

## Comparative Assessment Of Ayurvedic And Allopathic Methods

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### Abstract

This research paper will explore the methods of Allopathic and Ayurvedic medicine. Allopathic medicine has a strong focus on symptomatic components, basing diagnostic and treatment decisions on presented patient conditions. Contrastingly, Ayurvedic medicine, a traditional approach native to the Indian subcontinent, is an all-encompassing wellness system that emphasizes root cause and preventative medicine. The goal of this paper is to synthesize the ideologies behind Allopathic and Ayurvedic approaches, compare varied responses to hypothetical patient scenarios spanning mental and physical health, and review potential integrative techniques to optimize patient health. The responses to all three patient scenarios show a large overlap between the diagnostic rationale used by Allopathic and Ayurvedic medical professionals. Treatment plans, however, tend to vary much more between the two due to the difference between ideologies. All three Allopathic responses focused on the short-term while Ayurvedic responses tended to favor a gradual treatment approach and placed a heavy emphasis on prevention. The successful integration of underutilized herbal remedies and modern surgical technology will result in a more effective healthcare system. This ideal can be achieved through in-depth research that focuses on the compatibility of Allopathic and Ayurvedic approaches.

### Introduction

Throughout human history, many therapeutic practices have treated a range of medical conditions. Some of these historical practices, including Ayurveda, Oriental medicine, Osteopathy, and Reiki, are still being utilized to treat modern-day patients. This research compares a modern Allopathic approach to a traditional Ayurvedic approach. By conducting diagnostic cases grounded in each specialty's framework, this research explores the tenets of these two medical disciplines.

### History of Allopathic Medicine

Coined in 1810, "Allopathy" has become a general term for the use of modern, Westernized diagnostics, technologies, and approaches within the healthcare system. Its prefix "allos" means "opposite" and "pathos" refers to suffering (What to know about allopathic medicine, 2021). Upon creation, the practice of Allopathy was centered around treating a symptom with its opposite. The term was initially used in a derogatory sense due to its undeveloped, radical ideas, but it has since evolved into the mainstream medicine of today. Allopathic medicine is currently the most widely accepted and practiced global medical approach. (Eldridge, L., MD, 2022).

Allopathic medicine was initially founded upon the principle of symptomatic treatment. The goal of Allopathic medicine is to use opposites to counteract each other and restore balance after infliction/disease. This brings us to the main difference between Allopathy and Ayurveda: Allopathy promotes the patient's ease and quick return to normalcy while Ayurveda emphasizes long-term cureability.

## Allopathic Ideologies

Allopathy is organized into specialty units that narrow down the required scope of knowledge for practitioners. This also allows for a more standard procedure to be set in place. More general roles such as general practitioners and hospitalists tend to be diversified and employ cross-specialty knowledge. These individuals then utilize referrals and collaborative treatment plans that optimize the abilities of field specialists who can provide more niche care and treatment. (Allopathic and Osteopathic Medicine, n.d.)

Allopathic medicine accounts for patient symptoms and signs before treatment. After general symptoms have been used to narrow the scope of the issue, diagnostic methods include imaging, blood testing, direct pathologic sampling to confirm the presence and severity of certain conditions. Patient feedback is also acknowledged and incorporated into the treatment plan. Within Allopathy, a large importance is placed on patient and family history because of the role of genetics in many medical conditions.

When physicians are developing a treatment plan, the patient's need is also considered with the overall goal being to assist the patient in everyday life. The treatment plan is used to address all aspects of a condition and therefore usually involves multiple healthcare specialists based on severity and need. Allopathic treatments also tend to be more solution-based rather than curative to help the patient quickly return to their daily life. Alternatively, Ayurvedic treatments may take longer to accomplish this.

