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## Motivations Behind the Rise and Success of Homeopathy in India

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## Abstract

Homeopathy is a form of medicine that is incredibly controversial and is often labeled as a fraudulent, placebo effect drug, that can have potentially dangerous side effects. This is the picture that is painted of homeopathy in the United States and many other countries in which these medicines are banned in distribution or highly unregulated. In contrast, India has popularized and well-integrated homeopathy into their medical systems with government backing and consistent funding towards accredited homeopathic institutions and funding hospital systems. This paper will explore the circumstances and health care dynamics of India that allowed homeopathy to gain the level of popularity and continue to sustain such a dominant share of the medical market in India. This study will understand the health determinants of India to better identify motivations for favoring homeopathy as well as understanding individual factors in within a homeopathic patient -physician relationship vs. that of an allopathic patientphysician relationship.

## Introduction

#### History of The Birth of Homeopathy

During the 18th century, a prevailing perspective in medicine posited that all diseases originated from the overstimulation of nerves and blood. Treatment modalities aimed at alleviating overstimulation entailed "heroic" medical interventions such as bleeding, blistering, purging, vomiting, and the administration of substantial doses of toxic substances, including mercuric chloride (Loudon, 2006). Additionally, prior to the development of germ theory and public health policies, vulnerable patients were often exposed with deadly viral infections and leave hospitals with increased pain and a worsened condition than they were originally admitted (Loudon, 2006). Despite the drastic nature of these interventions, the paternalistic dynamic and inherent power differential between physicians and patients necessitated a perception of the physician as heroic and engendered a culture of unquestioning compliance among patients (Kaba & Sooriakumaran, 2006). The agonizing nature of medicine and the dehumanization of the patient compelled the creation of a different style of medicine entirely.

Homeopathy, created by the German physician Samuel Hahnemann, was a response to the orthodox medical practices at the time. Hahnemann received his medical degree in Erlangen in 1779 and failed to find financial success in his orthodox medical practices (Loudon, 2006). One of Hahnemann's breakthrough discoveries, which created the foundation for homeopathy, was the empirical rule that "like cures like" or the principle of similarity. (Loudon, 2006). Hahnemann discovered that dosing himself with small quantities of a malaria anti-parasitic treatment (quinine or "the bark") would result in the presentation of milder malaria symptoms without the intensity and root characteristics of the disease such as a mild, intermittent fever (Loudon, 2006). This principle led to the homeopathic practice, which ascertains that a

"homeopathic remedy in a healthy subject will produce certain sets of symptoms, while the same remedy will cure similar sets of symptoms in unhealthy (sick) subjects" (Hahnemann, 1796). The process behind preparing homeopathic treatment starts with crushing natural substances such as poisons (poison ivy, nightshade, cobra venoms), organisms (red onion extract, crushed bees), and various different minerals (arsenic) based on the symptoms they elicit in a healthy patient (National Center for Complementary and Integrative Health, 2018). Then, remedies enter a process of potentization, which includes a series of systemic dilutions and succussions (vigorous shaking of homeopathic solution) and is said to leave a spirit like essence remembered by the water and therefore retaining its healing properties (Sagar, 2007). Another important pillar of homeopathy is the law of infinitesimals, which states that dilution and potency are inversely correlated. For example, a solution that is 1-part-per million is more potent and medically strong than a 1-part-per thousand solution. This idea is the opposite of the principles of allopathic pharmacology (Sagar, 2017). Most homeopathic treatments are diluted 30 times, meaning the substance contains 1 part substance and 10<sup>29</sup> parts water. In all, homeopathy is based on the idea that these medicines would trigger the body's natural healing response. Because of the violent nature of the existing heroic treatments of the time and the objectification and dehumanization of patients, the popularity of homeopathy skyrocketed. There was an eagerness for a new wave of medicine that prioritized personalized treatment, holistic intake, and ensure the treatment was not more painful than the disease (Loudon, 2006).

#### History of Homeopathy in the US

Today, the term "homeopathy" may be relatively unfamiliar within the typical American household, with just over 2% of individuals in the US utilizing this approach (Dossett, 2018). However, this was not always the case. Homeopathy experienced a surge in international popularity and dissemination across Europe and the Americas during the late 19th century. By 1898, the ratio of allopathic to homeopathic practitioners stood at 9:1 (Rothstein, 1985/1972). By this juncture, Homeopathy had evolved into a formally organized system of medicine, boasting nine national organizations, twenty medical colleges, and thirty-one medical journals. Notably, the American Institute of Homeopathy predated the American Medical Association by three years, having been established in 1844 (Brierley-Jones, 2021).

The decline of homeopathy was precipitated by the publication of the Flexner report in 1910, which served as a catalyst for the demise of homeopathic medical colleges and other complementary medical institutions (Brierley-Jones, 2021). The primary assertion of the Flexner report was the promotion of scientifically validated and evidence-based practices over the previously emphasized qualities of bedside manner and patient-physician relationships. Consequently, with the diminishing presence of homeopathy in educational curricula and its declining credibility, the number of practitioners and the demand for homeopathy waned, ultimately leading to its expulsion from mainstream medical markets in Western countries. According to the most recent National Health Interview Survey in 2012, it is estimated that 5 million adults and 1 million children have used homeopathy at the time of the survey (National Center for Complementary and Integrative Health, 2018). Of the children using homeopathy, only 0.2% went to a practitioner. In the US, non-individualized homeopathy, which

is curated specifically for the patient under the care of a trained homeopathic doctor (Mathie et. al, 2017). Most adults self-prescribe homeopathy for issues like cold and musculoskeletal pain using over the counter options (National Center for Complementary and Integrative Health, 2018). The most typical profile for homeopathy users in the US is the white, educated, middle-aged female (Dossett, 2018). Among those who used homeopathy to address a health condition, the most common conditions targeted were respiratory and ear, nose, and throat complaints (18.5%); musculoskeletal complaints (12.3%); fatigue, sleep, stress, or chronic pain (7.7%); gastrointestinal conditions (5.0%); and neurologic conditions (3.4%) (National Center for Complementary and Integrative Health, 2018).

