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Characteristics Of Herpes Zoster Disease

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Article Info	ABSTRACT
Keywords:	Herpes zoster, or shingles, is a contagious disease caused by the
Characteristics,	reactivation of the varicella-zoster virus in the body. This virus can
Shingles	become active again when the immune system weakens. Its
	characteristic symptoms include clustered vesicular rash unilaterally
	along specific dermatomes, accompanied by radicular pain. Varicella, or
	chickenpox, is the primary infection that occurs upon initial exposure to
	the varicella-zoster virus. When the virus reactivates, it causes recurrent
	infection known as herpes zoster. The risk of developing HZ is influenced
	by several factors, including age, gender, history of infection, immune
	status, and comorbidities. This literature aims to explore the
	characteristics of herpes zoster. The method used is a narrative review
	of literature. The results obtained in this literature are that there are 15
	articles obtained with limitations from 2020 - 2024 and an analysis has
	been carried out with the limitations of each article regarding the
	characteristics of herpes zoster disease, 15 articles mention the most dominant characteristics of herpes zoster diseases in this literature
	review are age (45 -70 years), gender (male), lesion location (thoracic),
	comorbidities (diabetes mellitus and hypertension), complications (Post
	Herpetic neuralgia).
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INTRODUCTION

Herpes zoster or also called "shingles" is an infectious disease caused by the reactivation of the varicella zoster virus. Reactivation occurs when the body's immune system decreases. The characteristics of this disease are marked by the presence of unilateral vesicular rashes that are grouped with radicular pain around the dermatome. Varicella is a primary infection that occurs for the first time in individuals who come into contact with the varicella zoster virus. Varicella zoster undergoes reactivation, causing recurrent infections known as Herpes zoster.^{1,2}

The prevalence of herpes zoster based on data quoted from WHO, shows that the incidence of herpes zoster in developing countries is higher than in developed countries. Approximately one million cases of herpes zoster occur in the United States each year, with an incidence of 3.2 cases per 1,000 person-years. Cases of herpes zoster in hospitals in the United States mostly consist of patients aged >50 years.³



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Herpes zoster can appear throughout the year because it is not affected by the season and is spread evenly throughout the world, there is no difference in morbidity between men and women, morbidity increases with age⁴. Data from the Indonesian Ministry of Health for the period 2011-2013, the prevalence of herpes zoster in 13 teaching hospitals in Indonesia throughout 2011 to 2013 reached 2,232 cases.1. The incidence of herpes zoster disease increases with age and is rarely found in children. The peak of herpes zoster cases occurs at the age of 45-64 years as much as 37.95% and women tend to have a higher incidence.5

The most commonly affected dermatomes are the trunk (55%), head (20%), lumbar (15%), and sacrum (5%).6 Factors associated with reactivation of varicella-zoster virus include age, immunosuppression, and intrauterine exposure to varicella-zoster virus. The risk of contracting herpes zoster is estimated to be around 15-30%, but the risk is higher in adults and the elderly, immunocompromised patients, and patients with comorbidities, so the disease can be more severe and more severe complications can occur.⁶

Dewa Ayu's research (2017 on the characteristics of herpes zoster patients at the Dermatology and Venereology Polyclinic of Sanglah General Hospital, Denpasar, the prevalence of herpes zoster was 229 cases. Characteristics based on gender consisted of 48% male and 52% female. Herpes zoster patients classified as under 20 years of age were found to be 14%, aged 20 to 39 years 16%, aged 40 to 59 years 43% and aged over 59 years 27%. Based on the location of the dermatome, there were 2% generalized herpes zoster patients, 11% ophthalmic, 5% facial, 6% cervical, 20% thoracic, and 4% lumbosacral.⁷

Based on the background above, it is necessary to find a solution to the problem, because of the complications that may arise from herpes zoster. Therefore, researchers are interested in conducting further research to determine the characteristics of Herpes zoster disease.

METHOD

This research is a Literature Review research with a Narrative Review design . This method is used to identify, study, evaluate, and interpret all available research. By using this method, can be reviewed and systematic journal identification, which in each process follows the steps or established protocols. This study also uses the PICO method in look for literature.

Type data on research This in the form of data secondary, that is database from various reference, such as research journals, journal reviews, annual reports, books and related data with characteristics of morbus hansen's disease published on year 20 20 -202 4 . Search literature done through database electronic that is Google Scholar, Clinical Key, PubMed, Researchgate, results survey national like RIKESDAS, PSG And WHO, searching for withuse say key: Herpes Zoster . Content analysis carried out using a synthesis table by comparing research methods, subjects and objects of research, as well as the variables studied include the characteristics of herpes zoster disease.



