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Quality of Life among Varanasi based Ayurveda Junior Resident Doctors Engaged in Covid-19 Care using WHO-BREF - A Cross-Sectional Survey

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Abstract: Introduction: During the Coronavirus Pandemic, the Varanasi based Ayurveda junior resident doctors experiencing challenges in their quality of life following the covid19 related challenges. The challenges include; loss of many patients, deaths and illnesses of colleagues, fear of transmission to family members, personal risk of infection, inability to cope, personal isolation, population restrictions, and long shifts of work which affect their QOL and have received less attention from scholars. The study aimed at evaluating the quality of life of Ayurvedic medicine practitioners during COVID-19 pandemic.

Methods and Material: Varanasi based Ayurveda junior residents from both urban and rural settings were approached for the cross-sectional survey. An online cross-sectional survey was conducted to collect the data and WHOQOL-BREF questionnaire was made available online on Google forms to the junior residents.

The study population involved individuals within the range of 24-80 years. A sample size of 100 was selected from the target population using a convenience sampling procedure. The study identified two or more categories for each variable in the dataset; therefore, the chi-square test was used to examine the relationship between two or more unconditional variables. SAS 9.4 (Statistical Analysis System, Carry, NC, USA) tool was used to analyse the relationship between the categorical variables. P values were obtained for each variable.

Results: The sample n=100 comprised 52 males and 48 females. The responses were clustered in three categories to analyse the impact during the pandemic. The categories include; social support and satisfaction, impact on mental and physical health, and impact on personal life. Findings from the study showed that all three domains were adversely affected by the pandemic, with the analysis showing a relationship between the variables.

Conclusions: The Covid-19 pandemic impacted the QOL of the Ayurveda junior residents in the three categories selected for the study and efforts to help the residents focus on the three areas.

Keywords: Covid-19, Ayurvedic practitioners, Quality of Life (QOL), Healthcare Workers (HWC), WHO, Varanasi, personal, physical, mental, and social Domains.

I. INTRODUCTION

The healthcare workers have been experiencing adverse impacts as they try to curb the detrimental health impact of the Coronavirus disease. They are responsible for preventing the spread of the disease, treating other patients, and maintaining their personal and family wellbeing.¹ The overall well-being and psychological burden for the health care workers have continued to receive heightened attention globally, with many results showing burnouts, suicide, and psychological stress.² The Ayurveda junior residents are a significant part of the healthcare workforce. The individuals use techniques and theories to bring people into spiritual, emotional, mental, and physical balance, which enable them to find fulfilment and happiness, cure diseases, and maintain their health. The Varanasi based Ayurvedic resident doctors have been in the forefront to help in the fight against Covid-19, by using Ayurveda along with different medicine systems to help alleviate the disease condition and boost the immune system of individuals. Novel coronavirus or Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2), also known as Covid-19, was declared a global pandemic by WHO in 2020 due to its rapid spread. Covid-19 pandemic has led to individuals focusing their attention on the challenges that the health workers undergo.³ The healthcare workers have continued to offer their services despite; individual's

inability to cope, fear of transmission to family members, personal isolation, personal risk of infection, loss of many patients, death of friends and colleagues, and illnesses.⁴

The challenges brought about by Covid-19 could affect the quality of life of the individuals. WHO defines the quality of life as how individuals see themselves in their environment regarding their expectations and goals in life.⁵ Covid-19 has changed how things are done globally and presented unprecedented pressure on the health care systems. The studies conducted on the health care workers during the pandemic reveal adverse impacts on the psychological wellbeing of the individuals. There are high levels of psychological conditions during the Covid-19 emergency due to the psychological factors and emergency work which require timely treatment for their quality of life.¹

Covid-19 has also been seen to impact the sleep, physical activities, and eating habits of healthcare practitioners. In a recent study among Brazilian healthcare practitioners by⁴, most healthcare professionals reported sleep-related complaints, change of diet, and physical inactivity. A large number of practitioners are taking insomnia medication, others have changed their diets by increasing their alcoholic beverages and carbohydrate intake, and a significant proportion has shown a decline in their physical activity, which is likely to bring about psychological and health issues such as cardiovascular diseases and diabetes mellitus.⁴

