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# A Descriptive Observational Study on Status of Health in Context of Life Style w.s.r. to *Trayopstambha*

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## ABSTRACT

**Introduction:** An important component for maintaining balance in between body, mind and soul is *Trayopstambha* (sub-pillar of life) i.e. *Ahara, Nidra & Brahmacharya*. These three supportive pillars of life play an important role in development, sustenance, reproduction and termination of life. These sub-pillars help balancing the main pillars of Life i.e. *Vata, Pitta & Kapha* in our body. So a questionnaire was developed to assess the lifestyle of individuals on the basis of *Trayopstambha* and it was then validated.

**Aim:** To know whether there is any effect of lifestyle on health status of population w.s.r *Trayopstambha*.

## OBJECTIVE OF THE STUDY:

1. To ascertain parameters to determine Lifestyle of Subject on the basis of *Trayopstambha*
2. To assess Health status of the subject with the help of WHOQOL-BREF.
3. To find out correlation between Lifestyle and Health Status of the subject.

**Methodology:** Survey study was conducted using validated self-administered questionnaire, which was prepared by pooling information on *Ahara, Nidra & Brahmacharya* i.e. *Trayopstambha* structured with the help of classical Ayurvedic Texts and the WHOQOL-BREF instrument used for the assessment of Health status. The survey was conducted among subjects from immediate vicinity belonging to the age group 20-50 years.

**Results:** Pearson's correlation coefficient is done to determine the magnitude of the association as well as the direction of the relationship, and there was a significant positive correlation between *Trayopstambha* and WHOQOL-BREF at  $r= 0.55, p< .001$

This shows that if *Trayopstambha* scoring is high by following proper Ayurveda rule & regimen than Quality of Life scoring is also high.

**Conclusion:** The study demonstrated the significant relationship between *Trayopstambha* questionnaire and WHOQOL-BREF questionnaire thus indicating that the Quality of Life can be improved by abiding the rules of *Ahara, Nidra & Brahmacharya* as mentioned in Ayurveda text.

**Key Words** *Ayurveda, Trayopstambha, Quality of life*

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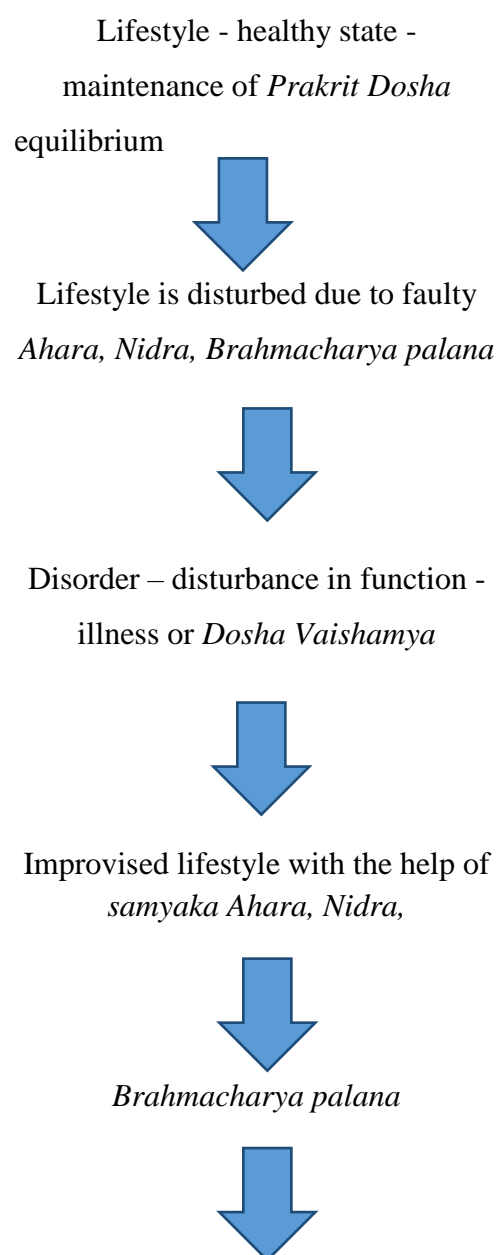
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**INTRODUCTION** In the present era where development and success become the primary motive of every person, proper diet intake, adequate sleep and other healthy habits were compromised with this modernization. Healthy food is replaced by fast food, junk foods which are available with less effort and less time consuming despite of very low nutritional value and vast health hazards. Due to job stress, family issues etc. adequate sleep is often neglected. Wisely and judiciously adopting the concept of *Brahmacharya* /*Abrahmacharya* is essential but lack of knowledge often leads to health issues. So it is a high time to understand the key factors behind the bad lifestyle and try to change the lifestyle. In Modern science various tools and techniques are available for the assessment of lifestyle and health status of the people.

