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Occupational Health Concerns of Women Police Personnel: The Need for Optimum Health and Wellness

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Abstract: ***In India, police department has traditionally been considered a male dominating profession. However, in tandem with a changing socio-cultural environment and an increase in educational opportunities, women have started recognizing their inherent potential and strength. Now days increasing number of women are joining the police department. However, in the existing familial and societal setup, women serving the police force are overtaxed and find it difficult to balance their work and family. This paper is an attempt is to investigate the health and nutritional status of women police a high-risk vulnerable group who are prone to a myriad of health and nutritional status due to their occupation and gender. This paper highlights the need for promoting and investing in the safety, health, and wellness of women police in the light of the problems they face. Maintaining physical health, encouraging healthy eating and sleeping patterns, and advocating good lifestyle practices are important for promoting optimum health and wellness.***
Keywords: ***women police personnel, lifestyle practice, health, wellness.***

I. INTRODUCTION

The status of women in India has been subject to many great changes over the past few millennia. From equal status with men in ancient times through the low points of the medieval period, to the promotion of equal rights by many reformers, the history of women in India has been eventful. Our Indian sub-continent is gradually emerging as a powerful land since women began playing significant role in the development of the nation. There is no arena, which remained unconquered by Indian women Indian women have mastered anything and everything which a woman can dream of. Woman who once considered being the masters in the art of home making are now considered to be the forces that shape a country. She can now be seen working on par with men in every field. Representation of women in the police department has been phenomenal and has also become necessary for addressing gender-related issues on a priority basis and ensuring support to women victims of violence as well as protecting their rights.

In 2001, the share of women in the police was only 1.83 per cent, increasing to merely 4.59 per cent in 2010. Maharashtra, Tamil Nadu, and Union Territory of Chandigarh have relatively better representation of women in their police forces In Tamil Nadu out of the 95,745 police personnel, 10,118 (10.57%) are women. The nature of police duty is such that women have to work at odd hours like late night or early hours in the morning. And policing being a 24/7 job with no regular holidays and work schedule it becomes very difficult to maintain family responsibility along with the police work [7].

Then there are the silent contributors to an officer's poor health and well-being, such as stress, poor nutrition, no exercise, post-traumatic stress, and depression. Through diet, exercise, and adequate sleep, officers can reduce their chances of hypertension, heart disease, cancer, degenerative joint diseases, and diabetes. Focusing on officer health, safety, and wellness is critical. It is hoped that this study would guide the implementation of interventions for addressing the health concerns of this high-risk occupational group.

II. METHODOLOGY

A total of 1000 police officers aged ≥ 25 years were studied. The study respondents were drawn from the Armed Reserve Police Force and North Zone of Chennai City Police Commissionerate. A proforma was designed for the purpose of data collection and was pre- tested on 25 subjects. Necessary alterations were made and the instrument was finalized.

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It had all the details about socio-demographic characteristics, income details, recording anthropometry details, past medical history, brief dietary details and life style pattern. Written consent was obtained from the subjects before recruiting them in the study. The study protocol was approved by the ethics committee of the institution.

A. Anthropometry and blood pressure measurements

Height, weight and waist measurements were recorded. Waist circumference was measured in centimeters placing the tape on the navel after loosening the outer garments. The waist was defined as the smallest girth between the costal margin and iliac crests. Body mass index (BMI) (weight in kg/height in m2) was later calculated. Blood pressure measurements were taken in resting state.

B. Assessment of stress levels, eating habits and physical activity

The police occupational stress scale was used to assess the stress levels of the participants. The scale focuses on the work situations which result in psychological strain. A healthy eating habits scale was framed to assess the eating habits of the police officers who participated in the study. Questions relating to breakfast consumption, intake of fruits and vegetables, variety of diet, choice of foods, high fat foods, snacking pattern and intake of healthy foods were asked and rated accordingly. The Physical Activity Index Score, a simple assessment tool developed by Sharkey and Gaskill, was used in the study to understand the current activity level of the subjects.

III. RESULTS AND DISCUSSION

This study is part of an ongoing intervention for promoting health and wellness among law enforcement officers. Two hundred women police personnel belonging to the Armed reserve Force and North Zone of Chennai City Police Commissionerate participated in the study. The age of the study population ranged from 25 to 50 years. More than 50% of the participants belonged to the age group of 30-45 years.

