Research Article

How Different Motivations for Making Informal Out-Of-Pocket Payments Vary in Their Influence on Users’ Satisfaction with Healthcare, Local and National Government, and Satisfaction with Life?

Nazim Habibov,1 Alena Auchynnikava,2 Lida Fan,3 and Yunhong Lyu2

1School of Social Work, University of Windsor, 167 Ferry Street, Windsor, Ontario, Canada N9A0C5
2University of Windsor, Ontario, Canada
3Lakehead University, Thunder Bay, Ontario, Canada

Correspondence should be addressed to Nazim Habibov; habibov@yahoo.com

Received 12 May 2021; Revised 22 July 2021; Accepted 28 July 2021; Published 27 August 2021

Academic Editor: Mihajlo Jakovljevic

Copyright © 2021 Nazim Habibov et al. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Background. The dominant view in the literature is that informal payments in healthcare universally are a negative phenomenon. By contrast, we theorize that the motivation healthcare users for making informal payments (IP) can be classified into three categories: (1) a cultural norm, (2) “grease the wheels” payments if users offered to pay to get better services, and (3) “sand the wheels” payments if users were asked to pay by healthcare personnel or felt that payments were expected. We further hypothesize that these three categories of payments are differently associated with a user’s outcomes, namely, satisfaction with healthcare, local and national government, satisfaction with life, and satisfaction with life of children in the future. Methods. We used microdata from the 2016 Life-in-Transition survey. Multivariate regression analysis is used to quantify relationships between these categories of payments and users’ outcomes. Results. Payments that are the result of cultural norms are associated with better outcomes. On the contrary, “sand the wheel” payments are associated with worse outcomes. We find no association between making “grease the wheels” payments and outcomes. Conclusions. This is the first paper which evaluates association between three different categories of informal payments with a wide range of users’ outcomes on a diverse sample of countries. Focusing on informal payments in general, rather than explicitly examining specific motivations, obscures the true outcomes of making IP. It is important to distinguish between three different motivations for informal payment, namely, cultural norms, “grease the wheels,” and “sand the wheels” since they have varying associations with user outcomes. From a policy making standpoint, variation in the links between different motivations for making IP and measures of satisfaction suggest that decision-makers should put their primary focus on situations where IP are explicitly asked for or are implied by the situation and that they should differentiate this from cases of gratitude payments. If such measures are not implemented, then policy makers may unintentionally ban the behaviour that is linked with increased satisfaction with healthcare, government, and life (i.e., paying gratitude).

1. Background

IP is defined as a direct contribution in cash or gifts that is in addition to any formally required contributions and which are made by users to healthcare personnel or others acting on their behalf [1, 2]. Since such payments are made out of the counter and under the table, they are not part of formal healthcare expenditures and can be made in the form of cash such as small tips and large sums of money, or through various types of gifts such as flowers and sweets, and before or after receiving services [3]. IP is a subsection of a wider category of out-of-pocket payments [4]. Thus, out-of-pocket payments represent the amount of IP and legitimate legal fees paid in the healthcare sector taken together. Legitimate fees may include copayments for compulsory and voluntary health insurance schemes and payments for healthcare services
which are not covered by compulsory and voluntary health insurance schemes.

Various estimates show that IP represents the lion’s share of out-of-pocket payments [5]. For instance, the share of IP has reached 96% in Pakistan [6] and 74% in Azerbaijan [7]. Even in EU and OECD countries, incidents of IP are high, reaching 35% in Poland, 41% in Lithuania, and 17% in the Czech Republic and Slovakia [7]. From the standpoint of health policy and planning, such a large share of IP underlines a shift in healthcare funding from a solidarity approach that is based on budget-financed or insurance-financed schemes, to an individualistic approach where consumers are expected to bear the main responsibility for healthcare costs [8, 9].

Against this background, the literature highlights a lack of studies on association between different motivations for IP and user outcomes and points out that the current literature tends to evaluate overall effect of IP without considering different motivations for making IP [10, 11]. With the above evidence in mind, we theorize that the motivations for making could be grouped into three broad categories, namely, “cultural norm,” “grease the wheels,” and “sand the wheels.” We further theorize that the direction of association between IP and satisfaction is not universal and depends on the specific motivation for making IP. More specifically, we hypothesize that “cultural norm” and the “grease the wheels” conceptualization of IP may be associated with positive user outcomes, while the “sand the wheels” conceptualization will have an opposite association. To test these hypotheses, we separately analyze the effect of each of the above-discussed theoretical motivations of IP on user well-being. This approach allows us to shed light on differences in the association between the various motivations for making IP with a wide range of users’ outcomes. In this way, the study answered to the following three research questions:

(1) How do each of these motivations influence satisfaction with public healthcare?

(2) How do each of these motivations influence satisfaction with local and national governments?

(3) How do each of these motivations influence satisfaction with one’s own life and expected satisfaction with the future life of one’s children?

The unique contribution of this study is threefold. First, as far as we know, this is the first study which tests for plausible variation in the influence of the different conceptualizations of IP on users’ outcomes on a large sample of countries. Second, we test for the influence of IP on a wide range of outcomes including satisfaction with local and national governments and satisfaction with one’s own life and expected satisfaction with the future life of one’s children.

Finally, we focused on postcommunist countries where incidents of IP are high and have a prolonged history. Historically, under the Semashko system, the state in the communist countries assumes the primary responsibility to provide universal healthcare to the citizens free at the point of utilization [12]. However, considerable shortage in the available public funding together with the nonexistence of official and legitimate mechanisms for engaging private healthcare expenditures led to widespread inequalities in access in the 1970s and IP became an important factor in ensuring access to rationed public healthcare since 1970s [13, 14]. The role of IP in providing access to public healthcare further grew through 1980 as postcommunist countries were not able to sufficiently increase public funding for healthcare and IP became widespread in forms of cash and small gifts, for instance, liquors, cigarettes, and perfume [15–17]. Collapse of communist economic system in the 1990s increased the spread of IP since the profound and protracted political and economic crisis associated with transition from communist further reduced public funding for healthcare [18, 19].

To curb IP, postcommunist countries embraced the wide range of healthcare reforms and each postcommunist country has chosen their own way for reforms with at least four main models were utilized: (1) to introduce compulsory health insurance system, (2) to implement guaranteed benefit packages for specific types of healthcare services or for specific population groups (e.g., maternal healthcare and healthcare for internally displaced people), (3) to use some combination of both above-described approaches, and (4) to remain with a traditional model of healthcare financing where healthcare funding is paid from the general budget revenue [20–23]. The fully comparable data about current characteristics of the healthcare systems in postcommunist countries is hard to find, so Table 1 provides the available information from the Global Health Expenditure database by the WHO that is the most reputable source of cross-country comparison for healthcare [24].

