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International Experience in Gender Education for Medical Professionals as a Tool to Combat Gender-Based Violence: Implementation Opportunities in Kazakhstan

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Abstract

In the introduction, gender-based violence is examined as one of the most pressing public health and human rights challenges of the twenty-first century, associated with substantial physical, psychological, reproductive, and social consequences for women. The health-care system occupies a critical position in responding to this problem, as women exposed to violence frequently seek medical care for both acute injuries and chronic health conditions. Consequently, medical professionals are uniquely positioned to identify violence, provide first-line support, and facilitate access to appropriate services. However, this potential can only be realized if health-care providers possess adequate knowledge, skills, and professional attitudes, which are not systematically embedded in medical education curricula in many countries, including the Republic of Kazakhstan.

The object of this study is the system of training medical professionals to respond to gender-based violence in international and national contexts. The objective of the study is to systematically analyze international evidence on educational programs designed to prepare medical professionals to respond to gender-based violence, to assess their effectiveness, and to evaluate the relevance and adaptability of evidence-based models for integration into the medical education system of Kazakhstan.

The study employed an analytical design based on a scoping review approach. Publications indexed in major international bibliographic databases, as well as reports, guidelines, and training materials produced by international organizations, were reviewed. A total of twenty-six sources describing educational interventions for medical students and health-care professionals were included in the analysis. In

addition, national survey data on violence against women, forensic medical statistics, regional sociological studies, and publicly available medical curricula were examined to characterize the Kazakhstan context.

The results demonstrate that the most effective training programs share several common characteristics. These include multidimensional content addressing gender-based violence as a public health and human rights issue, the use of interactive and experiential pedagogical methods such as simulations, standardized patients, and case-based learning, and institutional integration into existing medical education structures. Such programs are consistently associated with improvements in knowledge, professional attitudes, and readiness to respond to violence, as well as with increased screening and documentation in clinical practice. Analysis of the Kazakhstan context reveals a high prevalence and low disclosure of gender-based violence, alongside fragmented educational coverage and limited institutional training capacity.

In conclusion, the findings indicate that integrating gender-based violence response training into medical education represents an evidence-based and strategically important direction for strengthening the capacity of the health-care system in the Republic of Kazakhstan. Adaptation of internationally validated models, combined with contextual sensitivity and institutional support, may contribute to more effective and sustainable health sector responses to gender-based violence.

Key words: gender-based violence, domestic violence, medical education, health personnel, professional training, public health.

1. Introduction

Gender-based violence constitutes one of the most significant public health challenges of the twenty-first century, affecting approximately one in three women worldwide over the course of their lifetime, according to estimates by the World Health Organization. This phenomenon extends far beyond individual tragedies, representing a systemic violation of human rights with profound consequences for physical and mental health, social well-being, and economic development at the levels of families, communities, and entire nations. The medico-social consequences of gender-based violence encompass a wide spectrum of acute and chronic conditions, including traumatic injuries of varying severity, sexually transmitted infections and HIV, unintended pregnancies and unsafe abortions, chronic pelvic pain and gynecological disorders, post-traumatic stress disorder, depression, anxiety disorders, substance use disorders, and an increased risk of suicidal behavior. The World Health Organization emphasizes that differences in health outcomes between women and men result from a "combination of biological characteristics and socially constructed roles, norms, and power relations" [1, p. 5].

In the context of the Republic of Kazakhstan, the problem of gender-based violence acquires particular relevance, as evidenced by national surveys, forensic medical studies, and regional sociological research. These data indicate a substantial prevalence of various forms of violence against women, high levels of underreporting, and a pronounced gap between the scale of the problem and the use of institutional support services. Sociocultural norms, stigma, fear of consequences, and limited awareness of available services create a complex environment in which violence frequently remains

concealed, despite regular interactions between survivors and the healthcare system.

Healthcare professionals occupy a unique position at the intersection of health care and social protection and, in many cases, represent the first—and sometimes the only—professional point of contact for women experiencing violence. International studies demonstrate that such patients seek medical care not only for acute injuries, but also for chronic somatic conditions, reproductive health problems, and psychoemotional disorders. Consequently, the healthcare system possesses substantial potential for early identification, initial support, and referral of women subjected to violence, provided that healthcare professionals have the requisite knowledge, skills, and professional attitudes.

However, the realization of this potential in many countries is constrained by insufficient integration of a gender perspective and violence response training within medical education curricula. Research indicates that, in the absence of targeted training, healthcare professionals often experience difficulties initiating conversations about violence, fear causing harm to patients, lack confidence in interpreting disclosed information, and frequently do not have clear algorithms for subsequent action. Preliminary analytical reviews and expert assessments suggest that these challenges are also characteristic of the Kazakhstani context, where preparation of healthcare professionals to respond to gender-based violence remains fragmented and unsystematic.

International experience over the past two decades demonstrates that structured gender education for healthcare professionals constitutes an evidence-based strategy for improving the identification, documentation, and response to cases of violence. Programs implemented in the United States, Canada, Australia, countries of the European Union, South Asia, and Africa indicate that integrating a gender perspective into existing disciplines, employing interactive and experiential learning methods, developing communication and empathy skills, and providing training on clinical protocols and intersectoral referral pathways contribute to increased preparedness of healthcare professionals and to meaningful transformations in clinical practice. Leading international organizations, including the World Health Organization, have consistently promoted the integration of gender and human rights dimensions into both pre-service and in-service training of health personnel.