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RESULTS

				RESULTS			
NO	Authors	Publisher	Objective study	Subject	Method	Results	Implications
1.	Rania Ayu	Udayana	The purpose of this	The sample of this	This study is	Male 60.7% and female	The maximum clinical-
	Permata, the	Medical Journal	study was to	study was all	retrospective .	39.3%, the most	histopathological
	daughter of		determine the	patients diagnosed		common age is 45-64	spectral correlation was
	Kornia, I Gusti		prevalence and	with herpes zoster		years (50%), the most	found in the
	Ayu Agung Dwi		profile of HZ at	in medical records		common occupation is	lepromatous spectrum.
	Karmila (20 20)		Sanglah General	at Sanglah General		private workers and	The percentage of
			Hospital, Denpasar	Hospital, Denpasar		housewives (21.4%	correlation was much
			from April 2015 to	for the period April		each), the most common	smaller in all other
			March 2016	2015 to March		lesion location is thoracic	groups.
			according to the	2016, totaling 28		(32.1%), the most	
			variables of gender,	patients.		common comorbidities	
			age, occupation,			are DM and	
			lesion location,			hypertension (10.7%	
			comorbidities,			each), the most common	
			complications,			complication is Post	
			antiviral treatment			herpetic neuralgia (PHN)	
			given, and start time			(14.3%), the most	
			of antiviral			common antiviral given	
			treatment given.			is acyclovir (82.1%), and	
						more sufferers are given	
						antiviral treatment more	
						than 72 hours after the	
						onset of symptoms	
						(57.1%).	
2.	Chaitanya	Journal of	This study was	A total of 170	This was a	The male to female ratio	older age groups have a
	Namdeo,	Laboratory	conducted to study	patients who were	hospital-	was 2.1: The majority of	higher risk of
	Kailash Bhatia,	Physicians	the clinical	clinically	based	cases were seen in the	complications.



NO	Authors	Publisher	Objective study	Subject	Method	Results	Implications
	Deepa Saini,		characteristics,	diagnosed with	prospective	age group of 51 - 60	
	Pravesh Yadav,		complications, and	herpes zoster	observational	years (22.9%), followed	
	Sumit Chauhan		risk factors in	came to.	study	by the age groups of 31	
	(2020)		herpes zoster		involving 170	- 40 years and 61 - 70	
			patients.		patients	years (18.8% each). Left	
					clinically	side involvement was	
					diagnosed	more common. Pain in	
					with herpes	the affected dermatome	
					zoster .	was the most common	
						prodromal symptom.	
						Fever and myalgia were	
						the most commonly	
						reported constitutional	
						symptoms. Only 80	
						patients had a history of	
						previous varicella.	
						Thoracic dermatomes	
						were the most	
						commonly involved	
						followed by cranial,	
						cervical, lumbar and	
						sacral dermatomes.	
						Forty eight patients had	
						risk factors associated	
						with herpes zoster	
						infection. Secondary	
						complications due to	
						herpes zoster infection	



NO	Authors	Publisher	Objective study	Subject	Method	Results	Implications
						occurred in 40 patients .	
3.	Luciana Antoniolli, Camila Rodrigues, Rafael Borges, Luciano Z. Goldani (2020)	The Brazilian Journal of Infectious Diseases	The aim of this study was to describe the epidemiological and clinical aspects of herpes zoster (HZ) in hospitalized patients.	There were 801 records of herpes zoster according to the proposed criteria in a tertiary care hospital in Brazil.	This was a cross-sectional study that was found through hospital-based records during the period March 2000 to January 2017 in a 700-bed tertiary care hospital located in southern Brazil.	Most patients with HZ had a cutaneous form of the disease involving a single dermatome (n = 589, 73.5%). Additional clinical characteristics included postherpetic neuralgia (22.1%), ophthalmic HZ (7.6%), and meningoencephalitis (2.7%). Most patients had immunocompromised conditions (64.9%), including HIV, immunosuppressive therapy, and malignant neoplasms. During this period, there were 105 (13.1%) deaths, most of which were unrelated to HZ. Five deaths were related to HZ meningoencephalitis.	Awareness of the incidence and comorbid factors associated with HZ in Latin American countries such as Brazil contributed to the adoption and implementation of strategies for immunization in this area.
4 .	Syafira Alim, Sri	Fakumi Medical	To determine the	The sample used in	The study	The results showed that	The frequent
	Vitayani, Farah	Journal: Medical	characteristics of	this study was all	used a cross-	in herpes zoster patients,	dermatomal distribution