Empirical evidence shows that the social relationships among the HCW have been adversely affected by the pandemic, which has, in turn, has affected their quality of life because the practitioners can no longer go for their annual leaves as scheduled, the daily routine has been lost because things are being done differently which has made them lose the touch of social support⁶ Covid-19 anxiety has been viewed as the individual variable that determines the QOL amid the Covid-19 pandemic. An individual's anxiety about the disease could lower the quality of life by bringing confusion and uncertainty. The national identity and family also determine the QOL because identification with the nation or the family background could either promote resilience and wellbeing or in other instances, cause the factors to decline⁵

Several studies have been done to establish the psychological wellness of HCW during the Covid-19 pandemic. However, the studies had the following limitations about ayurvedic residents: the data used in the studies were collected from all ayurvedic practitioners and mainly assessed the psychological wellbeing. Besides, no studies have been conducted on the QOL of Ayurvedic medicine junior residents during the Covid-19 pandemic. The study was done with the main aim of evaluating the effect of the Covid-19 pandemic on the QOL of Ayurveda junior residents. To achieve the aim of the study, the following objectives were set up: To investigate the changes in daily life preferences/QOL of Ayurveda junior residents during the Covid-19 pandemic and assess the most impacted domain of health (physical, psychological, and social) during Covid-19 pandemic.

II. MATERIALS AND METHOD

A. Study participants and Design

The study was an online-based cross-sectional survey conducted between 1st and 31st May 2021 through questionnaires on Google forms via email or WhatsApp. The study employed a cross-sectional online survey to collect the data due to the limited face-to-face interactions with individuals. The target population was the Ayurveda junior residents from both urban & rural settings in Varanasi who were aged between 24-40 years. A total of 100 Ayurvedic health practitioners, 48 males, and 58 females, participated in the study. The research used a qualitative study research design to examine and assess the changes in the quality of life and changes in daily life preferences and to assess the domain of life that was majorly affected by the pandemic.

The data collection involved; (1) Conducting a Survey and approaching participants to participate in the study voluntarily, and (2) Data collection, which was done through the use of online questionnaires. In the first step, the participants were identified and approached to voluntarily participate in the study, and a convenience sampling method was used to reach and contact the respondents for the study. For inclusion in the study, participants had to fit in the following criteria; (i) males or females aged between 24 to 40 years; (ii) were Junior residents at the time of the study; (iii) Had a Smartphone or any electronic gadgets to fill the Google form. Students who were pursuing courses in ayurvedic medicine and yet to complete their course were excluded from the study because they do not have a long period of healthcare practice. To limit the Ayurvedic practitioners' responses, the online questionnaires were sent to the selected respondents.

- 1) *The Study Variables:* The study's independent variables were the changes in the daily life preferences of the participants and the social, psychological, and physical domains of the individuals affected by the pandemic. Data collected included the age, gender of the participants, the factors affecting their personal life, psychological and mental health, and factors relating to social support and satisfaction.
- 2) *Data Analysis:* A descriptive analysis was done by calculating the standard deviation and mean of the continuous variables and the percentage and frequency of the categorical variables. The data was analyzed using SAS software. The chi-square test was

conducted to determine the connection between the dependent and independent categorical variables, including the impact of lifestyle and activity on both males and females during the covid-19 pandemic.

