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## Discussion Kernel

## Ayurveda education in India: Addressing the human resource barriers to optimize the delivery



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## ABSTRACT

Ayurveda currently is passing through a phase of global renaissance. Its growing popularity however is not matching with quality driven human resource development to meet the growing expectations. Teachers holding the responsibility of inspiring the newer generation for their adherence to quality are often de-motivated for various reasons and eventually fail to deliver optimally. Although promoting Ayurveda by increasing its visibility is a priority approach in policy and planning, much is desired to be done on the fronts of its actual delivery. Not much is done to ensure the quality driven human resource development in Ayurveda, accounting for a major cause of its dismal show on the fronts like education, practice and research. Ayurveda in India in general is still striving to achieve the minimal standards in these key functioning areas. Uncertain career opportunities, poor recruitment and discriminatory promotional policies, erratic salary structures, meager opportunities for early and mid-career advancements and negligible resources for in job skill enhancements are prominent reasons of de-motivation among Ayurveda teachers. An identity crisis of being unfit in the larger community of higher or medical education further adds to the misery as the advantages given to these communities are not generally shared with Ayurveda teachers. The outcome of an education imparted by a demotivated teacher can have its far reaching and diverse effects on the society. A poor performance of Ayurveda in the country of its origin has its roots in the inappropriate handling of its key functionaries like teachers. Ayurveda teachers playing the role of service providers and educators can create the foundation of quality driven education and health care in Ayurveda, if they themselves are harnessed well for their potential. The teachers are essentially the spine of any step related to qualitative benchmarking of Ayurveda and hence their miseries and misappropriations are needed to be accounted and addressed. Ayurveda teachers also deserve to be nurtured well to bloom to their fullest potential so to serve Ayurveda with all their strength and capacity.

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## 1. Introduction

Ayurveda education and consequently its practice and research in India is facing a big human resource crisis. This crisis is multi-dimensional spanning widely through the spectrums of quantity and quality. Ayurveda educational institutions in the country have shown over 50% deficit of the teaching faculties required for basic standard of education. Comptroller and Auditor General of India (CAG), 2018 report on social, general and economic sectors in National Capital Region pointed out a soaring 37–52% deficit in the

sector [1]. A recent two year moratorium on the opening of new AYUSH colleges announced by Ministry of AYUSH, Govt. of India is a bid to disallow substandard education which often routes through poor human resource management policies in Ayurveda [2]. Multitudes leading to the countrywide human resource crisis in Ayurveda education include uncertain career opportunities, poor recruitment policies, erratic and imbalanced growth of new institutions, poorly operating career growth and enhancement opportunities and discriminative salary structures in the sector across the country. Private educational institutions barring a few have made the scenario worst by setting the newer standards of faculty and student exploitation with negligible contributions towards quality driven Ayurveda education.

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Besides the crisis of numbers, the quality of what is delivered is more worrisome. Education in Ayurveda therefore is being challenged at both the fronts of its quantity and quality eventually leading to the building of its image as an untrusted health care partner [3]. Ayurveda education therefore requires large scale reforms beyond mere curricular and pedagogic patchworks. It needs to heed seriously towards human resource management reforms involved in Ayurveda education [4].

Ayurveda recently has lost its glamour as a preferred profession among newer generation. People who choose Ayurveda in the absence of any better opportunity do not truly own it. This distraction continues through the course of the studies and escalates high through the hierarchy where people holding positions in Ayurveda are also found not motivated for the growth of the subject.

In Ayurveda, teaching comes as a default choice to PG students giving a mean to ensure their livings. Obviously, many who teach Ayurveda do not do this out of passion, inclination or motivation towards the subject but rather do it as a survival exercise. The quality of the education imparted by an unwilling teacher is not difficult to speculate [5,6]. We thereby need to make serious efforts to enumerate various human resource related issues affecting the quality of education in Ayurveda and to seek the possible remedial measures to improve upon them.

## 2. Ayurveda education in India: Current infrastructure and governance

With a large congregation of educational institutions, India is world's largest human resource producer in Ayurveda. There are 338 under graduate and 138 post graduate Ayurveda colleges in the country having intake of 21,387 UG and 4269 PG students every year. Ayurveda educational institutions in the country have grown by 7.2% in last 25 years (1992–2017) [7]. Ayurveda education in the country is regulated by Central Council of Indian Medicine (CCIM), a statutory body responsible for its standards and uniform deliverance. This executes its function by making regulations mandatory for Ayurveda educational institutions. Infrastructural requirements including the human resources needed to run an Ayurvedic teaching institution are determined and regulated by CCIM through its minimum standard requirement (MSR) guidelines. Although such MSR is supposed to be the guiding principle determining the bare minimum needs to ensure the basic standard of teaching in an Ayurvedic institution, this is disheartening to see that majority of Ayurveda institutions still do not meet such minimal standards even.

