

(RESEARCH ARTICLE)



An assessment of knowledge, attitude and practice of Dinacharya procedures among ayurveda doctors across India: A cross-sectional Survey

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Abstract

Background: Ayurveda is not merely a curative science rather it is a lifestyle guide which helps to promote health and prevent diseases. The preventive aspects of Ayurveda are accommodated under the umbrella of Swasthavritta which includes Dinacharya, Ratricharya, Ritucharya, Rules regarding Nidra, the concept of Dharaneeya and Adharaneeya vegas, Ahaaram, Sadvruttam, Rasayanam, etc which help to strengthen the defense mechanism of the body. Ayurveda doctors are supposed to be the ambassadors of these health promotive measures to the common mass.

Aim: The present work aimed at assessing the Knowledge, Attitude and Practices of selected Dinacharya procedures among the Ayurveda doctors across India.

Materials and methodology: A KAP survey was conducted among the Ayurveda doctors across India by sharing a structured closed ended questionnaire through google form. 311 subjects participated in the study.

Results: 1) **Knowledge:** Majority of the respondents are aware (partially/fully) about the Dinacharya practices. 2) **Attitude:** Majority of the respondents agree to the health benefits of Dinacharya practices because they have experienced them either personally or have learnt about it from the experiences of others. 3) **Practices:** 23.8% were waking up in Brahma Muhurta, 20.2% were practicing Ushajalapaanam though none of them consumed 8 prasruthi of water as classically advised, 16.7% respondents used herbal toothpastes, 88.4% reported to be practicing Jihwanirlekhanam but none were using metallic or wooden tongue cleaners as classically indicated, only 19.3% respondents used herbal collyrium regularly, 6.7% practiced Pratimarsha nasyam daily, 13.5% practiced gandoosham, 1% practiced dhumanam daily, 27% respondents practiced abhyangam and 23.2% respondents practiced vyaayamam daily.

Conclusions: There exists a wide gap in the Knowledge and practice of Dinacharya practices even among the ayurveda doctors.

Keywords: Ayurveda; Dinacharya; Health promotion; Nasyam; Abhyangam

1. Introduction

Ayurveda upholds the practices which can help in promoting Ayus. The very aim of Ayurveda is defined as health promotion and disease cure¹. The preventive aspects of health are widely described under Swasthavritta. For the promotion of Swasthya various practices have been explained by the Acharyas including Dinacharya, Ritucharya, concept of vegas, Ahara vidhi, rasayanam, etc². An Ayurveda doctor must be the ambassador of such health promotion

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tips to the common man. The present work aims to throw light on the understanding and practice of Dinacharya procedures among the Ayurveda doctors across India.

2. Literature Review

Dinacharya is the set of regimes including food and activities which is followed regularly on a daily basis with an aim of getting favourable (health promotive) results³. Starting from waking up in Brahma Muhurta, through the practices of Ushajalapaanam (drinking of water during sunrise) , Danta dhaavanam (tooth brushing), Jihwa nirlekhanam (tongue cleaning), Anjanam (collyrium), Pratimarsha Nasyam (nasal oil administration), Gandusham (oil pulling), Praayogika dhumapaanam (herbal inhalation), Abhyangam (oil massage) and Vyaayaamam (physical exercise) concluding with Snaanam (bath) measures have been advised for maintaining personal hygiene and strengthening the immunity through first line of defense, i.e., the skin and the mucous membrane. The table below briefly enlists the benefits of these practices, as indicated in Ayurveda classics.

Table 1 Health benefits of Dinacharya Practices

Dinacharya Practice	Health benefit
Brahma muhurta uthaapanam	During this period Vata is predominant in the body. Vata is the propelling factor which initiates all the activities in the body.
Ushajalapaanam	helps to restore the gastric peristalsis and prevents digestive problems.
Dantadhavanam	enhance the salivary secretions which clarifies the oral cavity and enhances the taste perception.
Jihwanirlekhanam	removes the accumulated impurities and purifies the oral cavity and enhances the taste perception.
Anjanam	helps in maintaining the health and beauty of the eyes while also the visual acuity is enhanced by the regular use
Pratimarsha Nasyam	Clears the nasal tract along with additional benefits of strengthening the shoulders, neck and organs located in head.
Gandusham	Clears and strengthens the oral mucosa
Praayogika dhumapaanam	Clears the nasal tract along with additional benefits of strengthening the shoulders, neck and organs located in head.
Abhyangam	daily oil application has been advised to prevent vata kopa and maintain the health of the skin
Vyaayaamam	cuts down the fat accumulation, makes the body light and flexible, improves physical ability, ignites the digestive fire, and keeps the body compact
Snaanam	Elimination of impurities from skin

3. Materials and methods

- **Study design:** The present work was conducted as Cross-sectional study.
- **Sample:** The ayurveda doctors across India (having BAMS degree) were selected as the respondents
- **Sample size:** 311 ayurveda doctors across India participated in the survey
- **Assessment tool:** A closed ended questionnaire was prepared to assess the Knowledge, aptitude and practices of Dinacharya practices by the participants. The questionnaire was shared through google form and responses were collected.

4. Observations

4.1. Demographic data

Majority participants were from the age group 24-39 years. 74.6% respondents were females and 25.4 % were males. 50.2 % were BAMS graduates, 45.7% were Post Graduates and remaining 4.1 % had PhD degree. Majority (45.3 %) were practitioners followed by Academicians (29.3%).

