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Description Of Urinary Incontinence And Psychosocial Problems In The Elderly In The Working Area Of Puskesmas Lanrisang Pinrang District

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Abstract
The increasing pace of life, social pressures and the aging population are causing urinary incontinence and psychosocial problems in the elderly to increase. Although not a fatal condition, urinary incontinence can impair mental health and reduce quality of life, as well as increase the risk of depression and anxiety. The study focused on knowing the description of urinary incontinence and psychosocial problems in the elderly in the working area of Puskesmas Lanrisang Pinrang Regency. This cross-sectional descriptive study involved 90 elderly respondents from the Lanrisang Health Centre, selected using purposive sampling based on specific inclusion and exclusion criteria. Data were collected using validated questionnaires: the Questionnaire for Urinary Incontinence Diagnosis (QUID) and Depression Anxiety Stress Scale 21 (DASS 21). QUID was selected for its specificity in categorizing different types of urinary incontinence, making it a reliable tool for this population. Similarly, DASS 21 is well-regarded for its ability to measure stress, anxiety, and depression levels comprehensively, which are critical psychosocial factors examined in this study. These tools were chosen for their reliability in measuring urinary incontinence and psychosocial problems, with analysis performed using univariate methods. The results showed that the majority of respondents (40.0%) experienced mixed urinary incontinence. The prevalence of urinary incontinence in the elderly with moderate levels of stress, anxiety, and depression was higher compared to mild and severe levels of stress, anxiety, and depression.

Keyword: Urinary Incontinence; Stress; Anxiety; Depression

Introduction

According to the World Health Organization (WHO) (2016), the age limit for the elderly is 60 years and above. In Indonesia, the elderly population has increased significantly, reaching 10.82% of the total population (BPS, 2022). South Sulawesi Province is among 8 provinces with a high elderly population, reaching 10.20% (BPS South Sulawesi, 2020). The distribution of the elderly in South Sulawesi is dominated by rural areas (61.40%).

Ageing is a continuous process of biological change (Ambohamsah et al., 2020). One of the physiological changes in the elderly is changes in the urogenital system (Dziechciaz & Filip, 2014). The bladder capacity of the elderly decreases and the external urethral sphincter muscles weaken (Alvis & Hughes, 2015). This increases the risk of urinary incontinence (Schmid et al., 2021).

Urinary incontinence negatively affects the quality of life of the elderly (Yazdany et al., 2014). The elderly can experience anxiety, depression and stress due to urinary leakage. WHO (2020) noted that 200 million people in the world experience urinary incontinence. In Indonesia, the prevalence of urinary incontinence reaches 5.8% (Koerniawan et al., 2020).

Research shows a close relationship between urinary incontinence and depression and anxiety (Chiu et al., 2020; Kwak et al., 2016). Elderly people with urinary incontinence have higher levels of depression and anxiety (Cheng et al., 2020; Townsend et al., 2014). Research by Kurniasari & Soesilowati (2017), Chesor et al. (2015), and Wilson et al. (2017) found a significant relationship between urinary incontinence and depression in the elderly.

Urinary incontinence is not included in the top 10 most common diseases reported in quarter 3 at Lanrisang Health Centre (2023). This is due to embarrassment, the perception that it is not a serious health problem, and lack of education (Muspida, 2015; Researcher interview, 2023). The accelerating pace of life, increasing social pressures, and an ageing population are causing urinary incontinence and psychosocial problems in the elderly to increase. Therefore, it is important to examine these phenomena, especially in the working area of Puskesmas Lanrisang

because Puskesmas Lanrisang has a working area that facilitates 3,600 elderly people.

Research Method

This study employed a cross-sectional descriptive design with a quantitative approach. The research was conducted at Puskesmas Lanrisang, Pinrang Regency, from 26 March to 25 April 2024. A total of 90 respondents were selected from 7 villages (Barang Palie, Waetuoe, Jampue, Samaulue, Lerang, Mallongi-longi, and Amassangan) using a purposive sampling technique based on the following inclusion criteria: (1) aged ≥ 60 years, (2) willing to participate as evidenced by signing the informed consent form, and (3) experiencing urinary incontinence. Exclusion criteria included: (1) severe mental disorders such as dementia or schizophrenia, and (2) inability to communicate effectively.

