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Depression in HIV-Infected Compared to Their Seronegative Partners in Serodiscordant Couples in Ouagadougou (Burkina Faso)

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Abstract

Introduction: Depression is common in HIV/AIDS. We aim to investigate the frequency and the grade of this mental disorder in partners and determine its influence on sexual dysfunctions in serodiscordant couples in Ouagadougou. Patients/Method: This cross-sectional study was monitored from 1 January to 31 June 2010 in the internal medicine department of CHUYO, Ouagadougou. HIV-infected patients and their seronegative partners who gave their consent were included. Depression was diagnosed using the Beck Depression Inventory 13 items (BDI-13). Results: Eighty heterosexual and monogamous serodiscordant couples were studied. 31 (38.7%) HIV-infected and 23 (28.7%) seronegative partners were affected by depression; p = 0.18. The score of depression was 3.5 ± 2.1 in HIV-infected and 3.3 ± 1.6 in seronegative partners; p = 0.85. Depression was diagnosed in both partners in 13 couples (16.2%) and in only one partner in 28 couples (35%). Depression was diagnosed at least for one partner in 40 (51.3%) couples where sexual dysfunctions affected partner (s) and in 1 (50%) couple where no sexual dysfunction was reported. Conclusion: Psychological assessment is needed for a better management of HIV/AIDS in serodiscordant couples.

Keywords

Depression, Serodiscordant Couples, Burkina Faso

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1. Introduction

Publications dedicated to depression in HIV-infected patients report a prevalence of depressive symptoms ranging from 21% to 97% [1]-[4]. In addition to the traditional endogenous and exogenous determining factors of depression, the neurotropism of the virus, the opportunistic neurological disorders and the side effects of antiretroviral drugs contribute to the pathogenesis of depression in HIV/AIDS [3]-[5]. What has been less studied is the profile of depression in serodiscordant couples. Because HIV infection may impact the live of the patient's entourage, seronegative partners may be affected by the psychological and social impact related to the presence of the virus in the household. The objective of the study was to compare the prevalence and the score of depression in HIV-infected patients and their seronegative partners and determine its influence on sexual dysfunctions in serodiscordant couples in Ouagadougou.

2. Material and Method

2.1. Study's Design

It was a cross sectional study, monitored from 1 January to 30 June 2010 in the day care hospital, in the internal medicine department, a tertiary HIV care referral center, CHUYO, Ouagadougou.

2.2. Patient's Selection

HIV-infected patients who were followed in the day care hospital and their seronegative partners were the study's population. Couples were included in this study if the two partners gave their consent to participate, and if the HIV-negative partner was already aware of the HIV status of the HIV-positive partner. Couples in which one or both partners were not able to undergo the questionnaire were not included. Patients were approached during a follow-up consultation in order to explain the objectives of the study. The number of couples included in the study was subjected to the duration of the study period and has not been determined by statistical calculations.

2.3. Data's Collection

Data were collected using a questionnaire delivered to the partners separately and then together by the same investigator. Patient's socio-demographic characteristics, data related to serodiscordance, depressive symptoms and sexual dysfunctions were reported in the questionnaire.

2.4. Operational Definitions

Depression was diagnosed using the French version of Beck Depression Inventory 13 items (BDI-13) [6]. This questionnaire includes 13 items, all rated from 0 to 3 (the different items are reported in **Table 1**). The global score after a complete administration of the questionnaire ranges from 0 to 39. The grade of depression was defined according to the score after the administration of the questionnaire: 0 - 3 (no depression), 4 - 7 (mild depression), 8 - 15 (moderate depression), over than 15 (severe depression).

2.5. Ethical Considerations

The institutional committee has approved the study. Patient's consent was obtained, and data's confidentiality has been monitored during the study.

2.6. Statistical Considerations

Data were analyzed using Epi Info version 3.5.2. The Chi square or Fischer statistical tests and the Student's test were used to compare respectively the qualitative and quantitative variables. Statistical differences were considered significant for $p < 0.05$.

3. Results

3.1. Partners Demographic Characteristics

Eighty heterosexual and monogamous serodiscordant couples have been studied. The woman was the HIV-infected

Table 1. Frequency of depressive symptoms in partners suffering from depression in serodiscordant couples (n = 80 partners).

