



# Clinical Characteristics of the Premature Ejaculation Sufferers in Aegean Region of the Turkey: A Multicentre, Observational Study

## Ege Bölgesindeki Çiftlerde "İntra-Vajinal Ejakülasyon Süresi" ve Klinik Yansımalarının Değerlendirilmesi

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### What's known on the subject? and What does the study add?

Current preliminary study from our region revealed that questionnaire based approach with PEPO may have considerable role in the diagnosis of PE sufferers. Our study findings supports conclusion that 'perceived control over ejaculation' is an important factor among PRO measures related to ejaculation while characterizing PE. Impact of shorter IELT among couples manifests by itself as much more poor ratings in the PRO measures related to ejaculation.

### ABSTRACT

#### Objective

Demonstration of the intra-vaginal ejaculation latency time (IELT) distribution in male subjects and its clinical expressions among couples in the Aegean region of the Turkey.

#### Materials and Methods

Subjects were recruited to the study from six different urologic centers in the Aegean region. During the enrollment period subjects were recruited in to two group according to presence of premature ejaculation (PE). PE diagnosis was made according to DSM-4 definition. Subjects and their partners were evaluated with patient reported outcome measures (PRO) related to the ejaculation-based questionnaire (Premature ejaculation patient profile questionnaire -PEPO). Stopwatch measurements were also asked from each couple to record intra-vaginal ejaculation latency time (IELT). Couples who completed two clinical visits with 4 wk interval were recruited to the data analysis.

#### Results

Among 141 eligible subjects, mean age was 36.5±9.7 years and mean partner age was 32.9±9.8 years. Following the initial evaluation 80 subjects recruited

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#### Amaç

Ege bölgesindeki erkeklerde intravajinal ejakülasyon latansi süresinin (IELS) dağılımı ve bu parametrenin çiftler üzerindeki klinik yansımalarının gösterilmesi amaçlanmıştır.

#### Gereç ve Yöntem

Hastalar Ege bölgesindeki altı farklı üroloji kliniğinden dahil edildi. Çiftler erken boşalma (EB) olan ve olmayan gruplar olarak hekim tarafından iki ana gruba ayrıldı. Başlangıç aşamasındaki EB tanısında DSM-4 TR tanı kriterleri kullanıldı. Çalışmaya dahil olma kriterlerine uyan hastalara kronometre cihazı verilerek 4 haftalık süre ile saat tutma yöntemi ile IELS değerlerini saniye olarak kayıt etmeleri istendi. Erkekler ve partnerleri bu süre sonunda Türkçesi valide edilmiş olan Prematür Ejakülasyon Hasta Profili (PEHP) anket formu ile sübjektif yakınmalar açısından değerlendirildi. Aynı işlemler 4 haftalık süre ile ikinci kez tekrarlandı.

#### Bulgular

Çalışmada verileri değerlendirilen 141 çiftte yaş ortalaması erkeklerde 36,5±9,7, eşlerinde 32,9±9,8 yıl olarak saptandı. Başlangıç değerlendirilmesi

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## ABSTRACT

to group 1(PE) and 41 subjects recruited to the group 2 (non-PE). Geometric mean IELT of the subjects was significantly differed between PE and non- PE group (64.7±66.8 vs. 521.5±414.7 seconds,  $p<0.001$ ). All of the PEPQ domain scores were also differed between groups. Subjects in the PE group gave poor ratings than non-PE subjects. Partner responses were similar pattern. Correlation analyses of the PEPQ scores demonstrated significant positive correlations between "perceived control over ejaculation" and "satisfaction with sexual intercourse" domains of the PEPQ and with IELT.

## Conclusion

Geographic distribution of IELT and its impacts among couples by the several subjective aspects of PRO measures should be assessed during PE investigations.

