Profiles of medical services use and health status in sex therapy clients: Associations with therapeutic alliance, attachment and trauma

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Adults with sexual difficulties tend to report poorer health and higher health services utilization than individuals from community samples. Several correlates are related to greater use of health services, such as childhood interpersonal traumas, insecure attachment and level of therapeutic alliance. Although it is documented that clients presenting sexual difficulties and seeking sex therapy are likely to present these risk factors, health status and medical services use have not yet been empirically examined in this population. A total of 220 clients seeking sex therapy completed self-report questionnaires assessing childhood interpersonal traumas, attachment representations, therapeutic alliance, and sexual satisfaction. Five variables were used to identify their health status and medical services use: 1) annual number of medical consultations; 2) annual number of emergency room visits; 3) presence of chronic health problems; 4) frequency of medication intake; and 5) health status self-assessment. Hierarchical clustering analyses were conducted and three distinct profiles were identified according to the clients’ health status and medical services use. The first profile (\(n = 106\)) was characterized by a good health and low use of medication and medical services. Compared to the other profiles, these clients report more secure attachment, stronger therapeutic alliance, and fewer traumas. The second profile (\(n = 73\)) showed the highest frequency of medical and emergency room consultations. These clients all reported a chronic health problem and a high rate of trauma. The third profile (\(n = 41\)) included clients using the most medication, but reporting a globally good health. These clients reported low levels of therapeutic alliance. Results provide a better understanding of the associations between sexual difficulties and health problems.

**KEYWORDS:** Attachment, childhood interpersonal traumas, health services use, sexual satisfaction, sex therapy, therapeutic alliance

Recent scientific data suggest that individuals presenting with mental and sexual health difficulties tend to seek consultations for their physical health, particularly in the emergency room, about twice as much (39%) as individuals not presenting these types of disorders (19%; Fleury, Grenier, Banvita, Piat, & Tremblay, 2014; Fleury et al., 2019). Indeed, many clients living with mental and sexual health difficulties develop physical symptoms related to these concerns; these individuals are likely to take medication or seek medical help for physical health reasons (Fleury et al., 2014, 2019; Ishak, Low, & Othman, 2010; Tan, Tong, & Ho, 2012). A better understanding of medical services use could lead to identifying comorbidities presented by clients with sexual difficulties. The present study focuses on documenting the health status, consultation behaviours and history, and medication use of sex therapy clients.

Physical and sexual health do not represent two independent clinical realities, but rather tend to be strongly associated with one another. It is recognized that individuals with sexual

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difficulties are more likely to demonstrate complex health issues (Bigras, Godbout, Hébert, & Sabourin, 2017; Ishak et al., 2010). Indeed, in addition to mental health difficulties, health issues such as diabetes, cardiovascular and congenital diseases, hypertension, and prostate problems act as risk factors in the development of sexual difficulties (McCabe et al., 2016; Tan et al., 2012). Moreover, clients exhibiting sexual difficulties tend to use more medications and prescription drugs in addition to using health services more regularly and frequently; as a result they may generate and experience higher health care costs (Bonomi et al., 2008; Kupelian, Half, & McKinlay, 2013; Xie et al., 2012). Thus, clients reporting sexual difficulties appear at risk of developing multiple comorbidities, including physical health difficulties in addition to their sexual difficulties. Research indicates that presenting multiple comorbidities of sexual, mental, and physical health is associated with complex and heterogeneous health care behaviours and history as well as greater difficulty in accessing appropriate services that meet the client's needs (Domino et al., 2014).

While clients seeking sex therapy (i.e., psychotherapy focused on the treatment of sexual difficulties) seek consultation for a variety of reasons (sexual dysfunctions, compulsive sexuality behaviour, etc.), all of them tend to report low levels of sexual satisfaction (Bigras, Daspe, Godbout, Briere, & Sabourin, 2017; Lafrenaye-Dugas, Godbout, & Hébert, 2018). This low sexual satisfaction is in turn associated with low relational and psychological well-being (Butzer & Campbell, 2008; Davison, Bell, LaChina, Holden, & Davis, 2009). These associations highlight the relevance of considering sexual satisfaction among clients who display sexual difficulties. In terms of health patterns, the current scientific knowledge suggests that clients with sexual difficulties have particular patterns regarding their health status and their use of health services and medication. However, very few studies have focused on different client profiles regarding the health status and medical help seeking behaviours of this population. Similarly, to our knowledge, no study has explored possible profiles associated with the characteristics of clients' reasons for consultation, in addition to their sexual satisfaction.

Several key variables and correlates are likely to contribute to the different profiles of help seeking in sex therapy clients. First, current studies indicate higher rates of childhood interpersonal trauma (CIT; e.g., sexual, physical or psychological abuse and neglect before the age of 18) in adults seeking sex therapy, compared to individuals from community samples (Bigras, Daspe et al., 2017; Bigras, Godbout et al., 2017; Lafrenaye-Dugas et al., 2018; Berthelot, Godbout, Hébert, Goulet, & Bergeron, 2014). Empirical data has documented that CIT rarely happens in isolation, and that a child who has undergone a form of violence has a high risk of experiencing multiple types of interpersonal violence (Hodges et al., 2013). In turn, the accumulation of different forms of CIT (i.e., cumulative childhood trauma) is related to a more severe and complex symptomatology, such as aggravation of relational and psychological symptoms, as well as sexual difficulties and a greater use of health services (Bigras, Daspe et al., 2017; Bigras, Godbout et al., 2017; Lafrenaye-Dugas et al., 2018; Berthelot, Hébert, et al., 2014; Chartier, Walker, & Naimark, 2007; Staples, Rellini, & Robert, 2012). More precisely, CIT appears to be associated with an increased frequency of physician visits, hospitalizations, emergency room visits, medication usage and greater costs to the health system (Bononi et al., 2008; Chartier et al., 2007), in addition to its impact on mental health and emotional wellbeing. Survivors of CIT also report a poorer perception of their own health and higher levels of chronic health problems (e.g., neuromusculoskeletal, cardiorespiratory or autoimmune disorders) (Wegman & Stelter, 2009). In short, sex therapy clients tend to show higher rates of CIT and these adverse experiences may influence their health status, however the distribution of these traumas in different client profiles remains undocumented. Patterns of health status and medical services use could provide a basis for understanding the help seeking strategies of clients who have endured different CIT experiences.

