

# Sexuality and social vulnerability in face of sexually transmitted infections among people with mental illnesses

## *Sexualidade e vulnerabilidade social em face das infecções sexualmente transmissíveis em pessoas com transtornos mentais*

Jaqueline Almeida Guimarães Barbosa<sup>1</sup>, Mark Drew Crosland Guimarães<sup>2</sup>, Maria Imaculada de Fátima Freitas<sup>3</sup>

DOI: 10.5935/2238-3182.20130071

### ABSTRACT

<sup>1</sup> Nurse. PhD in Nursing. Member of the Epidemiology and Assessment in Health Research Group-GPEAS, School of Medicine, Universidade Federal de Minas Gerais – UFMG, member of Collective Health Research Group – NUPESC, UFMG School of Nursing. Professor at Centro Universitário Metodista Izabela Hendrix. Belo Horizonte, MG – Brazil.

<sup>2</sup> Physician, PhD in Epidemiology. Associate Professor with the Department of Preventive and Social Medicine, UFMG School of Medicine, coordinator of the GPEAS. Belo Horizonte, MG – Brazil.

<sup>3</sup> Nurse. PhD in Education Sciences. Full Professor with the Department of Mother/Child Nursing and Public Health, UFMG School of Nursing, member of the GPEAS, member of the NUPESC. Belo Horizonte, MG – Brazil.

**Introduction:** Self-care in face of sexually transmitted infections(STI) and HIV/Aids is related to meanings attributed to sexuality. **Objectives:** This study aimed at understanding representations of patients with mental illness about sexuality. **Methods:** Thirty-nine patients were interviewed in public mental health services in Brazil. The analysis was based on narrative structural analysis. **Results:** Social representations about sexuality included sex, gender roles and gender identity, among others, forming a Web of interdependent representations that have important gender asymmetry and imply different vulnerabilities. Participants have limited knowledge on STI and their modes of prevention. **Conclusions:** Mentally ill patients have an excess vulnerability due to social exclusion context, poverty, violence, drug use, prostitution and low self-esteem. It is urgent to fully address health needs, including promoting sexual health and prevention of HIV/Aids of this population.

**Key words:** Sexuality; Sexually Transmitted Diseases; Mental Disorders; Mental Health Services; HIV; Qualitative Research.

### RESUMO

**Introdução:** o autocuidado diante de infecções sexualmente transmissíveis (IST) e HIV/Aids tem sido relacionado aos significados atribuídos à sexualidade. **Objetivos:** este estudo teve o objetivo de compreender representações de pessoas com transtornos mentais sobre sexualidade. **Métodos:** trata-se de estudo fundamentado na Teoria das Representações Sociais. Foram entrevistados 39 usuários de serviços públicos de saúde mental nos estados de Minas Gerias e no Rio de Janeiro. A análise dos dados se deu com base na Análise Estrutural de Narração. **Resultados:** as representações sobre sexualidade englobaram aquelas sobre o sexo, papéis e identidade de gênero, entre outras, formando uma teia de representações interdependentes que apresentaram importante assimetria de gênero e implicaram diferentes vulnerabilidades. Os entrevistados conhecem pouco sobre as ISTs e sobre as formas de prevenção. **Conclusões:** pessoas com transtornos mentais têm sua vulnerabilidade agravada pelo contexto de exclusão social, pobreza, violência, uso de drogas, prostituição e baixa autoestima. Faz-se urgente assistir integralmente essa população, incluindo promoção da saúde sexual e prevenção dos agravos sexualmente transmissíveis.

**Palavras-chave:** Sexualidade; Doenças Sexualmente Transmissíveis; Transtornos Mentais; Serviços de Saúde Mental; HIV; Pesquisa Qualitativa.

