

PRIORITY SEAT INTERVENTION REDUCES THE ANXIETY OF THE ELDERLY WITH HYPERTENSION IN THE WAITING ROOM OF THE NORTH KUTA HEALTH CENTER, TOURIST AREA IN BADUNG

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Abstract

People of more than sixty years of age known as elderlies or “Lansia” (bahasa Indonesia). The number of elderlies in millennial era are increasing and they have potential to live better and longer. The Covid-19 pandemic is fear haunted elderlies of high blood pressure that make them anxiety to come to the Puskesmas of North Kuta for having Health Control (Checking-up). Physically the elderlies are decreasing progressively such as the strength of mussels, arm strength mussels decrease for about 16-40%, and physical coordination is also decreasing, so they need the tools to do the activities. New habit is implemented at Puskesmas North Kuta such as social distancing when sitting to avoid physical contact and contagious diseases. The chairs of the waiting room for elderlies are not suitable for anthropometries of elderlies, so they are not comfortable when sitting, the chairs are too low, leaning position are also too low, minimum arms rest so make them difficulties when sitting or standing up. Currently priority chairs are not yet available for elderlies at the waiting room of Puskesmas of North Kuta. The objective of this research is to identify the ideal anthropometry chairs for elderlies and to design prototype chairs for elderlies at the waiting room of Puskesmas North Kuta. The method used is the basic measurement anthropometry and to measure the tiredness of Nordic body map. This research used a pre-experimental oe grup pre-tes,post test design a prototype of priority chairs for elderly people in the waiting room of the Community Health Center. The priority chairs for elderlies are made based on the measurement of elderlies when sitting: height of elbows when sitting; height of popliteal; width of hip and height of shoulders when sitting. Conclusions: Every elderly has the right to get the comfortable facilities when doing the activities and comfortable when sitting in the waiting room of Puskesmas.

Keywords: Elderly, Anthropometry, Priority Seats, Hypertension

INTRODUCTION

Individuals are classified as elderly when they have reached the age of 60 (sixty) years and over (PTM, 2019). The elderly in the millennial era have the ability to

maintain their lives, and having a longer life expectancy is a matter of pride (Lestari, et.al 2018). The elderly population in 2025 is estimated to be around 36 million people, or 11.34 percent of the population. Riskesdas in 2018 reported an increase in NCDs in the 2015-2019 RPJMN, World Health Organization (WHO) 2015 data, the prevalence of hypertension in the world is around 1.13 billion, meaning that 1 in 3 people in the world are diagnosed with hypertension (Mills et al., 2020). People with hypertension are expected to increase to 1.5 billion by 2025, with 9.4 million deaths, the third leading cause of death in Indonesia, and the number one cause of death in the world (Adrian, 2019). A total of 45% of deaths due to heart disease and 51% due to stroke are caused by hypertension (Ministry of Health RI, 2018) in (Jenderal & Yani, 2018) and (Latifin et al., 2020). According to JNC (hypertension is found as much as 60-70% in the population aged over 65 years. The typical type of hypertension often found in the elderly is Isolated Systolic Hypertension (ISH), in which the systolic pressure alone is high (above 140 mmHg), but the diastolic pressure remains normal (below 90 mmHg).

The elderly have physical limitations and susceptibility to disease (Glenn & Massie, 2019), slower mobility, often having a feeling of stress due to physical weakness. Accessibility makes it easier for the elderly in puskesmas by providing access to special seats (Indonesia, 2004) and (Lestari et.al, 2016). Preliminary studies from observations are known to access waiting room chairs made of four rows of iron, when using chairs in the waiting room states that it is difficult to put the buttocks when going to sit and difficulty when going to a standing position. The elderly expressed anxiety because when they got up and stood up from sitting in a chair felt back pain, hands hurt and head pain. Therefore, a chair is needed to sit in the waiting room of the puskesmas in accordance with the body size of the elderly. Research by Stuart about anxiety (anxiety) for health center treatment felt a sense of discomfort when using a chair sitting in the waiting room (Annisa, 2016).

RESEARCH METHODS

This research is an experimental study using the same mix of subjects (treatment by subject design) (Viglia & Dolnicar, 2020). Sample of elderly NCDs as many as 20 people as a control group (Pre) and at the same time a treatment / intervention group (Post) Data collection was carried out by measuring subjective complaints using Nordic bodu map (NBM) questionnaires and anthropometric measurements.

RESULTS AND DISCUSSION

General Overview North Kuta Health Center is located at Jl Raya Kesambi, Kerobokan Kuta Utara Badung, serving three villages and three villages and 90 Banjar neighborhoods, namely Kerobokan Kelod Village, Kerobokan Village, Kerobokan Kaja Village, Dalung Village, Cangu Village, and Tibubeneng Village. North Kuta Health Center is also a buffer area for tourism centers in North Kuta District.

Table 1. Distribution of Respondents at North Kuta Health Center

No	Respondent	N	Average	Stretch	SB
1	Man	13	68,92	60 -75	66,5
2	Woman	7	65,79	60 -73	64
	Total	20			

From table 1, it shows that the average age of the elderly at the North Kuta Health Center is 68.932 for men and 65.79 for women, with an age range of 60 – 75 years. It has entered an advanced age. In accordance with the elderly age limit set in accordance with the Government Regulation of the Republic of Indonesia Number 43 of 2004 concerning the Implementation of Improvement Efforts. Elderly Social Welfare, a person is said to be Elderly is someone who has reached the age of 60 (sixty) years and over (Hakim, 2020)

Anthropometers

The subject's body anthropometric measurement data to obtain body dimension measurement data was used to design a special elderly Priority Chair for the Elderly at the North Kuta Health Center. Measurement with static anthropometry position sitting position as in Table 3 below.