### 2.1. Standardizing Ayurveda education through appropriation of human resources: Minimal faculty requirements and teacher-student ratio

To ensure quality driven education in Ayurveda, Indian Medicine Central Council (Post Graduate Ayurveda Education) Regulations, 2016 [8] proposed the faculty requirement in PG education proportionate to the number of intake capacity in respective PG departments. Teacher – student ratio is recommended to be 1:1 for

lecturer, 1:2 for reader and 1:3 for professor respectively. Taking this ratio as the basic parameter to ensure the quality of Ayurveda education, 4269 PG students getting enrolled every year, may require 4269 lecturers, 2134 readers and 1423 professors respectively to comply with teacher-student ratio recommended by CCIM.

Although, such teacher-student ratio is not recommended for the undergraduate education in Ayurveda, Indian Medicine Central Council (Minimum Standard Requirements of Ayurveda Colleges and attached Hospitals) Amendment Regulations, 2013 [9] identifies the need of minimum 27 faculties including 12 higher faculties, to run an undergraduate college in Ayurveda for less than 60 students. Calculating the minimum faculty requirement in Ayurveda UG colleges for their minimum intake capacity, 9126 teachers are minimally needed including 4056 higher faculties. For the convenience of calculation, if the higher faculties are equally shared among readers and professors, we may need 2028 as each of them (Table 1). Summing the needs of UG and PG education together, about 16,979 teachers are needed to fulfill the minimal requirements of UG and PG education of Ayurveda in the country and of whom 3451 professors are needed to comply with the existing minimal norms. This may be reiterated here that the quality of education with bare minimum faculties cannot be equated with the quality of education offered by a greater number of faculties available to share their wisdom with the students.

### 2.2. Handling the faculty deficit: CCIM and administrative approaches

Faculty deficit in Ayurveda educational institutions is rampant despite the large number of qualified post graduates from various specialties passing out every year. Recognizing the faculty deficit, CCIM MSR 2013 granted special relaxation allowing the colleges to operate despite them not meeting the desired faculty numbers. The colleges were therefore allowed to run with 90% of the faculties needed as per the MSR. Sustained unavailability of qualified professionals in various subject areas to be taught in BAMS courses compelled the appointing authorities to make interim arrangements such as cross appointments between concerned and allied subjects, increasing the age for retirement till 65, filling the posts on contractual basis as a stop gap arrangement and opening academic positions for experts from research. Such approaches served temporarily to relieve the crisis, but at the same time delayed the decisive actions to find and uproot the cause.

Despite such flexible measures, over 80% senior teaching positions in Ayurveda colleges in India are still lying vacant. Faculty deficit therefore emerged as one single largest factor for non-grant of permission to many Ayurveda institutions in India. In 2018–19 alone, over 26% Ayurveda colleges across the country have not been granted to operate on account of their gross faculty deficit [10].

### 2.3. Finding the most suitable: Essentials and desirables needed for Ayurveda teachers

CCIM in furtherance to its powers of assuring quality education in Ayurveda prescribed the minimum qualifications and experience required for various teaching positions. To become a teacher in

**Table 1**

Postulated minimal faculty requirements in existing Ayurveda teaching institutions as per the current CCIM norms.

|             | Number of existing colleges | Minimum number of required lecturers | Minimum number of required readers | Minimum number of required professors | Total faculty positions minimally required |
|-------------|-----------------------------|--------------------------------------|------------------------------------|---------------------------------------|--|
| UG colleges | 338                         | 5070                                 | 2028                               | 2028                                  | 9126                                       |
| PG Colleges | 138                         | 4296                                 | 2134                               | 1423                                  | 7853                                       |
| Total       |                             | 9366                                 | 4162                               | 3451                                  | 16,979                                     |

Ayurveda at its entry position, a post graduate qualification in the concerned subject is the minimum required. For higher faculty positions, additional teaching/research experience and publications are required which are 10 years and 5 papers in case of professor and 5 years and 3 papers in case of associate professor. The publications are required to be from recognized journals although CCIM do not explain what it considers to be a recognized journal [11].