Romantic attachment insecurities form a second key correlate of health status and health care behaviours and history in sex therapy clients, and attachment insecurities are also known to be related to a history of past CIT. In fact, studies have indicated that the experience of CIT is associated with higher levels of insecure attachment in adulthood, and individuals with insecure attachment tend to use health services in a disparate and heterogeneous manner (Chiechanowski, Walker, Katon, & Russo, 2002). Adult attachment involves two interconnected dimensions (Godbout, Daspe et al., 2017; Mikulincer, Shaver, & Pereg, 2003). Attachment avoidance is related to the negative representation of others as not trustworthy and is characterized by emotional suppression, self-reliance, and discomfort with closeness and interdependence because of expectations that the partner will be unavailable. It involves a strategic deactivation of the attachment system to reduce negative emotional states as well as vulnerability to rejection and neediness. Attachment anxiety refers to a negative model of self and is characterized by fear of abandonment and rejection combined with a lack of sense of self-worth, as well as the tendency to validate oneself through others. It involves a strategic hyperactivation of the attachment system, which is sensitive to signals indicating that the relationship might be threatened, and is in need of love and reassurance (Godbout, Daspe et al., 2017 Mikulincer et al., 2003). Individuals are considered to have a secure attachment when their scores on attachment anxiety and attachment avoidance are low (see Brassard et al., 2012 for more information and cut-off), otherwise their attachment is considered insecure (Griffin & Bartholomew, 1994; Mikulincer et al., 2003). Individuals with insecure attachment report more physical health problems than the rest of the population (Chiechanowski et al., 2002). Anxious attachment is related to more medical visits and complex symptomatology than other types of attachment, and avoidant attachment is related to a tendency to avoid medical consultations (Chiechanowski et al., 2002). While it is known that attachment in adulthood is optimally understood through romantic relationships (Hazan & Shaver, 1987; Mikulincer & Goodman, 2006), higher levels of anxious and avoidant attachment are also associated with less sexual satisfaction, more sexual difficulties, and higher levels of psychological distress (Shallcross, Frazier, & Anders, 2014; Stefanou & McCabe, 2012).
A third key variable that may relate to health services seeking profiles is therapeutic alliance. Indeed, experiences of CIT and attachment insecurity are also documented as being linked with a poorer establishment of therapeutic alliance (Diener & Monroe, 2011; Lafrenaye-Dugas et al., 2018; Paivio & Cramer, 2004; Smith, Mseiefi, & Golding, 2010). Psychotherapy processes in which the therapeutic alliance is weaker are associated with a greater risk for clients to drop out of their treatments, and to have more irregular health care behaviours (Sharf, Primavera & Diener, 2010). The central role of the therapeutic alliance is increasingly recognized in the field of psychotherapy and sex therapy research, and the concept of alliance has recurrently been underlined as a key component of treatment efficacy in both psychological and biomedical therapy (Lafrenaye-Dugas et al., 2018; Bennett, Fuertes, Keitel, & Phillips, 2011). Specifically, a solid alliance that is established rapidly in a therapeutic relationship appears to act as an efficient predictor of positive therapy outcomes (Horvath, Del Re, Flickiger, & Symonds, 2011).

In sum, there is evidence to suggest that sex therapy clients are very heterogeneous in their help seeking, as well as their health status and medical services use profiles. Some exhibit a long history of medical consultations and physical health issues that are comorbid with their sexual difficulties, while others demonstrate a less complex care path.

These premises raise questions about the importance of assessing clients’ health services use to inform therapeutic interventions. Systemic approaches are recommended in sex therapy, to take into account the multiple variables related to therapy effectiveness (Herleim, Weeks, & Gambescia, 2015). Among those variables, assessing clients’ health services use may provide useful information to tailor well-adapted interventions. Low sexual satisfaction, accumulation of CIT, insecure attachment and difficulties in establishing a solid therapeutic alliance were found to be linked to a greater utilization of health services, as well as an increase in reported physical health symptoms (Bertakis & Azari, 2011; Bonomi et al., 2008; Ciechanowski et al., 2002; Lafrenaye-Dugas et al., 2018). Although sex therapy clients tend to present these risk factors (Lafrenaye-Dugas et al., 2018), their health care behaviours and history and the identified correlates have not been examined empirically. Since these variables of interest are related to therapeutic success in psychotherapy and sex therapy (Horvath et al., 2011; Lafrenaye-Dugas et al., 2018), a more thorough exploration of these correlates might offer important cues for assessment and treatment in this population.

**Objectives**

The first objective of this study was to investigate the heterogeneity in health status and health care behaviours and history of clients seeking sex therapy, by identifying profiles based on their use of health services and the perception of their health. The second objective was to examine whether these distinct health status and medical services use profiles were characterized by different levels of sexual satisfaction, CIT, insecure attachment and therapeutic alliance strength. The hypothesis was that different profiles of health status and medical services use in sex therapy clients would be identified, and that profiles with greater usage of services and medication, and a lower health status self-evaluation, would report more CIT and attachment insecurity, as well as a weaker therapeutic alliance and lower sexual satisfaction.

