

THE WAITING TIME FOR SPECIALIZED MEDICAL CONSULTATIONS IN A SMALL MUNICIPALITY OF MINAS GERAIS, BRAZIL

TEMPO DE ESPERA POR CONSULTA MÉDICA ESPECIALIZADA EM UM MUNICÍPIO DE PEQUENO PORTE DE MINAS GERAIS, BRASIL

TIEMPO DE ESPERA PARA LA CITA CON UN ESPECIALISTA EN UN PEQUEÑO MUNICIPIO DEL ESTADO DE MINAS GERAIS, BRASIL

Ed Wilson Rodrigues Vieira¹
Thais Moreira Nascimento Lima²
Andréa Gazzinelli³

¹ RN. PhD. student of the Nursing Graduate Program of the School of Nursing of the Universidade Federal de Minas Gerais – UFMG. Belo Horizonte, MG – Brazil.

² Nursing Student. School of Nursing – UFMG. Belo Horizonte, MG – Brazil.

³ RN. PhD. Professor of the School of Nursing – UFMG. Member of the National Institute of Science and Technology in Tropical Diseases – INCT-DT. Belo Horizonte, MG – Brazil.

Corresponding Author: Ed Wilson Rodrigues Vieira. E-mail: edwilsonvieira@gmail.com
Submitted on: 2014/05/20 Approved on: 2014/12/16

ABSTRACT

Objective: to evaluate the waiting time for specialized medical consultations in a small municipality, far from large urban centers, and located in an economically undeveloped region in Minas Gerais State, Brazil. **Method:** this was a case study with a descriptive approach that followed and analyzed in a six months period (July 2011 to January 2012), 152 referrals of patients to specialized medical consultations not offered in the municipality. The referrals were analyzed with regard to referencing and consultation scheduling using a structured instrument for data collection. A descriptive analysis was performed and the average number of waiting days was compared between variables of interest. **Results:** the majority of referrals (74.3%) were to specialists forwarded by primary care physicians. Requests for the first consultation represented 88.8% of referrals, and their main demand went to otorhinolaryngology (36.3%). The average waiting time for the first consultation, regardless of the specialty, was 244 days (standard deviation = 193, median = 198), ranging from six to 559 days. Only 3.7% of patients waited three months or less, and another 5.2% waited three to six months. At the end of the six months of the study period, 91.1% of the followed patients were still waiting for the specialized consultation. All the fulfilled consultations were in services located in the State capital, 700 km away. **Conclusion:** the access to specialized consultation is fragile, with long waiting time, directly affecting the integrality of care.

Keywords: Time-to-Treatment; Medicine; Especializations; Waiting Lists; Access to Health Care Services.

RESUMO

Objetivo: avaliar o tempo de espera por consulta médica especializada em um município de pequeno porte, distante de grandes centros urbanos e localizado em região economicamente pouco desenvolvida em Minas Gerais, Brasil. **Método:** estudo de caso com abordagem descritiva que acompanhou e analisou todos os 152 encaminhamentos de pacientes para consultas médicas especializadas não ofertadas em seu município de residência durante seis meses (julho de 2011 a janeiro de 2012). Os encaminhamentos foram analisados quanto ao referenciamento e agendamento da consulta, utilizando um instrumento estruturado para a coleta de dados. Realizou-se análise descritiva e o número médio de dias de espera foi comparado entre variáveis de interesse. **Resultados:** a maioria dos encaminhamentos (74,3%) foi referenciada a especialistas pelos médicos da atenção primária. As solicitações para primeira consulta representaram 88,8% dos encaminhamentos e a principal demanda destas foi para otorrinolaringologia (36,3%). O tempo médio de espera pela primeira consulta, independentemente da especialidade, foi de 244 dias (desvio-padrão = 193, mediana = 198), variando de seis a 559 dias. Apenas 3,7% dos pacientes encaminhados esperaram três meses ou menos pela consulta e outros 5,2% esperaram três a seis meses. Ao final dos seis meses de estudo, 91,1% dos pacientes acompanhados ainda aguardavam a consulta especializada. Todas as consultas efetivadas foram para serviços localizados na capital do estado, distante 700 km. **Conclusão:** a garantia de acesso a consulta especializada apresentou-se fragilizada, com elevado tempo de espera, afetando diretamente a integralidade do cuidado.