From the investigations carried out it has been found that police officers are expected to put in long working hours as most of them in the present study (72%) worked more than 15 hours a day. On an average policemen work twelve hours every day and often put in 36 hours at a stretch during VIP visits and festivals. There are innumerable problems a police officer has to face while on duty. In the current study the respondents reported that lack of access to drinking water and healthy food, irregular meal timings, extended duty hours and lack of time to relax are some of the problems faced by police officers while on duty. Policing is a 24- hour occupation and shift work is a necessity. However, night shift work can have considerable consequences on health and safety [1]. Working hours are also non-conducive for women police officers. A recent study sponsored by the BPRD reveals that “90 % of police station staff, across states and across police station types, presently works for more than eight hours a day”. Women were often found to be working more than 12 hours a day and often in postings outside their home towns which made their dual roles within home and work very difficult [8].

On analyzing the stress levels of the police officers using the police occupational stress scale it was found that 54 percent of the women police officers were severely stressed out. Some of the factors (Table 1) that contributed to stress among the respondents were inadequate rest (93.5%), lack of holidays (95%), heavy workload (80.5%) and problems at home (88%). This shows that stress is an inevitable part of police life. As a consequence of high stress most of the officers experienced headache, acidity and fatigue and some officers reported of eating excessively under stress. Law enforcement officers are widely recognized to suffer from very high levels of stress through performing work that is both physically and emotionally draining [3]. Recent research[4] has shown that high levels of stress in police officers directly correlate with higher levels of short- and long-term negative health effects (physiologically and psychologically).

TABLE 1
PERCENT DISTRIBUTION OF POLICE OFFICERS BASED ON CAUSES OF STRESS

Particulars	Police officer N= 200	
	Frequency	Percent
Inadequate rest	187	93.5
Long duty hours during hot summer	168	84
No leave/holiday	190	95
Heavy workload/time pressure	161	80.5

Seeing too many accidents on the road	128	64
Problems at home	176	88
Pressure from higher authorities	146	73
Offensive language from public	137	68.5
Pollution – air and noise	164	82

Another important observation from the study was the lack of physical activity among the women police. Only 34 percent of the women police officers were involved in regular physical exercise for 30 minutes in a day like walking and jogging. But when the Physical activity level of the women police was assessed using the assessment scale it was observed that 92.9 percent of the participants exhibited a sedentary lifestyle. Reasons cited for the low physical activity levels was lack of time, while some of them even said that they were not interested in physical exercise. A small percentage of the officers reported that they were not able to exercise because of some surgery that they had undergone in the recent past. Low levels of physical activity have been shown to promote increases in weight, body fat and potential health issues. Weight gain can also account for decline in an officer's physical performance and is associated with decreases in cardiopulmonary fitness [6]. The combination of night work, overtime, shortened sleep and faulty dietary practices which is seen among the police makes them vulnerable to many health problems and increases the risk of cardiovascular disease, primarily heart disease and stroke. The health profile of the study respondents is given in table 2.

TABLE 2
PERCENT DISTRIBUTION OF POLICE OFFICERS BASED ON HEALTH PROBLEMS

Particulars	Police officer N= 200	
	Frequency	Percent
Acidity	71	30.5
Indigestion	29	14.5
Constipation	41	20.5
Flatulence	50	25.0
Insomnia	85	42.5
Hair loss	141	70.5
Headache	129	64.5
Back pain	157	78.5
Leg pain	125	62.5
Respiratory problems	92	46
Anemia	58	29
Fatigue	165	82.5

The study revealed that most of the of women police were suffering from musculoskeletal problems like back ache (78.5) and leg pain (62.5%). Standing for prolonged hours, unusual duty hours, bad posture, frequent travel while patrolling make them prone them to such difficulties. Forty six percent were suffering from respiratory problems like coughing and wheezing as they have work to outside the police station in dusty and hot environment.

Anemia was seen in 58 (29%) of the police personnel and anemia causes fatigue, weakness, shortness of breath, palpitations, decreases work capacity, decreases cognition and job performance. Efforts should be taken to prevent anemia and they should be encouraged to include green leafy vegetables in adequate quantities in their diet. Fatigue was also seen 82.5% of the women police personnel which could be attributed to shift work, insufficient sleep and long and erratic work hours. Saha et al [2] states that health problems significantly among law enforcement officers increased after joining the service. Cardiovascular problems, gastrointestinal disturbances and problems associated with sleep deprivation significantly increased during police service.