Submitted: 12/10/2013  
Approved: 12/19/2013

Institution:  
Department of Preventive and Social Medicine,  
UFMG School of Medicine  
Belo Horizonte, MG – Brazil

Corresponding Author:  
Mark Drew Crosland Guimarães  
E-mail: drew@medicina.ufmg.br

## INTRODUCTION

This research originated on the need to advance knowledge towards the integrality of care of people with severe and persistent mental disorders in the face of the high and alarming prevalence rates of sexually transmitted infections (STI) and HIV/AIDS detected in this population in Brazil by the PESSOAS project.<sup>1</sup> In this study, carried out with over two thousand people in all the national territory, it was verified that this population has an active sexual life, as well as sexual risk behaviors. The sexually transmitted infection (STI) rates found were superior to those in the general population.<sup>1</sup>

However, only 8% of the population surveyed reported condom use in all intercourses, and 40% had never used it.<sup>2</sup> In addition, 30% reported sexual intercourse in exchange for money or drugs, and 18% had already suffered some kind of sexual violence. Although 61.5% of the researched institutions had patients known to be HIV infected, just a minority had actions of sexual health promotion or condoms available.<sup>2</sup>

In order to face such problem, it is assumed that it is necessary to consider the complexity of the subjective aspects involved in the subjects' actions regarding their experience of sexuality, which comprises, among others, sexual practices, eroticism, desire, pleasure, gender identity and roles, affection, otherness, as well as their own health.<sup>3</sup> Besides, it is necessary to consider the psychosocial aspects involved in self-care for sexual health, this being little considered in preventive approaches. Such approaches are characterized as generalizing and repressive, and they also consider behaviors only as the result of rational decisions. Many authors have signaled the limitations of these educational actions, as they do not contemplate the plurality of the meanings of sexual practices of different social groups and do not reach them in a similar or effective way, and they point to the need of advances in this field.<sup>4,5</sup>

However, the psychosocial aspects involved in sexual experience and self-care are not results of great investiture of health professionals when dealing with this population group,<sup>6-7</sup> and are poorly known. The existing studies show that men consider themselves as having greater sexual desire than women, the reason why they justify their "impulsive" behavior in their sexual experience. On the other hand, women have their sexual experience more linked to affection, and act reservedly due to the social repression towards their sexual behavior.

It is worth mentioning that patients with mental illness are often considered by health professionals

as "asexual" people or having a sexuality that must be restrained.<sup>8</sup> It is believed that this complicates the actions of health promotion for this group.

Therefore, it is necessary to expand the debate about sexuality and STI and HIV/AIDS prevention among people with mental illness in order to learn the obstacles for self-care in the face of STIs and HIV/AIDS, considering the specificities of this group characterized by social exclusion. This study aimed at understanding mentally ill people's representations about sexuality, focusing on self-care and on the care with others in the face of STIs and HIV/AIDS, considering their life contexts. This study proposes to corroborate with data and reflections that may contribute to the development of new strategies for sexual health care, in the perspective of integrality of care.

Studies in the field of representational phenomena are of great interest and have provided important insights for coping with vulnerability to STIs and HIV/AIDS, considering that people also guide their behavior from their repertoire of beliefs, values and attitudes, including those about sexuality<sup>9</sup>, which justifies the choice of this theoretical referential. In addition, sexuality is closely related to gender issues, which have become the theoretical basis for this analysis.<sup>10</sup>

## METHODS

This is a qualitative research, based on the Social Representations Theory, considered as essential in the analysis of socio-psycho-cultural aspects that permeate the health-disease process and its social practices.<sup>11</sup> In this study, actions are taken as a present dimension of social representations, seeking the understanding of the representation-action complex and its consequences in the social reality. Every representation is considered as social,<sup>12</sup> and, accordingly, the use of the word "representations" is adopted, once all of them are built within social practices and interactions among people.

The subjects were adults with severe and persistent mental disorders receiving care at public mental health services. The inclusion criteria were not to be in crisis and to agree to participate in the interview, after knowledge about the research and signature of the Informed Consent Form. Among those who met these criteria, the selection of participants occurred randomly. The interviews were carried out in two psychiatric hospitals in Belo Horizonte, Minas Gerais, and in two outpatient mental health services, one in Betim, Minas Gerais, and

the other in Carmo, Rio de Janeiro, Brazil, services to which the researchers had greater access. All of them were public services, and at the outpatient services, men and women spent the day together. At the hospitals, here was no coexistence between the different sexes.

There was not a previous definition about the number of patients, and data saturation was the criterion used for interruption of collecting new interviews. The project was approved by the participating healthcare services and by the National Committee for Research Ethics (CONEP number 592/2006). The subjects were ensured the right to refuse participation in the research, and confidentiality and information anonymity was assured.

