Reflections on the conceptualization and measurement of access to health services in Argentina: The case of the National Survey of Risk Factors 2009

Reflexiones sobre la conceptualización y la medición del acceso a los servicios de salud en Argentina: el caso de la Encuesta Nacional de Factores de Riesgo 2009

Matías Salvador Ballesteros[1], Betina Freidin[2]

[1]*Master's Degree in Social Sciences Research. Doctoral Fellow, Consejo Nacional de Investigaciones Científicas y Técnicas (CONICET), Instituto de Investigación Gino Germani (IIGG), Universidad de Buenos Aires (UBA), Argentina.* ✉

[2]*PhD in Sociology. Independent researcher, Consejo Nacional de Investigaciones Científicas y Técnicas (CONICET), Instituto de Investigación Gino Germani (IIGG), Universidad de Buenos Aires (UBA), Argentina.* ✉

ABSTRACT In this article we reflect on the complexity surrounding the conceptualization and measurement of access to health services. We present the theoretical models habitually used to approach the issue and different ways of operationalizing these models, taking into account the implications for the analysis of the data and the information obtained. As an example of this complexity, we analyze the National Survey of Risk Factors [*Encuesta Nacional de Factores de Riesgo*] conducted in Argentina in 2009. We show that the survey provides important information for understanding inequalities in access to health services. However, the way in which the barriers to access to the health system are measured may underreport the problem by only capturing extreme situations.
KEY WORDS Health Services Accessibility; Social Inequity; Health Care Surveys; Indicators; Argentina.

RESUMEN En este artículo reflexionamos sobre la complejidad que presentan la conceptualización y la medición del acceso a los servicios de salud. Presentamos los modelos teóricos que habitualmente se utilizan para abordar la temática y las diferentes formas de operacionalizarlos, dando cuenta de sus implicancias para el análisis de los datos y la información obtenida. Tomamos como ejemplo la Encuesta Nacional de Factores de Riesgo realizada en Argentina en el año 2009. Mostramos que esta encuesta ofrece información importante para comprender las desigualdades en el acceso a los servicios de salud; sin embargo, observamos que la forma en que mide y analiza el acceso puede subregistrar la problemática de las barreras en la utilización de los servicios de salud, captando solamente las situaciones extremas.
PALABRAS CLAVES Accesibilidad a los Servicios de Salud; Inequidad Social; Encuestas de Atención de la Salud; Indicadores; Argentina.

INTRODUCTION

Access to health services is a problem that has been approached in numerous studies and reviewed by a wide variety of health surveys conducted in different countries; however, several authors agree to highlight that there are different ways of conceptualizing and operationalizing the concept of access or accessibility (here we will use both terms as synonyms). It is observed that these terms are used imprecisely and that, as the definition used is not always clear, neither is its connection with the related concept of utilization of health services.[1-6]

On this article we reflect on the potentialities and limitations of the way this issue was approached by the National Survey of Risk Factors 2009 (ENFR) [*Encuesta Nacional de Factores de Riesgo*] conducted in Argentina. To this end, we will start by presenting the main theoretical conceptualizations about the access to health services, as well as their relevant ways of operationalization. Then, we will analyze the data obtained in the survey and discuss its scope and the possible interpretations of their results.

Theoretical models for the analysis of the access to health services

There are different theoretical models to analyze the access to health services. Following Frenk,[1] it is possible to classify them based on the scope of access. In the narrowest sense, access refers to the process that goes from the search until the health care initiation, and includes the factors that hinder or facilitate the health care service. In the broadest sense, access also includes health needs, the differential perception of needs, the desire for health care, and the decision-making process, like previous experiences with the search for health care, as well as continuity and the results of such health care, after the first contact with the specialists.[1,4,6]

Access to health services: narrow scope of the concept

Among the theoretical models that work with the narrow scope of the concept of access, several authors agree to highlight Donabedian's approach and Frenk's ensuing works as the main references.[2,4-6] Donabedian[7] analyzes health access as an attribute of the offer of services, but not simply as its availability, but as the ability to produce services with respect to the population's needs. Although health access is a characteristic of services, and has aspects that facilitate or limit their potential use, this concept assumes significance when it interacts with the population's needs and abilities[7]; it means that the access is understood by the "degree of 'adjustment' between the population's characteristics and those of the health care resources."[1, p.439]

Going back to the definition of Donabedian, Frenk[1] argues that accessibility is a product of the relationship between the obstacles during the search and finally obtaining health care generated by the organization of the health services and the population's abilities to overcome those obstacles, on the basis of the available resources in a geographical area. The author mentions three dimensions from which the obstacles of the system relate to the population's abilities: 1) ecological dimension, which relates the problems arising from the location of health care places to users' transport and time resources; 2) financial dimension, which connects the costs of obtaining health care with users' financial ability; and 3) the organizational dimension, whose obstacles include the delays to obtain appointments and the waiting times while, as regards the abilities, it incorporates free time availability and tolerance of delays.[1] The distance, the costs or the delay times that are involved in health care do not account themselves for the access, but they do when relating them to a population's income or available time. This is why there are different relationships between the population's abilities and the obstacles generated by the system for a same level of access.[1]

In connection with this meaning of narrow scope of the concept of access to health services, the term used is *access barriers*, which often accounts for the elements that hinder or prevent users from obtaining health care once the need is detected. These barriers include the mechanisms from which the system hinders the utilization of services (service availability, waiting times, distance and costs) taking into account their relationship with the population's abilities to overcome them (financial and transport resources, as well as free time and flexibility to handle work schedule).

