Personality Characteristics of Patients with Wedding Night Erectile Dysfunction

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Background: Wedding night erectile dysfunction is a common psychosomatic problem in Egyptian males. Its aetiology is unclear. Performance anxiety and abnormalities in the relationship between patient and fiancé are implicated. The role of personality characteristics has not been sufficiently addressed.

Aim: Identify whether long term personality features are related to the occurrence of wedding night erectile dysfunction. It is hypothesized that personality dysfunction in the direction of anxiety and introversion are logically related to poor sexual performance on the wedding night.

Subjects & Methods: Thirty male patients attending Kasr El-Ainy Andrology clinic complaining of wedding night impotence were included in this study. Psychogenic causation was confirmed after a thorough assessment with the Andrology assessment sheet, physical examination, and intracavernous injections of prostaglandin. Patients and 30 normal controls matched for age, marital status, education, and socioeconomic standard were assessed by the International Index of Erectile Function Questionnaire (IIEF) and the Eysenck Personality Questionnaire (EPQ) to compare sexual functioning and personality characteristics in both groups.

Results: Patients with wedding night erectile dysfunction show significantly higher neuroticism and less extraversion on the EPQ. They are also understandably significantly more impaired than controls on all measured aspects of the IIEF.

Conclusion: These findings are consistent with a role for personality readiness in the causation of erectile dysfunction on the first wedding night. Persons with characterological anxiety, emotionality, and a tendency to introversion are more predisposed to the occurrence of penile erection problems on their first complete sexual experience.

Keywords: Erectile dysfunction, Wedding night, Unconsummated marriage, Personality, Neuroticism.
persons to the occurrence of erectile dysfunction. Consequently, the pressures imposed on both sexes attempting sexual relation during their first wedding nights would be acting on susceptible individuals to cause the problem.

SUBJECTS AND METHOD

This is a case–control study conducted from May 2008 to March 2009 at the Andrology and Sexually transmitted Diseases (STD) outpatient clinic of Kasr El-Ainy University Hospitals, and at the Dermatology and Andrology outpatient clinic, National Research Centre.

Thirty male patients who presented for the first time as newly married between the age of 20 and 40 years, and suffering from erectile dysfunction that started on their wedding night were selected. Psychogenic erectile dysfunction was confirmed in these patients by general and local physical examination and by penile intracorporeal injection (ICI) of a vasoactive drug.

Patients were injected with 5 microgram of prostaglandin E1 into the corpora cavernosa from the lateral side using a 27-gauge (Insulin) syringe. Patients were asked to perform manual self-stimulation and evaluated after 30 minutes for degree of penile tumescence using the grading of Van Ahlen and Hertle, (1997). Only patients with confirmed penile erection were asked to participate in the study.

Thirty Egyptian males with normal sexual history were recruited to the study as a control group with the following criteria: Newly married (0-9 months period), have the same age and cultural background as patients, and have no sexual complaints. Control subjects were recruited from the Dermatology out patient clinic, National Research Centre, and were complaining of minor dermatological conditions.

All sixty subjects gave written informed consent to participate in the study. They were all assessed according to the following protocol:

1. **Sexual history:** This included a review of the person’s libido, erection (Morning, psychogenic and reflex), ejaculation, premarital relations, and hostility towards females. Psychological factors were considered and include screening for the presence of a mental disorder and a study of potential developmental influences (Religious background, sexual trauma and attitude towards sex). Moreover, gender identity, sexual orientation and sexual behaviour were carefully explored.

2. **Physical examination** included a general and a local genital examination. General examination was conducted as a part of evaluation with emphasis on signs of hypogonadism, hypo- or hyperthyroidism, liver disorders, endocrinal disorders, peripheral pulses, and gynaecomastia.

Local genital examination has been carried out to exclude congenital or acquired abnormalities

3. Completion of the abridged form of the **International Index of Erectile Function questionnaire (IIEF)** All subjects in the study were instructed to complete the validated Arabic version of the abridged form of the International Index of Erectile Function (IIEF-5) questionnaire (Shamloul, et al. 2004). The questionnaire evaluates 5 domains, which are the erectile function, the orgasmic function, the sexual desire, the intercourse satisfaction, and the overall satisfaction. The questions were asked verbally and the replies recorded by the attending physician.