III. RESULTS

Table 1- Summary analysis among Male and Female participants

Variables	Total Sample (N=100), (n %)	Male (N=52), (n %)	Female (N=48), (n %)	Chi ²	P-value
Age, mean \pm SD	27.59 \pm 1.6	27.9 \pm 1.60	27.2 \pm 1.5	-	0.01*
Diagnosed with Covid- 19?					
No	36 (36)	20 (20)	16 (16)	0.59	0.6
Yes	64 (64)	32 (32)	32 (32)		
How many time Covid positive since outbreak?					
0	35 (35)	19 (19)	16 (16)	0.94	0.04*
1	57 (57)	29 (29)	28 (28)		
2	08 (8)	04 (4)	04 (4)		
Serving extra hours duty since Covid- 19?					
0 hours	59 (59)	30 (30)	29 (29)	0.51	0.67
1-3 hours	28 (28)	14 (14)	14 (14)		
4-6 hours	10 (10)	06 (6)	04 (4)		
7-9 hours	01 (1)	00 (0)	01 (1)		
>10 hours	02 (2)	02 (2)	00 (0)		
What measures you follow to prevent or to maintain health since Covid- 19 pandemic?					
Ayurvedic	49 (49)	24 (24)	25 (25)	0.7	0.008*
Physical Exercise	18 (18)	10 (10)	08 (8)		
Yoga	31 (31)	16 (16)	15 (15)		
Diet	01 (1)	01 (1)	00 (0)		
None	01 (1)	01 (1)	00 (0)		
How would you rate your quality of life since pandemic?					
Very good	05 (5)	03 (3)	02 (2)	0.9	0.02*
Good	61 (61)	32 (32)	29 (29)		
Neutral	31 (31)	15 (15)	16 (16)		
Poor	03 (3)	02 (2)	01 (1)		
How satisfied are you with your health?					
Very Satisfied	06 (6)	04 (4)	02 (2)	0.5	0.005*
Satisfied	54 (54)	25 (25)	29 (29)		
Neutral	33 (33)	18 (18)	15 (15)		
Dissatisfied	07 (7)	05 (5)	02 (2)		
To what extent do you feel physical pain prevents you from doing what you need to do?					
Little	35 (35)	25 (25)	10 (10)	0.04	0.004*
Moderate	25 (25)	10 (10)	15 (15)		
Mostly	14 (14)	06 (6)	08 (8)		
	26 (26)	11 (11)	15 (15)		

Not at All	51 (51)	27 (27)	24 (24)	0.6	0.007*
	26 (26)	15 (15)	11 (11)		
	03 (3)	02 (2)	01 (1)		
	20 (20)	08 (8)	12 (12)		
How much do you need any medical treatment to function in your daily life?	27 (27)	18 (18)	09 (9)	0.05	0.002*
Little	52 (52)	21 (21)	31 (31)		
Moderate	21 (21)	13 (13)	08 (8)		
Mostly					
Not at All					
How much do you enjoy life?	26 (26)	19 (19)	07 (7)	0.03	0.001*
Moderate	44 (44)	21 (21)	23 (23)		
Mostly	30 (30)	12 (12)	18 (18)		
Completely					
To what extent do you feel your life to be meaningful?	08 (8)	06 (6)	02 (2)	0.12	0.001*
	33 (33)	21 (21)	12 (12)		
Moderate	57 (57)	24 (24)	33 (33)		
Mostly	02 (2)	01 (1)	01 (1)		
Completely					
How well are you able to concentrate?	02 (2)	01 (1)	01 (1)		
Little	13 (13)	06 (6)	07 (7)	0.97	0.01*
Moderate	59 (59)	31 (31)	28 (28)		
Mostly	26 (26)	14 (14)	12 (12)		
Completely					
How safe do you feel in your daily life?	20 (20)	15 (15)	05 (5)	0.14	0.001*
Little	49 (49)	23 (23)	26 (26)		
Moderate	27 (27)	12 (12)	15 (15)		
Mostly	04 (4)	02 (2)	02 (2)		
Completely					
	01 (1)	00 (0)	01 (1)	0.72	0.02*
	29 (29)	16 (16)	13 (13)		
	63 (63)	32 (32)	31 (31)		
	07 (7)	04 (4)	03 (3)		
How healthy is your physical environment?	05 (5)	02 (2)	03 (3)	0.6	0.005*
Little	18 (18)	10 (10)	08 (8)		
Moderate	49 (49)	28 (28)	21 (21)		
Mostly	28 (28)	12 (12)	16 (16)		
Completely					
	09 (9)	07 (7)	02 (2)		
	37 (37)	23 (23)	14 (14)	0.06	0.0004*
	42 (42)	16 (16)	26 (26)		
	12 (12)	06 (6)	06 (6)		
					0.009*