4.2. KAP Survey

4.2.1. Knowledge

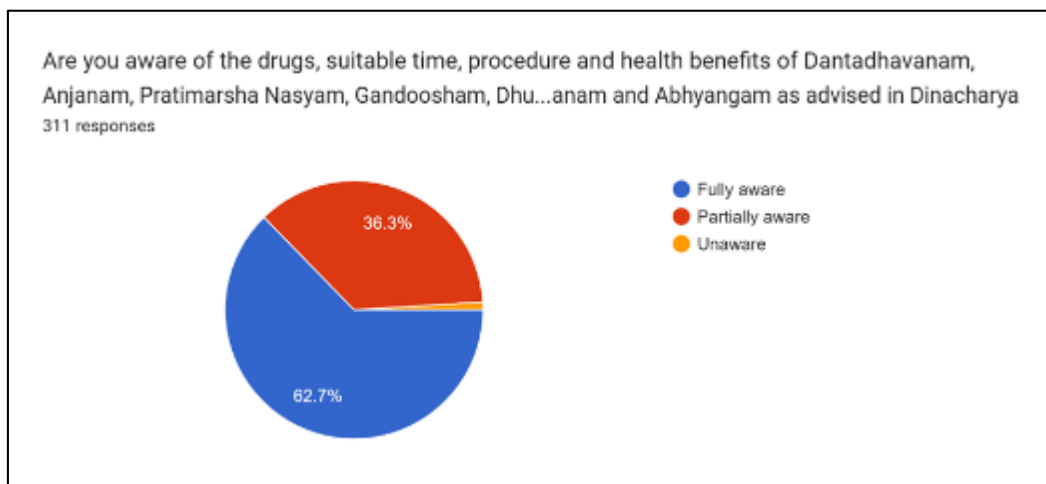


Figure 1 Awareness about the Dinacharya practices among the respondents

62.7% of the respondents reported to be fully aware of the Dinacharya practices as mentioned. 36.3% were partially aware while remaining 1 % were unaware.

4.2.2. Attitude

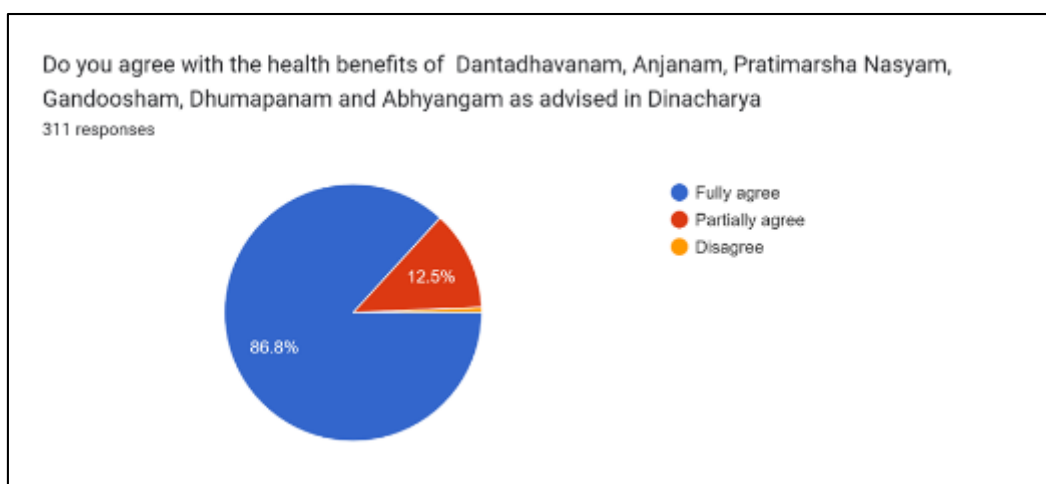


Figure 2 Attitude (agreement/disagreement) of respondents towards Dinacharya practices

86.8% respondents fully agree with the health benefits of the Dinacharya procedures as mentioned while 12.5% partially agree and 0.7% disagree.

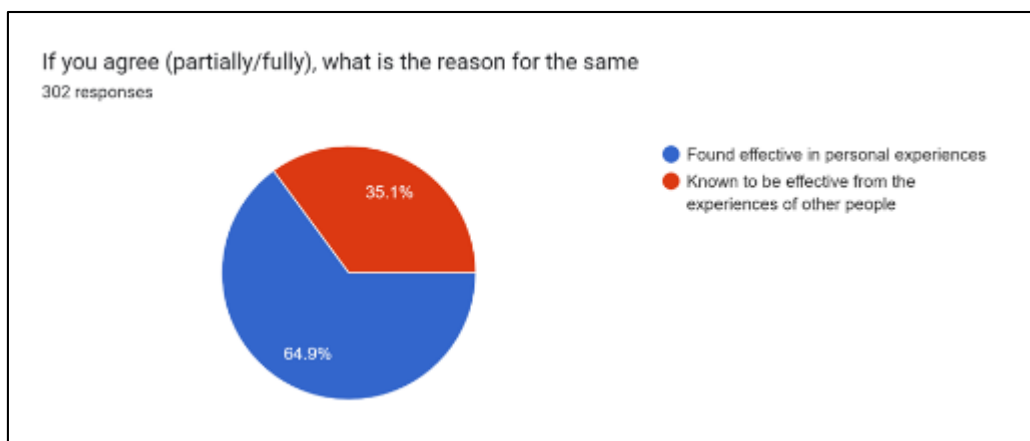


Figure 3 Reason for agreement on the benefits of Dinacharya practices

Among those who agree (partially/fully), 64.9% found these procedures effective in personal experience while 35.1% learnt about the efficacy from the experiences of others.

