



# Awareness Of Urinary Incontinence In Elderly Females In Alandi By Self Made Questionnaire

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## Abstract

### Background:

Urinary incontinence (UI) is defined as the involuntary loss of urine and is a significant public health concern worldwide. It affects 13.9% of males and 51.1% of females. Although commonly associated with elderly and parous women, UI is also reported among younger and nulliparous women. The condition negatively impacts quality of life, causing embarrassment, psychological distress, and social withdrawal. Risk factors include increasing age, parity, vaginal delivery, obesity, pelvic surgery, chronic cough, constipation, and chronic diseases such as diabetes mellitus and neurological disorders.

### OBJECTIVE

To find the awareness of urinary incontinence in elderly females in Alandi area using a self-made questionnaire.

### METHODS

A observational study was conducted on 373 participants aged 60 to 80 years in alandi . Data were collected using a structured questionnaire assessing awareness, symptoms of urinary leakage, impact on daily activities, and knowledge regarding physiotherapy management.

### Results:

The findings revealed that 71% of females were unaware of urinary incontinence, while only 28.7% had knowledge about it. Night-time urination more than once was reported by 44.7% of participants. Urine leakage during coughing or sneezing was experienced by 44.5%, and 31.3% reported leakage while bending or lifting objects. Leakage during walking or exercise was reported by 21.2%. Although 19.8% required frequent underwear changes and 18.2% reported work being affected, the majority reported minimal functional limitation. Awareness regarding physiotherapy was low: 74.3% were unaware of physiotherapy, 95.7% did not know it could be used for UI, and 97.9% were unaware that it could reduce symptoms. Additionally, 79.9% had never consulted a gynaecologist for the condition.

## Conclusion:

The study highlights low awareness and poor healthcare-seeking behaviour regarding urinary incontinence and its physiotherapy management. Community education and early intervention strategies are essential to improve knowledge, reduce stigma, and enhance quality of life among women.

## Keywords:

Urinary Incontinence; Women; Awareness; Quality of Life; Physiotherapy.

## INTRODUCTION

Urinary incontinence (UI) has been defined as the complaint of involuntary loss of urine and is a worldwide entity with a prevalence of 13.9% in males and 51.1% in females [1],

Urinary incontinence can affect people of all ages and genders, although it is more common among older adults and women who have given birth. However, epidemiological studies report that younger women who are nulliparous, also experience UI episodes, with the risk factors unknown.[1]

UI negatively affects the quality of life due to feelings of embarrassment, fear of Odor and distress leading women to distance themselves from social and recreational activities [1]

The pathophysiology of urinary incontinence results from various disturbances affecting the normal micturition cycle.. Assuming an intact lower urinary tract, urine flow occurs only when the intravesical pressure exceeds the Maximum urethral closure pressure is exceeded, or becomes zero or negative, leading to urinary leakage.. In general terms this may occur as a result of:[2]

A fall in urethral pressure associated with an increase in intravesical pressure as in normal voiding or in many cases of detrusor instability.[2]

An increase in intravesical pressure associated with an increase in urethral pressure, the latter being insufficient to maintain a positive closure pressure as in detrusor instability with associated detrusor sphincter dyssynergia, resulting from neurological lesions above the sacral plexus but below the pontine micturition centre [2]

An abnormally high increase in detrusor pressure during bladder filling a situation considered by some to be analogous to detrusor instability, but perhaps better considered as impaired bladder compliance. This may be seen in chronic inflammatory conditions such as tuberculosis or interstitial cystitis and also following pelvic irradiation.[2]

A sudden profound loss of urethral pressure alone, without any concomitant change in intravesical pressure as in urethral instability, a recognized but rare cause of incontinence [2]

The intravesical pressure rising to a greater extent than the intra-urethral pressure, either due to an intrinsic weakness of the urethral sphincter mechanism or due to a failure of pressure transmission as in genuine stress incontinence [2]

Urinary incontinence also occurs as a result of any changes or problems with transfer of signals to the bladder from the brain or due to problem with the sphincters detrusors response or as a result of combination of all the problems. The bladder muscles contract too much or not enough in case of any problem with the muscle or the nerves which control the function of the muscle. The sphincter muscle's function becomes poor in case of direct damage or in relation to the damage of the nervous system [3]

Potential risk factor for UI includes increasing age, parity, vaginal deliveries, obesity, surgery, constipation, and chronic respiratory problems such as cough.[4]

