

Public Health Program (BSc)

Introduction

The Continuous Bachelor's program in Public Health has long been established as a core discipline within the basic medical sciences at medical universities across the country, training multidisciplinary health-oriented professionals. A large proportion of its graduates are employed as healthcare providers (health experts) at county and provincial health center headquarters, as "health monitors" in urban and rural comprehensive health service centers and health posts, and as "Behvarzes" (community health workers) in rural health houses, where they deliver health services across various age groups.

Since the promulgation of the previous curriculum for this degree on May 30, 2010, significant changes have occurred in the country's health programs, adopting new approaches. One such initiative is the "Family Health Program and Referral System," which has been implemented nationwide. Within this framework, the "health monitor" serves as a key member of the family physician team. As a multidisciplinary professional working alongside the family physician at the primary care base, they are responsible for delivering specific components of the care and treatment service package.

In line with the Minister of Health, Treatment and Medical Education's emphasis on the mission-driven approach of the Schools of Public Health, and the necessity for their faculty and students to actively engage in health service delivery settings, a revision of this educational program became imperative. This decision was further reinforced by the resolution of the Council of Deputies dated February 5, 2024, and aligns with the overarching goals of the comprehensive program for justice, excellence, and efficiency in medical sciences education. This revised curriculum was developed not only with the members of the Public Health Evaluation and Planning Committee and the Deputy for Education but also with the direct input and collaboration of the Deputy for Health. The primary objective is to empower graduates and enhance their competencies to effectively address the country's health system challenges, enabling them to take on the role of "health monitor" within the family physician team, in accordance with the definitions outlined in the Family Health Program and Referral System.

Title of the Field: Public Health

Degree: Bachelor of Science (BSc)

Definition of the Field

The Bachelor's program in Public Health equips graduates with the competencies to function as "health monitors." In this role, they address the demands of the Family Health Program and Referral System, provide community-oriented care under current health frameworks, and safeguard the physical, mental, and social health of all age groups. The program additionally focuses on promoting health across the entire lifespan—from fetal development and infancy through adolescence, adulthood, and old age—consistent with national policies and the Law on Supporting the Family and Youth Population.

Admission Requirements and Conditions

Student admission will be based on the documents of the applicants, which are reviewed by the international committee of the department.

History and Evolution of the Program in Iran

Over three decades have passed since the establishment of the Public Health program in Iran. Graduates of this program—serving as frontline providers of maternal, child, and curative care within the national healthcare delivery system—have played a pivotal role in safeguarding and promoting the health of the population.

Beyond their service roles, these graduates have constituted the primary intake pool for various master's-level medical science disciplines, including Epidemiology, Health Education and Promotion, Health Services Management, Health Economics, Geriatric Health, and Vector Biology and Control. In doing so, they have significantly contributed to developing the specialized workforce required for service delivery, education, and research across the country.

With the Ministry of Health, Treatment and Medical Education's recent implementation of the Family Health Program and Referral System—designed to further improve public health status and systematically optimize healthcare outcomes—new programs tailored to diverse age groups have been introduced. Consequently, revising the current Bachelor's curriculum for Public Health has become an unavoidable necessity.

Furthermore, in alignment with overarching national policies concerning youth population growth, the updated curriculum has been specifically developed to realize the objectives outlined in the Law on Supporting the Family and Youth Population.

Professional Positions of Graduates

Graduates of this program are qualified to serve in the following capacities:

- Health Monitor in urban and rural comprehensive health service centers and health posts

- Headquarters Expert in county and provincial health centers
- Behvarz (Community Health Worker) in health houses
- Oral Health Monitor in dental centers
- Health Expert in the Social Security Organization and State Welfare Organization
- Health Educator in kindergartens and nursing homes
- School Health Expert in schools
- Occupational Health Educator and Expert in various industries
- Health Liaison in various organizations
- Health Expert in the Red Crescent Organization
- Health Expert in municipalities

Philosophy (Values and Beliefs)

The educational philosophy of the program is rooted in a set of core values and beliefs, including:

- Divine and spiritual foundations
- Health-centeredness
- Human dignity and quality of life
- National health priorities
- Health equity
- Holism and community-orientation
- Professional ethics
- Responsiveness to population aging
- Support for youth population growth

