

Profile Overactive Bladder in Community Health Service

Besut Daryanto*, Kurnia Penta Seputra, Paksi Satyagraha, I G Lanang Andi S and Hamdan Yuwafi Naim

Urology Department, Medical Faculty of Brawijaya University,
Saiful Anwar General Hospital, Malang, Indonesia.

*Correspondence:

Besut Daryanto, Department of Urology, Faculty of Medicine,
Universities Brawijaya-Saiful Anwar General Hospital, Malang,
Eas Java, Indonesia, Tel: +6282233678283, Fax: +62341333030.

Received: 08 March 2021; Accepted: 20 March 2021

Citation: Daryanto B, Seputra KP, Satyagraha P, et al. Profile Overactive Bladder in Community Health Service. Clin Rev Cases. 2021; 3(1): 1-3.

ABSTRACT

Introduction: Overactive bladder (OAB) can be defined as urgency with or without urge incontinence, generally accompanied by frequency and nocturia. Urgency, which is usually the main presenting symptom, is defined as a sudden, compelling desire to pass urine, which is difficult to defer. Frequency is generally defined as more than eight micturition's in a 24 hour period, and nocturia is generally defined as more than one micturition per night. OAB may be classified as "wet" (if it occurs with urge incontinence) or "dry" (without urge incontinence). The incidence of OAB in Europe and America were similar that almost 17% of general population had OAB. There are no data about profile OAB prevalence, especially age and gender to the possibility of overactive bladder incidence in Indonesia, especially in Malang.

Method: This was observational study. There are two kind of questioners that will be filled by the audiences, OABSS (Overactive Bladder Symptoms Score) dan Overactive Bladder Validated 8 Question Screener. The result of the screening will be noted and processed to find the profile of overactive bladder. The research was held in Community Health Service.

Result: There were total 83 people that underwent OAB screening in Dewi Shinta Elderly health care service, that most of them were female 71 (86%) and only 12 male (14%). The average age was 59.8 years old, the oldest was 86 years old and the youngest was 53 years old. Range of 51-69 years old was the most common number (70/84%) and followed by >70 years old (13/16%). In OABSS, there are total 75 people (90%) with mild OAB and 8 people (10%) with moderate OAB and there was no severe OAB. In Overactive Bladder Validated 8 Question Screener, there are 21 people (25.3%) that was OAB suspicious. There was no association of age and gender to the result of both scoring system, OABSS (Overactive Bladder Symptoms Score) dan Overactive Bladder Validated 8 Question Screener.

Conclusion: Most of patients were female with moderate OAB score. There was no association of age and gender to the possibility of overactive bladder incidence in Bunulrejo Sub-District.

Keywords

Overactive bladder, Age.

Introduction

Overactive bladder (OAB) can be defined as urgency with or without urge incontinence, generally accompanied by frequency and nocturia. Urgency, which is usually the main presenting

symptom, is defined as a sudden, compelling desire to pass urine, which is difficult to defer. Frequency is generally defined as more than eight micturition in a 24-hour period, and nocturia is generally defined as more than one micturition per night. OAB may be classified as "wet" (if it occurs with urge incontinence) or "dry" (without urge incontinence).

The incidence and prevalence of OAB, with or without urge incontinence tends to increase with the increase of age. The number of OAB in male and female were similar; event male has lower probability to have urge incontinence.

Some research in Europe and America shows the prevalence of OAB in both continent were similar that almost 17% of general population had OAB. There are no data about profile of OAB, the prevalence and the association of age and gender to the possibility of overactive bladder incidence in Indonesia, especially in Malang.

This research attempts to determine the profile of OAB in community health service.

Method

Retrospective study was conducted in 83 people in Bunulrejo Sub-district. There were two kind of questioners that will be filled by the audiences, OABSS (Overactive Bladder Symptoms Score) dan Overactive Bladder Validated 8 Question Screener. OABSS (Overactive Bladder Symptoms Score) is divided to three categories, mild OAB (score <5), moderate OAB (score 6-11), severe OAB (score >12). Overactive Bladder Validated 8 Question Screener is divided into 2 categories, if total score <7, means that the patient does not have OAB possibility and if total score >7, means the patient have OAB possibility. The inclusion criteria was all people that attended. After the data was collected, it will be processed to look for the association of age and gender to the possibility of OAB.