Meanwhile, there are different ways of inquiring about the access problem, in accordance with this meaning of narrow scope of the concept,

using demographic surveys; however, what these surveys have in common is that they inquire about the different mechanisms by which the population that has felt the need of utilizing any health service was not able to have access to it. On occasions, the survey asks about the existence of impediments of a specific dimension by which someone was not able to have access to a service. For instance, the survey *Behavioral Risk Factor Surveillance System*[a] just inquires about the financial dimension, while in other surveys the population is interviewed about different dimensions altogether (first, they are often asked if there was any impediment and then which one/s). This last procedure was followed by the Spanish version of the European Health Survey [*Encuesta Europea de Salud*].[b]

There are also differences about the universe being surveyed. While in many surveys, all the population is asked (as in the case of the two surveys mentioned above), in others, just a sub-universe is interviewed (for instance, those individuals that did not consult with at least one health professional and have had a health problem during the last month, as in the case of ENFR 2009). The issue regarding the implications of the different ways to approach this problem will be addressed below.

Access to health services: broad scope of the concept

As for the theoretical models that work with the broad scope of the concept of access, the one developed by Aday and Andersen has been the most used perspective,[8] as well as Andersen's ensuing revisions and updates,[9] which incorporate, as part of the access, the determinants of health needs and the differential subjects' perceptions of health care (information, beliefs and conceptions about health, trust in the medical system and tolerance of discomforts), as well as previous experiences and the feedback circuits of these experiences with the future use of the services.[2,4,6]

Aday and Andersen[8] state that the use of health services depends on three factors. The first one refers to the group of the predisposing factors, which exist before the onset of the health problem and predispose users to the utilization of the services. Here we find demographic factors (sex and age); social structure factors (level of education, social class and ethnicity), which are related to

the social status and the access to resources and differential abilities to face problems; and factors related to information, beliefs and conceptions of health (attitudes and knowledge about health and health services). A second group of factors is the group of the enabling factors, which account for the available means to obtain health care at community level (availability of the services) and at individual level (such as the means and knowledge to use the services, like money, health insurance and waiting times). Finally, the third group of factors is the group of the health needs, understood as the health conditions perceived by the persons. Thus, not only the health conditions, but also the perceptions are strongly influenced by the social structure and beliefs about health.[8,9]

At the same time, two access dimensions are defined: potential access (the presence of resources that enable persons to use the services) and realized access (the utilization of the services).[9] The potential access is determined by the enabling factors that, as we mentioned above, are a subset of the factors that determine the realized access (utilization). In view of the foregoing, it is argued that there is equity in the access to health services when their utilization is explained by demographic factors and health needs. On the other hand, there is inequity when the utilization is explained by the social structure, information, beliefs and conceptions of health or different enabling resources. That is to say, when any of these factors determines who receives the health care.[9]

The way of operationalizing the concept of access using Aday and Andersen's theoretical framework[8] is the utilization of the services in a specific period taking into account that this is not just explained by accessibility, but it is also mediated by other factors like health needs and demographic factors.[2,3,6,8,10] From a meta-analysis of studies of access and utilization of health services, Mendoza Sassi and Beria[10] learned that the consultation with the doctor during the last year is the most used indicator to measure the access to health services.

METHODOLOGICAL ASPECTS OF THE ANALYSIS OF THE ENFR 2009

This survey was carried out in Argentina in the years 2005, 2009 and 2013. It was jointly conducted by the National Institute of Statistics and

Censuses and the National Ministry of Health as part of a population-based strategy of promotion and primary prevention of chronic non-communicable diseases (ECNT) [*enfermedades crónicas no transmisibles*].The survey is considered an instrument of epidemiological surveillance, as it helps make a diagnosis and to trace the evolution of the prevalence of diverse risk factors of the ECNT in the population.[11] The questionnaire of the survey inquiries about the access to health services, but also about other wide variety of issues such as self-perception of the health status, physical activity, eating habits, tobacco use, alcohol use, body weight, contraceptive methods, preventive medical studies, arterial hypertension, cholesterol, diabetes and injuries associated with external causes.[12]

In order to design the questionnaire of the first ENFR, carried out in the year 2005, a cross-cultural adaptation and a validation of the questionnaire were done for the surveillance of the ECNT which was proposed by the Pan American Health Organization.[11,13]

