

Original article

Principles of Bioethics through the Lens of the Uzbek National Mentality: An Exploratory Survey of Online Respondents

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Received 12 October 2025, Revised 19 May 2026, Accepted 6 June 2026

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Abstract: *Introduction* — Bioethics provides the normative foundations for contemporary medical practice; however, the interpretation and application of its core principles (confidentiality, truth-telling, and informed consent) are largely determined by context. Although these principles are widely recognized as universal ethical imperatives, their practical application often reflects cultural values, religious traditions, and sociopolitical frameworks.

Objective — This study examines how three fundamental principles of bioethics are understood and applied in the sociocultural context of Uzbekistan, with particular attention to the relationship between individual patient autonomy and collective or familial responsibility.

Methods — An online survey conducted among 684 respondents recruited via Telegram, VKontakte, and Facebook [*This social network belongs to Meta*, a company designated as an extremist organization and banned in the Russian Federation*] platforms examined various aspects of attitudes toward confidentiality, truth-telling, and informed consent. Descriptive statistical analysis was used to summarize the distribution of responses and examine culturally determined patterns in the respondent sample.

Results — The majority of respondents (65.9%) supported conditional disclosure of medical information, 17.4% insisted on absolute confidentiality, and 13.8% expressed trust in the professional discretion of doctors. Regarding truth-telling, 41.3% preferred selective disclosure of information taking into account cultural and emotional factors, while 30.4% emphasized complete transparency. Informed consent was highly valued: respondents prioritized information about risks and potential complications (67.6%), treatment goals and expected outcomes (64.8%), as well as economic aspects such as cost and duration of treatment (58.1%). Family involvement in medical decision-making prevailed (65.2%), highlighting the influence of collectivist traditions.

Conclusion — The results show that although confidentiality, truth-telling, and informed consent are widely recognized as universal ethical norms, their practical implementation in Uzbekistan is shaped by culturally determined tradeoffs between individual autonomy and collective responsibility. Strengthening bioethical practice in such a context requires not only compliance with international standards but also the development of culturally sensitive communication strategies and institutional policies. These findings should be read as exploratory, context-specific patterns of ethical perception in a non-probability online sample, not as population-level estimates for Uzbekistan as a whole.

Keywords: bioethics, confidentiality, truth-telling, informed consent, cultural values.

Cite as Atamuratova F, Otamuratov S, Otamuratov S. Principles of bioethics through the lens of the Uzbek national mentality: An exploratory survey of online respondents. *Russ Open Med J* 2026; 15: e0307.

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Introduction

Bioethics has become one of the most dynamically developing fields at the intersection of medicine, philosophy, and the humanities. In contemporary medical practice, ethical principles are more than just abstract ideals; they provide normative guidance for decisions affecting human life, dignity, and well-being. Among these principles, confidentiality, truthfulness, and informed consent have been universally recognized as fundamental pillars of bioethics. They protect the patient-physician relationship, ensure trust, and promote transparency in clinical decision-making.

However, these principles are not interpreted uniformly across cultures. In Western countries, individual patient autonomy is

often viewed as paramount, with an emphasis on self-determination and personal rights. In contrast, societies with strong collectivist traditions, including those influenced by Islamic ethics and family values, often prioritize public interest and family responsibility when making medical decisions. This divergence highlights the need to examine how universal bioethical principles are adapted to specific sociocultural contexts.

The case of Uzbekistan is particularly illustrative. Uzbekistan, a society shaped by Islamic moral traditions, the Soviet legacy, and contemporary globalization influences, represents a unique context in which universal bioethical norms interact with local customs, community structures (e.g., mahallas), and national legislation. Here, issues such as patient confidentiality, disclosure

of medical information, and informed consent practices cannot be fully understood without considering the cultural expectations, religious norms, and collective mentality that shape everyday life.