Palavras-chave: Tempo para o tratamento; Medicina; Especialização; Listas de Espera; Acesso aos Serviços de Saúde.

RESUMEN

El objeto del presente estudio ha sido evaluar el tiempo de espera para la cita con un médico especialista en un pequeño municipio lejos de los grandes centros urbanos de una región poco desarrollada del Estado de Minas Gerais, Brasil. Se trata de un estudio de caso con enfoque descriptivo. Durante seis meses se siguieron y analizaron los 152 casos de pacientes remitidos a médicos especialistas no disponibles en el municipio (julio 2011 - enero 2012). La remisión del paciente fue analizada según su referencia y día y hora de la cita programada por medio de una herramienta estructurada para la recogida de datos. Fue realizado el análisis descriptivo y el tiempo medio de espera fue comparado con las variables independientes de interés. En la mayoría de los casos (74,3%), quienes remitían los pacientes a los especialistas eran los médicos de la atención primaria. Los pedidos de primera cita médica representaron el 88,8% de los casos y la especialidad más solicitada fue otorrinolaringología (36,3%). El tiempo medio de espera

fue de 244 días (Desviación Estándar = 193; Mediana = 198). Apenas un 3,7% de los pacientes esperó tres meses o menos; un 5,2% esperó entre tres y seis meses. Al final del período de estudio 91,1% de los pacientes todavía seguían esperando la cita. Todas las citas para médicos especialistas fueron para centros ubicados en la capital del Estado, a 700 kilómetros de distancia. Como conclusión se puede afirmar que hay poca garantía de acceso a las citas para especialistas, con altos tiempos de espera, lo cual afecta directamente la atención integral.

Palabras clave: Tiempo de Tratamiento; Medicina; Especialización; Listas de Espera; Accesibilidad a los Servicios de Salud.

INTRODUCTION

Long waiting time has been a common problem in different public health systems. Besides being an important determinant of professionals and users' satisfaction, the waiting time is an indicator of the quality of services related to the system's responsiveness to health care needs of the population.¹⁻³

Because it is not always compatible with the severity of health condition, the long wait can submit the patient to suffering, reducing the chances of cure, allowing disease worsening or extending the sequels, and even determining the risk of death.^{2,4,5} From the socioeconomic point of view, extended waiting time causes an impact at work and school performances by decreasing productivity.^{6,7} It may also increase the cost of healthcare systems and individual expenditure in the need to purchase private services.^{2,8,9}

In Brazil, the long waiting time for specialized consultations is among the main barriers to access to an integral health care in the Unified Health System (SUS).^{2,10,11} Generally speaking, the increased demand, mainly due to the expansion of primary care, increase of life expectancy and prevalence of chronic diseases together with insufficient resources and services, have hampered the access to specialized care.^{7,12-14}

If this problem occurs in large municipalities,^{11,14} in small ones, far from major urban centers and sometimes located in places where there is significant deficiency in health care, the situation may be more serious.^{7,15} Still, if these municipalities are located in economically underdeveloped regions, the access to consultations with specialized physicians is considered a real challenge.⁸

It turns out that small municipalities, which account for the majority of Brazilian municipalities, generally have few or no specialized health services in their territories. They remain with the management of primary health care (PHC), however, away from the management of other levels of health care provided by SUS.¹² In this scenario, with a view to facilitating the continuity of care, the Ministry of Health established the program for Treatment Outside of Domicile (TFD) in 1999 to ensure treatment to patients with illnesses not treatable in their municipality of residence, in accordance with the constitutional principles of universality and integrality. Thus, many municipalities forward their patients to larger urban centers, according to the Agreed and Integrated Program (PPI). However, despite the advances of this program, access obstacles and limitations remain.^{17,18}

Access to specialized medical attention in a timely manner is of great importance, especially facing the possibility of ensuring the necessary attention because services are interdependent.⁵ However, despite the relevance of the subject, the studies that deal with waiting time for consultations with specialized doctors in Brazil are scarce. Those who deal with the subject tend to address waiting times for surgeries, transplants, and diagnostic procedures. The approach is usually focused on some specialties, and the data are already collected in the reference services in those that measure the waiting time for specialized consultations.^{2,5,9,13,15} There are also indirect estimates of waiting times conducted by health professionals.¹¹ Others discuss the subject in an indirect way without a specific survey of time.^{3,4} In addition, the number of patients on waiting lists for specialized consultations is not known because official data are lacking.

