

Bladder Health and Active Aging: Overcoming Stigma and Innovating Treatments as We Age





Executive Summary

Health and well-being as we age are central to ensuring maximum participation in daily life, including economic productivity and workforce engagement. With our global society now comprised of more people over 60 than under 15,¹ maintaining our functional ability (as defined by the World Health Organization as “the interaction between a person’s physical and mental capacities (intrinsic capacity) with their surrounding environment”)² becomes a priority, along with treating disease itself. Our vision, hearing, bone and muscle mass and skin health, for instance, have for too long been brushed off as automatically declining with aging, when in fact, a focus on a life course of healthy aging can help protect them.

Bladder health, too, has been underrecognized as having an impact on quality of life and therefore healthy and active aging. Overactive bladder (OAB) is a condition characterized by a sudden and uncontrollable urge to urinate, and it has increasing relevance to our aging society as it affects a growing number of people. Often perceived as an inevitable condition of aging, it has gone unnoticed, unrecognized, undertreated and/or marginalized as a health concern. However, its impact on healthy and active aging degrades quality of life as well as workplace engagement and therefore employee productivity. Even more concerning is that the most commonly prescribed treatment options for OAB can have adverse effects on cognition.

In this report, we explore the connection between aging and OAB and identify potential opportunities to address OAB and its related effects to ensure a healthier and more active aging.

Main takeaways include:

- 1 OAB prevalence is on the rise in line with 21st century longevity, substantially magnifying the scope and impact of the issue. Persistent misconceptions about OAB lead to a stigma that creates barriers to getting treatment and living well with the condition.
- 2 Current treatment methods include medications with serious side effects, including reduced cognitive function, and other therapies are not practical or safe for older people. As the prevalence of OAB increases with our aging population, new treatment options are needed.

- 3 The individual costs of OAB are high and growing, with significant impact on overall quality of life, particularly for seniors, which includes discomfort and changes to activities of daily life that can have serious health implications. In addition, the stress on mental and emotional health and related costs of OAB are themselves not understood and need to be addressed.

- 4 OAB places an economic burden on the workplace and the economy, contributing to significant care costs and triggering experienced professionals to alter or end their careers in order to cope with their condition.

Businesses and public institutions should collaborate to promote advancements in OAB that can deliver innovations to benefit individuals – improving quality of life, workforce opportunity, and mobility as people age. In turn, this innovation can spur economic growth benefitting the broader economy and society as a whole. Innovations in available treatment options with fewer and/or less serious side effects, particularly on cognition, could have considerable positive impact, including improvement in compliance with the treatment itself.

This paper focuses specifically on how effective diagnosis and treatment of OAB can support active aging in the context of our growing aging population, recognizing that there are a host of key policies, including employment and social policy, retirement plans, fiscal policy, health care, public service delivery amongst others, that are critical to the broader picture of active aging across the life course.

Misconceptions and Stigma Delay Diagnosis and Treatment

Researchers estimate that 29.8 million adults over age 40 in the United States have bothersome OAB symptoms,³ and current statistics likely underestimate the affected population due to underreporting.⁴ With the aging of society generally, OAB prevalence itself is growing and should become a higher priority on the public health agenda. While the prevalence of overactive bladder does increase with age, it is not a normal part of the aging process. Current stigma and a lack of understanding of the causes and possible treatment of OAB leave many people with the condition to suffer unnecessarily.

“Educating your family and friends about overactive bladder and your experiences with it may help you establish your own support network and reduce feelings of embarrassment. Once you start talking about it, you may be surprised to learn how common this condition really is.”

The Mayo Clinic: “Self-management of Overactive Bladder”

OAB is not a disease, but a condition characterized by a set of urinary symptoms. The most common symptom of OAB is a sudden and uncontrollable urge to urinate. In some instances, this may lead to urine leakage (incontinence), which is different from urine leakage caused by sneezing, laughing or other types of physical effort. People with OAB have a frequent need to use a restroom, often many times during the day and multiple times during the night.

In the population-based, racially and ethnically diverse random sample of the Boston Area Community Health (BACH) Survey,⁵ symptoms of abnormal urinary function were common among both men and women and increased substantially with age. Women who have gone through

menopause and men who have had prostate problems seem to be at greater risk for OAB.⁶ Also, people with neurological diseases, such as stroke and multiple sclerosis (MS), have a high risk of developing OAB.