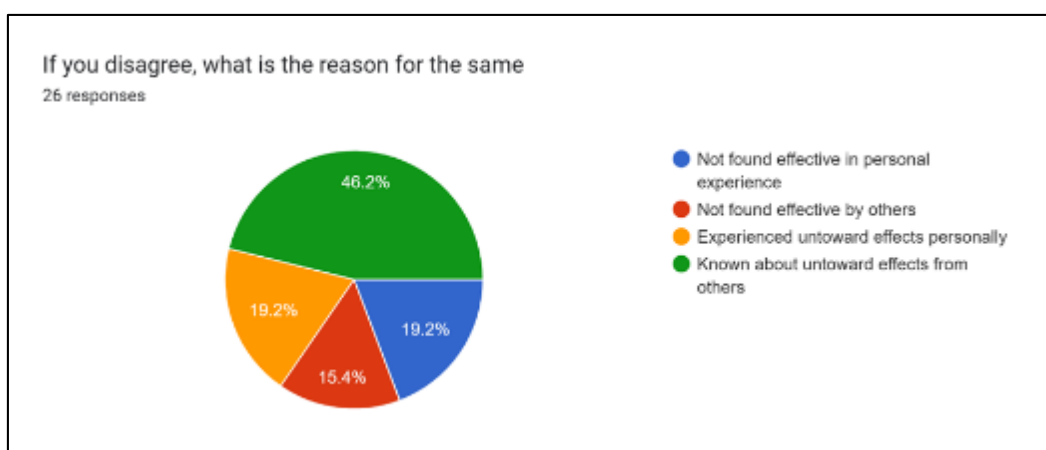


Figure 4 Reason for disagreement on the benefits of Dinacharya practices

Among those who disagreed, 46.2% learnt some untoward effect of these practices from others, 19.2 % each had either not found any positive effect personally or had personal untoward experiences, remaining 15.4 % not found effective by others.

4.2.3. PRACTICE

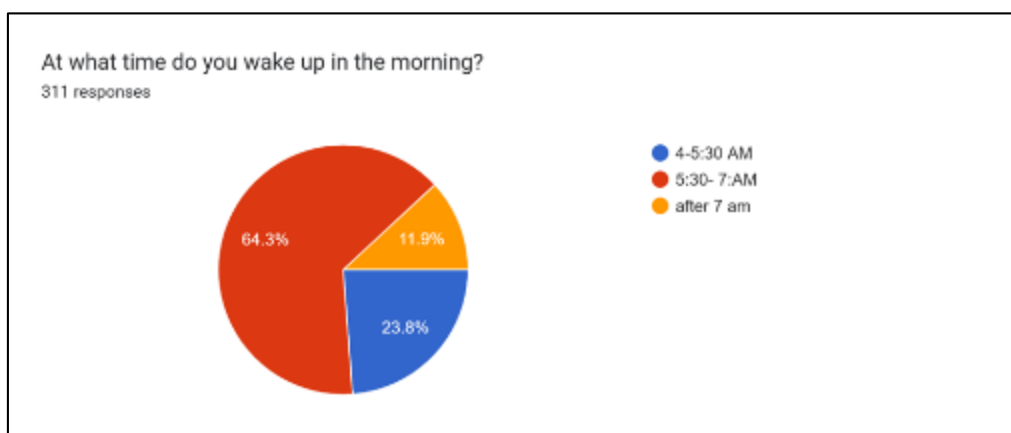


Figure 5 Assessment of Time of awakening in the morning

Majority of respondent (64.3%) woke up during 5:30-7:00 am, 23.8% during 4:00-5:30 am (the brahma muhurta), and 11.9% after 7 am.

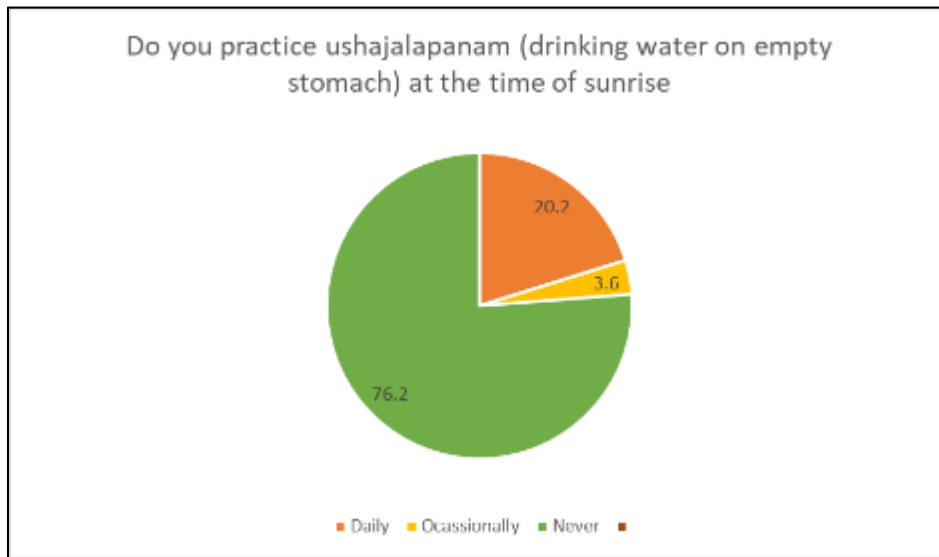


Figure 6 Assessment of practice of Ushajalapaanam

20.2% practiced Ushajalapaanam at the time of sunrise daily, 3.6 % did it occasionally ad 76.2 % practiced it never.