What actually missing in the current method of faculty recruitment in Ayurveda is to see the real teaching acumen of the candidate. Desirables like experience in teaching, research and publications although serve as filters to choose the one with desired abilities, in the absence of clarity, this also opens a lateral route for entry of undeserving candidates on the basis of their experience and publication of substandard quality [12]. This is obvious to see that unless the mechanisms to appraise the quality of experience and publications in terms of 'what published?' and 'where published?' is not developed, such parameters will remain deceptive and will not serve their purpose.

Teaching methods are not the part of Ayurveda education and training programs and as a result, once recruited, new teachers directly enter into the teaching profession without getting oriented to teaching methodologies. Magnanimous technological advancements are occurring in teaching methods recently. Unless the new teachers are exposed well to such technologies, an efficient use of their knowledge and skills to spread the knowledge of Ayurveda may remain unexplored.

#### 2.4. Recruiting Ayurveda teachers: Discrepancies across the country

Although CCIM had set its own recommendations about recruitment of Ayurveda teachers for different levels, various recruiting bodies follow their own policies on such matters. For example All India Institute of Ayurveda (AIIA), an apex post graduate teaching and training center for Ayurveda has set its rules for recruiting the faculty positions much higher than what are laid by CCIM [13]. AIIA justifies its higher entry benchmarks by proposing it a super specialty teaching institution at par with AIIMS. Its impact as a real tertiary care center in Ayurveda however is far from immediate vision.

The experience of recruiting faculties at AIIA has shown that conventional filters like entry level qualification, experience and number of research publication neither work efficiently to screen the most promising candidates nor it eliminate the possibilities of choosing the inappropriate candidates. Parameters sounding similar have been adopted by the central and state universities without any real idea of how to choose the best among all aspiring candidates on the basis of quality rather than quantity of their work and experience.

#### 2.5. Inequity at workplace: salary structure of Ayurveda teachers across the country

Despite the near uniform essentials and desirables for various teaching positions in Ayurveda proposed by CCIM, we see that salary structure in Ayurveda teaching cadre is highly discriminative across the country. Currently AIIA offers highest pay slab in the country to its faculties at all levels. Second in the pay slab comes the universities like Banaras Hindu University, Rajasthan Ayurveda University, Uttaranchal Ayurveda University and also the central institutes of Ayurveda like IPGT & R, Jamnagar and National Institute of Ayurveda. Following this in the tally, comes state like Delhi. Uttar Pradesh, Madhya Pradesh and Odisha rank lowest in the list for offering lowest in the pay slab to Ayurveda teaching faculties. Possessing the

similar essentials and desirables and holding the same rank but paid differently is inequity and against the fundamental right of 'same rank same pay'. A lower payment for the same rank and work demotivates the people to excel in their respective fields. In the worst scenario, this can also become a driving force for switching the jobs, places and positions for want of better opportunities.

#### 2.6. In job growth opportunities: How do we nurture our teachers to excel?

How do we identify our best employees and project them as the example to motivate others? This is a key management issue which every HR manager is well aware of. Keeping the staff motivated to perform their best and to retain them in the organization is a major task. A dedicated worker is an asset which no one can afford to lose.

This is interesting to see, how this human resource task is actually managed in Ayurveda services. In majority of the states, universities and institutions, the Ayurveda teaching cadre is open vertically at the entry level and all higher positions are subsequently filled in a hierarchical manner through departmental promotions or career advancement scheme (CAS) based on performance based appraisal system (PBAS). In some states such promotions are limited to 50% of the available vacancies and rest 50% are kept open to be filled laterally by direct recruitments. In principle, the exercise of recruiting the faculty either through direct means or through CAS or DPC is recommended to be done simultaneously to avoid any delay by either means. In practice, however such principles are rarely found operational. Both of these ways of recruiting the higher faculty in Ayurveda suffer huge administrative delays and hence the higher faculties are rarely recruited in time. In states like Uttar Pradesh and Delhi, the situation is pathetic where the recruitment and promotional delays are extended up to 12–15 years. The resulted short fall in faculty number comes oblivious in the form of regressive education standards and non-grant of permission at many colleges besides demotivation of those who are forcibly kept in waiting. Interim approaches like enhancing the retirement age, relocating the people from one place to other and contractual recruitments offer temporary relief but also defers the decisive actions by diluting the attention to the real crisis. This is not overemphasizing to reiterate that timely in-job career advancement is a big motivational mechanism available in the public sector. Its absence or unjustified delays triggers the de-motivation and hinders the people from giving their best.

