

# A Study on Health-care Utilization and Health-care Seeking Behavior of People Approaching Two Institutions (Ayurveda and Allopathic PHCs) in Vengara Panchayat of Malappuram District, Kerala

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## ABSTRACT

**Background:** To make health for all a reality, we need individuals and communities with access to high-quality health services to take care of their health and of their families. There is a need to undertake a more systematic analysis to examine AYUSH and Allopathic care utilization across regional, socioeconomic, and demographic groups. In a country like India, which is home to many traditional medicine systems, it is also essential to understand how Ayush coexists with allopathic system. **Methods:** The study used a cross-sectional study design using a self-made questionnaire to find healthcare utilization and healthcare-seeking behaviour. **Results:** Factors determining health-care utilization such as prior experience in care (AOR 3.47; 95% CI 0.52–23.37), affordability (AOR 11.48; 95% CI 2.31–57.08), availability of essential medicines and their quality (AOR 35.28; 95% CI 5.32–234.20), and acceptability of treatment (AOR 4.51; 95% CI 0.91–22.41) were shown to be a positive predictor for choosing Allopathic PHC. At the same time, healthcare services such as screening and basic management of mental health ailments (AOR 0.20; 95% CI 0.02–2.26) and care in pregnancy and childbirth (AOR 0.54; 95% CI 0.12–2.32) were shown to be negative predictors for allopathic. **Conclusion:** The study findings highlighted the need for systematic information on the usage of healthcare services and people's healthcare-seeking behaviours. It would help policymakers and stakeholders set up specific strategies to ensure the effective utilization and distribution of existing resources and enforce the country's sufficient delivery of healthcare services.

**Keywords:** Allopathic PHC, AYUSH, Healthcare utilization, Healthcare-seeking behaviour, Kerala

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## INTRODUCTION

According to the National Sample Survey conducted from 2017 to 2018, Over 80% of Indians do not have health expenditure coverage. Among rural, 85.9% do not have any health expenditure coverage. In the case of urban, it is marginally better at 80.9%.<sup>(1)</sup> To make health for all a reality, we need individuals and communities with access to high-quality health services to take care of their health and the health of their families. In the pluralistic context, it is essential to have such services not just from allopathic systems but also from Indian systems of medicine. For mainstreaming and integrating both systems, there is a need to study their evidence-based contextual needs.

## SUBJECTS AND METHODS

### Study Design and Period

The study used a quantitative methodology with a cross-sectional study design by gathering information through questionnaires from patients who approached specific health-care systems and interviews with seekers and providers of care. The study was carried out from January 2022 to March 2022.

### Study Area

The study area was Government Ayurveda hospital and Community health centre of Vengara panchayath, Malappuram District, Kerala. The ordinary people of Vengara mainly depend on the community health center, Government Ayurvedic hospital, and Government

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Ayurvedic dispensaries under Kerala's government health services department for their health need.

### Sample Size and Sampling Technique

Conveniently took 200 people as there was a restriction to access each health-care facility due to logistics and the COVID-19 scenario in the study area. Among 200 people, 100 approached AYUSH PHC, and 100 approached Allopathic PHC. The sampling technique used was convenience sampling.

### Conceptual Framework

We adapted Andersen's Health-care Utilization Model propounded in 1968. This model's conceptualization of health-care utilization assumes that a person's use of health services is influenced by

three key factors: predisposing factors, enabling factors, and the need for care factors, incorporating contextual and individual-level predictors. There are three main tenets of the theory. These are predisposing, enabling (Personal and Organizational), and need factors [Figure 1]. The tenets adequately explain the various factors influencing health-seeking behavior.<sup>[2-4]</sup>

### Outcome Measurement

The primary outcome measure used for the study was healthcare utilization pattern and institutional health-seeking behavior. We defined institutional health-seeking behaviors as “the willingness of an individual to seek help from a particular healthcare institution when ill and where a person seeks medical care and preferable treatment.” Health-care utilization pattern is “The process of seeking and using health-care services to promote health, determine health status, or cure existing illness and diseases.”<sup>[5]</sup>

### Study Tool

The questionnaire was developed through an extensive literature review and validation. Before administering the questionnaire, a pilot test was conducted among 10 OP visitors and excluded them from the analysis. The relevant ethical guidelines and regulations were followed while performing all data collection methods.