## History of Ayurveda

The Sanskrit title “Ayurveda” roughly translates to knowledge of life and is used to describe the practice’s overarching governing principles (Johns Hopkins Medicine, 2019). Ayurveda is a natural system of medicine that originated in the Indian subcontinent at the time of the Indus Valley civilization. During the Samhita period (between the 6th century B.C. and the 7th century A.D), Ayurveda underwent a developmental interval that featured the introduction of various guiding texts including the Charak Samhita, Sushruta Samhita, and Ashtanga Hridaya. This literature is now utilized as the modern foundation for Ayurvedic reasoning and treatment. Because the human body has not hugely evolved during this period, these teachings are still considered applicable to modern patients (Narayanaswamy, 1981).

Although there has been a significant increase in global interest in Ayurvedic teachings, the practice is still mostly limited to the Indian subcontinent through nearly 250,000 registered Ayurvedic practitioners (Pandey, M. M. et al., A. K. S. 2013). Ayurveda has also not been widely supported by allopathic sources due to a lack of evidence-based research, standardization, and publication awareness.

## Ayurvedic Ideologies

Ayurveda is a comprehensive, complete medical system with uniquely defined anatomy, physiology, pathology, pharmaceuticals, treatments, and surgical techniques. The approach is based on the five elements of space, air, fire, water, and earth. The idea is that the body’s internal functions replicate the interactions between these elements that occur on an earthly scale. For example, the bones within the human body represent the earth while water is

represented by plasma fluid and lymph within the body. Metabolic and digestive processes are indicative of the element fire. Space is present between all organs within the body while Air is present in the abdomen. Similarly, these five elements are present within medicinal plants at varying degrees. By ingesting such plants, ayurveda can adjust the level of each element within the body. These concepts of human-cosmos interrelation are referred to as Panchamahabhuta.

These elements are further categorized into the three doshas, which are fundamental energies. The three doshas are labeled kapha (water content), pitta (fire content), and vata (air content). The guiding principle of Ayurveda is that by upholding a balance between these three doshas, optimal health is achieved. It is also said that individuals are inclined to one of these elemental dispositions. All diseases within Ayurveda can also be grouped under these three doshas. For example, digestive/GI diseases are considered under pitta dosha because they are associated with an increased level of the fire element. These doshas can also be combined based on affected systems. The following figure labels the interactions between the doshas.



(Ayurveda Test | Euroved, 2018)

Based on the patient's elemental disposition and how a disease will disrupt inner balances, an Ayurvedic practitioner will recommend treatment avenues. There are also five main treatments in the realm of Panchakarma: vaman (emesis), virechan (therapeutic purgation), basti (enemas), nasya (nasal rinsing), and raktamokshana (phlebotomy). (*Panchakarma Therapy – Treatment Steps and Benefits*, 2022)

## Methods

For this study, perspectives from each discipline were synthesized and compared. Professionals chosen for this study had previous knowledge of both Allopathic and Ayurvedic medicine with a certified specialization in one field. This allowed for discussion of cross-discipline topics, such as integrative techniques and infrastructure necessities. Due to the range of patient issues discussed, an Allopathic professional with an extensive role in the healthcare system was chosen for their expertise in a multitude of fields. Interviews were completed either through conversation or a questionnaire accompanied by follow-up questioning.

During questioning, the allopathic-oriented participant was first asked basic profiling questions, such as asking them to state their occupation, education and background, and any prior

knowledge of Ayurveda. The Ayurvedic-oriented participant was similarly asked to state their occupation, education and background, and alternatively asked for their perspective and understanding of allopathic methodology. Both participants were then introduced to three case scenarios and asked to walk through their diagnostic process and create a brief treatment plan for each patient. Finally, participants were asked if they saw any benefit to integrating both approaches and what changes to the current healthcare system were necessary to fit their vision. For each response, similarities within approaches were condensed, while differences between professional opinions were highlighted and discussed.

### Scenario 1: Mental Health

To provide a full scope of each approach's ability, patient scenarios in different specialty areas were chosen. The following subsection describes the scenario presented to participants about mental health. This scenario is a textbook case of clinical depression and was sourced from Chafey et al. (2009).

