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# AGE-RELATED DIFFERENCES IN THE IMPACT OF OVERACTIVE BLADDER ON QUALITY OF LIFE: BASELINE RESULTS FROM THE MATRIX STUDY

# Hypothesis / aims of study

The impact of overactive bladder (OAB) symptoms on quality of life (QOL) has been examined in numerous trials, yet variations across age groups have not been sufficiently explored. This interim baseline analysis of the  $\underline{\mathbf{M}}$ ulticenter  $\underline{\mathbf{A}}$ ssessment of  $\underline{\mathbf{Tr}}$ ansdermal Therapy  $\underline{\mathbf{i}}$ n Overactive Bladder with  $\underline{\mathbf{Ox}}$ ybutynin (MATRIX) study compares quality of life (QOL) in adults with OAB between 2 age groups, patients younger than 75y and those 75y or older.

## Study design, materials and methods

The MATRIX study is an open-label, prospective, randomized trial of adults diagnosed with OAB. Patients will be treated with transdermal oxybutynin (OXY-TDS) over 6 months and evaluated for safety and patient-reported outcomes. Data are collected using validated instruments: the King's Health Questionnaire (KHQ), an OAB-specific QOL instrument that is scored on a scale of 0 (best) to 100 (worst); the Work Productivity Questionnaire (WPQ), an abbreviated version of the Work Limitations Questionnaire, which is scored on a scale of 0 (best) to 100 (worst); and the Beck Depression Inventory II (BDI-II), an assessment of the intensity of depression in clinical and normal participants, scored on a scale of 0 (best) to 63 (worst). The study is designed to enroll a population large enough to detect differences in QOL measured between subgroups over time.

#### Results

Currently 2770 patients with OAB aged between 18 and 100 years are enrolled in the MATRIX study. Of these, 2103 (76%) are younger than 75y (mean age, 56.6y; 10% male), half of whom work either full- or part-time. Six hundred fifty-nine (24%) are 75y and older (mean age, 80.8y; 22% male). Approximately 5.5% are employed full- or part-time.

The majority of study participants, regardless of age, report their general health to be good or very good (<75y, 75%;  $\geq$ 75y, 64%) but almost all report that bladder problems affect their lives adversely (<75y, 98.2%;  $\geq$ 75y, 96.1%). KHQ summary scores are higher (indicating greater impairment) in patients younger than 75y (mean score, 38.6) than in those 75y and older (mean score, 36.7) (P=.006). Patients younger than 75y experience significantly greater impairment than those 75y and older within the specific domains of role limitations, personal relationships, and sleep/energy (P≤.0001). However, no significant differences were observed in the severity measures, physical/social limitations, or emotions domains.

Among patients younger than 75y who are employed (1029), individual component responses to questions in the WPQ difficulty domain indicate that these individuals find it difficult at least 50% of the time to work without taking breaks (47%), stick to a routine or schedule (34%), keep their minds on work (37%), concentrate on work (25%), handle the workload (21%), or feel that they are doing all they are capable of doing (22%). The WPQ could not be used to compare age groups because of the small number of working patients 75y and older (n=36).

The mean BDI-II depression summary score is higher (indicating greater impairment) among patients younger than 75y (11.2) than in those 75y and older (9.2) (*P*<.0001). The following components are significantly more common among patients younger than 75y: feelings of sadness, pessimism, past failure, loss of pleasure, guilt, punishment, self-dislike, self-criticism, suicidal thoughts, crying, agitation, loss of interest, worthlessness, irritability, and

changes in appetite. The only characteristic of depression that is significantly more common among patients 75y and older is loss of interest in sex.

## Interpretation of results

OAB has a greater impact on QOL in patients younger than 75y than in those 75y and older. This may be because patients in the younger group tend to be more active and are more likely to be working, and thus are more likely to be faced with greater physical and social demands. Further, their expectations may be greater than those who are older. Similar observations have been made for other conditions, such as congestive heart failure, in which it has been shown that patients younger than 65y experience greater impairment in QOL than those who are older. [1]

#### Concluding message

Overactive bladder presents with similar disease severity in patients both younger and older than 75y. Despite this, those who are younger than 75y experience greater negative impacts on their QOL than do those who are 75y and older. This needs to be taken into consideration when counseling and treating patients with OAB.

### References

1. The influence of age, gender, and race on the prevalence of depression in heart failure patients. *J Am Coll Cardiol.* 2004;43:1542-1549

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