#### 2.7. The faculty number crisis in Ayurveda: AIIA as a case study

AIIA can be taken as a revealing case study in the context of faculty crisis in Ayurveda. AIIA started its actual functioning in 2016–17 with admission of its first batch of MD in Ayurveda. In 2018 it had 84 MD seats dealt by its 31 member faculty team composed of 5 professors, 10 associate professors and 13 assistant professors working as its regular faculty besides 3 contractual faculties [14]. If the CCIM teacher-student ratio recommendation for PG education in Ayurveda is to be believed as a reliable parameter for the deliverance of quality education, AIIA would have required a battery of 154 teachers (comprising of 84 lecturers, 42 readers and 28 professors) to meet the existing educational needs of its enrolled students. With its current strength which is 80% deficient to the actual need, the quality of education imparted at this premier institution remains questionable. The faculty crisis of AIIA therefore poses a serious question that despite its high status and best salary structure in the segment across the country, what is

limiting it in meeting the desired numbers. The primary limitation seems to be about the parameters set for the purpose of faculty recruitment. Although attempts have been made to invite the people from research and analogous positions to join AIIA, it did not help much resolving the situation. The problem of higher faculty deficit in Ayurveda seems also linked with the deficit in the feeding cadre which eventually fills the higher positions in a hierarchical manner. In states like Uttar Pradesh and many others, Ayurveda teachers remain stagnated for many years at entry positions without any career advancements. Eventually, these people, despite their rich and long experience at primary positions, and ability and willingness to join the higher positions at the places like AIIA, can't do so for not meeting the essentials required.

### 3. Qualitative deliverance: Missing leadership and lost accountability

While talking about miseries of teachers of Ayurveda, questions are also raised about the actual contribution of those holding the better positions. There are premier places like AIIA, BHU, Uttaranchal Ayurveda University and others where Ayurveda teachers enjoy best of class benefits. The key question is does a higher perk or position really motivates for the better deliverance? If we look at the academic contributions of the hierarchically best placed people in Ayurveda, we will be surprised to find no such correlational existence. There had not been any precedence in Ayurveda showing the evidences of a better performance driven by salary or position. There are 8598 higher faculties (Reader + Professor) on role in Ayurveda institutions in the country [15] and over 90% of these higher faculties have not contributed a single research paper published in an indexed journal during large part of their career [16].

Contribution for the growth of their science has rarely been an agenda to the existing higher faculties in Ayurveda. The reason of this can easily be traced to the missing leadership and accountability. As the younger generation do not see anybody in the hierarchy doing excellently and being rewarded for the excellence, excelling in the field loses its priority from the growing minds.

Ayurvedic institutions have also been dealt differently by policy makers and planners, since none of such institutions have been able to create the impact of their own by showing their intense utility for the common people. Because of their poor influence and impact on public in general, their issues and problems are heard with less interest. There are rare examples where the focused impacts on the society created by Ayurveda compelled the policy makers to look more seriously at it and to sanction more grants and facilities to maximize such impacts. Initiation of an Arthritis Specialty Clinic in Uttar Pradesh under the approval of AYUSH ministry is one example how one can make authorities to listen to their issues and problems [17].

This is clear that motivation is a self-generated instinct and attitude and it has less to do with perks and positions. There are examples where a small group of self-motivated people without any financial support and goal had been able to create large impacts upon the society. Publishing *Annals of Ayurvedic Medicine (AAM)* since last 8 years without any financial objective and support and bringing it to the level of UGC-CARE recognition is one fine example showing that it is not only the perks and positions which motivate [18]. A feeling of accountability, self-reliance and responsibility to the system, society and one's own people builds a stronger motivation. Unfortunately such examples are rare in Ayurveda. At the same time however this is also true that treating the people at par gives them a feeling of respect and prevents them from getting demotivated for such reasons. So keeping the people motivated and preventing them from getting de-motivated are two distinct issues requiring separate strategies to handle.