	01 (1)	00 (0)	11 (11)	0.05	
	31 (31)	22 (22)	09 (09)		
	56 (56)	24 (24)	32 (32)		
	12 (12)	06 (6)	06 (6)		
Do you have enough energy for everyday life?					
Little					
Moderate					0.003*
Mostly	26 (26)	15 (15)	11 (11)	0.46	
Completely	48 (48)	25 (25)	23 (23)		
	23 (23)	11 (11)	12 (12)		
	02 (2)	00 (0)	02 (2)		
	01 (1)	01 (1)	00 (0)		0.004*
Are you able to accept your bodily appearance?	16 (16)	09 (9)	07 (7)	0.12	
Little	48 (48)	20 (20)	28 (28)		
Moderate	36 (36)	23 (23)	13 (13)		
Mostly					
Completely	16 (16)	08 (8)	08 (8)		0.01*
Have enough money to meet your needs?	68 (68)	35 (35)	33 (33)	0.68	
Little	15 (15)	09 (9)	06 (6)		
Moderate	01 (1)	00 (0)	01 (1)		
Mostly					0.01*
Completely					
How available to you is the information that you need in your day-to-day life?	21 (21)	10 (10)	11 (11)	0.34	
Little	63 (63)	31 (31)	32 (32)		
Moderate	16 (16)	11 (11)	05 (05)		
Mostly					
Completely					
To what extent do you have the opportunity for leisure activities?	05 (5)	04 (4)	01 (1)		0.02*
Little	68 (68)	33 (33)	35 (35)	0.36	
Moderate	27 (27)	15 (15)	12 (12)		
Mostly					
Completely	31 (31)	16 (16)	15 (15)		
Not at all	46 (46)	24 (24)	22 (22)		0.004*
How well are you able to get around?	20 (20)	09 (9)	11 (11)	0.9	
Very good	02 (2)	02 (2)	00 (0)		
Good	01 (1)	01 (1)	00 (0)		
Neutral					
How satisfied are you with your sleep?	24 (24)	13 (13)	11 (11)		0.005*
Very Satisfied	43 (43)	20 (20)	23 (23)	0.09	
Satisfied	27 (27)	13 (13)	14 (14)		
Neutral	06 (6)	06 (6)	00 (0)		
Dissatisfied					
How satisfied are you with your ability to perform your daily living activities?	15 (15)	05 (05)	10 (10)		0.003*
	49 (49)	21 (21)	28 (28)	0.08	
	36 (36)	26 (26)	10 (10)		