**METHODOLOGY**

**Participants and Data Collection**

Clients seeking sex therapy with interns completing a graduate program in clinical sexology leading to a psychotherapy practice licence, were invited to complete self-report questionnaires within their first weeks ($M = 5.7$ weeks; $SD = 2.3$; $MIN = 1$; $MAX = 8$) of treatment (i.e., during the evaluation phase). These interns treated clients under clinical supervision. Participants were recruited from different facilities hosting interns (general hospitals, family medicine units, community and private clinics, etc.). Inclusion criteria consisted of being an adult client seeking sex therapy with an intern and not reporting any situational factors associated with specific health and treatment contexts that might interfere with the frequencies and history of health care experiences (i.e., road accident, high-risk pregnancy, cancer treatment, etc.). The project obtained approval from the University of Quebec in Montreal (Université du Québec à Montréal) Research Ethics Board. Informed and free consent was obtained from all participants following a full presentation of the study, and after informing them of their right to withdraw at any time. Clients were also informed that their refusal to participate in the study would not affect their access to the services provided. A total of 220 clients, 119 women (54.3%), 100 men (45.5%) and one client identifying as non-binary (0.4%) participated in this study. Clients were aged between 18 and 77 years old ($M = 37.0$; $SD = 12.6$). The majority, 184 (83.6%) defined their sexual orientation as heterosexual, 16 (7.3%) as homosexual, 11 (5.0%) as bisexual, and 9 (4.1%) identified with another sexual orientation (e.g., unsure or pansexual). Regarding relational status, 72 clients (32.7%) were single, 39 (17.7%) were in a dating relationship with a partner, 62 (28.2%) were in a common-law relationship, 40 (18.2%) were married and 7 (3.2%) indicated another type of status (e.g., polyamory or open relationship, divorced or widowed). The majority earned less than $40,000 CAN per year (66.0%), had at least a college education degree (80.9%), worked full-time (58.4%), spoke French as their native language (88.6%), and were from Canada (87.9%).

**Measures**

**Variables Used to Derive the Cluster Profiles**

All variables were assessed using self-report questionnaires. The survey began with a section collecting clients’ sociodemographic information (e.g., age, place of birth, gender, sexual orientation, etc.).

**Medical services use.**

Included in the sociodemographic section was a series of items asking clients about their health service use patterns and their perception of their health status. Health behaviour variables
were measured using five descriptive questions: (1) How many times have you consulted a physician or health professional in the past year? (2) Of those, how often did your consultation take place in an emergency room? (3) Do you have any chronic health difficulties? (4) Except for the contraceptive pill, how often do you take medications? (5) In general, how do you perceive your current health? These five items were all analyzed individually. The first two questions were open-ended, the third was on a dichotomized 1 "yes"/0 "no" scale, the fourth was answered using a Likert scale ranging from 0 "never" to 6 "more than once a day," and the fifth was also answered using a Likert scale ranging from 0 "not good at all" to 6 "excellent."

Correlates of Profiles

Reasons for consultation and professionals consulted in the past.

At the end of the sociodemographic section, a series of questions assessed the reasons prompting clients to seek sex therapy. They were also asked about the number of health professionals they consulted in the past to address their sexual difficulties, and to specify for how many months they have been experiencing each identified difficulty.

Sexual Satisfaction.

Sexual satisfaction was assessed with the Global Measure of Sexual Satisfaction (GMSS) (Lawrence & Byers, 1995), which measures the level of satisfaction a person feels toward their sexuality using five items on a bipolar scale ranging from 1 to 7 (good-bad, pleasant-unpleasant, positive-negative, satisfying-unsatisfying, valuable-worthless). Total scores range from 5 to 35 with higher scores representing greater sexual satisfaction. In our sample, Cronbach's alpha indicated high internal consistency among the items (α = .88).

Childhood Interpersonal Trauma.

Experience of trauma was assessed via the Childhood Cumulative Trauma Questionnaire (CCTQ) (Godbout, Bigras, & Sabourin, 2017) assessing eight forms of trauma: physical and psychological abuse by parental figures, psychological and physical neglect by parental figures, exposure to psychological and physical violence between parental figures, peer bullying, and sexual abuse. In Canada and many other countries, the age of majority and transition to adulthood ranges from 18 to 19 years old, and individuals under that age are legally considered children. In the province of Quebec specifically, where this study took place, the age of majority is 18 years. Thus, the questionnaire measured the presence of interpersonal traumas that occurred before the age of 18 years. Childhood sexual abuse was assessed with one item evaluating whether the client had ever experienced unwanted sexual contact or sexual contact with an adult, authority figures, or someone five or more years older before the age of 18, followed by questions on the type of committed acts (e.g., forced exhibitionism or voyeurism, touching, penetration) and relationship with the abuser. For the other types of CIT, items stated a potentially traumatic event (e.g., "Did one of your parents, or both, ever punch or kick you?"; "Did one of your parents, or both, ever confine you alone in a room for a long period of time?"). then investigated the event's frequency during a typical year on a scale ranging from 0 "Never" to 6 "Every day, or almost every day." This enabled us to document the different forms of trauma experienced by each participant and to analyze the presence of cumulative CIT, by recoding each form as 1 "experienced" or 0 "not experienced" as recommended by Godbout and colleagues (2017). The dichotomized items were then summed to produce a total score ranging from 0 to 8, with higher scores indicating greater exposure to different forms of trauma. Past studies established satisfactory psychometric qualities (Bigras, Godbout et al., 2017) for this questionnaire, and Cronbach's alpha showed high internal consistency in the current sample: .89.

Attachment representations.