The ENFR 2009 was conducted on the basis of a probabilistic multistage design (by conglomerates and strata), in four stages. The first three stages (department, area and dwelling) relate to the *framework of national sampling of dwellings*, which reduced the universe in urban localities of 5,000 inhabitants and more. In the fourth stage, all the households found inside a dwelling were studied and the Kish table was used in order to select the person to interview among the members of the household. In total 34,732 persons were surveyed. Due to the characteristics and the size of the sample, the survey helps make estimations for each one of the 24 jurisdictions of the country (23 provinces and the Autonomous City of Buenos Aires) for persons aged 18 years old and more, residents of private dwellings of conglomerates including at least 5,000 inhabitants.[12] We understand that this type of sample can be very useful to analyze the access to health services in Argentina given that the country has a decentralized health system and its characteristics vary widely depending on the abilities and resources of each jurisdiction.[14,15] In this sense, it should be emphasized that there are no other previous records of health surveys that have been conducted periodically with this sampling frame.

In order to analyze the ENFR we examined its questionnaire, the data base, the code manual and the methodological chapter of the publication of the survey.[12] This allowed us, by using the statistics package SPPSS 17.0, to recode the systems of original categories of some variables, to create new variables by combining other variables, as well as crossing variables in a different way than the already published crossings, by following the theoretical problematizations and questioning the ways the data was processed and interpreted. It should also be emphasized that we used the weighing factors developed by the creators of the survey without expanding the results to all the population.

In order to conduct the analysis developed in this article, we created the *potential use of health services* variable with the aim of problematizing the different level of importance that the access barriers to health system have in the diverse social groups, and we took into account the possibilities provided by the questionnaire of the ENFR 2009. As analyzed in the following section, the reports of the ENFR 2009 only capture "extreme" situations of the access barriers in a restricted sub-universe of the population, which distorts the importance that the problem has in the different social groups. With this new variable, we intended to increase the visibility of the social differences in connection with access barriers to obtain a consultation with a health professional and, at the same time, to theoretically problematize the existence of other access barriers that cannot be captured because of the way the questionnaire is designed, taking into account the theoretical model about the access to the services developed by Frenk.[1] We created the new variable using two dimensions: the consultation with a health professional during the last month and the feeling of overall discomfort or a health problem during the last month. By combining them we established three categories: 1) the persons who consulted with at least one health professional, 2) the persons who did not consult with a professional and did not feel any discomfort, and 3) the persons who did not consult with a professional and had some discomfort or health problem. Then, among the persons that had some discomfort, but did not consult with a health professional, we differentiated the reasons for non-consultation.

Moreover, as in the publications of the survey the total income of the household is included

without taking into account the number of members, we incorporated the variable *per capita income of the household*.

RESULTS

Measurement of the access to health services: problematization of the construction of the indicators within the narrow scope of the concept

The ENFR 2009 inquiries about the utilization of health services and the access to them. The questionnaire has a specific section where the population is asked whether they consulted with different health professionals (doctor, dentist, psychologist, psychiatrist, kinesiologist, phono audiologist or nurse) during the last month. As it also incorporates indicators of self-perception of the health status (that can be considered as an indicator of *health needs*), of *predisposing* factors (sex, age and level of education) and *enabling* factors (income and health insurance), the survey helps make an analysis of the access to health services from the broad scope of the concept. In Argentina, based on different population surveys, diverse studies have been conducted using this scope of the concept of access.[16-19] But, in addition, in the ENFR the population is asked why they did not consult with any health professional if they felt some discomfort or had a health problem. Finally, the persons who had some discomfort and did not consult with any professional during the last month are asked if they interrupted their habitual activities due to that discomfort and the reasons for non-consultation.

Now we will focus on the analysis of this last question that will be useful to analyze the access to health services from the narrow scope of the concept. This section of the questionnaire is presented in Figure 1.

In the official publication of the survey results[12] the *access barriers to health services* variable was created using Question 4: "Why did you not consult with a professional?" It was established that those who did not consult due to access problems were the persons who answered Option 2 (the person did not have money), Option 4 (the person made an appointment but they have not been assisted yet) or the persons who in Option 5 (another reason) specified "waiting times, union conflicts, distance, lack of professionals and/or appointment times, and problems with the health insurance."[12 p. 26] The answers "not having time" or "not believing the health problem was important" were not considered in the survey as access barriers. It should be emphasized that a conceptual definition of the access variable is not included in the publication. From the operational definition it is stated that 22.7% of "the persons that had some discomfort or health problems did not consult with a professional due to access problems [...] and there were no differences regarding jurisdiction."[12 p.26]