Open and in-depth interviews were conducted with 39 people with questions about their sexuality experience (when it started, about their partners, if they had suffered sexual violence), if they knew about or had had STIs and HIV/AIDS, how they protected themselves. The interviews were conducted in private rooms and recorded with an electronic recorder, and later transcribed.

Content analysis of the interviews was based on the proposed narrative structural analysis<sup>13</sup>. Initially, a thorough analysis of each interview was conducted, seeking the overall sense of the content. Later, each speech object was numbered in sequences, which were then grouped together by the subjects covered. At that moment, it was possible to unveil the respondents' set of representations by means of their judgments, values, opinions, statements and practices. Finally, a comparative analysis of all the interviews was performed, with the final categorization of the meanings found, which were interpreted in the light of the literature and of the researchers' reflection. NVIVO® software was used for the organization of the collected data.

There was no intention to relate the ways of living and thinking sexuality with any issues related to the subjects' clinical diagnosis, because it is considered that, regardless of the specificity of their mental disorder, all of them need health professionals' monitoring.

## RESULTS

### Characterization of the studied population and its social context

Twenty two men and seventeen women aged between 18 and 72 years old participated in the study.

Twenty were hospitalized and nineteen were outpatients in substitutive services. Regarding their psychiatric diagnoses, 80% had severe psychosis and 20% retardation, dementia and epilepsy. Twenty-two had some kind of income and the rest lived with the help of family or on charity. Ten participants were illiterate, eighteen studied for four years at most, and ten for eight years at most. Most of the respondents lived with someone. Three had lived in the streets.

Among the women, fourteen had had stable relationship, but only three lived with their partners at the moment of the interview. Eight men had already had a partner, but only two kept a stable marital relationship. Relationship instability was attributed to situations of aggressiveness, partner infidelity, drug and/or alcohol abuse.

Twenty respondents had children, but six did not keep any contact with them. All respondents reported having few friends and little family support. The use of illicit drugs was stated by 25% of the respondents, and of alcohol by 30%, which was justified as a way of relieving anxiety and sadness. It was also associated to the context of drug addiction where they live: *I used to see everybody using it and I wanted to use it too* (E14). In all statements, it was observed low self-esteem and the feeling of inferiority related to social prejudice due to their mental disorder: *They have prejudice because I am like this* (E16).

### The respondents' way of living and thinking sexuality

The sexuality theme has shown to be little talked about, even among couples, which proves it to still remain a taboo: *About that [sexuality] I talk to no one* (E7). Among those who reported talking to someone about their sexuality, they say that they were repressed or censored, and then they kept quiet: *I used to tell my friends everything, but they got mad, and now I don't tell them any more* (E8). None of the respondents reported talking about this subject to a health professional.

Among women, sexual practices were conceived as an integral part of other life projects, like getting married and starting a family, being connected with affection. The beginning of sexual life for the female respondents seemed to happen unexpectedly and conducted by men older than them: *When it happened, I didn't know the difference between being or not a virgin [...]*(E31). Unplanned pregnancy was a

common occurrence. Five female respondents had their sexual initiation through acts of sexual violence, two of which committed by members of their families. None of them reported the crime to a Police authority, nor did they get support from their families: *I told my mother about it [the rape suffered], but she didn't believe it and said I was crazy. Then I left home and went to live in the streets* (E4).

Along the lives of the female respondents, there are many reports of sexual-affective experience with neglected affection, kept for many years mainly due to financial dependence. Most of them reported performing sexual practices only to satisfy their partners, seen as beings focused on sex, considering as a wife's duty to provide pleasure to her partner: *When he wanted to have intercourse, he had to have it. I got angry [...] felt rage and sorrow, and did it [sex] just to satisfy him. I saw it as my duty as a wife to satisfy him* (E33). Thus, they feel used: *He just wanted to use me and thought I had to give him everything. He arrives, uses you, then throws you away like toilet paper* (E16).

After long periods of unsatisfactory sexual-affective experience, many of the female respondents reported leaving their partners, and also leaving their sexuality experience as they thought that a new sexual-affective involvement was not worth it, and also considering their inability to control their fecundity: *Sex is no good; Men are only good at putting kids into our bellies* (E24). A minority reported having sexual intercourse with several partners, which was related to the hope of conquering a stable partner. Masturbation was not part of their sexual trajectories, representing something shameful.