In Kazakhstan, the importance of this issue is further reinforced by institutional changes in the field of prevention and response to domestic violence, the expansion of the role of healthcare professionals in case documentation and intersectoral collaboration, and ongoing discussions regarding international commitments related to the protection of women's rights. Under these conditions, a systematic analysis of international experience in gender education for healthcare professionals and an assessment of the possibilities for its adaptation to the national context acquire particular scientific and practical significance.

The objective of this study is to systematically analyze international experience with gender education programs for healthcare professionals as a tool for addressing gender-based violence, to assess the effectiveness of different models and approaches, to identify key success factors and implementation barriers, and to determine the potential and strategies for adapting evidence-based educational models to the system of medical education and healthcare practice in the Republic of Kazakhstan.

2. Materials and methods

This study was conducted as a narrative review with elements of a scoping review and aimed to systematically synthesize international experience in integrating training for healthcare professionals on responding to gender-based violence, as well as to assess the feasibility of adapting identified approaches to the system of medical education in the Republic of Kazakhstan. The methodological framework of the

review was guided by the PRISMA recommendations for scoping reviews.

A comprehensive literature search was performed in the international bibliographic databases PubMed, Scopus, and Web of Science, as well as among publications and policy documents issued by international organizations, including the World Health Organization and the United Nations Population Fund. In addition, grey literature was examined, comprising program descriptions, evaluation reports, and other non–peer-reviewed materials relevant to the topic. The search was conducted without language restrictions.

Eligibility criteria included publications describing educational programs or training interventions for healthcare professionals or medical students focused on the identification and management of cases of gender-based violence and reporting educational, attitudinal, or practice-related outcomes. A total of twenty-six sources were included in the final analysis, representing nine countries and regional contexts, as well as global guidelines and evidence syntheses.

To examine the Kazakhstani context, data from national surveys on violence against women, forensic medical statistics, regional sociological studies, and regulatory documents were analyzed, together with publicly available curricula and course descriptions from medical universities. Data analysis followed a descriptive and synthetic approach and was aimed at identifying recurring educational models and key components of effective training programs.

The study relied exclusively on the analysis of published and publicly accessible sources and did not involve the collection of primary data. Accordingly, separate ethical approval was not required.

3. Results

3.1. Analysis of successful programs from different regions of the world

An international review of training programs for healthcare professionals on responding to violence against women, including studies from countries with well-developed healthcare systems, shows that the most effective models combine short lecture-based components with interactive methods (role-playing, simulation scenarios, work with standardized patients), rely on clearly defined clinical protocols and intersectoral algorithms, and are embedded within existing systems of training and accreditation for healthcare professionals.

A systematic review by N. Kalra and colleagues [2], including 19 studies from high- and middle-income countries (the United States, Australia, Iran, Mexico, Turkey, and the Netherlands), demonstrated that structured educational interventions for healthcare professionals (lecture modules combined with role-playing, simulations, and work with standardized patients) lead to significant improvements in attitudes, knowledge about intimate partner violence, and self-assessed readiness to respond among physicians and nurses working in primary care and hospital settings. In a number of studies included in the review, practice-related outcomes were also assessed: following the implementation of programs based on clinical algorithms and intersectoral pathways (safeguarding/domestic abuse pathways), the frequency of routine screening for violence and documentation of cases in medical records increased compared to baseline levels. This indicates real changes in the clinical behavior of healthcare professionals and confirms the potential of such programs to strengthen the systemic role of the healthcare sector in responding to gender-based violence.

In the United States, a range of training programs for healthcare professionals on responding to intimate partner violence has emerged in recent years, combining face-to-face training, simulations, and electronic learning. One example is the mPOWERED Electronic Learning System, a structured online course for nurses and other clinicians aimed at developing knowledge, confidence, and practical skills in screening, empathetic inquiry, and referral of women experiencing violence to specialized services [3]. The study showed that completion of the

module led to a significant increase in subjective preparedness and willingness to discuss violence with patients, as well as improvements in knowledge of response protocols and algorithms. Additional programs in the United States include short introductory sessions on screening and counseling, residency curricula involving experts from shelters, and the use of standardized female patients to practice communication scenarios. Taken together, these approaches contribute to the integration of responses to intimate partner violence into routine clinical practice across different levels of healthcare delivery.

In Canada, the EDUCATE program (Education in Domestic Violence for Residents and Clinicians Across Toronto East), developed at the University of Toronto and implemented in three affiliated hospitals, represents a strategically important example of the systematic integration of responses to intimate partner violence into obstetrics and gynecology residency training [4]. The program demonstrates that a targeted 12-hour educational intervention, distributed over the course of one year and based on the Prochaska–DiClemente stages-of-change model, a trauma-informed approach, and the CanMEDS competency framework, can not only expand knowledge and skills but also sustainably transform the clinical behavior of future specialists. The high level of interactivity of the program (standardized patients, role-play of scenarios, analysis of video recordings, collaboration with multidisciplinary teams and shelters) enabled residents not merely to "know about the problem," but to learn how to conduct difficult conversations safely and empathetically, plan subsequent steps, and document cases in ways that genuinely enhance the protection of women. The significance of EDUCATE is underscored by the fact that statistically significant improvements in knowledge and readiness to respond were maintained 12 months after completion of the training, and participants reported that the program helped them overcome feelings of helplessness when encountering violence and provided concrete tools for clinical practice. Thus, EDUCATE illustrates that well-designed training can bridge the critical gap between the rhetoric of the "role of healthcare in combating violence" and the actual competencies of frontline physicians.

