Prevalence and reasons for refusal to participate in clinical research

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Abstract

The information provided regarding the prevalence and reasons why volunteers refuse to participate in scientific research is sparse. This article aims to describe the prevalence and reasons for refusing to voluntarily participate in the cohort study whose objective is to evaluate morbidity and mortality amongst people living with HIV/AIDS (PLWHA), through a cross-sectional study conducted at the Centro de Treinamento e Referência em Doenças Infecciosas e Parasitárias (Training and Referral Center for Infectious and Parasitic Diseases). The following information was obtained: origin, date of birth, age, gender, and reason for not consenting, when applicable. The lack of time to devote to the research was the main reason given (63%), followed by fear of lack of confidentiality (17%). There was no statistical difference among those who accepted or not to participate in terms of gender, age or origin of the service. The percentage of PLWHA who refused to participate in the study (40.7%) and lack of time available for their participation (63%) were considered high.
Keywords: Longitudinal studies. Volunteers. Biomedical research/Epidemiology. Bioethics.

Resumo

Prevalência e motivos para recusar participação em pesquisa clínica

As informações fornecidas sobre prevalência e os motivos da recusa de voluntários a participar em pesquisa científica são escassas. Este artigo objetiva descrever esses dados em coorte voltada a avaliar morbimortalidade de pessoas vivendo com HIV/AIDS (PVHA), a partir de estudo transversal realizado no Centro de Treinamento e Referência em Doenças Infecciosas e Parasitárias. Foram obtidas as informações: origem, data de nascimento, idade, sexo e motivo do não consentimento, quando aplicável. Falta de tempo para se dedicar a pesquisa foi o principal motivo alegado para o não consentimento (63%), seguido por medo de falta de sigilo (17%). Não houve diferença estatística entre os que aceitaram ou não participar por sexo, idade ou origem do serviço. Consideraram-se elevados os percentuais de recusa de PVHA (40,7%), bem como de falta de tempo disponível para participação (63%).
Palavras-chaves: Estudos longitudinais. Voluntários. Pesquisa biomédica/Epidemiologia. Bioética.

Resumen

Prevalencia y motivos de la negación a participar en investigaciones clínicas

Las informaciones disponibles respecto a la prevalencia y a los motivos de la negación de voluntarios para participar de investigaciones científicas son escasas. Este artículo tiene como objetivo describir la prevalencia y los motivos de la negación a participar voluntariamente en una cohorte dedicada a evaluar la morbilidad y la mortalidad de personas que viven con VIH/SIDA, a partir de un estudio transversal realizado en el Centro de Capacitación y Referencia en Enfermedades Infecciosas y Parasitarias. Se obtuvieron las siguientes informaciones: origen, fecha de nacimiento, edad, sexo y motivo del no consentimiento, cuando correspondiera. La falta de tiempo para dedicarse a la investigación fue el principal motivo alegado para el no consentimiento (63%), seguido por el temor a la no confidencialidad (17%). No hubo diferencias estadísticas entre los que aceptaron participar o no de acuerdo a sexo, edad u origen del servicio. Se consideraron elevados los porcentajes en la negación de las personas que viven con VIH/SIDA a participar de la investigación (40,7%), así como la falta de tiempo disponible para esta participación (63%).
Palabras clave: Estudios longitudinales. Voluntarios. Investigación biomédica/Epidemiología. Bioética.

Aprovação CEP/UFMG CAAE 12649713.4.0000.5149

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Declaram não haver conflitos de interesse.

Research articles

According to data published by the Organização Mundial da Saúde (World Health Organization) (WHO), two million people were infected by the human immunodeficiency virus (HIV) in 2004 [1,2]. There are several health studies performed with people living with HIV/AIDS (PVHA) being antiretroviral treatment (ARVT) virgin, generally aiming to describe the epidemiological profile mapped by the health-disease process; the physiopathology of the infection by the HIV, including clinical parameters, (biochemistry, signs and symptoms, genotyping, drug resistance); morbidities associated or not to the HIV; AIDS mortality rates; and potential risk factors or comorbidity protection [3-9].

Being an issue approached subjectively in the field of bioethics and addressing the regulations ensuring the integrity and dignity of volunteers in scientific research [10,11], there is little quantitative information provided by studies with different designs on the number of people approached in the stage of volunteer inclusion as well as on the prevalence of the refusal and the reasons for not participating in scientific research. In this context, this article has the objective of describing these data in a cohort.

Methods

This is a crosscut study performed at the Centro de Treinamento e Referência em Doenças Infecciosas e Parasitárias (Training and Referral Center for Infectious and Parasitic Diseases - CTR-Orestes Diniz, UFMG, Belo Horizonte City Administration) between the second half of March and the first half of September, 2014 –, developed as part of the Quarup project, approved by the Comitê de Ética em Pesquisa com Seres Humanos da Universidade Federal de Minas Gerais - CEP-UFMG (Ethics Committee for Research with Human Beings of the Federal university of Minas Gerais), with the main objective of prospectively assessing the morbidity and mortality by causes associated or not to the HIV, in PVHA with ages between 18 and 55 years, starting ARVT. The present work was submitted to the Ethics Committee as a development from the original research (in the form of an addendum), being approved and registered according to the national norms [12].