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TABLE 3
ANTHROPOMETRIC MEASUREMENTS AND BLOOD PRESSURE LEVELS
OF THE STUDY RESPONDENTS

Particulars			Female	
			Frequency	Per cent
BMI	Under weight	< 18.5 Kg/m^2	7	3.5
	Normal	18.5 – 22.9 Kg/m^2	110	55.0
	Over weight	23 – 24.9 Kg/m^2	48	24.0
	Grade I Obesity	25 – 29.9 Kg/m^2	35	17.5
Waist Circumference	Normal	(<90 cm)	115	57.5
	High	(≥ 90 cm)	85	42.5
Blood pressure	Normal	<120/80 mmHg	124	62.0
	Pre-hypertension	120-139/80-89 mmHg	54	27.0
	Stage I hypertension	140-159/90-99 mmHg	22	11

The findings of the study also show that 24% and 17.5% of the respondents were overweight and obese respectively based on their BMI. In addition 42.5 % of them had a waist circumference of more than 90cms. High BMI and waist circumference increases the risk of developing cardiovascular diseases and diabetes. Based on the blood pressure measurements 11% of the women respondents were pre-hypertensive and 27% were in stage I of hypertension. Hypertension is directly responsible for 57% of all stroke deaths and 24% of all coronary heart disease deaths in India. There is a strong correlation between changing lifestyle factors and increase in hypertension in India [5].