The inability to control urine is quite an unpleasant and distressing problems. although it does not lead to death it causes substantial morbidity, social seclusion and psychological stress resulting in impaired Qol [4]

It occurs more often as people get older; UI is not an inevitable consequence of aging. The common types of UI in older people are stress incontinence and urge incontinence. Chronic diseases that are associated with

UI include diabetes mellitus, Parkinson's disease, dementia, stroke, chronic obstructive pulmonary disease, and arthritis.[19]

Urgent incontinence is more common in nervous system disorders such as multiple sclerosis, and spinal and pelvic nerve damage [15]

Vaginal childbirth is known to have major impacts on the pelvic floor, weakening bladder neck support and compromising innervation. Caesarean delivery, particularly prelabour caesarean, is believed to offer substantial protection against such pelvic floor trauma; in contrast, assisted vaginal delivery, with vacuum or forceps, is believed to carry increased risks of trauma.[20]

#### Alandi Town Population Census 2011 – 2025

Alandi is a Municipal Council city in the Pune district of Maharashtra. The city is divided into 17 wards, and municipal elections are conducted every five years. According to the Census of India 2011, Alandi has a population of 28,645, including 16,142 males and 12,503 females.

Current estimated population of Alandi Municipal Council in 2023 is approximately 39,000. The schedule census of 2021 for Alandi city is postponed due to covid. We believe new population census for Alandi city will be conducted in 2023 and same will be updated once its done. The current data for Alandi town are estimates, while the 2011 figures are based on official and accurate records.

### SUBJECT FILLING THE QUESTIONNAIRE



FIG NO: 1



**FIG NO: 2**

### **Methodology**

Type Of Study – Observational Study

Sample population - Between the age group of 60 to 80 years female in alandi.

Sample Size: 373

<b>INCLUSION CRITERIA</b>	<b>EXCLUSION CRITERIA</b>
<ul style="list-style-type: none"> <li>● Age group 18 -30 years</li> </ul>	<ul style="list-style-type: none"> <li>● Subjects with recent condition like –</li> </ul>
<ul style="list-style-type: none"> <li>● females</li> </ul>	<ul style="list-style-type: none"> <li>. Uncooperative</li> </ul>

### **Procedure**

Permission from ethical committee taken

Consent from participants taken

Participants have selected as per inclusion criteria

Survey has performed by using self-made questionnaire

### **OUTCOME MEASURE**

Self-made Questionnaire of urinary incontinence

**DATA ANALYSIS AND INTERPRETATION**

Q1	Δείκτης αξιολόγησης της ποιότητας των υπηρεσιών που παρέχονται από τον οργανισμό?	No.of. Response	(%)
	ού	107	28.7%
	±ρσ	266	71.3%

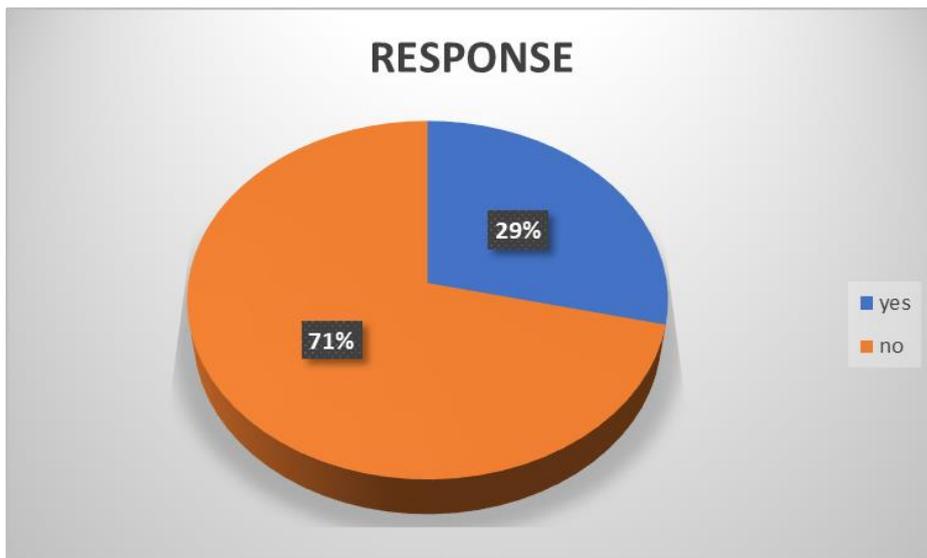


chart no :1

Q.2	Ποσοστό των εργαζομένων που θεωρούν ότι η εταιρεία τους προσφέρει καλές υπηρεσίες?	No.of. Response	(%)
	ού	167	44.7%
	±ρσ	206	55.2%