Respondents who met the inclusion and exclusion criteria were informed about the study and provided with an informed consent form. Those who agreed to participate and completed the consent form were included in the study.

Data were collected using a Likert scale questionnaire adopted from previous research, translated into Indonesian, and tested for validity and reliability. The questionnaire consisted of three sections: (1) respondent characteristic data (age, gender, latest education, village address, occupation, smoking history, and disease history), (2) urinary incontinence questionnaire, and (3) psychosocial problems questionnaire. The urinary incontinence diagnosis was assessed using the Questionnaire for Urinary Incontinence Diagnosis (QUID) (r: 0.799), which includes 6 items to assess the type of urinary incontinence. Psychosocial problems were assessed using the Depression Anxiety Stress Scale 21 (DASS 21) (r: 0.910), which consists of 21 items to evaluate levels of anxiety, stress, and depression.

The selection of QUID and DASS 21 was based on their proven reliability and relevance in assessing urinary incontinence and psychosocial impacts among older adults. QUID was chosen because of its focus on identifying the different types of urinary incontinence, which is crucial for understanding the specific needs of the target population. DASS

21 was selected due to its established reliability and validity in measuring psychosocial issues, including anxiety, stress, and depression, which are common among elderly individuals suffering from incontinence.

Results and Discussion

Description of Urinary Incontin

This study found that 40.0% of elderly respondents experienced mixed urinary incontinence, followed by urgency urinary incontinence (28.9%) and stress urinary incontinence (31.1%). The findings align with those of Saboia et al. (2017), who reported a high prevalence of mixed urinary incontinence among older adults. This is in line with the opinion of Khandelwal & Kistler (2013) who said that mixed urinary incontinence occurs in one third of the elderly who experience urinary incontinence. This similarity underscores the global relevance of addressing mixed urinary incontinence in this population.

Additionally, the results reflect Schmid et al.'s (2021) observations about the increasing risk of urinary incontinence with age-related physiological changes, such as reduced bladder capacity and weakened urethral sphincters. These findings emphasize the importance of targeted interventions for managing these types of urinary incontinence effectively in elderly populations.

Table 1. Frequency Distribution of Types of Urinary Incontinence

Type of Urinary Incontinence	Type of Urinary Incontinence	Type of Urinary Incontinence
Stres	28	31.1
Urgency	26	28.9
Mixed	36	40.0
Total	**90**	**100.0**

Although mixed urinary incontinence was more common than stress and urgency urinary incontinence, this finding also confirms that both stress and urgency urinary incontinence are quite prevalent in the elderly. Stress urinary incontinence occurs due to a decrease in the elasticity of the pelvic and urinary muscles, as well as reduced neural control that comes with aging. These factors contribute to urinary incontinence in older adults (Hagen et al., 2020). On the other hand,

urgency urinary incontinence is characterized by a strong, sudden urge to urinate, which is a defining feature of this condition (Tunn et al., 2023).

Psychosocial Problems in the Elderly

Based on the study results, most of the elderly participants experienced mild stress. This was characterized by symptoms such as unreasonable fatigue, an increased heart rate after physical activity, and overreacting to certain situations, like speaking quickly and feeling exhausted (Kaunang et al., 2019). The researcher found that most elderly individuals reported sometimes overreacting to situations, which aligns with these findings.

Table 2. Overview of Psychosocial Problems in Relation to Urinary Incontinence

Psychosocial Problems	Stress Urinary Incontinence (%)	Urgency Urinary Incontinence (%)	Mixed Urinary Incontinence (%)
Mild Stress	23.3	23.3	5.6
Moderate Stress	7.8	4.4	34.4
Severe Anxiety	0.0	28.9	28.9
Moderate Depression	30.0	25.6	31.1

This study found that the majority of elderly people experienced moderate stress levels. This may be because many elderly individuals feel tired, even without engaging in physically demanding activities. For instance, most of the elderly reported often having difficulty breathing, even when they hadn't engaged in physical activity. This is consistent with Kamso's (2000) theory, as cited by Karepouwan et al. (2018), which states that as people age, their physical abilities, including strength, hearing, vision, memory, and flexibility, significantly decline. This decline leads to fatigue and energy depletion, even without strenuous activity (Nygaard & Shaw, 2016).

