

Women in Academics: From Mythology to Modern Age

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Introduction

Women have a major role to play socially, culturally, academically and politically across globe. In the light of atrocities and unethical behavior of certain factions of the society towards women, it has become all the more important to assess the strength and weakness of female species and make them empower to face the societal challenges in the 21st century. This paper aims to invent the position of women in academics from the days of Indian Mythology to the modern age. While doing so, examples of women achievers in academics and science from western world is also considered.

Women in academics in Hindu Mythology

In Hindu mythology, Goddess of learning is "Saraswathi" - an epitome of intellect. All households worship goddess, seeking her blessings for knowledge and enlightenment. The entire universe is an academic institution under the tutelage of the Goddess Saraswathi.

"Mathru devo bava, Pitru devo bava, Acharya devo bava" is taken from Taittiriya Upanishad. The role of Mathru - the mother is supreme and this is another example of prospects of women in Hindu mythology.

Women in academics during Vedic period

Vedic period of India (c. 1500 - c. 500 BCE) was the period in Indian history during which the Vedas, the oldest scriptures of Hinduism, were composed. This period has seen many women scholars who debated with men scholars on various issues. Ghosha, Lopamudra, Mithreyi and Gargi are the four famous women who contributed immensely to Vedic hymns. Ghosha, granddaughter of Dirghatamas and daughter of Kakshivat, has two hymns of the tenth book dedicated to her. Lopamudra, wife of sage Agasthya was known for her immense knowledge and integrity. Maitreyi, wife of Yajnavalkya was a philosopher during Vedic period. She has 10 hymns of Rig Veda to her credit. Maitreyi was well versed in the Hindu scriptures and was a 'brahmavadini'. Maitreyi is cited as an example of the educational opportunities available to women in Vedic India, and for her philosophical achievements. She is considered a symbol of Indian intellectual women. Gargi is said to have written many hymns of Rig - Veda. She was highly knowledgeable in the Vedas and Upanishads and held intellectual discussions with men. Gargi attended the brahmayajna - the world's first philosophy conference which was also attended by Yajnavalkya. Gargi challenged Yajnavalkya, Who was considered the wisest man in the world, by asking questions about the foundation of atman (soul).

During the medieval age, Akka Mahadevi from Karnataka was one of the early female philosophers, who participated in the Veerashaiva Bhakti movement of the 12th century. She contributed to the spiritual discussions held at the "Anubhava Mantapa". Akka Mahadevi is known as an inspirational woman for Kannada literature.

Women in Academics from Western World

The academic life of women in western countries was not acceptable even in late 19th century. Two examples to understand the life and struggle to achieve scholarship in the chosen field are Madam Marie Curie and Dorothy Hodgkin.

Madam Marie Curie born on 7th November 1867 was a Polish - French physicist and chemist. She was not allowed to enroll in a regular institution of higher education in Poland because she was a woman. So, she moved to Paris in 1891. She had to struggle hard to get her position established as a scientist in France. As a woman, it was difficult for her to find laboratory space. During that time she was introduced to Pierre Curie, a physicist and they shared laboratory space for a while. Later they got married. They also started collaborative research. In December 1903, the Royal Swedish Academy of Sciences awarded Pierre Curie, Marie Curie, and Henri Becquerel the Nobel Prize in Physics, "in recognition of the extraordinary services they had rendered by their joint researches on the radiation phenomena" discovered by them. At first, the Committee intended to honor only Pierre and Becquerel. One of the committee member, an advocate of women scientists alerted Pierre about this. After Pierre's complaint Marie's name was included. However, it is noteworthy to mention that she received another noble prize independently in chemistry in 1911 - "in recognition of her services to the advancement of chemistry by the discovery of the elements 'radium and polonium'.

Dorothy Hodgkin born on 12 May 1907 was a British Crystallographer who won noble prize for developing protein crystallography 1964. Hodgkin was Chancellor of the University of Bristol from 1970 to 1988. She was elected a Fellow of the Royal Society (FRS) in 1947. Her research career in oxford was not easy. As a women scientist she had fight her way to get laboratory space, instruments for conducting experiments, university position, financial assistance etc. She had to prove her capabilities more than men to get Professors position in the university.

These are two examples of women in academics in the western world in late 19th and early 20th century who did not get encouragement but went on to win Noble prize on their own merit.

Women in Indian Academia in the modern world:

A book edited by Rohini Godbole and Ram Ramaswamy, entitled " Lilavathi's Daughters: the women scientists of India" published by the Indian Academy of sciences is a collection of essays giving biographical and autobiographical sketches of 100 Indian women in academia and science covering a range of disciplines. These essays speak volumes about the opportunities, challenges and constraints they faced in Indian academic institutions. Four examples from this book gives a glimpse of the challenges they faced in late 19th and early 20th century.

1. Anandibai Joshi lived during 1865 to 1887. She is the first Hindu women to obtain a medical degree from the USA. Coming from an orthodox family from Pune, she was initially encouraged by her husband to study medicine. Much against the wishes of the family and society, he sent her to New Jersey. It is very sad to note that she completed the course, but could not put her knowledge into practice, returned to India and died young at the age of 22 because of unknown sadistic attitude of her husband.