Since attachment representations in adults are best measured through romantic relationships (Hazan & Shaver, 1987; Mikulincer & Goodman, 2006), we used the Experience in Close Relationship Scale-12 (ECR-12; Lafontaine et al., 2016). This questionnaire measures the two attachment dimensions using two subscales: attachment anxiety (e.g., "I worry a fair amount about losing my partner") and avoidance (e.g., "I don't feel comfortable depending on romantic partners") using a Likert scale ranging from 1 "Strongly disagree" to 7 "Strongly agree." Higher scores on these subscales indicate a higher level of anxiety or avoidance, and clinical cut-offs have been proposed to depict attachment anxiety (score > 3.5) and avoidance (score > 2.5) (Brassard et al., 2012). Previous studies showed satisfactory psychometric qualities for this questionnaire (Brassard et al., 2012; Lafrenaye-Dugas et al., 2018). In our sample, the Cronbach's alpha of the anxious attachment subscale was .87, and .85 for the avoidant attachment subscale.

Therapeutic Alliance.

Therapeutic alliance was measured using the Working Alliance Inventory-Client Short Form (WAI) (Tracey & Kokotovic, 1989). This questionnaire includes twelve items (e.g., "I am confident in my therapist's ability to help me," "My therapist and I trust one another") which are answered on a scale ranging from 1 "Never" to 7 "Always." The total scale fluctuates between 12 and 84, while the scores on each subscale may vary between 4 and 28. A higher score indicates a stronger perceived therapeutic alliance, but this scale does not propose a clinical cut-off. Previous scientific studies supported the pertinence of assessing alliance in the first sessions (Horvath et al., 2011; Lafrenaye-Dugas et al., 2018). Cronbach's alpha of the total score indicates a high internal consistency in both previous studies (e.g., Taber, Leibert, & Agaskar, 2011), and in the current study (α = .92).

Data Analyses

Analyses were conducted using the software program IBM SPSS version 26. First, descriptive analyses were conducted to portray the characteristics of the sample on clients' health status and medical services use, their reasons for seeking consultation, sexual satisfaction, CIT, attachment style and level of therapeutic alliance. Second, a cluster analysis was performed using a hierarchical clustering algorithm (Ward's method). This methodology separated clients into distinct groups (e.g., clusters) grounded on their similarities regarding how many times they have
consulted a physician or health professional in the past year, how many times the consultations were in an emergency room, the presence of chronic health difficulties, how often they take medications, and their self-perception of their own health. All variables were standardized and redistributed on the same comparable scale ranging from 0 to 1. To select the optimal number of homogeneous profiles (between 1 and 15), an examination of the dendrogram, of statistical indicators for model selection, was realized in addition to comparing the results to theoretical frameworks, as suggested by Hair, Anderson, Tatham, and Black (1998). The two-steps clustering method was also performed to confirm this examination.

Analyses of variance (ANOVAs) and post-hoc analyses (LSD method) were performed first to test significant differences between clusters on the health variables used in their construction. Then, the analyses were conducted to examine cluster differences on the identified correlates: the number of health professionals that clients have seen in the past concerning their reason for seeking consultation, their level of sexual satisfaction and cumulated CIT, and their differences in attachment styles and perceived level of therapeutic alliance with their therapist.

RESULTS

Descriptive Data

In terms of reasons for seeking consultation, clients reported consulting for lack of sexual desire (55.5% of women and 34.0% of men), lubrication (16.0% of women) or erection problems (36.0% of men), orgasm disorder (31.9% of women), premature (22.0% of men) or delayed (12.0% of men) ejaculation, pain during sexual intercourse (34.5% of women and 2.0% of men), vaginismus (9.2%), sexual aversion (11.8% of women and 1.0% of men), problematic consumption of pornography (1.7% of women and 4.0% of men), or other motives such as relational difficulties, seduction issues, compulsive use of sexuality, and need for support in the process of questioning or affirming their sexual orientation or gender identity (21.0% of women and 23.0% of men).

More than half of the clients (57.1%) indicated more than one reason. Clients specified that they had been experiencing their reasons for seeking consultation for an average of 84.5 months (SD = 111.5) before their current consultation, which represents approximately 7 years. They reported that they had consulted an average of two (SD = 3.9) other health professionals for the presenting issues prior to the current consultation.

Regarding the level of sexual satisfaction in the sample, a mean of 21.0 (SD = 6.8) was documented on the GMSS. In comparison, a study using the GMSS in a community sample documented a significantly higher mean score of 27.3 (SD = 6.6; t = 11.9; p ≤ .001) (Bigras, Daspe et al., 2017). As for CIT, 83.5% of sex therapy clients reported experiencing at least two forms CIT, with an average of 3.9 forms. The more frequent experiences were bullying and psychological neglect, and the less frequent were exposure to physical violence and physical neglect. The distribution of CIT rates in the total sample is detailed in Table 1.

<table>
<thead>
<tr>
<th>Trauma</th>
<th>Total sample (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional abuse</td>
<td>62.6</td>
</tr>
<tr>
<td>Physical abuse</td>
<td>49.8</td>
</tr>
<tr>
<td>Psychological neglect</td>
<td>74.9</td>
</tr>
<tr>
<td>Physical neglect</td>
<td>18.2</td>
</tr>
<tr>
<td>Exposure to psychological violence</td>
<td>56.9</td>
</tr>
<tr>
<td>Exposure to physical violence</td>
<td>17.8</td>
</tr>
<tr>
<td>Bullying</td>
<td>69.1</td>
</tr>
<tr>
<td>Sexual abuse</td>
<td>41.1</td>
</tr>
</tbody>
</table>

Participants showed high levels of insecure attachment in the sample, with 64.6% of the clients reporting scores above the clinical cut-off for attachment avoidance, 70.9% for attachment anxiety, and 51.4% were above the threshold on both scales. Only 15.6% of clients exhibited a secure attachment.

For therapeutic alliance, the average score was 69.7 (SD = 10.7) on the WAI. Although this variable cannot be derived with a clinical cut-off, this average score appears comparable to average scores found in previous studies using the WAI in similar samples (ranging from 65.05 to 72.9; Lafrenaye-Dugas et al., 2018; Lafrenaye-Dugas, Hebert, & Godbout, 2020; Tabor et al., 2011; Xu & Tracey, 2015). There was no significant correlation between the number of weeks spent in therapy at the time of completion, and levels of therapeutic alliance reported by clients.