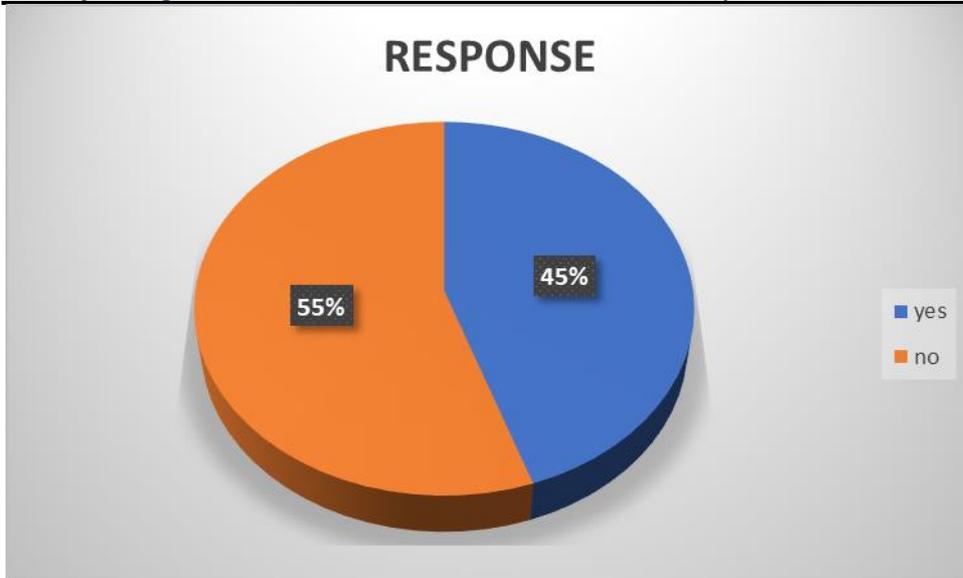


chart no :2

Q.3	α δϊ δΠ π ° α ς † ∫ ≠ y æš Σ ϑ † € ≠ £ ο υ ≤ ρ̄ ς û ∂ ς ≅ ≠ ρ û ρ ?	No.of. Response	(%)
	øú	132	35.3%
	± ρ υ	241	64.6%

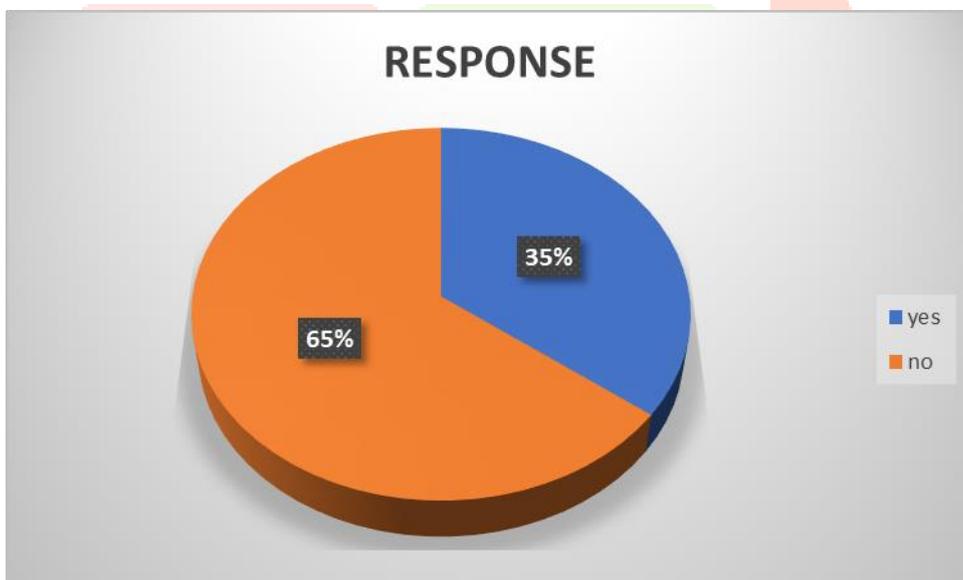
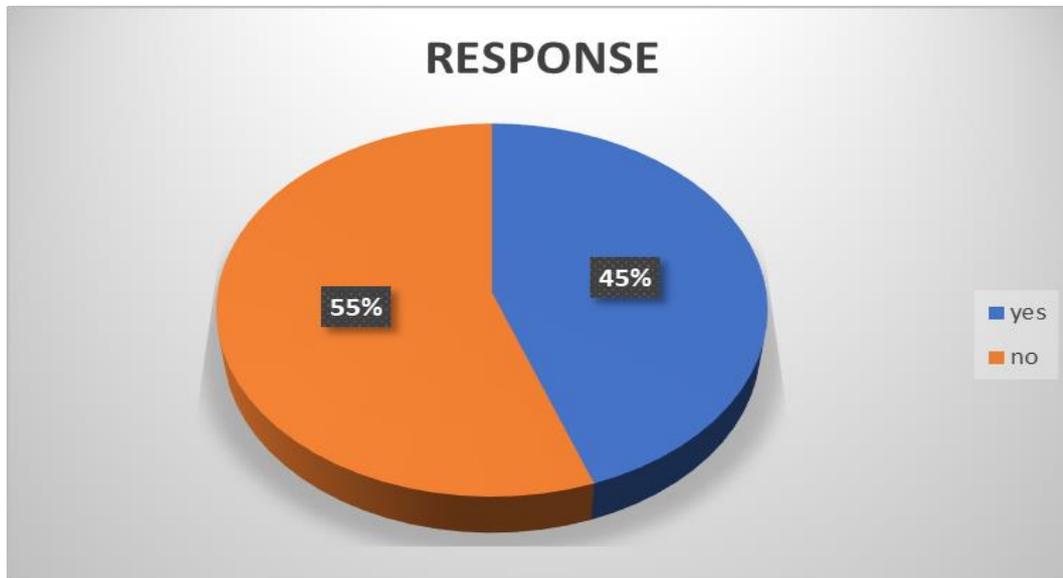