While North American programs demonstrate the potential of deeply integrated and institutionally supported curricula, in the Asia–Pacific region attention is increasingly shifting toward adapting similar models to the conditions of countries with limited resources and pronounced sociocultural barriers.

In Australia, the Healthy Relationships Training program has been developed and implemented within the WEAVE project, targeting general practitioners. A pre–post analysis conducted by Felicity Young and colleagues (2024) showed that participation in this program led to significant increases in knowledge, practical skills, and confidence among physicians in counseling women experiencing intimate partner violence, including the ability to raise the topic of violence, provide supportive counseling, and discuss options for seeking help [5]. The training includes interactive components and work with clinical scenarios adapted to the Australian context, and the authors emphasize that integration of this training into general practice education is a key condition for sustainable changes in clinical practice.

In Aotearoa (New Zealand), the "Atawhai" initiative has been developed as a primary healthcare provider–led response to family violence, integrating culturally safe practices and Māori worldviews on well-being and healing. Thus, the program demonstrates that training of healthcare professionals can simultaneously strengthen clinical competencies and support the rights of Indigenous peoples when it is originally designed with consideration of local knowledge systems and values [6]. In the Pacific region, the Pasifika Veilomani pilot online project, which involved healthcare workers from nine island states, showed that even under significant technical constraints, a distance-learning format can increase professionals' confidence in working with gender-based and family violence and stimulate critical reflection on their own practice, opening important opportunities for scaling up training in resource-limited and geographically isolated contexts [7].

In the European Union, the research and innovation project IMPRODOVA (Improving Frontline

Responses to High Impact Domestic Violence) is being implemented with the participation of a group of experienced researchers and practitioners from eight countries: Austria, Finland, France, Germany, Hungary, Portugal, Slovenia, and the United Kingdom (Scotland) [8]. The project aims to propose comprehensive solutions for combating high-impact domestic violence based on in-depth empirical research on how police and other frontline professionals (including healthcare and social workers) respond to domestic violence in European countries. Within the framework of the project, specialized training modules have been developed for different medical specialties (gynecology/obstetrics, emergency medicine, dentistry, pediatrics). The program includes medical assessment, documentation of evidence, and discipline-specific competencies. Such differentiated approaches allow adaptation of content to the specific clinical situations encountered by different categories of healthcare professionals.

In Spain, a specialized 10-hour training program was developed for emergency and urgent care professionals, aimed at increasing their readiness to work with cases of gender-based violence. The course is built around problem-oriented video materials that simulate real clinical situations and includes discussion of scenarios, analysis of typical errors, and practice of algorithms for identification, initial support, documentation, and referral of survivors. The format combines online components with face-to-face interactive elements, making it possible to adapt training to the demanding schedules of emergency service workers without reducing the depth of content.

The effectiveness of this program was evaluated in a quasi-experimental study by Adánez-Martínez et al. (2025), comparing indicators before and after participation in the training. The authors showed that, following the course, healthcare professionals demonstrated substantial improvements in knowledge of the signs and dynamics of gender-based violence, awareness of existing protocols, confidence in their own skills in managing such cases, and subjective readiness to raise the issue of violence with patients and accurately document information in medical records. The study emphasizes that even a relatively brief but contextually tailored program can significantly improve the quality of the healthcare system's response to gender-based violence in one of its most critical segments [9].

Ukraine, operating under conditions of armed conflict, adapted the WHO Global Guidelines on the clinical management of rape to the national context with technical support from the World Health Organization. Within this initiative, 443 primary healthcare workers were trained, revealing substantial gaps in knowledge of legal protocols, awareness of available resources, and understanding of best practices in organizing services for survivors of sexual violence [10]. This experience demonstrates that even in the context of an acute humanitarian crisis, systematic training of healthcare professionals remains a critically important element of the response to gender-based and sexual violence and can be effectively implemented in parallel with the provision of emergency care.

On the African continent, training programs for healthcare professionals and other specialists on gender-based and domestic violence are developing under conditions of simultaneously high needs and limited resources, making the region's experience particularly illustrative for countries facing similar challenges.

In Kenya, multiyear intersectoral training programs (2012–2018) were implemented, involving medical, legal, and law enforcement professionals and using standardized patients and objective structured clinical examinations (OSCEs) as key tools for assessing competencies [11]. This indicates that training was structured not only around lectures, but also around practical rehearsal of scenarios with "patient-actors," allowing evaluation of how professionals actually ask questions, respond to disclosures of violence, document information, and interact with other services. This approach is important in that it brings training closer to real practice and simultaneously establishes a shared language and algorithms across different sectors—healthcare, police, and the judicial system.

In Tanzania, studies have shown that without specially designed training programs, healthcare professionals face serious limitations in identifying and managing cases of domestic violence [12]. These

limitations include not only a lack of knowledge about indicators of violence and response algorithms, but also uncertainty, fear of "harming" the patient by asking inappropriate questions, and lack of clarity regarding where and how to refer survivors. These deficits are particularly critical in contexts with high HIV prevalence among women, where gender-based violence acts as an additional stressor, undermining treatment adherence, exacerbating mental health problems, and increasing the risk of revictimization. Under such conditions, systematic training of healthcare professionals becomes not merely "desirable," but a structural component of effective HIV and reproductive health programs.