Table 3 Results of anthropometric analysis of Subjects at North Kuta Health Center

No	Seated anthropometry	Min	Maks	Averaget	SB	Percentile (%)		
						5	50	95
1	Sitting height	65	87	71,79	5,79	65	71	87
2	Shoulder height sitting	45	64	50,50	5,43	45	49	74
3	Sitting elbow height	15	26	20,43	2,74	15	21	26
4	Knee height sitting	43	51	46,93	2,37	43	47	51
5	Popliteal height seated	40	46	43,21	2,19	40	42	46
6	Hand grab distance	54	69	58,93	5,46	54	57	65

Pengukuran antropometri dengan posisi statis pada lansia dilakukan untuk obtained anthropometric data of subjects to obtain body dimension measurements, used to design intervention chairs as priority seats for the elderly in the waiting room of the North Kuta Health Center. Anthropometry is very important in determining the tool, namely the design of priority chairs. Human body measurements can be grouped into two groups, namely body dimension measurements carried out on the body in static conditions, and functional dimension measurements carried out when the body is in a moving condition (Winata & Suryadi, 2020).

Design of Intervention Chair / Priority Seat.

Based on the size of antropometry, and musculoskeletal complaints obtained, the design of priority chairs for the elderly at the North Kuta Health Center is as follows

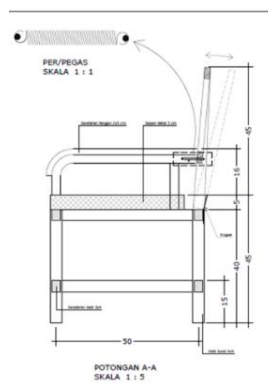


Figure 1. Cut Chair Design

Prototype Priority Chair as Intervention



Figure 2. Priority Seat Prototype with Right and Left Side Springs

After determining the design of the final sketch, proceed with a workshop / workshop to make a real product or prototype.

Priority Seat Intervention in the Lounge

Priority seat intervention on treatment (Post) for the elderly at the North Kuta Health Center.



Figure 3 Priority Seat Intervention at North Kuta Health Center

Priority Seat with spring

Special priority seats for the elderly in the waiting room are in accordance with anthropometry of the elderly in a static or sitting position. Facilities in accordance with anthropometry make it easy to use when going to sit or stand from a chair while waiting for a doctor's examination queue or waiting for medicine in the waiting room of the North Kuta Health Center as well as a form of respect and respect for the elderly at the puskesmas.

In line with research. Research on elderly chairs conducted by Mardiyantoro et al., (2019) In the terminal waiting room, the design problems for elderly seating include adequate comfort when sitting for more than 5 minutes (Stasiun, 2019). Priority seat intervention with springs on the left and right sides, provides automatic ease on the back, because the back can rest naturally with a slope of 15-20 degrees.

Blue

The choice of blue color is very suitable for the puskesmas waiting room, because it gives the impression of communicative, protection, spiritual, gentleness, tranquility, love, peace, stability, friendship and harmony. The blue color on the chair can basically create a feeling of calm, peace, clean air.

Table 4. Musculoskeletal Complaint Data of Subjects at North Kuta Health Center

No	Variabel	P I				P II			
		Conventional				Senior seats			
		Min	Mak	Average	SB	Min	Maks	Average	SB
1	Muskulo Complaints Skeletal with conventional seats	39,58	50,56	47,89	5,23	40,24	50,62	46,92	5,12
2	Muskulo Complaints Skeletal after physical examination	58,40	75,45	65,34	7,56	23,25	30,15	25,64	3,24
3	Difference	18,82	24,89	17,45	2,33	16,99	20,47	21,28	1,88

Table 5. Different Test Results of Musculoskeletal Complaints

No	Variable	Pre Periode		Intervensi/Post Periode		Value t	Value p
		Rerata	SB	Rerata	SB		
		1	Muskuloskeletal complaints before using a chair in the waiting room	47,89	5,31		
2	Muskuloskeletal complaints after using a waiting chair	55,34	6,52	25,64	3,28	12,232	0,001
3	Difference	7,45	7,94	21,28	5,80	12,525	0,001

Significance analysis with the t-paired test showed that in the conventional seat period and the intervention seat period the value of $t = 0.419$ and the value of $p = 0.682$. The difference test in conditions using the intervention chair (post) obtained significant results ($p * < 0.05$), this means that there was a significant difference between the Pre / conventional seat period and the priority seat period (Post) in musculoskeletal complaints or a decrease of 39.7%.

CONCLUSION

Respondents with age characteristics 60-75 years. Specific priority seats with automatic backrest tilt 140-200, percentile seat width 95, percentile seat base depth 5, percentile backrest width 95. There are significant differences in the use of intervention chairs. This means that there is a significant difference between the Pre / conventional seat period and the priority seat period (Post) in musculoskeletal complaints or a decrease of 39.7%. Every elderly person has the right to get facilities that are in accordance with elderly anthropometry, make it easier to do activities, sit comfortably in the waiting room of the puskesmas.

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