In the original project, volunteers were followed for eight or more clinical appointments – all at the entry and 24 months after the inclusion. The estimate of time spent in exams was twenty hours, for a period of twelve days, divided into: eight hours of physical exams, four hours of laboratory exams, two hours for ultrasound exams of the carotids and two hours for dual-energy X-ray absorptiometry coupled with anthropometric examination. The volunteer would be informed of the schedule for the exams before these, as this was delegated to the research team.

The PVHA contacted had not started ARVT, nor presented other infections. Exclusion criteria were: a) individuals without intention to keep the monitoring for at least six months; b) those who used ARVT for prophylaxis of HIV transmission, without therapeutic goal; c) presence of chronic-degenerative diseases before diagnosis of HIV infection; d) psychiatric issues; e) pregnant women.

For determination of sample size, the Openepi software was used with the following data: population size equal 10 100 individuals, prevalence of nonconsent equal to 50%, based on the derivation of the probability formula, that is, the percent to which the event is found significant, due to the nonexistence of data on the estimate of nonconsent in the literature searched [13,14], variation of 5% and confidence level of 95%, resulting in the minimum sample of 80 individuals.

For convenience, the approach to patients was performed with the first patients scheduled in the the pharmacy service to receive their first round of antiretrovirals treatment (ARVT), until reaching the minimum sample size established through the calculation of sample size (n = 80). Patients were informed about the objectives of the Quarup Project, the necessary medical appointments, biochemical and physical exams included in the research flowchart, places where the study was carried out, time spent and necessary for each procedure, possible risks and constraints and data confidentiality. Contact information (name, telephone number and e-mail) of the project coordinator and the researchers involved were also provided to the possible volunteers, in order to clarify any doubts that might arise referring to the study.

With the aim to know the epidemiological profile of patients, the following information was obtained through a questionnaire: name, origin in the Sistema Único de Saúde – SUS (Unified Health System) or in Supplementary Health, date of birth, date of approach, age, sex, and reason for the nonconsent. Those who accepted to participate signed the free and informed consent form (FICF), in which the secrecy of information and the confidentiality of the data collected were ensured.

The database was established with the *Epidata* software, version 3.1 [15], and the statistical analysis were performed with the *Stata* software

(version 11.0)[16], the level of significance adopted being less than 5%. As it did not imply any cost or harm to the ones involved, the variables sex, age group and service origin were compared between the ones who did and those who did not agree to participate in the study using the chi-square text, the partition chi-square text, and Fisher's exact test[14], with the aim to check for significant differences, which were not found.

Results

In order to reach the minimum number established by the calculation of sample size and, thus, confer reliability to the results, 112 ARVT virgin PVHA with medical prescription to start antiretroviral treatment were interviewed. Form these, 26 did not fulfill the criteria for inclusion in the cohort, leaving 86 volunteers apt to participate.

Among the 86 patients who fulfilled the inclusion criteria established for the cohort, 87.2% (n = 76) were male, with average age of 33.5 ± 8.7, ranging from 19 to 55 years. Over half (62.8%) were monitored in the supplementary health services, and almost 90% were approached by only one researcher (data not shown in picture or table).

Prevalence of nonconsent was 41% (n = 35). From these, 5 patients (14%) said they would start treatment immediately. Most of the other 30 individuals who did not accept the invitation to participate in the study claimed "lack of time to dedicate to the study" as the reason (63%), followed by fear of disclosure of the diagnosis to the society (17%) (Table 1).

No statistical differences were found between individuals who accepted or did not accept to participate as volunteers when tested for sex, age, and health service of origin (Table 2).

Table 1. Sociodemographic variables of ARVT virgin PVHA assisted at the Referral Center ("Centro de Referência") Belo Horizonte/MG, 2014 (n = 86)

Variables	n	%
Age group		
Adolescents (18-19 y.o.)	1	1
Young adults (20-24 y.o.)	14	16
Adults (25-55 y.o.)	71	83
Sex		
Male	75	87
Female	11	13
Health service		
Supplementary health	54	63
Unified Health System (Sistema Único de Saúde)	32	37
Consent to the study		
Participation	51	59
Non participation	35	41
Reasons stated for the non inclusion (n = 35)		
Lack of time	22	63
Fear of disclosure of the diagnosis/ lack of secrecy	6	17
Immediate start of ARVT	5	14
Does not wish to participate	2	6

n= sample evaluated

Table 2. Characteristics of the ARVT virgin PVHA, by sex, age group and health service assisted at the Referral Center, Belo Horizonte/MG, 2014