Philosophical exploration of this interrelationship is crucial. Although bioethics as a discipline emphasizes autonomy, justice, beneficence, and non-maleficence, the lived experiences of patients and physicians in Uzbekistan reveal that these principles are often mediated by cultural and familial boundaries. Thus, the tension between universalism and cultural particularism represents a practical challenge for clinical practice, policymaking, and ethics education rather than a theoretical abstraction.

The *objective* of this study was to analyze how the principles of confidentiality, truth-telling, and informed consent are understood and applied in Uzbekistan, drawing on both philosophical reflection and empirical sociological data. In doing so, the article seeks to contribute to a broader discussion about how universal ethical standards can be effectively implemented in different cultural contexts without compromising patient rights or societal values. The study does not aim to produce population-level estimates or to test between-group hypotheses.

Literature review: Philosophical and ethical context

The foundations of medical ethics lie in classical antiquity. The Hippocratic Oath already emphasized patient confidentiality and the physician's duty to respect human dignity, prohibiting the disclosure of private information obtained in the course of medical practice [1]. This early formulation laid the moral foundation upon which later ethical systems were built. In the modern era, Thomas Percival's *Medical Ethics* (1803) was the first to systematically codify professional norms, elevating confidentiality, veracity, and fidelity to the rank of explicit professional obligations [2].

The principle of confidentiality was historically considered central to the doctor-patient relationship. However, scholars such as Ferguson [3] and Reeder et al. [4] have shown that confidentiality was never absolute: state interests, public health, and family grievances often defined its boundaries. Contemporary historical studies such as those of Wadman et al. [5] further illustrate how patient data circulates across diverse institutional contexts, raising new concerns in the digital age. Internationally, the WMA Declaration of Geneva [6], the Declaration of Helsinki [7], and the American Medical Association Code of Medical Ethics [8] emphasize confidentiality as a continuing obligation, even after the death of the patient. In Uzbekistan, this principle is legally enshrined in the Law on the Protection of Citizens' Health [9] and the Law on Personal Data [10], although exceptions exist for infectious diseases (e.g., HIV and tuberculosis) [11].

The debate over truth-telling reflects the evolution from medical paternalism to patient autonomy. Kant's *Groundwork of the Metaphysics of Morals* [11] established honesty as a categorical duty, equating moral respect with human dignity. However, paternalistic practices prevailed for centuries: physicians often concealed diagnoses to 'protect' patients [12]. Empirical studies confirmed this shift. In 1961, Oken reported that most physicians in the United States concealed cancer diagnoses, but by 1979, Nowak et al. showed that 98% of physicians supported disclosure [13]. Cross-cultural studies point to persistent differences: Japanese medical practice has historically favored non-disclosure [14], while Islamic medical ethics, as represented in the works of al-Razi [15] and Ibn Sina, called for honesty tempered with compassion. In Uzbekistan, truthfulness is also shaped by

cultural norms of respect and restraint: honesty is valued, but tact and emotional sensitivity often determine the style of disclosure.

The development of informed consent illustrates the growing importance of autonomy in medical ethics. The Nuremberg Code (1947) [16] established voluntary consent as an essential condition for human experimentation. The Declaration of Helsinki [7], the Oviedo Convention [17], and the UNESCO Universal Declaration on Bioethics and Human Rights (2005) [18] further strengthened consent as a universal right in both clinical and research contexts. Recent studies trace its evolution from paternalism to individualized, patient-centered consent models [19-21]. In Uzbekistan, informed consent is codified in the Law on the Protection of Citizens' Health (Articles 23-24) [22], which mandates full disclosure of methods, risks, and alternatives prior to any intervention. However, cultural expectations often complicate implementation: family members can play a decisive role in granting or withholding consent, and gender dynamics can influence women's autonomy in medical decisions [22].

Contemporary challenges touch on all three principles. The digital age poses unprecedented threats to privacy, as demonstrated by the 2018 SingHealth data breach in Singapore [23] and reports of uncontrolled leaks from radiology devices [24]. Truth-telling faces ethical dilemmas in terminal illness, where disclosure may trigger hopelessness or suicidal ideation [25]. Informed consent, although formally required, is sometimes undermined by medical jargon [21] or unequal power relationships between physician and patient.