### Data Analysis

Data analysis and interpretation were conducted using MS Excel Application and IBM SPSS Statistics V22.0 Descriptive statistics, including frequency, percentage, mean, and standard deviation (SD), was done to describe the sociodemographic characteristics of the study sample. The distribution of health-care utilization and seeking behavior of participants by AYUSH and Allopathic healthcare centers were analyzed using the Chi-square test and multivariable analysis.

### Ethical Issues

Before the study, ethical approval was taken from the Institutional Ethics Committee of Hyderabad Central University (App.No. UH/IEC/2021/191).

### RESULTS

The mean age of the participants who approached the Ayush PHC was 45.63 (SD ± 19.82) years; among that, 56% were men. While the mean age of participants who approached the Allopathic PHC was 40.32 (SD ± 17.02), and 61% of the participants were men. Table 1 illustrates the distribution of sociodemographic characteristics by health-care centers that they visited. Higher proportions of participants with older age, +2 level education, and economic status above the poverty line visited the Ayush PHC. The proportion of participants in the age group 25–34 was higher in Allopathic PHC than in Ayush PHC.

From Table 2, most factors are statistically significant with the healthcare institution they visited. Factors like affordability, bed availability, basic medical equipment, digital technologies, diagnostic facilities, environment and parking, access to emergency transport for inter-facility transfer, perceived health-care service satisfaction, seasonal treatment, medicinal quality, and availability of essential medicines are statistically significant for their health-care utilization and health-care-seeking behavior.

The results of multivariable logistic regression analysis are presented in Table 3. We have found that the odds of utilizing Allopathic PHC for health-care needs is higher among those who have prior experience in care (AOR 3.47; 95% CI 0.52–23.37) due to affordability (AOR 11.48; 95% CI 2.31–57.08), availability of essential medicines and its quality (AOR 35.28; 95% CI 5.32–234.20), acceptability of treatment (AOR 4.51; 95% CI 0.91–22.41), and when the distance to the institution is >5 km (AOR 6.66; 95% CI 1.06–41.9). When considering the quality of service, peoples choose Allopathic PHC than Ayush PHC due to the approach of staff (AOR 3.74; 95% CI 0.59–23.78).

Institutional facilities and amenities – The odds of using Allopathic PHC are higher due to factors such as the availability of basic medical equipment (AOR 5.19; 95% CI 0.74–36.14), diagnostic facilities (AOR 24.57; 95% CI 3.77–160.18), digital technologies (AOR 4.11; 95% CI 0.35–48.69), access to emergency transport for inter-facility transfer (AOR 2.81; 95% CI 0.28–28.67), and availability of bed (AOR 10.07; 95% CI 0.07–1491.09).

Table 4 shows the utilization pattern of health-care services for common health problems in the study area. Factors such as neonatal and infant health-care services, childhood and adolescent health-care services, family planning, contraceptive services, and other reproductive health-care services, Management of Communicable Diseases including National Health Programs, Management of Common Communicable Diseases, and Outpatient care for simple acute illnesses and minor ailments, and elderly and palliative health-care services show statistical significance with the type of PHC they visited. About 58% of people preferred the Allopathic PHC for the Management of Common Communicable Diseases and Outpatient care for simple acute illnesses and minor ailments. However, among that, only 1% have opted for screening and basic management of mental health ailments. At the same time, 35% of people preferred the Ayush PHC for Screening, Prevention, Control, and Management of Non-Communicable Diseases. While only 1% of people preferred emergency medical services and family