We understand that this design of the *access barriers* variable captures a specific and *extreme* situation of the problem: the situation of those persons that during the last 30 days felt some discomfort and did not consult with any health professional, and that the reason for not consulting was among any of the options that were considered to be barriers. In this sense, we should ask ourselves why other situations that can be conceptualized as barriers to health services (in accordance with Frenk's narrow scope of the concept) are not being considered as such. First of all, it should be emphasized that the captured sub-universe of the population with the classification used in the ENFR excludes many hypothetical situations that are important in order to avoid underrecording the access barriers: 1) the situation of the persons that consulted with a health professional (for instance, doctor), but they *also* needed to consult with another professional (for instance, odontologist, psychologist or psychiatrist) and they could not do it; 2) the situation of the persons that needed to consult twice with the same professional and they were only able to do it in one opportunity, because if the persons being surveyed consulted with at least one of the health professionals, the filter of the question indicates that they must continue with the other section of the survey. In this sense, other works have registered that inequalities regarding access to health services varied in accordance with the specialty of the professional from whom the person required attention.[17,19,20] For instance, the inequalities regarding the access to the consultation (not only in the broad but also in the narrow scope of the concept) with the psychologist or psychiatrist and the odontologist are higher than in the consultation with the doctor. The population that wanted to consult with a health professional

for primary or secondary prevention is not being considered either; that is to say that these persons did not have some specific discomfort but they wanted to consult with a professional in order to anticipate to the onset of a health problem, or they wanted to control any chronic condition. This last under-recording is particularly important, given that the ENFR 2009 is part of a policy of promotion of health through primary and secondary prevention.

On the other hand, in the theoretical model we are using, the lack of time to consult with a professional is a barrier to have access to health services. We must remember that the access barriers arise from the differences between the population's abilities (in this case: available time) and the obstacles generated by the system (in this case, waiting times and/or journey time to the health service). Even if people do not exactly know how much time they will have to wait, the consideration about having time or not to consult with a health professional is strongly connected with the previous experiences that they have had with these services. [c] In this sense, different studies have found that, in

Argentina, the available time that persons must have (for the wait and the journey) to use a health service is related to the social structure, the subsystem in which they receive health care and their place of residence. Thus, the population with a lower level of education, from lower socioeconomic strata, who reside in poorer geographical areas and that is assisted in the public subsector is the group that has to wait the longest to use different health services.[21-23] Moreover, even if the waiting times at the appointments were not socially stratified, the availability of time for taking care of the own health is also different among the different social sectors. [24] In both senses, the impossibility to consult with a health professional due to lack of time is related to an inequity in the access to the system. Even if there were not differences among the diverse social sectors regarding waiting times and availability of time for taking care of one's health, the fact that there is population with needs to consult but that cannot do it due to lack of time is reflecting that there is an inadequacy between the characteristics of the system and the population's opportunities.
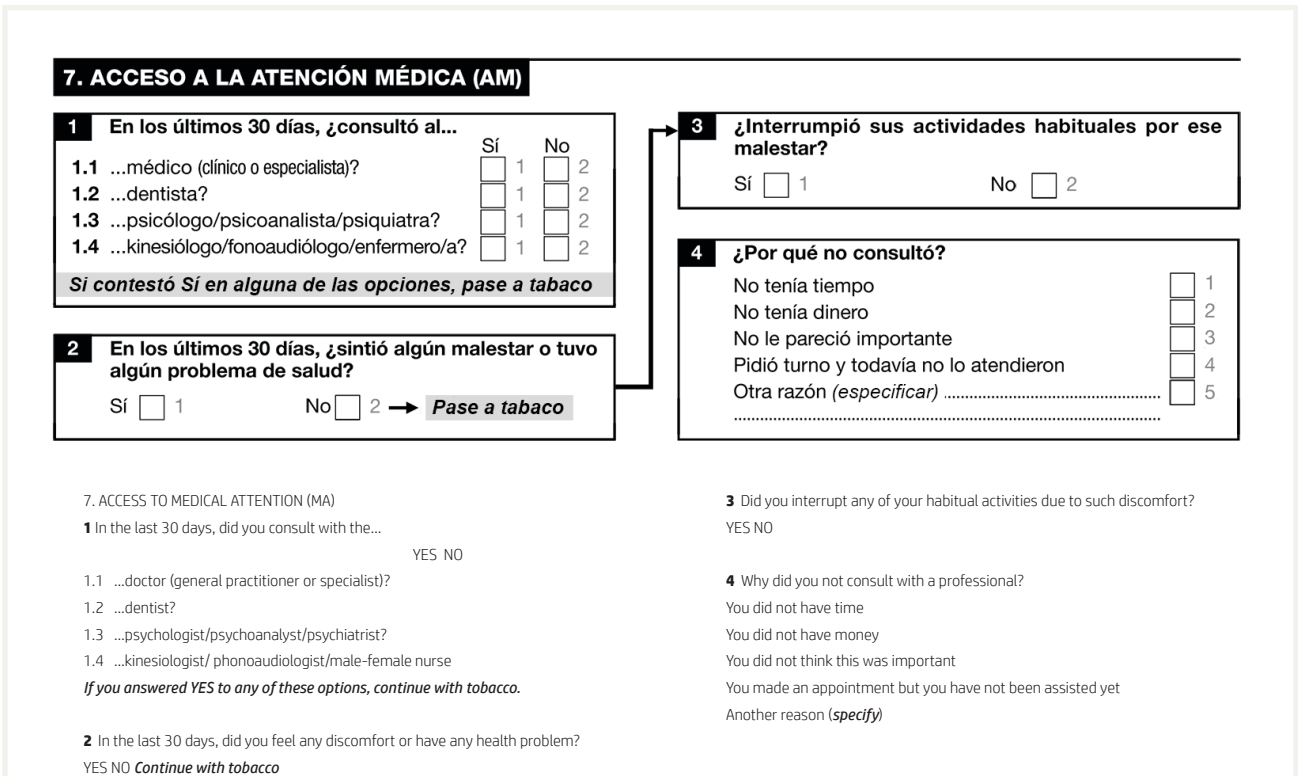