While homeopathy can be prescribed by practitioners and sometimes offered over the counter, it is not an FDA-approved medicine and cannot be labeled as something intended to treat or cure. The data from randomized controlled trials conducted in the US provide evidence for the FDA's decision. A meta-analysis was conducted on the performance of 75 non-individualized homeopathy treatments on 48 clinical conditions in randomized controlled trials. Of the 75 trials, 72 trials had risks of biases that rendered them impossible to assess (Mathie et. al, 2017). In the 3 trials that were understood to be valid, there was no significant evidence of a relationship between homeopathy and clinical improvement exceeding the effect of a placebo (Mathie et. al, 2017). Despite these facts, the demand for homeopathy continues to expand in the US. According to a financial report by IBIS world, the compounded annual growth rate of the homeopathy market in the US has decreased in the last five years by 3.5%. However, there has been a spike in usage post 2021 coinciding with the outbreak of Covid. The estimated total alternative medicine industry revenue has continuously grown over the last 10 years to \$30.6

billion USD in 2023 with homeopathy occupying an estimated 10% of this market (Mikulic, 2023).

#### History of Homeopathy in the India

Homeopathy made its entry into India in 1810 through the endeavors of missionaries and doctors. It was predominantly practiced by loosely trained administrators in civil services and the military (Das, B, 2021). Following numerous public and prominent instances of successful homeopathic treatments, its popularity swiftly disseminated across India. The news of its efficacy reached the royal circles, leading to the appointment of a royal homeopathic physician by the King of Lahore in 1829. The remarkable recovery of the King from vocal cord paralysis not only spread across the nation but also lent credence to homeopathy as a scientific discipline endorsed by royalty (Das, B, 2021). Presently, the Indian government, including the incumbent Prime Minister, advocates for the effectiveness of homeopathy in treating certain clinical conditions. During the mid to late 1800s, allopathic physicians in India, both local and foreign, started incorporating homeopathic training into their medical education (Das, B, 2021). Mahendra Lal Sirkar, the first recognized homeopathic doctor, acquired his allopathic medical degree in 1863, initially skeptical about homeopathy, he later became one of its most prolific and renowned practitioners in India, publishing extensively to validate its efficacy within academic and scientific circles (Das, B, 2021). Throughout the late 19th century, the establishment of homeopathic hospitals facilitated the provision of medicine at considerably reduced rates, ensuring widespread accessibility even in the most remote and impoverished regions of India (Das, B, 2021). However, the burgeoning growth of homeopathy also saw the proliferation of fraudulent and inadequately trained practitioners, particularly in rural villages, prompting the Government of India to establish a committee in 1944 to regulate and legitimize the practice and

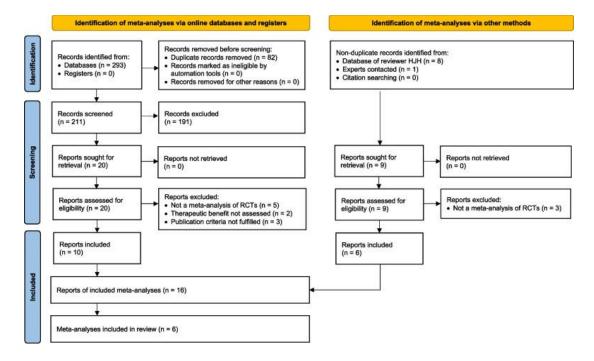
teaching of homeopathy (Das, B, 2021). Subsequently, in 1962, the first honorary Homeopathic physician was appointed as the President of India (Das, B, 2021). During the 1960s, an official compendium on Homeopathic pharmacology and Schedule II drugs was published, mandating all homeopathy drug manufacturers to adhere to it. Additionally, the government instituted the Central Council of Health to standardize education in complementary practices under AYUSH (Ayurveda, Yoga, Unani, Siddha, and Homeopathy). According to the Confederation of Indian Industry, the government's interim budget allocation for AYUSH increased from \$360 million USD to \$445 million USD between 2023 and 2024. As of 2018, Homeopathy ranks as the third most popular method of treatment in India, following allopathy and Ayurveda, with over 200,000 registered homeopathic doctors and approximately 12,000 physicians joining the field annually. The estimated number of homeopathy users in India that depend solely on homeopathy for medical treatment was 100 million people in 2007, a figure substantially surpassing that of the United States. Additionally, with an expected annual growth rate of 25%, this number is anticipated to more than double in the foreseeable future (Prasad, 2007). As of 2021, there are over 100 million people in India who depend solely on homeopathy for medical treatment Because other complementary and alternative therapies such as Ayurveda, Yoga and Siddha have ancient historical roots in India, the familiarity and trust in CAM treatments allowed for the welcoming acceptance of homeopathy as it is the third most used form of medicine in India after allopathy and ayurveda (Prasad, 2007).

#### Current Issue with RCT trials in measuring medical efficacy of homeopathy

Many of the trials that have been used to disprove the efficacy of homeopathy are conducted as randomized controlled trials (RCTs), which is the gold standard in pharmaceutical research due to the ability to disregard the effect of confounding variables and effectively isolate the causes of physiological efficacy of the drug. Practitioners of homeopathy and researchers argue that RCTs do not properly capture the impact of homeopathy and other complementary and alternative medicine. This argument suggests that the pill itself is not the full scope of homeopathic treatment and that, as a result, RCTs tend to undermine the more personal impacts of homeopathy such as detail to holistic healing, general lifestyle changes and personal physician-patient interactions (Teut et al., 2020). For a more appropriate form of assessment of the effectiveness of homeopathy, researchers support a more observational approach. Observational approaches continue to be obtained from a random sample of patients in a medical environment and can capture multiple treatment comparisons, are easier to implement, and provide a more generalizable and robust estimation of clinical effects if used with a large enough sample size (Teut et al., 2020). This can further be shown in the overviews of meta-analyses of RCT's conducted for homeopathic treatments that are further differentiated into individualized vs non-individualized homeopathy. In this study, meta-analyses were filtered to include studies that covered a wide range of age, gender groups, and clinical conditions while also being assessed for risk of bias and methodological quality (Hamre et al., 2023).