The reforms were not able to substantially reduce incidents of IP in postcommunist countries [25–27]. The recent studies conducted after 2010 reveal that incidents of making IP remain widespread. Thus, Stepurko et al. [25] found that the scale of making IP in forms of gifts varies from 35 percent in Poland to 58 percent in Ukraine. The most recently available estimates for postcommunist countries show that IP is considerable not only in low-income countries, for instance, 74 percent in Azerbaijan and 65 percent in Kyrgyzstan, but also in high-income countries, for instance, 34 percent in Hungary and 44% in Romania [7]. The literature indicates multiple interrelated reasons why IP were not significantly reduced as a result of the reforms. First, population health worsened because of depression, stress, ethnic wars, civil and political conflicts, corruption, and crime which are associated with the period of the transition from communism [28–30]. In turn, the worsening health increased demand for healthcare. Second, the reforms were not able to substitute the considerable deficit of public healthcare financing which happened during the transition [25]. Third, expectations of users about quality of healthcare continued to increase substantially during the transition and making IP was often considered the only way to gain access to higher quality and faster healthcare [10, 31]. Finally, many healthcare users felt that the state ceased to be responsible for their health and they must use all available ways to get access to healthcare including making IP [32].


Table 1: Current health expenditure by different schemes as percentage of total health expenditures.

| Government schemes and compulsory contributory health care financing schemes | Voluntary health care payment schemes | Household out-of-pocket payment |
|---|---|---|
| Albania | 58 | 0 | 42 |
| Armenia | 18 | 1 | 81 |
| Azerbaijan | 29 | 0 | 71 |
| Belarus | 71 | 2 | 27 |
| Bosnia and Herzegovina | 71 | 0 | 29 |
| Bulgaria | 55 | 1 | 43 |
| Croatia | 83 | 7 | 11 |
| Czech Republic | 82 | 3 | 15 |
| Estonia | 76 | 2 | 23 |
| Georgia | 37 | 8 | 56 |
| Hungary | 68 | 4 | 28 |
| Kazakhstan | 60 | 5 | 36 |
| Kyrgyzstan | 42 | 0 | 57 |
| Latvia | 56 | 1 | 43 |
| Lithuania | 67 | 1 | 32 |
| Mongolia | 64 | 3 | 32 |
| Poland | 69 | 8 | 23 |
| Romania | 78 | 1 | 21 |
| Russia | 57 | 3 | 40 |
| Serbia | 58 | 2 | 40 |
| Slovakia | 81 | 1 | 18 |
| Slovenia | 73 | 15 | 12 |
| Tajikistan | 32 | 2 | 66 |
| Ukraine | 48 | 3 | 48 |
| Uzbekistan | 45 | 1 | 55 |

Data is from the WHO’s Global Health Expenditure database by WHO at https://apps.who.int/nha/database/Select/Indicators/en. Household out-of-pocket expenditures encompass informal payments (IP) and various legitimate fees, as detailed in Introduction.

2. Materials and Methods

2.1. Main Theoretical Argument: Three Motivations for IP and Their Links with Users’ Outcomes. One the most accepted schools of thought conceptualizes IP as a cultural phenomenon that originates in the social norms of gratitude. According to this approach, users, healthcare personnel, and health administrators argue that cash payments or gifts given by healthcare users to healthcare personnel are consistent with customs and traditions that are rooted in cultural norms and beliefs of gift giving and reciprocity [33–35]. The notion of IP as a cultural norm of gratitude is asserted to be particularly relevant to nations outside of the realm of Western culture and tradition [36–38]. As justified by Yang [39], incidents of IP “cannot be reduced to a modern western notion of corruption because the personalistic qualities of obligation, indebtedness, and reciprocity are just as important as transactions in material benefit.” Thus, although large-scale corruption schemes in public services, and especially in healthcare, are commonly criticized, IP given to healthcare personnel are not necessarily considered to be the result of illegal corruption [40–43]. The important implication of conceptualizing IP as a non-zero form of gratitude payment is that there will be a positive association between making IP and a higher level of satisfaction and well-being for users who have paid IP. Thus, the following hypotheses can be articulated based on the discussion above:

H1 Gratitude motivation for making IP is associated with a positive user’s outcomes.

Another school of thought conceptualizes IP as a “grease the wheels” phenomenon and suggests that IP can alleviate the limitations of the healthcare system including its slow speed of action, low quality, and the competition between providers of public services in less-developed countries [11, 44]. It posits that users’ primary motivation for making IP is the prospect that they will receive a quicker and a higher quality of care that is more personalized and convenient and has shorter wait times and that they will have access to more advanced or specialized care and services [2, 45–47]. As an illustration, Riewpaiboon and colleagues detailed how a Thai woman made informal payments to an obstetrician to get better services during her pregnancy [48], while several other studies confirmed that IP resulted in a better relationship between users and healthcare personnel and consequently in higher levels of satisfaction for users [4, 5, 49, 50]. On the other hand, IP eases the inefficiencies of administering public healthcare in a situation where healthcare workers believe that they are not being paid adequately and so have the expectation of IP, while concurrently, users expect to pay out-of-pocket to underpaid professionals for more or better-quality service [15, 41, 51, 52]. As such, when the expectations of healthcare professionals and the users of healthcare are congruent; then a transaction between the payment and reception of unofficial payments takes place. Furthermore, IP could encourage competition between healthcare providers and could be financially beneficial for users. Thus, it could occur that users would need to pay less IP for formally “free” treatment in public healthcare rather than to officially pay more for the same treatment in private healthcare [7, 53]. The “grease the wheels” conceptualization suggests a statistically significant association between making IP and positive users’ outcomes. Consequently, our next hypothesis is

H2 “Grease the wheels” motivation for making IP is associated with a positive user’s outcomes.

The last school of thought conceptualizes IP as the more negative “sand the wheels” phenomenon and highlights that the above-discussed perspectives are used to normalize IP in healthcare and make an unacceptable phenomenon acceptable [1]. It posits that users have to make IP since they are directly asked by healthcare personnel or they know that such payment is expected, while not making IP will negatively affect access to services or the quality of the services they receive [8, 10, 25, 54]. As an example, Miller et al. [55]
(p. 310) cited a respondent in Bulgaria who described the fate of another user’s father: “He [son of another user] was told he had to give 20,000 levs. He said he could afford only 10,000 levs. And two days later his father died.” Furthermore, another respondent in the Ukraine emphasized, “When the matter has to do with health, you go ahead and give bribes. Health is more important than anything.” Another of the negative impact of IP includes a decrease in the likelihood of using healthcare when needed, in particular for the poor for whom IP frequently represents catastrophic expenditures [56–59]. Equally, IP is a serious barrier for access to more advanced and specialized types of treatment [60, 61]. The “sand the wheels” conceptualization of IP suggests a significant negative association between IP and user outcomes. Thus, our final hypothesis is

H3 “Sand the wheels” motivation for making IP is associated with a negative user’s outcomes.