Figure 1. Access block to medical attention from the questionnaire of the National Survey of Risk Factors. Argentina, 2009.

Source: National Ministry of Health[12 p.239].

From the foregoing observations, it can be inferred how to interpret the results and over which sub-universe of the population. As previously mentioned, the *access barriers* variable created by the ENFR 2009 is only focused on the population that felt some discomfort or had health problems and did not consult with any professional during the last month and that, as shown in Figure 2, only represents 10.6% of the total of the persons being surveyed. In this way, the population that consulted at least once with a health professional is being excluded from the analysis (50.9% of the population) – the format of the questionnaire does not allow to differentiate if they have had some discomfort or health problems – and those that have not consulted with a health professional and have not had any discomfort or health problems are also being excluded (38.6%). To perform the analysis on access barriers taking into account the population that did not consult and felt some discomfort means considering only 10.6% of the total population being surveyed and rejecting the effect of the differential utilization of the health services, as well as the differential perceptions on what discomfort is and the health needs among the different social groups.

Previous studies show that, in Argentina, there is a higher utilization of the services among the most favored social sectors[17-19] that, additionally, have fewer health problems although they have a greater tendency to report some minor discomfort.[25] This explains that, among those who felt some discomfort and did not consult with any professional, the most vulnerable population has more importance (below we will see that the population without health insurance that resides in households with lower per capita income has more relevance). Therefore, if we want to see the incidence of some structural factors like the income and health insurance on the access barriers, but we take as sub-universe a population that already has a representation of these variables which is different from that of the total population (as is the case of the population that felt some discomfort and did not consult with a professional), we are distorting the influence of the structural factors on the access barriers.

On the basis of the previous argument, we created a new variable that we named *potential use of the health system* (Figure 2), with three categories: *the person consulted with a professional, the person did not "need" to do so, and the person felt some discomfort and did not consult with a professional*. The person consulted with a professional category represents the population that attended an appointment with a professional at least once during the last month (we must remember that we understand that the consultation with only one health professional does not guarantee that there are not access barriers regarding another specialist). *The person did not "need" to consult with a professional* category represents the population that did not consult with a professional during the last month and did not feel any discomfort (we decided to put "need" between inverted commas to emphasize the fact that it is possible that part of this population had wanted to consult with any professional in a preventive way and was not able to do it). Finally, the third category is *the person felt some discomfort and did not consult with a professional*. Within this category, the persons who did not consult due to lack of money, time or because of problems with the appointment are the population that did not consult due to *extreme access barriers*.

In order to clarify how the differential way in which the access barriers affect different social groups is being dismissed when performing the analysis only over the population that felt some discomfort and did not consult with a professional, we present Table 1 and Table 2, in which we see
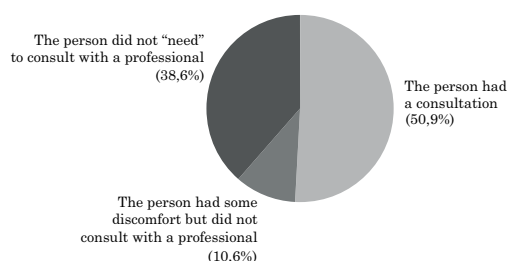

Figure 2. Percentage distribution of the population in urban areas, in accordance with the potential of the health system during the last month. Argentina, 2009.

Source: Own elaboration using data obtained in the National Survey of Risk Factors 2009.

Note: The potential use variable of the health system was created using two dimensions: having consulted with a health professional during the last month and having felt some discomfort or health problem during the last month. By combining them, we established three categories: 1) the persons who consulted with at least one health professional, 2) the persons who did not consult with a professional and did not feel any discomfort, and 3) the persons who did not consult with a professional and had some discomfort or health problem. Then, among the persons that had some discomfort and did not consult with a professional, we differentiated the reasons for not consulting.

Table 1. Percentage of non-consultation with any health professional during the last thirty days among the population that felt some health discomfort, based on reason and type of health insurance. Population aged 18 years old and more, residents of urban areas (N=3,670). Argentina, 2009.