Research has shown that the stigma of OAB is rooted in “social interruption, loss of control of the body, and speculation as to the nature of a non-specific ‘problem.’”⁷ The same study found men felt stigmatized for making frequent trips to the bathroom and “feared being seen as impotent,” while women feared having “an unclean body or compromised social identity.” The stigma of OAB can also serve as a barrier for seeking treatment as well: a survey of women with OAB found that a majority of respondents delayed raising their concerns with a healthcare provider for more than a year after the onset of symptoms.⁸ This unwillingness to seek treatment has been attributed to:

- The problem was not considered important enough to consult with a doctor (84%);
- Healthcare professionals never inquired about symptoms (71%); and
- The symptoms were considered a normal part of aging (69%).⁹

Millions of people, including a larger percentage of older people, with OAB have been living with their condition privately, unwilling to discuss their symptoms even with healthcare providers, in part because they are unaware that OAB is a common condition and not just a reality of aging that they are forced to accept. Without first identifying the problem, too many cases will go undiagnosed and too many older people will face compromised active aging and well-being.

OAB Negatively Impacts Quality of Life and Healthy Aging

OAB is not just an uncomfortable condition – it can be debilitating as it can cause disruption to daily activities that can lead to a significant decline in quality of life and have negative impacts on employment and income. OAB can lead to people confining themselves to their homes and forgoing opportunities for physical activity and social engagement in fear of being away from a bathroom. People with OAB report experiencing isolation and depression as a result of their condition, as well as lowered self-esteem, decreased sexuality, weight gain, urinary tract infections (UTIs), and a decline in exercise. Researchers have also found that lower urinary tract symptoms had a negative impact on quality of life across age, sex, and race/ethnic groups.¹⁰

Impacts on remaining healthy and active in later life

Physical inactivity accounts for more than 3 million deaths per year, largely from non-communicable diseases such as coronary heart disease, type 2 diabetes and cancer, which have higher prevalence in older populations.¹¹ People who are insufficiently active have a 20% to 30% increased risk of death compared to people who are sufficiently active, according to the World Health Organization.¹² An estimated 76% of people with OAB report that the symptoms interfered with or made it more difficult to complete daily activities, with an alarming number reporting decreased physical activity and increased weight because of an inability to exercise.¹³ An evaluation of a cross-sectional, population-representative survey found that both men and women with OAB were significantly less likely to report moderate and vigorous physical activity in their leisure time.¹⁴ Additionally, those with OAB were less likely to satisfy current national health recommendations on physical activity issued by the U.S. Department of Health and

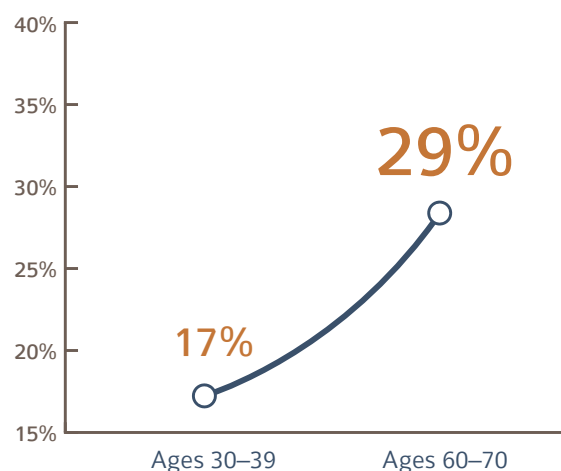
Human Services and the U.S. 2010 Healthy People Objectives.¹⁵ In a survey of U.S. women with symptoms of OAB:

- 39% reported that OAB interfered with daily activities (including 12% for whom their symptoms caused them to stay at home);
- 38% reported decreased physical activities; and
- 34% attributed weight gain because of an inability to exercise.¹⁶

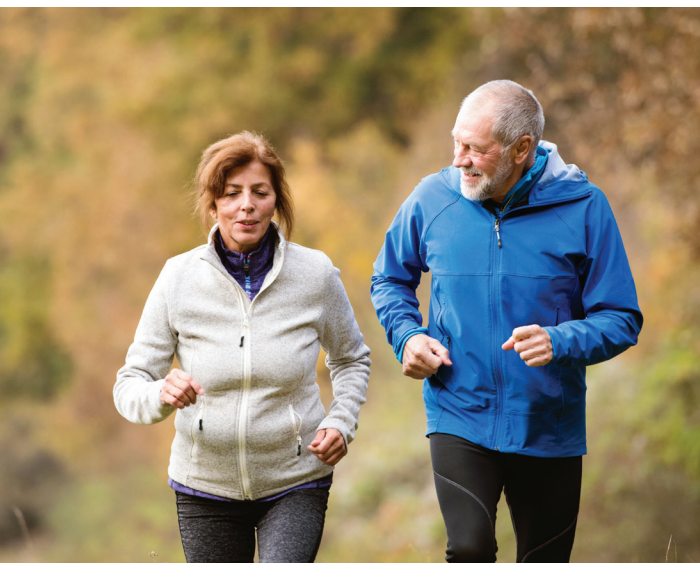
Physical inactivity may also account for up to 20% of the population-attributable risk of dementia, and it has been

Individuals who experience urine leakage when coughing, sneezing, or laughing.