The following values are emphasized in the program's philosophy

- a) Health services are a fundamental right for all individuals across the lifespan—from fetal life, through infancy, childhood, adolescence, young adulthood, and middle age, to older adulthood—and equitable access across all social classes is a prerequisite for maintaining and promoting health. Health is defined as a state of complete physical, mental, and social well-being, and not merely the absence of disease. Graduates of the Continuous Bachelor's program in Public Health play a fundamental role in delivering health services to all members of society. They are expected to provide these services through a health-oriented, community-oriented, and future-oriented approach, employing appropriate strategies and technologies, fostering

public participation, promoting intersectoral collaboration, and upholding social justice, human equality, as well as national and regional priorities. Furthermore, health services must be delivered in an integrated manner; therefore, graduates are required to acquire multidisciplinary knowledge and skills.

- b) The "Family Health Program and Referral System" has not only improved health and medical outcomes for the public but has also reorganized existing health centers into Comprehensive Health Service Centers and upgraded health posts to designated Health Posts. Beyond ensuring, maintaining, and promoting health, these facilities are now responsible for broader follow-up tasks, including promoting healthy life expectancy, meeting reasonable public expectations, reducing health inequalities between affluent and underprivileged groups, and providing financial protection against the costs of illness.
- c) The first level of health-related services and care within the national health system requires multidisciplinary personnel. These professionals must, first and foremost, facilitate universal access to essential services and care that address the simplest yet most prevalent health needs of the population. They must identify the specific health needs of diverse individuals and groups and provide appropriate care accordingly. They should also recognize cases requiring more specialized services, refer them appropriately, and be capable of delivering comprehensive primary care to all age groups, rather than functioning within a single discipline. Currently, universities train single-discipline personnel for such roles through pre-employment courses; however, the multidisciplinary nature of this program aims to address this gap.

Vision

Graduates will possess the comprehensive knowledge and multidisciplinary skills in public health necessary to become the preferred candidates for employment as "health monitors" within the national healthcare delivery system.

Mission

The mission of the Continuous Bachelor's program in Public Health is to train knowledgeable, competent, and responsible public health professionals who are committed to ensuring, maintaining, and promoting the physical, mental, and social well-being of individuals, families, and communities.

General Objectives

The program aims to educate and train graduates who can:

1. Establish effective communication with individuals, families, communities, and colleagues.

2. Monitor and oversee the health of target groups in the community in accordance with national guidelines.
3. Assess health needs at the environmental, community, family, and individual levels, and identify, assess, and control associated risk factors.
4. Explain how human, environmental, economic, and social factors influence the assurance, maintenance, and promotion of health across various levels.
5. Design and implement interventions—including needs assessments, health education, epidemic control, nutritional care, and health indicator monitoring—to improve community health outcomes.
6. Coordinate and oversee activities, personnel, and resources across multiple levels to achieve organizational goals.
7. Plan educational interventions aimed at modifying behavior and promoting desired health-related changes.
8. Demonstrate health and media literacy, with the ability to utilize cyberspace and technology for acquiring and disseminating information.
9. Collect, analyze, and evaluate data to inform evidence-based decision-making.

Roles of Graduates in Society

Public health graduates will serve society in the following capacities:

1. Caregiving
2. Education
3. Research
4. Counseling and Support
5. Management

Expected Competencies and Skills for Graduates

a) Expected General Competencies

The expected general competencies for graduates of this program include:

- Communication and interaction skills
- Client and family education
- Research and scientific writing

- Critical thinking and problem-solving
- Evidence-based management, encompassing collaboration, planning, organization, supervision and control, and evaluation)
- Professionalism
- Intersectoral collaboration
- Effective functioning in professional settings
- Data recording, information synthesis, and report presentation

Equipped with these competencies, graduates will be qualified to provide essential, age-appropriate care to all population groups—from fetal life through infancy, childhood, adolescence, adulthood, and into old age.

b) Comparative Table of Professional Duties, Expected Specific Competencies, and Related Course Codes