#### Scenario Description

*The patient was a 15-year-old adolescent female living with both her parents and a younger sibling. Her parents presented with significant marital problems, had been separated several times, and were discussing divorce. Her mother reported having a history of psychiatric treatment for depression and anxiety and indicated that the patient's father suffered from bipolar disorder and had been receiving psychiatric treatment. He was hospitalized on multiple occasions during previous years for serious psychiatric symptoms.*

After further questioning, participants were presented with the following details:

*Recent Events: failed several classes in school, and her family was in the process of looking for a new school due to her failing grades and difficulties getting along with her classmates. She presented the following symptoms: frequent sadness and crying, increased appetite and overeating, guilt, low self-concept, anxiety, irritability, insomnia, hopelessness, and difficulty concentrating. In addition, she presented difficulties in her interpersonal relationships, persistent negative thoughts about her appearance and academic abilities, as well as guilt regarding her parents' marital problems.*

*Medical History: revealed that she suffered from asthma, used eyeglasses, and was overweight. Her mother reported that she had been previously diagnosed with major depressive disorder (MDD) 3 years ago and was treated intermittently for 2 years with supportive psychotherapy and antidepressants (fluoxetine and sertraline; no dosage information available). This first episode was triggered by rejection by a boy for whom she had romantic feelings. Her most recent episode appeared to be related to her parents' marital problems and academic and social difficulties at school.*

#### Responses

	Allopathy	Ayurveda
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<p><b>Approach</b></p>	<p>Asked for further clarification of the family’s situation with a focus on her parents' current medication and treatment; Assessed home safety</p>	<p>The patient is first characterized by ailment. In this scenario, the ailment is psychological. The patient's dosha will then be identified by an ayurvedic practitioner either through a questionnaire or a discussion of sleep and diet habits.</p>
<p><b>Diagnosis</b></p>	<p>Diagnosed with depression; the patient may have underlying anxiety; these psychological patterns most likely developed as a reflection of parental behavior</p>	<p>All psychological issues within Ayurveda fall under the label Manasika Vyadhi which encompasses disorders that allopathy refers to as anxiety, depression, schizophrenia, insomnia, psychosis, etc.</p>
<p><b>Treatment/Referrals</b></p>	<p>This patient's condition was most likely identified through school or a general physician. The first step would be to complete a risk and severity assessment through a screening questionnaire. From the patient's initial description, the next step would be to reach out to a psychologist and psychiatrist. Generally, based on the patient's age, pharmacological treatment would not be the initial recommendation. Instead, lifestyle changes and counseling would be the first mode of intervention. Counseling sessions could consist of parental counseling, patient counseling, or combined patient-parent counseling. Anti-depressants would be used as a last resort in case of extreme behavior, such as manic or depressive episodes, or suicidal thoughts. If these are prescribed, side effects would be carefully monitored and the dosage would be gradually increased until a benefit is seen.</p>	<p>The patient would begin with initial questionnaires to characterize the imbalance and identify their constitution. Advice would include a change of environment to reduce external stressors and the addition or increase of prayer or meditation to add to mental positivity and calmness. Medicinal therapies such as purgation may be used to decrease the pitta and kapha dosha. The patient should also schedule shirodhara therapy in which warm oil is dripped onto the forehead to generate vibrations. These vibrations convert from kinetic energy into neural impulses which then influence the secretion of neurohormones. Shirodhara can be used to create calmness or reduce anxiety. Herbal medications may also be used to adjust pitta and kapha levels, although this would not be used as a first response due to the patient's age.</p>

<p><b>Timeline/Effectiveness</b></p>	<p>Some notable aspects of this approach include the 3-6 month time period required to experience the effects of the antidepressants. If a benefit is not seen, psychiatrists may need to increase the dosage, decrease the dosage, or change the medication type. Additionally, because of the temporary quality of psychological drugs, antidepressants would not be a long-term fix for this patient, rather, the goal would be to fix underlying issues.</p>	<p>Shirodhara is a non-invasive, weekly repeated treatment for several weeks, and can then be adjusted based on the patient's preferences. Ayurvedic herbal medications are taken for an approximate span of 3-6 months until treatment is considered complete.</p>
<p><b>Current Progress/Events</b></p>	<p>Many hospitals across the country have begun implementing adolescent behavioral units to address the increase in mental illness cases.</p>	

