

Career opportunities for M.Sc. (Phytomedicine)

Medicinal plants have been used for centuries to treat various ailments and illnesses. In recent years, there has been a resurgence of interest in medicinal plants due to their potential therapeutic benefits and the increasing demand for natural and sustainable healthcare solutions. Keeping in view demand at National and international level Baba Farid University of Health Sciences; Faridkot is making efforts to produce human resources related to this field. In this regards, a postgraduate program, Master of Science (M.Sc.) in Phytomedicine is being started to provide students with advanced knowledge and skills in the cultivation, management, trade and utilization of medicinal plants for health benefits.

This course shall be open to a candidate who has passed MBBS/BDS/B.Sc. (Life Sciences)/ B. Pharmacy/ B. Pharmacy (Ayurveda)/ B.Sc. (Nursing)/ BAMS/ B.Sc. (Agriculture) or equivalent examination from a Statutory Institution/University.

University intends to highlight career opportunities for M.Sc. (Phytomedicine) post-graduates that is based on their basic qualification attained before pursuing this course that include herbalist, plantation manager, quality control analyst, medicinal plant trader and research scientist. They work in pharmaceutical companies, herbal product companies, research institutions, and agricultural organizations, playing a vital role.

The M.Sc. (Phytomedicine) program will enable the candidates for following career opportunities.

1. **Clinical Herbalist:** MBBS/BDS/BAMS graduates can work as Clinical herbalists that work with clients to develop personalized herbal medicine plans, often in conjunction with other healthcare practitioners.

2. **Entrepreneur/Startup Founder:** Graduates with an entrepreneurial spirit may choose to start their herbal medicine companies or join startups focused on herbal product innovations.
3. **Environmental Conservationist:** Medicinal plant cultivation can be integrated with conservation efforts to promote biodiversity and protect endangered plant species.
4. **Ethno-botanist:** Ethno-botanists study the traditional uses of medicinal plants by different cultures and communities. They work to preserve traditional knowledge and promote sustainable practices.
5. **Herbal Medicine Educator:** Educators in herbal medicine teach courses, workshops and seminars on the use of medicinal plants for health and wellness.
6. **Herbal Product Formulator:** Herbal product formulators develop herbal remedies, dietary supplements, and herbal skincare products. They use their knowledge of medicinal plants to develop safe and effective formulations.
7. **Medicinal Plant Cultivator:** Agriculture graduates can establish their own medicinal plant farms or work on existing ones, cultivating and managing medicinal plants for commercial purposes. This includes growing plants for herbal medicine companies, dietary supplement manufacturers, and the cosmetics industry.
8. **Pharmacologist:** Pharmacologists specializing in herbal medicine research helping to uncover their therapeutic potential.
9. **Product Manager:** Product managers in the herbal medicine industry oversee the development, marketing, and distribution of herbal products. They work with interdisciplinary teams to bring herbal remedies to market.

10. **Quality Control Specialist:** Quality control specialists ensure that herbal products meet quality and safety standards. They perform tests and inspections to verify product quality and compliance with regulations.
11. **Regulatory Affairs Specialist:** Regulatory affairs specialists work to ensure that herbal products comply with regulatory requirements, facilitating their safe sale and distribution.
12. **Research and Development (R&D) Manager:** R&D managers lead research teams in developing new herbal products, improving cultivation techniques, and conducting clinical trials.
13. **Research Scientist:** Research scientists in medicinal plant science conduct experiments, analyze plant compounds and study the pharmacological properties of medicinal plants. They often work in research institutions, universities, or herbal product development companies.
14. **Sales and Marketing Specialist:** Sales and marketing specialists promote herbal products to consumers, healthcare professionals, and retailers, contributing to market growth.
15. **Sustainable Agriculture Consultant:** Sustainable agriculture consultants provide expertise in the cultivation of medicinal plants using environmentally friendly and sustainable practices.

Career opportunities for M.Sc. (Gerontology)

Aging is a gradual and irreversible patho-physiological process. It presents with declines in tissue and cell functions and significant increases in the risks of various aging-related diseases, including neurodegenerative diseases, cardiovascular diseases, metabolic diseases, musculoskeletal diseases, and immune system diseases. Although the development of modern medicine has promoted human health and greatly extended life expectancy, yet with the aging of society a variety of chronic diseases have gradually become the most important causes of disability and death in elderly individuals.