Each IIEF-5 item is scored on a five-point ordinal scale where lower values represent poorer sexual function. Thus, a response of 1 for a question is considered the least functional, whereas a response of 5 is considered the most functional (Rosen, et al. 1999). Scores on the items of each domain are then summed up. Erectile dysfunction severity was classified into the following five categories based on IIEF-5 scores; severe dysfunction (5-10), moderate dysfunction (11-15), mild dysfunction (16-20), normal (No ED) (21-25).

4. **Eysenck Personality Questionnaire (EPQ),** which is a ninety item questionnaire translated in Arabic, and answered by responding Yes or No to each item (Abdel-Khalek and Eysenck, 1983). The Eysenck Personality Questionnaire (EPQ) is the most well-known and studied assessment instrument that measures the three broad dimensions of Eysenck’s personality theory; that is, psychoticism (P), extraversion (E), neuroticism or emotionality (N), a lie scale (L) measuring dissimulation/ conformity, and a criminality scale (C).

Statistical analysis: The statistical package for social science (SPSS) program version 16.0 was used for analysis of data. The main findings are summarized as mean±SD. The student t-test was used for analyses of continuous data in comparisons between patients and controls. One way ANOVA was used once in this study for analysis of more than two groups of data followed by post hoc test for location of significance.

RESULTS

This study included thirty male patients with erectile dysfunction starting on their wedding night. Their age ranged from 23–36 years with a mean of 29.10±3.57 years. Five had primary education (16.7%), fourteen had secondary education (46.7%), and eleven had university education (36.7%). One patient was unemployed (3%), thirteen were office employees (43%), twelve were skilled and unskilled workers (40%), and four patients worked in their own business (13%).
Thirty male subjects with a normal sexual history were also recruited to the study. Their age ranged from 22-37 years with a mean age of 29.2±3.9 years. Six had primary education (20%), 15 had secondary education (50%), and nine had university education (30%). One was unemployed (3%), fourteen were office employees (46.7%), eleven were workers (36.7%), and four worked in their own business (13%).

Patients and controls are statistically matched as regards age, education, and occupation (Table 1).

Table 1: Demographic Characteristics of Patients and Controls:

<table>
<thead>
<tr>
<th></th>
<th>Cases</th>
<th>Controls</th>
<th>t test, X²</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (Mean±SD)</td>
<td>29.1±3.6</td>
<td>29.2±3.9</td>
<td>t=0.139</td>
<td>0.9</td>
</tr>
<tr>
<td>Education</td>
<td>5(16.7%)</td>
<td>6(20%)</td>
<td>X²=0.33</td>
<td>0.84</td>
</tr>
<tr>
<td>Primary</td>
<td>14(47%)</td>
<td>15(50%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intermediate</td>
<td>11(37%)</td>
<td>9(30%)</td>
<td>X²=0.08</td>
<td>0.99</td>
</tr>
<tr>
<td>University Occupation</td>
<td>12(40%)</td>
<td>11(40%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employee</td>
<td>4(13%)</td>
<td>4(13%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Worker</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

We screened the standard data collection instrument at Kasr El-Ainy Andrology outpatient clinic to extract information that may be related to character/personality features and formation. We identified four variables for study (Table 2). None of these variables showed a significant difference between patients and controls. The proportion of persons with a premarital sexual relation is quite low in both patients (7%) and controls (13%). None of the study subjects admitted to any form of sexual trauma in childhood (0%). Again all subjects expressed a heterosexual object preference (100%), and an almost equal proportion expressed conservative or ultraconservative general religious attitudes (27% in patients, and 23% in controls). These findings indicate that it is important to collect this sensitive information by a trained clinician and after a period of developing trust between clinician and patient.