**Findings**

Both disciplines accounted for the effect of environmental factors during their diagnostic process. Ayurveda also discusses the patient’s dosha characterization. Where Allopathy has a specific name for clinical depression, Ayurveda uses the broader label “Manasika Vyadhi” to accommodate this condition. Both treatment recommendations contained a significant overlap; however, the ideology behind each was different. Allopathy focused on creating situational changes and counseling while Ayurveda promoted mental clarity and balance. On the pharmaceutical side, Ayurvedic herbal remedies are typically used for a shorter period of 3-6 months and then the treatment is considered complete. In contrast, the prescription of modern antidepressants must be more closely monitored and adjusted over a longer period. The treatment of shirodhara (oil therapy) has also been shown in multiple case studies to show a significant improvement in stress and depression levels. Overall, this patient would be diagnosed and treated by both approaches.

**Scenario 2: Physical Health**

This second scenario was geared toward physical health and the description was from the Osteoarthritis Action Alliance (2023). This scenario presents an osteoarthritis case as it relates to obesity. The following subsection describes the scenario presented to participants.

**Scenario Description**

*Emma is a 35-year-old woman who injured the ACL and meniscus in her right knee playing NCAA collegiate soccer at age 20. Her ACL was surgically reconstructed, and she returned to play after completing a full physical rehabilitation program. During her annual physical, she commented that her right knee feels achy some mornings when she wakes up. She also notes that while kicking the soccer ball with her children over the last couple of months, she has felt twinges of pain and weakness in her right knee. Emma is 5'11" and 215 pounds (BMI 30 kg/m<sup>2</sup>). On her pre-visit worksheet, Emma reported that she engages in moderate exercise about once per week for 30 minutes but is otherwise fairly sedentary. She also reported eating fast food for lunch 5 days a week.*

## Responses

	Allopathy	Ayurveda
<b>Approach</b>	Assess factors including current physical symptoms and reported severity, as well as patient medical history. Taking into account the patient's pain in the knee, a knee arthroscopy would be completed to check for arthritis.	Based on the patient's symptoms, an Ayurvedic practitioner can characterize the affected doshas to assist in finalizing a diagnosis. In this case, because the patient feels pain, an imbalance in vata must be involved. The patient's weight indicates an imbalance of kapha.
<b>Diagnosis</b>	Diagnosed as overweight; knee pain in the right knee due to osteoarthritis	Knee Pain corresponds to an increased vata level, while weight gain corresponds to an increased kapha level in Ayurveda.
<b>Treatment/Referrals</b>	To address weight issues, the patient should implement a weight reduction/management plan that features a gradual increase in exercise durations. It is also important to note during the development of this plan, the patient's pain tolerance and to utilize exercises that avoid stress on the leg. Concerning the patient's osteoarthritis, they should schedule physical therapy sessions to address mobility issues. The patient may have a scheduled Tylenol/Motrin/ibuprofen intake for pain management. If mobility issues persist, the patient should consider surgical options through an orthopedic doctor, such as a	Oil therapies, such as Janudhara, in which oil is poured over the joint, can be used to decrease vata levels. This, accompanied by light massaging of the joint will reduce pain and stiffness. Herbal fermentation and steam therapies can also be used to decrease vata levels and reduce joint pain. Kapha levels can be reduced with dietary inclusion of honey, vaman (emesis), udvartana (powder massage), virechan (therapeutic purgation), or basti (enemas). If these treatments do not have the desired effect, the use of herbal medications can also adjust vata and kapha levels.

	complete or partial knee replacement.	
<b>Timeline/Effectiveness</b>	Partial knee replacement surgery can temporarily relieve pain from osteoarthritis, but does not act as a cure. Complete knee replacement surgery can provide a joint that lasts up to 20 years.	Jhanudhara would continue weekly for 3-6 months and can then be adjusted to accommodate any further pain. Kapha-reducing therapies would conclude in 3 weeks and then herbal medications may be utilized.
<b>Current Progress/Events</b>	Some orthopedic professionals have made use of repeated viscosupplementation, referred to as Hylan Synvisc injections, to provide joint lubrication and relieve knee pain.	

