries
SFRY	Socialist Federal Republic of Yugoslavia
MH	Main hypothesis
OLS	Ordinary Least Square

Appendix C: Questionnaire

ANKETA

„Analiza neformalnog plaćanja u zdravstvenom sektoru u Bosni i Hercegovini“

Poštovani,

studija je dio master rada na Ekonomskom fakultetu u Sarajevu na temu “Analiza neformalnog plaćanja u zdravstvenom sektoru Bosne i Hercegovine“. Molimo Vas da uzmete učešće u popunjavanju upitnika i date odgovore na pitanja vezana za Vaše stavove i iskustva. Odabrani ispitanik unutar domaćinstva mora biti punoljetno lice. Popunjavanje upitnika je anonimno i nigdje ne treba da unosite svoje ime. Za popunjavanje istog Vam je potrebno oko 10 minuta.

Neformalna davanja/plaćanja se odnose samo na onu vrstu davanja koja nije zakonski zahtjevana od korisnika medicinskih usluga. Participacije nisu neformalna davanja.

1. Koja su prosječna mjesečna primanja po domaćinstvu u kojem živite? (Unesite oznaku **X** u prazan prostor koji odgovara, ne samo Vašim ličnim primanjima, nego ukupnim primanjima Vašeg domaćinstva).

1)	do 300,00 KM	
2)	301,00 – 600,00 KM	
3)	601,00 – 1000,00 KM	
4)	1001,00 – 2000,00 KM	
5)	2001,00 – 4000,00 KM	
6)	preko 4000,00 KM	

2. Koliko osoba pripada Vašem domaćinstvu?

Godine	Broj muških lica	Broj ženskih lica
0-4 godina		
5-9 godina		
10-14 godina		
15-19 godina		
20-24 godine		
25-29 godina		
30-34 godina		
35-39 godina		
40-44 godina		
45-49 godina		
50-54 godina		
55-59 godina		
60-64 godine		
65-69 godina		
70-74 godine		
75-79 godina		
80-84 godine		
85 godina i više		

3. Da li je neko u posljednja 24 mjeseca u Vašoj porodici bio bolestan u toj mjeri da je zahtijevalo liječenje?

1) Da

2) Ne

Ostala pitanja koja se odnose na medicinske usluge, odgovoriti imajući u vidu osobu za čije liječenje je potrošeno najviše resursa domaćinstva (novca i drugih oblika davanja).

4. Kojeg spola je oboljela osoba?

1) Muškarac

2) Žena

5. Koliko godina ima oboljela osoba?

6. Da li je oboljela osoba zdravstveno osigurana?

1) Da

2) Ne

7. Koji vremenski period bolesna osoba nije bila u stanju da obavlja normalne/svakodnevne aktivnosti?

1) 1 – 7 dana

2) 7 – 14 dana

3) 14 dana – 1 mjesec

4) 1 – 3 mjeseca

5) više od 3 mjeseca

8. Koliko je bilo ozbiljno oboljenje, po Vašem mišljenju?

1) lakše oboljenje

2) prosječno “teško“ oboljenje

3) ozbiljno oboljenje

4) oboljenje koje predstavlja životnu opasnost

9. Za liječenje te bolesti, da li je lice primilo uslugu u javnoj zdravstvenoj ustanovi?

1) Da

2) Ne

10. Ukoliko oboljela osoba nije zatražila medicinsku uslugu unutar javne zdravstvene ustanove, šta je bio razlog za to (moguće je zaokružiti više odgovora)?

1) nije bilo ozbiljno oboljenje. On/ona se odlučio/la za samostalno liječenje

2) zbog straha/sramote da ode u zdravstvenu ustanovu

3) zbog nedostatka novca

4) nije mu/joj omogućen pristup zdravstvenom sistemu

5) potrebni medicinski tretman nije dostupan u tom području/mjestu

6) ne služi svrsi, liječenje nije učintovito za tu vrstu bolesti

7) Drugi razlog (Navesti) _____

11. Ukoliko se bolesna osoba odlučila za proces samostalnog liječenja, navesti ukupni iznos koji je dat za lijekove i ostale rashode koji se odnose na samostalno liječenje?

12. Koliko dugo je oboljela osoba čekala, prije nego je zatražila liječenje?

- 1) potražila je pomoć ljekara čim je primjetio/la simptome
- 2) sačekao je/la nekoliko sati u slučaju hitnosti
- 3) čekao/la je manje od jedne sedmice
- 4) čekao je/la više od jedne sedmice

13. Označite sa oznakom **X** koju vrstu zdravstvene usluge je primila oboljela osoba u protekla 24 mjeseca unutar javne zdravstvene ustanove (možete označiti više odgovora):

Vrsta medicinske usluge	
Primarna njega	
Hitna pomoć	
Specijalistički pregled	
Laboratorija i ostale dijagnostičke usluge	
Hospitalizacija	
Stomatološke usluge	

14. Zašto je oboljelo lice tražilo medicinsku pomoć baš u toj zdravstvenoj ustanovi (označite sa oznakom **X** one opcije koje odgovaraju situaciji oboljele osobe unutar Vašeg domaćinstva)?

Zbog blizine zdravstvene ustanove	
To je ustanova gdje radi porodični ljekar oboljele osobe – lokalna pripadnost	
Dobro mišljenje o određenom ljekaru koji radi u toj zdravstvenoj ustanovi	
Dobra reputacija zdravstvene ustanove	
Predhodno iskustvo u navedenoj ustanovi	
Manje je skupa	
Uputili su me na tu ustanovu	
Jedina ustanova koja je dostupna za vrstu oboljenja od koje boluje lice	
Neki drugi zazlog – navedite sami razlog u praznom polju	

15. Da li je oboljela osoba uspješno završila medicinsko liječenje?

1) Da

2) Ne

16. Da li je bilo koji iznos novca dat ljekaru ili medicinskoj sestri, a da nije dio participacije?

1) Da

2) Ne

17. Da li je nešto u znak zahvalnosti (poklon) dato ljekaru ili medicinskoj sestri?

1) Da

2) Ne

18. Da li je pružena protu-usluga ljekaru ili medicinskoj sestri u zamjenu za pruženi medicinski tretman?

1) Da

2) Ne

19. Koji iznos novca je dat ljekaru ili medicinskoj sestri unutar javne zdravstvene ustanove u kešu ili iznos novca u vrijednosti poklona ili protu-usluge za medicinski tretman u posljednja 24 mjeseca – popunite sve prazne prostore u tabeli koji se odnose na oboljenje?

Vrsta medicinske usluge	Iznos u novcu	Iznos novca u vrijednosti poklona	Iznos novca u vrijednosti protu-usluge
Primarna njega			
Hitna pomoć			
Specijalistički pregled			
Laboratorija i ostale dijagnostičke usluge			
Hospitalizacija			
Stomatološke usluge			

20. U kom trenutku je došlo do plaćanja (u novcu) ili davanja poklona ili protu-usluge nekom od medicinskog osoblja (moguće je zaokružiti više odgovora)?

1) prije tretmana

2) tokom tretmana ako je bilo više od jedne posjete

3) poslije tretmana