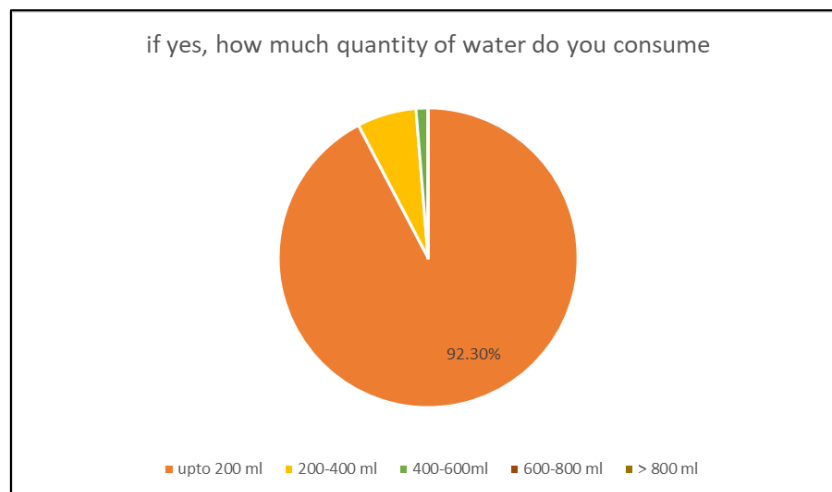


Figure 7 Assessment of quantity of Ushajalapaanam

Among those who practiced ushajalapaanam 92.3% consumed up to 200 ml of water, 6.4% consumed 200-400 ml water and 1.3 % consumed 400-600 ml water. None of them reported consuming > 600 ml water.

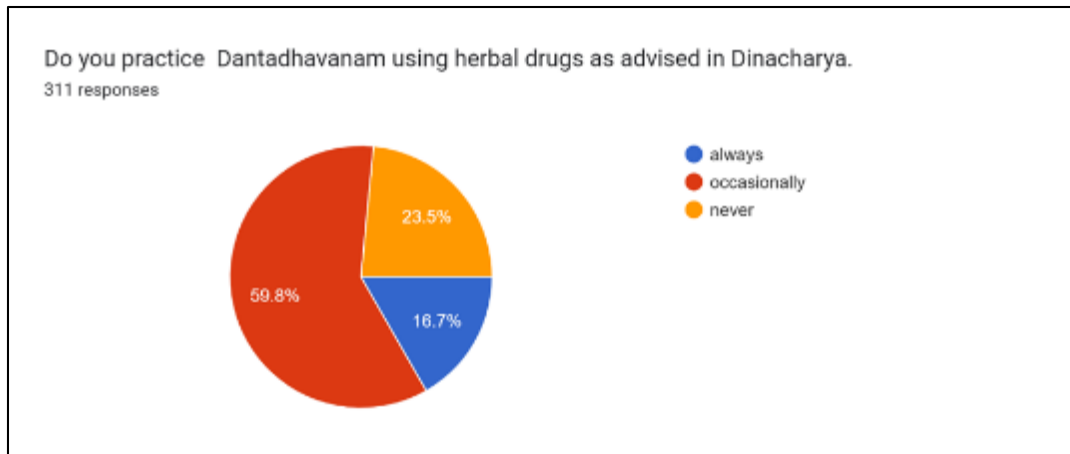


Figure 8 Assessment of use of herbal preparations for Dantadhavanam

Only 16.7% respondents use herbal toothpaste/ toothpowders regularly, 59.8% used it occasionally and 23.5% never used herbal preparations for Dantadhavanam.

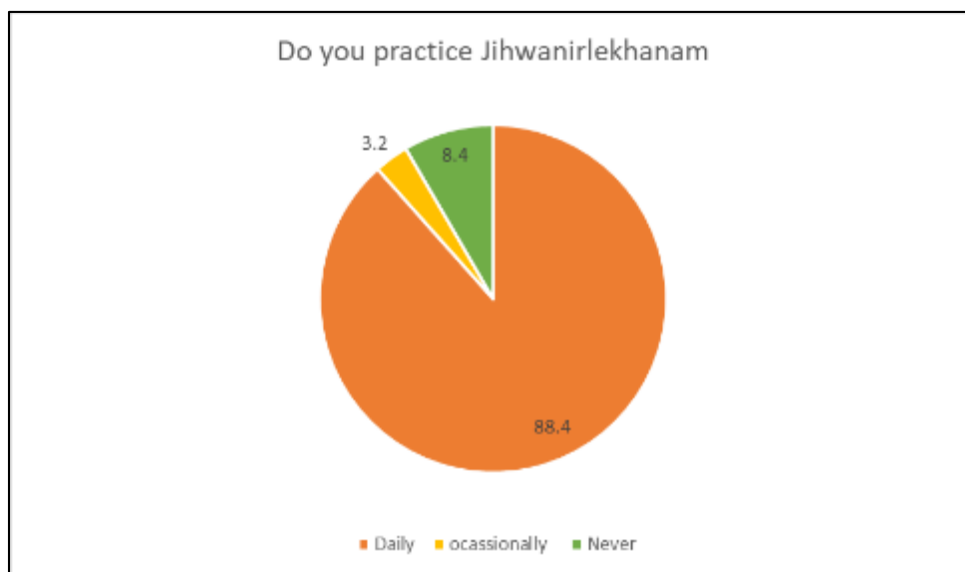


Figure 9 Assessment of the practice of Jihwanirlekhnam

88.4% reported to be practicing Jihwanirlekhnam daily, 3.2 % practiced it occasionally while 8.4% practiced never.