Specific Competencies	Professional Duties
Care	All-age care (fetal, neonatal, infant, childhood, early childhood, adolescent, youth, pre-middle age, middle age, early elderly, elderly, and very old age) according to the latest guidelines and service packages of the Youth Population, Family Health, and Schools Center of the Deputy for Health
	Marriage care, healthy fertility, and childbearing counseling • Age-appropriate care (These services must be in accordance with service packages, protocols, and guidelines of the Deputy for Health)
	Nutrition • Providing nutritional care according to the guidelines of the Deputy for Health
	Oral and dental health • Providing oral and dental health care according to the guidelines of the Deputy for Health
Training	Mental, social health, and addiction • Providing care in the field of mental, social health, and addiction according to the guidelines of the Deputy for Health
	Infectious and communicable diseases • Providing care for infectious and communicable diseases according to the guidelines of the Deputy for Health
	Risk management, disasters, and accidents • Managing risk, disasters, and accidents according to the guidelines of the Deputy for Health
	Environmental health management • Managing environmental health according to the guidelines of the Deputy for Health
Training	Pre-pregnancy to post-partum care and preserving the life of the fetus • Education on prescribing supplements and vaccination • Education on personal hygiene, avoiding substance and alcohol use, appropriate timing for pregnancy, and parenting
	Marriage care, healthy fertility, and childbearing • Education on childbearing
	• Education on the side effects and methods of contraception



	Early childhood and adolescent age group • Education on puberty • Education, monitoring, and follow-up of correct medical treatment for pediculosis according to the relevant guidelines • Education on personal and environmental hygiene principles to those affected by pediculosis and their family Youth age group • Education on timely, easy, and stable marriage • Education on childbearing counseling • Healthy lifestyle and infertility prevention training • Education about the side effects of using contraceptive methods Pre-middle-aged and middle-aged age group • Education for timely, easy, and lasting marriage • Childbirth counseling training • Healthy lifestyle and infertility prevention • Education about the side effects of using contraceptive methods • Breast self-examination training Elderly age groups • Training to prevent falls and imbalance • Nutritional education, physical activity, use of supplements, education related to caring for the elderly with hypertension and diabetes Nutrition • Nutrition training Oral and dental health • Oral health education for all age groups Mental, social and addiction health • Providing educational interventions in the field of mental, social and addiction health • Providing educational interventions for children and parents • Providing psychoeducational interventions Disaster and incident risk management • Disaster preparedness training based on existing posters and hazard mapping • Educating the covered population on the prevention of traffic accidents, especially students, parents, and young adolescent age groups. • Educating the covered population about drowning prevention, especially in the spring and summer. • Public education on controlling environmental factors in natural disasters until help reaches people Environmental health management • Drinking water sanitation training • Holding public education and information sessions • Training and introduction of home radiation-generating equipment • Needs assessment and public education in the field of environmental health (health and air pollution control, food hygiene, insect and rodent control, water and wastewater, waste management, control and reduction of tobacco products, etc.) • Providing training related to occupational noise-related complications and diseases • Training and supervision on the use of personal protective equipment against radiation Teaching a healthy lifestyle based on the principles of Iranian medicine
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Research	- Assisting in applied research in the country's health fields (HSR) - Presenting research proposals in the field of applied research - Participating in research interviews and collecting required data and analyzing results - Preparing reports and assisting in the publication of research findings and scientific texts
Counseling and Support (Counseling services will be provided at the primary healthcare level in accordance with defined service packages. Specialized counseling services will be made available through referral to appropriate providers.)	Marriage care, healthy fertility, and childbearing - Childbearing counseling - Infertility prevention counseling Nutrition - Nutritional counseling
	Skill in communicating with adolescents and parents - Establishing effective and compassionate communication with clients - Providing counseling to parents on health, considering physical, mental, social, and cultural factors - Providing counseling to target age groups in the health system
Managerial	- Planning to achieve care goals based on needs assessment and prioritization of problems - Organizing and coordinating specialized personnel needed to form specialized units and integrating them to achieve program goals - Monitoring and evaluating the program to determine the extent of activities' compliance with care plans and assessing their effectiveness - Managing and leading the program so that human resources utilize their maximum capacity in service of program goals - Preparing and formulating an operational plan based on the situation analysis of the catchment area - Primary, first-level, second-level, third-level, and fourth-level prevention of common health problems

Educational Strategies

- Task-Based Education
- Collaborative (Student-Teacher-Oriented) Education
- Problem-Based Education
- Community-Oriented Education
- Subject-Based Education
- Hospital-Based Clinical Education
- Evidence-Based Education
- Service-Oriented Education
- Practicum-Based (Compulsory Training) Education

The program utilizes a diverse range of teaching and learning methods, including:

- Conferences and Seminars – Didactic and expert-led presentations on key public health topics.
- Small Group Discussions and Workshops – Interactive, participatory sessions for deeper exploration of subject matter.