In Nigeria, the Ipas program plays an important role, targeting humanitarian workers and medical personnel working with women and girls who have experienced sexual violence in contexts of conflict, displacement, and humanitarian crises [13]. The training includes not only the fundamentals of trauma-informed care and ethics in working with survivors, but also highly specific clinical competencies, such as techniques for safe abortion, postabortion care, infection prevention, and psychological support. This is critically important in contexts where sexual violence coincides with limited access to reproductive health services and high levels of stigma, and where any error by a healthcare professional may exacerbate trauma or place a woman at additional risk.

In Burkina Faso, where a substantial proportion of the population lives in conditions of forced displacement, studies have identified multiple barriers to providing care for survivors of gender-based violence, ranging from geographic inaccessibility of services and shortages of trained personnel to fear of reprisals, distrust of institutions, and cultural norms that inhibit disclosure [14]. These findings underscore that training for humanitarian contexts cannot be limited to general lectures on women's rights; rather, programs are needed that are adapted to the realities of camps and temporary settlements, take into account linguistic, cultural, and gender dynamics, and build bridges among healthcare providers, nongovernmental organizations, community leaders, and international organizations. Such a comprehensive, context-sensitive approach to training becomes a key condition for ensuring that systems of care are not merely formal, but genuinely accessible and safe for survivors of violence.

Following the analysis of African initiatives implemented under conditions of conflict, humanitarian crises, and limited resources, it is particularly instructive to turn to the experience of South Asian countries, where efforts have been made to institutionalize training within national hospitals and global clinical guidelines. The "Gender in Medical Education" (GME) project, implemented between 2007 and 2012 in the state of Maharashtra, became one of the largest initiatives to integrate a gender perspective into medical education in low- and middle-income countries, covering seven medical colleges [15]. Its key feature was the embedding of gender content into existing disciplines (obstetrics and gynecology, public health, internal medicine, psychiatry, forensic medicine), rather than the creation of a separate course, which enhanced the sustainability and scalability of changes. Curricula were reviewed for stereotypes and "blind spots," and modules were enriched with topics such as violence during pregnancy, reproductive rights, and social determinants of health. The pedagogical approach relied on interactive methods and faculty development, and evaluation using the Gender Attitude Scale showed statistically significant improvements in students' gender attitudes across all disciplines ($p<0.05$), increased recognition of gender-based violence as a health issue, and greater readiness to raise this topic in clinical practice when institutional support was available.

In addition, a five-day cascade training program based on the WHO guideline "Caring for Women Subjected to Violence," adapted to the Indian context, was implemented in three tertiary-level hospitals in India. Trained facilitators subsequently trained medical staff in the identification and management of cases of violence. The study demonstrated that such training substantially improved healthcare professionals' understanding of violence against women as a health issue, increased levels of empathy, and enhanced interpersonal communication skills and supportive interactions with patients [16].

Among regional studies from low- and middle-income countries, the HERA project (Healthcare Responding to Violence and Abuse), implemented in

Brazil, Nepal, Sri Lanka, and the occupied Palestinian territories (Table 1), deserves particular attention. Research conducted by the London School of Hygiene and Tropical Medicine describes a multicenter intervention aimed at improving the healthcare system's response to domestic violence in low- and middle-income countries. The intervention included training healthcare professionals to identify and respond to cases of domestic violence, with an emphasis on a woman-centered and structurally integrated approach. Key outcomes included improved detection of domestic violence cases and enhanced professional expertise, with healthcare workers reporting increased confidence, readiness to identify, support, and refer survivors of violence. The training focused on developing empathy, nonjudgmental inquiry techniques, skills in first-line support, and subsequent case management. The project also involved the development of new detection and referral protocols, and training materials were adapted to the specific context of each country.

Table 1 - Changes in Detection of Gender-Based Violence Following Implementation of HERA and Comparable Healthcare Training Initiatives

Country	Key Outcomes of HERA and Similar Initiatives	Increase in Detection	Features of Change
Brazil	Significant improvement in the identification of cases of violence; introduction of new protocols and empathy training	+78%	Development of new training materials; expansion of the program to various regions
Nepal	Substantial increase in detection; introduction of structured approaches and new support methods	+100%	Adaptation of training to pandemic conditions; enhanced confidence of healthcare professionals
Sri Lanka	Improved skills in identification and support for victims of domestic violence; updated referral protocols	+69%	Practical integration into the healthcare system; training of multidisciplinary teams

The HERA project data demonstrate impressive results across different countries: in Brazil, the detection of cases of violence increased by 78%, in Nepal by 100%, and in Sri Lanka by 69% [17]. These findings clearly illustrate the potential of structured educational programs for healthcare professionals in the context of developing countries.

Alongside national programs, global training packages play an important role in setting standards for preparing healthcare workers to respond to gender-based violence. The UNFPA MGBViE (Managing Gender-Based Violence in Emergencies) project offers a three-phase training model (e-learning, a 7–8-day face-to-face training, and subsequent mentoring), designed for humanitarian settings and available in four languages, which ensures broad applicability across regions. The WHO/PAHO course Response to Violence Against Women and Girls and the WHO clinical guideline Caring for women subjected to violence serve as the foundation for national training programs, providing standardized modules on screening, first-line support, clinical management, and referral of survivors, including specialized courses on the clinical management of rape in humanitarian contexts. Taken together, these resources form a global framework that countries can draw upon when developing and adapting their own training programs for healthcare professionals.

Thus, the analysis of international experience demonstrates the existence of several core models of

gender education for healthcare professionals, adapted to local contexts.