The female respondents that reported never having sexual intercourse (two) attributed their behavior to fear of pregnancy once they believe that, if they got pregnant, they would be abandoned as they see happen to other women around them. There was report of sex performed in exchange for money (two respondents), which was connected to poverty and drug abuse, and one of them had a history of sexual violence.

As for the men, sexuality was highly valued, mainly as a factor of identity, and sex was practiced regardless of affective involvement. Most of them sought brothels for their sexual initiation. Performance and sexual pleasure were their main focus: *Intercourse without pleasure doesn't count as intercourse* (E12).

Among men, it was also observed the desire to establish a stable relationship: *I want to get married, all it takes is someone who wants me* (E39). However,

in their reports, their difficulty in finding partners was outstanding, which proved to be the greatest motivator in their resort to sex professionals along their lives. They reported difficulties also related to their sexual performance: *I went to bed with a woman but, at the moment, the thing [penis] didn't get up!* (E39), which they attributed to the drugs used in treating their mental disorder. They also complained about the lack of places to have sexual intercourse.

Among those who lived a stable relationship, many reported having extramarital affairs, a behavior reported naturally, and also mandatory for the gender: *One cannot refuse when a woman offers* (E3). Masturbation is also seen as normal, practiced even inside the health centers. There were even reports of homosexual relationships (two), which was reported as something experienced with suffering due to social prejudice.

Among men, there were also reports of sexual violence, in one case during childhood, and the other at the psychiatric hospital by colleagues at the infirmary. And they also did not report the incident, which is believed to have resulted from their embarrassment in doing so.

Some respondents reported prostituting themselves with men, which was also connected to poverty and drug abuse. There were young respondents who said they had never had a sexual intercourse, which was attributed to fear of contracting diseases and to religious precepts, showing the influence of such factors on the sexual experience: *The Bible doesn't allow any of this* (E10); *Sex is getting a disease* (E26). Respondents over 50 years of age reported stopping having sexual intercourse not only for fear of diseases, but also for considering themselves past the age for sexual intercourse: *I'm passed that age* (E36).

Mental health services are seen both by men and women as unsuitable places for a sexual intercourse: *We come here to get treated* (E2). However, they stated that some sexual practices did occur furtively at those places.

### **Self-care and care for the other in the face of the risk of contracting STI and HIV/AIDS**

Except from one respondent who had graduation in the health field, the group had superficial and even mistaken information on STI and HIV/AIDS: *I've already heard about it, but I don't know what it is* (E25); *I think you can get it from kissing* (E19). Nevertheless, they recognize

the possibilities of transmission of health problems via sexual intercourse. AIDS is the most feared among the STIs due to its representation as '*destructive and deadly*'. Only a minority claimed to have received information on STIs and HIV/AIDS at mental health services.

Generally, STIs are seen as '*street diseases*, which lead the men to see the risk only in sex professionals and 'cheap' women, and the women in men who frequent brothels. However, not even when they related with these people was condom use guaranteed. It was observed that they feel safe with the fact that the partner has a healthy appearance: *Just by looking, I can tell when a person has a disease* (E1). Some rely on the fact that the partner will tell them if they have any STI, and others on the fact that they will be warned if they relate with risky partners: *Everybody warns you when someone is sick* (E30). In their reports, it was outstanding the sensation of safety with partners they knew, being enough the fact that they lived in the same neighborhood: *There's no risk with her because I already know her* (E22).

Even in cases in which the respondents had a more accurate perception of the need of self-care, which happened as a result of STI experiences with themselves or with people close to them, condom use was not constant. Among men, the difficulties were associated with the great valorization attributed to sexual pleasure: *I can't resist the temptation of having sex without condom* (E2).

Among the few who reported using condoms, it was observed that the use resulted from a demand from the sex professional partner. Women reported difficulties in negotiating condom use with their partners: *My husband came to me and said: why do you want to use a condom? Do you have another man?* (E33). Condom use was connected with the idea of marital infidelity. It is noteworthy that many female respondents, though claiming to know a condom (always the male type), stated never having had or handled one. The female condom proved to be unknown by all.

There were reports of interruption of condom use after the couple's cohabitation, which was related to greater intimacy and confidence in the partner, and the fear of affecting their conjugality. Some women with marital relations said they did not protect themselves because they believed their partners 'take care of themselves' so as not to transmit infections, which some men claimed that they did, but in an inefficient way: *When I had the disease, I spent five days away from home not to transmit it to my wife* (E38).