- Outpatient Training – Clinical exposure and skill development in ambulatory care settings.
- Skills Laboratory – Hands-on practice of clinical and technical procedures in a simulated environment.
- Facility-Based Distance Learning – Remote instruction utilizing available technological infrastructure.
- Mass Media Education – Use of radio, television, and digital platforms for health messaging and instruction.
- Interactive Education – Learner-centered approaches emphasizing active engagement and feedback.
- Flipped Education – Pre-class independent study followed by in-person application and discussion.
- Field Internship – Practical experience in community health settings.
- Hospital Internship – Supervised clinical training within hospital environments.

Ethical expectations from learners

Learners are expected to:

- Follow the legal charter of patients and clients.
- Demonstrate strong motivation and commitment to promoting societal well-being, and prioritize this value in their professional practice.
- Recognize their societal responsibility to improve health and perform their duties with integrity and accountability.
- Strictly adhere to regulations concerning the protection and safety of patients, clients, staff, and the work environment (regulations reviewed by the relevant educational group).
- Comply with dress code regulations.
- Uphold professionalism at all times.
- Safeguard the resources and equipment entrusted to them.
- Respect professors, staff, classmates, and other learners, and contribute to a respectful and collaborative work environment.
- Adhere to social and professional ethics when reviewing programs.
- Adhere to research ethics when conducting field-related research.
- Develop a comprehensive understanding of the regulations and legal provisions concerning the health of various age groups, as defined within the framework of the Youth Population and Family Support Law.

Comprehensive Assessment

A) Assessment Methods

Students are assessed through a variety of formative and summative methods, including:

- Written examinations
- Oral examinations
- Objective Structured Clinical Examination (OSCE)
- Direct Observation of Procedural Skills (DOPS)
- Portfolio-based assessment, encompassing performance evaluations (logbook), test results, commendations and corrective feedback, certificates of completion, among other items.

B) Assessment Frequency

Assessments are conducted at the following intervals:

- Continuous assessment
- Periodic assessment
- Final assessment

#Inter-group tests are available to the teaching group.

Course and course specifications for the undergraduate public health program

Course details:

1- Course name:

Bachelor's degree in public health

2- Course length and structure:

The requirements of the educational regulations of the continuous undergraduate course approved by the Supreme Council for Medical Sciences Planning.

3- Course names and number of units:

The number of units for this course is 130 units, which are as follows:

General courses: 34 units

Basic courses: 22 units

Specialized courses: 66 units

Internship: 18 units

Note:

The internship will be offered during two full academic semesters. To acquire service delivery skills in line with the needs of the public health service delivery system, graduates of the public health field under the "Health Care" category will be tried to conduct the internship in full coordination with the health departments of the medical universities of the country and with maximum use of the facilities, equipment and physical space of the health education schools and comprehensive health service centers, health bases and health homes.

Table 1- General courses of the undergraduate program in public health

Course code	Course title	Number of units	Hours			Prerequisite or concurrent
			Theoretical	Practical	Total	
1	Two courses from the theoretical foundations of Islam courses	4	68	0	68	-
2	A course from Islamic ethics courses	2	34	0	34	-
3	A course from the courses of the Islamic Revolution	2	34	0	34	-
4	A course from Islamic history and civilization courses	2	34	0	34	-

5	A course from the Introduction to Islamic Sources courses	2	34	0	34	-
6	Persian literature	3	51	0	51	-
7	General English	3	51	0	51	-
8	Physical education (1)	1	0	34	34	-
9	Physical education (2)	1	0	34	34	8
10	Family and population knowledge	2	34	0	34	-
11	History of Islamic and Iranian culture and civilization	2	34	0	34	-
Total		24				