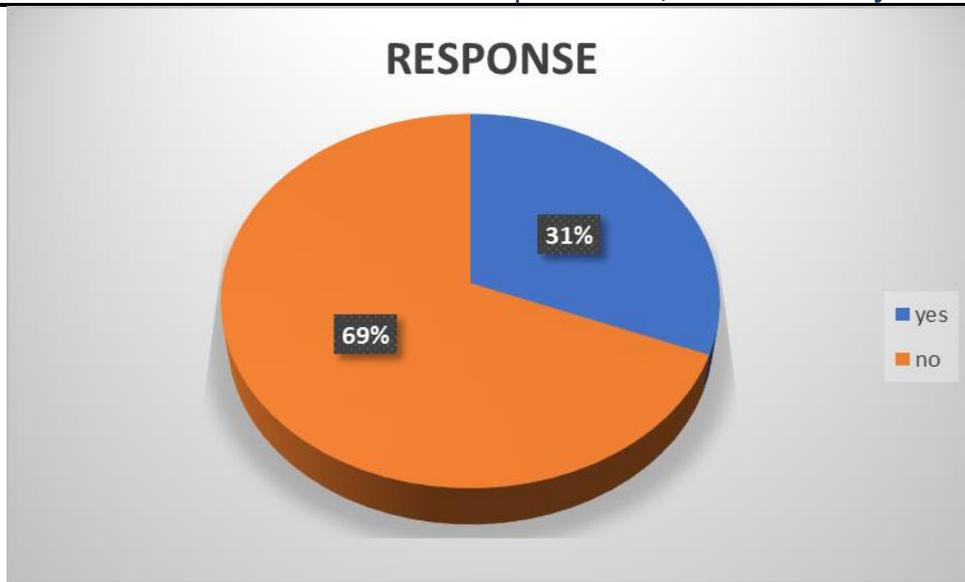
chart no:3

Q.4	ü û π ρ □ û " € ©æû ρ π ρ " €Σρ ¶ Σđ Σρ <sup>a</sup> £ς ≠θ £ς π <sup>o</sup> aς (∂đ ) †‡ ≠ς ού≠€û ρ ?	No.of. Response	(%)
	ού	166	44.5%
	±ρσ	207	55.5%