## Findings

Both disciplines separated the patient's treatment to focus on two main concerns: the patient's weight and knee pain. On the Allopathic side, exercise and dieting were the basis for weight reduction and management. Ayurveda similarly offered dietary changes, but provided herbal supplements and physical treatments rather than exercise. Both disciplines offer a gradual approach to modification of the patient's weight. To respond to the patient's knee pain, Allopathic professionals provided instant pain relief along with a diagnostic plan to test for osteoarthritis. If osteoarthritis was confirmed, a partial or complete knee replacement surgery would be recommended.

Allopathic professionals also would refer the patient to a physical and orthopedic therapist for long-term care to provide a more holistic treatment. To reduce the patient's knee pain, Ayurveda offered a more long-term treatment that has been shown to have semi-permanent results (Centre for Reviews and Dissemination (UK), 2014). Another point that emerged during the Ayurvedic discussion of this scenario was the importance of Allopathic techniques. Upon introduction, professionals explicitly stated that if the ACL (Anterior cruciate ligament) was affected in any way, Allopathic surgical methods should be used because of the instant effectiveness provided.

### Scenario 3: Melanoma

The last scenario presented concerned a patient showing signs of early-stage melanoma. This scenario was sourced from A Case of Melanoma (n.d.). The goal of this section is to compare the responses of each discipline when faced with a long-lasting, difficult-to-treat, globally prevalent condition.

#### Scenario Description



*Demographics: A 38-year-old white man presented to a dermatologist for evaluation of a suspicious lesion on the right side of his nose.*

*History: The patient reported that he had been at a cookout when a family member had asked about the mole on his nose. The patient stated that he thought that the lesion had always been there but could not say for certain. The patient stated that he had not noticed a change in the lesion; however, he had not been monitoring it for change. He denied pruritus, bleeding, or erythema of the lesion. He reported no family history of skin cancer or other skin disease. The patient's occupation required him to work outdoors at times. He denied consistent sunscreen use while outdoors.*

*Physical examination: Upon evaluation, the patient was noted to have a singular, irregularly shaped lesion on the right dorsum nasi, brown and black, and approximately 4 mm in size at the largest diameter.*

Professionals were also presented with the following image from A Case of Melanoma (n.d.):



Fig 1. Lesion on side of patient's nose

## Responses

	<b>Allopathy</b>	<b>Ayurveda</b>
<b>Approach</b>	First, the patient's age and medical history were considered. Then, the permanence of the lesion's presence was questioned. Long-lasting periods of unchanged behavior can increase the likelihood that the lesion is benign. Next, when evaluating the image, the ABCDE method was used to search	Ayurvedic standards indicate that any skin pigmentation is related to an imbalance of pitta. The factors that would be considered for diagnosis would be appetite, diet, digestion, bowel habits, and temperament.

	<p>for asymmetry, border irregularities, color discrepancies, and larger diameters, and evolution of size/shape/color which are associated with malignancy. The height of the lesion was also taken into account. A malignancy diagnosis would be confirmed through a biopsy.</p>	
<b>Diagnosis</b>	<p>Based on the initial screening, the lesion was determined to be a nevus that could develop into melanoma. The patient would be referred to a dermatologist who would confirm the diagnosis through a biopsy and establish a treatment plan.</p>	<p>This patient would be classified under the ayurvedic title of Arbuda, a term used as an equivalent to all types of cancer.</p>
<b>Treatment/Referrals</b>	<p>After melanoma is confirmed through test results, treatment of any stage of melanoma would be composed of surgical removal of the lesion.</p>	<p>The first step would be to reduce the patient's pitta by avoiding alcohol and hot, spicy foods made with chilies, raw onion, raw garlic, mustard, and cayenne. Purgation treatments can be used to reduce pitta as well. Certain herbal medications can be used to change the appearance of the skin. Some applied examples include sandalwood, neem oil, ghee medicines, etc, while ingested medications can include ashwagandha (Indian ginseng), kanchar (blooms from bauhinia tree), turmeric, ginger, amla (Indian gooseberry), and tulsi (basil). Ayurvedic remedies have also been shown to have positive results in melanoma prevention.</p>