Variables	Non participants (n = 35)		Participants (n = 51)		*p*
	N	%	n	%	
Sex					
Male	32	91	43	84	0,332*
Female	3	9	8	16	
Age group					
Adolescents	1	3	0	0	0,171**
Young adults	8	23	6	12	
Adults	26	74	45	88	
Health services					
Supplementary health	23	66	31	61	0,288*
Unified Health System (SUS)	12	34	20	39	

**Chi-square test **Fisher's exact test*

http://dx.doi.org/10.1590/1983-80422016242131

Discussion

We did not find any study that quantitatively evaluated the prevalence of nonconsent of recently diagnosed ARVT virgin PVHA in participating in health studies, especially in longitudinal studies; and this article shows as the main result a high percentage of refusal (40.7%).

Despite the high prevalence of refusal, it is important to call attention to the respect the researcher must always have for the decision of the individual. This right is established in Resolution 466/2012 of the Conselho Nacional de Saúde (National Health Council) [12], as good conduct in research, in favor of scientific integrity, reproducibility of results and evolution of scientific knowledge, and is based on the principle of autonomy of the research subject [17-20].

As for the reasons stated by the subjects who did not accept to participate, 63% claimed to have no time available for the activities predicted. Analyzing the age groups of young adults and adults and the possibility to classify them as economically active people , it may be possible to justify the high occurrence of this variable [21,22]. Also, it is important to mention that the Quarup Project took place in fixed times in the morning during two working days of the week, a factor that may have contributed to the findings. However, most people with these characteristics accepted to participate.

It is also worth emphasizing that 17% reported concerns about the breach of secrecy, reinforcing the need to clarify the process of maintenance of secrecy and confidentiality of data projects, as well as the professional ethics of the health service itself. It is necessary to supply potential volunteers all the information about established mechanisms established by researchers about secrecy and confidentiality of all data collected in the research, in clear, accessible language, considering the heterogeneity of the group to be evaluated, including people with high social vulnerability.

According to a qualitative study on focal groups composed of people who refused to participate in biomedical research [23], there were nine reasons reported and, among these, the ignorance about the procedure of consent in research, about the objectives of the research and bad previous experiences were related to the breach of secrecy.

Participation in studies of clinical monitoring is also fundamental, as the data generated in these studies are useful not only for the construction of knowledge but also for the improvement of the care and treatment of affected populations by the SUS [24,25]. Almeida et al. [23], with the aim to analyze the participation of vulnerable situations in scientific research in health and the aspects involving this decision demonstrated, in a qualitative study, that the expectation of some immediate benefit for oneself and for the community are conditioning factors for consent [23].

We consider it important that research projects include data on the refusal to participate and also the reasons why people decide to participate. Analysis of these data may contribute to a better understanding of the universe of the participants in the research, improving the process of free and informed consent, from preliminary information, clarification about the project, until the signature of the FICF. This information may also help the estimate of the number of people to be invited in prospective studies and, consequently, allow to better evaluate the time spent the number of researchers or collaborators and the funds invested [26].

Final considerations

Considering the high prevalence of nonconsent by PVHA to participate as volunteers, claiming lack of time for participation, fear of diagnosis disclosure or breach of secrecy and lack of will to participate, we suggest that studies emphasize, in the stage of inclusion, the importance of participation of the volunteers in clinical research, having as ethical principles the autonomy and the secrecy of each and every piece of information about the participant.

We also stress the importance of following the ethical recommendations for scientific research by the Conselho Nacional de Saúde/Conep (National Health Council), considering the relevant role of Brazil in the struggle against easing these rules.

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Recebido: 31.10.2015
Revisado: 11. 3.2016
Aprovado: 13. 6.2016

Annex

Quarup Project– Non-infectious complications in patients with HIV/AIDS

Checklist for inclusion

1. Number of the Medical File Service: _____

2. Date of the interview:_____

3. Physician responsible:_____

4. Patient's name: _____

5. Sex: ( ) Female ( ) Male

6. Contact phone number:_____

7. Date of birth: _____ Age between 18 and 55 ? ( ) yes ( ) no

8. Origin by health service: SUS ( ) Supplementary health ( )

9. ARVT virgin patient who fulfills the initial criteria according to the Ministry of Health/Brazil? ( ) yes ( ) no

10. Capable of manifesting the desire to participate in the study by signing the free and informed consent form (FICF)? ( ) yes ( ) no

11. Has made previous use of ARVT (prophylaxis vertical transmission and other reasons)? ( ) yes ( ) no

12. Has diagnosis of chronic degenerative diseases and / or known to already have target organ damage (diabetic nephropathy, history of acute myocardial infarction or stroke) before the diagnosis of HIV infection? ( ) yes ( ) no

13. Patient with clinical instability? ( ) yes ( ) no

14. Other reasons preventing the patient from participating in the study:

_____

_____