	Objective study	Subject	Method	Results	Implications
Student Journal	herpes zoster patients at Ibnu Sina Hospital in 2016-2017 based on age, gender, nutritional status, location, and comorbidities.	patients who suffering from herpes zoster at Ibnu Sina Hospital Makassar in 2016-2017 which was obtained by total sampling using medical record data from patients diagnosed by a Herpes Zoster doctor.	sectional design using secondary data, namely medical records of herpes zoster patients and collected using the total sampling technique.	the most age group was between 45 and 64 years, with the number of cases reaching 9 (36.0%). Female gender was dominant with 14 cases (56.0%), while underweight nutritional status included 13 cases (52.0%). Dermatom distribution most is in the section thoracic with 11 cases (44.0%), while the most common comorbidities common is malignancy with 10 cases (40.0%).	of involvement, particularly in the thoracic region, highlights the importance of a site-specific clinical approach. Furthermore, the increased incidence of herpes zoster in patients with comorbidities such as malignancies underscores the need for a comprehensive and collaborative management strategy between medical specialists. Overall, this study provides a basis for improving the clinical management and prevention of herpes zoster in the hospital setting, with the hope of
					management and prevention of herpes zoster in the hospital
	Student Journal	patients at Ibnu Sina Hospital in 2016-2017 based on age, gender, nutritional status, location, and	patients at Ibnu Sina Hospital in 2016-2017 based on age, gender, nutritional status, location, and comorbidities. suffering from herpes zoster at Ibnu Sina Hospital Makassar in 2016- 2017 which was obtained by total sampling using medical record data from patients diagnosed by a Herpes Zoster	patients at Ibnu Sina Hospital in Portion 1 Sina Hospital in Portion 2016-2017 based Portion 2016-2016-2016-2016-2016-2016-2016-2016-	patients at Ibnu Sina Hospital in herpes zoster at lbnu Sina Hospital in 2016-2017 based on age, gender, nutritional status, location, and comorbidities. Suffering from herpes zoster at secondary secondary data, namely of cases reaching 9 medical records of herpes zoster sampling using medical record data from patients diagnosed by a Herpes Zoster doctor. Suffering from herpes zoster at secondary data, namely medical records of herpes zoster cases (56.0%), while underweight nutritional status included 13 cases (52.0%). Dermatom distribution most is in the section thoracic with 11 cases (44.0%), while the most common comorbidities common is malignancy with 10



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5.	Desire´e Van	Infectious	To better	Patients were	Observational	A total of 32 patients	Herpes Zoster
	Oorschot,	Diseases and	understand the	eligible for the	studies use	participated in the study,	negatively impacts many
	Ashleigh	Therapy	burden, patient	study if they were	qualitative	with a mean age of 61	dimensions of patients'
	McGirr,		pathways, and	at least 50 years of	designs.	years. Most of them	health-related quality of
	Philibert Goulet,		clinical management	age and had been		(72%) were female. The	life, especially during the
	Patricia		of HZ in these	diagnosed with HZ		most commonly reported	acute phase of the
	Koochaki,		countries and	by a healthcare		symptoms included rash	disease.
	Ramya		identify gaps in the	practitioner within		(n = 32), pain (n = 31),	
	Pratiwadi,		literature	the previous 7–60		fatigue (n = 26), and	
	Selam Shah,			days for HZ		itching (n = 20). The	
	Desmond			patients and 90–		most frequently reported	
	Curran (2022)			365 days in		affected quality of life	
				Canada . Eligible		domains included	
				patients were		emotional functioning (n	
				invited to		= 31), daily activities (n =	
				participate in a		31), sleep (n = 29),	
				concept elicitation		physical functioning (n =	
				interview by		25).	
				telephone.			
6 .	Sharon L.	BMC Infectious	T he aim of this	The sample	Data were	The median age of the	Digestive disorders have
	Cadogan,	Diseases	study was to	consisted of 8022	taken from the	overall study population	the potential to be a risk
	Jennifer S.		explore potential	adults (aged 16	2015 Health	was 51 years (IQR: 36–	factor for medical
	Mindell, Judith		risk factors for	years and over)	Survey for	66). Among those who	conditions that lead to
	Breuer, Andrew		herpes zoster using	who participated in	England, an	reported previous herpes	the occurrence of Herpes
	Hayward and		survey data from a	the HSE 2015.	annual cross-	zoster, the median age	Zoster.
	Charlotte		nationally	Data collection	sectional	was 63 years (IQR: 49–	