The study also found that more than half of the elderly experienced moderate anxiety, and nearly half experienced severe anxiety. Symptoms of anxiety included fear about an uncertain future, as reported by all the elderly participants who mentioned occasionally feeling hopeless about what lies ahead. This finding aligns with Rindayati et al. (2020), who found that excessive worry is a common symptom among older people.

Additionally, depression was found to be the most prevalent psychosocial issue among the elderly, with almost all participants experiencing moderate depression. This finding is consistent with research by Livana et al. (2018), which also reported high rates of depression among the elderly, mostly mild cases. This contrasts with Anissa et al. (2019), who found that most elderly people experienced mild depression. The majority of the elderly participants in this study reported difficulty feeling positive emotions, which supports Herawati and Deharnita's (2019) view that depression in the elderly can stem from a lack of positive interactions with their environment.

Relationship Between Urinary Incontinence and Psychosocial Problems

Stress urinary incontinence occurs when the pressure on the bladder is greater than the pressure on the urethral sphincter, leading to urine leakage during activities that put additional pressure on the abdomen, such as coughing, sneezing, or physical activity (Lukacz et al., 2017). The finding that stress urinary incontinence occurs most frequently at mild stress levels suggests that everyday activities or light physical exertion are enough to trigger urine leakage in older adults with this condition.

Table 3. Distribution of Relationship Between Urinary Incontinence and Psychosocial Problems

Variable	Stress						Anxiety								Depression			
	Mild		Moderate		Severe		Mild		Moderate		Severe		Very		Mild		Moderate		Severe	
	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%
Stress urinary incontinence	21	23.3	7	7.8	0	0	1	1.1	27	30.0	0	0.0	0	0.0	1	1.1	27	30.0	0	0.0
Urgency urinary incontinence	21	23.3	4	4.4	1	1.1	0	0.0	21	23.3	5	5.6	0	0.0	1	1.1	23	25.6	2	2.2
Mixed urinary incontinence	5	5.6	31	34.4	0	0.0	0	0.0	8	8.9	26	28.9	2	2.2	0	0.0	28	31.1	8	8.9
Total	**47**	**52**	**42**	**46.6**	**1**	**1.1**	**1**	**1.1**	**56**	**62.2**	**31**	**34.4**	**2**	**2.2**	**2**	**2.2**	**78**	**86.7**	**10**	**11.1**

Frequent mixed urinary incontinence at moderate stress levels suggests that higher stress or emotional changes may be a stronger trigger for urinary incontinence symptoms in these cases. Strong urinary urges, where individuals feel an immediate need to urinate, are characteristic of urgency urinary incontinence and can often be triggered by stress and emotional factors (Gumssoy et al., 2019).

The finding that stress and urgency urinary incontinence were most common at moderate anxiety levels, while mixed urinary incontinence was most common at severe anxiety levels, highlights the relationship between anxiety levels and the type of urinary incontinence in older adults. This supports the findings of Reynolds et al. (2023), who reported that older adults with urinary incontinence experience higher levels of anxiety than those without.

Older adults with severe anxiety are more likely to have mixed urinary incontinence. This suggests that high emotional stress can significantly affect bladder function and the nervous system. Severe anxiety can cause physiological changes, such as increased activity in the autonomic nervous system, which may worsen urgency urinary incontinence (Juraskova et al., 2020). Urinary incontinence can lead to embarrassment and social isolation, which can trigger psychological problems, such as prolonged stress and depression (Wilson et al., 2017).

Regarding depression, most elderly people with urinary incontinence showed moderate levels of depression. This was especially true for those with stress, urgency, and mixed urinary incontinence. This is in line with the findings of Wilson et al. (2017), who noted that the more severe the urinary incontinence, the more severe the depression.