Thus, considering the adverse impacts of the waiting time and lack of studies in this area, this study aims to assess the waiting time for specialized medical consultations in a small municipality, far from large urban centers and located in an economically undeveloped region. The purpose is to contribute to the reflection and debate on the subject and improvement in the access to specialized attention in small municipalities.

MATERIAL AND METHOD

This is a case study with a descriptive approach, which examined the waiting time of patients referred to specialized medical consultations not available in their municipality of residence. The analytical reference was based on the organization's perspective of integrated health care networks. In that regard, it was considered that the performance of integrated networks should be evaluated, among others, by the dimension of intermediate results, which presents access as one of its variables.¹⁹ Therefore, access was understood as the use of health services in a timely manner to obtain the best possible result.²⁰

The study was conducted in the city of Jequitinhonha, Jequitinhonha Valley, Minas Gerais State with approximately 24,000 inhabitants.²¹ It is located 225 km from the city of Teófilo Otoni, a regional reference, and at 700 km from Belo Horizonte, the State capital. Its Human Development Index (HDI) is 0.615, considered medium by the United Nations Development Program.²² Its primary health care services network is structured in the Family Health Strategy, where eight teams

operate. The municipality has a Psychosocial Health Care Center and a philanthropic hospital, privately managed, for hospital attention. In regards to access to specialized services, the municipality is part of a regionalized Health Services Network configuration determined by the Regionalization Director Plan (PDR) of Minas Gerais belonging to the micro-region of Almenara and the northeastern macro-region of Teófilo Otoni.²³

The municipality has a unit of the Viva Vida Center, which is the reference for ambulatory attention of the Child and Maternal Mortality Reduction State Program offering consultations with specialized doctors based on the maternal and child demands of the entire health micro-region. In recent years, to improve access to specialized care, the municipality invested in hiring specialists such as cardiologist, gynecologist, neurologist, ophthalmologist, orthopedist, pediatrician, and urologist for biweekly or monthly assistance. For patients who require specialized medical consultations that are not offered in the municipality, the access is provided by the Treatment Outside of Domicile Program. Thus, the flow begins with filling a specific printed form by the requesting physician. The patient receives the referral and turns it in the Municipal Consultation Scheduling Center where a professional is responsible for scheduling by means of contacts with the Macro and Micro-Regions Regulating Centers by phone.

All 154 referrals to specialized medical appointments outside the municipality that awaited schedules in July 2011 were considered a source of data for this study. Two referrals were excluded because of illegible information; 152 referrals were evaluated.

Initially, each referral was identified with a numeric, unique, and sequential code. An instrument was designed for data collection considering: a) requested health service; b) filling of referral justification; c) type of medical specialty requested; d) referral date. From then on, referrals were followed up for six months (until January of 2012) with the goal of identifying the date and location of consultations. Data was collected by the principal investigator and graduate students from the School of Nursing at the Universidade Federal de Minas Gerais (UFMG) previously trained to use electronic equipment (*Personal Digital Assistant* — PDA), which are small portable electronic devices (*palmtops*) with touch screen (*touch screen*) for data entry in which the data collection instrument was installed. Data were transferred from PDAS to a computer at the end of each field working day in order to verify and correct missing or incorrect information. Subsequently, a double checking was conducted on the data to ensure information quality.

The *Statistical Package for Social Science* (SPSS Inc., Chicago, United States), version 15.0 was used in the analysis. The waiting time was defined as the period between the referral and consultation date. In the analysis of waiting time, only referrals to primary consultations were considered be-

cause returning consultations tend to obey a schedule determined by the specialized doctor or reference service. Firstly, no statistical difference in the variables of interest was observed according to the individuals who carried out the data collection. The results were expressed in frequencies, averages, medians, and standard deviations. Comparisons were conducted between the average waiting time and the health service responsible for the referral and filling the clinical justification in the referral form.

