ARTIGO ARTICLE

STD Knowledge amongst the 10th Military Unit Police Officers of the State of Rio de Janeiro

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ABSTRACT

Introduction: STD are a serious public health problem, causing various complications, such as infertility, cervical cancer, penile cancer, and various psychosocial problems. **Objective:** evaluate the knowledge of STD and risk factors of the acquisition of STD among the 10th Military Unit police officers of Rio de Janeiro State. **Methods:** cross-sectional epidemiological study through the distribution of individual and anonymous questionnaires. Target population: Military police officers from the 10th MU, located in Barra do Piraí, Rio de Janeiro State. The questionnaire consisted of 24 questions addressing social-demographic data (age, sex, marital status, military rank) and sexual behavior/risk practices (partnership type, sexual practices, condom use, number of partners, frequency of intercourse, alcohol use, illicit drugs). **Results:** 600 questionnaires distributed for a total of 771 military officers on active duty, 313 were answered, and 291 included for analysis. The average age was 36.9 years, 76.64% married, 89.7% aware of STD, 94.5% know how to prevent from STD, 90.37% had lessons about STD, 13.05% already had STD, 95.88% use contraceptives, 22.68% had more than 41 sexual partners during their lifetime, 40% had more than two sexual partners last year, 14.42% had six sexual partners in the last 12 months, 23% have an affair, about 13% reported intercourse with sex professionals, 9.27% reported group intercourse, 6.19% use alcohol during intercourse, 4% reported homossexual activity, 45.36% make sex twice to three times a week, 71.14% make oral sex, and 34.02% reported anal sex. **Conclusion:** the 10th MU police officers have high knowledge about STD and there is a considerable risk of acquiring STD by these individuals, since many of them do not use condoms, have multiple sexual partners and extramarital sex as well, make group intercourse and also with sex professionals.

Keywords: STD, education, police officers, 10th MU-RJ

INTRODUCTION

Sexually transmitted diseases (STD) are a public health problem, especially in developing countries⁽¹⁾. In the study of sexuality, it is necessary to examine the risk practices and prevalence of sexually transmitted infections. Such a relationship is assigned to the morbidity and mortality caused by this type of infection, especially HIV/AIDS⁽²⁾.

Many factors contribute for the present worldwide situation concerning STD, such as lack of information/sexual education, early age in sexual activity, low income and low education levels, lack of consistent use of condoms, multiplicity of partners, intercourse with sex professionals, use of alcohol and illicit drugs during sexual practices, among others. In a country like Brazil, where financial resources for health and education are still limited and often underused, the solution is not always in the implementation of advanced techniques, but in preventive medicine.

STD are considered high morbidity illnesses, causing serious consequences, such as infertility, neonatal diseases, ectopic pregnancy, genital mutilations, cancers and even death, in addition to a strong predisponent factor for the infection with HIV/AIDS⁽³⁾. Costa & Germano⁽⁴⁾ quoting Carrara, author of an important publication on the syphilis history in Brasil, reports the following: "In 1873, the War Minister of the Empire, the physician João José de Oliveira Junqueira, considered syphilis the most common disease

amongst soldiers. In 1883, he guaranteed there was not a single soldier who had not been hospitalised more than once due to a venereal disease".

In 1918, in the 1st South-American Congress of Dermatology and Syphilography, the medic officer Júlio Porto Carreto noticed the venereal diseases incidence growth among the police officers. The same authors, Costa & Germano⁽⁴⁾, asserted that "the social status given to the police officers put them in a prominent position symbolized by their uniform. For women, this would be an example of masculinity and strength, therefore, of the ideal man". Of course this statement does not apply to all women of all social status.

It is important to identify STD knowledge and their risks among police officers of the State of Rio de Janeiro, in order to create strategies to improve these officers and their families' health. Therefore, after analysing data concerning the knowledge about health education on STD among police officers, it will be possible to propose activities to increase this knowledge and also show safe sex practices to this population. It is then expected that the police officers extend this knowledge to their families. Through this action we hope to contribute to improve police officers health involved in this research, as well as their families.

OBJECTIVE

Verify STD knowledge as well as risk factors for the acquisition of these diseases among police officers located at the 10th Military Unit of the State of Rio de Janeiro (10th MU-RJ).