### Figure 1: Process of Acquiring Reports for Meta Analysis

Data Source Hamre, 2023



The statistical analyses conducted aimed to assess the proportion of meta-analyses indicating a significant positive effect of homeopathy versus those showing no significant difference. While non-individualized homeopathy showed no significant evidence of effect of homeopathy when compared to a placebo, individualized homeopathy did show significant evidence of homeopathy beyond the placebo effect. This argument is used to provide evidence to expand on why RCTs are not a representative evaluation of homeopathy as this form of testing removed the individuality of patients and holistic healing aspects which are critical factors of homeopathic practice. This also provides an explanation as to why homeopathy has a higher penetration rate and prevalence in India, as most homeopathy prescribed there is individualized homeopathy in contrast to the fact that most Americans consume non-individualized homeopathy.

## Rationale

How has a form of treatment become so validated and recognized in one country where it is seen as unethical in almost all others?

I myself have taken several healthcare courses in the United States in which I have been taught that homeopathic medication is a false form of medication and that there is history of clinical data to prove it. However, being raised in an Indian household, I was often treated with homeopathic medications in India while abroad. Growing up surrounded by medical pluralism and diversity, I am highly interested in looking into homeopathy from a non-western lens and understanding what underlying variables may be at play that have allowed homeopathy to become so prevalent in India.

Even in the western world, medicine is being dislodged from the long-standing paternalistic framework of the doctor-patient relationships. Patient centered care is now championed in major medical hospitals as the gold standard with a greater respect towards patient autonomy. Within the singular relationship between a doctor and physician, the act of listening to a patient to ensure understanding and reassurance is a form of therapeutic intervention. The theories of Balint in 1957 combined the ideas of medicine and psychology to create the concept of the "doctor as drug". He argued that the level of trust and confidence a physician was able to illicit from a patient had an impact on that patient's probability for a better outcome. Some reasons for this had to do with better time management in appointments and the doctor's ability to have better insight into the patient's needs and values. Szasz and Hollander devised three main archetypes for the relationships between physicians and patients (1956). Specifically in the case of chronic illness, which is the type of illness homeopathy most commonly gets used for, the model of mutual participation is most effective due to the increased level of responsibility that the patient has to engage with their own health (Szasz & Hollender, 1956). The doctor-patient relationship is marked with higher levels of depth, friendship, and partnership. The physician derives their satisfaction from their sense of humanity rather than a sense of control.

#### Table 1: Three Models of Patient-Physician Relationships

Model	Physician's role	Patient's role	Clinical application of model	Prototype model
Activity- passivity	Does something to the patient	Recipient (unable to respond to inert)	Anaesthesia, acute trauma, coma, delirium, etc.	Parent-infant
Guidance- co-operation	Tells patient what to do	Co-operator (obeys)	Acute infectious processes, etc.	Parent-child (adolescent)
Mutual participation	Helps patient to help himself	Participant in " <i>partnership"</i> (uses expert help)	Most chronic illness, psychoanalysis	Adult-adult

Data Source: Szasz and Hollander, 1956

Today, the United States has institutional policies and ethical frameworks in place in to enforce patient centered care. The Center for Medicare and Medicaid Services (CMS) is pioneering the way for pay for performance (P4P) payment systems to incentivize value-based care, which many private insurers are also adopting. Through various P4P models such as the Hospital Value-Based Purchasing Program, hospitals are financially rewarded by CMS with one of the criteria regarding patient and caregiver-centered experiences. Patient centered care is now a pillar and an expectation of modern medical care, both in allopathy and homeopathy.

Researchers have begun reassessing homeopathy as more than a pill and rather a style of treatment; physicians take a much more holistic view of patients and personalize treatments

based on lifestyle, emotional situation and presenting symptoms (Varanasi et al., 2021). Viewing homeopathy as a holistic method of treating patients rather than taking it at face value in clinical trials may begin to help explain why homeopathy is such a prevalent form of medication in India

Several variables contribute to the divergent success of homeopathy in India compared to countries like the US. Cukaki's research delves into the rising popularity of homeopathy, attributing it to a shift in priorities among individuals, where medical efficacy may not always be paramount, or individuals may be increasingly skeptical of modern medicine (2020). India, with a smaller proportion of medically literate individuals compared to the US, faces the potential risk of exploitation of lower-income groups through homeopathic practices. Furthermore, the influence of media and how homeopathy is portrayed through various outlets adds another layer of complexity to this analysis. To streamline the focus, this research paper will explore the background of a few selected social determinants and simultaneously focus on the individual physician experience. Employing a combination of literature review and survey methodology, this study will evaluate experiences across various metrics in a qualitative yet measurable manner. Through this investigation, I aim to delve deeply into physician-patient interactions to discern the role of the variables contributing to the remarkable popularity of homeopathy in India.

## Methodology

To better understand to social determinants at play, literary analysis was conducted to isolate different motivations and quantify their validity. Eligibility criteria was drawn from Cooper's Taxonomy which categorizes literary review materials into groups based from (1) focus of attention; (2) goal of the synthesis; (3) perspective on the literature; (4) coverage of the literature; (5) organization of the perspective; and (6) intended audience. To remain within the scope and intentions of this research, categories were chose based on (1) large eligible sample size, (2) published in "neutral journals", (3) focus on public health determinants, and (4) topics that highlighted insight either for or against generic stigmas created on homeopathy.

As mentioned earlier, the question of why homeopathy grew to the level of popularity it has in India is a multi-faceted problem. In order to identify general themes to better target the core motivations which allowed homeopathy to thrive in India, a join patient perspective and physician perspective will be assessed. Secondary research will be conducted through an analysis of existing survey results conducted regarding the level of treatment satisfaction from a patient perspective in India and the US while considering biases and the style of survey conducted. Criteria will be determined based off of the research validity guidelines posted by Dr.Burns and Dr.Kho from the Canadian Medical Association Journal (2015).

- 1. Clear Research Question
- Defined Target Population that Aligns with Study (Indian, chronic care, medium income)
- 3. Pilot Tested Questionnaire for Validity
- 4. Methodology to reduce response and non-response bias (question language, justifiable sample size, mode of distribution and access, etc.)

#### 5. Transparent and Readable Results

Primary data will be collected and discussed through phone interviews with both allopathic and homeopathic doctors in India to develop a qualitative understanding of their patient-physician relationships as well as their own relationship with the other form of medication. The survey results consist of 3 homeopathic doctors and 3 allopathic doctors in India. Interviewers were selected based on consistent geographic region with similar patient portfolio (urban/middle-class India) and non-procedural/surgical practitioners. These criteria were used in identifying interviewers to remove factors of large financial constraints and low health literacy in rural areas. I also chose to not interview any allopathic doctors who spent most of their time in specialty surgery or procedural activities as the nature of their patient interactions are quite different.