3.2 The Kazakhstan Context

To analyze the Kazakhstan context, data from national surveys on violence against women, forensic medical statistics, regional sociological studies, as well as regulatory and programmatic documents in the fields of healthcare and medical education were used. The data obtained make it possible to characterize the scale of gender-based violence (GBV), the level of its institutional detection, and the current state of readiness of the healthcare system.

The results of the National Sample Survey on Violence against Women (n = 14,342; age 18–75 years) indicate a significant prevalence of various forms of GBV in the Republic of Kazakhstan [18]. According to the survey data, 17% of women who had ever been in an intimate partnership experienced physical or sexual violence by an intimate partner during their lifetime; 21% reported psychological violence, and 7% reported economic control by a partner. Marked regional variability was observed: in certain regions, the lifetime prevalence of physical and/or sexual violence reaches 19–31%. Forensic medical data summarized by Mussabekova et al. for the period 2019–2022 complement the survey findings and indicate pronounced gender asymmetry among victims of domestic violence, with women accounting for 77.9–91% of all registered survivors [19]. At the same time, approximately 78% of cases are recurrent, reflecting the chronic nature of violence.

Despite the high prevalence of GBV, the level of institutional help-seeking remains extremely low. According to the national survey, only 1.1% of women who experienced violence sought help from law enforcement agencies, while 51% did not disclose their experience to anyone [18]. These indicators point to high latency of gender-based violence and limited visibility of the problem in official statistics. Regional studies confirm this trend and allow for a more detailed understanding of barriers to help-seeking. In a study conducted in Turkistan Region (n = 24,621), the main barriers were fear of possible consequences (58.4%), feelings of shame and social stigmatization (46.9%), and distrust in the effectiveness of the institutional support system (34.1%) [20]. More than half of respondents indicated insufficient awareness of available support services; in rural areas, the level of awareness was below 40%, and willingness to seek help even when information was available did not exceed 8.6%.

Analysis of available data indicates that women experiencing GBV regularly interact with the healthcare system for various clinical reasons, including visits related to acute injuries, chronic somatic conditions, reproductive health disorders, and psycho-emotional disturbances. Under conditions of high latency, medical institutions often become the only institutional point of contact for survivors, even when the formal reason for seeking care is not directly related to a violent episode.

In recent years, institutional steps aimed at formalizing the medical response to gender-based violence have been recorded in Kazakhstan. In 2020, the first clinical protocol for the provision of medical care to patients affected by gender-based violence was approved, regulating procedures for identification, initial assessment, management, and documentation of cases in medical organizations [21]. The protocol was developed based on World Health Organization recommendations and adapted to the structure of the national healthcare system. An additional component was the implementation of an online course for primary healthcare workers, developed by the Ministry of Health of the Republic of Kazakhstan in collaboration with UNFPA. The course is available in Kazakh and Russian and is aimed at developing basic knowledge and skills for providing medical care to GBV survivors; by 2021, more than 40 healthcare workers from Shymkent and Turkistan Region had completed the training. Taken together, these initiatives demonstrate the existence of individual mechanisms for introducing training; however, their coverage remains limited.

An analysis of medical university curricula, based on a review of publicly available study plans, course descriptions, and national textbooks, revealed fragmented inclusion of GBV-related content in core medical disciplines. In obstetrics and gynecology, violence is mentioned mainly in the context of injuries during pregnancy, without systematic consideration of

prevalence, identification, and comprehensive clinical response. In forensic medicine, primary attention is paid to documentation of bodily injuries from a legal perspective, while clinical and psychosocial aspects of support are minimally represented. Disciplines such as public health, psychiatry, and internal medicine generally do not integrate GBV content, despite its proven impact on mental health and chronic somatic conditions. Additionally, some educational materials contain elements of gender bias, including stereotypical representations of gender roles and elements of victim blaming. According to preliminary studies and expert surveys, medical students and practicing physicians report insufficient preparedness to work with GBV cases, difficulties in initiating relevant questions, and uncertainty regarding further clinical actions after disclosure of violence.

Separate pilot initiatives indicate the potential of innovative solutions in the prevention of gender-based violence. For example, the UMAI-WINGS project implemented in 2024 demonstrated a 23% reduction in the prevalence of psychological violence among study participants [22]. At the same time, such initiatives have not yet been integrated into the system of medical education and clinical practice at the institutional level.

Overall, the results characterize the Kazakhstan context as a combination of high prevalence and latency of gender-based violence, limited institutional detection, and fragmented educational readiness of the healthcare system to respond.

3.3 Key Components of Effective Cender Education Programs for Healthcare Professionals

The synthesis of the gender education programs for healthcare professionals included in the review made it possible to identify a recurring set of components associated with positive educational outcomes. Despite differences in geographic, institutional, and sociocultural contexts, most of the analyzed initiatives demonstrated similar structural and pedagogical characteristics, allowing them to be considered common elements of effective educational models.

Across all programs that demonstrated significant improvements in knowledge, attitudes, and readiness to respond to gender-based violence, the training content was multidimensional in nature. It combined conceptual understandings of gender-based violence as a public health and human rights issue, epidemiological data on the prevalence and forms of violence, clinical aspects of case identification and management, ethical and legal frameworks for care provision, as well as elements of reflection on professional attitudes and potential biases. This approach ensured simultaneous influence on the cognitive, affective, and behavioral levels of healthcare professional training.