<p><b>Timeline/Effectiveness</b></p>	<p>Surgical removal of melanoma has shown to be a highly effective treatment option for earlier stages.</p>	<p>These treatments can be used to reduce symptoms gradually, but may not show a highly effective outcome in the short-term. For that reason, these are not viable solutions to melanoma conditions and should instead be used in combination with other disciplines as prevention or symptom management.</p>
<p><b>Current Progress/Events</b></p>	<p>With the rise of AI technology, online dermatology applications have been trained to diagnose skin conditions by image with a relatively high accuracy. Although this is still under development and requires a medical professional to confirm the diagnosis, it does introduce a primary diagnostic platform for patients.</p>	

**Findings**

It is interesting to note the similarities between diagnostic methods that were established centuries apart. Ayurvedic practices also use a process similar to the allopathic ABCDE method to evaluate skin lesions. This method looks for the following features to differentiate whether it is a malignancy or benign lesion: Vrittam (round), the Sthiram (immovable), the Manda Ruja (slightly painful), the Mahant (big size), the Alpamoolam (deep-seated) (C.P et al., 2020). When faced with this scenario, professionals of both disciplines showed some difficulty with diagnosis, most likely due to the presentation of a very early-stage case of melanoma. In terms of treatment and effectiveness, each has its benefits. According to further research, "if cancer cells are found in the lymph nodes, further treatment will become necessary, such as a lymph node dissection., chemotherapy, immunotherapy, or targeted therapies" (Mount Sinai Health System, n.d.). Skin grafting can also be used to cover any wounds left from surgical treatment. The following effectiveness statistics are taken from Melanoma Survival Rates - Melanoma Research Alliance (n.d.):

- Stage I, and Stage II: 98.4%
- Regional melanoma- Stage III: 63.6%
- Metastatic melanoma- Stage IV: 22.5%

Allopathy offers an immediate solution through surgical removal however allows the possibility of relapse. Adversely, Ayurveda offers long-standing preventative measures against melanoma symptoms. In this way, the application of Ayurveda preceding or following surgical removal could be a highly effective option against melanoma.

### **Discussion**

When reviewing possible integration strategies, Allopathic professionals saw a benefit in incorporating herbal remedies to lessen chemical side effects. However, they explicitly cited the need for expansive research into the effects of herbal remedies and their compatibility when used alongside Allopathic drugs. It is currently recommended that patients using natural medications disclose all information to their healthcare professional and, in most cases, stop taking them together. For a successful combination of these two disciplines, in-depth research and education is required to increase practitioner and patient confidence.

From an Ayurvedic standpoint, Allopathic surgical methods have evolved to address medical needs far beyond the scope that Ayurveda can provide. In this area, Allopathic treatments are better for patient health and more reliable. It has been made clear by Ayurvedic professionals that specific conditions that deal with internal function or extreme blood loss should only be dealt with through modern technology. However, although Allopathic technologies have improved rapidly, Ayurvedic professionals point out the negative effects that tend to accompany modern drugs and pharmaceuticals.

By combining certain herbal pharmaceuticals from Ayurveda with the abilities of precision surgical technology, patients may experience decreased side effects while still receiving benefits from reliable modern interventions.

### **Conclusion**

This paper sought to contrast Ayurvedic and Allopathic medicine. After interviewing practitioners in their specialized fields this paper determined that meaningful similarities exist across Ayurvedic and Allopathic approaches. Both take a systematic approach when understanding the patient's diagnosis, but they differ in their approach to treatment. Ayurvedic medicine lacks the precision technology to combat more serious illnesses and conditions and relies on traditional herbal treatments, while Allopathic medicine has a greater interplay with pharmaceuticals and technology. Both practices benefit patient health and well-being which can be retained by further research into a combined approach that optimizes the strengths of both disciplines.

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