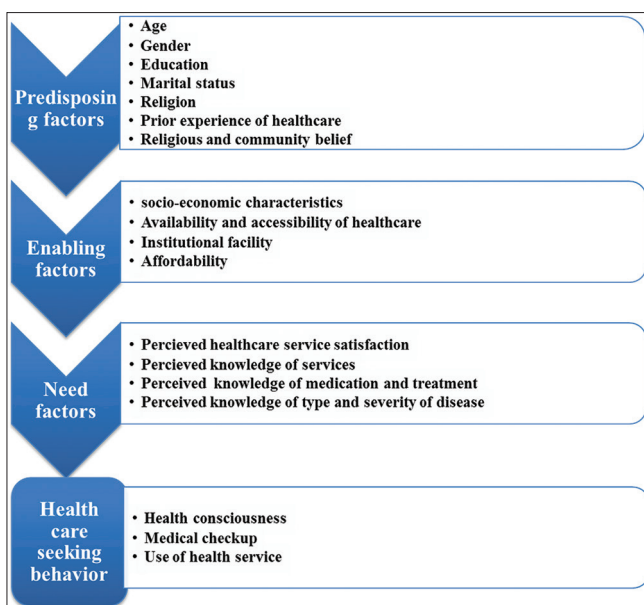


Figure 1: Health service utilization model

**Table 1:** Frequency and percentage distribution of sociodemographic characteristics of the participants approaching ayush and allopathic healthcare institutions (n=200)

| Socio-demographic characteristics | Responses from Ayush<br>PHC, n=100, (%) | Responses from Allopathic<br>PHC, n=100, (%) | Total, n=200,<br>(%) |
|-----------------------------------|---|--|----------------------|
| Age group                         |   |  |                      |
| 0–2                               | 0 (0)                                   | 1 (1)  | 1 (0.5)              |
| 3–15                              | 0 (0)                                   | 1 (1)  | 1 (0.5)              |
| 16–24                             | 15 (15)                                 | 14 (14)                                      | 29 (14.5)            |
| 25–34                             | 20 (20)                                 | 30 (30)                                      | 50 (25)              |
| 35–44                             | 19 (19)                                 | 16 (16)                                      | 35 (17.5)            |
| 45–54                             | 10 (10)                                 | 15 (15)                                      | 25 (12.5)            |
| 55–64                             | 08 (8)                                  | 11 (11)                                      | 19 (9.5)             |
| 65+                               | 28 (28)                                 | 12 (12)                                      | 40 (20)              |
| Gender                            |   |  |                      |
| Male                              | 56 (56)                                 | 61 (61)                                      | 117 (58.5)           |
| Female                            | 44 (44)                                 | 39 (39)                                      | 83 (41.5)            |
| Marital status                    |   |  |                      |
| Married                           | 72 (72)                                 | 74 (74)                                      | 146 (73)             |
| Unmarried                         | 18 (18)                                 | 22 (22)                                      | 40 (20)              |
| Widow/Widower                     | 10 (10)                                 | 03 (3)                                       | 13 (6.5)             |
| Divorced                          | 00 (0)                                  | 01 (1)                                       | 1 (0.5)              |
| Religion                          |   |  |                      |
| Muslim                            | 93 (93)                                 | 75 (75)                                      | 168 (84)             |
| Hindu                             | 06 (6)                                  | 24 (24)                                      | 30 (15)              |
| Christian                         | 01 (1)                                  | 01 (1)                                       | 2 (1)                |
| Educational qualification         |   |  |                      |
| Illiterate                        | 10 (10)                                 | 07 (7)                                       | 17 (8.5)             |
| LP                                | 15 (15)                                 | 16 (16)                                      | 31 (15.5)            |
| UP                                | 09 (9)                                  | 14 (14)                                      | 23 (11.5)            |
| SSLC                              | 12 (12)                                 | 13 (13)                                      | 25 (12.5)            |
| +2                                | 26 (26)                                 | 16 (16)                                      | 42 (21)              |
| Diploma/ITI                       | 10 (10)                                 | 10 (10)                                      | 20 (10)              |
| Degree                            | 10 (10)                                 | 20 (20)                                      | 30 (15)              |
| PG and above                      | 08 (8)                                  | 04 (4)                                       | 12 (6)               |
| Economic status                   |   |  |                      |
| Most economically backward        | 15 (15)                                 | 13 (13)                                      | 28 (14)              |
| Below poverty line                | 10 (10)                                 | 25 (25)                                      | 35 (17.5)            |
| Above priority line               | 54 (54)                                 | 51 (51)                                      | 105 (52.5)           |
| Non-priority                      | 21 (21)                                 | 11 (11)                                      | 32 (16)              |
| Family size                       |   |  |                      |
| 2–3                               | 1 (1)                                   | 10 (10)                                      | 11 (5.5)             |
| 4–5                               | 56 (56)                                 | 64 (64)                                      | 120 (60)             |
| >5                                | 32 (32)                                 | 26 (26)                                      | 58 (29)              |

