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MASHINASOZLIK
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МИНИСТЕРСТВО ВЫСШЕГО ОБРАЗОВАНИЯ, НАУКИ И
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IMPROVING THE QUALITY MANAGEMENT SYSTEM IN MEDICAL INSTITUTIONS BASED ON ISO 7101:2023 AND ISO 9001:2015 STANDARDS

СОВЕРШЕНСТВОВАНИЕ СИСТЕМЫ УПРАВЛЕНИЯ КАЧЕСТВОМ В МЕДИЦИНСКИХ УЧРЕЖДЕНИЯХ НА ОСНОВЕ СТАНДАРТОВ ISO 7101:2023 И ISO 9001:2015

TIBBIYOT MUASSASALARIDA ISO 7101:2023 VA ISO 9001:2015 STANDARTLARI ASOSIDA SIFAT MENEJMENTI TIZIMINI TAKOMILLASHTIRISH

ABSTRACT

Ensuring the quality and efficiency of healthcare services is a crucial aspect of modern medical institutions. In this context, the implementation of international standards plays a significant role. This study provides a comparative analysis of ISO 9001:2015 and ISO 7101:2023 standards to evaluate their applicability in diagnostic and treatment institutions. ISO 9001:2015 focuses on quality management principles applicable across various industries, including healthcare, emphasizing customer satisfaction, process optimization, and continuous improvement. On the other hand, ISO 7101:2023 is specifically designed for healthcare facilities, addressing regulatory compliance, patient safety, and service efficiency. The study examines the similarities and differences between these two standards, analyzing their impact on healthcare service quality and operational effectiveness. Additionally, the research highlights the challenges associated with implementing these standards in medical institutions and provides recommendations for optimizing their adoption. The findings of this study contribute to improving quality management systems in healthcare and ensuring compliance with international best practices.

АННОТАЦИЯ

Обеспечение качества и эффективности медицинских услуг является важнейшим аспектом современных медицинских учреждений. В этом контексте внедрение международных стандартов играет значительную роль. В данном исследовании представлен сравнительный анализ стандартов ISO 9001:2015 и ISO 7101:2023 для оценки их применимости в диагностических и лечебных учреждениях. ISO 9001:2015 фокусируется на принципах управления качеством, применимых в различных отраслях, включая здравоохранение, с акцентом на удовлетворенность клиентов, оптимизацию процессов и непрерывное совершенствование. С другой стороны, ISO 7101:2023 специально разработан для медицинских учреждений и касается соблюдения нормативных требований, безопасности пациентов и эффективности обслуживания. В исследовании рассматриваются сходства и различия между этими двумя стандартами, анализируется их влияние на качество медицинских услуг и операционную эффективность. Кроме того, исследование освещает проблемы, связанные с внедрением этих стандартов в медицинских учреждениях, и дает рекомендации по оптимизации их применения. Результаты данного исследования способствуют совершенствованию систем управления качеством в здравоохранении и обеспечению соответствия международным передовым практикам.

ANNOTATSIYA

Sog'liqni saqlash xizmatlarining sifati va samaradorligini ta'minlash zamonaviy tibbiyot muassasalarining muhim jihatlaridan biridir. Shu nuqtai nazardan, xalqaro standartlarni joriy etish muhim rol o'ynaydi. Ushbu tadqiqot ISO 9001:2015 va ISO 7101:2023 standartlarining qiyosiy tahlilini diagnostika va davolash muassasalarida qo'llanilishini baholash uchun taqdim etadi. ISO 9001:2015 sog'liqni saqlash kabi turli sohalarda qo'llaniladigan sifatni boshqarish tamoyillariga qaratilgan bo'lib, mijozlar ehtiyojini qondirish, jarayonlarni optimallashtirish va doimiy takomillashtirishga urg'u beradi. Boshqa tomondan, ISO 7101:2023 sog'liqni saqlash muassasalari uchun maxsus ishlab chiqilgan bo'lib, tartibga solish talablariga muvofiqlik, bemorlar xavfsizligi va xizmat ko'rsatish samaradorligini hal qiladi. Tadqiqotda ushbu ikki standart o'rtasidagi o'xshashliklar va farqlar o'rganiladi, ularning sog'liqni saqlash xizmatlari sifati va operatsion samaradorligiga ta'siri tahlil qilinadi. Bundan tashqari, tadqiqot ushbu standartlarni tibbiyot muassasalarida joriy etish bilan bog'liq muammolarni ta'kidlaydi va ularni joriy etishni optimallashtirish bo'yicha tavsiyalar beradi. Ushbu tadqiqot natijalari sog'liqni saqlash sohasida sifatni boshqarish tizimlarini takomillashtirishga va xalqaro eng yaxshi amaliyotlarga muvofiqlikni ta'minlashga hissa qo'shadi.