There were some who reported interrupting the use claiming that the condom *bursts*, which leads to evidence of inability in the use. Condom use was also jeopardized by drug or alcohol abuse, which was stated by a female respondent who knew to be HIV positive: *When we drink, we do things we shouldn't and afterwards we don't even remember very well what we did*. She said she does not reveal her diagnosis to her partners for fear of losing them. Substance abuse was shown to make self defense even more difficult in situations of sexual abuse: *In these situations, we can't even defend ourselves* (E9).

In some reports, demotivation and meaninglessness of self-care was verified as a result of social and family neglect: *Nobody gives a damn for me, why care for myself?* (E17). It is worth pointing out that the group expressed interest in learning about STIs and HIV/AIDS: *It's good and necessary* (E7).

## DISCUSSION

The representations about sexuality encompassed meanings about sex, gender identity and roles, practices and sexual partners, forming a net of interdependent representations. They were structured by factors like age and religion, among others, but mainly by gender, which showed great asymmetry in the ways of living and thinking sexuality between men and women. Such asymmetries are related to conceptions of masculinity and femininity, based on dichotomies of sexuality of biological nature that associate values such as instinctivity and initiative to men, and passivity and submission to women. These are conceptions that generate and feed the inequality of conditions between men and women, propitiate abuse of power and favor vulnerability for both. Such conceptions have their origin in the patriarchal model, learned since childhood and internalized by the individuals as natural, and are permanently fed back in a complex process of cultural elaboration. This explains their strong anchorage and allows the understanding of the difficulties in modifying behaviors, once social acceptance depends on following pre-established scripts<sup>3</sup> for men and women.

Patients with mental illness know little about STI and HIV/AIDS prevention, and those who had more knowledge found difficulty in condom use, which was related to lay and unfounded beliefs about STIs and contraceptive methods, to their confidence in their

partners, to the hierarchy between genders and to neglect on the part of the health services. The sexuality theme was not discussed at those services, which could be a result of the taboo around the subject, which is also present among health professionals.

The findings are similar to those found in studies carried out even with other social groups<sup>14-17</sup>, and in those groups knowledge about STIs was broader. The great specificity of people with mental disorders is their social context, marked by poverty, ignorance, abandonment, prejudice and drug addiction. In addition to making self-care more difficult, this context favors situations of greater vulnerability such as sex for money and sexual violence.

## CONCLUSIONS

The context where the experience of sexuality occurs for people with severe and persistent mental disorders is of great vulnerability, resulting mainly from their social arrangements and contexts. STI and HIV/AIDS prevention actions are almost inexistent in this population, which jeopardizes their rights to sexual health. It is necessary to consider this population's psychosocial aspects and material context of existence so that sexual health may be possible and ensured as a human right for these people as well, according to the philosophy of integral and equitable attention of the Unified Federal Health System (SUS).

Such task is known to be difficult and impossible to be attained in the short term. To face it, some are suggested, including: promotion of fight against gender differences, deconstructing stereotypes that contribute to the vulnerability of both men and women; promotion of fight against the taboo that surrounds sexuality by means of dialogues, with no prejudice or repression; promotion and innovation of actions of sexual education and STI and HIV/AIDS prevention considering these people as subjects of the process of learning about self-care; promotion of clarifications for the deconstruction of unfounded beliefs that become barriers to self-care; availability and teaching of the use of the male condom, also for women, glamorizing its use as a conduct that conveys self-respect and respect for others; promotion of self-esteem among mentally-ill patients, providing them with job opportunities, and income and fighting stigmas; intensification of follow-up of people with greater difficulties to defend themselves; reinforcement towards

the adoption of alternative practices of healthy and safe sex like masturbation; education for prevention and defense against acts of sexual violence; sensibilization of family members about their importance in the education process for these people's sexual health; increment of negotiation skills for condom use so that they can persuade their partners without the risk of losing them, by simulating situations similar to those they really live; encouragement for the partners' participation in actions of promotion of sexual health. All health professionals can contribute to the necessary advancements by qualifying themselves in dealing with the right of people with mental illnesses to a healthy experience with sexuality.

