



JNK

JURNAL NERS DAN KEBIDANAN
(JOURNAL OF NERS AND MIDWIFERY)

<http://jnk.phb.ac.id/index.php/jnk>



Literature Review: Quality of Life in Patients with Overactive Bladder



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Article Information

History Article:

Received, 09/10/2021

Accepted, 03/12/2021

Published, 15/04/2022

Keywords:

incontinence,
overactive bladder,
quality of life

Abstract

Overactive Bladder, hereinafter referred to as OAB, is a complaint of urgency accompanied by urgency incontinence or without urgency incontinence, which is usually followed by an increase in urinary frequency during the day and nocturia, without infection or other pathology of the bladder. OAB can affect the quality of life of sufferers. This study analyzes the relationship between OAB and quality of life based on databases such as Science Direct, Elsevier, Willey Library, Sage Journal, and Google Scholar, 2010-2020. The study results show that the prevalence of OAB in men and women increases with age and women are at greater risk major have OAB. The incidence of OAB is most experienced at the age of > 60 years. Based on 10 journals, 6 journals stated that there was a relationship between OAB and quality of life. The conclusion of this study is that OAB can reduce the quality of life in men and women

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DOI: [10.26699/jnk.v9i1.ART.p127-134](https://doi.org/10.26699/jnk.v9i1.ART.p127-134)

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P-ISSN : 2355-052X

E-ISSN : 2548-3811

INTRODUCTION

OAB according to The International Continence Society (ICS) is the inability to hold urine immediately after the urge to urinate (urinary urgency), with or without bedwetting after the urge to urinate (incontinence), usually accompanied by increased frequency of urination. during the day (day time) or at night (nocturia), with evidence of no infection or other underlying pathological abnormalities. The prevalence of OAB increases with age, and in older patients, cognitive deficits, and decreased mobility are more likely to cause urinary incontinence (Ismy, 2017). With age, changes in the urinary system result in decreased bladder capacity, irregular and uncontrollable bladder muscle contractions, the bladder is more sensitive to urinary stimulation, causing increased frequency of urination and difficulty holding urine out, this condition is called urination overactive bladder (Tamtomo, 2016).

Various studies conducted in Europe and America show that the prevalence of OAB in both continents is almost the same, namely approximately 17% of the general population suffers from OAB. Research conducted by the National Overactive Bladder Evaluation (NOBLE) stated that 37% of OAB patients complained of urinary incontinence, also known as wet OAB, and 63% were not accompanied by urinary incontinence or dry OAB. A study conducted in Indonesia showed 4.1% and 1.8% of people from children to the elderly experienced wet OAB and dry OAB. A survey conducted by the Department of Internal Medicine at Ciptomangunkusumo Hospital to 208 geriatric populations in Jakarta found the incidence of wet OAB was 32.3% (Pande, M.W & Harrina, E, 2015). Based on the high incidence of OAB, patients must receive appropriate management to reduce the magnitude of the prevalence which can adversely affect the quality of life.

Changes in the urinary system occur with age due to weakness of the muscles that support the bladder, when the bladder is full, the nervous system sends signals of the urge to urinate and tells that it is time to urinate, but OAB sufferers have problems with storage function. bladder. When the bladder contains a small amount of urine, the bladder muscle will suddenly contract and increase pressure in the bladder, resulting in a sudden and frequent urge to urinate, and a frequent urge to urinate at night (Hongkong, 2019). OAB has an impact on the physiological and psychological

health of the sufferer, and this greatly damages the quality of life of the sufferer. Patients feel the urge to urinate urgently and urine output against the will, which causes sufferers to experience psychological pressure. Events and negative feelings experienced by people with OAB cause a decrease in quality of life.

The severity of OAB has an impact on a person's quality of life, the procedure that can be done to help OAB patients improve their quality of life is to consult doctors and psychologists to increase self-confidence. to improve the quality of life the first is to break down the psychological barrier and seek medical help. The second important thing is to develop good habits, for example, drinking enough water, avoiding drinks that can stimulate urine output, exercising the pelvic floor muscles regularly to maintain the ability to control urine output, maintaining body weight (Hongkong, 2019). Based on the above background, the researcher is interested in examining the relationship between OAB and quality of life.

METHODS

Data Sources.