Result

| | | |
|-----------------------|-----------------------|------------|
| Total sample | 83 elderly | |
| Average of age | 59.8 years old | |
| Oldest age | 86 years old | |
| Youngest age | 53 years old | |
| Range of age | 51-69 years old | 70 (84%) |
| | >69 years old | 13 (16%) |
| Gender | Male | 12 (14%) |
| | Female | 71 (86%) |
| OABS Score | Mild OAB Symptoms | 75 (90%) |
| | Moderate OAB Symptoms | 8 (10%) |
| | Severe OAB Symptoms | 0 (0 %) |
| OAB V8 | OAB | 21 (25.3%) |
| | No | 62 (74.7%) |

Table 1: Overall data of OAB screening participants in Bunulrejo Sub-District.

| | OABSS | | |
|-------------------|-------|----------|--------|
| | Mild | Moderate | Severe |
| Gender | | | |
| Male | 10 | 2 | 0 |
| Female | 65 | 6 | 0 |
| Age | | | |
| 51 – 69 years old | 66 | 4 | 0 |
| >70 years old | 9 | 4 | 0 |

Table 2: The data of OABSS questionnaire.

Total sample were 83 elderly. The average was 59.8 years with the youngest, age was 51 years old and the oldest age was 86 years

old. The range of age 51-69 years old had the highest number with 70 elderly or 84% from the total elderly and 13 elderly (16%) with age > 70 years old. In OABSS, there were 75 elderly (90%) with mild OAB and 8 elderly (10%) with moderate OAB and no severe OAB were found. From Overactive Bladder Validated 8 Question Screener obtained only 21 elderly (25.3%) that suspected of having OAB.

Based on Overactive Bladder Symptoms Score, there were 10 male who had mild OAB symptoms and only 2 male had moderate OAB symptoms. There were 65 female who had mild OAB symptoms and only 6 female had moderate OAB symptoms. When it was viewed in terms of age, there were 66 elderly with 51-69 years old who had mild OAB symptoms and 4 elderly with 51 - 69 years old who had moderate OAB symptoms. At over 70 year's old age group, 9 elderly had mild OAB symptoms, 4 elderly had moderate OAB symptoms, and no one had severe OAB symptoms.

| | <i>Overactive Bladder Validated 8 Question Screener</i> | |
|-------------------|---|---------|
| | OAB | Not OAB |
| Gender | | |
| Male | 4 | 8 |
| Female | 21 | 50 |
| Age | | |
| 51 – 69 years old | 19 | 51 |
| >70 years old | 6 | 7 |

Table 3: The result of *Overactive Bladder Validated 8 Question Screener* Questionnaire.

Based on Overactive Bladder Validated 8 Question Screener, there were 4 male who have the possibility of suffer from OAB and 8 others people who did not have the possibility of suffer from OAB. There were 21 female who had the possibility of suffer from OAB and 50 others did not have the possibility of suffer from OAB. When it was viewed in terms of age, there were 19 people with 51-69 years old age range who had the possibility of suffer from OAB and 51 other people who did not have the possibility of suffer from OAB. At above 70 years old age group, there were 6 people who have the possibility of suffer from OAB and 7 others did not have the possibility of suffer from OAB.

There was no association of gender to the results of the OABSS assessment ($p = 0.712$) and the result of Overactive Bladder Validated 8 Question Screener ($p = 0.231$). When it was viewed from range of age, there was also no association to OABSS assessment ($p = 0.652$) and Overactive Bladder Validated 8 Question Screener ($p = 0.243$)

Discussion

There were 83 people involved in this study, the youngest age was 53 years, the oldest age was 86 years and the average age was 59.8 years. In other studies, the range of age used was far more varied. One study by Stewart et al, the range of age was 25-75 years, [1] 2 other studies that made by Cheung at al also used a fairly wide range of age 25->70 years [2]. The narrow range of age in this study was due to the small number of participants who took part in

this screening and the screening location was in elderly health care system whose participants were over 50 years of age.