planning, contraceptive services, and other reproductive Health-care services, none reported oral health-care services.

The results of multivariable logistic regression analysis are presented in Table 5. We have found that the odds of utilizing Allopathic PHC for health-care needs of common health problems are higher among almost all services. Odds of utilizing services such as screening and basic management of mental health ailments (AOR 0.20; 95% CI 0.02–2.26) and care in pregnancy and childbirth (AOR 0.54; 95% CI 0.12–2.32) were less for Allopathic. The odds of utilizing basic oral healthcare are very high in Allopathic PHC (AOR 579230420.0; 95% CI 0.00) as no one reported it from Ayush PHC.

### Use of Private Healthcare Services

About 54% of the people who visited AYUSH PHC used private healthcare centers for emergency services, but only 15% of people opted for private healthcare centers for rehabilitative services. While from Allopathic PHC, 62% of people chose private healthcare for emergency services. However, only 3% of them chose private healthcare for seasonal treatment [Figure 2].

## DISCUSSION

To the best of our knowledge, this study is the first of its kind to provide a snapshot regarding the health-care-seeking behaviors and patterns of health-care utilization and its determining factors for people visiting AYUSH and Allopathic PHC in India. Apart from Allopathic health and wellness centers, understanding the utilization of AYUSH care has been important for various reasons, including an increased focus on its mainstreaming and integration with the biomedicine-based health care system.<sup>[6]</sup> It also helps to form evidence-based health policies and efficiently manage the resources in the country based on the demand and influencing factors.<sup>[7–9]</sup>

Considering predisposing factors such as age, most participants are from the age group 25–34 in Allopathic PHC, but in Ayush PHC, it is 65+. It may be due to the preference of Ayush PHC for chronic and NCDs, which is more among old age people. Among the participants, the male proportion is more in both PHC. In comparison, people from the Muslim religion are more in proportion. It is because of the high popularity of people from the Muslim religion in the study area. Even though this finding is similar to the study findings by Rudra *et al.*<sup>[10]</sup> where they conducted an econometric analysis that suggests that Muslims are more likely to use AYUSH care. Due to

**Table 2:** Frequency and percentage distribution of factors determining for health-care utilization and health-care seeking behavior (n=200)