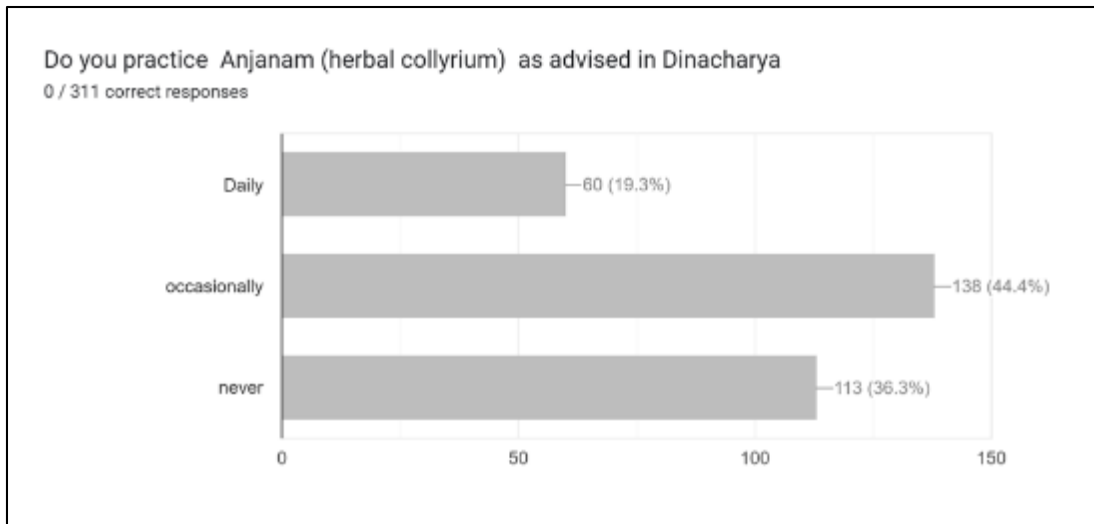


Figure 10 Assessment of use of herbal anjanam

19.3% respondents used herbal collyrium on a regular basis, 44.4% used it occasionally and 36.3% never used it.

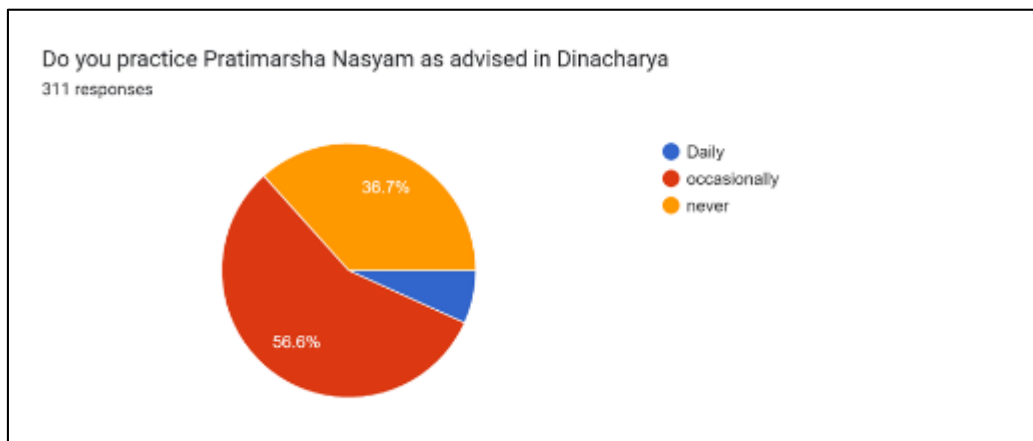


Figure 11 Assessment of use of Pratimarsha Nasyam

Only 6.7% respondents practiced Pratimarsha nasyam daily, 56.6% practiced it occasionally and 36.7% never used it.

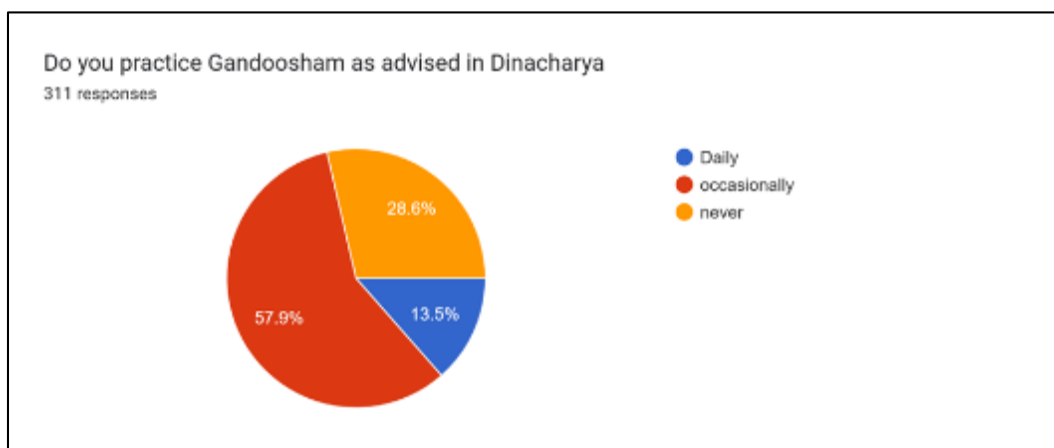


Figure 12 Assessment of use of Gandoosham

Only 13.5% practiced gandoosham daily, 57.9% occasionally while 28.6% never used it.