### 4. Faculty crisis in Ayurveda: Impacts and the solutions

Looking back at country wide faculty crisis in Ayurveda, lack of motivation seems to be one of most serious concern. There are many underlying causes for reducing motivation and growing demotivation. Most apparent of these seem to be the absence of role models and demonstration of benefits associated with quality work. The other factors are related with delayed recruitments through vertical or lateral means and delayed or absent mechanisms of in job career advancements. Discriminative salary structures in various states acts as serious limiting factors in most cases. 'How tempting the profession of teaching in Ayurveda is' can easily be judged by a simple question if asked from the current teachers of Ayurveda. If asked about how strongly they agree to bring their next generation in Ayurveda teaching, it would be hard to find anyone really aspiring to do so. This state of dissatisfaction among its existing stakeholders raises two serious questions. One is about the quality of the services currently delivered by the people who are in the state of sheer unhappiness with their profession. Second more serious concern is about who is really going to shoulder the responsibilities of Ayurveda education in future if we continue with this state of affairs.

Looking back at the primary issue, this seems simple to propose that there should be separate strategies to promote motivation and to prevent demotivation. To promote motivation, a clear demonstration of advantages associated with quality work is highly desired. To prevent demotivation, this is highly desired that Ayurveda teachers are treated at par with others in terms of respect and dues genuine to their positions. To minimize country wide hiccoughs on recruitment related matters in Ayurveda teaching cadre, a uniform stature is urgently required to be formed. There shall be a central recruiting body for the purpose which may look after all recruitment and promotion related issues pertaining to the Ayurveda teaching cadre. This recruitment body may further be made responsible to frame its own methods of recruiting the best among all on the basis of dynamic credentials rather than considering the publication number and experience year alone as the determinants of merit. Such policies shall also be made flexible to accommodate those having exceptional skills and expertise in various domain areas even if they do not fit into the experience criteria. Academic institutions and universities may be allowed to take the services of their faculties till they find them suitable for the job. Naturally, it should not be guided by the age alone. The people of exceptional qualities may be allowed to remain engaged in various capacities in academic institutions. Positions of national professor, distinguished professor, and emeritus professor are such propositions which can also be adopted in Ayurveda at par with other streams of study. The salary structure is essentially required to be made uniform in order to minimize the expatriation of existing faculties from one state to other and rather be made more attractive to invite more talents to come and join [19]. Mechanisms like performance based salary and career advancements have also shown promises to improve the education standards [20]. Early and mid-career advancements schemes are required to be proposed for Ayurveda teachers at par with teachers of higher education or medicine. Factually, either Ayurveda teachers should be treated at par in every matter in terms of the opportunities and benefits enjoyed by the teachers of any other stream or there should be a separate nationwide regulation allowing such benefits to be bestowed upon Ayurveda teachers across the country.

### 5. Conclusion

If we want to get the best from our teachers, undoubtedly we need to give them the best. There are examples from the countries

like Korea, Germany, US and Japan who have done so to build their knowledge capital. Although there can be the argument that the driving force for quest of knowledge should not be governed by materialistic benefits, unfortunately living in miseries without a hope of changing the things for better may neither be a good proposition to prosper the quest for knowledge. Ayurveda teaching fraternity has long been secluded from the world of higher education. The simplest proposition to bring this huge knowledge capital in real use is to bring its stakeholders at par and to assure them of getting all assistance needed to bloom them to their fullest potential. Helping Ayurveda teachers to do their best by treating them equitably is possibly one best proactive measure to better Ayurveda in coming years.

This however should also be understood that the misery of Ayurveda education is not going to end merely by treating its teachers with best perks and packages. There are numerous examples of individuals and institutions that had been able to perform extraordinarily despite the limitation of resources. The quality of education is determined by many complex factors of which infrastructure and number of faculties makes only a small tangible fraction. Large part of education quality is intangible and relates to self-motivation and high morale of a teacher. One unwilling tutor is sufficient to create a large bulk of faithless, unwilling, unenlightened, ignorant and helpless budding graduates in Ayurveda which would be the future generation of this field. It's a vicious cycle, which is ultimately bound to deteriorate the whole education system unless remedial steps are not taken timely.

A real time feedback system is often suggested as an effective counter measure for poor delivery. For a physician, the patient can be the best judge and for a teacher it is the student. A blind feedback system to evaluate the teacher's performance can be a good way to enhance the performance if it is linked with appraisals. This can be done on individual basis at colleges or collectively for a subject, state or whole country. Rewarding the better performers can be more motivating comparing to punishing the defaulters [21]. This would also be the best motivation for the young talents to join this once most respected profession of the human history.

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#### Conflict of interest

None.