Table 2: Attitudes and Developmental Characteristics related to erectile dysfunction:

<table>
<thead>
<tr>
<th></th>
<th>Cases</th>
<th>Controls</th>
<th>X²</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Premarital Sexual Relation</td>
<td>2/30</td>
<td>4/30</td>
<td>0.74</td>
<td>0.39</td>
</tr>
<tr>
<td>Sexual Trauma in Childhood</td>
<td>2/30</td>
<td>2/30</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Heterosexual preference</td>
<td>30/30</td>
<td>30/30</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>Conservative Religious Attitudes</td>
<td>8/30</td>
<td>7/30</td>
<td>27%</td>
<td>0.89</td>
</tr>
</tbody>
</table>

The findings on the comparative performance of patients with erectile dysfunction and controls on the abridged International Index of Erectile Function are quite understandable in view of the presenting complaints of the patient group. There is a significantly lower score in the patient group on erectile function in all aspects of this scale (Table 3, Figure 1).

Table 3: Comparison between cases and controls as regards the results of IIEF:

<table>
<thead>
<tr>
<th></th>
<th>Patients</th>
<th>Controls</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orgasm</td>
<td>7.1±1.7</td>
<td>10.0±0.0</td>
<td>9.29</td>
<td>0.0001</td>
</tr>
<tr>
<td>Intercourse</td>
<td>7.5±1.2</td>
<td>13.7±1.1</td>
<td>21.17</td>
<td>0.0001</td>
</tr>
<tr>
<td>Erection Satisfaction</td>
<td>8.7±2.1</td>
<td>29.8±0.6</td>
<td>52.2</td>
<td>0.0001</td>
</tr>
<tr>
<td>Sexual desire</td>
<td>4.8±1.3</td>
<td>9.97±0.2</td>
<td>22.05</td>
<td>0.0001</td>
</tr>
<tr>
<td>Overall satisfaction</td>
<td>2.6±0.7</td>
<td>9.9±0.3</td>
<td>50.99</td>
<td>0.0001</td>
</tr>
</tbody>
</table>

Fig. 1: Performance of patients and controls on the International Index of Erectile Function.

However, the uniformly lower scores on all aspects including sexual desire indicate secondary or ripple effects on all aspects of sexual performance in patients with wedding night dysfunction as a result of loss of confidence or self-esteem.

The mean scores of patients and controls may be compared to the EPQ norms derived from the Egyptian population. The lie scores of patients and controls are both more than one standard deviation above the population mean (7±4). This finding indicates that controls and to a higher degree patients have difficulty expressing spontaneous and honest opinions about themselves especially when these opinions involve a degree of self-revelation. In order to find out whether the elevated lie scores are an aberrant finding in this study or of a stable nature we tested 30 additional control subjects with the EPQ in order to identify the lie scores. The second control group also scored higher than normal on the lie scale of the EPQ and the differences between the three groups (Patients, control 1 and control 2 were non-significant) Mean for second control group12.93±3.5, One Way ANOVA, P<0.2)

Psychoticism levels in both patients and controls are more than one standard deviation above population norms (3.95±3). What is of interest is that the patient group mean is less than the controls mean and that the difference is not statistically significant.
The mean scores of both patients and controls on extraversion are both within one standard deviation of the population norms (13±5). Both groups are less extraverted than the population but the patients with erectile dysfunction are significantly less extravert, i.e. show more introvert personality characteristics than controls (Table 4, Figure 2).

Table 4: Performance of patients with Wedding night erectile dysfunction and controls on the Eysenck Personality Questionnaire (EPQ):

<table>
<thead>
<tr>
<th>EPQ</th>
<th>Cases</th>
<th>Controls</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychoticism</td>
<td>8.1±3.9</td>
<td>9.03±3.71</td>
<td>0.95</td>
<td>0.35</td>
</tr>
<tr>
<td>Neuroticism</td>
<td>18.4±4.4</td>
<td>12.50±4.31</td>
<td>5.29</td>
<td>0.0001</td>
</tr>
<tr>
<td>Extraversion</td>
<td>8.87±2.93</td>
<td>10.83±3.78</td>
<td>2.25</td>
<td>0.028</td>
</tr>
<tr>
<td>Criminality</td>
<td>8.30±2.35</td>
<td>7.37±2.50</td>
<td>1.49</td>
<td>0.14</td>
</tr>
<tr>
<td>Lie</td>
<td>13.3±3.89</td>
<td>12.0±3.66</td>
<td>1.29</td>
<td>0.19</td>
</tr>
</tbody>
</table>

The most significant finding is related to the constellation of behaviours that Eysenck termed Neuroticism. Here controls score within one standard deviation of the population norms (10±5) while patients with erectile dysfunction score significantly higher (18.4±4.4) indicating a significant elevation of the character traits of anxiety and emotionality (P<0.0001).