There were 70 people with the range of age 51-69 years, obtained 66 (94%) had mild OAB symptoms and only 4 (6%) had moderate OAB symptoms. From 13 people with the range of age above 70 years old obtained 9 (69%) with mild OAB symptoms and only 4 (31%) with moderate OAB symptoms. Overactive Bladder Validated 8 Question Screener assessment system, in the range of age 51 - 69 years old, obtained 19 elderly with suspect OAB and 6 elderly suspect OAB in range of age above 70 years old. The findings showed that there is a tendency that the increasing of age, the more likely the incidence of OAB. Although in Chi Square test there was no significant association of age to the OABSS ($p=0.652$) and Overactive Bladder Validated 8 Question Screener assessment results ($p = 0.243$). This is not in accordance with several studies that stated that there is association between increasing of age with the increasing of OAB incidence, where in a study made by Cheung et al It was found in female group that the incidence of OAB was 49% in the range of age 40-49 years old to 79% in the age range of 70 - 79%. This is also in line with several previous studies, which stated that there was an increase between age and the incidence of OAB [2].

When it was viewed in terms of gender, in the OABSS scoring system, from the total of 12 male, 10 (83.3%) of male had mild OAB symptoms and only 2 (16.7%) of male had moderate OAB symptoms. From the total of 71 female, obtained 65 (91.5%) with mild OAB symptoms and only 6 (8.5%) with moderate OAB symptoms. Meanwhile, based on the Overactive Bladder Validated 8 Question Screener assessment system, from the total of 12 male, only 4 male who were suspected of OAB and 21 female who suspected of OAB. Based on the Chi Square test, there is no association of gender to OABSS results ($p = 0.712$) and Overactive Bladder Validated 8 Question Screener ($p = 0.231$). This is related to several studies, which state that there is no association of gender to OAB. The research that was made by Stewart et al found a similar prevalence between male (16%) and female (16.9%). The research also found that gender have correlation to the severity of

symptoms, as an example it was found that OAB without urgency incontinence was more common in male than female [1].

The weakness in this study is that there was lack of supporting data to look for the association of OAB to other factors, including BMI (Body Mass Index), smoking habits, race, diabetes, hypertension, chronic heart failure, COPD (Chronic Obstructive Pulmonary Disease) and hepatitis. One study was found that there was no association of the possibility of OAB to BMI ($p=0.61$), smoking ($p=0.87$), race ($p=0.32$), diabetes ($p=0.83$), hypertension ($p=0.1$), heart failure ($p=0.74$), COPD ($p=0.69$), but uniquely there is association between incidence of OAB and hepatitis ($p=0.03$, $OR=22$) [3].

Conclusion

Most of patients were female with moderate OAB score. There is no association of Age and Gender to the Possibility of Overactive Bladder incidence in Bunulrejo Sub-District.

References

1. Lloyd SM, Crawford G, Mc Skimming P, et al. The impact of age, gender and severity of overactive bladder wet on quality of life, productivity, treatment patterns and satisfaction. *Journal of Clinical Urology*. 2017; 10: 513-522.
2. Stewart W, Van Rooyen J, Cundiff G, et al. Prevalence and burden of overactive bladder in the United States. *World journal of urology*. 2013; 20: 327-336.
3. Barkin J. Overactive bladder. *Canadian Journal of Urology*. 2011; 18: 8.
4. Cheung WW, Blank W, Borawski D, et al. Prevalence of overactive bladder, its under-diagnosis, and risk factors in a male urologic veterans population. *International journal of medical sciences*. 2010; 7: 391.
5. Hakimi S, Aminian E, Alizadeh Charandabi SM, et al. Risk factors of overactive bladder syndrome and its relation to sexual function in menopausal women. *Urologia Journal*. 2018; 85: 10-14.