Concerning their health status and their use of care services, clients reported that they consulted a physician on average four times in the past year (SD = 5.6). Of these consultations, 32.3% indicated that at least one visit was to the emergency room. They reported taking medications on average 3.0 times a week (SD = 2.1). Similarly, 32.3% reported living with a chronic health problem. About one third (33.2%) reported having a health status level ranging from “low” to “medium,” and about two out of three clients (66.8%) reported having a “good” to “excellent” health.

Profiles Description

As shown in Table 2, to select the optimal number of profiles, the Akaike’s Information Criterion (AIC; Bozdogan, 1987), and the Bayesian Information Criterion (BIC; Schwarz, 1978) were used, as well as a dendrogram representation of the hierarchical classification. All of these indicators pointed towards the three-profile solution. Indeed, this three-class model offered the cluster division with the strongest empirical foundation concerning health status and medical services use, and their associations with sexual satisfaction, CIT, attachment and therapeutic alliance. As presented in Table 2, the three clusters were identified based on the medical and health history variables (i.e., number of medical consultation and emergency room visits in the last year, presence of chronic health conditions, frequency of medication intake and general health self-perception). ANOVAs followed by post-hoc analyses (LSD method) were performed to examine cluster differences.
The following section presents each cluster along with the group differences regarding the profiles comparison variables (e.g., the number of professionals consulted in the past concerning sexual difficulties, sexual satisfaction, CIT, attachment and therapeutic alliance). The post hoc results comparing the three profiles on the variables used to derive the clusters, and the correlates of the profiles, are presented in Table 2 and 3, and illustrated in Figure 1. Regarding sociodemographic factors, profiles did not differ in terms of gender and annual income. However, clients in the first profile reported being significantly younger ($M = 32.6$ years old; $SD = 10.7$) compared to clients in the other two profiles (respectively $M = 42.3$ years old; $SD = 13.7$ and $M = 39.2$ years old; $SD = 10.9$; $p < .001$).

### TABLE 2. AIC and BIC Values for Different Numbers of Clusters

<table>
<thead>
<tr>
<th>Number of clusters</th>
<th>AIC</th>
<th>ΔAIC</th>
<th>BIC</th>
<th>ΔBIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>902.69</td>
<td></td>
<td>933.23</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>626.96</td>
<td>-275.73</td>
<td>688.04</td>
<td>-245.19</td>
</tr>
<tr>
<td>3</td>
<td>505.56</td>
<td>-121.40</td>
<td>597.18</td>
<td>-90.86</td>
</tr>
<tr>
<td>4</td>
<td>452.87</td>
<td>-52.69</td>
<td>575.04</td>
<td>-22.14</td>
</tr>
<tr>
<td>5</td>
<td>434.99</td>
<td>-17.88</td>
<td>587.70</td>
<td>12.66</td>
</tr>
</tbody>
</table>

### First Profile: Good Health

The profile ($n = 106$; $48.2\%$ of the sample) named “Good health” is characterized by generally healthy clients and a low use of medical services and medication. Using the clinical cut-offs proposed by Brassard and colleagues (2012), post-hoc analyses revealed that these clients reported the highest level of secure attachment compared to the other groups, with $22.0\%$ of them presenting a secure attachment style ($56.4\%$ showed a clinical level of attachment avoidance, $63.4\%$ showed a clinical level of attachment anxiety, and $43.0\%$ were above cut-off on both dimensions). Indeed, $66.7\%$ of the clients with a secure attachment were in this profile. They demonstrated a stronger therapeutic alliance ($M = 71.2$; $SD = 10.3$) and a greater sexual satisfaction ($M = 21.9$; $SD = 6.5$) compared to the third profile. Furthermore, they indicated less CIT ($M = 3.5$; $SD = 2.1$), reported experiencing their sexual difficulties for the shortest period of time ($M = 61.5$ months; $SD = 64.8$), and consulted the fewest health professionals regarding their sexual difficulties ($M = 61$; $SD = 83$) when compared to clients from the second and third profiles.

### Second Profile: Chronic Discomfort

The clients included in the second profile ($n = 73$; $33.2\%$ of the sample), entitled "Chronic discomfort," demonstrated a higher

### TABLE 3. ANOVA and Post Hoc Analyses (LSD Method) for the Three Profiles

<table>
<thead>
<tr>
<th></th>
<th>Profile #1: Good health</th>
<th>Profile #2: Chronic discomfort</th>
<th>Profile #3: Medication centred</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$M$ ($SD$)</td>
<td>$M$ ($SD$)</td>
<td>$M$ ($SD$)</td>
</tr>
<tr>
<td>Medical consultation</td>
<td>2.37 (2.98)$^b$</td>
<td>5.90 (6.92)$^b$</td>
<td>5.66 (6.69)$^b$</td>
</tr>
<tr>
<td>Emergency room visits</td>
<td>0.34 (0.72)$^a$</td>
<td>0.82 (1.19)$^b$</td>
<td>0.34 (1.58)$^a$</td>
</tr>
<tr>
<td>Chronic health conditions</td>
<td>0.00 (0.00)$^*$</td>
<td>0.97 (1.6)$^b$</td>
<td>0.00 (0.00)$^*$</td>
</tr>
<tr>
<td>Medication intakes</td>
<td>1.26 (1.96)$^b$</td>
<td>4.16 (1.95)$^b$</td>
<td>5.17 (1.67)$^b$</td>
</tr>
<tr>
<td>General health perception</td>
<td>4.39 (1.06)$^a$</td>
<td>3.4 (1.18)$^a$</td>
<td>3.95 (1.07)$^a$</td>
</tr>
<tr>
<td></td>
<td>$F(2,217)$</td>
<td>$F(2,217)$</td>
<td>$F(2,217)$</td>
</tr>
<tr>
<td></td>
<td>11.51 ***</td>
<td>7.24 ***</td>
<td>2573.67 ***</td>
</tr>
<tr>
<td></td>
<td>0.11</td>
<td>0.07</td>
<td>23.72</td>
</tr>
</tbody>
</table>

*Note. Means on the same row with different superscript letters ($^a$ versus $^b$ versus $^*$) differ at $p < .05$.