| Reason for visit  | AYUSH PHC,<br>n=100, % | Allopathic PHC,<br>n=100, % | Total,<br>n=200, % | P-value |
|---|------------------------|-----------------------------|--------------------|---------|
| Prior experience in care                                  | 73 (73)                | 76 (76)                     | 149 (74.5)         | 0.63    |
| Affordability   | 27 (27)                | 73 (73)                     | 100 (50)           | 0.00    |
| Accessibility (distance to institution)                   |                        |                             |                    | 0.70    |
| <2 km   | 49 (49)                | 44 (44)                     | 93 (49.22)         |         |
| 2–5 km  | 34 (34)                | 35 (35)                     | 69 (34.5)          |         |
| >5 km   | 17 (17)                | 21 (21)                     | 38 (19)            |         |
| Quality of service  |                        |                             |                    |         |
| Approach of doctor  | 58 (58)                | 86 (86)                     | 144 (72)           | 0.00    |
| Approach of staff   | 25 (25)                | 54 (54)                     | 79 (39.5)          | 0.00    |
| Timely service  | 23 (23)                | 38 (38)                     | 61 (30.5)          | 0.02    |
| Person-centered treatment                                 | 13 (13)                | 04 (04)                     | 17 (8.5)           | 0.02    |
| Institutional facility and amenities                      |                        |                             |                    |         |
| Workforce   | 21 (21)                | 22 (22)                     | 43 (21.5)          | 0.86    |
| Bed availability  | 01 (01)                | 21 (21)                     | 22 (11)            | 0.00    |
| Basic medical equipment                                   | 12 (12)                | 59 (59)                     | 71 (35.5)          | 0.00    |
| Digital technologies                                      | 03 (03)                | 22 (22)                     | 25 (12.5)          | 0.00    |
| Diagnostic facilities                                     | 03 (03)                | 83 (83)                     | 86 (43)            | 0.00    |
| Environment and Parking                                   | 17 (17)                | 07 (07)                     | 24 (12)            | 0.03    |
| Availability of WASH amenities                            | 21 (21)                | 14 (14)                     | 35 (17.5)          | 0.19    |
| Access to emergency transport for inter-facility transfer | 03 (03)                | 14 (14)                     | 17 (8.5)           | 0.00    |
| Compatibility   | 12 (12)                | 15 (15)                     | 27 (13.5)          | 0.53    |
| Medicinal quality and availability of essential medicines | 16 (16)                | 72 (72)                     | 88 (44)            | 0.00    |
| Acceptability of treatment                                | 17 (17)                | 58 (58)                     | 75 (37.5)          | 0.00    |
| Religious and community belief                            | 06 (06)                | 02 (02)                     | 08 (04)            | 0.15    |
| Seasonal treatment  | 10 (10)                | 00 (00)                     | 10 (05)            | 0.00    |
| Perceived health-care service satisfaction                |                        |                             |                    | 0.00    |
| Neither satisfied nor dissatisfied                        | 05 (05)                | 02 (02)                     | 07 (3.5)           |         |
| Somewhat dissatisfied                                     | 01 (01)                | 34 (34)                     | 35 (17.5)          |         |
| Somewhat satisfied  | 56 (56)                | 00 (00)                     | 56 (28)            |         |
| Very satisfied  | 38 (38)                | 64 (64)                     | 102 (51)           |         |
| Perceived quality of service and healing of disease       |                        |                             |                    | 0.82    |
| Very much   | 61 (61)                | 58 (58)                     | 119 (59.5)         |         |
| Much  | 25 (25)                | 29 (29)                     | 54 (27)            |         |
| Somewhat  | 10 (10)                | 07 (07)                     | 17 (8.5)           |         |
| Low   | 04 (04)                | 05 (05)                     | 09 (4.5)           |         |
| Very low  | 00 (0)                 | 01 (01)                     | 01 (0.5)           |         |

\*Statistically significant variable is considered as  $P < 0.05$ **Table 3:** Factors associated with health-care utilization and health-care seeking behavior in the multivariable logistic regression analysis