2.2. Data. We followed the methods of Habibov et al. [62]. Our study is based on the secondary analysis of microdata from the 2016 Life-in-Transition survey (henceforth, the LITS) that covers 27 postcommunist countries of Eastern Europe and the former Soviet Union. The LITS was implemented by the Ipsos pollster company with support from the European Bank for Reconstruction and Development and the World Bank [63]. The survey collects information about IP in each country and about the socioeconomic characteristics of respondents and their households.

The LITS employs a multistage design. The survey employs the list of primary selection units (PSUs) which is derived from the most recent sample frames prepared by the countries’ national statistical organizations in the first stage of sampling. The probability proportional to size technique is employed to choose the PSUs from the frames in the second stage of sampling. In this way, depending on the size of the country and its population density, approximately 50–70 PSUs in each country are selected for surveying. During the third stage, the random walk technique is used to choose households for interview in each of the selected PSU. In the case where more than one household lives at the same address, then only one of the households was randomly selected to participate in the survey. During the final stage, one household member was selected for an interview using the last birthday technique. Up to three home visits were conducted to heighten the chances that the chosen respondents would be able to participate in the survey. Specially trained investigators then interviewed approximately 1000 respondents in each country under investigation, with an overall response rate of 89%.

The original English version of the master questionnaire was developed in conjunction by Ipsos, the EBRD, and the World Bank. It was then translated into the local languages by experienced professional interpreters. In translation, the questionnaire was then sent to each country to be checked and approved by local interviewers and agencies. Feedback from each country was then given to professional translators who rechecked the translated national versions. All the suggestions for adjustments made by the local teams were incorporated into the final version of the survey. In countries where Russian is spoken, survey participants were given the option of using the Russian version. After the questionnaire was pretested, suggestions were again incorporated into the questionnaire. The amended version of the questionnaire was then used for the pilot that was conducted in each country by local interviewers and agencies. Criticism and advice resulting from these pilots occasioned additional changes to the questionnaire.

2.3. Definitions and Measurement. Detailed description of all the variables including descriptive statistics can be seen in Table 1, while further discussion of the descriptive results can be found in Figure 1. As such, here, we will confine ourselves to a brief outline of the variables used in this study. We commence with making IP. The LITS asked each respondent who had used the healthcare system within the last 12 months whether she or he had “made unofficial payments or gifts (with the exception of any official fees or payments) during the last 12 months.” The response is recorded as binary (yes = 1; no = 0). The same definition of IP has been used in previous studies [7].

Next, respondents who had made IP were asked about their motivations for doing so. We conceptualized IP payment as a “grease the wheel” payment if the respondent had indicated that they had offered to pay IP to get better or quicker services. In contrast, we conceptualized it as a “sand the wheel” payment if the respondent indicated that IP was made because they had been asked to pay it by healthcare personnel or felt that IP was expected. Lastly, if the respondent reported making IP to express customary gratitude to healthcare personnel, it was considered a “gratitude payment.” All motivation variables are recorded as binary (made a specific type of IP = 1; no = 0).

The LITS allows us to distinguish between four types of users’ outcomes, namely, satisfaction with healthcare, local and national government, satisfaction with life, and satisfaction with life of children in the future. All variables are ordered Likert-scale variables ranging from 1 to 5, where a higher value indicates a more satisfaction.

2.4. Analytic Approach. We regress making IP on satisfaction with healthcare, local and national government, satisfaction with life, and satisfaction with the anticipated future life of one’s children. We estimate a series of ordered logit regressions since satisfaction is measured by ordered Likert-scale type variables. All regression models controlled for covariates that are typically associated with making IP including individual-level characteristics such as age, gender, education, marital status, self-assessed health status, and household-level characteristics such as number of young and older children, household wealth, and residing in rural areas [7, 8, 25]. To control for country-level differences, all models included country dummies. To control for PSU influence, all models include cluster-robust standard errors. All models reported odds ratios, standard errors, and statistical significance at conventional levels (∗p < 0.05, ∗∗p < 0.01, and ∗∗∗p < 0.001).
3. Results

3.1. Descriptive Results. Descriptive results for main predictor of interest are reported in Figure 1, which illustrates the flow chart of the IP-related questions. As shown, approximately 18% of respondents made IP. Among those who made IP, about 31% did so to express gratitude. In contrast, about 19% offered to pay to get better services. However, the largest share of respondents who made payments, approximately 45%, were asked to do so by healthcare personnel or felt that IP were expected.

Further descriptive results for IP payments are reported in Table 2. This table shows the percentage of respondents who reported to make IP in each country. Among countries of the former Soviet Union, respondents from Tajikistan, Moldova, and Azerbaijan reported the highest incidents of making IP—46, 42, and 35 percent, respectively. The lowest number of IP incidents in the countries of the former Soviet Union is reported in Georgia (3 percent) and Uzbekistan (16 percent). Looking at the postcommunist countries of South Europe, we can find that highest proportion of respondents paid IP in Albania 31 percent and Romania 30 percent. The lowest percentage of IP in South Europe can be observed in Croatia (9 percent) following by Macedonia (10 percent). Remarkably, IP are widespread in more developed postcommunist countries of Eastern Europe such as Hungary with 25 percent and Lithuania with 24 percent. Approximately 13 percent of respondents reported paying IP in Slovakia and 12 in Latvia. The lowest incidents of making IP in Eastern Europe can be found Slovenia (2 percent) and Estonia (5 percent).

Finally, a sociodemographic and economic description of the analytical sample is presented in Table 3.

3.2. Influence of IP Motivations on Satisfaction with Healthcare. We begin with examining the association between motivations for providing IP and satisfaction with healthcare. The results of ordered logit regressions on satisfaction with healthcare are reported in Table 4. Overall, as shown in Model 1, making IP is associated with a significant reduction in the likelihood of reporting satisfaction with healthcare. However, results of Models 2 to 4 show that the association between IP and healthcare satisfaction depends substantially on one’s specific motivations for making IP. Thus, the results of Model 2 suggest that making IP as a cultural norm of gratitude is associated with increased satisfaction with healthcare. In comparison, results of Model 3 indicate that offering to pay IP in order to get better service (i.e., the “grease the wheels” conceptualization) is not significantly associated with healthcare satisfaction. To the contrary, results of Model 4 signal that paying IP because it is expected or asked for (i.e., the “sand the wheels” conceptualization) significantly reduces satisfaction with healthcare.

