DOI: https://doi.org/10.54393/tt.v1i1.4



Original Article

THE THERAPIST

JOURNAL OF THERAPIES & REHABILITATION SCIENCES https://thetherapist.com.pk/index.php/tt Volume 1, Issue 1(Jan-Jun 2020)



Frequency of Risk Factors of Pressure Ulcers in Geriatric Population in Lahore, Pakistan

Ali Asad Naeem¹, Sana Batool², Komal Fatima³ and Rabeea Riaz⁴

¹Department of Physiotherapy, CMH Lahore Medical College & Institute of Dentistry, Lahore, Pakistan

²University institute of physical therapy, University of Lahore, Lahore Pakistan

³Cosme Studio Clinic, Lahore, Pakistan

⁴Wapda Teaching Hospital Complex, Lahore, Pakistan

Key Words:

Pressure Ulcers, Geriatrics, Bed Ridden, Prevalence, Risk-Factors

How to Cite:

Naeem, A. A., Batool, S. ., Fatima, K., & Riaz, R. (2020). Frequency of Risk Factors of Pressure Ulcers in Geriatric Population in Lahore, Pakistan. *THE THERAPIST (Journal of Therapies & Amp; Rehabilitation Sciences)*, *I*(1). https://doi.org/10.54393/tt.v1i1.4

Corresponding author: Sana Batool, University institute of physical therapy, University of Lahore, Lahore Pakistan sana.fizza@gmail.com

Article History Received: 2nd April 2020 Accepted: 3rd May 2020 Published: 30th June 2020

ABSTRACT

The prevalence of pressure ulcers has turned out to be across the board, particularly in critically ill bedridden patients, especially in the geriatrics population. Along with their condition, poor level of nutrition, increased, moisture, low mobility and constant sheer friction forces acting upon their body leadto the development of pressure ulcers. Lack of proper care from nursing staff, as well as attendants, will contribute more to this. Hence, the aim of this study was to find the prevalence of pressure ulcers in older bedridden patients. **Objective:** To find out the prevalence of pressure ulcers in the geriatric population in Lahore, Pakistan. Method: A cross-sectional survey was conducted. The examination was completed between April and July on 180 patients. A cross-sectional survey was done to gather data through a questionnaire to discover the incidence of pressure ulcers in the geriatric population in Lahore. Collected data was statistically entered by SPSS ver. (21.0) software. Results: The study included 180 subjects. Out of 277 subjects, 46 (25.6.7%) had severe risk, 17(9.4%) had high risk, 25(13.9%) had moderate risk, 30 (16.7) had and finally, 62 (34.4) had no risk of developing pressure sores. Conclusion: The study concluded that increased moisture low mobility poor nutrition and continuedfriction and shear forces lead to the development of pressure ulcers.

INTRODUCTION

A pressure ulcer occurs by supported pressure applied to the skin and underlying tissue, as well as grinding applied to both surfaces. All lesion caused by sustained pressure applied to the skin or fundamental tissue leads to progressive degeneration [1]. People with spinal cord injuries are more prone to develop pressure ulcers, which are a misjudged issue in medical care [1,2]. As soon as immobility-induced pressure on bony prominences begins, pressure ulcers will form.

Prevalence figuresserve as quality indicators, which can aid in the evaluation of institutional care policies [3].Pressure ulcers are an issue in acute care facilities as well as in other countries. Internationalhealth care publications report incidence rates as high as 11% when it comes to hospitalized patients, as well as prevalence rates of 3% to 22% [4]. There were 280,000 pressureulcers reported in hospital stays in 1993, and 11 years later there were 455,000 ulcers reported [5]. However, prU development could hurt a person's physical, emotional, social, and mentalhealth [6].

The prevalence and occurrence of pressure ulcers in long-term care facilities have been studied ina few Brazilian epidemiological studies [7,8] and one hospital [9]. The incidence rates are higher in critical care patients (incidence 5.2%-20% and prevalence 14.4%) [10]. Patients prone to developing pressure ulcers caused by their long hospital stays were studied, along with their diseases and nutritional status, to determine which were at greatest risk for mortality. Patients who died developed pressure ulcers after their long hospital stays [11].

The Annual prevalence research conducted in Victoria, Australia, in-between 2003 and 2006 revealed pressure ulcers had a prevalence rate of 17.6% to 26.5% overall and 14.9% to 47.7% [12]. The reason of this study it's to acknowledge the

probability of obtaining Pressure Ulcers in geriatric Subjects with hip fractures [13]. Many professionals also agree that it may be impossible to eradicate PrUs in the terminally ill because of the numerous risk factors and comorbid conditions [14].

There is evidence that the sequence of events resulting in pressure ulcers may be initiated after only a few hours of immobility-induced pressure [15]. The empirical data supporting the validity of PU risk assessment scale scores is weak, according to Langemo, Diane K, et al., and the resultant scores contain various amounts of measurement error. There was no evidence of a clinical impact from the use of these scales. When such tools are used in clinical practice, these difficulties should be thoroughly considered. Because PU risk is so closely linked to overall health and the severity of sickness, it's debatable whether completing additional standardized PU risk measures is truly necessary. The use of PU risk scales as a quality measure for care activities is illogical [17].