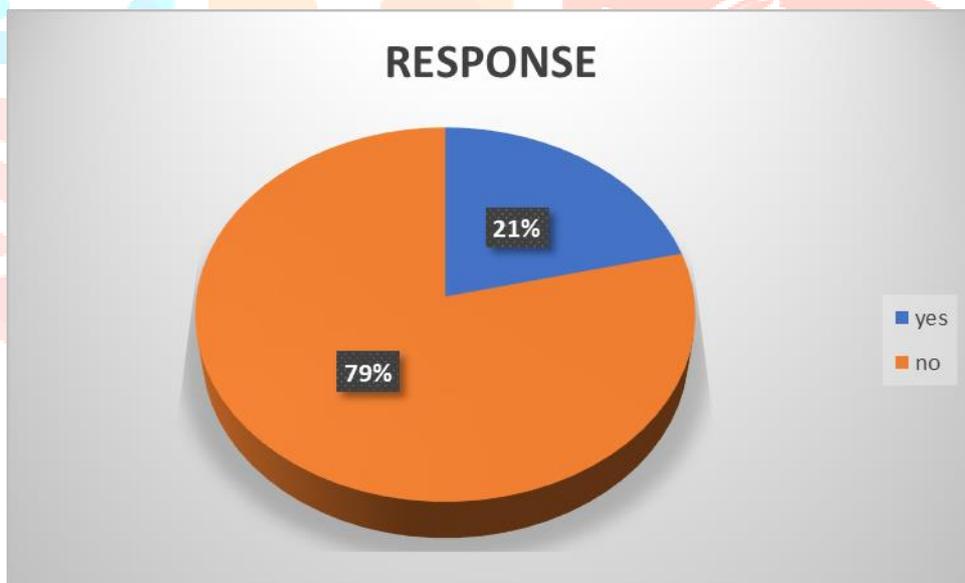


Pie chart no:4

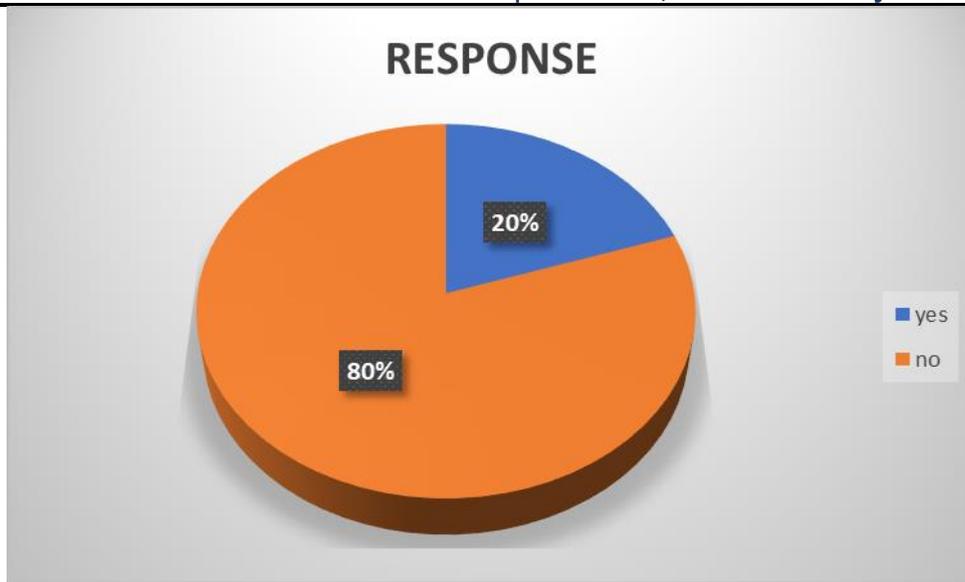
Q.5	ü ρ υ <sup>a</sup> ρî š Σæ û <sup>a</sup> ρ ü ρ υ <sup>a</sup> ρîâ Ñü ρο <sup>a</sup> δ≠á }£š Σæ π <sup>o</sup> aς (∂đ ) †‡ ≠ς ού≠€û ρ ?	No.of. Response	(%)
	ού	116	31.1%
	±ρσ	257	68.9%