The study was approved by the Research Ethics Committee of UFMG under the opinion ETIC 0174.0.203.000-1 in compliance with the Resolution nº 196/96. The study was authorized by the Municipal Health Secretary prior to the beginning of data collection.

RESULTS

Most referrals (113/152; 74.3%) were forwarded to specialist doctors by doctors in the primary health care (Family Health Strategy). Others were referred by services of secondary care or hospitals located both in the municipality itself (12.4%) and others (13.3%).

The requests for first consultation with specialized doctors accounted for 88.8% of the referrals (135/152), the rest being for returning consultations. As for the first consultation, the main demand was for otorhinolaryngology, which accounted for 36.3% of referrals. In addition, the referrals to specialties such as otorhinolaryngology, dermatology, angiology, and orthopedics accounted for nearly three-quarters of all requests (Table 1).

Table 1 - Distribution of medical specialties required in referrals to consultations with specialized doctors in the small municipality of Jequitinhonha, 2011

	Frequency	%
Otorhinolaryngology	49	36.30
Dermatology	24	17.78
Angiology	14	10.37
Orthopedics	14	10.37
Rheumatology	8	5.93
Endocrinology	6	4.44
Pulmonology	3	2.22
Allergology	2	1.48
General Surgery	2	1.48
Gastroenterology	2	1.48
Hematology	2	1.48
Others	9	6.67
Total	135	100.00

Table 2 - Average waiting time for the first consultation with a specialist doctor by specialty-Jequitinhonha, 2011

	Average	N	Standard Deviation	Maximum waiting time
Hematology	434.00	1	-	434
Allergology	420.00	2	182.43	549
Endocrinology	381.00	2	178.00	507
Rheumatology	370.00	2	111.71	449
Otorhinolaryngology	339.25	4	216.64	550
Pulmonology	331.50	2	321.73	559
Angiology	174.00	1	-	174
Dermatology	136.76	3	108.61	229
General Surgery	120.00	1	-	120
Orthopedics	68.00	5	81.38	170
Cardiology	14.00	1	-	14
Total	243.92	24	192.63	

The average waiting time for the first consultation with a specialist doctor, regardless of the specialty, was 244 days (standard deviation = 193, median = 198), ranging from six to 559 days. Patients referred by the primary care services showed waiting times that were similar to those from the secondary or hospital services (average of 246 and 250 days, respectively). Hematology specialties, allergology, endocrinology, and rheumatology showed waiting times that exceeded one year (Table 2).

Only 3.7% of patients referred for first consultation (5/135) waited three months or less for their consultations, others 5.2% (7/135) waited three to six months (90 to 180 days). At the end of the study period, six months, most followed up referrals (123/135) were still waiting for a specialized consultation to be scheduled.

Patients whose referral forms showed the fields intended for clinical justification filled up presented less waiting time (190 days) when compared with those whose forms showed the justification partially filled (319 days). However, this difference was not statistically significant.

All consultations were scheduled for services in the capital of the State, highlighting weaknesses in meeting the Northeast micro- and macro- regional demands on health.

DISCUSSION

Solving the problem of waiting time for out-patient care has earned the attention of an expressive number of studies and government policies, which generally consider a balance between the demand for care and availability of services to serve it.^{24,25} Despite being a complex problem, a general analysis on the formation of long queues indicates that this arises from the inability of the health care system to ensure adequate health care in an acceptable time to citizens.^{7,26}

Since it is from the PHC services that, in general, service and access to specialized services in small municipalities are structured, these were responsible for the majority of referrals for consultations with specialized doctors. This result is consistent with other studies that have identified good performance in the PHC in its port of entry attribute^{11,12} and it may be a reflection of the increased coverage of services in that level of attention throughout Brazil. Conversely, it implies that the generalist primary care physician is primarily responsible for the appropriate referral to a specialist.¹²

The initial consultations responded to the high demand for specialist doctors. When in large numbers, returning consultations for patients' revisions in specialized services could feed the overcrowding status and would be a preponderant factor in difficulties for remaining patients to obtain access to specialized assistance.^{5,27}

