Use of a stopwatch to measure ejaculatory latency may not be accurate among Indian patients

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ABSTRACT

Introduction: Although the use of a stopwatch is recommended to record intravaginal ejaculatory latency time (IELT) for premature ejaculation, there is no Indian literature which assesses the reliability of this method among our patients. Hence, we assessed the accuracy of stopwatch-measured IELT and compared it with other methods such as number of thrusts and self-assessed IELT in an Indian context.

Methods: Between January 2015 and December 2015, couples with premature ejaculation (PE) confirmed with the Premature Ejaculation Diagnostic Tool were enrolled in this study. They were asked to report self-assessed IELT for the first 2 weeks, number of thrusts before ejaculation following vaginal penetration for the next 2 weeks, and stopwatch-clocked IELT for the last 2 weeks. At each 2-week interval, the couples answered erectile/ejaculatory performance anxiety index questionnaire (EPAI). The data were analyzed at the end of 6 weeks.

Results: A total of 42 couples with an average married life of 5.53 years were included in the study. Average stopwatch-clocked IELT was almost 1 min more than the self-reported IELT, which was statistically significant. The average number of thrusts reported was 6.31. Anxiety on the EPAI scale was maximum while using stopwatch to measure IELT.

Conclusion: Use of stopwatch to clock the IELT does not appear to represent true IELT in Indian patients. Self-assessed IELT correlated more accurately with symptoms of PE.

INTRODUCTION

Although premature ejaculation (PE) is the most common sexual dysfunction in men, there are controversies in its definition, evaluation, diagnostic tools, and treatment methodologies. Waldinger attempted standardization of PE as an entity and described a novel method to clock the ejaculatory latency using the stopwatch which is now a standard tool. [1] In India, a few studies have used the stopwatch method to clock ejaculatory latency. [2,3] However, the reliability of this method has not been established among Indian patients. We assessed the accuracy of this method in our patients by comparing stopwatch-measured ejaculatory latency with

self-assessed ejaculatory latency and counting number of thrusts before ejaculation during heterosexual vaginal intercourse.

METHODS

After obtaining written informed consent and ethics committee approval, couples who presented with complaints of PE between January 2015 and December 2015 were administered the Premature Ejaculation Diagnostic Tool Questionnaire (PEDT). PEDT is a validated tool and has five questions. [4] These questions pertained to difficulty in delaying ejaculation, ejaculation before one wants to ejaculate, ejaculation with very little stimulation, frustration because of early ejaculation, and concerns about the partner

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remaining unsatisfied. Each question has five responses that are scored 0–4. PE is diagnosed if the sum of the scores is 10 or more. Those with the final score between 8 and 10 are diagnosed to have probable PE while scores of 8 or less are diagnosed as normal.

88 couples were assessed for eligibility. Twenty-one couples were excluded because of other associated sexual dysfunction, 14 refused to comply, and 11 couples had normal PEDT. Finally, 42 couples were enrolled for this study. All couples were counseled about the concept of intravaginal ejaculatory latency time (IELT) and were shown how to measure the period using the stopwatch on a cell phone.

During the first 2 weeks, they were asked to report a self-assessed IELT and the average over 2 weeks with at least two sexual intercourses per week was recorded. During the next 2 weeks, they were asked to report the number of thrusts prior to ejaculation. Insertion of penis was taken as the first thrust and the average number of thrusts on each intercourse over 2 weeks with at least two sexual intercourses in a week was calculated. Thereafter they were explained the use of the stopwatch in their cell phone to clock IELT. The partners were asked to clock the ejaculatory latency during the consecutive 2 weeks with at least two sexual intercourses in a week. The average for each couple was recorded.

At the end of 2, 4, and 6 weeks, all patients were administered the erectile/ejaculatory performance anxiety index questionnaire (EPAI). EPAI is a validated index to measure erectile function.^[5] This questionnaire was modified with the addition of phrases pertaining to ejaculatory delay in the questionnaire. EPAI contains ten questions, each having four possible responses. These questions pertain to apprehension about delaying ejaculation, repeated thoughts about not being able to delay ejaculation, feeling of nervousness when the female partner talks about sex, use of excuses to avoid sex, feeling the need to take medications to delay ejaculation, feeling the need to take antianxiety medications to prevent early ejaculation, repeated checking about ejaculation during a sexual act, reading books about delaying ejaculation, thinking about delaying ejaculation even during sex, and feeling of nervousness even when the sexual encounter is with a known partner. The options are "not at all" (scored as 1 point), "sometimes" (scored as 2 points), "most of the times" (scored as 3 points), and "every time" (scored as 4 points). The final index is arrived at by adding the scores to all the ten questions. The least possible score is 10 indicating "no anxiety" and the highest possible score is 40 indicating highest anxiety.

Outcomes

The primary outcome measures were the ejaculatory latency as per self-assessment, stopwatch measurement, and

measurement by number of thrusts. The secondary outcome measures were the anxiety scores during measurement of ejaculatory latency by self-reporting, stopwatch, and based on the number of thrusts.