3.3. Influence of IP Motivations on Satisfaction with Local and National Governments. We proceed with evaluating the relationship between IP and satisfaction with local and national governments. The results of ordered logit regressions on IP on satisfaction with local government are reported in Models 5 to 8 of Table 5. Overall, as shown in Model 5, making IP is associated with a significant reduction in the likelihood of reporting higher satisfaction with local government. Nevertheless, the association between IP and healthcare satisfaction varies considerably across specific motivations for making IP. Indeed, paying IP because it is a cultural norm of gratitude significantly increases satisfaction with local government in Model 6. In contrast, offering to pay IP in order to get better service (i.e., the “grease the wheels” conceptualization) is not significantly associated with satisfaction with local government in Model 7. Finally, making IP because it is expected or asked for (i.e., the “sand the wheels” conceptualization) is associated with a reduction in satisfaction with local government in Model 8.

The results of ordered logit regressions on IP on satisfaction with national government are reported in Models 9 to 12 of Table 4. Making IP overall in Model 9 is associated with a significant reduction in the likelihood of reporting satisfaction with the national government. Nonetheless, in the line with our previous results, the association between IP and healthcare satisfaction varies across specific motivations for making IP. Hence, Model 10 suggests that having made IP as a customary show of gratitude significantly increased satisfaction with the national government. Conversely, making IP because it is expected or asked for (i.e., the “sand the wheels” conceptualization) significantly reduced satisfaction with the national government in Model 12. In contrast, offering to pay IP in order to get better service (i.e., the “grease the wheels” conceptualization) has no significant association with satisfaction with the national government in Model 11.

3.4. Influence of IP Motivations on Life Satisfaction. We now turn to assessing the link between IP and life satisfaction. The results of ordered logit regressions on IP on the life satisfaction and the anticipated satisfaction with the
future life of one’s children are reported in Models 13 to 20 of Table 6. The results of these models confirm our previous findings. Overall, making IP is associated with a lower life satisfaction for respondents in Model 13. The negative effect of IP is even higher if making IP was expected or asked for (i.e., the “sand the wheels” conceptualization) in Models 16 and 20. In contrast, making IP as a customary gratitude is associated with higher life satisfaction in Models 14 and 18. In comparison, no link can be established between offering to pay IP in order to get better service (i.e., the “grease the wheels” conceptualization) in Models 15 and 19.

### 4. Discussion

Addressing the original question about the association between IP and user outcomes provides us with a novel insight. The currently popular view in the literature is that making IP has a negative effect on users’ well-being [3, 9]. Most papers correlate making IP with healthcare satisfaction and have found a negative influence of IP on healthcare satisfaction [12, 54]. Our results however beg for a much more nuanced approach. As our findings suggest, only “sand the wheels” payments, when IP is asked for or felt to be required, are associated with lower satisfaction with healthcare. In
sharp contrast, paying IP as a customary gratitude is associated with higher satisfaction with healthcare. In comparison, paying “grease the wheels” IP to get better services is not associated with higher satisfaction with healthcare. These findings are robust for all other measures of satisfaction that we used in this study. Thus, paying to express gratitude is associated with higher satisfaction with healthcare. In comparison, paying IP because it was asked for or felt to be required is linked with reduced satisfaction for all the above-described measures of satisfaction. Finally, paying to get better services because one felt that IP was required is not associated with all the above-described measures of satisfaction. We can conclude therefore that the direction of association between IP and satisfaction is not universal and depends on the specific motivation for having made IP.

From a research standpoint, our findings suggest that researchers need to look beyond informal payments in general and into the specific categories that reflect the motivations for making them. Focusing on informal payments in general, rather than explicitly examining specific motivations, obscures the true outcomes of making IP. As we have demonstrated, although IP may seem to be related to lower satisfaction, our findings suggest that this is true only if respondents were asked for IP or they felt it was expected. In all other cases, making IP is associated neither with satisfaction nor with a higher level of satisfaction.

From a policy making standpoint, variation in the links between different motivations for making IP and measures of satisfaction suggests that decision-makers should put their primary focus on situations where IP are explicitly asked for or are implied by the situation and that they should differentiate this from cases of gratitude payments. If such measures are not implemented, then policy makers may unintentionally ban the behaviour that is linked with increased satisfaction with healthcare, government, and life (i.e., paying gratitude). However, differentiating between different types of IP payments may present a genuine dilemma for agencies and decision-makers who are engaged in anticorruption practice and healthcare reform.

In terms of conceptualizing IP as a cultural phenomenon which leads to positive user’s outcomes, our results are in line with previous findings [12, 33, 34]. The authors of these studies suggest that giving cash to gifts to healthcare personnel is considered by users as consistent with beliefs about norms of giving and reciprocity. Our findings about the positive influence of IP as a cultural phenomenon are also in line with previous literatures which suggest that even though large-scale corruption schemes are commonly criticized, IP given to healthcare personnel are not necessarily conceptualized by users as illegal corruption and do not have negative undertone [40–43].

On the other hand, in terms of conceptualizing IP as a “grease the wheels” phenomenon, we cannot confirm the results of previous studies which suggest that such IP can improve their satisfaction [2, 45–47]. Association between “grease the wheels” payments and user’s outcomes in our estimations is not positive but not statistically significant. There are three main reasons why our study cannot establish significant association between “grease the wheels” IP and users’ outcomes. First, users may experience lower satisfaction even if they received better and faster services due to “grease the wheels” payments because they paid for services which they expected to be delivered for free. In other words, they may feel dissatisfaction that they have to make IP to receive higher quality and faster services since they believe that such quality and speed should be available without additional “grease the wheels” IP. Second, users could make “grease the wheels” IP to get better and faster services, but after receiving services, they may be unsatisfied with the quality and speed of services which they received [5]. Hence, they may question whether such quality and speed justify making “grease the wheels” payments.

Yet, on the other hand, in terms of conceptualizing IP as a “sand the wheels” that led to negative outcomes, our study concurs with findings of previous studies that reports that such payments are often catastrophic expenditures, especially

| Country                  | Making informal payments | Percentage |
|--------------------------|--------------------------|------------|
| **Eastern European countries** |                          |            |
| Czech Rep.               | 89                       | 9.80       |
| Estonia                  | 67                       | 5.36       |
| Hungary                  | 239                      | 25.18      |
| Latvia                   | 142                      | 11.52      |
| Lithuania                | 303                      | 24.44      |
| Poland                   | 69                       | 6.59       |
| Slovak Rep.              | 135                      | 12.88      |
| Slovenia                 | 24                       | 2.09       |
| **South European countries** |                          |            |
| Albania                  | 242                      | 30.79      |
| Bosnia and Herzegovina   | 158                      | 19.39      |
| Bulgaria                 | 134                      | 15.95      |
| Croatia                  | 72                       | 9.07       |
| FYR Macedonia            | 71                       | 10.35      |
| Romania                  | 209                      | 29.73      |
| Serbia                   | 98                       | 13.26      |
| **Countries of the former Soviet Union and Mongolia** | |
| Armenia                  | 170                      | 19.08      |
| Azerbaijan               | 131                      | 34.38      |
| Belarus                  | 160                      | 17.86      |
| Georgia                  | 21                       | 3.11       |
| Kazakhstan               | 133                      | 18.63      |
| Kyrgyz Republic          | 177                      | 24.72      |
| Moldova                  | 238                      | 41.75      |
| Mongolia                 | 96                       | 16.52      |
| Russia                   | 195                      | 21.76      |
| Tajikistan               | 260                      | 45.69      |
| Ukraine                  | 251                      | 33.92      |
| Uzbekistan               | 132                      | 15.96      |