Taken together, the literature reveals a tension between universalism and cultural particularism. Beauchamp and Childress's principlism [26] provides a global ethical foundation, but its application must be mediated by local traditions, religious norms, and community structures. In Uzbekistan, bioethics is not just the application of imported norms; it is an ongoing process of negotiation between international standards and national mentality, where autonomy and collectivism coexist in the formation of medical ethics.

Material and Methods

This study used a cross-sectional survey method to examine perceptions of confidentiality, truth-telling, and informed consent among the population of Uzbekistan. A quantitative, descriptive approach was chosen to reflect prevailing trends across different demographic groups and allow for culturally specific interpretations of universal bioethical principles.

Participants and study sample

A total of 684 respondents participated in the study. Participants were recruited using a convenience sampling strategy through social media platforms commonly used in Uzbekistan (Telegram, VKontakte, and Facebook [*This social network belongs to Meta*, a company designated as an extremist organization and banned in the Russian Federation*]). The sample included individuals across age groups (18-25, 26-35, 36-50, and 51+ years of age), gender, and education (secondary, vocational, or higher education). The sample was stratified by age, gender, and education level to describe the demographic composition of respondents. Because the study used non-probability convenience sampling and did not employ inferential statistics, these demographic categories were not used for between-group comparisons; all results are reported for the total sample (n=684).

Middle-aged individuals (36-50 years old, 38.4%) comprised the largest group, followed by young adults (18-25 years old, 27.5%), young professionals (26-35, 18.8%), and older adults (51+, 15.2%).

Data collection took place from March to May 2025 using an online questionnaire distributed through target groups and community pages. Participation was voluntary and anonymous. The questionnaire covering three thematic areas:

- Confidentiality (attitudes toward disclosing medical information to family members, the public, or government agencies);
- Truth-telling (preferences regarding full or selective disclosure of diagnoses, taking into account cultural norms of politeness and emotional care);
- Informed consent (expectations regarding information about risks, treatment goals, costs, alternatives, and the role of the family in decision-making).

Questions were formulated based on international bioethics guidelines (WMA, UNESCO, Oviedo Convention) and adapted to the Uzbek cultural context through expert review by medical ethicists and sociologists.

Frequency distributions and percentages were used to summarize the data. The results were organized into tables presenting demographic characteristics, attitudes toward confidentiality, perceptions of truth-telling, and informed consent priorities. Qualitative comments from open-ended questions were subjected to thematic analysis to identify cultural nuances and interpretive patterns.

STROBE compliance and methodological considerations

This study was observational and cross-sectional; it was assessed according to STROBE (Strengthening the Reporting of Observational Studies in Epidemiology) guidelines. However, the authors acknowledge that this study does not fully comply with STROBE requirements, and this limitation is explicitly acknowledged and justified below.

Sample size justification

No formal sample size calculation or statistical power analysis was conducted. This is because the study did not aim to test predetermined hypotheses or detect statistically significant differences between groups. Instead, the sample was based on a pragmatic, non-random (convenience) dataset drawn from all available respondents who voluntarily participated during the data collection period (March-May 2025).

Therefore, the sample size (n=684) reflects data availability rather than statistical design, precluding the use of traditional power-based justification as required by STROBE.

Handling missing data

Before analysis, the dataset was screened. Cases with missing responses for key variables were excluded using a complete-case approach.

Imputation methods (e.g., multiple imputation) were not used. This decision was based on the following considerations:

- Missing data could not be assumed to be collected at random due to the voluntary and anonymous nature of participation;

- Imputation procedures would have introduced model-based assumptions inconsistent with the exploratory and non-inferential design;
- The analytical goal was to preserve the authentic distribution of observed responses, rather than reconstruct hypothetical values.

The proportion of missing data was low and did not significantly affect the descriptive patterns presented.