A portion of these individuals also experience urge incontinence.



Source: www.depend.com/en-us/incontinence-help/bladder-leakage-basics/youre-not-alone-the-statistics-of-urinary-incontinence



“Without treatment, OAB symptoms are uncomfortable. It can be hard to get through the day without many visits to the bathroom. OAB can impact relationships. You may not want to do things you enjoy because you worry about finding a bathroom in time. It can disrupt your sleep and sex life. It can leave you tired and short-tempered, or leaks can lead to a rash or infections. The whole experience can make anyone feel hopeless and very unhappy.”

Urology Care Foundation

estimated that 10 million new cases globally might be avoided each year if older adults met recommendations for physical activity.¹⁷

Further, OAB with incontinence can lead to skin infections due to extended contact with urine and increasing discomfort for patients. Researchers evaluating Medicaid data found more than a fifth of people with OAB are also treated annually for UTIs, and 8% were treated for skin infections.¹⁸ Decreased physical activity and hygienic challenges make OAB a catalyst for other, more serious, health issues that reduce healthy years of life or even hasten death.

Many people with OAB experience sleep disturbances as a result of needing to use the bathroom repeatedly at night. Attempting to manage these effects with adaptive measures but without the supervision of a medical professional can lead to other issues; for example, severe restriction of fluid intake, as someone with poor sleep might do to reduce the need to use the bathroom at night, may lead to more serious consequences such as dehydration or a greater likelihood of UTIs. Dehydration also has an impact on cognitive performance, risk of delirium, gastrointestinal function, kidney function, heart function, headaches, skin, and chronic diseases.

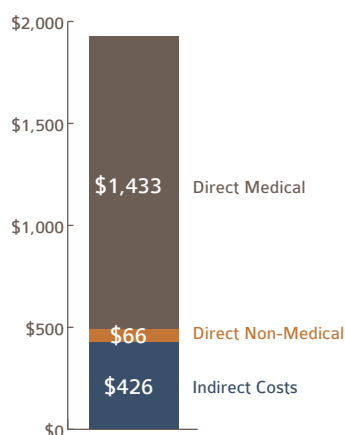
Impacts on well-being and emotional health

Roughly one-quarter of people with OAB are uncomfortable being around people and are concerned about accidents when taking part in activities outside the home.¹⁹ Nearly one-third of people with OAB report feelings of depression and high levels of stress.²⁰ Stress has increasingly been found to play a damaging role in health, weakening the immune system and increasing the risk of health issues such as adrenal dysfunction, headaches and irritable bowel syndrome.²¹ Data from the Mayo Clinic revealed that not taking a break from everyday stressors, as would be the case for someone living with OAB, can elevate the amount of the stress hormone cortisol in the body, which actually speeds up the aging process.²²

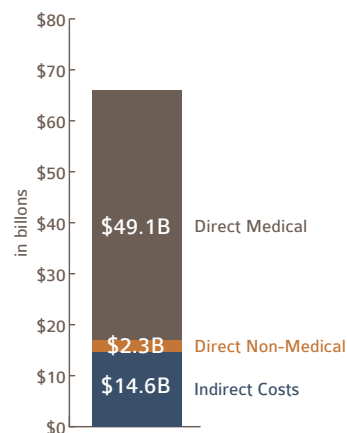
Self-isolation, a common response to living with OAB, only serves to further exacerbate the impacts of OAB on overall well-being. Researchers have found that loneliness is a predictor of functional decline and death,²³ and older adults who describe themselves as lonely have been shown to be twice as likely to develop dementia.²⁴ Experiencing loneliness as a result of OAB, even where opportunities for social interaction exist, is a significant problem for older people.