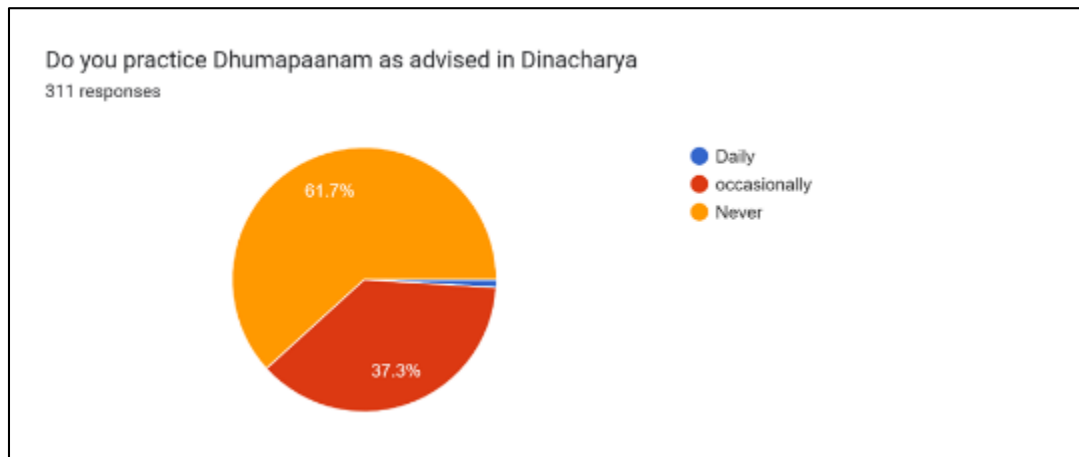


Figure 13 Assessment of use of Dhumapaanam

Only 1 % respondents reported practicing dhumapanam daily, 37.3% used it occasionally while 61.7% never used it.

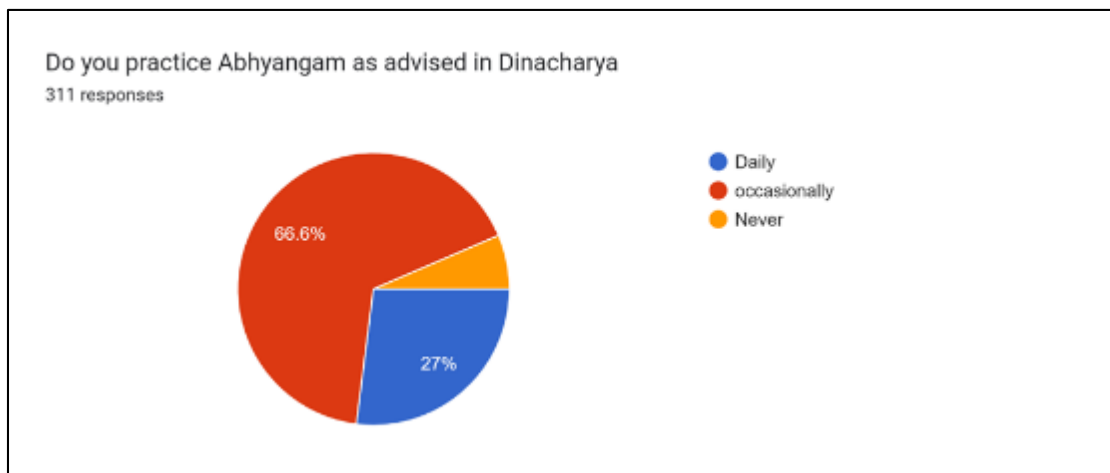


Figure 14 Assessment of the practice of Abhyangam

27% respondents practiced abhyangam daily, 66.6% occasionally and 6.4% never used it.

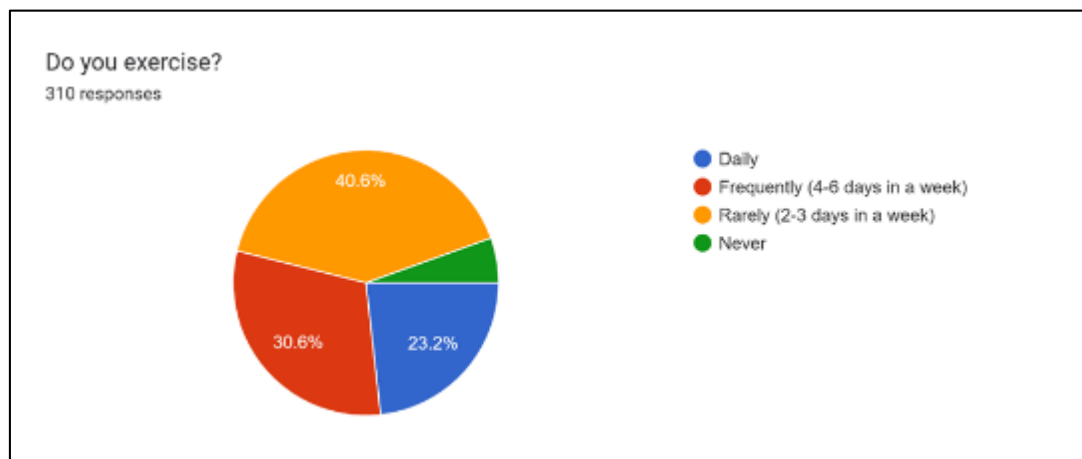


Figure 15 Assessment of the practice of Vyaayamam

23.2% respondents did vyaayamam daily, 30.6 % did it atleast 4-6 days in a week, 40.6 % did it 2-3 days in a week while 5.6% never did vyaayamam.