In Ayurveda vast knowledge of rules and regimen are mentioned for adopting healthy life style in all the aspects like physical, mental, social etc. in the form of *Dincharya*, *Ratricharya*, *Ritucharya* etc. As per Ayurveda for the maintenance of health *Ahara*, *Nidra* & *Brahmacharya*, collectively known as *Trayopstambha* plays vital role because if these three components are taken with proper advisable way then it can lead to healthy life<sup>1</sup>. So, a questionnaire was developed for the assessment of lifestyle on the basis of *Trayopstambha* as

mentioned in Ayurveda classical texts. The aim is on the basis of assessment of lifestyle, the scoring will be done and as per the results subjects can be motivated for adopting healthy lifestyle as a preventive measure to prevent the occurrence of life style related disorders.

This can be understood as follows-



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Helpful to overcome disease -  
maintaining Dosha equilibrium –  
Healthy state – Lifestyle

### AIM AND OBJECTIVES

**AIM:** To know whether there is any effect of lifestyle on health status of population w.s.r to *Trayopstambha*

#### OBJECTIVE OF THE STUDY:

1. To ascertain parameters to determine Lifestyle of subject on the basis of *Trayopstambha*.
2. To assess Quality of life of the subject with the help of WHOQOL-BREF.
3. To find out correlation between LIFESTYLE AND QUALITY OF LIFE (QOL) of the subject.

### METHODOLOGY

Ethical permission was taken by the Institutional Ethics committee (IEC No-N.F.5 (283)/2013-CO/2614). The trial was also registered under CTRI (CTRI/2020/06/025774)

Sample Population was taken from near premises of A&U Tibbia College. Interested subjects were enrolled for the study after taking the written informed consent from all participants.

**Study Type:** Descriptive cohort observational study.

**Sampling Method:** Convenient/purposive

**Table 1** Item number and their Content Validity Index (CVI) scores

S No.	Items	Relevant	Irrelevant	CVI Score	Interpretation
1	Q1,Q2,Q3,Q4,Q5,Q6,Q7,Q8, Q9,Q10,Q11,Q12,Q13,Q14 Q15,Q16,Q17,Q18,Q19,Q20, Q21,Q22,Q23	7	0	1.00	Appropriate
2	Q24	6	1	0.85	Appropriate
3	Q25,Q26,Q27,Q28,Q29,Q30 Q31,Q32,Q33,Q34	7	0	1.00	Appropriate

Sample size: 100

Age: - 20 - 50years

#### Inclusion Criteria:

1. Subjects in the age group 20-50 years.
2. Subjects belonging to both the genders.
3. No history of serious illness or disease.

#### Exclusion Criteria:

1. Those who are not willing to participate in the study.
2. Subjects with severe ill health.
3. Patients suffering from congenital anomalies.
4. Subjects who have a recent history or who are currently known to abuse of alcohol or drugs.
5. Subjects on systemic or oral steroids or any regular medication.

#### Assessment Criteria:

The subjects were interviewed for

- Demographic data.
- Validated *Trayopstambha* questionnaire.
- WHOQOL-BREF instrument comprises 26 items, which measure the four broad domains: Physical health, Psychological health, Social relationships, and Environment<sup>2</sup>.