The greatest demand for otorhinolaryngology corroborates the estimate that ear, nose, and throat diseases are among the main reasons for seeking assistance in the PHC, which reflects directly on the demand for specialized services.⁵ Hence, it is a fact that the demand for specialist medical consultations is the reflection of the resolutive capacity in the PHC services. Another point is that few specialties responded for most of the demands. With this, it is agreed that there are no ways to find realistic and impacting solutions to the issue of consultation queues without properly first learning about it.²⁷ To this end, it is necessary to have the exact information about the amount of people waiting for a particular specialty. However, knowing the average and maximum waiting time is more important than knowing the total number of patients in this waiting mode.²⁸ To get this information, municipalities just need to consider referral and consultation dates. The information accurately presented can secure more legitimacy to referrals and increase the chances to have them fulfilled.

The average waiting time for a first consultation with a specialist, regardless of specialty, was high, reaching 244 days. This means that if all patients were required to stay in queue for the same length of time, they all would have waiting times of more than eight months to be served. It is obvious that most patients cannot wait that long; even in less urgent cases this waiting would be a problem.¹⁵ Unfortunately, the lack of official data on waiting times in Brazil, and the fact that in national studies found on the subject the approach was given on one single specialty,^{2,5,15} makes comparing this result difficult. The comparison with international scenarios, which sometimes feature much lower waiting times,^{13,29} requires caution because there are differences in the determinants of social and health systems.

Some specialties have stood out for presenting longer waiting times. These are knowingly situations in which the demands for these specialties in secondary care have been greater

than the number of consultations offered. Such a situation relates to difficulties that the public health system has faced to solve the problem of specialties in the secondary attention.⁵

The variation in waiting times related to the size of the municipality is evident when comparing the waiting time for consultations with an otorhinolaryngologist in one capital, which was of 3.8 months,⁵ with the waiting time for the same specialty in the studied municipality, 11.3 months on average (339 days). This analysis corroborates another study that concluded that patients who do not reside in a capital also experienced longer waiting times for specialist consultations.¹⁵ The reduced governance of small municipalities about specialized services outside of their territory can, in part, be related to that difference in access between small and large municipalities. There is still no guarantee that the planned PPI quotas are in fact distributed among municipal health units.¹¹

Another issue is that long or short waiting times for specialized attention present regional nuances.³⁰ In the South of the country, the waiting time for a consultation with a rheumatologist was 7.8 months on average,¹⁵ and in the studied municipality it was even longer (over 12 months). In theory, the municipality location in an economically undeveloped region may lead to longer waiting times.

It is believed that an acceptable waiting time for a first appointment with a specialist must not exceed three months.⁶ However, only 3.7% of followed up patients were assisted in less than three months. As the inadequacy of services is considered one of the main factors to explain lengthy waiting times,³ this result reflects an important deficiency in the supply of specialized consultations in the State of Minas Gerais, especially in the studied region.³¹ In other Brazilian cities, the problem of waiting times is ancient and persists despite the exchange of teams in health management.¹⁵

It is worth noting that, without the efforts of the municipality to maintain some specialist doctors in their network of health services, the waiting queue for specialized consultations and, consequently, the waiting time would be even longer. That is because when there are specialists working at the primary level of attention, an important portion of patients can be handled properly at the local level.¹⁵ However, despite being a rational proposal, there are practical difficulties for its operationalization³² because specialist doctors are not easily found to work in small towns, distant from major centers. The Viva Vida Center operation also contributed to shortening waiting times because much of the maternal and child demand is fulfilled by the specialized medical attention in their municipality.

Patients referred by primary care services waited for specialized consultations similar times to that of those referred by other levels of attention. A different result was found in another study²⁹ when patients referred by a family doctor compared with those referred by another medical specialist or other service had more chances to see a specialist in less time.