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110	Warren-Gash1 (2022)	T dollarici	representative sample of the general community- dwelling population in England.	was conducted in participants' homes via face-to-face Computer Assisted Personal Interviews and self-administered methods and is described in full elsewhere .	representative survey of households in England.	74), compared with 49 years (IQR: 35–64) in participants who had never had herpes zoster. Among those who reported previous herpes zoster, the median age at onset of herpes zoster was 42 years (IQR: 25–57). A history of herpes zoster was more commonly reported by women, older individuals, individuals of white ethnic background, and those with certain medical conditions, including diabetes, respiratory and gastrointestinal disorders, and immunocompromised	Implications
7.	Carlos	International	This study aimed to	In the analysis	This cross-	patients. In the analysis period	This is the first study to
	Cifuentes- González,	Journal of Infectious	estimate the	period, 77,893	sectional	2015-2019, the SISPRO	determine the
	Gonzalez, William Rojas-	Infectious Diseases	prevalence of Herpes Zoster	patients were diagnosed with	study used the Integrated	database recorded between 25,370,381	epidemiological characteristics of HZO
	Carabali, Maria	Diseases	Ophthalmicus	HZ, of which 2,378	Social	and 37,081,636 annual	based on the National



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	Alejandra		(HZO) and describe	patients had HZO,	Protection	consultations, with	Health Database in the
	Fonseca-Mora,		the	representing	Information	women accounting for	Columbia region. It
	German Mejia-		sociodemographic	3.05% of all cases .	System	41.90% to 43.28% and	found that the age
	Salgado, Juliana		distribution of the		database of	men 56.67% to 58.01%	distribution was
	Reyes-Guanes,		disease by age, sex		the Colombian	of the total registered	correlated with a higher
	Alejandra de-la-		and region in		Ministry of	patients. Patients aged ≥	disease burden .
	Torre (2022)		Colombia using		Health, which	50 years (6,106,529 to	
			National Health		is the unique	9,846,367) represented	
			Registry data from		official	24.07% to 27.27% of all	
			January 1, 2015 to		database in	records. In that period,	
			December 31,		the country.	there were 77,893	
			2019.		We used the	patients diagnosed with	
					International	herpes zoster (HZ), of	
					Classification	which 2,378 had herpes	
					of Diseases	zoster ophthalmicus	
					specific code	(HZO), representing	
					for HZO	3.05% of all cases. The	
					(B02.3) from	estimated mean	
					2015 to 2019	prevalence of HZO was	
					to estimate	0.99 per 100,000	
					the	inhabitants, with an	
					prevalence	increasing trend, in	
					and	contrast to that observed	
					demographic	in HZ in general. Females	
					status of the	accounted for 54.44% of	
					disease in	HZO cases, with a male-	
					Colombia.	female ratio of 1:1.19.	
						The most frequently	



NC) Authors	Publisher	Objective study	Subject	Method	Results	Implications
						diagnosed age group was between 55 and 59 years (9.25%), followed by the >80 years group (8.70%), and the 65 to 69 years group (8.41%). Analysis of the annual distribution of the disease showed that the prevalence of the disease increased with age in the linear graph, as well as a higher prevalence in females in all age groups in the bar graph, except in the 35-39 and 45-49 age	
8.	Rajesh Sinha, Pinki Kumari, UK Pallavi, Subhasree Sarkar (20 23)	Cureus	To investigate the clinical and epidemiological patterns of herpes zoster and various post-herpetic complications.	A total of 72 patients with herpes zoster and post-herpetic complications who attended the dermatology outpatient department (OPD) of a tertiary care	A cross- sectional population- based study was conducted through a retrospective database review.	groups. A total of 72 patients were included in this study, consisting of 32 (44.4%) patients suffering from herpes zoster and 40 (55.5%) patients suffering from post-herpetic complaints. The minimum age was 14	A broader understanding of the clinical and epidemiological factors of herpes zoster and post-herpes zoster complications is essential, as the disease imposes a significant burden on tertiary care



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			hospital in Bihar		years, the maximum age	settings across all age
			during the period		was 83 years, and the	groups. Cases involving
			May 2022 to June		mean age in our study	multi-dermatomal,
			2023 after		was 52 ± 17 years. The	severe, or unusual
			obtaining approval		most commonly affected	presentations, as well as
			from the ethics		age group was 41-60	widespread lesions,
			committee .		years. A total of 52 males	should prompt extensive
					and 22 females were	workup to rule out
					included in this study,	immunocompromise.
					resulting in a male to	Common complications
					female ratio of 2.3:1. The	include post-herpes
					thoracic dermatome was	neuralgia, unsightly
					the most commonly	scarring, and
					involved dermatome,	pigmentary changes.
					observed in 43 (59.7%)	Untreated or under-
					patients, and the left side	treated cases are more
					was more frequently	susceptible to long-term
					affected, seen in 41	adverse effects. Timely
					(56.9%) patients.	management of
					Among the total 72	ophthalmologic
					patients, 26 (36.1%) had	complications is
					comorbidities, with	essential to prevent poor
					hypertension (18%)	visual outcomes.
					being the most common,	Therefore, early
					followed by diabetes	diagnosis and initiation
					mellitus (12.5%).	of appropriate antiviral
					Regarding the post-	therapy and pain
					herpetic complaints	management are key