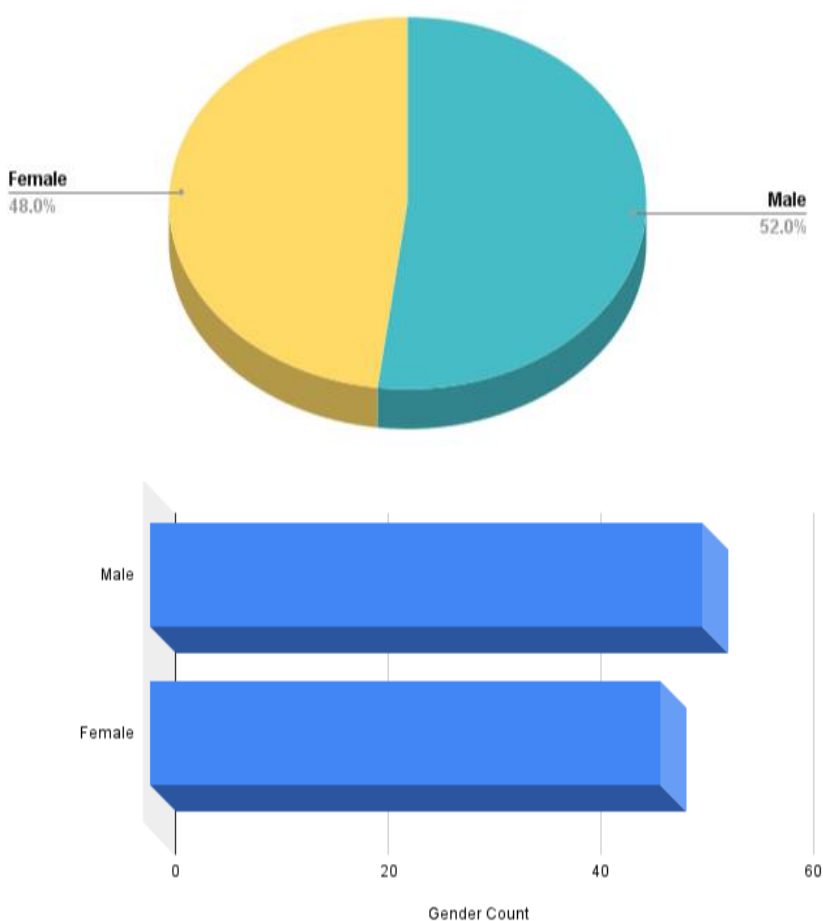
Very Satisfied					
Satisfied					
Neutral					0.01*
	29 (29)	18 (18)	11 (11)	0.43	
	58 (58)	28 (28)	30 (30)		
How satisfied are you with your capacity for work?	13 (13)	06 (6)	07 (7)		
Very Satisfied					0.02*
Satisfied	08 (8)	05 (5)	03 (3)	0.48	
Neutral	56 (56)	31 (31)	25 (25)		
How satisfied are you with yourself?	36 (36)	16 (16)	20 (20)		
Very Satisfied					
Satisfied					
Neutral	12 (12)	06 (6)	06 (06)		0.02*
Dissatisfied	51 (51)	27 (27)	24 (24)	0.77	
Very Dissatisfied	36 (36)	19 (19)	17 (17)		
	01 (1)	00 (0)	01 (1)		
	46 (46)	28 (28)	18 (18)		0.008*
How satisfied are you with your personal relationships?	16 (16)	08 (8)	08 (8)	0.22	
Very Satisfied	38 (38)	16 (16)	22 (22)		
Satisfied					
Neutral					
Dissatisfied					
How satisfied are you with the support you get from your friends?					
Very Satisfied					
Satisfied					
Neutral					
How satisfied are you with the conditions of your living place?					
Very Satisfied					
Satisfied					
Neutral					
How satisfied are you with your access to health services?					
Very Satisfied					
Satisfied					
Neutral					
28. How satisfied are you with your transport?					
Very Satisfied					
Satisfied					
Neutral					
Dissatisfied					
How often do you have negative feelings such as blue mood, despair, anxiety, depression?					
Little					
Moderate					
Not at all					

IV. INTERPRETATION

In the given dataset of 100 observations, we found two or more categories (groups) for each variable. So, the Chi-Square Test for independence was applied to test the correlation between two or more categorical variables. SAS 9.4 (Statistical Analysis System, Carry, NC, USA) was used for statistical analysis for categorical variables. Statistical significance was determined at $P < 0.05$. In the chi-square test, we assumed two hypotheses; the null hypothesis (h_0) and the alternate hypothesis (h_a). Null hypothesis (h_0): There is no relationship between variables. The alternate hypothesis (h_a): There is a significant relationship between variables. If the p-value is less than 0.05, the null hypotheses is rejected, and if the value is greater than 0.05, the null hypotheses remain.

The test was done to establish the association between genders with the other group variable to confirm whether the group gender (male or female) has any relationship with the other categorical variables, as shown in Table-1. The tables also show the sample mean and standard deviation 27.59 ± 1.6 of the Age variables and frequency counts with percentages of other variables.