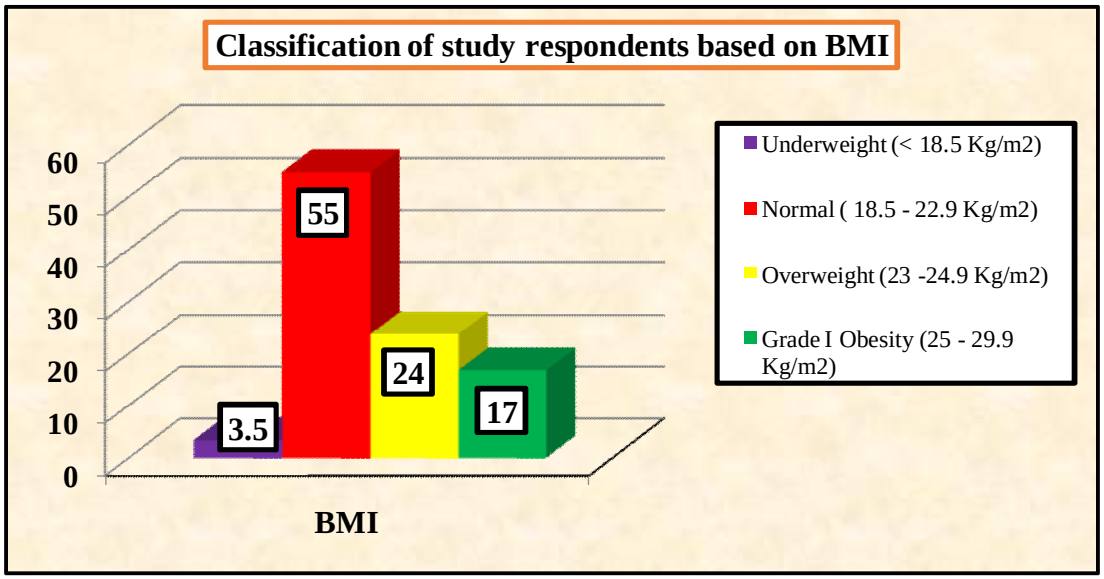

Fig.1. Classification of study respondents based on BMI

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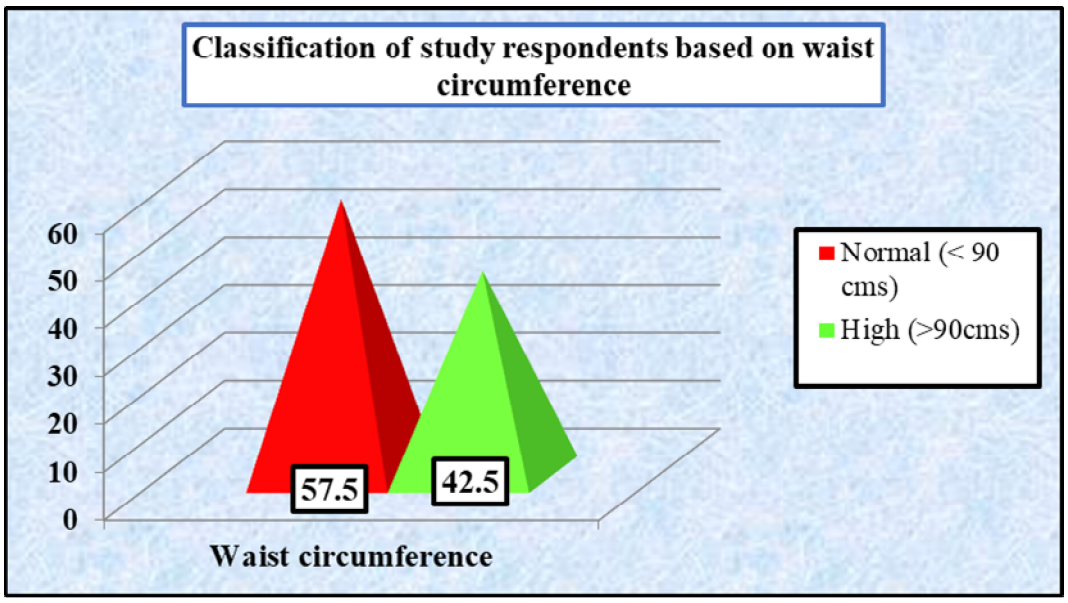

Fig.2. Classification of study respondents based on waist circumference

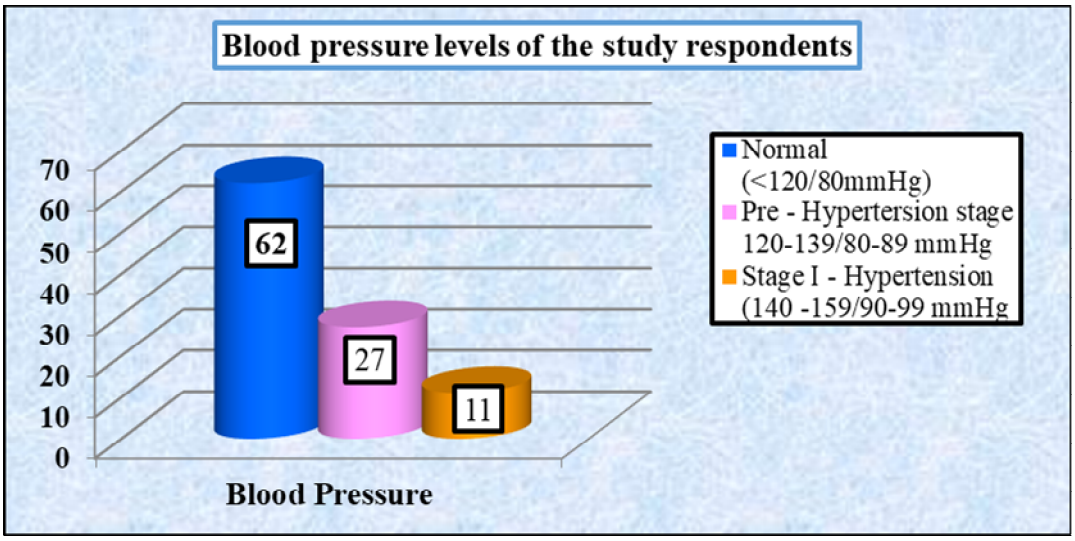

Fig.3. Blood pressure levels of the study respondents

The dietary practices of the respondents revealed that a greater percentage of the women officers (90%) were non vegetarians and 7 percent were ova-vegetarians. Poor dietary practices like skipping meals (52%) and frequent consumption of junk foods was seen among majority of the respondents of the study. Breakfast was the main meal that was being skipped. Majority of the police officers compensated for the meal skipped by drinking coffee / tea. In addition to drinking coffee/tea police officers ate baji/bonda/vada/samosa or other junk foods. Due to lack of time and irregular working hours, the respondents opt for junk foods or fast foods which contain high amounts of sodium which increases and aggravates the risks of high blood pressure and they are loaded with calories and fats especially the artery clogging saturated fats. Results also indicated that the fruit and vegetable consumption of the respondents were less than the daily recommended requirement which makes them prone to micronutrient deficiency. Faulty dietary behaviors seem among the respondents in the current study include increased number of meals eaten outside the home, larger portion sizes of meals at restaurants and fast-food takeaways, and increased consumption of soft drinks and these behaviours are directly linked to adverse health outcomes. Paying close attention to good eating habits now support health benefits later as carelessness about food choices can contribute to many chronic diseases, including heart disease, diabetes and cancer.