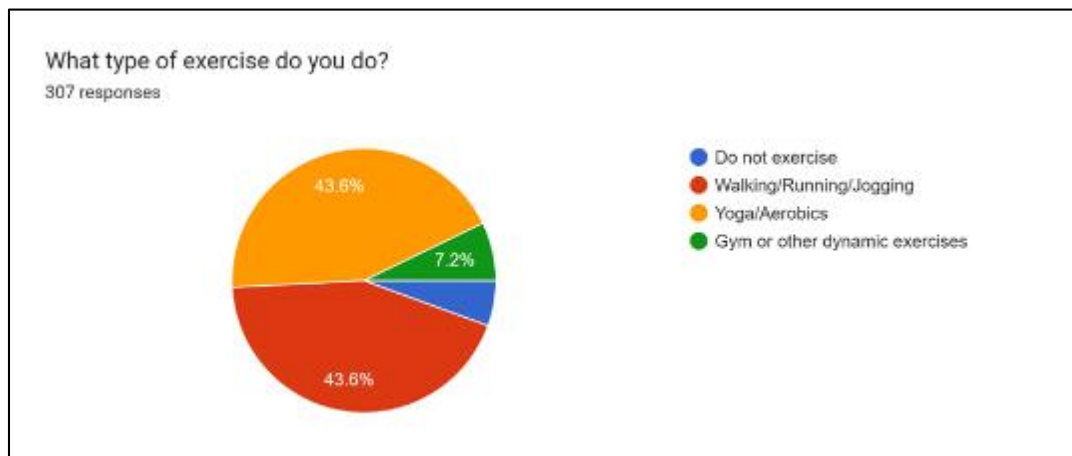


Figure 16 Assessment of the type of vyaayaamam practiced

43.6% each reported doing walking/running/jogging and yoga/ aerobics, 7.2% were doing gym or other dynamic exercises.

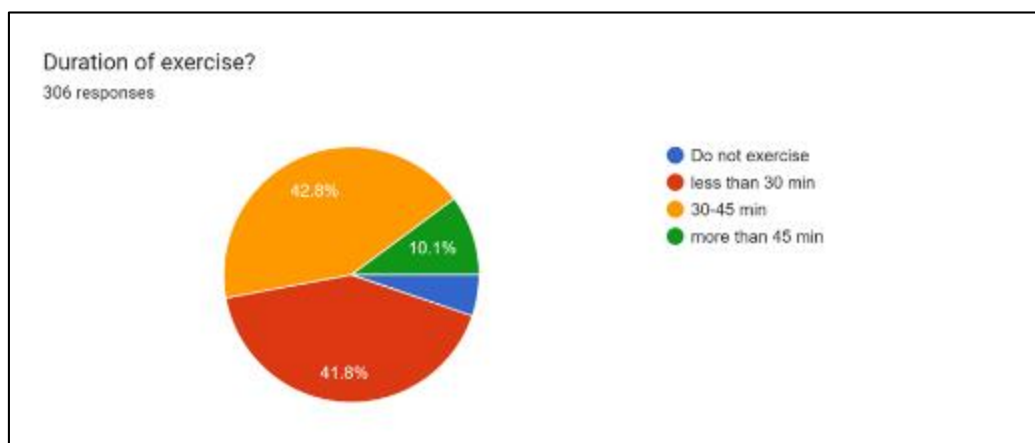


Figure 17 Assessment of the duration of exercise

42.7% performed exercise 30-45 minutes, 41.8% performed less than 30 minutes, 10.1 % > 45 minutes.

5. Discussions

5.1. Demographic data

5.1.1. Age wise distribution

As the questionnaire was shared through google forms the responses from the age group well versed with such online modes could easily respond. This might be the reason for higher responses from an age group 24-39 yrs.

5.1.2. Gender wise distribution

Females responded more than males. This might be due to distribution of population (female more than males) in the WhatsApp groups where the questionnaire was randomly shared.

5.1.3. Qualification wise distribution

The WhatsApp groups selected for randomly sharing the questionnaire were general groups of communication among the Ayurveda fraternity. Thus, the members included from different qualifications.

5.1.4. Distribution based on occupation

Most of the respondents were Practitioners. This might be due to the keenness of practitioners to participate in such general surveys related to health promotive measures of Ayurveda.

5.2. KAP SURVEY

5.2.1. Knowledge

62.7% of the respondents reported to be fully aware of the Dinacharya practices as mentioned. 36.3% were partially aware while remaining 1 % were unaware. As all the respondents are Ayurveda doctors, they are acquainted with the practices of Dinacharya explained in Ayurveda. However, an in-depth knowledge might be there only with those who have referred to these procedures out of interest or for some academic or other needs. This explains the distribution of responses as obtained.

5.2.2. Attitude

86.8% respondents fully agree with the health benefits of the Dinacharya procedures as mentioned while 12.5% partially agree and 0.7% disagree. Majority of the respondents agree to the benefits of Dinacharya. This might be attributed to the fact that they might have at one or other instance personally experienced the benefits or learnt of it from others among the Ayurveda fraternity. This is evident from the responses to the next question. Among those who agree (partially/fully), 64.9% found these procedures effective in personal experience while 35.1% learnt about the efficacy from the experiences of others. Though only a small proportion of the respondents disagreed to the benefits of Dinacharya (0.7%), the reasons are evident from the responses to the following question. Among those who disagreed, 46.2% learnt some untoward effect of these practices from others, 19.2 % each had either not found any positive effect personally or had personal untoward experiences, remaining 15.4 % not found effective by others.

5.2.3. Practice

Waking up in Brahma Muhurta

Brahma Muhurta was arbitrarily set as approximately 4:30 – 5:18 am considering the time of sunrise to be 6:00 am. Majority of respondent (64.3%) woke up during 5:30-7:00 am, 23.8% during 4:00-5:30 am (the brahma muhurta), and 11.9% after 7 am. Only 23.8% respondents were observed to be waking up during Brahma Muhurta. This may be attributed to the changes in the working habits and lifestyle of the society. The people may be required to keep up awake either for professional or family reasons.

Ushajalapaanam

Ushajalapaanam is a concept mentioned in Bhava Prakasham.

20.2% practiced Ushajalapaanam at the time of sunrise daily, 3.6 % did it occasionally and 76.2 % practiced it never.

Bhava Prakasham is a text which is not commonly referred in the context of Dinacharya. Therefore, this concept may not be very familiar to the Ayurveda doctors (other than Swasthavritta post graduates or the academicians). This might be the reason for only 20.2% respondents following this practice.