***$p < .001$.

### TABLE 4. Profiles Correlates Analyzed through ANOVA and Post Hoc Analyses (LSD Method)

<table>
<thead>
<tr>
<th></th>
<th>Good health</th>
<th>Chronic discomfort</th>
<th>Medication centred</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$M$ ($SD$)</td>
<td>$M$ ($SD$)</td>
<td>$M$ ($SD$)</td>
</tr>
<tr>
<td>CQ</td>
<td>3.5 (2.1)$^a$</td>
<td>4.2 (2.2)$^b$</td>
<td>4.3 (1.9)$^b$</td>
</tr>
<tr>
<td>ECR Anxiety</td>
<td>4.1 (1.5)$^a$</td>
<td>4.5 (1.4)$^b$</td>
<td>4.4 (1.5)$^b$</td>
</tr>
<tr>
<td>ECR: Avoidance</td>
<td>2.9 (1.4)$^a$</td>
<td>3.4 (1.5)$^b$</td>
<td>3.3 (1.4)$^b$</td>
</tr>
<tr>
<td>WAI: Total</td>
<td>71.2 (10.3)$^a$</td>
<td>69.1 (10.4)$^b$</td>
<td>66.9 (1.8)$^b$</td>
</tr>
<tr>
<td>GMSS</td>
<td>21.1 (6.5)$^a$</td>
<td>20.5 (6.8)$^b$</td>
<td>19.4 (7.1)$^a$</td>
</tr>
<tr>
<td>Difficulty duration (months)</td>
<td>61.5 (64.7)$^a$</td>
<td>103 (146.2)$^b$</td>
<td>110 (126.2)$^b$</td>
</tr>
<tr>
<td>Number professionals consulted</td>
<td>0.6 (0.8)$^a$</td>
<td>1.3 (1.4)$^b$</td>
<td>2.3 (3.9)$^a$</td>
</tr>
<tr>
<td></td>
<td>$F(df)$</td>
<td>$F(df)$</td>
<td>$F(df)$</td>
</tr>
<tr>
<td></td>
<td>3.0 (2.217)$^*</td>
<td>2.1 (2.210)$^*$</td>
<td>3.0 (2.209)$^*$</td>
</tr>
<tr>
<td></td>
<td>.03</td>
<td>.03</td>
<td>.03</td>
</tr>
<tr>
<td></td>
<td>2.5 (2.202)$^*$</td>
<td>2.2 (2.210)</td>
<td>2.2 (2.210)</td>
</tr>
<tr>
<td></td>
<td>.03</td>
<td>.02</td>
<td>.02</td>
</tr>
<tr>
<td></td>
<td>3.0 (2.147)$^*$</td>
<td>6.3 (2.159)$**$</td>
<td>6.3 (2.159)$**$</td>
</tr>
<tr>
<td></td>
<td>.04</td>
<td>.07</td>
<td>.07</td>
</tr>
</tbody>
</table>

*Note. Means on the same row with different superscript letters ($^a$ versus $^b$ versus $^*$) differ at $p < .05$.

$^a$p < .05. $^b$p < .01.

$^*$marginally significant
number of medical visits compared to the first profile, in addition to presenting the highest number of visits to the emergency room compared to the clients from two other profiles. They also indicated the lowest self-assessment of their health, and were the only ones to mention chronic health problems compared to the clients from the other profiles. According to post-hoc comparison tests, clients in this profile reported significantly higher levels of attachment avoidance (71.8%) and attachment anxiety (78.8%) than the participants from the first profile. Similarly, 60.5% of these clients showed significant levels of both anxious and avoidant attachment, and only 9.9% reported a secure attachment. They also demonstrated a higher rate of CIT (M = 4.2; SD = 1.9), and a lower level of therapeutic alliance (M = 69.1; SD = 10.4) and sexual satisfaction (M = 20.5; SD = 6.8) compared to the clients from the “Good health” profile. On average, they reported dealing with the presenting sexual difficulty for 103.8 months (SD = 146.2) prior to seeking the current therapy, and they consulted significantly more health professionals for their sexual difficulties than clients from the first profile (M = 1.3; SD = 1.4).

**Third Profile: Medication Centred**

The third profile comprised the smallest number of clients (n = 41; 18.6% of the sample) with the highest level of medication use, but stated a general good health and a moderate level of medical consultations compared to clients from the other profiles. Therefore, this group was named “Medication centred." Although correlate levels and average scores appear more elevated for this profile than for the other two, the only significant differences were observed compared to the “Good health” profile. Specifically, post-hoc analyses exposed that these clients demonstrated significantly more attachment anxiety and avoidance than the first profile, but did not differ from the second profile on this correlate, as they presented similar rates of insecure attachment (9.8% secure; 70.1% showed a clinical level of attachment avoidance; 75.6% showed a clinical level of attachment anxiety; and 56.1% were simultaneously above cut-off on both dimensions). This group displayed, compared to the first profile, significantly higher level of CIT (M = 4.3; SD = 1.9), the lowest level of therapeutic alliance (M = 66.9; SD = 10.9), the lowest level of...
sexual satisfaction ($M = 19.4; SD = 7.1$), and their motives for seeking consultation were reported as existing for the longest period of time, with an average of 110.2 months ($SD = 126.2$), nearly 10 years. In comparison to the “Good health” profile, this profile indicated significantly more health professionals consult- ed to treat their sexual difficulties. However, although it shows a higher mean on this correlate than the second profile, this difference is not sufficient to be statistically significant ($M = 2.1; SD = 3.9$ VS. $M = 19.4; SD = 7.1; p = .090$).