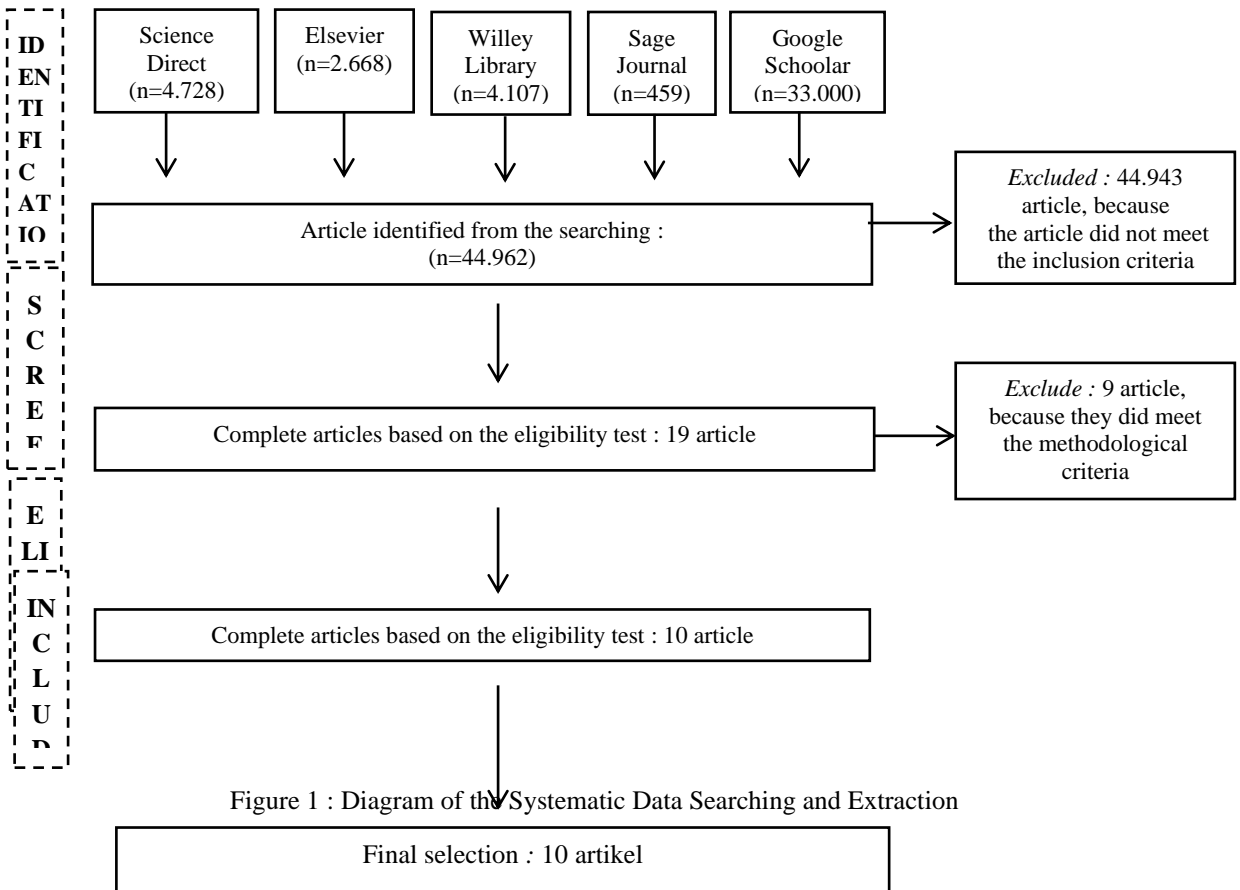
Articles were obtained through various online databases of international journals such as Science Direct, Elsevier, Willey Library, Sage Journal, and Google Scholar. The data search was carried out by identifying the relevance of the journal using the keywords Incontinence, Overactive Bladder, and Quality of Life. Research inclusion criteria in the form of journals published in 2010-2020; has been published with an open-access journal system; journal manuscripts consist of abstract and full text; English language journal; Scopus indexed journal with cross-sectional design; research respondents in the journal are men and women with age > 18 years. Respondents in the journals taken as samples were measured the degree of OAB to see the prevalence of the occurrence of Overactive Bladder on quality of life. No specific intervention was given, participants were only asked to fill out the available questions (questionnaires) to assess Overactive Bladder and quality of life.