More and Better Treatments Options Are Needed to Improve Health, Productivity and Overall Well-being

The average, annual costs for a person with OAB



The estimated, average annual costs for everyone living with OAB in the US



The current treatment options for OAB are often not practical for older adults, or worse, have significant negative effects that cause people to abandon treatment. The generic, less expensive medications available for OAB have demonstrated serious adverse cognitive side effects, while the behavioral therapies can be difficult for an elderly patient to complete. If these initial efforts are not effective in curbing symptoms, paralyzing injections, catheterization, or surgery are possible treatment options, but all carry significant health risks and additional individual burden in costs and recovery needs. The costs, side effects, and effectiveness of current treatment options are all cited by people with OAB to be barriers to continuing them, and many choose not to seek alternatives or stop treating their condition.²⁵

The need for better, more effective interventions for OAB is overwhelming, given the multi-faceted issues surrounding OAB. Not only is OAB costly and has negative economic impacts, it also prevents millions of older people from living healthy and active lives. The availability of better treatment options will also lead to improved medication compliance, helping to ameliorate symptoms and keep individuals active, engaged and contributing to society and the economy.

Treatment options and cognitive function

Some medications used to treat OAB work by relaxing the bladder muscle to help stop it from causing symptoms by contracting excessively. A group of drugs called anticholinergics can combat bladder muscle contractions by blocking the nerve signals related to contractions. However, the side effects of these treatments are serious and may in fact be a barrier to treatment for many.²⁶ In addition, several studies have shown that a number of popularly prescribed oral anticholinergic medications have a significant negative impact on cognitive function (this term encompasses reasoning, memory, attention, and language and leads to the attainment of information and knowledge) in otherwise healthy adults above the age of 65.

The long-term effects of these anticholinergic medications are even more concerning. A recent study followed participants for nearly a decade and found a dose-response relationship between the cumulative use of anticholinergic medications and dementia. Multiple studies have also linked the long-term use of anticholinergics with an increased risk of dementia and even damage to the central nervous system. In a two-year longitudinal study looking at patients enrolled in



the UK Medical Research Council Cognitive Function and Ageing Study (CFAS) between 1991 and 1993, researchers found that there was not only an association between the cumulative use of anticholinergics and cognitive impairment, but also with an increased rate of mortality and hospitalizations.²⁷ This growing body of evidence has led to an increasing consensus in the scientific community, but those findings have not yet filtered through to health care providers or the regulatory community examining the safety and effectiveness of current treatments for OAB.

Furthermore, the current standard pharmacological intervention, anticholinergic medications, is only modestly superior to a placebo, making them a treatment with significant risk, especially for older people using them long-term, with very little benefit.²⁸

Abandoning pharmaceutical interventions

In the Boston Area Community Health (BACH) Survey, participants reported that the use of prescription medication for urinary symptoms was low, with more than 90% of participants reporting taking nothing for their condition.²⁹ Data in the U.S. suggests that 92% of patients with OAB failed initial treatment with anticholinergic medications within two years, and 82% stopped taking the medication within the first six months. Only 5.8% switched therapy to a different agent.³⁰ In the five-year follow-up BACH study,³¹ the primary reasons cited for discontinuing OAB medications were:

- Unmet treatment expectations (46%);
- Side effects (21%); and
- Cost (17%).



“Most treatment involves a combination of medicine, behavioral modification, pelvic muscle exercises, collection devices, and absorbent products... [But] only 1 out of every 12 people affected seeks help.”

National Association for Continence

People with OAB are largely choosing to live without treating their condition. Combined with the fact that current treatments that are being used carry serious side effects and have proven limited effectiveness, the future viability of these OAB treatments is not promising.

The OAB care pathway

In order to help “manage” symptoms, health care professionals first recommend eliminating bladder-irritating foods, keeping urinary diaries, voiding techniques and “bladder retraining” which may help to clarify or ease the severity for symptoms for people with OAB. This approach, however, may require a significant investment of time and energy that may not be practical or help alleviate the stigma, costs or discomfort of the condition. If these techniques fail to alleviate

symptoms, guidelines for health care professionals (like the 2015 American Geriatrics Society (AGS) Beers Criteria) recommend starting a course of medication, but fail to prioritize a non-anticholinergic option that would yield better results, particularly for people over 65 concerned about cognitive side effects of treatment. Regulatory indications for anticholinergic also focus on the short-term effects and have not yet incorporated evidence of long-term effects of current medications. However, given the enormous costs—individual, economic, and societal—of OAB, particularly to older people, the need for new approaches to diagnosis and treatment is undeniable.

OAB Increases Health Costs and Places Burdens on Health Systems and Workplaces

As our global population ages, the economic burden caused by OAB will only increase with the aging population. This includes healthcare costs for treatments that are related to or exacerbated by the development of OAB, such as an increase in doctor visits, an increase in nursing home costs and care needs, as well as personal costs, such as adult diapers or other incontinence support. However, the costs associated with OAB are not limited to people in care settings, and the economic impacts related to the workplace are significant. Research reports an earlier age of retirement among people with OAB, limiting career opportunities and removing experienced talent from the workforce.