Table 2- Basic courses of the undergraduate program in public health

Course code	Course title	Number of units			Hours			Prerequisite or concurrent
		Total	Theoretical	Practical	Theoretical	Practical	Total	
01	Anatomy	2	1.5	0.5	26	17	43	-
02	Physiology	2	1.5	0.5	26	17	43	-
03	Immunology	1	1	0	0	17	0	-
04	Bacteriology & Virology	2	1.5	0.5	26	17	43	03
05	Parasitology & Mycology	2	1.5	0.5	26	17	43	03
06	Nutrition basics	2	2	0	34	0	34	-
07	Basics of Epidemiology	2	2	0	34	0	34	-
08	Advanced language and public health terminology	2	2	0	34	0	34	-
09	Biostatistics	2	2	0	34	0	34	-
10	Information technology and its application in the network system	3	1	2	17	68	85	-
11	Familiarity with common diseases	2	2	0	34	0	34	01, 02, 04, 05
Total		22						

Table 3- Specific courses in the undergraduate program of Public Health

Course code	Course title	Number of units			Hours			Prerequisite or concurrent
		Total	Theoretical	Practical	Theoretical	Practical	Total	
12	Health systems in the world and Iran	2	2	0	34	0	34	-



13	Principles of health system management	2	2	0	34	0	34	-
14	General public health	2	2	0	34	0	34	-
15	Familiarity with physical examination and diagnostic tests	2	1	1	17	34	51	01, 02
16	Healthy lifestyle from the perspective of Iranian medicine	2	2	0	34	0	34	-
17	Social determinants of health	2	2	0	34	0	34	-
18	National programs of infectious diseases	3	3	0	51	0	51	-
19	National programs of non-communicable diseases	3	3	0	51	0	51	-
20	Mental health, social, addiction	4	3	1	51	34	85	-
21	Research methods in health sciences	2	1	1	17	34	51	07, 09
22	Population youth and childbearing	2	2	0	34	0	34	-
23	Integrated newborn and child health care	4	3	1	51	34	85	01, 02, 15
24	Integrated maternal health care and fetal life preservation	3	2	1	34	34	68	01, 02, 15
25	Health of infants, teenagers, youth and school health	3	2.5	0.5	43	17	60	01, 02, 15
26	Health of middle-aged	2	1	1	17	34	51	01, 02, 15



	and elderly age groups							
27	Medical Entomology and Vector Control	2	1.5	0.5	26	17	43	-
28	Health Education and Promotion	2	2	0	34	0	34	-
29	Educational technology	1	0	1	34	0	34	-
30	First aid and medical emergencies	3	2	1	34	34	68	01, 02, 15
31	Immunization	2	1	1	17	34	51	03, 04, 05
32	Environmental health	2	2	0	34	0	34	-
33	Occupational health and ergonomics	2	2	0	34	0	34	-
34	Counseling principles and communication skills	2	2	0	34	0	34	-
35	Pharmacology	2	1.5	0.5	26	17	43	-
36	Nutrition in healthcare	2	2	0	34	0	34	06
37	Health and food safety	1	1	0	17	0	17	06
38	Health Economics	2	2	0	34	0	34	-
39	Professional ethics and accountability in service delivery units	1	1	0	17	0	17	-
40	Health care in disasters and emergencies	1	1	0	17	0	17	30
41	Oral health	2	1	1	17	34	51	01, 02
42	Principles of social participation and community-oriented empowerment	1	1	0	17	0	17	-
Total		66						

Table 4- Internship courses in the field of public health undergraduate curriculum

Internship units			
Course code	Course title		Number of units
43	Internship (1)	Health Education	1
		Environmental Health	0.5
		Occupational Health	0.5
		Immunization	1
		Communicable Diseases	2
		Non-communicable diseases	2
		Oral and dental health	1
		Psychosocial health and addiction	1
		Total	9 units (459 hours)
44	Internship (2)	Integrated care, family support, youth and childbearing	1
		Integrated maternal health care and fetal survival	2
		Integrated neonatal and child health care	2
		Integrated child, adolescent and school health care	1
		Integrated youth health care	1
		Integrated health care for middle-aged people	1
		Integrated health care for the elderly	1
		Total	9 units (459 hours)
Sum Total			18

Titles of training workshops required for the course:

- Passive defense
- Entrepreneurship
- Required application software