DISCUSSION

This study suggests that the processes involved in long term character formation may predispose certain individuals to the occurrence of erectile dysfunction for the first time on the wedding night. The majority of literature reports link wedding night erectile dysfunction to performance anxiety. Such anxiety is generated under cultural and situational influences that exaggerate the importance of the wedding night for the couple (Usta, et al. 2001; Badran, et al. 2006). There are several other influences implicated in the causation of this specific problem including situational, social, and female related factors (Zargooshi, 2000; Usta, et al. 2001 and Özdemir, et al. 2008).

Our findings indicate that patients with wedding night erectile dysfunction have higher levels of neuroticism and lesser degrees of extraversion than matched controls. Higher levels of neuroticism indicate a significant elevation of the character traits of anxiety and emotionality. Using the five factor personality questionnaire Fagan, et al. (1991) have also demonstrated elevation of neuroticism scores in patients with sexual dysfunction These findings are significant in understanding the formative influences paving the way for erectile dysfunction. At the same time they are neither exclusive nor exhaustive findings by any means.

Neuroticism is a fundamental personality trait in the study of psychology. It may be embedded in other personality types. Neuroticism can be defined as an enduring tendency to experience negative emotional states. Individuals who score high on neuroticism are more likely than average to experience such feelings as anxiety, anger, guilt, and clinical depression. They respond more poorly to environmental stress, and are more likely to interpret ordinary situations as threatening, and minor frustrations as hopelessly delaying gratification. Neuroticism is related to emotional intelligence, which involves emotional regulation, motivation, and interpersonal skills (Sharma, 2003). It is also considered to be a predisposing factor for traditional neuroses, such as phobias and other anxiety disorders. Our findings indicate the persons with such character traits are more prone than others to develop a sexual dysfunction on their wedding night. They also confirm why some individuals and not others are unable to overcome the performance anxiety of the wedding night in traditional cultures like Egypt.

Sex may have a different meaning attached to it in different character types (Vaknin, 2006). There is some debate as to whether the incidence of personality disorder is higher in men reporting sexual dysfunction than in the normal population. Some authors associated sexual dysfunction with exaggerated personality traits than expected in normal population (Gomes and Nobre, 2008). However, personality profiles were varied and there was no particularly consistent trait or cluster of traits associated with sexual dysfunction. A tendency toward greater self consciousness, vulnerability and lower openness seemed most consistently to describe dysfunctional men. These characteristics
are surprisingly similar to what has been revealed about neuroticism and introversion in this study. Such characteristics may lead to diminished association with others and reduced experience and act to sustain performance anxiety associated with male sexual dysfunction (Kandeel, 2007).

Inspite of the relatively mature age at marriage of both patients (Mean 29.1±3.6 years) and control groups (29.2±3.7 years), 93% of the patients and 87% of control group reported absence of any premarital sexual experiences. This contrasts with the figures derived from many other countries including countries with conservative traditions like Egypt. Singh, et al. (2000) stated that the timing of sexual initiation varies widely by country and gender, the proportion of having intercourse by age of 17 ranges from 72% in Mali to 47% in the United states and 45% in Tanzania. Also the proportion of males who had their first intercourse by age 17 ranges from 76% in Jamaica to 64% in United States and 63% in Brazil. In Asian countries first intercourse starts later than that age (Santrock, 2005). At ages 19-20, 63% of females and 72% of male Spaniards had their first sexual experience, respectively. And by the age 21-23, 86% of men had had sex with another person (Gil and Ballester, 2006). Although such discrepancy from results of this study can be explained by the difference in the religious and cultural background; it may also reflect the difficulty in self disclosure that may be characteristic of subjects in this study.