#### References

- [1] Lack of staff and infra structure in Ayurveda Hospitals and colleges in New Delhi : CAG. Available at: <http://www.uniindia.com/lack-of-staff-and-infrastructure-in-ayurveda-hospitals-and-colleges-in-delhi-cag/india/news/1188289.html>. [Accessed 13 November 2019].
- [2] Freeze on all new Ayush instts for a period of two yrs. Available at: <https://punemirror.indiatimes.com/pune/civic/freeze-on-all-new-ayush-instts-for-a-period-of-two-yrs/articleshow/65745628.cms>. [Accessed 13 November 2019].
- [3] Patwardhan K, Gehlot S, Singh G, Rathore HCS. The Ayurveda education in India: how well Are the graduates exposed to basic clinical skills? *Evid base Compl Alternative Med* 2011;6. <https://doi.org/10.1093/ecam/nep113>. Article ID 197391.
- [4] Narayan JP. Teaching reforms required for Ayurveda. *J Ayurveda Integr Med* 2010;1(2):150–7.
- [5] Vyas MK. Reforms in Ayurveda education; the challenges ahead. *Ayu* 2015;36(3):231–2.
- [6] Singh RH. Exploring issues in contemporary Ayurvedic education. *Ayu* 2015;36(4):361–3.
- [7] AYUSH in India. Available at: <http://ayush.gov.in/genericcontent/ayush-india-2017>. [Accessed 13 November 2019].
- [8] Indian medicine central Council (minimum standard requirements of Ayurved colleges and attached Hospitals) regulations. Available at: <https://ccimindia.org/rul-reg-msr-2016-9-7>. [Accessed 13 November 2019].
- [9] Indian Medicine Central Council (Minimum Standard Requirements of Siddha Colleges and attached Hospitals) Regulations, 2013 Notification. Available at: <https://ccimindia.org/rul-reg-msr-2013-4.php>. [Accessed 13 November 2019].
- [10] List of Not Permitted 13-C ASU colleges 2018-19. Available at: <http://ayush.gov.in/event/list-not-permitted-13-c-asu-colleges-2018-19>. [Accessed 13 November 2019].
- [11] Rastogi S. Recognizing Ayurveda journals: Who will bell the cat? *J Ayurveda Integr Med* 2019;10(2):152–3. <https://doi.org/10.1016/j.jaim.2019.03.001>.
- [12] Rastogi S. Plight of Indian Ayurveda journals. *Curr Sci* 2019;116:1617.
- [13] All India Institute of Ayurveda – Ministry of AYUSH. Available at: <http://ayush.gov.in/sites/default/files/Final%20Adv%20with%20terms%20and%20conditions%20PDF.pdf>. [Accessed 10 April 2020].
- [14] Academic Staff, All India Institute of Ayurveda. Available at: [http://www.aiia.co.in/department\\_staff.html](http://www.aiia.co.in/department_staff.html). [Accessed 10 April 2020].
- [15] Information obtained through RTI dated 10.06.2019 from CCIM, responded through ref. no. 20-50/2019-(RTI)-VII Dated 15.07. 2019.
- [16] Patwardhan K, Prasad BS, Aftab A, More VR, Savrikar SS. Research orientation in Ayurveda educational institutions: challenges and the way forward. *J Ayurveda Integr Med* 2019;10(1):45–9. <https://doi.org/10.1016/j.jaim.2018.12.001>.
- [17] Rastogi S. Emanating the specialty clinical practices in Ayurveda: preliminary observations from the Arthritis clinic and its implications [published online ahead of print, 2020 Apr 1]. *J Ayurveda Integr Med* 2020;S0975–9476(19):30335–43. <https://doi.org/10.1016/j.jaim.2019.09.009>.
- [18] Rastogi S. Publishing a standard medical journal. *Annals Ayurvedic Med* 2018;7(3–4):75–8.
- [19] Britton J, Propper C. Teacher pay and school productivity: exploiting wage regulation. *J Publ Econ* 2016;133:75–89. <https://doi.org/10.1016/j.jpubeco.2015.12.004>.
- [20] Woessmann L. Merit pay International. Available at: [https://educationnext.org/files/ednext\\_20112\\_Woessmann.pdf](https://educationnext.org/files/ednext_20112_Woessmann.pdf). [Accessed 4 June 2019].
- [21] Rastogi S, Bhattacharya A, Singh RH. Consortium for Academic and Research Ethics (CARE) to refine and strengthen research publication: time for Ayurvedic academics to get overhauled. *Annals of Ayurvedic Medicine* 2019;8(1–2):2–5.