The adequate filling of referral forms allowed shortening waiting times; however, with no statistical significance. It is important to analyze this situation because problems in completing the forms denote disorganization in the system. Therefore, the need to better orient the health care professional regarding the completing of forms is relevant, both in the epidemiological point of view and as a reference and counter reference.⁵

The fact that all referred consultations were scheduled for services in the distant state capital confirms the great challenge for the regionalization of health care in the State of Minas Gerais. Other municipalities in the State are also inserted into health regions highly dependent on specialized services located in the capital³¹ and probably have similar problems with waiting times. The analysis of this situation leads to the understanding that the prospect of a networked health system providing shorter waiting times is only viable if the territory provides good health care services. In another perspective, when prolonged specialized care is indicated, the long distances to be traveled can cause more pain and distress.²⁷

Each patient that requires specialized attention may need to go through several steps that increases significantly the waiting time.^{2,6,27} The queue for the initial consultation with a specialist is just the beginning, and sometimes the biggest bottleneck.²⁷ The actual waiting time comprises several other periods from the appearance of disease symptoms to obtaining a specialized treatment; each one of them marked by difficulties and delays.²⁷ However, all the steps prior to the effective specialized assistance deserve attention and an approach to identify obstacles and solutions to optimize the flow of patients.

Some possible solutions to the problem of waiting time deserve discussion. Measures that increase the offer of specialized services are often among the main strategies for the reduction of waiting time.^{3,9,24,25} However, it is understood that simply increasing the offer of consultations, aiming at reducing waiting times, would just encourage increasing number of referrals.³³ The solution is also probably a better communication between the general practitioner doctor, or community doctor, and the specialist.¹⁵ For that, the adequate and consistent structuring of primary care services, with improvements in referral and scheduling systems are needed.^{2,4,11,15,25} What can still be done is to increase efficiency in the use of the current installed capacity on public networks, both in the primary and secondary care, to improve the PHC efficacy, and avoid inappropriate referrals and unnecessary re-scheduling due to low counter references.^{2,3,5,14} Investments in telemedicine also have provided important advances in reducing waiting time.³⁴ In the Brazilian context, the National Telehealth Program stands out as an important program that, has allowed professionals outside of major urban centers to have access to training through video conferencing and discussion of clinical cases with specialists from various areas.³⁵

A possible limitation of this study is that waiting time was estimated in only one municipality. However, this is a pioneering study in the national literature on the evaluation of waiting time for specialized consultations in small municipalities. Although it was conducted in one single municipality, if analyzed from the perspective of the organization of integrated health care networks in which access is provided, the results show that the high prevalence of waiting times reflects a fragile integration between the primary health care and specialized care. Further studies with the purpose of understanding the factors involved in determining the waiting time for specialized consultations on the national scene may portray the situation more completely, contributing to the planning and management of the health system. In addition, studies in municipalities with better economic development and higher HDI will bring important contributions allowing comparative analysis of the results.

CONCLUSIONS

The waiting time to access specialized medical consultations in a small municipality, far from large urban centers and located in an economically undeveloped region, proved to be long. The guaranteed access to specialized consultations is fragile, directly affecting the integrality of care. Short- and long-term interventions will be needed to resolve the causes for excessive waiting time; the municipality needs to advance the regulation about referrals and monitor waiting time with the implementation and use of computerized tools.

The evaluation of waiting times in different regions and medical specialties will allow to obtain essential information for a strategic decision-making by managers and a more thorough picture of the actual situation, contributing to the planning and management of the health system.

ACKNOWLEDGEMENTS

The authors are thankful to the managers and health professionals in the municipality for their contribution.

FUNDING

Fundação de Amparo a Pesquisa de Minas Gerais-FAPEMIG e Conselho Nacional de Desenvolvimento Científico e Tecnológico - CNPq.

REFERENCES

1. Aeenparast A, Farzadi F, Maftoon F. Waiting time for specialist consultation in tehran. *Arch Iran Med*. 2012 Dec; 15(12):756-8.
2. Padovani CSS, Schor N, Laranja SMR. Avaliação do perfil epidemiológico e das dificuldades encontradas pelos pacientes para o atendimento de