## Key Words

Premature ejaculation, clinical evaluation, premature ejaculation patient profile

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sonrası 80 çift EB grubuna (grup 1) 41 çift ise EB olmayan gruba (grup 2) dahil edildi. Gruplardaki İELS değerlerinin ortalaması istatistiksel olarak farklılık gösterdi (grup 1'de 64,7±66,8, grup 2'de 521,5±414,7 saniye,  $p<0.001$ ). Çiftlerin PEHP sorularına verdiği yanıt skorlarında da gruplar arasında anlamlı farklılık saptandı. Grup 1'deki çiftlerin skorlarının her iki partnerde de grup 2'ye göre daha kötü seviyede olduğu gözlemlendi. Korelasyon analizlerinde İELS süreleri ile çiftlerin PEHP sorularındaki "ejakülasyon zamanlaması üzerindeki hakimiyet duygusu" ve "cinsel ilişkiden tatminkarlık" skorları arasında pozitif korelasyon saptandı. Yine İELS süreleri ile PEHP skorları arasındaki korelasyon gücünün daha yüksek olduğu saptandı.

## Sonuç

Erken boşalma yakınması olan hastaların değerlendirilmesinde PEHP formuna dayalı sübjektif değerlendirme yapılması tanısız değerlendirmenin bir parçası olmalı ve İELS süresinin coğrafik değişkenlik göz önünde bulundurulmalıdır.

## Anahtar Kelimeler

Prematür ejakülasyon, klinik değerlendirme, prematür ejakülasyon hasta profili

## Introduction

Differentiation of the diseases from the variations of some sexual measurable parameters in different geographic regions is the main topic in current trials. Premature ejaculation has been studied widely because it is the most common male sexual dysfunction influencing both of the partners (1). Demonstration of variable distribution of intravaginal ejaculation latency time (IELT) in men from different countries is another issue that makes some difficulty during classification of the ejaculatory disorders (2). In a recent population based study conducted by Waldinger et al. also revealed that there are some differences between countries (2). In this population based stop watch study demonstrated that Turkish couples have lowest median IELT values among European countries (3).

Parallel to the variable distribution of IELT in different geographic regions, definition of the Premature Ejaculation has changed by the time in diagnostic approach to the disease. Subjective measures, DSM definitions and operational definitions of the disease has taken role temporarily among this issue (4,5,6). Diagnosing the disease and separating the healthy subjects from the patients still remained as main problems in the ejaculatory disorders. Evaluation of the couples using patient reported outcome (PRO) measures related to the ejaculation has improved to diagnostic approach of the physicians (7). We have planned current observational trial to enhance rational approach to the couples suffered from premature ejaculation in our country.

The aim of the current study is to demonstrate IELT distribution of men with PE and without PE and clinical characteristics of the couples by the means of PRO measures related to ejaculation in the Aegean region of the Turkey.

## Material and Methods

### Study Design

The study was performed in six different urology clinics from Aegean region. Study protocol was approved by local ethic committees in each of

the participating centers. Couples above 18 years old and who have monogamous heterosexual relationship at least six months were the subjects of the study.

Detailed medical history, sexual anamnesis, physical examination obtained during initial evaluation. Following initial evaluation subjects were recruited to two diagnostic groups according to the presence of PE (PE and non-PE group). Diagnosis of PE and above mentioned enrolment of the subjects to two study groups was performed by the indexed authors from each participating centers using DSM-4 diagnostic criteria (5,6). The study protocol was scheduled for 8 weeks with two clinical visits (Initial assessment and enrollment with informed consent, visit 1st at 4th weeks and visit 2nd at 8th weeks).

Validated Turkish version of the "Premature Ejaculation Patient Profile Questionnaire" (PEPQ) was used to evaluate patient reported outcome measures related to ejaculation in the study (6). Men and their partners independently completed the male and female version of the "Premature Ejaculation Patient Profile Questionnaire" in visit 1 and visit 2 to assess "perceived control over ejaculation, satisfaction with sexual intercourse, personal distress and interpersonal difficulty related to ejaculation. Domain scores were shown in Table 1. Intravaginal ejaculation latency time measurements were also asked from couples with calibrated stop-watch recordings at visit 1 and visit 2. Geometric mean IELT values were determined before statistical analyses for each subject.