Keywords: ISO 9001:2015, ISO 7101:2023, healthcare quality management, medical institutions, standard implementation, patient safety.

Ключевые слова: ISO 9001:2015, ISO 7101:2023, управление качеством в здравоохранении, медицинские учреждения, внедрение стандартов, безопасность пациентов.

Kalit so'zlar: ISO 9001:2015, ISO 7101:2023, sog'liqni saqlash sifatini boshqarish, tibbiyot muassasalari, standartni joriy etish, bemorlar xavfsizligi.

Introduction

Achieving sustainable medical success in a demanding and constantly changing environment, providing high-quality and modern medical services is closely related to the quality of management. Based on global and domestic experience, one of the effective modern means of providing high-quality medical care is the implementation and continuous improvement of the quality management system in accordance with the requirements of the international standard ISO 9001. [1]

The International Organization for Standardization (ISO), the World Federation of National Standardization Organizations, defines the basic concepts and principles of quality management. In the ISO 9000:2015 standard, quality is defined as «the degree of compliance of the set of specific properties of the object with the requirements» The 2015 ISO 9001 standard states that tools such as understanding the organizational environment, developing policies and objectives in the field of quality, an action plan for continuous quality improvement, internal audits and preventive actions, risk and knowledge management, and employee competence and awareness allow a medical organization to maintain a high level of quality of medical services. [2-4].

Analysis of foreign literature indicates a growing interest in the quality of medical care, all its aspects, in particular, the terminological definition of the concept of quality in healthcare. [5-15]

As a result of our analysis and analysis, we witnessed the implementation of the international standard ISO 9001:2015 in medical institutions. Therefore, we did not limit ourselves to ISO 9001:2015 alone but also conducted research on the integration of the international standard ISO 7101:2023, which is recognized and implemented in medical institutions around the world. Table 1 below shows a comparative analysis of the ring standard.

Comparative analysis of international standards that can be implemented in medical and diagnostic institutions

№	ISO 9001:2015 Quality Management System. Requirements	ISO 7101:2023 Quality management systems in healthcare organizations
1	Scope	Scope
2	Normative references	Normative references
3	Terms and definitions	Terms and definitions
4	Context of the organization	Context of the organization
5	Leadership	Leadership
6	Planning	Planning
7	Support	Support
8	Operation	Operation
9	Performance evaluation	Performance evaluation
10	Improvement	Improvement

Table 1

We have developed documents for the implementation of international standards ISO 9001:2015 and ISO 7101:2023 in a number of medical institutions. Information about these documents is reflected in the table below. Documents developed during the implementation of international standards ISO 9001:2015 and ISO 7101:2023.

Document name	Parts	Document name	Parts
Organizational structure of the enterprise	4	Staceholder	3.2, 4.2, 4.3
Quality Policy	5.2	Management system	3.4
Purpose	6.2	Risk management	3.7, 3.8, 3.9, 3.10, 6.1.3,
Corrective and preventive measures	10.2	Efficiency	3.11, 3.12, 3.13, 3.15
Risk and Opportunity Analysis	6.2	Monitoring and universal health care	3.20, 3.21, 3.22, 3.23, 3.24, 3.25
Quality guide	4.3, 4.4, 9.3, 10	Healthcare literacy	3.34, 3.39
Manage documents	7.4, 7.5	Patient safety	3.41, 3.44, 3.45
Manage writing	7.4, 7.5	Leadership and responsibility	5.1, 5.2, 5.3
Manage inappropriate product	8.7, 8.7.2, 10.2	Support	7.1

Table 2

Method

In the dissertation work, based on the requirements of international standards ISO 9001:2015 and ISO 7101:2023, a “Quality Management System in Medical Institutions” was developed for treatment and diagnostic institutions. The proposed system consists of 5 principles and 53 requirements.