Data Selection and Analysis.

In the data extraction search resulting on Science Direct obtained 4,728 data, Elsevier obtained 2,668 data, Willey Library obtained 4,107 data, Sage Journal 459 data and Google Scholar

obtained 33,000 data. The total data obtained are 44,962 data. The data is identified the possibility of duplication and a review of the abstract is carried out whether it is by the research criteria. After identifying the data, 19 appropriate data were

obtained, after that Eligibility was carried out, 10 articles that met the criteria were obtained. Researchers conducted in-depth identification of articles and articles that could be used (included) totaling 10 articles.



RESULT

The analysis and selection data based on the criteria inclusion and methodological criteria result in 10 research articles as data for the literature review. All the articles used were published during 2010-2015, more precisely: one was published in 2010, three in 2011, two in 2012, one in 2013, two in 2014, and one in 2015. They were mostly published in international journals indexed on reputable databases such as Scopus, PubMed and Google Scholar. Nine of the articles employed quantitative methods with a cross-sectional design survey (n=7), population study (n=2), while one article used retrospective study.

Demographic Characteristics

The demographic characteristics of the respondents in each study included data on gender, age, Questionnaire and Conclusion of

research results in each journal (Table 1). This study categorizes respondents based on gender (male or female), two articles not including this, while one article responds to only female and one to only male. Based on the age of the respondents over 18 years old. The questionnaires used to measure OAB were OAB-q, OAB-V8, IPSS, OABSS and then the quality of life was measured by SF, SF-12, PPBC, HADS, modified mWLO, QoL, EQ-5D, Developed HRQoL, N-QoL, I-QoL, WPAI, and KHQ.

It has been explained in the journal that OAB can be experienced by anyone, male or female, mostly due to age, the youngest respondent who experienced OAB was 47 years. The prevalence of OAB in women is higher than that in men. OAB can occur with or without symptoms, the usual symptoms are nocturia and urinary incontinence.

The quality of life of patients with OAB is poor compared to those who do not experience OAB, OAB affects the quality of life negatively, in general the quality of life of OAB respondents

without symptoms is better, OAB respondents without symptoms are better than OAB respondents with symptoms.

Table 1: Demographic Characteristics and Quality of Life Patient with Overactive Bladder

Author	Respondents	Age	Questionnaire	Result
Agulló, E. M., Cerdá, J. R., Pérez, L. G., Rebollo, P., Pérez, M., Chaves, J., & EPICC Collaborative Study Group. (2010).	893 Res	>50	OAB-q, SF, and SF-12	<ol style="list-style-type: none"> 1. Patients with UI and OAB symptoms had worse scores 2. Quality of life of male respondents aged >65 is worse than female respondents
Coyne, K. S., Sexton, C. C., Kopp, Z. S., Ebel-Bitoun, C., Milsom, I., & Chapple, C. (2011).	5874 Res	>40	PPBC, OAB-q, SF-12, HADS, and modified mWLO	<ol style="list-style-type: none"> 1. The prevalence of OAB in men is 25.5%, in women 56.2% 2. There is OAB without symptoms, OAB with bother and OAB without bother 3. From the analysis of the AOB questionnaire data it is significant to the quality of life
Lee, K. S., Choo, M. S., Seo, J. T., Oh, S. J., Kim, H. G., Ng, K., ... & Kim, J. C. (2015).	625 Res	>18	OAB-q, I-QoL, and EQ-5D	<ol style="list-style-type: none"> 1. All respondents experienced OAB 2. 68% female respondents 3. The severity of effect is a major contributor to quality of life
Milsom, I., Kaplan, S. A., Coyne, K. S., Sexton, C. C., & Kopp, Z. S. (2012).	12.374 Res	>40	Developed HRQoL, OAB-q SF, and HADS	<ol style="list-style-type: none"> 1. Symptoms of OAB are very disturbing 2. 68% female respondents 3. OAB affects the quality of life negatively, in general the quality of life of OAB respondents without symptoms is better than OAB respondents with symptoms
Sexton, C. C., Coyne, K. S., Thompson, C., Bavendam, T., Chen, C. I., & Markland, A. (2011).	3.488 Res	>40	PPBC, HADS, and OAB-	<ol style="list-style-type: none"> 1. OAB occurs in 40.4% male respondents and 46.9% female respondents 2. 61% female respondents aged >65 years 3. OAB is significantly associated with quality of life
Sut, H. K., Kaplan, P. B., Sut, N., & Tekbas,	280 Res (Female)	30-65	OAB-V8, OAB-q, and EQ-5D	<ol style="list-style-type: none"> 1. OAB incident 38.9% on average occurs at the age