### Subjects

Subject enrollments were voluntarily following written informed consent without any compensation. Patients who have admitted with ejaculation related complaints were also informed about there would not be any effect on therapeutic management with to be or not to be in the study. During the study, subjects and their partners were asked to do not change their sexual habits. Subjects who have had history of pelvic or spinal cord surgery, spinal cord injury, drug or alcohol abuse and major psychiatric disorder were excluded from the study. Subjects were ineligible who have indicated any form of the sexual

dysfunction (including erectile dysfunction, decreased sexual interest) except for the PE. Subjects whom partners reported to being pregnant or using medications such as anti-depressants that may affect female sexual functions were also excluded from the study. During the study, antipsychotics, selective serotonin reuptake inhibitors, tricyclic antidepressants, anesthetic ointments to delay ejaculation and vaso-active drugs (oral or intra-cavernosal) were disallowed medications. Subjects were also ineligible who have taken above-mentioned medications 30 days before the initial evaluation.

**Statistical Analysis**

All analyses were conducted based on data obtained from visit 1. Geometric mean IELT was taken from stop-watch recording obtained in 4 week period for each patient and used for analyses as mean IELT. During data analyses ejaculation prior to vaginal penetration was assigned an IELT value of 0 minutes. Two sided t test was used for between group comparisons of IELT and PEPQ domain scores. Test-retest reliability was evaluated with comparing measures obtained from visit 1 and visit 2 using Intra-class Correlation Coefficient (ICC). Comparison of the distribution of subject and partner responses to each domain of the PEPQ was accomplished with chi-squared test between PE and non-PE groups. Spearman- Rank Correlation Coefficient test was used to evaluate relationship between IELT and PEPQ domains.

**Results**

Among 141 eligible couples mean age of the male subjects was 36.5±9.7 (min 20, max 64) years. The mean partner age was 32.9±9.8 (min 20, max 64) years. The mean intercourse frequency per month was 10.2±7.0. After the initial evaluation 80 subjects (66.1%) were recruited in to group 1 (PE group) and 41 subjects (33.9%) recruited in to group 2 (non-PE group). The ages of the couples, educational

status and intercourse frequencies were similar in both groups. Mean IELT measurements were shorter in group 1 than group 2 (64.7±66.8 vs 521.5±414.7 seconds) (p<0.001). Distribution of the mean IELT of the PE and non- PE subjects were shown in Figure 1.

Scores of the subject and partner PEPQ items were also differed between groups (p<0.0001). Partner responses for all items were in similar pattern. Distribution of PEPQ domain scores and mean IELT values in PE and non-PE groups were demonstrated in Table 2. Analyses of data obtained from visit 1 and visit 2 revealed acceptable test re-test reliability for all PEPQ domain scores and IELT measurements (ICC range:0.80-0.96).

At the correlation analyses, subject and partner ratings in all items of the PEPQ and IELT of the subjects were significantly correlated with each other (shown in Table 3). Perceived control over ejaculation score of the subjects was the most strongly correlated item with the IELT measurements (0.59). Perceived control over ejaculation measures