---

Table 3: Informal payments by countries in percentage.
for the poor [24]. The linkage between IP as a “sand the wheels” and negative user’s outcome that we found is also in accord with other previous findings that such payments serve as the major barrier to utilization of healthcare when it is needed [8, 25, 54]. Our finding on the negative association between making IP and satisfaction with healthcare is also congruent with previous findings. Thus, Habibov [10] found that making IP in postcommunist countries is associated with a negative effect on satisfaction with public healthcare by a factor of -1.26.

In addition, the results of our study concur with the results of the recent, 2021, study by Habibov et al. [62]. The authors studied association between “grease-the-wheel,” “sand-the-wheel,” and “cultural norm” motivations for making informal payments with satisfaction in public primary, secondary, and vocational education in postcommunist countries using the same survey instrument, namely, LITS survey. Although field of research of that study was not public health, but public education, and their theoretical framework was based on a different set of assumptions than those used in our study, it is still instructive to compare their results with our results. Thus, similar to our findings, the authors reported that the association between IP and satisfaction with public education depends in a great part on the specific motivations for making IP. In line with our findings, the authors found that making IP because users were asked to by educational personnel and because such payments were expected was associated with weakened satisfaction with public education. In contradistinction, customary gratitude in form of IP was associated with increased levels of satisfaction with public education. Making IP in order to get better services was significantly associated with satisfaction. It can be concluded that difference in “grease-the-wheel,” “sand-the-wheel,” and “cultural norm” motivations for IP and satisfaction with public services exists not only in public health but also in public education. Therefore, our findings along with findings by Habibov et al. [62] suggest that more research is needed to confirm the difference in effect of “grease-the-wheel,” “sand-the-wheel,” and “cultural norm” motivations for making IP on satisfaction with public services, life satisfaction, and other well-being indicators.

At the same time, we found that the negative effect of making IP is almost equal for local and national governments. This finding suggests that turning a blind eye to “sand the wheels” payments is hardly an option since it reduces satisfaction with local and national governments. On the one hand, this finding contradicts those of Habibov et al. [64], who reported that individuals tend to blame local rather than national governments for corruption. The authors explained that healthcare is mostly managed at the local level, which helps national governments escape the blame for healthcare corruption. On the other hand, our findings that both levels of government have been blamed for corruption equally is consistent with the notion that although healthcare is managed at the local level, the major parameters and regulations of health policy and administration are established and monitored at the national level.

Another interesting finding is that the influence of making IP extends beyond proximal outcomes, such as satisfaction with healthcare, and into distal outcomes, such as life satisfaction. This finding is in line with findings of Sulemana et al. [65], which demonstrated that higher levels of informal payments have a negative effect on life satisfaction in Africa. This finding is also in line with those of Rodriguez-Pose and Maslauskaite [66] who established that happiness, in Central and Eastern European countries, is highly influenced by

| Table 4: Satisfaction with healthcare. |
|--------------------------------------|
|                                        |
| Made IP in general                     |
| Customary gratitude                    |
| Offered to pay to get better service ("grease the wheels") |
| Asked to pay or felt that IP was expected ("sand the wheels") |
| Women                                  |
| Age                                    |
| Married                                |
| University                             |
| Number of older children               |
| Number of younger children             |
| Wealth                                 |
| Rural                                  |
| Lower level of health                  |
| Country dummies included               |
| N                                      |
| Log likelihood                         |
| McKelvey & Zavoina $R^2$               |
| LR chi$^2$                             |

|                  | Model 1 | Model 2 | Model 3 | Model 4 |
|------------------|---------|---------|---------|---------|
| Made IP in general | $0.392^{***}$ (0.014) |         |         |         |
| Customary gratitude |         | $3.455^{***}$ (0.245) |         |         |
| Offered to pay to get better service ("grease the wheels") |         |         | $0.911$ (0.068) |         |
| Asked to pay or felt that IP was expected ("sand the wheels") |         |         | $0.379^{***}$ (0.024) |         |
| Women            | $1.110^{***}$ (0.029) | $1.144^{*}$ (0.071) | $1.150^{*}$ (0.071) | $1.186^{**}$ (0.074) |
| Age              | $1.007^{***}$ (0.001) | $1.004^{*}$ (0.002) | $1.005^{*}$ (0.002) | $1.005^{*}$ (0.002) |
| Married          | $0.968$ (0.027) | $1.059^{*}$ (0.071) | $1.006$ (0.067) | $1.027$ (0.068) |
| University       | $1.060$ (0.041) | $1.014$ (0.092) | $1.064$ (0.096) | $1.031$ (0.093) |
| Number of older children | $0.992$ (0.020) | $0.980$ (0.043) | $0.987$ (0.043) | $0.970$ (0.042) |
| Number of younger children | $1.028$ (0.023) | $1.063$ (0.054) | $1.089$ (0.055) | $1.087$ (0.055) |
| Wealth           | $0.979^{*}$ (0.010) | $0.969$ (0.023) | $0.977$ (0.023) | $0.963$ (0.022) |
| Rural            | $1.137^{***}$ (0.032) | $1.156^{*}$ (0.078) | $1.164^{*}$ (0.078) | $1.186^{*}$ (0.079) |
| Lower level of health | $0.639^{**}$ (0.024) | $0.652^{***}$ (0.056) | $0.632^{***}$ (0.053) | $0.645^{***}$ (0.055) |
| Country dummies included | YES | YES | YES | YES |
| N                | $22,529$ | $3807$ | $3807$ | $3807$ |
| Log likelihood   | $-27653.14$ | $-5117.49$ | $-5276.90$ | $-5159.74$ |
| McKelvey & Zavoina $R^2$ | $0.122$ | $0.146$ | $0.067$ | $0.125$ |
| LR chi$^2$       | $2675.78^{***}$ | $569.01^{***}$ | $250.22^{***}$ | $484.50^{***}$ |