METHODS

A meeting was held with the commander of the 10th MU-RJ for the presentation of the project and the subsequent distribution of questionnaires and sealed boxes for each company. The 10th MU-RJ is located in the city of Barra do Piraí, Rio de Janeiro State, and it is composed of five companies (Barra do Piraí, Vassouras, Paty

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do Alferes, Valença, and Piraí) and a Command and Service Squad (Pelotão de Comando e Serviço – PCSV).

Each company commander received information on this research, whose participation was voluntary and completely anonymous Questionnaires and sealed boxes were available for each military unit office. The questionnaire is composed of 24 questions about social-demographic data (age, sex, marital status, military rank) and sexual behavior/risk practices (partnership type, sexual practices, condom use, number of partners, frequency of intercourse, alcohol use, illicit drugs).

The Free and Clarified Consent Term (FCCT) was not used in order not to identify individuals in a research group, especially senior officers, as these officers belong to a smaller contingent. In this manner, our purpose was to have a greater adherence, as the study gives no chance of identification.

Type of study: cross-sectional epidemiological study with application of individual and anonymous questionnaires.

Target population: male and female police privates (corporal, 3rd Sergeant, 2nd Sergeant, 1st Sergeant, Warrant officer) and officers (Cadet, Aspirant, 2nd Lieutenant, 1st Lieutenant, Captain, Major, Lieutenant Colonel and Colonel) of the 10th MU located in Barra do Piraí.

The unit is composed of 771 police officers, and 600 questionnaires were available for the whole contingent, as we considered that several police officers are presently away from their activies due to various reasons (sick leave, vacation).

Place of study: 10th MU-RJ located in Barra do Piraí, Rio de Janeiro State, and its companies.

Inclusion criteria: correct questionnaire filling in and insertion in sealed and unidentified box.

Exclusion criteria: blank questionnaires or less than 50% completed.

Period of study: questionnaires were distributed and collected in September and October, 2012.

Statistics analysis: simple frequency.

RESULTS

Of a total of 600 questionnaires, 313 were collected, however, 291 completed questionnaires were included (92.97%) for analysis.

Regarding gender of the researched individuals, 21 (7.21%) were women, and 269 (92.44%) were men. Only in one questionnaire (0.35%) this question was not answered.

The average age of police officers was 36.9 years, 21 years the youngest and 58 years the oldest. Marital status is shown on **Table 1**.

Table 1. Marital Status - PO - 10th MU-RJ, 2012.

Marital Status	N (%)
Married	50 (17,19%)
Single	223 (76,64%)
Divorced	12 (4,13%)
Widow	3 (1,03%)
Not answered	3 (1,03%)

Concerning ranks, it was observed that 10 (3.5%) were senior officers, and 273 (93.81%) were corporals. Sixty (20.62%) cor-

porals informed college degree. Considering that the number of women and senior officers is significantly smaller than men and corporals, the remaining results will be shown together.

Tables 2 to 9 present the main results of our questionnaires.

The 38 police officers who answered having had STD, mentioned the following diseases: syphilis (4/10.52%), gonorrhea (19/50%), genital wart/HPV (8/21.05%), and genital herpes (8/21.05%).

DISCUSSION

Although there are studies in the medical literature abour sexuality, knowledge, and risk factors for the infection with STD, very few of them are about POs⁽⁵⁻⁷⁾.

In our sample of 600 questionnaires made available, 291 were completed, which means 48.5%. The return was highly satisfactory, considering a research addressing sexuality, behaviour, and vulnerabilities among police officers.

However, of 313 questionnaires answered, 22 (7.02%) were not completed and a few contained comments not appropriate to be

Table 2. Knows STD, Knows how to prevent STD, Affraid to be infected with STD, Had lessons about STD, Had STD, Use condom, Use contraceptive, PO - 10th MU-RJ, 2012.