### PROCEDURE

The questionnaire was first developed and validated. (**Table-1**). None of the items were found to have I-CVI below 0.7.

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### Conclusion of Content validity

No items were removed based on the scores obtained by I-CVI, S-CVI and ACP but on the suggestion of the expert one question is removed and one question is modified. The question removed is “Pragdakshinshira” and the modified question is “Bhramamuhurta utistheswa....”

### Reliability:

The data analysis was done using the software 'Statistical Package for Social Sciences', IBM SPSS version 28.0.0.0(190). The Cronbach's Alpha calculated was .900 which makes the scale reliable. (Table 2)

**Table 2** Reliability Statistics

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	No. of Items
<b>0.900</b>	0.900	35

This questionnaire was then asked to the participants and on the basis of their scoring lifestyle assessment was done.

The scoring was then compared with the validated WHOQOL-BREF and the relation between the lifestyle and quality of life was assessed.

## RESULTS

### Socio-demographic characteristics

A total of 100 healthy volunteers answered the questionnaire among them.

- 61% are male and 39% are female.
- 62% belong to 21- 30yrs age group, 22% belong to 31-40 yrs age group and remaining 16% belong to 41-50yrs age group

**Table 4** Pearson's Chi-square test

- 42% are Vegetarian and 58% are Non-Vegetarian.
- 22% High, 64% Medium and 14% belongs to Low Socioeconomic status.
- 3% comes below BMI 18.5, 47% comes in the range of BMI 18.5-24.9(Normal Weight), 47% comes in the range of BMI 25.0- 29.9 (Pre-obesity), 3% comes in range of BMI 30.34.9 (Obesity Class I)
- 98% were educated & 2 % were Illiterate.
- 12% participants have rated there Quality of Life as Very Good, 52% participants rated as Good, 34% participants rated as Neither Good Nor Poor & 2 % participants rated as Poor.

### Scoring

On the basis of total score in the *Trayopstambha* Questionnaire, the Lifestyle is divided into four levels (Table 3).

**Table 3** Scoring of *Trayopstambha* Questionnaire

TYPE	SCORE
<b>Healthy life style LEVEL 4</b>	112 AND ABOVE
<b>Moderate life style LEVEL 3</b>	86-111
<b>Borderline lifestyle LEVEL 2</b>	60-85
<b>Unhealthy lifestyle LEVEL 1</b>	34 to 59

## COMPARISON

1. WHOQOL-BREF Questionnaire & *Trayopstambha* Questionnaire Correlation

Pearson's Chi-square Test showed statistically significant relation between *Trayopstambha* and WHOQOL-BREF at  $X^2 = 17.412$  at  $p < 0.001$ . (Table 4)

Pearson's correlation coefficient was done and it showed that there was positive correlation between them at  $r = 0.55$ ,  $p < .001$  (Figure 1)

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Pearson's Chi-square test			
	Value	DF	Asymptotic Significance (2-sided)
Pearson's Chi-Square	17.412	2	<.001
Pearson's correlation coefficient	0.55		<.001
No. of Valid Cases	100		

This shows the strong relation between the *Trayopstambha* & WHO Quality of Life. If *Trayopstambha* scoring is good by following proper *Ayurveda* rule & regimen than Quality of Life scoring is also good and vice versa.