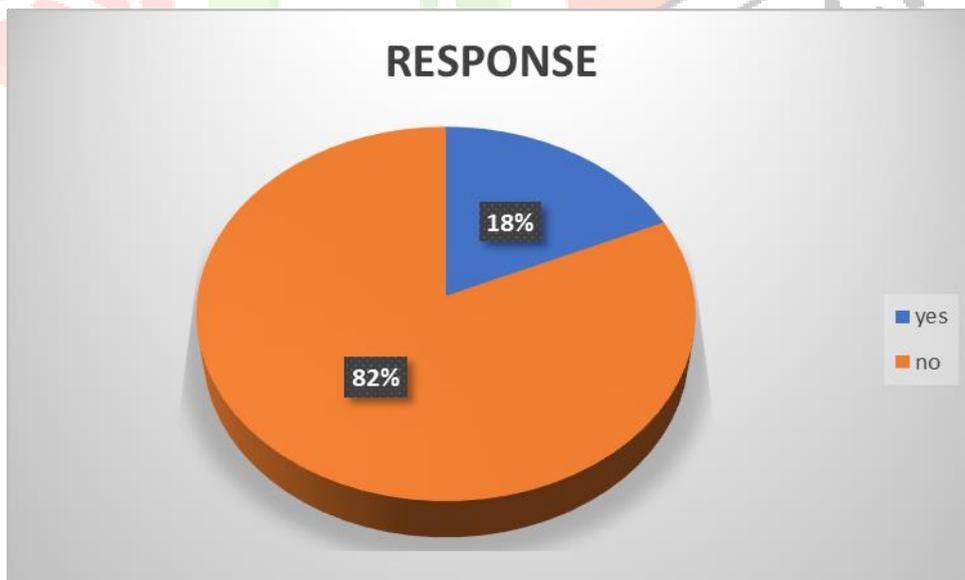
Q.6	व्यायाम करताना चालताना लघवी (मूत्र )गळती होते का ?	No.of. Response	(%)
	हो	79	21.2%
	नाही	294	78.8%



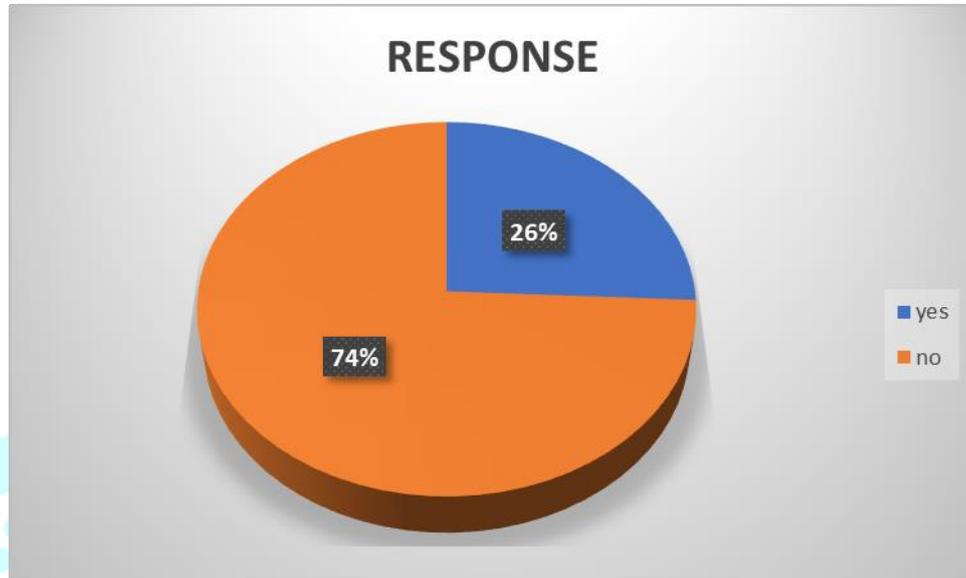
Q.7	लघवी (मूत्र )गळतीमुळे तुम्हाला आतली कपडे वारंवार बदलावे लागतात का ?	No.of. Response	(%)
	हो	74	19.8%
	नाही	299	80.2%



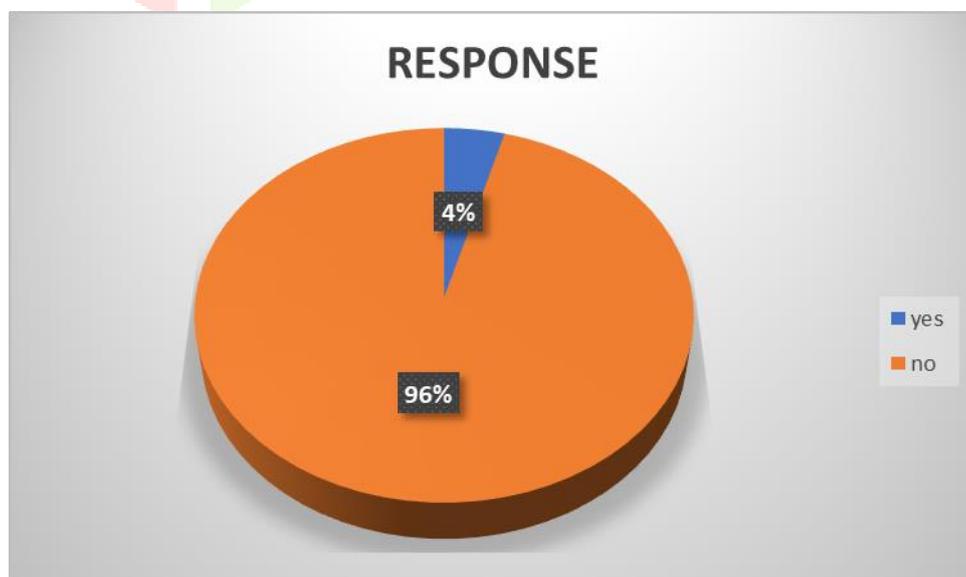
Q.8	लघवी (मूत्र )गळतीमुळे तुम्हाला आतली कपडे वारंवार बदलवे लागतात का ?	No.of. Response	(%)
	हो	68	18.2%
	नाही	305	81.8%