- primeira consulta no ambulatório de triagem da nefrologia da UNIFESP. *J Bras Nefrol*. 2012; 34(4):317-22.
3. Conill EM, Giovanella L, Almeida PF. Listas de espera em sistemas públicos: da expansão da oferta para um acesso oportuno? *Considerações a partir do Sistema Nacional de Saúde espanhol*. *Ciênc saúde coletiva*. 2011; 16(6):2783-94.
4. Hadorn DC. Setting priorities for waiting lists: defining ours terms. *Can Med Assoc J*. 2000 Oct; 163(7):857-60.
5. Guerra AFM, Gonçalves DU, Côrtes MCJW, Alves CRL, Lima TMA. Otorrinolaringologia pediátrica no sistema de saúde de Belo Horizonte. *Rev Saúde Pública*. 2007; 41(5):719-25.
6. Paterson WG, Depew WT, Paré P, Petrunia D, Switzer C, Veldhuyzen van Zanten SJ, Daniels S. Wait times for gastroenterology consultation in Canada: The patients' perspective. *Can J Gastroenterol*. 2006 Jun; 24(1):411-23.
7. Vieira J. Listas de espera para cuidados de saúde: onde fica a ética? *Nursing (Edição Portuguesa)*. 2007; 17(217):30-5.
8. Regidor E, Martínez D, Astasio P, Ortega P, Calle ME, Domínguez V. Asociación de los ingresos económicos con la utilización y la accesibilidad de los servicios sanitarios en España. *Gac Sanitaria*. 2006; 20(5):352-9.
9. Lima DMG, Ventura LO, Brandt CT. Barreiras para o acesso ao tratamento da catarata senil na Fundação Altino Ventura. *Arq Bras Oftalmol*. 2005; 68(3):357-62.
10. Gouveia GC, Souza WV, Luna CF, Souza-Júnior PRB, Szwarcwald CL. Health care users' satisfaction in Brazil, 2003. *Cad Saúde Pública*. 2005; 21 Suppl:S109-18.
11. Giovanella L, Mendonça MHM, Almeida PF, Escorel S, Senna MCM, Fausto MCR, Delgado MM, Andrade CLT, Cunha MSilva, Martins MIC, Teixeira CP. Saúde da Família: Limites e possibilidades para uma abordagem integral de atenção primária à saúde no Brasil. *Ciênc Saúde Coletiva*. 2009; 14(3):783-94.
12. Bender AS, Molina LR, Mello ALSF. Absenteísmo na atenção secundária e suas implicações na atenção básica. *Rev Espaço para a Saúde*. 2010 jun; 11(2):56-65.
13. Cano JD, Medina E, Custardoy J, Orozco D, Quince F. Identificación de las variables de influencia en los tiempos de espera en atención especializada. *Gac Sanitaria*. 2003; 17(5):368-74.
14. Spedo SM, Pinto NRS, Tanaka OY. O difícil acesso a serviços de média complexidade no SUS: o caso da cidade de São Paulo, Brasil. *Physis Rev Saúde Coletiva*. 2010; 20(3):953-72.
15. Simon JC, Maltchik M, Silva EE, Lima VRB, Bredemeier M. Avaliação do tempo de espera para consultas de reumatologia em um centro de atendimento terciário de Porto Alegre - RS. *Rev AMRIGS*. 2008 out./dez; 52(4):303-8.
16. BRASIL. Portaria no 55, de 24 de fevereiro de 1999. Dispõe sobre a rotina do tratamento fora de domicílio no Sistema Único de Saúde - SUS, com inclusão dos procedimentos específicos na tabela de procedimentos do Sistema de Informações Ambulatoriais do SIA/SUS e dá outras providências. 1999. [Cited 2014 Apr. 14]. Available from: <http://dtr2001.saude.gov.br/sas/PORTARIAS/Port99/PT-055.html>.
17. Gaiva MAM, Neves ÁQ, Siqueira FMG. O cuidado da criança com espinha bífida pela família no domicílio. *Esc Anna Nery Rev Enferm*. 2009 Oct-Dec; 13(4):717-25.
18. Rodrigues ILA, Monteiro LL, Pacheco RHB, Silva SED. Abandono do tratamento de tuberculose em co-infectados TB/HIV. *Rev Esc Enferm USP*. 2010; 44(2):383-7.
19. Vázquez ML, Vargas I, Unger J, Mogollón A, Silva MRF, Paepe P. Integrated health care networks in Latin America: toward a conceptual framework for analysis. *Rev Panam Salud Publica/Pan Am J Public Health*. 2009; 26(4):360-7.
20. Travassos C, Martins M. Uma revisão sobre os conceitos de acesso e utilização de serviços de saúde. *Cad Saúde Pública*. 2004; 20(Sup 2):S190-8.
21. Instituto Brasileiro de Geografia e estatística. Cidades@. Minas Gerais. Jequitinhonha. [Internet]. Rio de Janeiro: Instituto Brasileiro de Geografia e Estatística; [Cited 2014 Apr. 14]. Available from: <http://www.cidades.ibge.gov.br/xtras/perfil.php?lang=&codmun=313580>.