No single person reported exposure to any childhood sexual trauma and all agreed about heterosexual preference. Fahmy, et al. (1995) report that 7.63% of psychiatric patients have been sexually abused. All of these are very conservative estimates and the results of this study can only be explained by the relatively small sample, the sensitivity of the information, and possibly the character organization of neuroticism and introversion which may lead to adoption of traditional and expected rather than spontaneous positions. The need to please and appear well than actually feeling and expressing feeling. Such an interpretation is aided by the uniformly high scores on the lie scale of the Eysenck personality inventory which merely indicates that the individual worries about his social image rather than expresses his inner feelings and actions.

An important corollary of this finding is that the physician’s attitude in discussing and evaluating sexual dysfunction should be mindful of the difficulty these patients experience in expressing their problems. Such sensitivity should and help patients feel comfortable talking about these issues. The establishment of rapport with the patient assists in facilitating communication, history taking and provides an opportunity to initiate patient and partner education about ED and its treatments (Brosman, 2008).

It can therefore be concluded that patients with wedding night erectile dysfunction have a psychological problem that is not only the outcome of immediate pressures and circumstances. It is also linked to long term personality characteristics conducive to high levels of anxiety and difficulty in relating to others. These predisposing factors become manifest as an erection problem when the immediate circumstances create a performance pressure on the individual. Further studies are needed to clarify further the role of personality organization of both partners in psychogenic erectile dysfunction.

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**REFERENCES**


الملخص العربي

خصائص الشخصية في مرضاى اختلال الإنتصاب في ليلة الزواج

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تهدف هذه الدراسة إلى التحقق من العلاقة بين اختلال الإنتصاب النفسي في ليلة الزواج وسمات الشخصية. أجريت هذه الدراسة على 30 مرضاى من الذكور المتزوجين على عيادة أمراض الذكورة بكلية طب القصر العينى وعيادة الأمراض الجلدية والتناسلية بالمركز القومي للبحوث من الذين يعانون من اختلال الإنتصاب لأسباب نفسية، مما تتراوح أعماهما بين 20 و40 عامًا، وقد تم توارثهم في 30 فردًا كعينة ضابطة على أن يكونوا من حديثي الزواج ومن نفس المرحلة العمرية ويتم القلق النفسي بالإضافة إلى العدوى الإنجابية عند بعض الأسباب المهينة لاختلال الوظيفة الجنسية في ليلة الزواج الأولى.

الخلاصة هي أن العصبية وتعاني درجة أعلى من الفقق النفسية بالإضافة إلى العدوى الإنجابية أمام بعض الأسباب المهينة لاختلال الوظيفة الجنسية في ليلة الزواج الأولى. وقد تم اتخاذ التاريخ المرضي والجنسي وإجراء فحوص عام وموضوعية. وملوء بيانات الدليل الدولي لاختلال الإنتصاب الوظيفي، وتطبيق استبيان أيزنك لجوانب الشخصية. أظهرت النتائج وجود فروق واضحة في اختلال الوظيفة الجنسية بين المجموعتين بالإضافة إلى فروق ذات دلالة إحصائية، في نتائج استبيان أيزنك للشخصية حيث تبين أن المرضى يعانون بدرجات أعلى من العصبية ودرجة أقل من الإنبساطية طبقاً لمفهوم أيزنك.

ومع ذلك، تمت مقارنتهم من خلال مراجعة التقارير الطبية والحقوق والخلفيات الاجتماعية، ولا يعانون من مشاكل جنسية، تم جمعهم من عيادة الأمراض الجلدية بالمركز القومي للبحوث. وقد تم اتخاذ التاريخ المرضي والجنسي وإجراء فحوص عامة وموضوعية. وملوء بيانات الدليل الدولي لاختلال الإنتصاب الوظيفي، وتطبيق استبيان أيزنك لجوانب الشخصية. أظهرت النتائج وجود فروق واضحة في اختلال الوظيفة الجنسية بين المجموعتين بالإضافة إلى فروق ذات دلالة إحصائية، في نتائج استبيان أيزنك للشخصية حيث تبين أن المرضى يعانون بدرجات أعلى من العصبية ودرجة أقل من الإنبساطية طبقاً لمفهوم أيزنك.

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