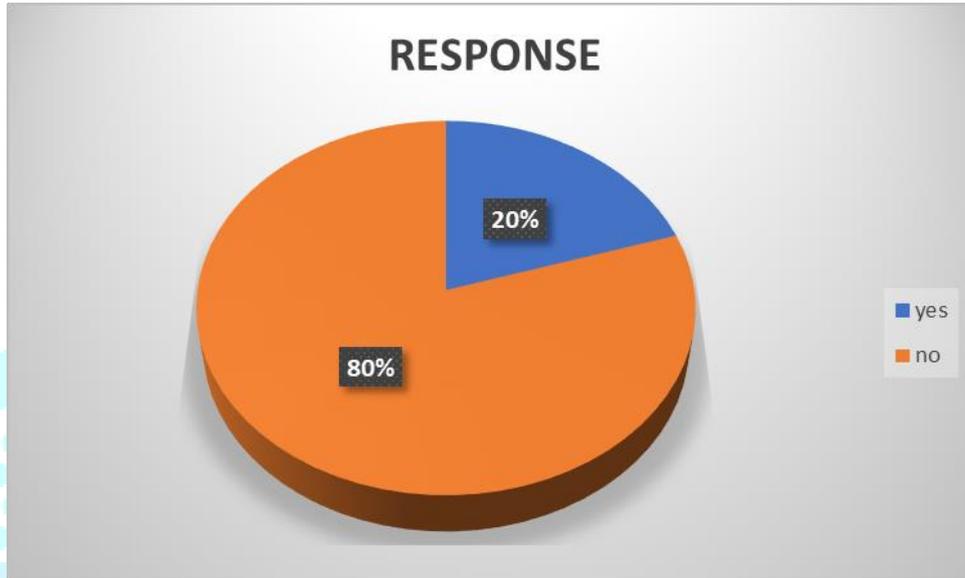
Q.9	तुम्हाला भौतिकोपचारशास्त्राबद्दल माहिती आहे का ?	No.of. Response	(%)
	हो	96	25.7 %
	नाही	277	74.3 %



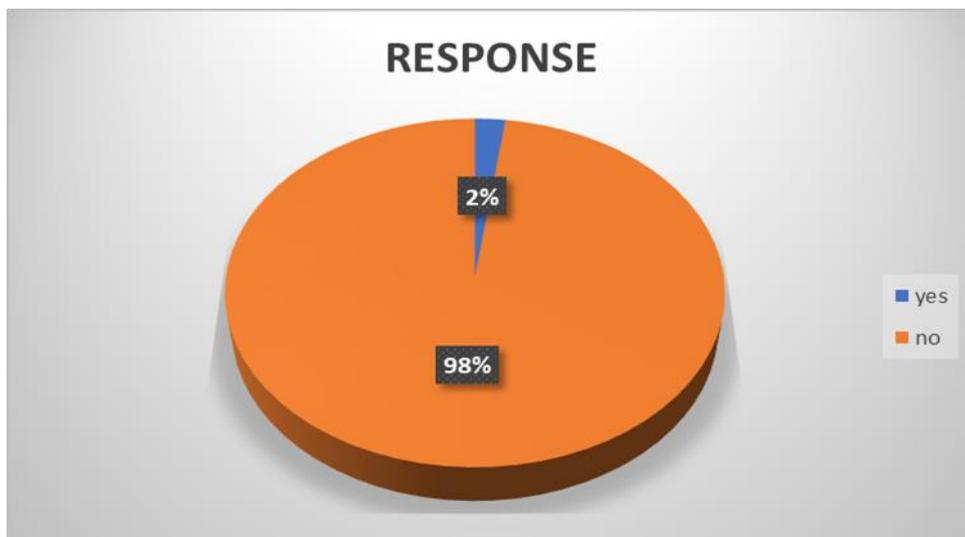
Q.10	भौतिकोपचारशास्त्रा मध्ये मूत्र संयमता येण्यासाठी उपचार दिले जातात या बद्दल तुम्हाला माहिती आहे का ?	No.of. Response	(%)
	हो	16	4.3 %
	नाही	357	95.7 %