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						found in our study, the most common was post-herpetic neuralgia, seen in 31 (77.5%) patients, followed by post-herpetic pigmentation (macules), observed in 22 (55%) patients, and scarring (papules, plaques, hypertrophic scars, and keloids), observed in 17 (42.5%)	aspects in the management of herpes zoster and post-herpes neuralgia.
9.	Xin-Bei Valerie Chan, Ngiap Chuan Tan, Mark Chung Wai Ng, Ding Xuan Ng, Yi Ling Eileen Koh, Wai Keong Aau, and Chirk Jenn Ng (20 23)	Frontiers in Public Health	This study describes the prevalence and utilization of health services in managing Herpes Zoster in developed societies .	Data of multi-ethnic Asian patients with the diagnosis code "herpes zoster" from 2018 to 2020 were extracted from their electronic medical records. Socio- demographic, clinical, visits, medical leave, prescriptions and referrals analyzed. A total of 2,987 of		patients. The mean age was 59.9 (SD + 15.5) years; 49.2% were male; 78.5% were Chinese, 12.2% were Malay, and 4.1% were Indian. The prevalence was 221, 224, 203 per 100,000 people in 2018, 2019, and 2020. The age group 70 to 79 years had the highest prevalence (829/100,000) over 3 years. Oral acyclovir (median daily dose 4,000 mg; median duration 7	The findings of this study suggest the need for HZ vaccination in older age groups. Visitation and referral rates were low. Topical acyclovir use was not found, and further research should evaluate the underlying reasons, benefits, and harms of this practice.



NO	Authors	Publisher	Objective study	Subject	Method	Results	Implications
				737,868 people were diagnosed with HZ during the 3 years		days) and topical acyclovir were prescribed by 71.6 and 47.6%, respectively. Prescribed analgesics were gabapentin (41.0%), acetaminophen combinations (30.1%), oral NSAIDs (23.7%), opioids (6.0%), and tricyclic antidepressants (1.9%). Most individuals consulted only once (84.3%); 32.7% required medical leave and 5.6% were absent for more than 7 days. HZ-related referral to hospital was required in 8.9% (4.9% emergency, 2.8% ophthalmology).	
10.	Kezia Arung Palobo, Sawitri, Pirlina Umiastuti (2023)	Syntax Literate: Indonesian Scientific Journal	This study aims to analyze risk factors in HZ patients, especially in the dermatology and genital URJ of Dr. Soetomo Hospital,	Samples were taken using consecutive sampling technique with inclusion criteria, namely patients in early adolescence (18-25	This study uses a retrospective analytical method with a design. case-control	It was found that as many as 62 (23.5%) HZ patients were aged 56-65 years, with women as the more dominant gender at 146 (55.3%), postherpetic neuralgia	Risk factors in the form of advanced age and comorbid disease factors that a person has are among the biggest risk factors for HZ.



NO	Authors	Publisher	Objective study	Subject	Method	Results	Implications
			Surabaya.	years), early adulthood (26-35 years), late adulthood (36-45 years), early elderly (46-55 years), late elderly (56-65 years), and elderly (>65 years) who have DMK (Medical Health Document) data on age, gender, and comorbidities or accompanying diseases.	study on HZ patients recorded and documented in the Medical Records of URJ Dermatology and Venereology patients at Dr. Soetomo Hospital, Surabaya for the period 2015-2017.	complications (42%) and patients who had comorbid diseases such as type 2 Diabetes Mellitus 15 (2.9%) also had a higher incidence.	
1 1.	Eduarda Pena, Maria João MS Gonçalves, Constança Azeredo, Susana Oliveira, Sara Araújo, et all (2023)	Open Forum Infectious Disease	This study aims to describe the clinical characteristics of Herpes Zoster patients.	The study involved 152 patients at a hospital in Portugal with a diagnosis of herpes zoster infection between January 1, 2012 and December 31, 2022.	This retrospective study reviewed the charts of all patients older than 18 years .	The study included 152 patients with a mean age of 70 years; 58% were female. In terms of clinical manifestations: 47% had localized herpes zoster (thoracic dermatomes in 40%) and only 11% had generalized herpes zoster. Other manifestations included meningitis/encephalitis	Thoracic involvement is most common with localized infection. Postherpetic neuralgia and bacterial infections are common complications. It is important to implement preventive strategies such as herpes zoster vaccination to prevent herpes zoster and post-