Pedagogical analysis of the included programs showed that initiatives based on interactive and experiential learning methods were consistently associated with more pronounced educational effects compared with programs relying predominantly on lecture-based formats. In most effective interventions, a similar set of pedagogical practices was employed, including work with standardized patients, role-playing and simulation of clinical scenarios, analysis of clinical cases, small-group discussions, structured reflective assignments, the use of multimedia materials, and elements of community engagement. As schematically presented in Figure 1, these methods formed a coherent cluster of experiential learning aimed at developing communication and empathy skills and increasing healthcare professionals' confidence in initiating and conducting sensitive conversations about gender-based violence with patients.

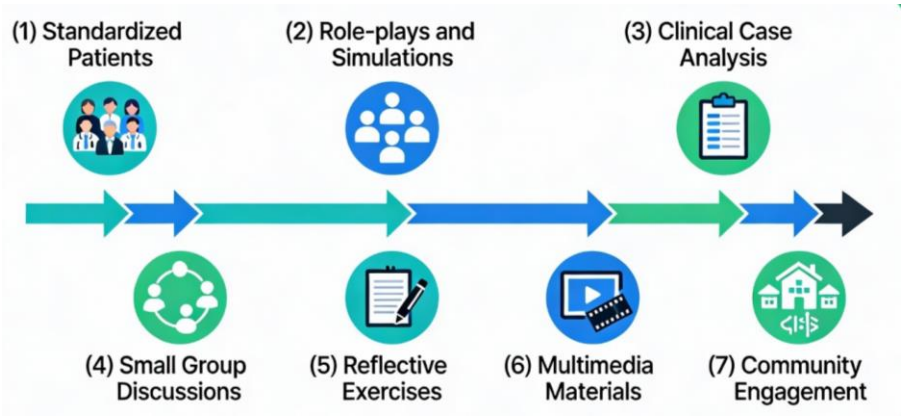

Figure 1 - Interactive and Experiential Pedagogical Methods Most Commonly Used in Effective Gender Education Programs for Healthcare Professionals

Organizational analysis showed that sustained educational effects were more often observed in programs integrated into existing curricula and clinical training, rather than those implemented as fragmented or elective courses. The integration of gender-related content into core medical disciplines made it possible to demonstrate its relevance across different areas of clinical practice and reduced the risk of marginalizing the topic. An additional factor contributing to sustainability was the presence of institutional support, including the involvement of program leadership, faculty development, and the availability of clinical protocols and algorithms that facilitate the application of acquired knowledge in practice.

Many of the analyzed programs highlighted the importance of multidisciplinary and intersectoral collaboration. Effective training models included cooperation between healthcare professionals and social services, non-governmental organizations, psychologists, and legal professionals, which broadened healthcare providers' understanding of the ecosystem of support for survivors of violence and contributed to the development of realistic referral skills to available support resources.

Finally, the analysis showed that programs adapted to the local sociocultural context generally demonstrated higher acceptability and participant engagement. Such adaptation included the use of local epidemiological data, clinical vignettes reflecting the context of a specific country or region, and consideration of cultural norms and barriers influencing disclosure of violence and help-seeking behaviors.

Taken together, the results of the synthesis indicate that the effectiveness of gender education for healthcare professionals is determined not by individual components in isolation, but by a combination of content-related, pedagogical, and organizational elements implemented in an institutionally supported and contextually adapted manner.

4. Discussion

The results of the present review study confirm that structured gender education for healthcare professionals represents a reproducible and evidence-based strategy for strengthening the role of the healthcare system in responding to gender-based violence. The analysis of programs implemented across diverse geographic and sociocultural contexts demonstrates consistent patterns of improvement in knowledge, professional attitudes, and subjective readiness of healthcare professionals to identify and manage cases of violence. Despite variations in format, duration, and institutional settings, effective initiatives are characterized by a similar combination of content-related, pedagogical, and organizational elements.

The findings are consistent with the results of the systematic review by Kalra et al., which showed that structured educational interventions are associated with significant improvements in healthcare workers' knowledge and attitudes, and in some studies with increased rates of routine screening and documentation of violence. Similarly, in North American and European programs, including EDUCATE and the IMPRODOVA project, the integration of training into clinical education with an emphasis on practical skill development and the use of clinical algorithms emerged as a key factor of effectiveness. These data support the conclusion that training embedded in the professional context and supported by institutional mechanisms has a higher potential for sustainable change than fragmented or elective courses.

The results of the pedagogical analysis are particularly important, as they highlight the advantages of interactive and experiential learning methods. The use of simulation scenarios, standardized patients, role-playing, and clinical case analysis enables the development not only of cognitive knowledge but also of communication and empathy skills that are essential for addressing the sensitive and highly stigmatized issue of violence. These conclusions are consistent with evidence from the EDUCATE and HERA programs, as well as from intersectoral initiatives in Africa, where experiential approaches were identified as a key mechanism for transforming clinical behavior rather than merely increasing awareness.

Evidence from studies conducted in low- and middle-income countries, as well as in humanitarian and crisis settings, further complements the overall picture and points to the high adaptability of educational models. Experience from India, African countries, and the HERA project demonstrates that even in resource-constrained environments, training healthcare professionals can lead to increased detection of violence and greater professional confidence, provided that the content is contextually adapted and referral pathways are available. These findings extend the applicability of the present review and confirm that the effectiveness of gender education is determined not by the level of available resources, but by the quality of integration and contextual relevance of the intervention.

At the same time, the analysis reveals substantial limitations in the existing evidence base. The majority of included studies focus on proximal educational outcomes—knowledge, attitudes, and self-assessed readiness—while data on actual changes in clinical practice and, in particular, on patient-level outcomes remain limited. This gap reflects methodological and ethical challenges in evaluating educational interventions in the field of gender-based violence, including the need for longitudinal follow-up, the use of objective measurement methods, and the protection of vulnerable populations. Therefore, the effectiveness of programs should be interpreted with the understanding that improved healthcare worker competencies constitute a necessary but insufficient condition for achieving systemic impacts on levels of violence and women's well-being.