Among those who practiced ushajalapaanam 92.3% consumed up to 200 ml of water, 6.4% consumed 200-400 ml water and 1.3 % consumed 400-600 ml water. None of them reported consuming > 600 ml water. The amount of Ushajalapaanam mentioned by Bhava Mishra is 8 prasruthi (768 ml). As this concept is not as popular as other Dinacharya procedures, this amount of water was not observed to be consumed by any of the respondents.

Dantadhavanam

Only 16.7% respondents use herbal toothpaste/ toothpowders regularly, 59.8% used it occasionally and 23.5% never used herbal preparations for Dantadhavanam. Availability of purely herbal based tooth brushing products in the market might be the reason attributable for this observation. Palatability of herbal toothpastes might also be a reason.

Jihwanirlekhanam

88.4% reported to be practicing Jihwanirlekhanam daily, 3.2 % practiced it occasionally while 8.4% practiced never. Jihwanirlekhanam is a common practice which is trained in the childhood itself in Indian households. This might be the reason for 88.4% practicing this. However, poor availability of metallic or wooden tongue cleaners might be the reason for majority of respondents (95.6 %) using easily accessible steel tongue cleaners.

Anjanam

Availability of pure herbal anjanam in the market is not common. Preparation of herbal anjanam is also a tedious procedure. This might be the reason why only 19.3% respondents used herbal collyrium on a regular basis.

Partimarsha Nasya

Nasyam is popular as a therapeutic measure which is administered in the clinical conditions related especially to the Jatrurdhwa. This might be the reason why only 6.7% respondents practiced Pratimarsha nasyam daily. Those who practiced it occasionally (56.6%) might have done so in the incidence of some clinical condition as mentioned above.

Gandoosham

Only 13.5% practiced gandoosham daily, 57.9% occasionally while 28.6% never used it. The same reason as stated in Pratimarsha Nasya can be attributed here too. Occasional use might be in the event of diseases related to oral cavity.

Dhumapanam

Only 1 % respondents reported practicing dhumapanam daily, 37.3% used it occasionally while 61.7% never used it. The same reason as stated in Pratimarsha Nasya and Gandoosham can be attributed here too. These procedures have more popularity and acceptance as therapeutic measures rather than a preventive Dinacharya tool.

Abhyangam

27% respondents practiced abhyangam daily, 66.6% occasionally and 6.4% never used it. Abhyangam is also a practice which is done for kids in the Indian households. This practice may thus be adopted by some even as they grow up due to acquaintance from childhood. Occasional use may be indicative of seasonal use in winters owing to dryness of the skin.

Vyaayaamam

23.2% respondents did vyaayamam daily, 30.6 % did it atleast 4-6 days in a week, 40.6 % did it 2-3 days in a week while 5.6% never did vyaayamam. In the present scenario, there is an awareness about the importance of exercise in health promotion. However, most of the people adopt programmed schedules for exercise, for example, 4 days a week or so. This might be the reason for the observation in the present study with 23.2% respondents reportedly doing exercise daily while approximately 70 % doing it on a programmed basis. The common awareness about significance of exercise in health promotion is reflected in the type of exercises adopted by them. 43.6% each reported doing walking/running/jogging and yoga/ aerobics, 7.2% were doing gym or other dynamic exercises.

6. Results

- **Knowledge:** Majority of the respondents are aware (partially/fully) about the Dinacharya practices.
- **Attitude:** Majority of the respondents agree to the health benefits of Dinacharya practices because they have experienced them either personally or have learnt about it from the experiences of others.
- **Practices:** 23.8% were waking up in Brahma Muhurta, 20.2% were practicing Ushajalapaanam though none of them consumed 8 prasruthi of water as classically advised, 16.7% respondents used herbal toothpastes, 88.4% reported to be practicing Jihwanirlekhanam but none were using metallic or wooden tongue cleaners as classically indicated, only 19.3% respondents used herbal collyrium regularly, 6.7% practiced Pratimarsha nasyam daily, 13.5% practiced gandoosham, 1 % practiced dhumapanam daily, 27% respondents practiced abhyangam and 23.2% respondents practiced vyaayamam daily.

7. Conclusions

There exists a wide gap in the Knowledge and practice of Dinacharya practices even among the ayurveda doctors.

Recommendations

Workshops can be conducted for Ayurveda doctors to train them in Dinacharya practices. Dinacharya camps can be conducted as a part of school outreach programs by the Swasthavritta Departments of Ayurveda Medical Colleges to propagate these practices to each and every household.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

Statement of ethical approval

As the present work is an Observational Study (Cross sectional Study) without any intervention 'The present research work does not contain any studies performed on animals/humans subjects by any of the authors'.

Statement of informed consent

Informed consent was obtained from all individual participants included in the study.

References

- [1] Pt. Bhashagacharya Harishastri Paradkar Vaidya (editor). Ashtanga Hridayam (Ayurveda Rasayanam commentary). Varanasi, Chaukhambha Krishnadas Academy, 2006 reprint.
- [2] Dr Shivprasad Sharma (editor). Ashtanga Sangraham (Sasilekha commentary). Varanasi, Chaukhambha Sanskrit Series Office, 2008 reprint.
- [3] Vaidya Yadavji Trikkamji (editor). Charaka Samhita (Ayurved Dipika commentary). Varanasi, Chaukhambha Surabharati Prakashan, 2017 reprint.
- [4] Vaidya Yadavji Trikkamji (editor). Sushruta Samhita (Nibandha Sangraham commentary). Varanasi, Chaukhambha Krishnadas Academy, 2008 reprint.