**DISCUSSION**

In clients reporting sexual difficulties, studies have identified an association between sexual issues and poorer physical health status, the presence of more comorbidities, and greater health services utilization. The main objective of this study was to identify different profiles of health status and medical services use among sex therapy clients based on frequency of medical consultation and emergency room visits in the last year, presence of chronic health conditions, medication use and self-report general health status. The findings highlight the heterogeneity in the patterns of medical services use and the perception of their own health that the clients maintain. Indeed, three profiles were identified (“Good health,” “Chronic discomfort,” and “Medication centred”), and showed differences in several correlates associated with mental and sexual health, and therapeutic success, such as their sexual satisfaction levels, accumulation of CIT, attachment representations, level of therapeutic alliance, the time passed since their first manifestations of sexual difficulties, and the number of professionals they consulted in the past to address them. To our knowledge this is one of the first studies to perform a profile analysis in a population seeking sex therapy and presenting various sexual difficulties. Results underscore that sex therapists are likely to meet clients with highly diverse health profiles, some of whom may display complex care trajectories.

Clients from the “Chronic discomfort” and “Medication centred” profiles were significantly older than those from the “Good health” profile, which could explain why they report more health problems, medical consultations and medication intake. This is also consistent with the data stating that they report having had their difficulty for longer compared to clients from the “Good health” profile. Thus, these data show that the emergence of health difficulties with age, combined with sexual difficulties, seems to put these clients in complex sexual, physical, and mental health situations.

The data also underscore the importance of questioning the possible obstacles encountered in the client’s trajectory that led to the current management and treatment of their sexual difficulties, to better understand the experiences of clients, and the time elapsed between the first manifestations of sexual difficulties and the current consultation. This study focused on health status and medical services use profiles and found three groups with distinct help and health care services seeking strategies in sex therapy clients. Results therefore raise awareness to the potential therapeutic disappointments clients might have experienced (e.g., potential waiting lists, seeking help for sex-related problems without improvement), and their associations with sexual satisfaction, CIT, attachment and therapeutic alliance. Such findings point to the importance of a systematic comprehensive clinical evaluation of these variables in clinical settings.

**Differences Between the Profiles and Clinical Implications**

In the present study, participants manifested with a high prevalence of insecure attachment, CIT, and a typically long length of time elapsed between the first manifestations of sexual difficulties and the current sex therapy consultation among sex therapy clients.

Among the three profiles found in this study, one included the greater number of clients—close to half—and was entitled “Good health.” It included clients with the smallest number of risk factors, i.e., the lowest number medical visits and medica- tion use, and the best overall health. They were also less likely to report CIT and insecure attachment, and more likely to report strong therapeutic alliance and high sexual satisfaction. However, with about one in five clients reporting secure attachment, this rate is lower than what is found in community samples. In other studies that also used the ECR questionnaire, almost one out of two individuals presented a secure attachment (Pistole, Roberts, & Chapman, 2010). We also note that the average of almost four different experiences of CIT in this group is high, compared to individuals from community samples in which the average varies from two to three (Bigras, Daspe et al., 2017). These results raise the importance for clinicians to systematically evaluate the history of CIT and the representations of attachment in clients seeking consultation for sex-related difficulties, and not only in clients presenting trauma-related concerns or risk factors. Results also support the importance for sexual health professionals to stay alert to the multiple physical and sexual health risk factors (e.g., attachment and CIT) and to perform a holistic clinical evaluation, even if the client reports specific motives for seeking sex therapy or reports a relatively good health.

The “Chronic discomfort” profile captured about one third of the sample. These clients reported the highest level of emergency room visits. They were also the only clients mentioning chronic health problems; indeed all of them reported chronic health problems. Considering the high needs and use of care services of these clients, this profile could probably be the one generating the most health care costs. Clients in that profile also reported a high level of insecure attachment, especially compared to clients in the “Good health” profile. Previous studies suggested a central role of attachment representations in care services use patterns. Anxiously attached clients typically require more frequent consultations with their health care professionals, while clients with avoidant attachment tend to adhere more strongly to treatment when they feel in control and autonomous (Ciechanowski et al., 2002), and struggle to express their vulnerabillity to health professionals (Bennett et al., 2011; Palvio & Cramer, 2004). Clients reporting an avoidant attachment may also avoid intimate forms of health care, such as regular visits to the same professional, and opt for irregular visits with different
providers in different care systems, such as emergency rooms or walk-in clinics (Ciechanowski et al., 2002). These two elements may explain the high level of consultation in the emergency room in this group. In other words, attachment insecurities need to be taken into account to create a strong therapeutic alliance (Lafrenaye-Dugas et al., 2018; Smith et al., 2010).