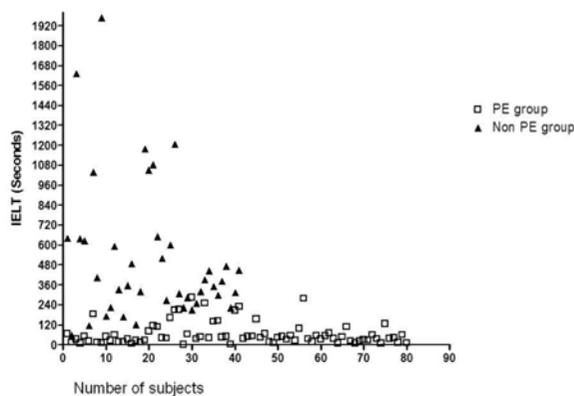


Figure 1. Distribution of mean IELT of the study subjects

| Table 1. Items contained in Premature Ejaculation Profile Questionnaire (PEPQ) |   |   |
|--|---|---|
| Measure  | Question  | Scores and Response Options   |
| Perceived control over ejaculation   | Subject: Over the past month, how was your control over ejaculation during sexual intercourse?  | 0. Very poor<br>1. Poor<br>2. Fair<br>3. Good<br>4. Very good                       |
| Satisfaction with sexual intercourse   | Subject&Partner: Over the past month, how was your satisfaction with sexual intercourse?  | 0. Very poor<br>1. Poor<br>2. Fair<br>3. Good<br>4. Very good                       |
| Personal distress related to ejaculation                                       | Subject: Over the past month, how distressed were you by how fast you ejaculated during sexual intercourse?<br>Partner: Over the past month, how distressed were you by how fast your partner ejaculated during sexual intercourse?   | 0. Extremely<br>1. Quite a bit<br>2. Moderately<br>3. A little bit<br>4. Not at all |
| Interpersonal difficulty related to ejaculation                                | Subject: Over the past month, to what extent did how fast you ejaculated during sexual intercourse cause difficulty in your relationship with your partner?<br>Partner: Over the past month, to what extent did how fast your partner ejaculated during sexual intercourse cause difficulty in your relationship with your partner? | 0. Extremely<br>1. Quite a bit<br>2. Moderately<br>3. A little bit<br>4. Not at all |

of the subjects were also strongly correlated with satisfaction with sexual intercourse (0.80), personal distress (-0.80) and interpersonal difficulty (-0.75) measures of the subjects. Among partner ratings satisfaction with sexual intercourse domain scores were positively correlated with perceived control over ejaculation domain scores of the male subjects (0.75) and mean IELT (0.53).

## Discussion

Current study revealed that the scores of PE group in "perceived control over ejaculation", "satisfaction with sexual intercourse", "personal distress and interpersonal difficulty" items of PEPOQ were significantly lower (worse ratings) than previously reported data in the literature (2,8,9,10). Another different finding from the literature was lower

**Table 2. Premature Ejaculation Profile Questionnaire scores of the study groups**

|   | Male Subjects PE Group     | Male Subjects Non-PE Group | Partners Responses in PE Group | Partners Responses in Non-PE Group |
|---|----------------------------|----------------------------|--------------------------------|------------------------------------|
|   | n=80                       | n=41                       | n=80                           | n=41                               |
| Perceived control over ejaculation †<br>Mean (±SD)<br>Median<br>Range   | 0.5 (±0.76)*<br>0<br>0-3   | 3.0 (±0.83)<br>3.0<br>1-4  | NA                             | NA                                 |
| Satisfaction with sexual intercourse †<br>Mean (±SD)<br>Median<br>Range | 0.9 (±1.04)*<br>1.0<br>0-4 | 3.3 (±0.57)<br>3.0<br>2-4  | 1.1 (±1.01)*<br>1.0<br>0-4     | 3.3 (±0.48)<br>3.0<br>3-4          |
| Personal distress ‡<br>Mean (±SD)<br>Median<br>Range                    | 0.9 (±1.21)*<br>0<br>0-4   | 3.6 (±0.53)<br>4.0<br>2-4  | 1.3 (±1.21)*<br>1.0<br>0-4     | 3.6 (±0.62)<br>4.0<br>2-4          |
| Interpersonal difficulty‡<br>Mean (±SD)<br>Median<br>Range              | 1.2 (±1.20)*<br>1.0<br>0-4 | 3.8 (±0.38)<br>4.0<br>3-4  | 1.5 (±1.18)*<br>1.0<br>0-4     | 3.7 (±0.41)<br>4<br>3-4            |

IELT: Intra-vaginal Ejaculation Latency Time, PE: Premature Ejaculation, SD: standard deviation, NA: not assessed

\*p<0.001 in PE vs. non-PE using chi square analysis

† Responses included 0="very poor", 1="poor", 2="fair", 3="good", and 4="very good"

‡ Responses included 0="extremely", 1="quite a bit", 2="moderately", 3="a little bit", and 4="not at all"