Question	Yes N (%)	No N (%)
Know STD?	261 (89.7%)	30 (10.3%)
Know how to prevent STD?	275 (94.5%)	16 (5.5%)
Affraid to be infected with STD?	210 (72.16%)	81 (27.84%)
Had lessons about STD?	263 (90.37%)	28 (9.63%)
Had STD?	38 (13.05%)	253 (86.95%)
Use condom?	117 (40.20%)	174 (59.79%)
Use contraceptive?	279 (95.88%)	12 (4.12%)

Table 3. Number of sexual partners during life, PO - 10th MU-RJ, 2012.

Number of Sexual Partners During Life	N (%)
1-5	64 (21.99%)
6-10	35 (12.02%)
11-20	59 (20.28%)
21-40	57 (19.59%)
41 or more	66 (22.68%)
Not informed	10 (3.44%)

Table 4. Number of sexual partners last year, PO - 10th MU-RJ, 2012.

Number of Sexual Partners Last Year	N (%)
None	7 (2.41%)
1	163 (56.01%)
2-5	75 (25,77%)
6-10	19 (6,52%)
11 or more	23 (7,90%)
Not informed	4 (1,37%)

Tabela 5. Frequência de relações sexuais por semana, PM – 10° BPM-RJ, 2012

Number of Intercourses per Week	N (%)
None	8 (2.75%)
1	18 (6.19%)
2-3	132 (45.36%)
4-5	97 (33.33%)
6 or more	34 (11.69%)
Not informed	2 (0.69%)

Table 6. Type of sex, number of sexual partners, PO - 10th MU--RJ, 2012.

Sexual Partnership Type	N (%)
Unique	211 (72.50%)
Multiple	72 (24.75%)
No sexual partner at the moment	8 (2.75%)

Table 7. Type of intercourse, anatomical location, PO - 10th MU-RJ, 2012.

Anatomical Location of Intercourse	N (%)
Vaginal	
Yes	218 (74.92%)
No	65 (22.34%)
Made in the past	8 (2.7%)
Oral	
Yes	207 (71.14%)
No	77 (26.46%)
Made in the past	7 (2.41%)
Anal	
Yes	99 (34.02%)
No	192 (65.985)
Made in the past	6 (1.03%)

Table 8. Extramarital, group and homossexual intercourse, PO - 10th MU-RJ, 2012.

Extramarital, Group, and Homossexual Intercourse	N (%)
Extramarital	
Yes	68 (23.37%)
No	223 (76.63%)
In the past	29 (9.97%)
Im group	
Yes	19 (6.52%)
No	272 (93.47%)
In the past	8 (2.75%)
Homossexual	
Yes	9 (3.09%)
No	282 (96.91%)
In the past	3 (1.03%)

analysed. In our evaluation, a small group of police officers from the 10th MU-RJ still need to be informed of the seriousness of studies like the present research.

Tabela 9. Use of alcohol and illicit drugs, PO - 10th MU-RJ, 2012.

Alcohol and illicit drugs	N (%)
Alcohol	
Yes	18 (6.19%)
No	273 (93.81%)
In the past	23 (7.90%)
Illicit drugs	
Yes*	5 (1.72%)
No	286 (98.28%)
In the past**	1 (0.35%)

^{*}One case of LSD, one case of marijuana, one case of cocaine and ecstasy, one case of marijuana and cocaine.

In a study also using questionnaires and STD risk, Pinheiro *et al.*⁽⁵⁾ worked with 450 police officers from Santa Catarina State and obtained 193 (42.89%) completed questionnaires.

As already mentioned, our analysis was not by gender. However, we would like to emphasize that the percentage of women in the 10th MU-RJ is of 7.21%, and according to data found in publication of D'Araujo⁽⁸⁾, this rate is greater than the ones found in the military of the following countries in the beginning of 2001: Germany (2.8%), Denmak (5.0%), Spain (5.8%), Greece (3.8%), Italy (0.1%) and Norway (3.2%).

The female police officers participation in Brasil, in 2003, was as follows: Rio de Janeiro (4%), São Paulo (9.7%), Minas Gerais (6.6%), Bahia (12.1%), Espírito Santo (7.5%), Rio Grande do Sul (5.7%), Amazonas (8.6%), Pará (13.4%), Pernambuco (3.3%), Ceará (1.5%), Tocantins (7.4%), Federal District (4.7%)⁽⁹⁾.