According to a new report, percentage of people worldwide aged 65 and over is projected to jump to nearly 17% of the world's population by 2050 (1.6 billion). Among the older population worldwide, non-communicable diseases are the main health concern. In low-income countries, the older population faces a considerable burden from both non-communicable and communicable diseases. The fear is that this phenomenon will weaken economic growth as the number of people of working age declines and that governments' fiscal burden will worsen because of higher pension and health care costs.

The demand for gerontology experts is expected to increase as the population continues to age. Businesses, government agencies, service organizations, educational institutions and self-employed professionals from every economic sector are recognizing the need for specialized knowledge and skills to meet the needs of this changing demography.

If we look towards western world, the people are aware about gerontology however in Indian scenario the role of a gerontologist is still not in a proper place. **Although few organizations are providing training in M.D. (Geriatric Medicine) that is exclusively centered for treatment of elderly, however the other components of gerontology are still missing. This is because this aspect**

is totally ignored and innocent public is not aware of the consequences. Hence there was an urgent need to know about gerontology, to make public aware about aging science and to start capacity building programs to produce skilled personnel to take care of the rapidly aging populations.

Hence BFUHS being an apex body in Punjab has taken a lead in this aspect and started a post graduate program in gerontology (M.Sc. Gerontology)

This course shall be open to a candidate who has passed MBBS/BDS/ B.Sc.(Life Sciences)/B.Pharmacy/BAMS/ B.Sc.(Nursing) or equivalent examination from a Statutory Institution/University.

After completing M.Sc. (Gerontology) program and becoming a Gerontologist there are various job opportunities in which a trained gerontologist can work in India as well as abroad.

1. **Health Educator in NGOs:** A health care educator works with communities or groups, like senior citizens, to teach them how to take care of their health. People in this role may create education programs that target the health care needs of senior citizens and then present their programs in nursing homes and at seminars.
2. **Personal Care Associates:** Personal care associates help elderly clients perform daily tasks like changing their clothes, eating nutritious meals and maintaining good hygiene. These associates can work in care facilities like nursing homes or in the client's home. This role may also require helping patients schedule appointments, providing transportation and doing household chores for a client.
3. **Grief counselor:** A grief counselor is a mental health professional who specializes in helping clients emotionally recover after a loss in their lives. Some counselors may work in offices that focus on many aspects of geriatric

therapy and counseling, or they may work in nursing homes or assisted living facilities to provide in-house services. The primary duties of this role include examining a client's emotional state, offering coping methods after a loss and actively listening to clients talk about their situation.

4. **Home Health Aides:** Home health aides help elderly clients perform personal care tasks and provide them with basic medical services. Responsibilities include helping clients bathe and eat as well as monitoring their vital signs, doing exercises and giving medication. Home health aides often work in a client's home with other professionals in a care team, like therapists.
5. **Director of Social Services:** A director of social services provides resources to groups of people who need specific kinds of help, like the elderly. Examples of how a social services director can help include informing senior citizens of low-cost or free assistance programs like transportation, health education meetings and mental health counseling opportunities. These directors may work in assisted living facilities or community centers, where they organize the multiple opportunities available to help the elderly live comfortably. Many social services directors are also social workers.
6. **Health services administrators:** Health care services administrators manage health care facilities or departments like hospitals and nursing homes. Responsibilities for this role include overseeing medical employees, setting achievable goals for their facility and organizing medical services for patients. In nursing homes, health services administrators may help with hiring the employees who care for senior citizens and coordinate the medical aspects of the facility, like which medical professionals are available and how they monitor patients and give medications. In addition, these administrators manage the health care budget for a facility.

7. **Geriatric Psychologist:** A geriatric psychologist work with elderly patients to develop treatment plans for neurological disorders, including those that affect physical mobility, and mental health issues. Typical duties of this role include assessing a patient's mental and physical state through a series of tests and questions, studying the effects of treatment and meeting regularly with patients to provide treatment and resources. Geriatric psychologists require a Ph.D. and state licensure, as well as experience with geriatric conditions and treatments.