The proposed “Quality Management in Medical Institutions” system differs from other systems in that its principles are unique and compatible with the healthcare system. The following sequence indicates its requirements.

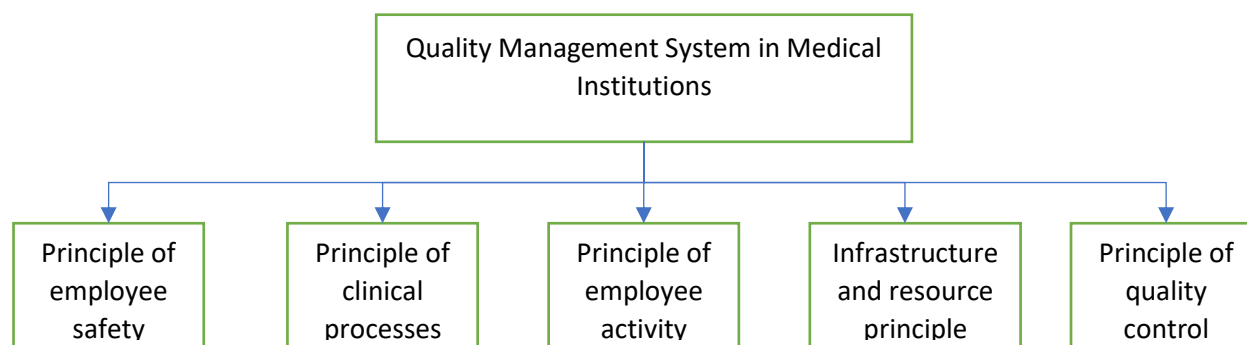


Table 3

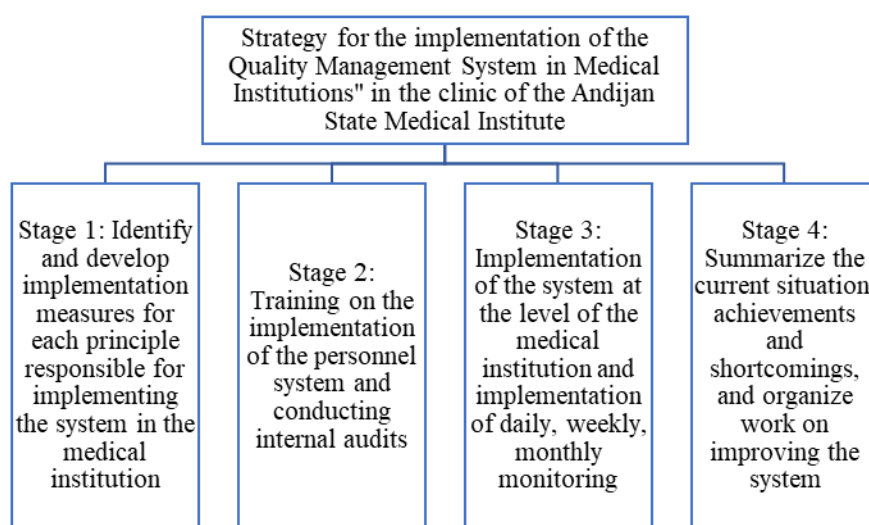


Table 4

An action plan for the implementation of the “Quality Management System in Medical Institutions” in the “ASMI Clinic” has been developed.

Plan of measures for the implementation of the Quality Management System in Medical Institutions at the Clinic of Andijan State Medical Institute according to

The champions who achieved high results in accordance with the requirements of the Quality Management in Medical Institutions system were identified and presented for incentives. According to the Quality Management System in Medical Institutions, the requirements, obligations, and duties of those responsible are defined, which are indicated below.

Results.