As for the last profile, “Medication centred” clients reported the highest use of medication, even though their health was generally good. About one out of five clients are included in this group. They reported a high level of CIT and living with the sexual difficulty that brought them to seek consultation for an average of 10 years. It is documented that cumulative CIT is linked to a range of long-term adverse effects, such as physical, mental, and sexual difficulties, and difficulties in engaging in a therapeutic alliance (Bigras, Daspe et al., 2017; Bigras, Godbout et al., 2017; Berthelot, Hébert et al., 2014; Bonomi et al., 2008; Paivio & Cramer, 2004). These data raise the relevance for clinicians to rapidly implement strategies to enhance the therapeutic alliance with their clients, in order to promote adherence to treatment. The results suggest long and obstacle-stricken care history in groups of sex therapy clients. Implementing early referral to effective sexual health care (e.g., informing physicians on the available sex therapy services, increased access to sex therapy) could be highly beneficial for these clients, which parallels sexual health care guidelines (Colson & Roussey, 2013; Nelson, Warren, Gleave & Burlingame, 2013). Similarly, results of previous studies suggest that the longer a person waits before seeking counselling when they have symptoms, the more they tend to be difficult to treat (Kishi, Mellor, Kathol, & Swigart, 2004), and the more adherence to treatment can be difficult (Rickwood, Deane, & Wilson, 2007). These results also raise the hypothesis that lower adherence to therapy and treatments may be associated with increased medication use and self-treatments, in order to avoid consultations within a therapeutic relationship. Our findings highlighted that clients in this profile reported weaker levels of perceived therapeutic alliance, as well as lower levels of sexual satisfaction. It should be noted that several medications (e.g., antidepressants and painkillers) tend to interfere with the sexual response, which can also negatively influence the sexual satisfaction of clients (Clayton, Croft, & Handiwala, 2014; Gallach et al., 2018). The current findings support the idea that clinicians would benefit from assessing the co-occurrence of several risk factors in clients, as well as their potential impact on their physical, mental, and sexual health. This could ensure that each of these facets is managed to promote adherence to the proposed treatments, and even, in the long term, to eventually reduce health care costs for both the health care system and the clients (Hibbard & Greene, 2013).

It should be noted that clients from the last two profiles showed several differences when compared to clients from the first one. They both reported a higher level of attachment anxiety and attachment avoidance, more CIT, the lowest levels of therapeutic alliance and the longest time living with the sexual difficulties that prompted them to seek consultation. However, these profiles did not significantly differ from each other. In other words, sex therapists may encounter two subgroups of clients who are similar in terms of CIT, alliance, attachment and sexual satisfaction, but who differ in their medical help seeking behaviours and history (medical consultations, medication, chronic illness and perception of their health).

The results highlight a potential need for training among health professionals (e.g., physicians, nurses) to increase their ability to efficiently screen sexual difficulties in their clients and refer to sex therapy when needed. Indeed, it is documented that only 35% of clients would spontaneously report a sexual difficulty to their physician, while this rate rises to 69% when the physician directly questions the clients (Bonierbale & Tignol, 2003). Likewise, many health professionals feel intimidated to discuss sexuality with their clients (Quinn, Happell, & Brown, 2011). Some professionals report that they are afraid of opening a “Pandora’s box” by questioning their clients’ sexuality, and worried about receiving information they do not have the time or knowledge to properly handle (Quinn et al., 2011).

In short, these results identify meaningful differences between the profiles concerning sex therapy clients’ history of CIT, attachment representations, reports of therapeutic alliance, sexual satisfaction and the time-lapse between when clients first experienced the sexual difficulties and the current sex therapy. Such results confirm our hypothesis, which stipulated that profiles presenting higher use of health services and medication, and poorer health status, would show higher rates of CIT and attachment insecurities, a weaker perceived therapeutic alliance, and lower levels of sexual satisfaction. Our results are consistent with previous studies highlighting the link between sexual difficulties, sexual satisfaction and complex health symptomatology related to complex health care utilization, as well as the association between CIT, attachment representations in adulthood, sexual difficulties and a greater presence of physical symptoms and medical visits (Bonomi et al., 2008; Chartier et al., 2007; Ciechanowski et al., 2002; Ishak et al., 2010; Tan et al., 2012; Xie et al., 2012). These results also suggest the need for clinicians to be sensitive to the health status and medical services use of their clients, and to investigate both past trauma and current attachment representations to guide therapeutic interventions and optimize treatment benefits, notably through a strong therapeutic alliance. For instance, Emotion Focused Therapy (EFT) offers techniques centred on attachment that are sensitive to trauma survivors (MacIntosh & Johnson, 2008). Early evaluations and interventions based on attachment and trauma could allow for rapid detection of potential barriers to the quality of therapeutic alliance, which may affect the efficacy of the therapy.

Research Limits and Avenues for Future Studies

Despite the fact that this is one of the first studies to explore profiles of health status and health care services use of clients consulting in sex therapy, the conclusions should be moderated in consideration of its limitations. First, self-report questionnaires are often subject to a recall bias. Second, the moment at which participants completed the questionnaires varied between 1 week and 8 weeks after beginning their sex therapy treatment, which could have had an effect on the results. Third, the study is exploratory and the use of a cluster analysis is dependent on
the variables and correlates considered. Fourth, clusters included medical consultations and medication intake for reasons of both mental health and physical health, without discriminating. Finally, despite the fact that the cluster #2 (“Chronic discomfort”) and #3 (“Medication centred”) can be distinguished on their frequency of consultation to the emergency room, their medication intake, and their perception of their own health, the correlates examined in the present study failed to distinguish them. Future studies should investigate other variables that might provide distinction, such as the level of distress clients feel about their sexual difficulties, or their level of motivation to engage in therapy.

These results, however, offer avenues for future studies. Indeed, future research would benefit from exploring the comorbidity patterns found in clients and differentiating the impacts of mental and physical health comorbidities. It would also be useful to document whether certain sexual difficulties (e.g., specific sexual dysfunctions) are associated with more complex health contexts, or with longer consultation delays. Likewise, the effect of factors associated with clinicians in the creation of the therapeutic alliance should be considered in future studies, and results need to be replicated with a larger clinical sample.

CONCLUSION

This study highlighted the presence of different health status and medical services use profiles in sex therapy clients and provided a better understanding of the associations between their sexual difficulties and health problems. These results inform clinicians about the role of CIT, attachment, therapeutic alliance, and sexual satisfaction in planning their interventions with clients reporting sexual difficulties. They also advise on taking into consideration the length of time during which clients have lived with their sexual difficulties, and their health behaviours and history, in order to create customized treatment. In the long run, it could lead to clients having faster access to appropriate services so that their sexuality can heal and flourish.

REFERENCES


Health services use in adults seeking sex therapy