| Variables  | AOR (95% CI)         | P-value* |
|--|----------------------|----------|
| Prior experience in care (Ayush vs. Allopathic)                                  | 3.47 (0.52–23.37)    | 0.20     |
| Accessibility (Distance to institution)  |                      |          |
| <2 km  | Ref                  |          |
| 2–5 km   | 1.08 (0.22–5.44)     | 0.92     |
| >5 km  | 6.66 (1.06–41.9)     | 0.04     |
| Affordability (Ayush vs. Allopathic)   | 11.48 (2.31–57.08)   | 0.00     |
| Quality of service (Ayush vs. Allopathic)  |                      |          |
| Approach of doctor   | 1.26 (0.26–6.14)     | 0.78     |
| Approach of staff  | 3.74 (0.59–23.78)    | 0.16     |
| Timely service   | 0.13 (0.01–1.19)     | 0.07     |
| Person-centered treatment  | 0.56 (0.03–10.28)    | 0.7      |
| Institutional facility and amenities (Ayush vs. Allopathic)                      |                      |          |
| Workforce  | 0.52 (0.08–3.31)     | 0.49     |
| Basic medical equipment  | 5.19 (0.74–36.14)    | 0.1      |
| Diagnostic facilities  | 24.57 (3.77–160.18)  | 0.00     |
| Digital technologies   | 4.11 (0.35–48.69)    | 0.26     |
| Environment and Parking  | 0.96 (0.1–9.58)      | 0.97     |
| Availability of WASH amenities   | 0.7 (0.06–8.07)      | 0.77     |
| Access to emergency transport for inter-facility transfer                        | 2.81 (0.28–28.67)    | 0.38     |
| Bed availability   | 10.07 (0.07–1491.09) | 0.36     |
| Medicinal quality and availability of essential medicines (Ayush vs. Allopathic) | 35.28 (5.32–234.20)  | 0.00     |
| Compatibility (Ayush vs. Allopathic)   | 1.49 (0.2–11.10)     | 0.70     |
| Acceptability of treatment (Ayush vs. Allopathic)                                | 4.51 (0.91–22.41)    | 0.07     |
| Personal and community belief (Ayush vs. Allopathic)                             | 0.19 (0.01–2.83)     | 0.23     |
| Seasonal treatment (Ayush vs. Allopathic)  | 0.00 (00)            | 01       |

AOR: Adjusted odds ratio, \*statistically significant at  $P < 0.05$ , PS: The reference category is recorded according to our variable of interest

**Table 4:** Frequency and percentage distribution of utilization of health-care services for common health problems (n=200)

| Variables  | Ayush PHC,<br>n=100, % | Allopathic PHC,<br>n=100, % | Total,<br>n=200, % | P-value* |
|--|------------------------|-----------------------------|--------------------|----------|
| Care in pregnancy and childbirth   | 13 (13)                | 18 (18)                     | 31 (15.5)          | 0.33     |
| Neonatal and infant health care services   | 09 (09)                | 22 (22)                     | 31 (15.5)          | 0.01     |
| Childhood and adolescent health-care services  | 12 (12)                | 25 (25)                     | 37 (18.5)          | 0.02     |
| Family planning, contraceptive services, and other reproductive health-care services                         | 01 (01)                | 12 (12)                     | 13 (6.5)           | 0.00     |
| Management of communicable diseases, including national health programs                                      | 13 (13)                | 27 (27)                     | 40 (20)            | 0.01     |
| Management of common communicable diseases and outpatient care for acute simple illnesses and minor ailments | 14 (14)                | 58 (58)                     | 72 (36)            | 0.00     |
| Screening, prevention, control, and management of non-communicable diseases                                  | 35 (35)                | 39 (35)                     | 74 (37)            | 0.56     |
| Care for common ophthalmic and ENT problems  | 14 (14)                | 12 (12)                     | 26 (13)            | 0.67     |
| Basic oral healthcare  | 00 (00)                | 02 (02)                     | 02 (01)            | 0.16     |
| Elderly and palliative health-care services  | 12 (12)                | 24 (24)                     | 36 (18)            | 0.03     |
| Emergency medical services   | 01 (01)                | 06 (06)                     | 07 (3.5)           | 0.05     |
| Screening and basic management of mental health ailments   | 05 (05)                | 01 (01)                     | 06 (03)            | 0.10     |