Statistical analysis

Statistical analysis was performed using GraphPad Software ($^{\circ}$ 2017 GraphPad Software, Inc. USA). The variables such as mean and standard deviation were calculated. The two-tailed t-test was used to measure the P value. P < 0.005 was considered statistically significant.

RESULTS

A total of 42 couples with an average married life of 5.53 years were included. The mean age of the male partner was 34.72 years and was 30.22 years for the female partner. Although the couples seemed to have understood the instructions to use the stopwatch, most (83%) complained that it was extremely difficult. In the end, while all 42 couples reported the IELT using the stopwatch, only 7 were confident that they had clocked the time accurately.

Mean self-assessed IELT was 2.17 ± 1.21 min, stopwatch-measured IELT was 3.12 ± 1.72 min, and average number of thrusts before ejaculation was 6.31 ± 3.1 . The difference between mean self-assessed IELT and stopwatch clocked IELT was statistically significant (P = 0.0006). Mean EPAI score was 20.79 ± 3.24 after self-assessed IELT, 24.36 ± 3.51 after IELT based on number of thrusts and 29.41 ± 3.58 after stopwatch recorded IELT. The difference in EPAI score was significant between self-reported IELT and stopwatch-measured IELT (P < 0.0001), self-reported IELT and IELT based on number of thrusts (P < 0.0001) and stopwatch-measured IELT and IELT based on number of thrusts (P < 0.0001).

DISCUSSION

Our study showed that the stopwatch in a cell phone was difficult to use for measuirng IELT in an Indian setting. Our patients were more comfortable to report self-assessed IELT which correlated more closely with their symptoms.

Use of a stopwatch to measure ejaculatory latency was first reported by Waldinger *et al.* in 1998.^[1] In this landmark study of 110 patients, 80% men ejaculated within 30 s of vaginal intromission and this was clocked accurately by the stopwatch used by the partner. We have used the same method in one of our studies.^[3] During that study, we found that the participants found it very difficult to use stopwatch and hence we decided to look into this method in an Indian setting in an independent study.

There are some questions which need to be addressed before embracing the stopwatch as a tool to measure IELT in an Indian setting. First, is it possible to clock an event accurately with a stopwatch in an intensely excited state such as while performing sexual intercourse? Second, would the use of a stopwatch not increase the anxiety among couples already anxious about the PE? Third, is there a standard technique to use the stopwatch for clocking IELT?

The arousal status and excitement are highest during the sexual intercourse. [6] In such a state, the reaction time suffers; hence, it is likely that the time taken to stop the ticking stopwatch may be high and result in an inaccurate measurement. [7] Given such a scenario, research based on inaccurately clocked IELT may be fraught with errors. In our study, 83% couples were not confident about the accuracy of the stopwatch-measured IELT. Most of them were of the opinion that they took more than a minute extra to stop the watch after ejaculation. This suggests that the excited state of sexual arousal and orgasm negatively affected the accuracy of the stopwatch clocking of IELT.

Waldinger recommended that the female partner should use the stopwatch.^[1] However, the reaction time varies with gender despite the best training and women are less likely to be accurate in clocking the stopwatch during the intercourse.^[8-12] Initially, we asked the female partner to use the stopwatch but later left it to the couple to decide as in some cases, the male partner was more comfortable clocking than the female partner. Various positions are described for sexual intercourse and the couples enquired about which position would be most accurate. However, there is no literature on the best method for measuring IELT by stopwatch. Hence, we allowed them to use whatever position they wished.

Patients suffering from PE are likely to be anxious about anticipated failure and their partners are equally affected by the stress of PE.^[12] Anxiety is known to affect the performance of the cognitive tasks adversely.^[13] Reaction time is affected by anxiety and stress, resulting in an inaccurate clocking of stopwatch. As was evident in our study, performance anxiety was high during the use of a stopwatch compared to other methods. The added burden of evaluation, in a sense, increased anxiety by almost 50% in our study. This itself leads to further shortening of IELT as anxiety is reported to be a causative factor in the PE.^[14,15] However, participants in our study reported a longer IELT compared to self-reported IELT, which may be attributed to inaccurate clocking.

Although stopwatch is the best tool to clock IELT, it will be of no use if not clocked accurately. Self-assessed IELT does not fare poorly in comparison to stopwatch-measured IELT.^[16,17] Studies before 1989 used the number of thrusts before ejaculation as a measure to estimate ejaculatory latency.^[18] However, it may be too subjective for use it

as a research tool in clinical trials. In such a scenario, it may be better to use self-assessed IELT instead of stopwatch-measured IELT.

CONCLUSION

Stopwatch-measured IELT, though described as the gold standard in the evaluation of PE in the western literature, does not appear to represent true IELT in the Indian context. Among our patients, accurate clocking of IELT using stopwatch was almost impossible. The use of a stopwatch increased anxiety which in turn affects accuracy. Hence, self-assessed IELT is a better tool to evaluate PE patients in the Indian context. Ejaculatory latency based on number of thrusts and self-assessed IELT correlated accurately with symptoms of PE.

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