A general overview of survey questions is listed below. As these interviews are conversational, they may go in depth in certain areas but will not stray away from the general framework of the intended survey. Some interviews led to follow up questions after the termination of the official interview, and these will only be included in a comparative analysis if they provided additional context or insights into personal thoughts about their practiced system of medicine or other systems of medicine. Questions noted by "#a" are the modified version of questions asked to allopathic physicians.

#### Interview Questionnaire

- 1. Tell me about what interested you in pursuing homeopathy?
  - a. Tell me about what interested you in pursuing medicine and specifically your field of medicine?
- 2. About how many patients do you see in one day? Is this consistent with your colleagues?

- 3. How do you intake patient history? How much time do you speak with each patient during their initial appointment and follow ups?
- 4. How often do you follow up with your patients?
- 5. How do you interact with allopathic medication/ allopathic physicians?
  - a. How often do you interact with homeopathic patients/homeopathic physicians?
- 6. How do you know if your patients and their families are satisfied with service?
- 7. What are your goals in improving patient satisfaction and how have you worked towards achieving them?
  - a. If answered as no goals, prompted with what are your future goals as a medical physician

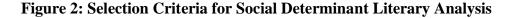
Questions revised by both thesis director and second reader and piloted to ensure openendedness and fair interpretation of experiences and responses. Interviewers were selected by concentrating on one geographic region of Hyderabad, India to focus specifically on the patient and physician interactions and to avoid confounding variables of diverse socioeconomic contexts. Through using online and in person validation, I selected homeopathic and allopathic doctors in a well-established large-scale practice with that had a general specialty and spent much of their career in a patient facing setting. Interviews were conducted by phone and recorded after obtaining consent from each interviewer.

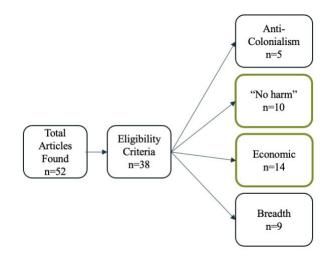
Interviews were transcribed and coded to perform a thematic analysis as per the guidelines outlined by Braun & Clarke (2006). Using AI applications, themes were generated both within the allopathic group, the homeopathic group and within all 6 interviews. Themes selected would have a 100% prevalence rate in all interviews in the sampling group.

## **Results**

#### Literary Analysis of Social Determinants

In total, 52 articles were selected that were related to providing textual context to the social determinants of health access and preferences in India. Of those, 38 articles were selected based off the original eligibility criteria discussed earlier in the methodology. Subsequently, the articles were categorized into four main groups, each containing two subcategories. The selection process aimed to highlight two predominant factors that best encapsulate the healthcare landscape of India and contribute to the current status of homeopathy. These factors were chosen based on specific criteria and to develop a comprehensive understanding of the macroscopic perspective. The two areas of interest selected were identified as a theme of "No Harm" and the Indian Payment System of care.





Sources of Motivation for Homeopathy: The Patient Perspective

To gain deeper insights into the patient perspective, existing surveys were aggregated to consolidate patient motivations and perspectives of homeopath. The studies chosen covered

specific diseases rather than a wide array of clinical conditions but all fall under the category of chronic care(coronary artery disease, cirrhosis of the liver). Overall, motivations were a combination of "push factors" that deterred patients away from allopathic care and "pull factors" that attracted individuals toward homeopathic care which are detailed in the table below.

#### Table 2: Motivations for Homeopathy in Indian Patient Survey Sample

Data Source: Singh & Dixit, 2020, Vetriselvan & Yoganandan, 2020, Dutta, 2023,

Personal Attributes of Patients	Positive Attributes of Homeopathy
Trust in CAM	No Side Effects
<b>Financial Constraints</b>	Improvement in Physical Strength
	Preventative Characteristics
	Purity
	Variety
	Shared Decision Making
	Welcoming Environment
	Facilitating External Factors of
Disease Characteristics	Homeopathy
Chronic Disease	Commercialization
Pain Management	Publicity
Past Relapse in Progression	Awareness
	Access

#### Sources of Motivation for Homeopathy: The Physician Perspective

#### **Table 3: Demographics of Interviewed Physicians**

Variable	Characteristic	Frequency (n)		Percentage	
		Allopathy	Homeopathy		
Responses	No of Initial Requests	7	5		
	Eligible Responses	3	3	43%	60%
Gender	Male	2	3	67%	100%
	Female	1	0	33%	0%
Age	<50	1	0	33%	0%
	>=50	2	3	67%	100%
Years in Practice	<20	2	0	67%	0%
	>= 20	1	3	33%	100%

The above table outlines demographic information of the interviewers of which data was used and analyzed. Variables including age, gender, and years in practice were not taken into consideration into the sampling criteria. All of the physicians interviewed had 10+ years of experience. The discrepancy in the sampling groups to highlight would be "Years in Practice" as different level of experiences can change patient load and comfort in patient communication. Additionally, gender and age also influence patient-physician relationships with women tending to have a more empathetic approach to patient care and take more time in history intake and older physicians tending to take a more paternalistic approach towards patients (Löffler-Stastka et al., 2016)

Question	Allopathy		Homeopathy			
Question	Minimum	Maximum	Average	Minimum	Maximum	Average
# of patients seen per day	10	120	44	15	200	88
Average time taken for initial patient history	10	45	23	3	40	19
Average time taken for follow up appointments	5	5	5	3	45	18
Time until next follow up (in days)	7	60	12	1	30	13
Priority for Improving Patient Satisfaction (1-10)	2	10	7	10	10	10
Number of follow ups for chronic cases		yearly		60 days	yearly	
Number of follow ups for acute cases		weekly		daily	weekly	
Opinion: allopathy and homeopathy for treatment	No		Yes			

**Table 4: Overview of Allopathic and Homeopathic Phone Interview Results** 

The above table provides summary statistics of the quantitative aspects of the survey divided by allopathy and homeopathy. The average number of patients that the homeopathic doctors interviewed was double the patients seen by allopathic doctors due to an incredibly high maximum number of patients seen. Additionally, while duration of initial appointments of allopathic doctors seemed to have a slightly larger average, homeopathic doctors a higher average time with follow up appointments. Both types of treatment have a wide range and preference for appointment length with patients. Rather than being associated with the type of treatment, length of appointment had a higher correlation with doctor preference, case type and overall patient load and capacity. When asked if doctors suggest taking both allopathic and homeopathic treatment simultaneously with patients, there were stark contrast in answers and respondents expressed the greatest polarization in this question. Both groups, expressed mutual respect for the other and noted they would not be qualified to diagnose or understand the nature of the other group's medicines. All homeopathic physicians had a unanimous opinion that homeopathy was safe to use alongside allopathic medication. On the contrary, allopathic physicians unanimously voted that they strongly recommend their patients to not continue both treatments at once due to fear of unknown adverse side effects.