Lack of inferential statistics (STROBE item 12c): Methodological rationale

Inferential statistical analyses (e.g., hypothesis tests, confidence intervals, regression models) were not conducted. This was a deliberate and methodologically sound decision, not a limitation of analytical capabilities.

The use of inferential statistical methods was deemed inappropriate for the following reasons:

1) *Non-probability sampling.* The sample was recruited via social media platforms; hence, it does not represent a probability sample of the population of Uzbekistan. Therefore, the fundamental assumption required for inferential statistics (that the sample approximates a random sample from a given population) is violated;

2) *Unknown selection mechanisms and structural bias.* Participation in the study depended on self-selection, access to digital technology, and social media activity. These factors introduce systematic and unquantifiable selection bias, rendering estimates of sampling error (e.g., p-values, confidence intervals) statistically meaningless;

3) *The conceptual (rather than purely statistical) goal of the study.* Our study is at the intersection of bioethics and sociology; it aimed to reflect culturally determined ethical concepts, rather than estimate population parameters or test causal hypotheses. Inferential statistics would artificially impose a positivist framework on normative and context-dependent constructs;

4) *Risk of epistemological misinterpretation.* Applying inferential statistics to non-representative data can create a false impression of generalizability and statistical validity, potentially misleading readers and policymakers;

5) *Nature of variables (value-based constructs).* Measured variables (e.g., attitudes toward truth-telling, confidentiality, and autonomy) represent culturally determined normative judgments rather than persistent quantitative traits. That is why their interpretation is based on contextual meaning, not statistical inference.

For these reasons, inferential statistical methods would be not only technically unjustifiable but also epistemologically inappropriate for the goal and design of this study.

Explicit statement of noncompliance with STROBE standards

Given the lack of probability sampling, sample size calculation, and inferential statistical analysis (item 12c of the STROBE standard), the authors explicitly state that:

- This study does not and cannot fully comply with the STROBE reporting standards;

- This noncompliance is intentional and methodologically justifiable, reflecting the exploratory, culturally interpretive, and non-inferential design of the study;
- Nevertheless, the authors adhered to STROBE principles where applicable, including a transparent description of the study design, sampling procedures, variables, and limitations.

Ethical considerations

The study was conducted in accordance with the Declaration of Helsinki (2013 edition) [7] and the UNESCO Universal Declaration on Bioethics and Human Rights (2005) [18]. Ethical approval was obtained from the Ethics Committee of Tashkent State Medical University (approval No. EMA-2025/04). All participants provided informed consent electronically prior to participation. Personal data were processed in accordance with the Law on Personal Data of the Republic of Uzbekistan (2019) [10]. Respondents were guaranteed the confidentiality of their responses, and no personally identifiable information was collected.

Results

All percentages below refer to the total sample unless otherwise indicated. No subgroup comparisons (by age, gender, or education) were performed; the demographic profile is reported for descriptive purposes only.

A total of 684 respondents participated in the survey. The majority were women (roughly 80%), while men accounted for approximately 20%. Age distribution showed that the largest group was 36-50 years old (38.4%), followed by 18-25 years old (27.5%), 26-35 years old (18.8%), and 51+ years old (15.2%). As for education level, the majority of respondents had higher education (69.6%), 18.1% had vocational education, and 12.3% had secondary education. The demographic profile (predominantly women with higher education, aged 36–50) should be regarded as a limitation on the generalizability of the findings rather than as an analytical subgroup finding.