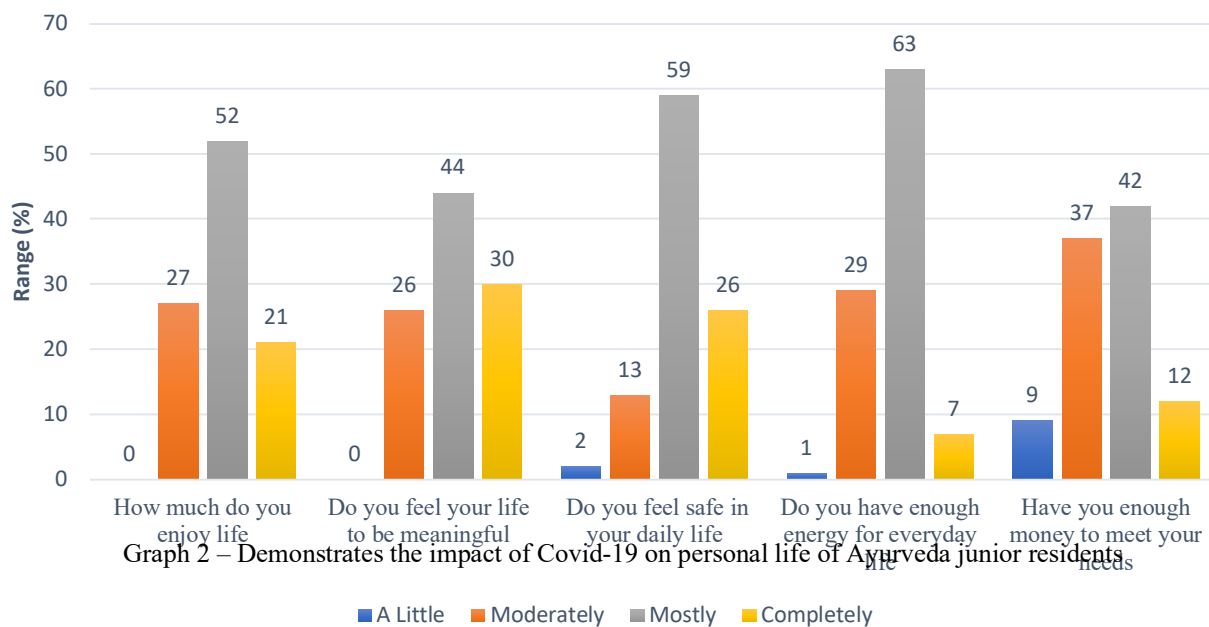
Frequency Percentage by Gender



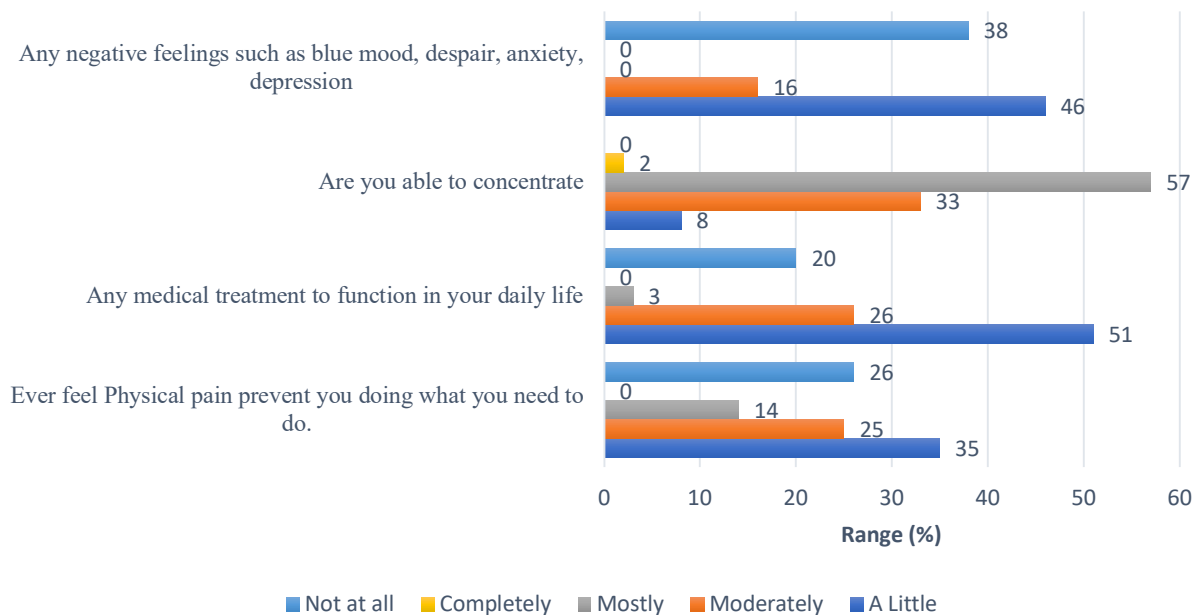
Graph 1- Graphical representation of number of male and female participants

The data set had a qualitative set of values, so focus was put on the gender (M: F) as a key attribute for analysis to conclude the impact on lifestyle and activity during the covid-19 in both male and female as well as overall sample by analysing the frequency counts and percentages shown in the table and figures. In the 100 samples, the variables based were grouped on responses in three categories, (1) Impact on personal life, (2) Physical and mental health impact, and (3) Social support and satisfaction to analyse the impact during Covid-19 pandemic.