\*Statistically significant variable is considered as  $P < 0.05$

**Table 5:** Factors associated with utilization of health-care services for common health problems in the multivariable logistic regression analysis

| Variables   | AOR (95% C.I.)      | P-value* |
|---|---------------------|----------|
| Care in pregnancy and childbirth (Ayush vs. Allopathic)   | 0.54 (0.12–2.32)    | 0.40     |
| Neonatal and infant health care services (Ayush vs. Allopathic)   | 2.58 (0.64–10.33)   | 0.18     |
| Childhood and adolescent health care services (Ayush vs. Allopathic)  | 2.01 (0.73–5.49)    | 0.17     |
| Family planning, contraceptive services, and other reproductive health-care services (Ayush vs. Allopathic)                         | 20.19 (1.96–207.66) | 0.01     |
| Management of communicable diseases, including national health programs (Ayush vs. Allopathic)                                      | 2.56 (1.01–6.47)    | 0.047    |
| Management of common communicable diseases and outpatient care for acute simple illnesses and minor ailments (Ayush vs. Allopathic) | 11.58 (5.19–27.08)  | 0.00     |
| Screening, prevention, control, and management of non-communicable diseases (Ayush vs. Allopathic)                                  | 2.09 (0.97–4.54)    | 0.06     |
| Care for common ophthalmic and ENT problems (Ayush vs. Allopathic)  | 2.20 (0.73–6.63)    | 0.16     |
| Basic oral healthcare (Ayush vs. Allopathic)  | 579230420.0 (0.00)  | 01       |
| Elderly and palliative health-care services (Ayush vs. Allopathic)  | 4.41 (1.68–11.57)   | 0.00     |
| Emergency medical services (Ayush vs. Allopathic)   | 19.6 (1.88–203.92)  | 0.01     |
| Screening and basic management of mental health ailments (Ayush vs. Allopathic)   | 0.20 (0.02–2.26)    | 0.19     |

AOR: Adjusted odds ratio, \*statistically significant at  $P < 0.05$ , PS: The reference category is recorded according to our variable of interest

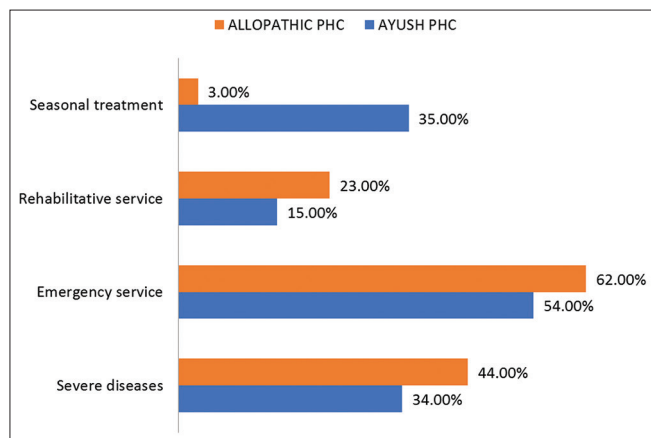
limited sample limitations, they could not undertake separate analyses to discern the association between religious background and the use of various forms of traditional medicine.

When considering factors enabling health-care-seeking behavior and utilization, economic status is measured by asking participants' ration card type. According to the Kerala Gov., there are four types of ration cards available, which are allocated based on their economic status.<sup>[11]</sup> People above the poverty line (Blue color ration card) choose the PHC. APL card is issued for families having an annual income of more than 15,000 and <1 Lkah. Most participants come under the APL category because the families in the study area are more dependent on income from Middle East countries, and the poverty level is low in the study area. People from all economic classes are also opting for both PHC. It shows the importance of the healthcare institution in the study area and how they depend on it for their healthcare needs. Affordability is a significant determinant as 73% of people approach Allopathic PHC, and 27% from Ayush PHC reported not wanting to pay for services and medicines. Most respondents reported that the distance to

the institution is <2 km, so they chose the particular PHC. Similar findings were reported by Abuduxike *et al.*<sup>[5]</sup> conducted in Turkey, and Govender *et al.*<sup>[9]</sup> conducted in South Africa, Adane *et al.* (2017).<sup>[12]</sup> conducted in Ghana, where more people chose the public sector than the private due to affordability and easy accessibility.