Standard errors in parentheses: $^*$ $p < 0.05$, $^{**}$ $p < 0.01$, and $^{***}$ $p < 0.001$. 
| Model | Local government | National government |
|-------|------------------|---------------------|
|       | Made IP in general | 0.665*** (0.024) | 0.675*** (0.025) |
|       | Customary gratitude | 1.643*** (0.116) | 1.704*** (0.128) |
|       | Offered to pay to get better service | 0.889 (0.070) | 0.893 (0.073) |
|       | Asked to pay or felt that IP was expected | 0.708*** (0.046) | 0.685*** (0.048) |
|       | Socioeconomic covariates included<sup>1</sup> | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
|       | Country dummies included | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
|       | N | 21,028 | 3,599 | 3,599 | 3599 | 19,715 | 3,313 | 3,313 | 3,313 |
|       | Log likelihood | -25,889.09 | -4,609.35 | -4,633.12 | -4,620.22 | -23,869 | -3,966.83 | -3,991.32 | -3,977.41 |
|       | McKelvey & Zavoina $R^2$ | 0.130 | 0.166 | 0.153 | 0.160 | 0.233 | 0.276 | 0.276 | 0.284 |
|       | LR chi<sup>2</sup> | 2,739.98*** | 602.42*** | 554.88*** | 580.68*** | 4,767.30*** | 1,015.55*** | 966.57*** | 994.38*** |

Standard errors in parentheses: *$p < 0.05$, **$p < 0.01$, and ***$p < 0.001$. The same socioeconomic covariates as in Table 2.
|                          | Model 13          | Model 14          | Model 15          | Model 16          | Model 17          | Model 18          | Model 19          | Model 20          |
|--------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Made IP in general       | 0.895** (0.030)   |                   |                   |                   |                   |                   |                   |                   |
| Customary gratitude      | 1.356*** (0.093)  |                   |                   |                   |                   |                   |                   |                   |
| Offered to pay to get    |                   | 1.063 (0.081)     |                   |                   |                   |                   |                   |                   |
| better service           |                   |                   |                   |                   |                   |                   |                   |                   |
| (“grease the wheels”)    |                   |                   |                   |                   |                   |                   |                   |                   |
| Offered to pay to        |                   |                   |                   |                   |                   |                   |                   |                   |
| get better service       |                   |                   |                   |                   |                   |                   |                   |                   |
| (“sand the wheels”)      |                   |                   |                   |                   |                   |                   |                   |                   |
| Asked to pay or felt     |                   |                   |                   |                   |                   |                   |                   |                   |
| that IP was expected     |                   |                   |                   |                   |                   |                   |                   |                   |
| (“sand the wheels”)      |                   |                   |                   |                   |                   |                   |                   |                   |
| Socioeconomic covariates | Yes               | Yes               | Yes               | Yes               | Yes               | Yes               | Yes               | Yes               |
| included                  |                   |                   |                   |                   |                   |                   |                   |                   |
| Country dummies included | Yes               | Yes               | Yes               | Yes               | Yes               | Yes               | Yes               | Yes               |
| N                        | 22,392            | 3,778             | 3,778             | 3,778             | 20,667            | 3,498             | 3,498             | 3,498             |
| Log likelihood           | -29,538.17        | -5,122.78         | -5,132.42         | -5,121.16         | -28,302.26        | -4,814.12         | -4,836.84         | -4,825.84         |
| McKelvey & Zavoina $R^2$ | 0.189             | 0.186             | 0.182             | 0.187             | 0.176             | 0.174             | 0.162             | 0.167             |
| LR chi²                  | 4,445.19***       | 749.1***          | 729.81***         | 752.34***         | 3909.16***        | 626.15***         | 580.73***         | 602.73***         |

Table 6: Life satisfaction.

Standard errors in parentheses: *p < 0.05, **p < 0.01, and ***p < 0.001. The same socioeconomic covariates as in Table 2.
corruption and that the effect of corruption on happiness increased over time.

5. Limitations

We will be remiss without highlighting limitations of this study. First, since our data is cross-sectional, the results reflect correlation rather than causation. Second, small country samples preclude us from conducting a country-by-country analysis. Using a relatively small sample can also prevent us from accurately capturing incidents of relatively rare diseases and interventions which are frequently associated with higher propensity to make IP. Third, the LITS provides no information about the amount of IP paid and frequency of making IP, while all questions about reporting IP and getting responses as a result of reporting IP are related to the most recent incident of IP only. Finally, insofar as the LITS was not specially designed to analyse IP, the questionnaire does not allow us to differentiate between the types of health conditions (e.g., broken arm vs. cancer), healthcare facilities (e.g., primary vs. specialized), and personnel (e.g., nurses vs. technicians) who are likely to receive IP. Future research should address these specific limitations.

6. Conclusion

This study has revealed that it is important to distinguish between three different motivations for informal payment, namely, cultural norms, “grease the wheels,” and “sand the wheels” since they have varying associations with user outcomes. Payments that are the result of cultural norms are associated with better outcomes, while “sand the wheel” payments are associated with worsening outcomes. We found no association between making “grease the wheels” payments and outcomes. In addition, we found that these three motivations are associated with different socio-economic correlates. Consequently, focusing on informal payments in general, rather than explicitly examining specific motivations, obscures the true outcomes of making IP.

Abbreviations

IP: Informal payments
LITS: Life in Transition Survey
EBRD: European Bank for Reconstruction and Development.

Data Availability

Data is available at http://www.ebrd.com.

Ethical Approval

Ethics Review Board does not require approval for the secondary analysis of anonymous publicly available data.

Conflicts of Interest

The authors declare that they have no conflict of interests.

Authors’ Contributions

All authors participated in the production of the manuscript. All authors read and approved the final version of the manuscript. NH and AA conceived the study. NH, AA, and LF developed theoretical arguments and hypotheses to be tested. The data was analysed by YL and NH. Results were interpreted by YL, NH, AA, and LF. NH and AA wrote the first draft. Other authors provided analytic feedback and contributed to improving the writing of the manuscript.