2. E. K Janaki Ammal (1897 - 1984), obtained D.Sc in 1931 from Michigan, USA. She was a renowned botanist and plant cytologist. She is a founder fellow of the Indian Academy of Sciences and winner of Padmashri award. Hailing from an enlightened family from Kerala, she remained single and pursued teaching initially. She joined the institute of Coimbatore for a research position. On the invitation of Honorable Pandit Jawarharlal Nehru in 1951 she joined services of the Government of India to reorganize Botanical survey of India. She is one of the fortunate who had challenges and opportunities to establish herself in the male dominant academic society.
3. Kamala Sohonie, a bio - chemist had many hurdles to pass, before she could be known as "woman in Science". After completing BSc in Physics and chemistry from Bombay University, she applied for an admission at IISc. Sir C V Raman, than the Director refused admission on the ground that she was a woman candidate. She fought her way to get admission and proved to be a good researcher. She obtained PhD in 1929 from Cambridge and retired as First Lady Director of Institute of Science, Mumbai. She had to fight to get the rightful position as the Director.
4. Asima Chatterjee (1917 - 2006) was the first woman DSc, FASc, FNA, Khaira professor of chemistry at Calcutta University. She was a recipient of Padma Bhushan. The other awards conferred on her are S S Bhatnagar award, C V Raman award of the UGC, PC Ray award etc. She is the first lady president of Indian Science congress and also member of Rajya Sabha. She was appointed as Reader at the University of Calcutta and remained there until she became the prestigious Khaira Professor. She made significant contribution in Medicinal chemistry. She had quite a bit of struggle to establish as scientist which included financial struggle.

Women Empowerment

Women Empowerment refers to increasing and improving the social, educational, economic, political and legal strength (Inheritance) of the women, to ensure equal - right to women, and to make them confident enough to claim their rights.

Women empowerment is just not for the benefit of women. It helps in building a strong, healthy society with good economy. The position and status of women all over the world has risen incredibly in the 20th century. In the context of women academicians, it is important to find out whether women academicians are empowered with the following rights?

- Freely live their life with a sense of self - worth, respect and dignity
- Have complete control of their life, both within and outside of their home and workplace
- To make their own choices and decisions
- Have equal social status in the society and equal rights to economic justice
- Get equal opportunity for education
- Get equal employment opportunity without any gender bias
- Get safe and comfortable working environment

The situation of women academicians is slowly and steadily improving across globe. Girls and women are entering schools and colleges in ever - larger numbers almost all over the world, although access to women education remains a challenge in many countries including India. According to a latest survey - Globally, higher education has 28% of women students. Almost 50% of the teaching positions are occupied by women.

In spite of these figures, Women representation in top positions of education sector is almost invisible. Majority of the senior positions in the universities like Vice chancellor are held by men, the reason being gender bias.

What should be the effort to change this scenario?

- Higher educational sector should become gender sensitive
- Make conscious efforts to integrate women into the system
- Initiate programmes for capacity building of women managers in higher education
- Promote them to become leaders and decision makers

Government of India has taken few steps to empower women academicians.

They are:-

1. The National Educational Policy of 1986 highlighted the role of women education in promoting equality for women in the educational system as well as in empowering them. It recognized that women needed special support and programmes in order to bridge the gap between the participation and representation of women and men in the higher educational system. This programme is a critical initiative in empowering women to claim due space for themselves and also move to the top. It is also about enabling women to do management with a difference; to understand issues of leadership, power and governance and how they operate in the system.
2. UGC - Common wealth secretariat workshop on women and management in higher education held in 1997 focused on advancing women in higher education to become managers, through a process of gender sensitization and training of women in higher education system. These managers in turn, would be able to act as leaders to carry on such training within their own institutions by organizing similar programmes for women performing managerial roles. Since 2004, UGC has taken over the responsibility of training women faculty with vigor and commitment in the different regions of India

Statistics on women leaders in academics in India

India currently has many institutions of higher learning including many universities under UGC, IIT's, IIM's, CSIR Laboratories, DST Institutions. Below is a table giving the facts on number of male and female heads in these institutions.

Institutions of higher learning	Number of male Heads of Institutions	Number of female Heads of Institutions
Indian Universities	418 Vice Chancellors	13 Vice Chancellors
IIT's	23 Directors	None
CSIR Laboratories	41 Directors	1 Director
DST Laboratories	26 Directors	None
ICSSR Institutes	24 Directors	5 Directors
IIM's	17 Directors	None
IISc - Premier research Institute	1	None
ISI - Premier research Institute	None	1 Director (current)

Table 1

There are only 3% of women in decision making positions in the universities, although India had Prof. Inderjit Kaur (1975 - 77) as first women Vice chancellor of Punjabi University, Patiala four decades ago. All the other institutions mentioned in the table put together accounts to 139 Institutes of higher learning. There are 7 women directors amounting to bare 5% of the total.

These indicators do not show an encouraging trend for Women.

Conclusion

Women in academics currently have challenges and constraints along with prospects. In addition to various programs and initiatives to empower women by the government, women also should consciously build a niche for themselves and try to compete with men to reach decision making positions in academia. Right from Mythological age to modern age, women are highly regarded academically in our country. This should continue and empower women for better future.

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