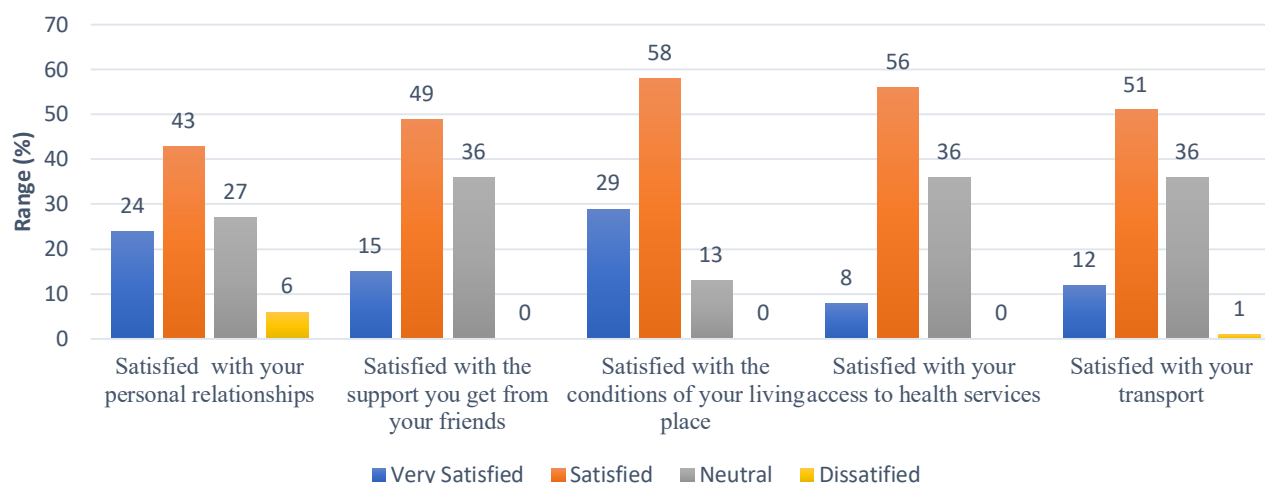
Impact on Personal life



Physical and Mental Health Impact



Social Support and Satisfaction



Graph 4- Demonstrates the impact on social support and satisfaction during Covid-19 pandemic among Ayurveda junior residents

V. DISCUSSION

The study evaluated the quality of life of Ayurvedic junior residents amid the Covid-19 pandemic using impact on personal, mental and physical health and the social satisfaction obtained during the pandemic as the baseline. A review of the literature showed adverse impacts on the psychological wellbeing of the HCW from the Covid-19 pandemic.⁷ Analysis from the tables also confirmed the impact on personal, physical and mental health and the social satisfaction obtained during the pandemic. Covid-19 has impacted the rate at which individuals enjoy life.⁸ From the study, 27% of the individuals moderately enjoyed life, 52% mostly enjoyed life, and only 21% completely enjoyed life.

Considering the personal life, our findings showed that a significant proportion of the Ayurvedic junior residents did not have energy for everyday life and did not have money to meet their needs. Lack of energy can be attributed to the challenges experienced treating Covid -19 patients, the losses of patients and family members, and the fear of contracting covid-19.⁸ Having inadequate money could be linked to the medical expenses the Ayurvedic junior residents incur to take their loved ones who contracted Covid-19 to a health facility. Our findings also showed that individuals experienced negative feelings, including; depression, anxiety, despair, and blue mood. The factors are likely to impact the individual's ability to enjoy their life. Also, only 2% of the population was found to concentrate on their work during the Covid-19 pandemic. That reveals how Covid-19 has disrupted the quality of life of the Ayurvedic junior practitioners.⁵ Apart from this 51% of the junior practitioners were on little medication to function in their daily life.