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					(7%), keratitis (n=4) and	herpes zoster neuralgia
					Ramsay-Hunt syndrome	in older adults, especially
					(n=3). Approximately half	those who are
					of the patients (51%) had	immunocompromised.
					an identified cause of	
					immunodepression at the	
					time of admission: 25%	
					had malignancies on	
					chemotherapy and 6%	
					had rheumatism that died	
					on immunosuppressive	
					therapy, only 7 patients	
					were HIV positive. Most	
					patients (78%) were	
					treated with acyclovir	
					(mean duration 9 days).	
					Postherpetic neuralgia	
					and secondary bacterial	
					infections were common	
					(35% and 20%,	
					respectively). All-cause	
					in-hospital mortality was	
					6%.	
1 2 Zupeng Xia	o, Clinical,	To understand the	A total of 189	This study	A total of 189 patients	This study provides
Hanyi Wu, X	in Cosmetic and	demographic	patients were	was a	with HZO were included	demographics, clinical
Chen, Xia	oli Investigational	information and	included in this	retrospective	in the analysis. The mean	manifestations and
Chen, Renta	ao Dermatology	ocular symptoms of	study.	study. All	age at presentation was	some risk factors of HZO
Yu, Aijun Ch	en	hospitalized		patients	61 years (mean	patients. HZO can cause



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(2023)		patients with HZO,		diagnosed	59.9±14.5 years),	severe sequelae. which
		and to find		with HZO	ranging from 14 to 93	may require more
		potential factors		who were	years. A total of 85	aggressive treatment for
		associated with the		hospitalized in	subjects (45.0%) were	patients with severe
		time to resolution		the	over 60 years old, while	facial rashes .
		of skin rash and		Department of	19 cases (10.1%) were	
		duration of ocular		Dermatology	under 40 years old. The	
		symptoms at		of a hospital in	male to female ratio was	
		discharge, this		Chongqing,	1.59. There were 47	
		study was		China from	current smokers (24.9%),	
		designed .		January 1,	23 former smokers	
				2015 to	(12.1%), and 119 never	
				December 30,	smokers (63.0%). Fifty-	
				2021 were	four cases (28.6%) had	
				included in	hypertension or coronary	
				this study.	heart disease, 34 cases	
					(18.0%) had diabetes, 16	
					cases (8.5%) had	
					hepatitis, 11 cases	
					(5.8%) had cancer, 11	
					cases (5.8%) had kidney	
					disease, and 4 cases	
					(2.1%) had autoimmune	
					disease.	
13. Elif Dem	irci General	This study aims to	This study involved	In this cross-	Of the 440 patients, 252	Especially elderly and
Saadet, Sa	bir Category of	investigate the	a total of 440	sectional	(57.3%) were female and	immunosuppressed
Hasanbeyzad	e Products	demographic and	patients diagnosed	study, data of	188 (42.7%) were male.	patients with HZ need to
(2023)		clinical	with HZ at	patients	The mean age was	be treated with care and



NO Authors	Publisher	Objective study	Subject	Method	Results	Implications
		characteristics of	Medicana	followed up	48.9±18 (4-94) years.	followed up for pain
		patients diagnosed	International Ankara	with a	The most common	management and PHN
		with herpes zoster.	Hospital.	diagnosis of	localizations were the	progression.
				herpes zoster	thoracic region with a	
				in the	rate of 35.5% and the	
				dermatology	lumbar region with a rate	
				department	of 21.4%. Disseminated	
				between	zoster and ophthalmicus	
				2013 and	were more frequent in	
				2020 were	elderly patients	
				retrospectively	(p<0.001). The most	
				examined.	common comorbidities	
					were hypertension (HT) +	
					coronary artery disease	
					(CAD) (12.6%), cancer	
					(10.3%), and diabetes +	
					HT (5.9%). Severe pain	
					was observed in 19.7%	
					of patients and was more	
					frequent in women	
					(p=0.016). Moderate and	
					severe pain levels were	
					high in patients with	
					HT+CAD and cancer	
					(p<0.001). Post-herpetic	
					neuralgia was observed	
					in 15.3% of patients over	
					50 years of age.	