Factors such as availability of beds, essential medical equipment, digital technologies, diagnostic facilities, good environment, parking facilities, and access to emergency transport for inter-facility transfer are factors related to institutional facilities which significantly determine health-care-seeking behavior and utilization. About 83% of people approaching Allopathic PHC reported visiting there due to diagnostic facilities and 59% reported the availability of basic medical equipment. Out of 200 participants, 16 visiting Ayush PHC and 72 visiting Allopathic PHC mentioned that medicinal quality and availability of essential medicines determine their health-care-seeking behavior. About 10% of people visiting Ayush PHC reported choosing Ayush PHC for seasonal treatment.

Factors such as the approach of doctors and staff, timely service, and person-centered treatment are the need factors that



**Figure 2:** Use of private healthcare services

are significant in determining health-care facilities. About 56% of people visiting Ayush PHC and 86% of people visiting Allopathic PHC reported the approach of the doctor has significance in choosing the particular healthcare institution. This result is similar to the study conducted by Rout *et al.*(2019),<sup>[13]</sup> in India, where they found that utilization of public facilities for outpatient and inpatient services was found to be very low, which is attributed to the poor quality of care and long waiting hours. Questions asked whether compatibility is a factor for determining the healthcare institution; 12% of people approaching Ayush PHC and 15% of Allopathic PHC reported that they opted for the particular PHC due to the same-gender doctor or staff availability. Acceptability of treatment is a significant factor in seeking the particular PHC for healthcare needs. When asked about the relationship between perceived quality of service and healing of their disease, 61% approaching Ayush PHC and 58% approaching Allopathic PHC mentioned “very much.”

In contrast, 56% of people are somewhat satisfied with the health-care service perceived by Ayush PHC, and 64% from Allopathic PHC are very satisfied with the health-care service they perceive. People visiting Ayush PHC utilize services for screening, prevention, control, and management of NCDs. About 5% of the participants utilized mental health consultation. These findings are similar to the study by Rudra *et al.*<sup>[10]</sup>, where patients with chronic illness reported greater use of AYUSH care across rural and urban India. While 58% of participants utilized the Allopathic PHC to manage the common communicable disease and OP care for acute illnesses and minor ailments. These results were supported by the previous studies reporting that need factors are the strongest determinants of health-care utilization.<sup>[14-16]</sup>

### Limitations

However, some more limitations should be considered while analyzing the study results.

- We used a cross-sectional study design with convenient sampling methods, which might limit the power, reliability, and generalizability of the study results to the entire population, and the causal relationships between factors should be interpreted with caution
- We took public facilities available in Vengara Panchayath. But the public health facility for Ayush is at the PHC level, and from Allopathic, it is upgraded to CHC. So facilities will be

more at CHC. Hence, people approach for more services

- Data were collected based on a self-made questionnaire that relied on the participants’ self-reports. There may be a chance for information and recall bias.

### CONCLUSION

This study’s results help to find the health-care service utilization and health-care-seeking behavior of people approaching both PHC. Health-seeking behaviors of the participants were significantly related to the factors such as affordability, quality of service, institutional facilities such as access to emergency transport for inter-facility transfer, workforce, basic medical equipment, digital technologies, environment and parking, medicinal quality, and availability of essential medicines and seasonal treatment, perceived health-care service satisfaction. The study findings highlighted the need for systematic information on the usage of health-care services and people’s health-care-seeking behaviors. It would help policymakers and stakeholders set up specific strategies to ensure the effective utilization and distribution of existing resources and enforce the country’s sufficient delivery of health-care services.

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