A significant proportion of the population confirmed to feel physical ache when doing what they were required to do during the pandemic. Human beings need social support and satisfaction in order to get on well in their lives.⁷ Ayurvedic healthcare practitioners are concerned with the wellbeing of other individuals, and they therefore require social support and satisfaction, especially in such demanding times 6% of the population expressed dissatisfaction with their personal relationships. Also, 36% were neutral on the satisfaction they got from friends, which is likely to be due to stigmatisation as they fear contracting Covid-19. A further 36% were neutral on their access to health services which show that despite being on the frontline in the fight against Covid-19 the individuals could be undergoing medical complications which affect their quality of life.⁶

In the social support domain, the individuals were seen to have moderate satisfaction in all the areas of their social life. That could be attributed to limited interactions with others, due to fear of transmission, or inability due to fatigue.⁹ Our findings showed the need for the healthcare workers to get social support in the course of discharging their duties, the need for financial support to meet their duties, and the need to consider their physical and health impacts to reduce their dependence on medicine in order to discharge their duties.

From the above discussion, it is evident that Covid-19 has impacted the QOL of the Ayurveda residents. The sudden changes in how things are done, the rampant deaths of patients and loss of loved ones and the work pressures have changed how the Ayurvedic

HCW view life.⁶ It is noteworthy that the QOL of Ayurvedic junior practitioners has not received adequate attention from researchers and the stakeholders concerned, which is likely to impact their performance by declining productivity and affect their lifespan. It is therefore recommended that more studies on QOL be conducted on the healthcare workforce to determine other variables that are likely to impact the quality of life in order to address them in a timely manner. The personal life, mental and physical health, and the social relationships of the Ayurvedic junior practitioners should be given a priority in order for them to continue offering quality healthcare services in these unprecedented times of Covid-19.

REFERENCES

- [1] Giusti EM, Pedroli E, D'Aniello GE, Stramba Badiale C, Pietrabissa G, Manna C, et al. The psychological impact of the COVID-19 outbreak on health professionals: A cross-sectional study. *Front Psychol.* 2020; 11:1684.
- [2] Amanullah S, Ramesh Shankar R. The impact of COVID-19 on physician burnout globally: A review. *Healthcare (Basel).* 2020;8(4):421.
- [3] Cai H, Tu B, Ma J, Chen L, Fu L, Jiang Y, et al. psychological impact and coping strategies of frontline medical staff in Hunan between January and March 2020 during the outbreak of Coronavirus disease 2019 (COVID-19) in Hubei, China. *Med Sci Monit.* 2020;26: e924171.
- [4] Mota IA, Oliveira Sobrinho GD de, Morais IPS, Dantas TF. Impact of COVID-19 on eating habits, physical activity and sleep in Brazilian healthcare professionals. *Arq Neuropsiquiatr.* 2021;79(5):429–36.
- [5] Korsi Dorene Kharshiing KD, Kashyap D, Gupta K, Khursheed M, Shahnawaz MG, Khan NH, et al. Quality of life in the COVID-19 pandemic in India: Exploring the role of individual and group variables. *Community Ment Health J.* 2021;57(1):70–8.
- [6] Woon LS-C, Mansor NS, Mohamad MA, Teoh SH, Leong Bin Abdullah MFI. Quality of life and its predictive factors among healthcare workers after the end of a movement lockdown: The salient roles of COVID-19 stressors, psychological experience, and social support. *Front Psychol.* 2021; 12:652326.
- [7] Prasanna DAD, Selvi KS. A Study to Assess the Determinants of Quality of Life among Adults during Covid-19 Pandemic in South India. In 2021. p. 18609–18619.
- [8] Dawel A, Shou Y, Smithson M, Cherbuin N, Banfield M, Callear AL, et al. The effect of COVID-19 on mental health and wellbeing in a representative sample of Australian adults. *Front Psychiatry.* 2020; 11:579985.
- [9] Chou W-P, Wang P-W, Chen S-L, Chang Y-P, Wu C-F, Lu W-H, et al. Voluntary reduction of social interaction during the COVID-19 pandemic in Taiwan: Related factors and association with perceived social support. *Int J Environ Res Public Health.* 2020;17(21):8039.



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