Author	Respondents	Age	Questionnaire	Result
S. (2012).				of 47 years 2. OAB incident significantly occurs in postmenopausal women 3. Quality of life of women with OAB is worse than women who do not have OAB
Takao, T., Tsujimura, A., Kiuchi, H., Takezawa, K., Okuda, H., Yamamoto, K., ... & Nonomura, N. (2013).	259 Res (Male)	45-88	IPSS, OABSS, N-QoL, and BII	1. The average male respondent OAB occurs at the age of 68 years 2. Quality of life of men with OAB with UI is lower than OAB respondents without UI
Tang, D. H., Colayco, D. C., Khalaf, K. M., Piercy, J., Patel, V., Globe, D., & Ginsberg, D. (2014).	1.607 Res	>18	EQ-5D, I-QoL, OAB-q, and WPAI	1. The average number of women who experience OAB at the age of 60.7 is 77% 2. 71% of women who experience OAB with symptoms of UI 3. OAB with UI is significantly related to the quality of life
Wang, Y., Xu, K., Hu, H., Zhang, X., Wang, X., Na, Y., & Kang, X. (2011).	14.844 Res	>18	OABSS and KHQ	1. The most common symptom of OAB is nocturia. In men 71.5%, 91.5% are respondents who have OAB with nocturia 2. Quality of life of patients with OAB is lower
Yamanishi, T., Fuse, M., Yamaguchi, C., Uchiyama, T., Kamai, T., Kurokawa, S., & Morita, T. (2014).	2.494 Res	>40	N-QOL, and OABSS	1. OAB incident 25.1% 2. The average respondent who has OAB is 63.2 years 3. OAB has a significant effect on the quality of life

*Res = Respondents

DISCUSSION

Incident of Overactive Bladder

The aging process goes hand in hand with the loss of the ability of tissues to maintain normal structure and function, the older the age, the greater the decline in anatomy and organ function. Anatomical changes due to the aging process occur in all organs including the urinary system organs, especially the bladder where its

capacity decreases, causing residual urine after urination and increased irregular bladder muscle contractions, causing frequent urination and difficulty holding urination (Tamtomo, 2016). The older a woman is, the more likely she is to suffer from urinary incontinence. Women who have had multiple vaginal births, are obese, or have gone through menopause have a higher risk of stress-induced urinary incontinence. The cause

of urinary incontinence due to stress in women is that after menopause, women produce less estrogen and the soft tissue in the mucous lining of the urinary tract becomes less strong so that the ability to control the urinary tract weakens (Hongkong, 2019). This is also evidenced by research conducted (Yuliang et al., 2011) that multiple parity and vaginal delivery are risk factors for the occurrence of Overactive Bladder (OAB) in women. Postmenopausal women experience thinning of the mucosa accompanied by a decrease in bladder capacity so that they are more vulnerable and sensitive to urine stimulation so that it can cause uncontrolled contractions and this condition is referred to as overactive bladder (Tamtomo, 2016). Based on research (Sut et al., 2012) significantly OAB is also caused by systemic disease so that menopause is not an independent risk factor for OAB.

Overactive Bladder is a symptom complex that includes urological emergencies with or without incontinence, frequency, nocturia. A common symptom of OAB is incontinence but it also does not rule out the possibility of nocturia (Yuliang et al., 2011). The International Continence Society describes Overactive Bladder is a syndrome with no definite cause, with local abnormalities found during diagnostic evaluation (Ismy, 2017), (Derek, H et al., 2014) states that OAB occurs due to excessive muscle activity. bladder detrusor. Overactive bladder (OAB) is defined as the presence or absence of urinary urgency, often associated with urinary frequency and nocturia (E Martinez et al., 2010).