22. Atlas do Desenvolvimento Humano no Brasil 2013. Perfil Municipal. Jequitinhonha, MG [Internet]. Programa das Nações Humanas para o Desenvolvimento. Fundação João Pinheiro. Instituto de Pesquisa Econômica Aplicada; [Cited 2014 Apr. 14]. Available from: http://www.atlasbrasil.org.br/2013/pt/perfil/jequitinhonha_mg#idh
23. Malachias I, Leles FAG, Pinto MAS. Plano Diretor de Regionalização da Saúde de Minas Gerais (PDR/MG). Belo Horizonte: Secretaria de Estado de Saúde de Minas Gerais. 2010. [Cited 2014 Apr 14]. Available from: <http://www.saude.mg.gov.br/component/gmg/page/401-regionalizacao-assistencial-sesmg>.
24. Leddin D, Bridges RJ, Morgan DG, Fallone C, Render C, Plourde V, Gray J, Switzer C, McHattie J, Singh H, Walli E, Murray I, Nestel A, Sinclair P, Chen Y, Jan Irvine E. Survey of Access to Gastroenterology in Canada: The SAGE wait times program. *Can J Gastroenterol*. 2010 Jan; 24(1):20-5.
25. Kreindler SA. Policy strategies to reduce waits for elective care: a synthesis of international evidence. *Br Med Bull*. 2010 May; 95:7-32.
26. Proença G, Ferreira D, Freitas A, Madeira F, Soares AO, Ferreira R. Programa especial de combate à lista de espera para consulta de cardiologia: relato de uma experiência inovadora. *Rev Port Cardiol*. 2003; 22(11):1335-42.
27. Sarmiento Junior KMA, Tomita S, Kos AOA. O problema da fila de espera para cirurgias otorrinolaringológicas em serviços públicos. *Rev Bras de Otorrinolaringologia*. 2005; 71(3):256-62.
28. Ezekowitz JA, Armstrong PW. The waiting game: facing the consequences. *CAMJ*. 2002; 167(11):1247-8.
29. Carrière G, Sanmartin C. Waiting time for medical specialist consultations in Canada. *Statistics Canada, Catalogue nº 82-00 - Health Reports*. 2010 Jun; 21(2).
30. Giovanella L, Lobato LVC, Carvalho AI, Conill EM, Cunha EM. Sistemas municipais de saúde e a diretriz da integralidade da atenção: critérios para avaliação. *Saúde Debate*. 2012; 26(60):37-61.
31. Malachias I, Marra A, Castro GB, Pinto MAS, Siqueira M, Azevedo J. A resolubilidade e os vazios da Assistência hospitalar Micro e macrorregional do SUS/MG em 2010 e a evolução – 2003/2010. Secretaria de Estado da Saúde de Minas Gerais. 2011.
32. Campos WSC, Chakour M, Santos RC. Análise crítica sobre especialidades médicas e estratégias para integrá-las ao Sistema Único de Saúde (SUS). *Cad Saúde Pública*. 1997 Jan/Mar; 13(1):141-4.
33. Kirwan J. Rheumatology out-patient workload increase inexorably. *British Journal of Rheumatology*. 1997; 36:481-6.
34. Hofstetter PJ, Kokesh J, Ferguson AS, Hood LD. The impact of telehealth on wait time for ENT specialty care. *Telemed J E Health*. 2010 Jun; 16(5):551-6.
35. Telessaúde Brasil Redes [Internet]. Brasília: Ministério da Saúde. [Cited 2014 Mar. 20]. Available from: <http://www.telessaudebrasil.org.br/>.