Thanks to the improvement of the «Quality Management System in Medical Institutions,» factors negatively affecting the quality of medical services have decreased, and the quality of medical services has increased, which can be seen in the example of the “ASMI Clinic.” **All tasks implemented in the medical institution in 2024 January and January 2025 were carried out in accordance with the requirements of the «Quality Management in Medical Institutions» system, and the following indicators were achieved.**

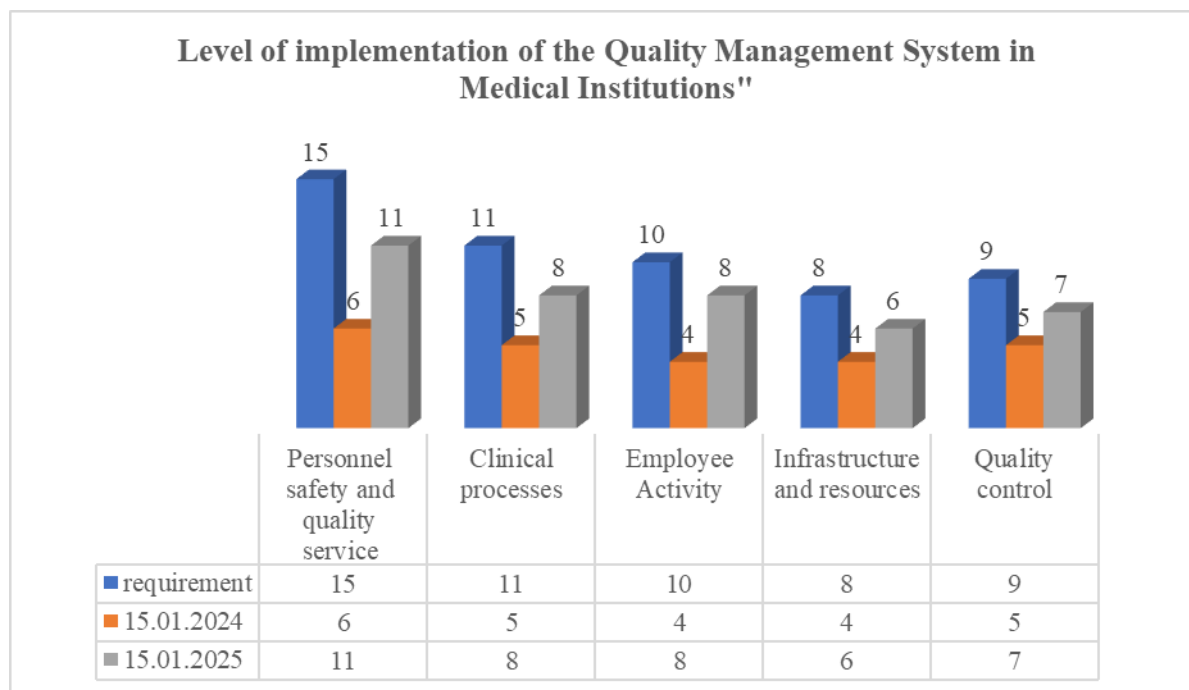


Table 5

Level of implementation of the «Quality Management System in Medical Institutions»

Principles	Personnel safety and quality service	Clinical processes	Employee Activity	Infrastructure and resources	Quality control	Total
Number of requirements	15	11	10	8	9	53
15.01.2024	6	5	4	4	5	24
	33%	45%	40%	50%	55%	45%
15.01.2025	11	8	8	6	7	40
	73%	72%	80%	75%	77%	75%

Table 7

Unfulfilled requirements of the quality management system in medical institutions and their causes

Conclusion

The «Quality Management System in Medical Institutions» was developed based on the standards ISO 9001:2015 and ISO 7101:2023, which significantly improved the quality of medical services after its implementation in the «ASMI Clinic. During 2023, the fulfillment of system requirements increased from 45% to 75%, and positive changes were noted in the field of patient safety and staff qualifications. However, a lack of resources, difficulties for employees in adapting to new requirements, and technical limitations hindered the system's full effectiveness. In the future, it is necessary to increase financial resources, strengthen personnel retraining programs, and implement electronic monitoring systems for further improvement of the Quality Management System in Medical Institutions

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