References

[1] P. Gaal, “Gift, fee, or bribe? Informal payments in Hungary,” in Glob Corrupt Rep, J. Kotalik and D. Rodriguez, Eds., pp. 71–74, Pluto Press, London, 2006.
[2] R. M. Cherecheș, M. I. Ungureanu, P. Sandu, and I. A. Rus, “Defining informal payments in healthcare: a systematic review,” Health Policy, vol. 110, no. 2-3, pp. 105–114, 2013.
[3] M. Meskarpour Amiri, M. Bahadori, Z. Motaghed, and R. Ravangard, “Factors affecting informal patient payments: a systematic literature review,” International Journal of Health Governance, vol. 24, no. 2, pp. 117–132, 2019.
[4] WHO, “Out-of-pocket payments, user fees and catastrophic expenditure,” World Health Organizations, 2020, http://who.int/health_financing/topics/financial-protection/out-of-pocket-payments/en/.
[5] S. B. Mejsner and L. E. Karlsson, “Informal payments and bought and brought goods in the Western Balkans-a scoping review,” International Journal of Health Services, vol. 6, pp. 621–637, 2017.
[6] M. Lewis, “Informal payments and the financing of health care in developing and transition countries,” Health Affairs, vol. 26, no. 4, pp. 984–997, 2007.
[7] N. Habibov and A. Cheung, “Revisiting informal payments in 29 transitional countries: the scale and socio-economic correlates,” Social Science & Medicine, vol. 178, pp. 28–37, 2017.
[8] V. S. Gordeev, M. Pavlova, and W. Groot, “Informal payments for health care services in Russia: old issue in new realities,” Health Economics, Policy, and Law, vol. 9, no. 1, pp. 25–48, 2014.
[9] M. Schaaf and S. M. Topp, “A critical interpretive synthesis of informal payments in maternal health care,” Health Policy and Plan., vol. 34, no. 3, pp. 216–229, 2019.
[10] N. Habibov, “Effect of corruption on healthcare satisfaction in post-soviet nations: a cross-country instrumental variable analysis of twelve countries,” Social Science & Medicine, vol. 152, pp. 119–124, 2016.
[11] M. Nurunnabi, “Revisiting accountability: corruption in health care in developing countries,” in Integrity, Transparency and Corruption in Healthcare & Research on Health, K. Calisyr, Ed., Springer, Singapore, 2020.
[12] W. C. Cockerham, Health and Social Change in Russia and Eastern Europe, Routledge, London, 1999.
[13] E. Richardson, “Health financing,” in Trends in health systems in the former soviet countries, B. Rechel, E. Richardson, and M. McKee, Eds., pp. 91–109, WHO, Copenhagen, 2014.
[14] P. Gaál, M. Jakab, and S. Shishkin, “Strategies to address informal payments for health care,” in Implementing health financing reform: lessons from countries in transition, J. Kutzin, C. Cashin, and M. Jakab, Eds., pp. 327–360, WHO: Copenhagen,
WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies, 2010.

[15] P. Gaál and M. McKee, “Informal payment for health care and the theory of ‘INXIT’,” International Journal of Health Planning and Management, vol. 19, no. 2, pp. 163–178, 2004.

[16] J. Kutzin and M. Jakab, “Fiscal context and health expenditure patterns in CEE/CIS countries,” in Implementing Health Financing Reform: Lessons from Countries in Transition, J. Kutzin, C. Cashin, and M. Jakab, Eds., Copenhagen, WHO Regional Office for Europe on behalf of the European Observatory, 2010.

[17] J. Kutzin et al., “Implementing health financing reform in CE/EECCA countries: synthesis and lessons learned,” in Implementing health financing reform: lessons from countries in transition, J. Kutzin, C. Cashin, and M. Jakab, Eds., pp. 65–82, WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies: 383–411 on Health Systems and Policies, Copenhagen, 2010.

[18] M. Tambor, M. Pavlova, B. Rechel, S. Golinsonska, C. Sorwada, and W. Groot, “The inability to pay for health services in Central and Eastern Europe: evidence from six countries,” European Journal of Public Health, vol. 24, no. 3, pp. 378–385, 2014.

[19] B. Rechel and M. Karanikolos, “Health system performance,” in Trends in health systems in the former Soviet countries, B. Rechel, E. Richardson, and M. McKee, Eds., pp. 173–204, WHO, Copenhagen, 2014.

[20] B. Akkazieva and M. Jowett, “An evaluation of the impact of introducing patient co-payments on access to health services, financial protection, and levels of unofficial payments in Armenia,” in Health Financing Policy Paper series, WHO Regional Office for Europe, Copenhagen, 2013.

[21] D. Balabanova, B. Roberts, E. Richardson, C. Haerpfer, and M. McKee, “Health care reform in the former Soviet Union: beyond the transition,” Health Services Research, vol. 47, no. 2, pp. 840–864, 2012.

[22] B. Rechel and G. Khodjamurodov, “International involvement and national health governance: the basic benefit package in Tajikistan,” Social Science & Medicine, vol. 70, no. 12, pp. 1928–1932, 2010.

[23] B. Rechel, B. Roberts, E. Richardson et al., “Health and health systems in the Commonwealth of Independent States,” Lancet, vol. 381, no. 9872, pp. 1145–1155, 2013.

[24] A. Wagstaaff, P. Eozenou, and M. Smitz, “Out-of-pocket expenditures on health: a global stocktake,” The World Bank Research Observer, vol. 35, no. 2, pp. 123–157, 2020.

[25] T. Stepurok, M. Pavlova, I. Gryga, L. Murauksiene, and W. Groot, "Informal payments for health care services: the case of Lithuania, Poland and Ukraine," Journal of Eurasian Studies, vol. 6, no. 1, pp. 46–58, 2015.

[26] J. Falkingham, B. Akkazieva, and A. Baschieri, “Trends in out-of-pocket payments for health care in Kyrgyzstan, 2001–2007,” Health Policy and Planning, vol. 25, no. 5, pp. 427–436, 2010.

[27] World Bank, "Albania: out-of-pocket payments in Albania’s health system," in Trends in household perceptions and experiences 2002–2008, Washington, D.C., World Bank, 2011.

[28] P. Abbott and C. Wallace, “Talking about health and well-being in post-Soviet Ukraine and Russia,” Journal of Communist Studies and Transition Politics, vol. 23, no. 2, pp. 181–202, 2007.

[29] W. Cockerham, B. P. Hinote, P. Abbott, and C. Haerpfer, “Health lifestyles in Central Asia: the case of Kazakhstan and Kyrgyzstan,” Social Science & Medicine, vol. 59, no. 7, pp. 1409–1421, 2004.

[30] B. Rechel and M. McKee, “Health reform in central and eastern Europe and the former Soviet Union,” The Lancet, vol. 374, no. 9696, pp. 1186–1195, 2009.

[31] N. Habibov, R. Luo, and A. Auchynnikava, “The effects of healthcare quality on the willingness to pay more taxes to improve public healthcare: testing two alternative hypotheses from the research literature,” Annals of Global Health, vol. 85, no. 1, pp. 1–14, 2019.

[32] J. Morris and A. Polese, "Informal health and education sector payments in Russian and Ukrainian cities: structuring welfare from below," European Urban and Regional Studies, vol. 23, no. 3, pp. 481–496, 2016.

[33] M. Mokhtari and M. Ashtari, “Reducing informal payments in the health care system: evidence from a large patient satisfaction survey,” Journal of Asian Economics, vol. 23, no. 2, pp. 189–200, 2012.

[34] T. Vian, D. W. Brinkerhoff, F. G. Feeley, M. Salomon, and N. T. K. Vien, “Confronting corruption in the health sector in Vietnam: patterns and prospects,” Public Administration and Development, vol. 32, no. 1, pp. 49–63, 2012.

[35] N. Cohen and D. Ficil, "An alternative way of understanding exit, voice and loyalty: the case of informal payments for health care in Israel," The International Journal of Health Planning and Management, vol. 32, no. 1, pp. 72–90, 2017.