The findings related to the Kazakhstani context underscore the relevance of the conclusions drawn from the international review. The high prevalence and latency of gender-based violence, combined with the limited educational preparedness of the healthcare system, create a situation in which medical institutions often serve as the only institutional point of contact for survivors. Despite the existence of a clinical protocol and isolated training initiatives, the fragmented integration of gender-based violence topics into medical education constrains the healthcare system's capacity for identification and first-line support. In this context, the international models identified in this study provide a relevant foundation for the further development of healthcare professional training in Kazakhstan.

A key strength of this study lies in the use of a scoping review design, which enabled the inclusion of a broad range of sources, including peer-reviewed publications, policy documents, and grey literature, as well as the comparison of international educational models with empirical data from the Kazakhstani context. Nevertheless, the results should be interpreted in light of limitations related to the heterogeneity of methodological quality among included studies and the predominance of

self-reported measures in assessing educational outcomes.

Overall, the discussion highlights that gender education for healthcare professionals should be viewed as a structural component of the healthcare system, whose effectiveness depends on the interplay of content-related, pedagogical, and organizational factors. The findings provide a basis for further research aimed at evaluating the impact of educational programs on clinical practice and patient outcomes, as well as at analyzing the conditions necessary to ensure the sustainability and scalability of such interventions in national contexts.

Implications for Integrating Training on Responses to Gender-Based Violence in Kazakhstan

The findings of this study have direct implications for the development of healthcare professional training in the Republic of Kazakhstan. The combination of a high prevalence and marked latency of gender-based violence, documented in national and regional studies, with the limited educational preparedness of the healthcare system indicates a structural gap between public health needs and current clinical response capacities. In this context, the international experience analyzed in the present study allows for the identification of principles that may be relevant for adaptation within the Kazakhstani system of medical education.

First, the results underscore the appropriateness of integrating training on responses to gender-based violence into existing medical disciplines and stages of medical education rather than introducing it in isolation as optional or elective courses. Such integration enhances the sustainability of educational initiatives and demonstrates the clinical relevance of a gender perspective across medical specialties, including obstetrics and gynecology, psychiatry, internal medicine, and primary health care.

Second, international evidence highlights the importance of moving beyond predominantly lecture-based formats toward interactive and experiential learning methods aimed at developing communication and empathy skills. In the Kazakhstani context, this implies a phased adaptation of such methods, taking into account resource constraints and the need for targeted faculty development.

Third, the findings indicate that educational interventions are most effective when supported by institutional commitment and aligned with clinical protocols and referral pathways. In Kazakhstan, this suggests that the integration of training should be accompanied by systematic efforts to enhance healthcare professionals' awareness of available support services and the practical functioning of intersectoral collaboration mechanisms.

Overall, the implications of this study point to the need to conceptualize training on responses to gender-based violence as a systemic component of healthcare system development rather than as a standalone educational initiative. Further research and pilot programs may contribute to refining optimal integration models that are aligned with national priorities and institutional conditions.

5. Conclusions

The systematic analysis of international experience in gender education for healthcare professionals achieved the objective of the study and demonstrated that the integration of training on responses to gender-based violence constitutes an evidence-based strategy for enhancing the healthcare system's preparedness to identify and manage violence against women. The results of the review indicate that the most effective educational programs are characterized by a combination of multidimensional content, interactive pedagogical approaches, and institutional integration into existing medical education systems, as evidenced by improvements in knowledge, professional attitudes, and readiness to respond among healthcare professionals across diverse countries and contexts. The analysis of data from Kazakhstan revealed that, despite the high prevalence and latency of gender-based violence, the healthcare system of the Republic of Kazakhstan currently exhibits limited educational readiness for a systematic response, reflected in the fragmented

inclusion of this topic in medical curricula and the restricted scope of training initiatives. The comparison of international models with the national context supports a qualified conclusion regarding the substantial potential for adapting evidence-based educational approaches, taking into account the institutional, sociocultural, and resource conditions of Kazakhstan. The findings confirm that training healthcare professionals to respond to gender-based violence should be regarded as a systemic component of healthcare development, and further research is required to assess its impact on clinical practice and outcomes for women who have experienced violence.

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Гендерлік зорлық-зомбылықпен күрестегі құрал ретінде медицина қызметкерлерін гендерлік оқыту жөніндегі халықаралық тәжірибе: Қазақстанда іске асыру мүмкіндіктері

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Түйіндеме

Кіріспеде гендерлік негіздегі зорлық-зомбылық жиырма бірінші ғасырдағы қоғамдық денсаулық сақтау мен адам құқықтары саласындағы ең өзекті мәселелердің бірі ретінде қарастырылады. Бұл құбылыс әйелдердің физикалық, психикалық, репродуктивтік және әлеуметтік әл-ауқатына ұзақ мерзімді жағымсыз әсер етеді. Денсаулық сақтау жүйесі зорлық-зомбылықтан зардап шеккен әйелдермен өзара әрекеттесудің негізгі институционалдық кеңістігі болып табылады, себебі олар медициналық ұйымдарға жарақаттармен қатар созылмалы соматикалық және психоэмоционалдық шағымдармен жиі жүгінеді. Осыған байланысты медициналық қызметкерлер зорлық-зомбылықты ерте анықтау, бастапқы қолдау көрсету және тиісті қызметтерге бағыттау тұрғысынан маңызды рөл атқарады. Алайда бұл рөлді тиімді жүзеге асыру үшін арнайы білім мен дағдылар қажет, ал олар көптеген елдерде, соның ішінде Қазақстан Республикасында, медициналық білім беру жүйесіне жүйелі түрде енгізілмеген.