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IV. CONCLUSION

A police department has an obligation to recruit and maintain officers who are properly trained and physically capable of responding to the needs of all citizens. Implementation of a physical fitness programme, following a regular balanced diet, and stress management can extend the career and improve the quality of life of the officers. In addition the department will also benefit in the public's eyes by producing more professional and efficient officers that will help to combat the negative stereotype associated with a police officer. This paper calls for the need to preserve and support the well-being of the law enforcement officer especially women officers and suggests that promoting the health of the women police should be accorded top priority.

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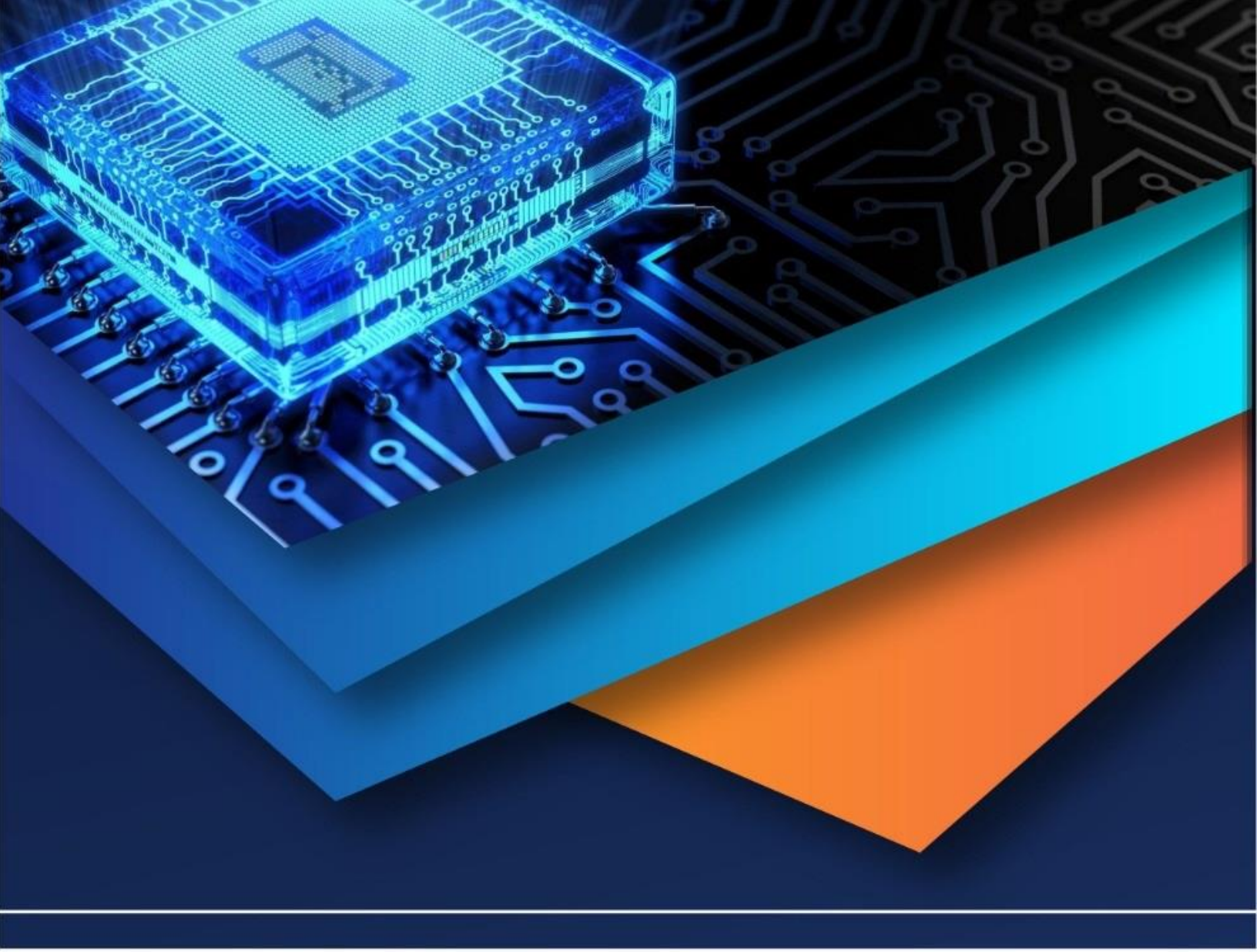

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