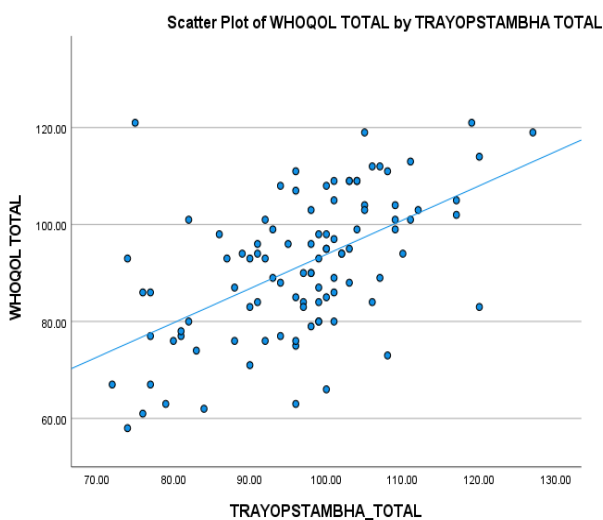


Figure 1 Pearson's correlation coefficient

**Comparison with Domains:**

A comparison of all the four domains of WHOQOL separately with the three components i.e. *Ahara*, *Nidra* and *Brahmacharya* was carried out to see which domain showed significant results.

In the present study a relatively higher QOL in the *Ahara* and *Nidra* domain and a lower QOL in the *Brahmacharya* domain was observed after comparison.

**Comparison of WHOQOL with *Ahara* Domain:**

➤ Pearson Chi-Square Test showed statistically significant relation between *Ahara* and WHOQOL at  $X^2 = 14.185$ ,  $p < .001$ .

➤ A Pearson's correlation coefficient showed there is significant positive relation between them at  $r = 0.47$ ,  $p < .001$

➤ Odds Ratio Test was applied which showed the significant association between *Ahara* and WHOQOL with calculated value 11.389 at 95% Confidence Interval

**Comparison of WHOQOL with *Nidra* Domain:**

➤ Pearson Chi-Square Test showed statistically significant relation between *Nidra* and WHO at  $X^2 = 4.262$ ,  $p < 0.05$ .

➤ Pearson's correlation coefficient showed there was significant positive relation between them at  $r = 0.57$ ,  $p < 0.05$ .

➤ Odds Ratio Test was applied which showed the significant association between *Nidra* and WHOQOL with calculated value 4.556 at 95% Confidence Interval.

This shows the positive relation between the *Nidra* & WHO Quality of Life.

**Comparison of WHOQOL with *Brahmacharya* Domain:**

➤ Pearson Chi-Square Test showed statistically no significant relation between *Brahmacharya* and WHOQOL at  $X^2 = .008$  at  $p > 0.05$ .

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➤ Pearson's correlation coefficient Test showed that there is no significant correlation between them at;  $r = 0.010$  at  $p > 0.05$ .

➤ Odds Ratio Test was applied which showed no association between *Brahmacharya* and WHOQOL with calculated value 0.938 at 95% Confidence Interval.

This shows no any relation between the *Brahmacharya* & WHO Quality of life.

### DISCUSSION

The findings are consistent with previous studies which showed that there is relation between QOL and general health<sup>3</sup>. People with better quality of life have better physical health outcomes, such as fewer physical complaints, more exercise, and better sleep quality.

If *Aahar* is taken properly as mentioned in *Ayurveda* Regimen Quality of Life also improves and if Dietics rule are not followed than it can result in decreased QOL.

A systematic review performed on older adults showed that healthy dietary patterns were associated with better self-rated health and were significantly associated with an improvement in QOL<sup>4</sup>.

If Sleep is taken properly both Quantitative & Qualitative as mentioned in *Ayurveda* text than quality of life also improves and if Sleep is not taken properly than Quality of Life also decreases. There is positive relation between *Nidra* and Quality of Life. The sleep quality is influenced by multiple factors like unemployment stress, poor performance etc<sup>5</sup>.

Previous studies have shown that low quality of sleep causes physical and psychological problems as compared to others<sup>6</sup>. The questions related to *Brahmacharya* were very less and hence not sufficient to draw to any conclusion.

### CONCLUSION

The study demonstrated the significant relationship between *Trayopstambha* questionnaire and WHOQOL-BREF questionnaire thus indicating that the Quality of Life can be improved by abiding the rules of *Ahara, Nidra & Brahmacharya* as mentioned in *Ayurveda* Text.

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