Reasons for not consulting	Health insurance									
	Private medical insurance (n=349)		Private medical insurance (n=1,671)		Other (n=88)		Only public (n=1,562)		Total (n= 3,670)	
	n	%	n	%	n	%	n	%	n	%
The person did not have time*	61	17.5	367	22.0	26	29.5	361	23.1	815	22.2
The person did not have money*	26	7.4	183	11.0	10	11.4	285	18.2	504	13.7
The person asked for an appointment but have not been assisted yet*	13	3.7	103	6.2	6	6.8	90	5.8	212	5.8
The person did not think this was important	189	54.2	732	43.8	36	40.9	611	39.1	1,568	42.7
Another reason	60	17.2	286	17.1	10	11.4	215	13.8	571	15.6

Source: Own elaboration using data obtained in the National Survey of Risk Factors 2009.
*Reasons considered to be access barriers.

the impact of the type of health insurance on the barriers to access, while in Table 3 and Table 4, we analyze what occurs with the variable *per capita income of the household*. In Table 1 and Table 3, we focus on the population that *felt some discomfort and did not consult with a professional* using the creation of the variable so proposed on the publication of the results of the ENFR 2009. In Table 2 and Table 4, we expanded the analysis to all the population, and we worked with the potential use variable of the health system and we incorporated such categories as *the person consulted with a professional* and *the person did not "need" to consult with a professional* (Figure 2). It should be emphasized that in Table 2 and Table 4, we still see that the survey is limited because it only captures

Table 2. Percentage of the potential use of the health system, based on reason and health insurance. Population aged 18 years old and more, residents of urban areas (N=34,729). Argentina, 2009.

Potential use of the health system	Health insurance									
	Private medical insurance (n=4,458)		Employment-based health insurance (n=19,086)		Other (n=761)		Only public (n=10,424)		Total (n= 34,729)	
	n	%	n	%	n	%	n	%	n	%
The person consulted with a professional	2,643	59.3	10,649	55.8	406	53.4	3,968	38.1	17,666	50.9
The person did not "need" to consult with a professional	1,466	32.9	6,766	35.5	267	35.1	4,894	46.9	13,393	38.6
The person felt some discomfort but did not consult with a professional										
The person did not have time*	61	1.4	367	1.9	26	3.4	361	3.5	815	2.3
The person did not have money*	26	0.6	183	1.0	10	1.3	285	2.7	504	1.5
The person asked for an appointment but have not been assisted yet*	13	0.3	103	0.5	6	0.8	90	0.9	212	0.6
The person did not think this was important	189	4.2	732	3.8	36	4.7	611	5.9	1,568	4.5
Another reason	60	1.3	286	1.5	10	1.3	215	2.1	571	1.6

Source: Own elaboration using data obtained in the National Survey of Risk Factors 2009.
Note: We created the new variable using two dimensions: the consultation with a health professional during the last month and the feeling of some discomfort or a health problem during the last month. By combining them we established three categories: 1) the persons who consulted with at least one health professional, 2) the persons who did not consult with a professional and did not feel any discomfort, and 3) the persons who did not consult with a professional and had some discomfort or health problem. Then, among the persons that had some discomfort and did not consult with a health professional, we differentiated the reasons for not consulting with a professional.*Reasons considered as access barriers.

Table 3. Percentage of non-consultation with any health professional during the last thirty days among the population that felt some health discomforts, based on reason and per capita income of the household quintile. Population aged 18 years old and more, residents of urban areas (N=3,108). Argentina, 2009.

Reasons for not consulting	Per capita income of the household quintiles											
	Quintile 1 (n=942)		Quintile 2 (n=784)		Quintile 3 (n=610)		Quintile 4 (n=416)		Quintile 5 (n=356)		Total (n= 3,108)	
	n	%	n	%	n	%	n	%	n	%	n	%
The person did not have time*	202	21.4	203	25.9	145	23.8	89	21.4	73	20.5	712	22.9
The person did not have money*	209	22.2	108	13.8	53	8.7	49	11.8	12	3.4	431	13.9
The person asked for an appointment but has not been assisted yet*	68	7.2	54	6.9	35	5.7	18	4.3	14	3.9	189	6.1
The person did not think this was important	337	35.8	318	40.6	287	47.0	179	43.0	203	57.0	1,324	42.6
Another reason	126	13.4	101	12.9	90	14.8	81	19.5	54	15.2	452	14.5

Source: Own elaboration using data obtained in the National Survey of Risk Factors 2009.

Note: As can be observed in the subtotals, as the per capita income of the household quintile increases, the amount of cases decreases. That is due to the fact that among those people who did not consult with a health professional and have felt some discomfort during the last month, the most important population is that within the households with lower income, and the least important is the population within the households with higher income.

*Reasons considered to be access barriers.

what we previously named as cases of extreme access barriers of health services: the population that did not consult with a health professional, had a health problem or felt some discomfort during the last month and the reason for not consulting is money, time or problems with appointments. We cannot know if the persons that did not consult with at least one professional or did not have health problems felt the need to consult and did not do it; however, what these tables do show is what percentage of a specific population group is affected by these extreme cases of access barriers (in Table 2, depending on the health insurance and in Table 4 depending on family per capita income quintile).