Symptoms	Frequency	%
Fatigability	12	(22.2)
Difficulty at work	20	(37)
Negative self-image	32	(59.2)
Failed staff	12	(22.2)
Indecision	10	(18.5)
Dissatisfaction	10	(18.5)
Anorexia	06	(11.1)
Pessimism	09	(16.7)
Guilt	45	(83.3)
Sadness	40	(74.1)
Social withdrawal	05	(9.2)
Self-loathing	38	(70.4)
Suicidal ideation	00	(0%)

partner in 60 couples (75%). The average age was 37.5 years (limits: 20 and 62) for HIV-infected and 40 years (limits: 23 and 65) for seronegative partners; p = 0.08. The average age was 35 years (limits: 18 and 60) for women and 40 (limits: 25 and 65) for men; p = 0.01. The partners were married in 67 couples (83.7%) and cohabiting in 13 couples (16.3%) since 10 ± 4 years (limits: 1 and 35). The serodiscordance status was known for 4 ± 1 years (limits: 1 and 12). In 41 couples (51.2%), the partners were illiterate while in the 39 remaining (48.8%), at least one partner was educated.

3.2. Prevalence of Depression in Partners

Fifty four (33.7%) cases of depression were observed. According to HIV status, depression was diagnosed in 31 (38.7%) HIV-infected and 23 (28.7%) seronegative partners; p = 0.18. According to the gender, depression was diagnosed in 29 (36.2%) women and 25 (31.2%) men; p = 0.50. Depression was diagnosed in both partners in 13 couples (16.2%), one partner in 28 couples (35%) and none partner in 39 couples (48.8%). **Table 1** reports the depressive symptoms in patients. The score of depression was 3.4 ± 1.3. It was 3.5 ± 2.1 in HIV-infected and 3.3 ± 1.6 in seronegative partners; p = 0.85. It was 3.4 ± 1.3 in women and 3.1 ± 1.0 in men; p = 0.31. A mild depression was reported in 52 patients (96.3%), while depression was moderate in 2 patients (3.7%). No severe depression was recorded.

3.3. Depression and Sexual Dysfunction in Partners

In 78 (97.5%) couples, at least one partner reported sexual dysfunction. Disturbances of libido, erection and orgasm were reported respectively in 37.2%, 20.5% and 7.7%. In 40 (51.3%) couples where sexual dysfunctions were reported by partner (s), depression was observed in at least one of them, while in 1 (50%) couple where no partner had a sexual dysfunction, depression was diagnosed in one partner; p = 0.11.

4. Discussion

In our cohort of serodiscordant couples, no statistic difference was observed in the prevalence and the grade of depression in HIV-infected compared to their seronegative partners. The prevalence of depression in HIV-infected partners meets the proportions of 21% - 97% reported in the literature [1]-[3]. However, any comparison must take into account the diversity of depression assessment tools used in studies [1]. A limit of the BDI-13 used in our study is that it preferentially evaluates the dysphoric component of depression. Moreover, in our study, the difficulty of self-administration of the questionnaire in our mostly illiterate population was also a limitation for an optimal use of this tool in accordance with recommendations.

The frequency and the grade of depression did not significantly differ in partners, probably, because, seroneg-

ative partners could be just like their infected partners, victims of suffering related to the presence of HIV in the household. The fear of contamination and the uncertainty about the future without the partner could explain their predisposition for depression. Similarly, stigma significantly associated with depression among HIV-infected patients [3] [4] is sometimes extended to the other members of the family, and could constitute a destabilizing factor for seronegative partners.

No severe depression was registered in partners from our serodiscordant couples. In publications concerning specifically HIV-infected patients, moderate to severe depression was reported in 51.3% in Burkina Faso [7] and major depression was reported in 15.6% in China [3]. This difference, compared to what is observed in HIV-infected partners in our serodiscordant couples, could be supported above all by a successful psychological and social approach and support in their management, everything facilitating mutual acceptation and support among the partners in these couples.

Guilt, sadness, self-loathing and negative considerations of self-image were the most depressive symptoms mentioned by partners. No suicidal ideation was reported, contrarily to proportions ranging from 9% to 12% in Botswana [2], and 26% to 38% in USA [8] [9] in studies conducted in HIV-infected populations. Generally, it is reported the rarity of suicidal ideation and the passage to the act during depression affecting black Africans, given the relative protection afforded by the structure of families in Africa.

Sexual dysfunctions in the couples were not significantly correlated with the presence of depression in partners. This finding seems paradoxical, compared to what commonly reported in the literature [10]-[12] and reflects the variability and complexity of the link between sexuality and depression, two phenomena often part of a vicious circle.

5. Conclusion

Depression was assessed in partners of serodiscordant couples with the French version of BDI-13. There was no significant difference in the frequency or the severity of depression in partners. The non-self-administration of the questionnaire was the main methodological limitation. Then, depression is common in HIV-infected and their seronegative partners living in serodiscordant couples, but often goes unnoticed. This disorder must be actively tracked in order to provide an early medical and psychological care and support. Such an approach is needed to promote a global care of HIV and safety sexuality in serodiscordant couples.

Conflicts of Interest

The authors report no conflicts of interest in relation with the subject.

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