Homeopathy Themes	Allopathy Themes	Combined Themes	
1. Patient-Centered Care	1. Patient Load	1. Patient Focus	
2. Legacy and Family Tradition	<ol> <li>Professionalism</li> <li>Patient Feedback</li> </ol>	2. Constraints	
3. Integration Between Systems	4. Separation of Treatment	3. Continuous Learning	
4. Continuous Learning	5. Contextual	5. Continuous Learning	
5. Fundamental Philosophy	Considerations		

 Table 5: Thematic Analysis and Extracted Themes from Interviewed Doctors

The above themes are separated by the homeopathic respondents and the allopathic respondents with an additional analysis on the most prevalent themes within all six interview transcripts. Themes are also reflective on the questions that were asked as well as any free form answers that expanded upon the scope of the direction interview question. Qualitative and

quantitative questions were both combined in the thematic analysis. In regard to

wtr5patient-centered care, homeopaths credited their original philosophy while allopaths credited their actions as a response to documented patient feedback and a general shift in the medical system. Both groups also showed a sense of community awareness, but homeopathic doctors felt themselves as part of their community while allopathic doctors saw their purpose as providing service to a community, one they may not claim as their own. Both allopathic and homeopathic doctors also cited constraints in their respective practices, with homeopathic practitioners primarily facing challenges related to patient load, while allopathic practitioners encountered economic barriers hindering their patients' ability to afford prescribed medicines.

## Discussion

The two main sources of context to set the stage for potential reasons as to why

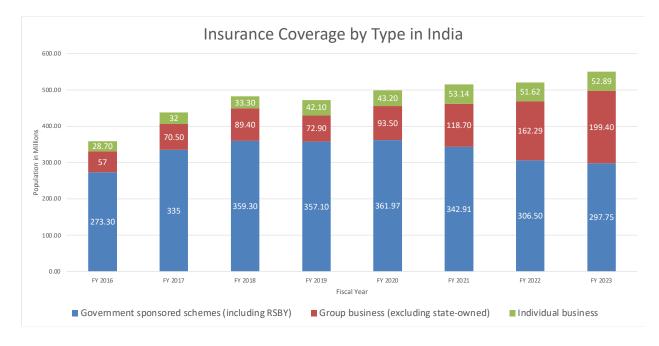
homeopathy was able to grow to the level of popularity that it has in India were identified to be

the payment landscape and the notion of "No Harm" engrained in the history of natural

medicines originating in India which will both be discussed in greater depth.

#### India Insurance and Payment Systems: The Affordability of Medicine for India

**Figure 2: Insurance Coverage by Type in India** *Data Source: IRDAI, 2023* 



The total number of individuals covered in India in 2023 was 550 million with a majority being covered through government insurance (IRDAI, 2023). This still leaves massive gaps in the Indian population of about 30% of the population (about 400 million individuals) uncovered or not knowing of insurance access despite it being offered at no cost. This number is simply the quantified number that are devoid of insurance but vastly undercounts the number of individuals that do not have access to quality care due to the overcapacity in Indian government hospitals.

The public health care system is severely underfunded and struggles with proper access to bed space, doctors, technology, and general space for patients that tend to overflood unhygienic waiting rooms.

In accordance with the UN Sustainability Goals of providing universal health care for all, India rolled out a new insurance program, Pradhan Mantri Jan Aarogya Yojana (PM-JAY), in 2018, replacing the earlier Rashtriya Swasthya Bima Yojana [RSSY]. The goals of the PM-JAY insurance program were to expand coverage to over 500 Million socially and financially disadvantaged individuals and families in India. The package provides 500,000 Indian rupees annually to each household which roughly translates to around \$6000 USD (Selvaraj et al., 2022). While increasing access to hospitals and coverage, it is not clear that funding for these state and district level publicly funded hospitals are increasing in funding simultaneously. While there was a 10% increase in the tax resources from 2010-2019, which are being distributed from the central to state governments, many of these financial resources are being earmarked for other departments adjacent to healthcare and that are noted as "higher priority." This makes it difficult to measure any improvement in access or quality of care in government hospitals (Selvaraj et al., 2022). Additionally, the enforcement of legislation across regarding standardizing diagnoses and treatment expectations has not been met by many Indian states (Selvaraj et al., 2022).

Another important aspect of assessing affordability of care is pharmaceutical product pricing. The National List of Essential Medicines (NLEM) is a dynamic list of medicines that are considered important for India's public health and reducing their disease burden. The goals of the NLEM are to decrease the cost and increase the safety and efficacy of medicine via price caps and assured quality assessments (Ministry of Health and Family Welfare, 2022). However, the NLEM allows for loopholes that make the reality of the case that only 1/5 of the drugs on the

Indian market are covered under NLEM. The NLEM only covers the typical dose for generic medicines and drug manufacturers can be exempt from the price caps of NLEM by increasing the dosage of medicines or creating a combination drug that includes a NLEM drug with other non-NLEM listed drugs (Selvaraj et al., 2022). Homeopathy may seem like a popular and viable options for patients that are prescribed non-NLEM listed drugs because homeopathic treatments cover a large span of viruses and diseases and are crafted to be personalized to the patient.