Table 4. Percentage of the potential use of the health system, based on reason and per capita income of the household quintile. Population aged 18 years old and more, residents of urban areas (N=28,905). Argentina, 2009.

Potential use of the health system	Per capita income of the household quintiles											
	Quintile 1 (n=6,244)		Quintile 2 (n=5,925)		Quintile 3 (n=5,574)		Quintile 4 (n=5,208)		Quintile 5 (n=5,954)		Total (n= 28,905)	
	n	%	n	%	n	%	n	%	n	%	n	%
The person consulted with a professional	2,656	42.5	2,725	46.0	2,833	50.8	2,928	56.2	3,585	60.2	14,727	50.9
The person did not "need" to consult with a professional	2,646	42.4	2,416	40.8	2,131	38.2	1,864	35.8	2,013	33.8	11,070	38.3
The person felt some discomfort and did not consult with a professional												
The person did not have time*	202	3.2	203	3.4	145	2.6	89	1.7	73	1.2	712	2.5
The person did not have money*	209	3.3	108	1.8	53	1.0	49	0.9	12	0.2	431	1.5
The person asked for an appointment but has not been assisted yet*	68	1.1	54	0.9	35	0.6	18	0.3	14	0.2	189	0.7
The person did not think this was important	337	5.4	318	5.4	287	5.1	179	3.4	203	3.4	1,324	4.6
Another reason	126	2.0	101	1.7	90	1.6	81	1.6	54	0.9	452	1.6

Source: Own elaboration using data obtained in the National Survey of Risk Factors 2009.

Note: the potential use of the health system variable was created using two dimensions: the consult with a health professional during the last month and the feeling of any discomfort or health problem during the last month. By combining them we created three categories: 1) the persons that consulted with a least one health professional, 2) the persons that did not consult with a professional and did not feel any discomfort and 3) the persons that did not consult with a professional and felt some discomfort or had a health problem. Then, among those who felt some discomfort and did not consult with a professional, we differentiated the reasons for not consulting.

*Reasons considered to be access barriers.

In Figure 1, which includes only the persons who felt some discomfort and did not consult with a professional, we can see that the lack of money affects mainly the population that only has public health insurance (18.2%), almost twice of what affects the population with employment-based health insurance (11%) and three times of what affects the population with private medical insurance (7.4%). Instead, not consulting due to lack of time has a similar importance for the people with different types of insurance. Finally, having asked for an appointment without receiving assistance has less importance for all the population, regardless of the type of health insurance, although it is greater among those people who only have public health insurance (5.8%) or an employment-based health insurance (6.2%), and it is lower among those who have a private medical insurance (3.7%).

Now, then, when in Table 2 we add all the population, also including those people who consulted with a professional and those who did not "need" to do so, we observe that not consulting due to lack of time is more important for the population that only has a public health insurance (3.5%), and it almost doubles the importance in comparison with the population with employment-based health insurance (1.9%) and private medical insurance (1.4%). In addition, we see that not consulting due to lack of money affects three times more the population that only has public health insurance (2.7%) in comparison with the population that has employment-based health insurance (1.0%), and affects 4,5 more times the population with private medical insurance (0.6%). Finally, it is interesting to see what happens with those people who had some discomfort but who did not consult with the doctor because they did not consider this was important. In Table 1, that category was more important for those who have private medical insurance (54.2%) and employment-based health insurance (43.8%) than for those who only have public health insurance (39.1%). However, when we take into account all the population in Table 2, that category is more important for the population with public health insurance (5.9%) than for those with employment-based health insurance (3.8%) or private medical insurance (4.2%). This is due to the fact that the amount of people who consulted with the doctor during the last month is greater among those people who have private medical insurance

(59.3%) or employment-based health insurance (55.8%) than among those who only have public health insurance (38.1%). Once again, it should be noted that Table 2 has the limitation of not showing whether those who consulted with the doctor or did not "need" to do so faced access barriers to have another consultation with the doctor. Instead, it does show the importance of the *access barriers* that we have previously defined as *extreme* (those persons who had some discomfort and did not consult with the doctor due to lack of money, lack of time or because they requested an appointment and have not been assisted yet), as regards all the population based on their health insurance.

Something similar occurs with the *per capita income* variable of the household. In Table 3, we see that not consulting with the doctor due to lack of money is almost 7 times more important for the people who belong to homes within the first quintile (22.2%) than for the people within the fifth quintile (3.4%). As regards not consulting due to lack of time, we practically find no differences (taking into consideration the most extreme groups, 21.4% within the poorest quintile in comparison with 20.5% of the wealthiest quintile). Instead, in Table 4, when we take into account all the population, we see that not consulting due to lack of time becomes less important as the income quintile increases, so it is three times more important in the first (3.2%) and in the second quintile (3.4%) than in the fifth (1.2%). In addition, not consulting due to lack of money is 15 times more important in the first quintile (3.3%) than in the fifth quintile (0.2%). Once again, the reason that explains the differences in the importance of these categories in both Tables is the percentage of the population that during the last month consulted with a health professional. As the income quintile increases, so does the percentage of the population that consulted with a health professional during the last month (in the extremes, the first quintile consulted 42.5% as opposed to 60.2% of the fifth quintile).