**Table 3. Correlations between subject and partner measures with Premature Ejaculation Profile Questionnaire (PEPOQ) in whole group (PE and non-PE)**

| Subject measures in PEPOQ            | Subject measures in PEPOQ |                                    |                                      |                   |                          |
|--------------------------------------|---------------------------|------------------------------------|--------------------------------------|-------------------|--------------------------|
|                                      | IELT                      | Perceived control over ejaculation | Satisfaction with sexual intercourse | Personal distress | Interpersonal difficulty |
| IELT                                 | 1.0                       | 0.59*                              | 0.54*                                | -0.53*            | -0.52*                   |
| Perceived control over ejaculation   | 0.59*                     | 1.0                                | 0.80*                                | -0.80*            | -0.75*                   |
| Satisfaction with sexual intercourse | 0.54*                     | 0.80*                              | 1.0                                  | -0.78*            | -0.81*                   |
| Personal distress                    | -0.53*                    | -0.80*                             | -0.78*                               | 1.0               | 0.88*                    |
| Interpersonal difficulty             | -0.52*                    | -0.75*                             | -0.81*                               | 0.88*             | 1.0                      |
| Partner measures in PEPOQ            |                           |                                    |                                      |                   |                          |
| Satisfaction with sexual intercourse | 0.53*                     | 0.75*                              | 0.75*                                | -0.72*            | -0.73*                   |
| Personal distress                    | -0.50*                    | -0.70*                             | -0.70*                               | 0.75*             | 0.71*                    |
| Interpersonal difficulty             | -0.52*                    | -0.65*                             | -0.67*                               | 0.68*             | 0.67*                    |

\*Correlation is significant at the 0.01 level (2- tailed)

mean IELT value of the PE group subjects from the literature (2). In the EU study conducted in five different countries from Europe revealed higher mean IELT value of the PE sufferers ( $198 \pm 211$  seconds vs.  $64.7 \pm 66.8$  seconds compared with Turkey. We concluded as a master actor mean IELT directly regulates sexual measures by the means of patient reported outcomes. Much shorter IELT dictates worse PRO measures related to ejaculation.

Correlation analyses of the PEPQ scores demonstrated significant positive correlations between "perceived control over ejaculation" and "satisfaction with sexual intercourse" domains of the PEPQ and with IELT. At the same time there were found negative correlations in "personal distress" and "interpersonal difficulty" scores of the both partners with IELT, "perceived control over ejaculation" and "satisfaction with sexual intercourse" domain scores. Above mentioned findings of the current study were similar to previously reported data in the literature (2,8). However, correlation coefficient value between "perceived control over ejaculation" domain scores of the male subjects and "satisfaction with sexual intercourse" domain scores of both couples was higher than previously reported one. Correlation coefficients between IELT and all domain scores of the PEPQ were also differed and higher than from the US and Europe studies reported in literature (2,8).

Major limitation of the study was the patient compliance. About twenty percent of the informed subjects with drawn from the study at 4th week visit. Authors also experienced suspicion about data confidence obtained from stop- watch recordings. Both of these limitations observed more often-in urban areas (Denizli, Manisa, Aydın) than metropolis (İzmir). Prediction of data confidence problem from stopwatch recordings provided addition of second visit protocol at 8th weeks to the study design at the beginning. However, statistical analyses of the data from first and second visits revealed acceptable test re-test reliability. This finding was similar with previously reported European Study (2). Thus, only data obtained from first visit (at 4th weeks) were used for statistical analyses to prevention from re test bias.

## Conclusion

Current preliminary study from our region revealed that questionnaire based approach with PEPQ may have considerable role in the diagnosis of PE sufferers. Our study findings supports conclusion that 'perceived control over ejaculation' is an important factor among PRO measures related to ejaculation while characterizing PE. Impact of shorter IELT

among couples manifests by itself as much more poor ratings in the PRO measures related to ejaculation. Geographic distribution of IELT and its impacts among couples should be concluded during PE investigations.

## Conflicts of Interest

There are no conflicts of interest.

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