Q.11	तुम्ही कधी स्त्रीरोगतज्ञकडे गेला आहात का ?	No.of. Response	(%)
	हो	75	20.1 %
	नाही	298	79.9 %



Q.12	मूत्र असंयमता या आजाराची लक्षण कमी करणे व ही समस्या बरी करणे याकरिता भौतिकोपचारशास्त्र तुम्हाला मदत करते या विषयी तुम्हाला माहिती आहे का ?	No.of. Response	(%)
	हो	8	2.1 %
	नाही	365	97.9 %



## DISCUSSION

This study was conducted to assess the awareness towards the urinary incontinence among females in Alandi area

Urinary incontinence (UI) is a prevalent and often distressing condition that significantly impacts the quality of life of affected individuals. Despite being commonly associated with elderly individuals and women who have undergone childbirth, epidemiological studies suggest that young nulliparous women may also experience UI episodes, though the exact risk factors remain unclear. The high prevalence of UI, particularly among women (51.1% compared to 13.9% in men),

Several risk factors are linked to the development of UI, including age, parity, vaginal deliveries, obesity, prior surgeries, chronic constipation, and respiratory disorders such as chronic cough. These factors either weaken the pelvic floor muscles, impair neurological control, or increase abdominal pressure, ultimately contributing to urinary leakage.

A survey conducted among individuals in Alandi town provides insightful data on public awareness, experiences, and the impact of UI

71% of women are unaware of urinary incontinence; 74.3% are unaware of physiotherapy, and 95.7% don't know it's used for incontinence. Only 2.1% know physiotherapy can help to reduce the symptoms. 44.7% wake up more than once at night to urinate. 35.5% monitor water intake due to leakage of urine. 44.5% females leak urine when coughing/sneezing. 31.3% females leak urine when bending/lifting. 21.2% females leak urine when walking/exercising. 19.8% frequently change underwear. 18.2% say work is affected. 20.1% have consulted a gynecologist

The literature lacks studies investigating the awareness of pelvic floor muscles in elderly women living in the community. **Dunivan et al** evaluated UI and pelvic organ prolapse (POP) knowledge among elder Southwestern American Indian women and assessed barriers to care for PFDs. They found that knowledge of incontinence was similar to that of historical gynecology control groups. The results showed that almost 50% of the participants believed that the use of pads and diapers and surgery were the only treatment options for UI. The participants reported high levels of barriers to care seeking, especially related to cost and inconvenience<sup>(9)</sup>

**Dumoulin et al** performed a randomized clinical trial to determine whether the effectiveness of group-based PFM training is not inferior to individual PFM training in women aged 60 years or older with stress or mixed UI [15]. They reported that the median percentage reduction in incontinence episodes at 1 year was 70% in individual compared with 74% in group-based PFM training intervention. The widespread use of PFM training in clinical practice could increase UI treatment capacity for older women<sup>(10)</sup>

**Moosdorff-Steinhauser HFA** found that Because incontinence is so common and usually not severe, an increasing number of women are becoming numb to it, which contributes to the “normalization” of incontinence and lessens the significance of pelvic floor care. According to a Dutch study, just 13.1% of women attempted to seek help, despite the fact that 90% of women reported that their incontinence negatively affected their quality of life. The most common reasons for not seeking help were feeling powerless because they thought leaking urine was an inevitable part of getting older, **Wang X** and some women who had given birth thought leaking urine was a legacy of childbirth **Bayat M**. The concept of “normal” is typically derived from misperceptions held by some HCPs and intimate female friends or relatives who have given birth **Buurman MBR.**, Therefore, it is essential to strengthen health education for women to improve their understanding of urinary incontinence. pay more attention to their own health, and take active measures to prevent and treat urinary incontinence. HCPs can help patients reshape their perception of the disease, face their medical conditions objectively, and reduce their sense of stigma by means of acceptance and commitment therapy, cognitive behavioral therapy, peer support education, and other methods **Yan F.**<sup>(11)</sup>

## CONCLUSION

This study concludes that there is lack of awareness about urinary incontinence among the women's of Alandi area.

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