As a response to the higher price of allopathic healthcare and the socioeconomic diversity of populations in India, AYUSH medicines would seem to provide a more familiar and economic option which makes it a popular option for rural and urban families with a lower socioeconomic status. However, until recently, AYUSH medicines that have typically been measured together in research are now being extracted into their individual therapies within AYUSH. Ayurvedic practitioners make great disIn fact, Homeopathy does not follow similar trends to that of other natural and herbal medicines used in India despite these medicines often being grouped together in documentation (Srinivasan & Sugumar, 2016). The other alternative medicines in the AYUSH group are all historically originating from India from almost over 3000 years ago and have created strong familial and regional ties with the communities that they first began with; therefore, showing higher prevalence in rural communities (Srinivasan & Sugumar, 2016). Contrary to this, Homeopathy is almost equally prevalent in both urban and rural communities. While it may seem that alternative therapies are a more affordable option based on the payment landscape in India, the predominant users of AYUSH therapies fall into higher socioeconomic classes and the traditional governmental Indian medical systems are prevalent in lower socioeconomic classes (Srinivasan & Sugumar, 2016). Overall monthly expenditures for users of AYUSH are higher than users of the public medical system which is a motivation for it's high use in lower socioeconomic groups (Srinivasan & Sugumar, 2016). This contradicts the usual stigma regarding user populations of AYUSH treatments having characterizes of low socioeconomic levels and low medical literacy rates. Homeopathy is used in both circles but is branded incredibly differently and have different motivations behind the use.

#### Discussion on Indian Patient Motivations for Homeopathy Use

The personal attributes delineated in patient surveys and underscore two primary motivations for the utilization of homeopathy: choice and necessity. Complementary and alternative medicine (CAM) holds significant historical precedence in India, fostering generational relationships with local providers wherein trust and comfort are cultivated, leading individuals to regard homeopathy as their preferred initial treatment option. Furthermore, the inherent characteristics of certain pain-related, chronic diseases render the homeopathic approach more attractive to patients in India. As posited by Szasz and Hollender (1956), the treatment of chronic diseases aligns well with a model of patient-physician interaction characterized by mutual participation, facilitating holistic treatment plans and fostering greater emotional connection and trust, particularly pertinent for conditions typified by pain and suffering. Additionally, several positive attributes associated with homeopathy, such as its perceived absence of side effects amidst the perceived drawbacks of conventional treatments, contribute to its appeal. Conventional treatments often entail escalating dosages and therapies, yielding adverse effects like muscle pain, depression, fever, and fatigue, thereby prompting patients to seek alternative methods that potentially mitigate such complications and uphold their quality of life.

Despite a preference for allopathic treatments, the prohibitive costs of privately funded healthcare and the inadequacies of underfunded public healthcare facilities position homeopathy as a secondary recourse for some middle-class families. Some studies have also explored homeopathy as a public health solution for alleviating the patient burden on government hospitals (Kaur et al., 2019). However, most lower socioeconomic families in India turn to medicines like Ayurveda as a first resort because of familiarity and a sense of community as practitioners are often active members of these communities (Wyganowska-Swiatkowska & Kurhańska-Flisykowska, 2012). While Ayurveda and Homeopathy are not comparable and have very different treatment styles, philosophies and drugs, some attributes such as low side effects and herbalism make homeopathy something familiar and therefore more easy to adopt in Indian culture as an alternative therapy (Wyganowska-Swiatkowska & Kurhańska-Flisykowska, 2012).

#### Discussion on Thematic Analysis from Physician Interviews

As a physician, Dr.Paru says he often must consider the financial constraints of his patients such as understanding their insurance coverage and ability pay as this impacts the complacency of a patient to continue taking a long-term medicine for a chronic issue. He also notes this is probably not something many physicians in the US must think about.

"When writing a prescription, that of a long-term medicine, you must always take into account to ensure that a patient doesn't skip a medicine because they are expensive." Dr. Paru Homeopathy.

Dr. Paru's assertion is substantiated by the prevailing norms within the United States healthcare system, where physician prescription practices typically do not prioritize consideration of cost. This is largely attributed to the predominant third-party insurance system, which, until recently, did not afford physicians access to comprehensive price lists for their services and treatments. Despite advancements in technology, the integration of such tools has been slow among US physicians due to apprehensions surrounding potential loss of market competitiveness or challenges in navigating pricing mechanisms. For instance, the Humana price tool, designed to enhance price transparency, has only achieved a modest adoption rate of 10% over nearly a decade since its inception (Galewitz, 2019). Traditionally, pricing has been a domain largely relegated to insurance companies and patients for comprehension and resolution. Lynn Quincy of the nonprofit health research firm Altarum underscores this, noting, "Doctors often have no idea what it might cost the patient after insurance, if they have insurance." Moreover, research indicates that physician estimates of out-of-pocket expenses tend to underestimate actual costs, with physicians often grappling with inquiries regarding such expenses (Sloan et al., 2021). As suggested by Dr.Paru, conversations about affordability and consistency are central to the conversations physicians have with their patients and can therefore impact their prescription habits. Additionally, with the limited scope of capped drugs listed under the NLEM, physicians may fear that patients will not consistently take their medication or be able to properly scale the dosage and combinate drug best suited for the patient clinically. Homeopathy solves two key issues: patient personalization and affordability.

"...being able to understand people in different religions, socioeconomic classes, medical literacy and under the psychological situation of the patient [is how I measure success]" Dr.Venogopal, Homeopathy

"I satisfy myself, and I have done justice to the complaints they have given and given them the treatments that treat. My goal is not to appease them and not

# always things come the way we expect. You can be unhappy with the drugs you are on" Dr.Paru, Allopathy

While patient centered care is a premier focus of both allopaths and homeopaths, patientcentered care is not necessarily central to the origins of allopathy as it is to homeopathy which impacts the perception and importance of where patient satisfaction lies. To some allopaths, curing the disease is their gauge of success while to some homeopaths the patient's overall wellbeing is the gauge of their success.

"Homeopathy from its origins says to treat the patient, and not the disease – this has volumes of meaning." Dr.Kanupareddy, Homeopathy

"We take a patient feedback survey usually, inside and outside of the treatment and the nurse intakes this information. Usually we wish we had more time to make the patient happy" Dr.Pratap, Allopathy

Both groups discussed improving their clinical practices and history taking practices to create a more holistic approach in treatment but homeopathic doctors quoting this as a part of homeopathy's fundamental philosophy while allopathic doctors quoting this as a response to patient feedback

## Limitations

Within the determinant analysis limitations were posed due to a lack of access of updated and neutral information regarding a medicine that is highly stigmatized in the medical world. Journals holding most recent information could have been biased due to the sponsorships and publishing companies ties or written in a non-English language and caused translation error. Additionally, many of the Indian data bases publicly available are less recently updated with last known counts of homeopathy with the most detailed homeopathy count dated to 2007 (Prasad ,2007). The latest publicly available US based general count of homeopathy users was derived form the 2012 NMSR survey distributed by the CDC (Clarke et al., 2015). Trends and popularity, especially in a post pandemic world, could drastically change the prevalence and awareness of homeopathy from past growth rates and numbers.