Impact on the economy

A recent study analyzing economic costs associated with OAB in the United States found that the average annual per capita costs of OAB were \$1,925. Applying these costs to the estimated 34 million people in the United States living with OAB results in total national costs of \$65.9 billion.³² The study modeled projections and found that total national costs could be expected to rise to \$82.6 billion in 2020. The cost burdens are also disproportionate across gender lines. Researchers found that direct medical costs for OAB (including diagnostic, treatment, and consequence costs) are almost five times as high for women as men and twice as high for those 65 years or older compared to younger individuals.³³ Older people who may be on a fixed income are responsible for bearing these costs, as Medicare does not cover incontinence supplies or adult diapers, and Medicaid coverage of supplies vary by state. In Michigan, for example, supplies are covered if a doctor has written a prescription and so are accessible, but only to those who have consulted a health care provider and received a diagnosis – only a segment of the affected

population.³⁴ A significant portion of the costs related to living with OAB have been borne by older people, particularly older women, in the absence of other support or treatment options.

Impact in the workplace

OAB among working adults presents substantial challenges, including hindering participation in the workplace, limiting job performance, and an increased need for disability claims. People with OAB in the workforce have reported their condition as a reason for an increase in missed workdays and even early retirement. A study analyzing the economic impact of OAB on six countries found that the total number of excess hours lost from absenteeism due to OAB was calculated to be 52 million hours per year for all six countries combined (among individuals over 65 years old.)³⁵

In the same study, over 21% of the OAB population fear interrupting meetings due to their bladder symptoms. In addition, nearly 7% of respondents reported that their OAB symptoms factored into the location of their workplace as well as their working hours. Critically, 5% of those surveyed cited OAB as the cause for their voluntary termination or their early retirement, while 3% had to change jobs or were fired due to OAB. Applying these findings to the U.S. population would indicate over 2.6 million people had left the workforce because of their OAB symptoms. The loss of skilled and experienced members of the workforce due to OAB is economically damaging and the primary impact of these findings is on older people.

In a separate study comparing disability claims in individuals with OAB and controls without, employees with OAB were found to have two to three more work loss days

Percentage of the OAB population who...



21%+

...fear interrupting meetings due to their bladder symptoms.



7%

...said that their OAB symptoms factored into the location of their workplace as well as their working hours.



5%

...cited OAB as the cause for their voluntary termination or their early retirement.



3%

...had to change jobs or were fired due to OAB.

“Older people around the world are critical participants in the global economy, and a condition like OAB hinders them and presents a serious problem. We must recognize and treat OAB effectively to reduce associated costs and keep people in the workforce and participating in society.”

Michael W. Hodin, PhD, Global Coalition on Aging

per year due to medically-related absenteeism and disability than those without OAB.³⁶ Finally, unemployment was also found by researchers to be higher in the population with OAB (44% of men and 54% of women surveyed between ages 18 and 70).³⁷ As the working population ages

and continues to fill a vital role in the health of the global economy, the impacts of OAB are alarming, and the trends toward reduced productivity or exiting the workforce altogether will continue to grow if the status quo of OAB treatment remains.

Conclusion

It is evident that with increased longevity comes an increased prevalence of OAB, and the negative individual, societal and economic impacts that accompany the condition. OAB is costly in terms of care and support, and economic productivity, but it also has a significant impact on quality of life for many. The stigma surrounding OAB, and the misconceptions about how and when it can be treated, have led many to suffer the physical and emotional effects of the condition. However, current treatments also include medications with serious side effects, including reduced cognitive function, and often people with OAB discontinue treatment. As the prevalence of OAB increases with our aging population, new treatment options are needed.

In particular, further research is urgently needed into the relationship between OAB and cognitive decline, including investigation into the impacts of decreased physical activity, depression and other associated issues of OAB on risk factors for the development of dementia. The threats to cognitive function that appear to be significant for both treated and untreated OAB necessitate a new approach to the condition. Innovations in treatments with fewer or less serious side effects could initiate a change in current views toward diagnosis and treatment, improving the lives of millions of people with the condition. The effective diagnosis and treatment of OAB can support active aging as part of a broad strategy to support the needs of the growing global older population.





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About the Global Coalition on Aging

The Global Coalition on Aging aims to reshape how global leaders approach and prepare for the 21st century's profound shift in population aging. GCOA uniquely brings together leading global corporations across industry sectors with common strategic interests in aging populations, a comprehensive and systemic understanding of aging, and an optimistic view of its impact. Through research, public policy analysis, advocacy and communication, GCOA shapes the dialogue and advances solutions to ensure aging is a path for nations' economic growth and winning business strategies.

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