The average age of officers was 36.9 years, the youngest was 21 years, and the oldest, 58 years. In a Pinheiro *et al.*⁽⁵⁾ study, the average age was almost the same, 36.7 years. However, the youngest informed 17 years, and the oldest, 65 years. Out of the 291 individuals of the research, 223 (76.64%) reported to be married/living with a partner. The authors observed a percentage of 62.7%.

The PO of our study showed a high rate of knowledge about STD, as 90% of them reported awareness of some STD. However, we emphasize that the author of the present study has already given several lectures on this subject during the last five years in the 10th MU-RJ, which we believe could have positively modified the knowledge about STD. In addition, 10% of the individuals reported not knowing about STD, which shows the need for more approach to the subject.

Unfortunately, no similar literature was found for comparison.

In our study, 13.05% (38/291) of police officers mentioned that already had STD in the past. Fifty percent of them reported gonorrhea, 21.05% herpes, 21.05% condyloma acuminata/HPV, and 10.52% syphilis.

Pizzol⁽¹⁰⁾ worked with 1,745 patients in the dermatology ambulatory of the PO Hospital in the city of Vitória, Espírito Santo State, and reported 178 (10.2%) cases of STD, 34.83% of them with non-gonococcal urethritis.

Pinheiro *et al.*⁽⁵⁾, in 2011, after collecting questionnaires of police officers in the city of Ponta Grossa, State of Paraná, identified 34 individuals (17.61%) with a previous history of STD. As oc-

^{**}One case of cocaine and LSD.

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curred in our study, most individuals reported gonorrhea, followed by HPV, herpes, and syphilis. We emphasize that no PO reported infection with HIV.

In our research, 59.79% (174/291) informed no use of condoms during intercourse. Pinheiro *et al.*⁽⁵⁾ showed 146/193 (75.64%). In our material, 12/291 (4.12%) reported no use of contraceptives. Regarding this same subject, Pinheiro *et al.*⁽⁵⁾ mentioned a very different result from ours, which is, 29.5%. In the item "number of partners per year" our results are similar to Pinheiro *et al.*⁽⁵⁾ study. Nevertheless, when compared to our results, the items "number of partners last year", "number of intercourses per week", "vaginal, oral, anal sex practices", "extramarital intercourse", "homossexual intercourse", and "intercourse with sex professionals", were very similar.

About 10% of POs of our study informed practice of group intercourse. Unfortunately, no publication was found for comparison. However, it is worth saying that this is traditionally considered a high-risk practice for infection with STD.

Our study observed that 5/291 = 1.72% police officers of the 10th MU-RJ use illicit drugs (marijuana, LSD, cocaine, ecstasy) two hours before or during intercourse. Pinheiro *et al.*⁽⁵⁾ showed drug consumption by 27.46% (53/193) of police officers in the State of Paraná. However, this was a general question and not explicitly vinculated to an intercourse. Silveira⁽¹¹⁾ studied firemen of the city of Florianópolis, Santa Catarina State, and observed low alcohol consumption, around 12%. In Pinheiro *et al.*⁽⁵⁾ investigation, the question about alcohol consumption was not directly related to intercourse. The rate found by the author of the present study was of 67.87% (131/193).

We cannot assure that the 10th MU-RJ POs use less drugs and alcohol than the ones from Ponta Grossa, Paraná State, since the questions were elaborated in different ways. Even considering our numbers small, the ideal is that military professionals have zero consumption of illicit drugs.

Although we have worked with an innovative and important subject to the military segment, we point out the following limitations of the study: exiguous time for field research and elaboration of the final text, work done in only one military unit of the State of Rio de Janeiro, natural research difficulty with questionnaires about STD, sexuality and risk behaviour concerning STD in a military unit, and the lack of STD or AIDS laboratory or clinical diagnosis.

We consider necessary to extend this type of study to other MUs in the State of Rio de Janeiro in order to obtain a wider range of data.

CONCLUSION

The 10th MU-RJ POs have a high knowledge about STD. There is a considerable risk of infection with STD by these police officers, as many do not use condoms, have multiple sexual partners, have extramarital intercourse and group intercourse as well, and have intercourse with sex professionals.

Conflict of interest

There is no conflict of interest to be declared.

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