According to Catherine VanGilder et al., aggressive preventative care is critical for the prevention of pressure ulcers and may necessitate significant, but frequently scarce, resources. Management may make educated decisions about where to focus resources and prevention efforts by knowing which units within a facility have the greatest pressure ulcer incidence [16].

METHODS

A cross-sectional study was conducted. Its sample size was calculated by formula $n = (Z^2 * p (1-p))/e^{2}$. The calculated sample size was 180. Data was collected from different intensive care units of hospitals in Lahore in a duration of 3 months. Inclusion criteria was recent deliveries, age more than 30, ladies having more than 2 babies and exclusion criteria was any recent trauma, radiculopathy, or any systemic diseases. The data was an analysis by using SPSS (Statistics Package for Social Sciences). The significant level was set as 0.05.

RESULTS

The minimum percentage of moisture is 1.00 and maximum percentage is 4.00 and mean and the standard deviation is 2.4333 ± 1.05756

The minimum percentage of activity is 1.00 and the maximum percentage is 4.00 and the mean and the standard deviation is 2.4667 ± 1.13551

The minimum percentage of Friction and shear is 1.00 and maximum percentage is 4.00 and mean and standard deviation is 1.9944 ± 0.83564

The minimum percentage of Interpretation is 1.00 and maximum percentage is 5.00 and mean and standard deviation is $3.2500 \pm$ 1.61652

		Frequency	Percent
Valid	constantly moisture	46	25.6
	Moist	42	23.3
	occasionally moist	60	33.3
	rarely moist	32	17.8
	Total	180	100.0

Table 1: Distribution of patients according to moisture exposure

The table 1 shows out of 180, 46 were constantly moist, 42 were moist, 60 wereoccasionally moist and 32 were rarely moist. The table 2 shows that out of 180 subjects, 72 were bedfast, 82 were able to walkoccasionally and 26 were able to walk frequently.

		Frequency	Percent
	Bedfast	63	35.0
	walk occasionally	87	48.3
Valid	walks frequently	30	16.7
	Total	180	100.0

Table 2: Distribution of patients according to mobility

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Friction and shear

	Frequency	Percent
Problems	63	35.0
potential problems	55	30.6
no apparent problem	62	34.4
Total	180	100.0

Table 3: Distribution of patients according to problems of Friction and shear

The table 3 shows that out of 180 subjects 63 had friction and shear problems, 55 hadpositional friction and shear problems and 62 had no apparent problems.

		Frequency	Percent
	Severe	46	25.6
	High	17	9.4
Valid	Moderate	25	13.9
	Mild	30	16.7
	None	62	34.4
	Total	180	100.0

Table 4: Interpretations

So according to the Braden scale from left to right, it has risk scaling from 23 to 6, 23 beingno risk and 6 has the severe risk. So according to the research conducted 46 subjects lie on 6to 9 which is severe.17 subjects lie on 10 to 12 which is high risk. 25 subjects lie on 13 and 14 which is moderate risk. 30 subjects lie on 15,16,17,18 which is a mild risk and finally 62 subjects lie on 19 to 23 which is no risk.

DISCUSSION

As indicated by my investigation if the body has expanded dampness, less versatility, and expanded grating and shear compels these variables will build up the expanded odds of pressure ulcers. Expanded dampness is because of urinary incontinence, fecal incontinence and expanded sweat will prompt such conditions on the body which increments bacterial development and later on contamination. In my investigations, I have seen expanded contact and shear powers are available in light of the fact that low level of versatility and no action by the subject. The patients who are laid up can't change sides every now and again and because of the carelessness of medical caretakers and orderly will prompt regular pressure on hard prominences and the territories which are as often as possible reached with a base of mattress prompts pressure ulcer.

A low Braden Scale score, age >70 years, and a diagnosis of diabetes, according to Slowikowski GC, 2010 and Gerri C, et al., 2020, may speak to clinically significant pressure ulcer risk factors in the surgical concentrated care population, and patients with these components may benefit from more forceful preventive care [18,19]. Furthermore, additional psychometric testing is required before the Surgical ICU Pressure Ulcer Risk Assessment scale can be recommended for use in examination or practice settings. My assessment revealed that moisture and touch are the primary causes of pressure ulcers.

Lindgren M, et al., 2005, dissected the hazard variables of pressure ulcers in patients experiencing surgery (2005) in this exploration he watched 41 quiet who develop pressure ulcers in the observational period [20]. Those patient which develop pressure ulcers were elderly patient which had less weight and had low BMI levels. In the observational period, more ladies develop pressureulcers than men. In my exploration, I have watched that most subjects had less sustenance which prompts extraordinary pressure reduction and because of poor nourishment and low mobility circulation is also compromised.

CONCLUSIONS:

The prevalence of pressure ulcers in the geriatric population was determined to be 25.6.7 percent severe risk, 9.4 percent high risk, 13.9 percent moderate risk, 16.7 percent had, and lastly, 34.4 percent had no risk of getting pressure ulcers.

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