[36] L. J. Burak and T. Vian, “Examining and predicting under-the-table payments for health care in Albania: an application of the theory of planned behavior,” Journal of Applied Social Psychology, vol. 37, no. 5, pp. 1060–1076, 2007.

[37] R. Trux, "Corruption, attitudes, and education: survey evidence from Nepal," World Development, vol. 39, no. 7, pp. 1133–1142, 2011.

[38] T. Stepurok, M. Pavlova, I. Gryga, and W. Groot, "To pay or not to pay? A multicountry study on informal payments for health-care services and consumers’ perceptions," Health Expectations, vol. 18, no. 6, pp. 2978–2993, 2015.

[39] M. Yang, Gifts, Favours, and Banquets: The Art of Social Relationships in China, Cornell University Press, Ithaca/London, 1994.

[40] D. Bowser, "Corruption, trust, and the danger to democratization in the former Soviet Union," in In the Transition: Essays on Post-Communism, D. Lovell, Ed., pp. 80–95, Ashgate Publishers, London, UK, 2001.

[41] T. Vian, “Review of corruption in the health sector: theory, methods and interventions,” Health Policy and Planning, vol. 23, no. 2, pp. 83–94, 2008.

[42] W. S. Lee and C. Guven, “Corruption, attitudes, and education: survey evidence from Nepal,” World Development, vol. 39, no. 7, pp. 1133–1142, 2011.

[43] W. S. Lee and C. Guven, “Corruption, attitudes, and education: survey evidence from Nepal,” World Development, vol. 39, no. 7, pp. 1133–1142, 2011.
Ukraine,” *The International Journal of Health Planning and Management*, vol. 28, no. 2, pp. e169–e187, 2013.

[46] P. Baji, N. Rubashkin, I. Szebk, K. Stoll, and S. Vedam, “Informal cash payments for birth in Hungary: are women paying to secure a known provider, respect, or quality of care?,” *Social Science & Medicine*, vol. 189, pp. 86–95, 2017.

[47] A. Vafaei Najar, H. Ebrahimipour, A. Pourtaleb et al., “At first glance, informal payments experience on track: why accept or refuse? Patients’ perceive in cardiac surgery department of public hospitals, northeast of Iran 2013,” *BMC Health Services Research*, vol. 17, no. 1, p. 205, 2017.

[48] W. Riewpaiboon, K. Chuengsatiansup, L. Gilson, and V. Tangcharoensathien, “Private obstetric practice in a public hospital: mythical trust in obstetric care,” *Social Science & Medicine*, vol. 61, no. 7, pp. 1408–1417, 2005.

[49] A. Szende and A. J. Culyer, “The inequity of informal payments for health care: the case of Hungary,” *Health Policy*, vol. 75, no. 3, pp. 262–271, 2006.

[50] K. Karibayev, A. Akanov, K. Tulebayev, K. Kurakbayev, and B. Zhussupov, “The impact of informal payments on user satisfaction with hospital care: Kuanysh Karibayev,” *European Journal of Public Health*, vol. 26, p. 136, 2016.

[51] P. Gaal, P. C. Belli, M. McKee, and M. Szócska, “Informal payments for health care: definitions, distinctions, and dilemmas,” *Journal of Health Politics, Policy and Law*, vol. 31, no. 2, pp. 251–293, 2006.

[52] T. Vian and L. Burak, “Beliefs about informal payments in Albania,” *Health Policy and Planning*, vol. 21, no. 5, pp. 392–401, 2006.

[53] R. Rose, *Getting Thing Done in an Anti-Modern Society: Social Capital Networks in Russia*, World Bank, Washington, 1998.

[54] P. Aarva, I. Ilchenko, P. Gorobets, and A. Rogacheva, “Formal and informal payments in health care facilities in two Russian cities, Tyumen and Lipetsk,” *Health Policy and Plan*, vol. 24, no. 5, pp. 395–405, 2009.

[55] W. L. Miller, Å. B. Grødeland, and T. Y. Koshechkina, “If you pay, we’ll operate immediately,” *Journal of Medical Ethics*, vol. 26, no. 5, pp. 305–311, 2000.

[56] D. Balabanova, M. McKee, J. Pomerleau, R. Rose, and C. Haerpfer, “Health service utilization in the former Soviet Union: evidence from eight countries,” *Health Services Research*, vol. 39, no. 6p2, pp. 1927–1950, 2004.

[57] L. Fan and N. N. Habibov, “Determinants of accessibility and affordability of health care in post-socialist Tajikistan: evidence and policy options,” *Global Public Health*, vol. 4, no. 6, pp. 561–574, 2009.

[58] N. Habibov, “Determinants of out-of-pocket expenditures on prescribed medications in Tajikistan: implications for healthcare sector reform,” *Journal of Health Organization and Management*, vol. 23, no. 2, pp. 170–182, 2009.

[59] N. Habibov, “The inequity in out-of-pocket expenditures for healthcare in Tajikistan: evidence and implications from a nationally-representative survey,” *International Journal of Public Health*, vol. 56, no. 4, pp. 397–406, 2011.

[60] N. Habibov, “What determines healthcare utilization and related out-of-pocket expenditures in Tajikistan? Lessons from a national survey,” *International Journal of Public Health*, vol. 54, no. 4, pp. 260–266, 2009.

[61] N. Habibov, “Hospitalization in Tajikistan: determinants of admission, length of stay and out-of-pocket expenditures. Results of a national survey,” *The International Journal of Health Planning and Management*, vol. 25, no. 3, pp. 251–269, 2010.

[62] N. Habibov, A. Auchynnikava, and Y. Lyu, “Association between “Grease-the-wheel”, “sand-the-wheel”, and “cultural norm” motivations for making informal payments with satisfaction in public primary, secondary, and vocational education in 27 nations,” *International Journal of Educational Development*, vol. 80, pp. 102320.1–102320.9, 2021.

[63] EBRD, *Life in Transition*, European Bank for Reconstruction and Development, London, n.d..

[64] N. Habibov, L. Fan, and A. Auchynnikava, “The effects of corruption on satisfaction with local and national governments. Does corruption “Grease the wheels”?,” *Europe-Asia Studies*, vol. 71, no. 5, pp. 736–752, 2019.

[65] I. Sulemana, A. M. Iddrisu, and J. E. Kyore, “A micro-level study of the relationship between experienced corruption and subjective wellbeing in Africa,” *The Journal of Development Studies*, vol. 53, no. 1, pp. 138–155, 2017.

[66] A. Rodriguez-Pose and K. Maslauskaite, “Can policy make us happier? Individual characteristics, socio-economic factors and life satisfaction in Central and Eastern Europe,” *Cambridge Journal of Regions, Economy and Society*, vol. 5, no. 1, pp. 77–96, 2012.