## ACKNOWLEDGMENTS

O Projeto PESSOAS foi financiado pelo Departamento de DST, Aids e Hepatites Virais, Ministério da Saúde, através da colaboração entre o Governo Brasileiro e a UNESCO (Projeto 91BRA3014). MIF Freitas é bolsista do Programa de Pesquisador Mineiro da FAPEMIG; JAG Barbosa foi bolsista da CAPES; MDC Guimarães é bolsista de produtividade em pesquisa do CNPQ.

## REFERENCES

1. Guimarães MDC, Campos LN, Melo APS, Carmo RA, Machado CJ, Acurcio FA. Prevalence of HI, syphilis, hepatitis B and C among adults with mental illness: a multicenter study in Brazil. *Rev Bras Psiquiatr.* 2009; 31(1): 43-7.
2. Guimarães MDC, Mckinnon K, Campos LN, Melo APS, Wainberg M. HIV risk behavior of psychiatric patients with mental illness: a sample of Brazilian patients. *Rev. Bras. Psiquiatr.* 2010; 32(4): 349-60.
3. Gagnon J. Uma interpretação do desejo: ensaios sobre o estudo da sexualidade. Rio de Janeiro: Garamound; 2003.
4. Paiva V, Pupo LR, Barboza R. O direito à prevenção e os desafios da redução da vulnerabilidade ao HIV no Brasil. *Rev Saúde Pública.* 2006; 40(supl): 109-19.
5. Cordeiro F, Heilborn ML, Cabral CS, Moraes CL. Entre negociação e conflito: gênero e coerção sexual em três capitais brasileiras. *Ciênc Saúde Coletiva.* 2009; 14:1051-62.
6. Wainberg ML, González MA, Mckinnon K, Elkington DP, Mann CG, Mattos PE. Targeted ethnography as a critical step to inform cultural adaptations of HIV prevention interventions for adults with severe mental illness. *Social Science & Medicine.* 2007; 65 (2): 296-308.
7. Pinto DS, Mann CG, Wainber M, Mattos P, Oliveira, SB. Sexuality, vulnerability to HIV, and mental health: an ethnographic study of psychiatric institutions. *Cad Saúde Pública.* 2007; 23(9):2224-33.

8. Brito PF, Oliveira CC. A sexualidade negada do doente mental: percepções da sexualidade do portador de doença mental por profissionais de saúde. *Ciênc Cogn*. 2009; 14(1): 246-54.
  9. Giami A. Representações e sexualidade: psicologia social e pluridisciplinaridade. In: Loyola MA, organizador. *A sexualidade nas Ciências Humanas*. Rio de Janeiro: EDUERJ; 1998. p. 201-25.
  10. Taquete SR, Vilhena MM, Paula MC. Doenças sexualmente transmissíveis e gênero: um estudo transversal com adolescentes no Rio de Janeiro. *Cad Saúde Pública*. 2004; 20(1): 282-290.
  11. Moscovici S. Representações sociais: investigações em psicologia social. 6ª ed. Petrópolis: Vozes; 2009.
  12. Giami A, Veil C. Enfermeiras frente à AIDS: representações, condutas, permanência e mudanças. Canoas: ULBRA; 1997.
  13. Demazière D, Dubar C. Analyser les entretiens biographiques. L'exemple de récits d'insertions. Paris: Nathan, Coll. Essais & Recherches; 1997.
  14. Resta DG. Em relação ao sexo tudo é curioso: um modo de pensar a sexualidade de jovens na perspectiva da vulnerabilidade e do cuidado em saúde. [Tese]. Porto Alegre: Universidade Federal do Rio Grande do Sul; 2012.
  15. Dias FLA, Silva KL, Vieira NFC, Pinheiro Patrícia NC, Maia CC. Riscos e vulnerabilidades relacionados à sexualidade na adolescência. *Rev enferm UERJ*. 2010; 18(3): 456-61.
  16. Silva KL, Dias FLA, Maia CC, Pereira DCR, Vieira NFC, Pinheiro PNC. A influência das crenças e valores culturais no comportamento sexual dos adolescentes do sexo masculino. *Rev Enferm. UERJ*. 2010; 18(2): 247-52.
  17. Gomes MEA; Guimarães JMX, Sampaio JJC; Pacheco MEAG, Coelho MO. Concepções e vivências da sexualidade: um estudo com usuárias da estratégia saúde da família. *Rev Baiana Saúde Pública*. 2010; 34(4): 919-34.
-