NO	Authors	Publisher	Objective study	Subject	Method	Results	Implications
	Ashwin Budihal, Madhuri M Gudikote, Naveen Kumar P, Vidya KR (2024)	National Journal of Physiology, Pharmacy and Pharmacology	The aim of this study was to better understand the clinical profile and epidemiological patterns of HZ and various postherpetic complications.	Seventy-five patients with HZ and postherpetic complications who presented to the dermatology outpatient department were included in this study.	cross- sectional study was conducted in a tertiary hospital in Karnataka for 24 months from August 2013-August 2015.	The present cross-sectional study was conducted in a tertiary care hospital, and a total of 75 patients were considered for the study. The youngest patient was a 12-year-old male and the oldest patient was a 90-year-old male. The mean age of the patients was 52.45 ± 12.5 years. There was a female gender preponderance. Skin examination revealed erythema (84%) and vesicles (84%). Pain intensity was classified based on VAS. Approximately 54.6% of patients had moderate pain.	Acute vesicles with erythema and radicular pain in a unilateral dermatomal distribution are the most typical presentation of HZ infection, and are most commonly seen in the thoracic region .
15.	Raunak Parikh, O'Mareen Spence, Nikolaos Giannelos, lain	Dermatology and Therapy	To consolidate the literature on repetitive HZ loads, this study aims to serve as a non-	Included studies were categorized based on data collection (retrospective or	This study conducted a PubMed search (January 1,	A study from Korea showed a 45% higher risk of recurrence in individuals aged 51–70 years compared with	Because HZ is preventable by vaccination, national vaccination recommendations for HZ



NO Authors	Publisher	Objective study	Subject	Method	Results	Implications
Kaan (2024).	r ubilisher	systematic literature review, and discuss what is known about the incidence, risk factors, and clinical features of recurrent HZ.	prospective); data source (medical records, insurance claims, or physician survey); case definition (based on clinical presentation, antiviral prescription, or confirmed laboratory testing); country; inclusion criteria (general population or restricted by specific medical conditions or immune status); duration of followup; and statistical/analytic approach used.	2003– February 2, 2023) to assess the available	those aged 21–50 years. In Spain, the risk of recurrence increased with age, ranging from 1.14 for those aged 40–49 years to 2.14 for those aged ≥80 years. However, a study from California found that the cumulative risk of recurrence decreased with age, from 11.1% for those aged 50–59 years to 9.0% for those aged ≥80 years. HZ recurrence was more common in women than in men. Eleven studies reported the percentage of immunocompromised individuals with observed HZ recurrence during follow-up, with estimates ranging from 0–18.2%. In the two studies that documented dermatomal distribution, dermatomes supplied by the thoracic,	should include the need and timing of vaccination in both immunocompetent and immunocompromised individuals with a history of HZ.



NO Authors	Publisher	Objective study	Subject	Method	Results	Implications
					trigeminal, and/or c	ervical
					nerves were	most
					frequently involve	ed in
					recurrent HZ epi	sodes.
					Other factors that	t may
					influence recurrence	e in an
					individual ir	nclude
					prolonged pain aft	er the
					initial HZ episode a	nd the
					presence of herpes	zoster
					ophthalmicus.	



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Fifteen articles were analyzed using a synthesis table to see the variables that investigated by each study regarding the characteristics of herpes zoster disease. Of the 15 articles discussing the characteristics of herpes zoster disease, 11 article Which discuss about Characteristics of herpes zoster disease based on age, most often found in older adults (51-60 years) (journal 1, 2, 4, 7, 8, 9, 10, 12, 13, 14, 15), eight article use studies retrospective, (journals 1, 7, 8, 9, 10, 12, 13, 14), two articles used design descriptive (journal 2 and 4) and one article used a systemic review design (journal 15).

The results of the analysis regarding the characteristics of herpes zoster disease, 9 articles mention the characteristics of herpes zoster disease based on gender, most commonly found in women (journals 4, 5, 6, 7, 10, 11, 13, 14, 15), six articles using design stud i retrospective (journal 6, 7, 10, 11, 13, 14), two article use studies descriptive (journals 4 and 5), one article with a systematic review study (journal 15).

Furthermore, the results of the analysis regarding the characteristics of herpes zoster disease based on the location of the lesion, were mostly in the thoracic region of seven articles (journals 1, 2, 4, 8, 11, 13, and 15). Several articles also discuss the incidence of herpes zoster due to immunocompromised conditions (journals 3, 6, 11, 12, 15). With complications of *postherpetic neuralgia* (journals 1, 2, 3, 8, 9, 10, 11).

Discussion

Herpes zoster (HZ) usually manifests as a painful unilateral dermatomal rash, also known as shingles . The risk of HZ is associated with decreased immune system function, especially varicella-zoster virus-specific T-cell responses, associated with aging and/or in individuals with impaired immune systems or immunosuppression due to disease or therapy.^{8,9}

Prevalence of multi-ethnic Asians with a diagnosis of "herpes zoster" from 2018 to 2020 through socio-demographic data obtained A total of 2,987 out of 737,868 people were diagnosed with HZ over 3 years. With an aging population, the average incidence of HZ is 3-10/1,000 people per year in Asia Pacific countries increasing by about 5% per year.¹⁰