The size of the interviewer groups with homeopathic doctors (n=3) and allopathic doctors (n=3) are relatively small which puts the data at a higher risk for skew and not representative of the general opinion of homeopathic and allopathic physicians in India. Additionally, a non-sample was used and interviewers were selected as per a volunteer basis. This creates a potential for response bias within the interviewers. As an American interviewing Indian physicians and doctors, cultural differences and perceptions of the interviewer could have also impacted word and answer choice.

## **Conclusion and Future Considerations**

India's existing culture and history of alternative medicines such as Ayurveda, Siddha, Unani, Yoga allowed for a familiarity and existing preference to alternative therapies which led to the easy adoption and resources for homeopathy to catch and gain success in higher society circles. This vetted the medicine and began to span across India in different clinics and health care settings as a patient-centered, natural, zero-side effect inducing medicine that shares some qualities with other alternative therapies that originate from India. While often grouped together under the title, AYUSH, Homeopathy is an prominent outlier from the other alternative therapies in terms of user demographics. While homeopathy is a cheaper form of medicine and some use it due to its access and affordability, its foreign characteristics popularized homeopathy in urban, higher socioeconomic classes with high literacy rates.

Delving deeper into the physician's perspective of homeopathy and allopathy in India provided insights on the fundamental philosophies that tie both together and distinguish them as well. Both homeopathic and allopathic doctors can see up to 100 patients a day, sparing only 3-5 minutes for patient intake. While homeopathy patient intake is generally more holistic, time and patient load was dependent on need and doctor preference rather than dependent on school of medicine. Both groups of doctors prioritize patient-centered care and continuous learning. While both groups showed professionalism and respect towards the other system of medicine, homeopaths accepted using both forms at once while allopath's avoid it in fear of adverse effects. Further considerations for research would be through a more well-developed random sampling of doctors to explore other areas such as the patient-physician effects on physiology.

# Appendix

Transcribing Interviews: Homeopathy

	DR.VENU GOPAL - HOMEOPATHY
1	Looking for an independent career in a time where India was a socialist country (1980s) and job opportunities were low
2	About 45-50 patients in one day, with higher seniority more patients
3	History is patient led and they are able to explain their problem, doctor prompts questions based on symptoms- a very holistic approach on the condition and they look at the constitution of the person and see what systems link and also impact the disease.
	Ask how people interact with the circumstance and environment that would cause a gene to be triggered.
	Acute case is 5-8 patients, chronic conditions are much longer
4	Acute -follow ups 24 hours, lack of hospital structure for general check ups
	Chronic cases first follow ups from 2-6 weeks
5	Accepting allopathy as a legitimate form of medicine, do not tamper with the dosage of allopathy medicine.
	Patients often notice that their dosage of allopathic medication reduces when also taking homeopathy.
6	Patient surveys and personal check ins with first time patients for follow up requests, general satisfaction can be measured because of the level of referrals to friends and family to homeopathy.
7	Learning how to effectively respond to feedback and constantly being updated with new research and new techniques since medical knowledge is continuous. India is an incredibly diverse country and constantly being able to understand people in different religions, socioeconomic classes, medical literacy and under the psychological situation of the patient.
ADDITIONAL COMMENTS	After receiving homeopathy after having allopathy, homeopathy often begins patient's first option for treatment.
	Medicine is a pharmaceutical industry which is unfortunately money oriented. That is why there is not so much popularity of homeopathy in other countries because it is not a good investment that does not fit the industry of medical insurance and pharmaceutical.
	Ex: UK has an existing population of patients that would be interested in homeopathy but due to lack of access of providers there is not a prevalence.
	Often opponents of homeopathy have some level of stake in allopathic medication and also sell homeopathic medication because they want to the

system to survive without the profession to capitalize on the system. Boots pharmaceuticals is a good example in the UK.

#### **DR.KESARI - HOMEOPATHY**

1	Grandfather had cataracts and was able to see without surgery due to homeopathy medication and family has historically only generally gone to homeopathy. Practicing for 44 years, seeing about 40+ patients from day 1
2	At peak of career seeing around 200 patients a day, now seeing more than 100 patients a day. Definitely see higher than average number of patients than colleagues.
3	Based on my way of teaching from my gurus, 3 to 5 minutes of intake patients. I know there are some doctors that take 30-40 minutes for each case but with the number of patients I have that is impossible and I want to assure affordability and access for my patients.
4	Medicine doses are usually administered for a week for an acute condition, more chronic conditions such as asthma, medicine can be administered for a month. Some acute cases have appointments every day over the phone.
5	Many first-time patients for dissatisfaction with allopathic and over prescription of long-term antibiotics come to homeopathy and now generations of family members have been attending the same physician.
6	I am able to tell patient satisfaction based on number of referrals, some even traveling far distances. People tell all of their friends and families to visit me when they are coming to town. I've had families of over 4 generations come and see me in my practice.
7	As I am in the retirement of my career, I do not have any main goals but there is always more to learn about Understanding the scope of homeopathy and the breath of the 3000+ illnesses and viruses that homeopathy can treat that allopathy can't
ADDITIONAL COMMENTS	Allopathy is very easy and surrounds either giving a pain killer, an antibiotic or an antacid but homeopathy is very complex and the nature of it allows to use something as potent as cobra venom due to dilution. By diluting medicine, you are making it even more and more powerful in a dynamic state. That is why you can use things like arsenic and poisons and make things very easily. There is a lot of

scope, a lot of scope. I may have treated more than 40,000 positive covid cases. We can treat any sort of virus, let it be herpes – allopathy cannot treat like that. We can avoid almost 40% of surgery. It is a different science of medicine; it can work others.