It should be emphasized that when other socioeconomic variables are analyzed, such as the level of education or poverty using the indicator of unsatisfied basic needs, what happens is something similar to the case of health insurance and the per capita income of the household quintile. When we take into account all the population, and not only those people who had some discomfort and did

not consult with the doctor, different *access barriers* such as lack of time acquire another meaning, while in other barriers such as lack of money the differences increase. Instead, these differences are not evidenced when analyzing the data according to the sex, and they are minor when the population is classified in age groups.

Finally, we would like to highlight that, after reading the percentages belonging to each category for the *potential use of the health system* variable – as described in the last column of Table 2, slightly different from those in Table 4, given that in this Table those who did not answer the question about the household income are not included – we can see that not consulting due to lack of time is the main *barrier to have access to health services* (2.3%), followed by lack of money (1.5%) and the problems related to the appointment with the doctor (0.6%). If we join these three reasons, what we call *extreme access barriers* to health services amount to 4.4% of the population. These barriers affected, during the last month, 7.7% of the population of the poorest quintile and 7.4% of the population whose only health insurance is public insurance, in contrast with 2.2% of the people with private medical insurance, 3.8% of those who have employment-based health insurance and 1.7% of the people who belong to the category of households within the fifth per capita income quintile.

FINAL CONSIDERATIONS

We have argued in the article that there are different ways to approach the problem of access to health services. That is the reason why we have emphasized the importance of theoretically problematizing and specifying the way to conceptualize and analyze the access to health services. As we have seen, the ENFR 2009 does not only allow us to analyze inequalities in access from the utilization (broad scope of the concept of access), but it also studies the mechanisms by means of which the system hinders the use of services to the population (access barriers or narrow scope of the concept of access). However, we have also seen different restrictions we consider important to keep in mind when analyzing the data. In the first place, we have seen that if the access barriers are analyzed without taking into account the use of differentiating health needs and services, the inequalities in access are

being underestimated, given that the structurally favored sectors tend to use more most of the services and to have less health problems. As we have previously seen, the indicator obtained that way may be hiding or reducing the differentiating impact that the reasons for not consulting with the doctor have among the different social groups. In the second place, from our theoretical framework we understand that not consulting with the doctor due to lack of time has to be considered a barrier to access to health services. The fact that it has a greater impact on the sectors without health insurance, with less income and without completed tertiary or university studies, evidences that this barrier is a factor of inequality in the access to services. In this sense, it should be noted that not consulting with the doctor due to lack of time is the main *extreme access barrier* to health services.

Taking into account the lack of time as a barrier is something that could be corrected through a different grouping of the data obtained in the ENRF (just like we have done in the previous sections of the article); however, the source does not allow us to reconstruct the difficulties in the access that could have been experienced by the population that consulted with a professional but needed to consult with another, or those who did not consult with a professional and did not have any health discomfort but wanted to consult for preventive reasons. This way, only the extreme cases of *access barriers* are being captured: the universe is reduced to those people who had some discomfort during the last month and did not consult with any health professional. In this sense, we understand that an option that would capture the problem in a better way would be that the question on *access barriers* could be made to all the persons being surveyed. It should be emphasized that there are previous cases of surveys that inquire all the population about the access barriers.

To conclude, it is important to remember that the ENFR is an unusual health survey in Argentina, due to the type and size of its sample, which allows us to obtain separated results for each of the 24 jurisdictions of the country, which is carried out periodically every four years, and which provides information on a wide variety of issues connected with the population lifestyles and health. As regards the subject of access to health services, the information obtained in the survey serves to make an

analysis using the broad scope of the concept of access, and to capture what we call *extreme access barriers* using the narrow scope of the concept of access; however, we understand that the suggestion to slightly modify the way we approach the subject of access from the narrow scope may provide very valuable information due to the characteristics of the sample and the wide range of subjects approached by the survey.

ENDNOTES

a. This survey is carried out periodically by the Centers for Disease Control and Prevention of the USA. In the 2012 questionnaire, all the persons being surveyed are asked if during the last year they have felt the need to consult with a doctor, but have not done so due to the cost involved. Regardless of their answer, then all the persons being surveyed are asked about the date of their last consultation with a doctor for a routine check-up.

b. The survey inquires about diverse health problems as well as the consultation with different health professionals. Regardless of the answers, all the population is asked the following: "Do you think during the last 12 months you needed to consult with a specialist but did not do it?" If they answer affirmatively, they are asked about the main reason for that.

c. Mendoza Sassi and Beria (10 p.55) state that there is a relationship of reverse causality between the utilization of services and the user satisfaction: the utilization "would generate a satisfactory [or unsatisfactory] response and [...] that satisfaction would determine the present or future utilization."

ACKNOWLEDGMENTS

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