Based on the results of the literature study, the incidence of Overactive Bladder (OAB) increases with age and the incidence is most experienced at the age of >60 years and Overactive Bladder (OAB) is at greater risk in women. Women who have been pregnant and have given birth experience increased pressure in the abdomen so that it presses on the bladder which results in the inability to control the urge to urinate, besides women who have given birth several times will experience pelvic floor muscle weakness so that the ability to control the urge to urinate very weakly, this makes women more prone to experiencing Overactive Bladder (OAB).

Quality of Life in Patients with Overactive Bladder

The Overactive Bladder (OAB) can cause a significant negative impact on physiological and

psychological health so that it can reduce the patient's quality of life (Hongkong, 2019). Although the morbidity of patients with Overactive Bladder (OAB) is not high, their quality of life is very low compared to patients with other diseases (Ismy, 2017). Overactive bladder (OAB) has a negative impact on quality of life, this occurrence is often associated with additional medical comorbidities and has a huge economic impact (Ellsworth & Pamela, 2010). The impact of OAB is evident across generic and condition-specific domains of health-related quality of life (Coyne, 2011).

According to the World Health Organization (WHO) quality of life is an individual's perception of life in terms of the cultural context and value system the individual resides in and is related to living standards, expectations, pleasures, and concerns. It is a complex concept of levels that includes a person's physical health, psychological status, level of freedom, social relationships, and the individual's relationship to environmental characteristics. According to Chang and Weissman (2008) quality of life has meaning, namely the degree to which a person enjoys the possibilities in his life. This enjoyment has two components, namely experience, satisfaction, ownership, or achievement of several characteristics and these possibilities are the result of each person's opportunities and limitations in life and reflect the interaction of personal factors with the environment (Susanto, 2013). According to Adam (2006) quality of life is an analytical concept of an individual's ability to get a normal life related to individual perceptions of goals, expectations, standards, and specific attention to life experienced by being influenced by values and culture in the environment the individual is in (Nursalam, 2013). The quality of life of patients who have OAB makes it worse for the wet/wetting condition, this is the worst aspect of this problem because this condition causes OAB patients to limit their daily life due to feelings of shame, anxiety, fear, irritability, frustration, and depression heavy (Ismy, 2017). Quality of life is decreasing due to a person's low willingness to seek treatment (Sexton et al., 2011).

OAB-q is one of the measuring tools used to measure the severity of symptoms and also the quality of life of patients with Overactive Bladder (OAB). The score is transformed from a 0-100 scale, a higher score indicates a better quality of life so that it is inversely related (Groenendijk et

al., 2019). Based on literature studies, it turns out that patients with Overactive Bladder (OAB) experience a decrease in quality of life. The higher the score, the better the quality of life and vice versa with a value range of 0-100. In this literature study, it turned out that most researchers used the OAB-q SF HRQoL questionnaire and all questionnaires used a range of 0-100 with the same interpretation even though the questionnaires were different. Patients with Overactive Bladder (OAB) have a worse quality of life than non-OAB sufferers. Patients with Overactive Bladder (OAB) experience a decrease in quality of life because they often experience an impaired perception of themselves because OAB symptoms include urgency, incontinence, and nocturia that burden their lives. Quality of life in this study is used to assess a person's emotions, assess a person's ability to meet the demands of normal life activities, and assess the impact of illness that has the potential to reduce the quality of life.

How to maintain the quality of life to remain active and productive, a person needs ease of activity, an understanding of the environment, and adequate health services (Sadly, 2010). Guidelines for treating OAB in the elderly are to pay attention to comorbidities and to pay attention to the elderly as vulnerable groups who need help (Sexton et al., 2011). The quality of life of a person with OAB increases if the patient seeks medical care (Sut et al., 2012), while patients who do not seek treatment are reported to have a low quality of life (Lloyd et al., 2017).

CONCLUSION

The incidence of Overactive Bladder (OAB) in men and women increases with age and is at greater risk for women. OAB incidence is related to the quality of life. Improving the quality of life in patients with OAB can be improved through consultation with a doctor to relieve the symptoms that arise.

SUGGESTIONS

Appropriate management can relieve OAB symptoms so that it can improve the quality of life elderly. It's also important for nurses to know nursing interventions that can be given to patients suffering from OAB.

ACKNOWLEDGMENT

Thank to the research team for their cooperation during preparation of this journal, and thank to UPT-PPM STIKES RS Baptis Kediri for continuing to motivation to publish each research result.

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