Зерттеудің объектісі халықаралық және ұлттық контексте медициналық қызметкерлерді гендерлік негіздегі зорлық-зомбылыққа жауап беруге даярлау жүйесі болып табылады. Зерттеудің мақсаты медициналық қызметкерлерге арналған білім беру бағдарламалары бойынша халықаралық тәжірибені жүйелі түрде талдау, олардың тиімділігін бағалау және дәлелді модельдерді Қазақстанның медициналық білім беру жүйесіне бейімдеу мүмкіндіктерін анықтау болып табылады.

Зерттеуде scoping review элементтері бар шолу-талдау әдістемесі қолданылды. Халықаралық библиографиялық дерекқорларда жарияланған ғылыми еңбектер, халықаралық ұйымдардың баяндамалары мен нұсқаулықтары талданды. Медициналық студенттер мен практик-мамандарға арналған білім беру интервенцияларын сипаттайтын жиырма алты дереккөз іріктелді. Сонымен қатар Қазақстандағы әйелдерге қатысты зорлық-зомбылық жөніндегі ұлттық сауалнамалар, сот-медициналық статистика және медициналық жоғары оқу орындарының ашық оқу жоспарлары пайдаланылды.

Нәтижелер тиімді бағдарламалардың ортақ сипаттамаларын анықтады. Оларға мазмұнның көпқырлылығы, интерактивті және тәжірибелік оқыту әдістерін қолдану, сондай-ақ білім беру құрылымдарына институционалдық тұрғыда интеграциялану жатады. Мұндай бағдарламалар білім деңгейінің, кәсіби ұстанымдардың және зорлық-зомбылыққа жауап беруге дайындықтың артуымен байланысты. Қазақстандық контекст талдау гендерлік негіздегі зорлық-зомбылықтың кең таралуы мен жасырын сипаты жағдайында білім беру дайындығының жеткіліксіз екенін көрсетті.

Қорытындылай келе, халықаралық дәлелдерге негізделген гендерлік негіздегі зорлық-зомбылыққа жауап беру даярлығын медициналық білім беру жүйесіне енгізу Қазақстан Республикасында денсаулық сақтау жүйесінің әлеуетін нығайтудың перспективалы бағыты болып табылады.

Түйін сөздер: гендерлік негіздегі зорлық-зомбылық, тұрмыстық зорлық-зомбылық, медициналық білім беру, медицина қызметкерлері, кәсіби даярлық, қоғамдық денсаулық сақтау.

Международный опыт гендерного образования медицинских работников как инструмент борьбы с гендерным насилием: Возможности имплементации в Казахстане

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Резюме

Во введении рассматривается гендерно-обусловленное насилие как одна из наиболее значимых проблем общественного здравоохранения и прав человека в современном мире. Оно сопровождается тяжелыми и долгосрочными последствиями для физического, психического и репродуктивного здоровья женщин, а также для их социального благополучия. Система здравоохранения занимает особое место в реагировании на данную проблему, поскольку женщины, пережившие насилие, нередко обращаются за медицинской помощью по самым разным поводам, не всегда напрямую связанным с насильственным эпизодом. В этой связи медицинские работники являются ключевыми субъектами раннего выявления и первичной поддержки пострадавших. Вместе с тем реализация этого потенциала требует наличия специализированных компетенций, которые во многих странах, включая Республику Казахстан, остаются фрагментарно представленными в системе медицинского образования.

Объектом исследования является система подготовки медицинских работников к реагированию на гендерно-обусловленное насилие в международном и национальном контексте. Цель исследования заключается в систематическом анализе международного опыта образовательных программ для медицинских работников, оценке их эффективности и выявлении возможностей адаптации доказательных моделей для системы медицинского образования Казахстана.

В исследовании применена методология обзорного анализа с элементами scoping review. Были проанализированы публикации из международных научных баз данных, документы международных организаций, а также программные и нормативные материалы. В итоговый анализ включены двадцать шесть источников, описывающих образовательные интервенции для медицинских студентов и практикующих специалистов. Дополнительно использованы данные национальных обследований по насилию в отношении женщин, судебно-медицинская статистика и открытые учебные планы медицинских вузов Казахстана.

Результаты исследования показывают, что наиболее эффективные программы подготовки медицинских работников характеризуются сочетанием мультидимензионального содержания, интерактивных педагогических методов и институциональной интеграции в существующие образовательные структуры. Использование симуляций, стандартизированных пациентов и анализа клинических случаев связано с улучшением знаний, профессиональных установок и готовности к реагированию на гендерно-обусловленное насилие. Анализ казахстанского контекста выявил значительный разрыв между масштабами и латентностью проблемы и уровнем образовательной готовности системы здравоохранения.

В заключение делается вывод о том, что интеграция подготовки медицинских работников по реагированию на гендерно-обусловленное насилие является обоснованным и перспективным направлением развития медицинского образования и укрепления потенциала системы здравоохранения Республики Казахстан.

Ключевые слова: гендерное насилие, домашнее насилие, медицинское образование, медицинские работники, профессиональная подготовка, общественное здравоохранение.