Moderate depression can affect an individual's quality of life and may impact bladder function and neural control (Maas et al., 2011). In the case of urinary incontinence, moderate depression can increase emotional stress and physical strain, which may worsen symptoms of stress, urgency, or mixed urinary incontinence (Lee et al., 2021).

Depression in older adults can also lead to negative thought patterns about themselves and the future, which can increase anxiety and stress (Wilson et al., 2017). This can further disrupt bladder function and control mechanisms, raising the risk of urinary incontinence. This is consistent with research by Wilson et al. (2017), which found a significant relationship between urinary incontinence and depression in elderly individuals at Bethania Lembean Nursing Home. A similar relationship was also observed in a study by Chesor (2015) on elderly individuals at Panti Werdha Dharma Bakti Pajang Surakarta.

Conclusion

This study found that urinary incontinence is a significant health problem for the elderly in the Lanrisang Health Centre working area. The most common type of urinary incontinence is mixed, followed by urgency and stress. Older people with urinary incontinence also experience higher levels of stress, anxiety and depression. Older people with mixed urinary incontinence most commonly experienced moderate stress. Stress and urgency urinary incontinence were most common with moderate levels of anxiety. Moderate depression was most common in older adults with all types of urinary incontinence.

This study shows that urinary incontinence is not just a common health problem, but can also have a significant impact on the quality of life of the elderly. Therefore, it is important to increase awareness and understanding of urinary incontinence among various parties, including older people, health professionals and policy makers.

Older people need to know that urinary incontinence is not normal and can be treated. Health workers should have adequate knowledge and skills to diagnose and manage urinary incontinence. Policy makers need to support efforts to increase awareness, research, and services for screening and treatment of urinary incontinence.

Although this study provides important information, there are some weaknesses, such as the study sample only came from one health centre work area. However, this study has several important contributions, namely; providing information on the prevalence and characteristics of urinary incontinence and identifying the relationship between urinary incontinence and levels of stress, anxiety and depression. Further research by addressing weaknesses and following recommendations may help improve understanding of urinary incontinence in older adults and develop more effective interventions.

Implication for Practice

These findings emphasize the need for a comprehensive approach to managing urinary incontinence in the elderly. Healthcare providers should prioritize regular screenings to identify urinary incontinence early and provide targeted interventions. Psychological counseling and support

groups can help address the emotional toll of the condition. Community education programs should be implemented to raise awareness and reduce stigma surrounding urinary incontinence.

For policymakers, the findings highlight the importance of allocating resources to establish specialized elderly care centers equipped to manage both the physical and mental health challenges of urinary incontinence. Subsidizing treatment options and ensuring access to affordable medical supplies, such as incontinence pads, could significantly improve the quality of life for elderly individuals. Developing national guidelines that integrate multidisciplinary care models will help create a standardized approach to addressing urinary incontinence and associated psychosocial problems.

These findings emphasize the need for a comprehensive approach to managing urinary incontinence in the elderly. Interventions should include psychological counseling, community education, and tailored medical therapies to address the multifaceted effects of urinary incontinence. Healthcare professionals should also consider environmental and social support systems to reduce the stigma and emotional impact of urinary incontinence.

Limitations

This study relied solely on self-reported data, which may have introduced bias due to social desirability or inaccurate recall. The cross-sectional design limits the ability to determine causal relationships between urinary incontinence and psychosocial problems. Additionally, the relatively small sample size and geographic focus on the Lanrisang Health Centre may restrict the generalizability of the findings to other populations or regions.

Future research should consider employing larger and more diverse samples, as well as incorporating longitudinal designs to explore causal pathways. Observational data or qualitative methods, such as interviews or focus groups, could provide richer insights into the experiences of elderly individuals with urinary incontinence. Expanding research to include rural and urban comparisons may also uncover environmental and infrastructural factors influencing these conditions. Addressing these limitations will strengthen the evidence base and inform more effective interventions.

The study relied solely on self-reported data, which may introduce bias due to social desirability or inaccurate recall. Future studies should incorporate observational or longitudinal methods to strengthen findings. Additionally, interventions addressing urinary incontinence should

consider integrating physical and mental health support tailored to elderly populations. These strategies could enhance the overall well-being and quality of life for those affected.

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