The results of this study indicate that from the study of Chaitanya Namdeo, et all (2022) it was found that the most cases of HZ were seen in the age group 51 - 60 years (22.9%), followed by the age group 31 - 40 years and 61 - 70 years (each 18.8%). In addition, in global reports, infections are most common in patients over the age of 55 years, with a peak over 60 years. Research from Carlos Cifuentes-González, et all (2022) also found that regarding age distribution, patients aged ≥ 50 years (6,106,529 to 9,846,367) represented 24.07% to 27.27% of records on HZ prevalence. 11,12

Herpes Zoster is more dominant in female patients than male patients. From the results of research by Syafira Alim, et all (2022), the distribution of the gender of herpes zoster patients is mostly female at 56.0%. Kezia Arung, et all (2023) also explained that women are the more dominant gender at 146 (55.3%) in HZ cases at Dr. Soetomo Hospital, Surabaya. 13,14

The most common lesion location obtained from Rania Ayu et al.'s (2020) study on HZ was the thoracic (32.1%), followed by the ophthalmic.¹⁵ Another study by Eduarda Pena, et all (2023), found in terms of clinical manifestations: 47% suffered from local herpes zoster (thoracic dermatome in 40%) and only 11% experienced generalized zoster.¹⁶



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And it was also found that dominant complications in several studies showed that *postherpetic neuralgia* was often found in HZ cases. In the study of Rajesh Sinha (2023), it was found that the most common post-herpetic complaint was post-herpetic neuralgia (PHN), seen in 31 (77.5%) patients. Then the study of Luciana, et all (2020) also showed that from 801 herpes zoster records, the clinical characteristics of HZ complications were dominant in post-herpetic neuralgia (22.1%).^{17,18} PHN is one of the chronic sequelae of herpes zoster that can be intermittent or constant pain. PHN occurs in the same dermatome as the HZ rash, and originates from peripheral and central neuronal damage that may be a side effect of the immune/inflammatory response that accompanies VZV reactivation and migration.¹⁹ Based on the analysis of the 15 journals above, several characteristics of ZH were obtained, including:

a. Age

The most common age range for experiencing HZ is the sixth decade. (51-60 years) by 22%, followed by the fourth decade (31-40 years) by 18.9% and the seventh decade (61-70 years) by 15.5%. ²⁰This study identified advanced age as an independent risk factor for delayed recovery of skin lesions due to HZ. In addition, the older a person is, the higher the risk of contracting from Herpes Zoster incidence. Specific cell-mediated immunity to Varicella Zoster may decline with age, leading to an increased incidence and severity of HZ .²¹

The study also showed that adults aged 50 years and older had a higher risk of stroke or myocardial infarction for 3 to 12 months after an episode of shingles. This study finding is supported by the presence of varicella zoster virus in the intracerebral and coronary arteries of these patients in *postmortem studies*.²²

b. Gender

Most studies reporting HZ recurrence rates by sex have shown higher rates in women. This variation may be explained by different approaches to HZ surveillance in different countries; differences in health-seeking behavior between women and men; and cultural factors, such as medication use and patient patience, which lead to underreporting of symptoms and inappropriate use of antivirals in more women.²³

c. Comorbidity

Herpes zoster infection is more common and more severe in immunocompromised populations. The incidence is significantly higher in this population compared with immunocompetent individuals over the age of 60 years. Due to the high level of immunosuppression in HZ patients, skin involvement in one dermatome is the most frequent clinical manifestation. Identified causes of immunosuppression in HZ patients include VZV reactivation from undiagnosed neoplasms, HIV infection, or other immunosuppressive conditions.^{24,25}

d. Location of Lesion

The most common lesion location is thoracic. Literature states that the most common location of herpes zoster is thoracic followed by herpes zoster ophthalmicus. In 10%-25% of herpes zoster ophthalmicus that do not receive proper therapy, permanent damage can occur including inflammation ocular, pain weakness and loss of vision. In a study of dermatomes, it was concluded that the most common location is at the level of the intercostal or thoracic nerves because these thoracic dermatomes are traversed by sensitive sensory nerve fibers. ¹⁵



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e. Complications

The most common complication of PHN from several literatures. This is in accordance with the literature stating that PHN is the most common complication and increases with age. Chronic PHN pain can persist for months or even years after the acute phase of the disease. 14,15

CONCLUSION

Based on the results of the identification and review of several literature reviews, then can made conclusion that Age characteristics and immunocompromised state are the most dominant factors in this literature review , followed by gender . Although there are several other characteristics such as clinical symptoms and location predilection of herpes zoster. The suggestion expected by the researcher is for further research to analyze whether the characteristics found in This study is to be a risk factor for herpes zoster disease . And for clinicians to be aware of the occurrence of herpes zoster disease which has identical characteristics to the characteristics of the subjects of this study, so that management planning can be arranged better.

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