#### **DR.KANUPAREDDY - HOMEOPATHY**

1	Homeopathy was practiced for over one century in my home. There is a home dynasty of homeopathy. My grandson is an MBBS graduate but after graduating from his MBBS, he joined the Royal London Homeopathy Institute which is a 150+ year institution. He got his membership of the faculty there which is a recognized qualification to practice.
2	At the height of my practice, I can see up to 70 patients a day and I am the most senior practitioner in my area so I can see several patients, but I have recently limited my practice to about 12-15 patients a day because of my current physician constraints but I have practicing for the last 60+ years.
3	My junior doctors usually worked with me and worked in my clinic for some time. They usually take the case and history and suggest treatment. I go over the suggestions and make the final decision.
4	Usually after a month
5	In other parts of the world, they are trying to get rid of medical pluralism by defunding homeopathic institutions. Allergists allopathists often refer patients (even their own children) to homeopathy because homeopathy works best for those certain medicines. There is no animosity but there are constraints. If surgery or emergency care or procedures, we refer immediately to allopathy. The patient is important, not the style of medicine. We know homeopathy is holistic so it can be better at other things.
6	Patients usually get medicine for one month and after a month they are followed up with and accordingly another form of medicine can be prescribed. Families often send all of their family members and create relationships with me.
7*	Even after the patient leaves, we study the case and see how to improve the treatment and we change the medicine accordingly. We are life-long students, and I try to read every day and each patient is a challenge.
ADDITIONAL COMMENTS	I have worked in the AYUSH department for India and there is an institutional director in each department in AYUSH that is led by a qualified allopathic doctor.

The most famous non-allopathic medicine is homeopathy, because the education system is more standardized and with ayurveda there is a less

Homeopathy from its origins says to treat the patient, and not the disease – this has volumes of meaning. The patient may come for pain in the knee joint – we ask about his sleep, his appetite and ask about his reaction about changes in pressure and temperature. We ask about questions about other things beyond the disease. There is a dynamic force called vital force which is an invisible and when this is disorganized- the patient develops a sickness. The sickness is not pertaining to the organs but rather the central dynamic force, and when that is disordered, the patient presents with symptoms. This is why you must treat the patient and not just the disease. In chronic diseases, allopathy treats specifically the pain. This is why sometimes there is chronic and reoccurring pain and long-term prescriptions For homeopathy, we look at the reason why the pain occurs and treat that.

About 80-90% of our patients come for allopathy and then take homeopathy. The minority use homeopathy first. They get exhausted of relapses and constant returning to doctors to allopathy and need another form of medicine.

WHO recognizes that there is such a large number of practitioners but have not recognized the medicine as legitimate.

#### Transcribing Interviews: Allopathy

#### **DR. PARU - ALLOPATHY CARDIO GENERALIST** 1 "Interest in medicine because of parents, grandfather always wanted him to be a grandfather and was slowly being tuned into the field. I had no other vision and always pictured myself as a physician as a child. People often say they see the passion in my work and good that I became what I wanted to be. I am a cardiologist and treat the diseases of the heart and including clinic and procedural. Unlike the US, there is no differentiation, and it is quite broad including pediatrics and electrophysiology and acute heart attacks and procedures" 2 I see about 25 patients a day, excluding inpatient work. This will be slightly average and people that are more senior to me may have more patients than me. I practice in a medical hospital in Vishakapatnam. 3 All of my questions are focused on the heart because I am typically a tertiary medical practitioner. From the MBBS curriculum I follow that certain protocol. Depending on the case, I plan my follow ups. Acute cases usually a week and chronic cases usually once a year 4 First appointment takes about 10-15 minutes to assess and follow ups are about 5 minutes. 5 I am not aware of homeopathy and do not comment but suggest do not take both at the same time because I am not sure on the reactions between the two. I do not look into that. I satisfy myself, and I have done justice to the 6 complaints they have given and given them the treatments that treat. My goal is not to appease them and not always things come the way we expect. You can be unhappy with the drugs you are on and if that is the case you can come back to me" 7 My goal is to always be better today than I was yesterday, not only in medicine but in life. One thing in mind is that India is not like the US. Our constraints are ADDITIONAL **COMMENTS** different. We have a lot of financial issues. When writing a prescription that of a long-term medicine, you must always take into account to ensure that a patient doesn't skip a medicine because they are expensive. You should always consider the finances when writing a prescription and that impacts the type of medicines you can prescribe which is not something that is thought about in the US.

	DR.DIVYA - ALLOPATHIC DERMATOLOGY
1	No one in my family has been a doctor but my grandfather and my father both were very invested in social work such as volunteering at medical camps. I wanted to give social work by being able to treat by medicine. I practice clinical dermatology.
2	I see 12-15 patients a day. This is the average number for my specialty.
3	On average 10-15 minutes per case but if the conditions are chronic or complicated it may take 30-45 minutes to go in deeper. It depends on the disease.
4	Eczema and fungal infections, 2-3 weeks follow ups are needed but other conditions may need 6-8 months and then a break is taken for maintenance
5	I typically suggest a patient to stop taking homeopathy if they are taking it and I typically do not see patients take homeopathy after treatment. There are times when patients will go to local doctors that provide topical creams or oral medicines that can lead to bad side effects like blisters that I have to treat.
6	I can tell through follow ups. If I don't see a patient again, that means that they are satisfied with their service. There are some patients that are very open about their level of satisfaction which is when I would schedule a follow up appointment. I look at their symptoms and change in health to determine satisfaction
7	Clinical Examination is the first and foremost important thing to clinical diagnosis. Ethically and professionally, it is not good to send a patient away to dismiss their claims. I try to do a deep history and understand the diagnosis. If I really can't solve the case, I can ask my more senior professors. My job also does not stop at just providing medicine but also providing counseling.
ADDITIONAL COMMENTS	N/A

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#### **DR.PRATAP - ALLOPATHIC ENT**

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2	On average in India, doctors can see up to 100-120 patients a day.
3	On average, I take 15-20 minutes for taking patient history and follow up patients take 5 minutes.
4	50% of cases we do not follow up, the other 50% of cases we follow up after a week. For complicated cases it can vary

5	We do not provide any alternative medicines but over 40% of patients consult first homeopathy and then will contact us as a last resort allopathy.
6	We take a patient feedback survey usually, inside and outside of the treatment and the nurse intakes this information.
7	Usually, we want to spend more time in that initial appointment, but it can be incredibly difficult to do that.
ADDITIONAL COMMENTS	

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