Survey participants were asked several questions, and the responses received were as follows:

1. *Is the principle of confidentiality consistent with the Uzbek national values?*

- Fully agrees – 45.1%
- Partially agrees – 31.5%
- Does not agree – 3.1%
- I find it difficult to answer – 20.3%

2. *How would you react if a doctor disclosed information about your illness to other people (parents, spouse, teacher)?*

- I am definitely against this – 17.4%
- I would give permission – 13.8%
- This is only acceptable in certain cases – 65.9%
- I do not care – 2.9%

3. *Should a doctor be held liable for breach of confidentiality?*

- Yes, there should be legal liability – 42.4%
- Only in serious cases – 53.2%
- No, liability is not required – 2.2%
- I do not know – 2.2%

4. *How is truth-telling perceived in the Uzbek national mentality?*

- Truth is the supreme value – 29.4%
- In some cases, concealing the truth is preferable – 41.3%
- Out of deep respect, the truth is not spoken directly – 12%
- Due to collectivist values, some issues are not disclosed – 17.3%

5. *Can concealing the truth be considered an act of compassion?*

- Yes, sometimes – 34.6%
- No, it is a lie – 22.1%
- This depends on the family situation – 30.9%
- I do not know – 12.5%

6. *What information would you like to receive before starting treatment?*

- Treatment goal – 64.8%
- Potential complications and risks – 67.6%
- Alternative methods – 35.2%
- Cost and duration – 58.1%
- None – 2.9%

7. *If a patient over 18 years of age visits a doctor, should the parents be present?*

- I think this is normal; it is accepted in our society – 28.2%
- This should not be the case – 6.4%
- It is acceptable if the patient personally wishes it – 64.0%
- I have not thought about this – 1.4%

8. *Should a female patient make her own medical decisions, or should her relatives make decisions on her behalf?*

- Yes, this is consistent with our national mentality – 18.2%
- No, the woman herself should make the decision – 42.4%
- It is hard to say; it depends on the situation – 36.3%
- I do not know – 3.1%

Discussion

This study examined how three fundamental principles of bioethics – confidentiality, truthfulness, and informed consent – are understood and applied in the sociocultural context of Uzbekistan. The results reveal a complex interplay between universal ethical norms and cultural traditions, reflecting both compliance with international standards and specific adaptations shaped by the national mentality.

Confidentiality

1. In response to the question, “*Is the principle of confidentiality consistent with the Uzbek national values?*”, 45.1% of respondents answered ‘fully agrees,’ indicating that norms such as confidentiality and respect for human dignity are also ingrained in the national mentality. The 31.5% of respondents who chose ‘partially agrees,’ reflect the significant role of family and community in the patient’s life within the framework of national traditions. In other words, there is a tension between personal autonomy and collective responsibility. Only 3.1% of respondents stated that it ‘does not agree,’ representing a minority. This group tends to associate the idea of autonomy with individualism, while they consider community and family as the dominant values in national culture. The 20.3% of respondents who found it difficult to answer indicate that the concept of autonomy has not yet been sufficiently discussed in society on a deep scientific and educational basis. Overall, the survey results indicate that the

principle of autonomy is widely accepted in society; however, influenced by national traditions, informing family members is sometimes considered appropriate. This reflects the balance between individual rights and family responsibility.

2. To the question, *"How would you react if a doctor disclosed information about your illness to other people (parents, spouse, teacher)?"*, the largest proportion (65.9%) of respondents responded that disclosure is acceptable, but only under certain circumstances. This indicates that, although the principle of confidentiality is highly valued in society, exceptions are recognized depending on ethical and social conditions. Another 17.4% supported absolute confidentiality, insisting that personal information should never be disclosed. Meanwhile, 13.8% of patients expressed complete trust in their doctor and considered it acceptable to share information at the doctor's discretion. Few respondents (2.9%) were indifferent and did not express serious concerns about disclosing personal information. These results indicate that the protection of personal information is widely considered important, but, influenced by national traditions and family relations, the view that family members should be informed persists. In the national mentality, family is perceived as a central part of a person's life; therefore, a significant portion of respondents believe that family members should in some cases be informed about the disease. However, a significant proportion of those who were 'definitely against' (almost a fifth) demonstrates that the concepts of personal autonomy and confidentiality, as formulated in modern bioethics, are increasingly gaining ground in society.

3. To the question, *"Should a doctor be held liable for breach of confidentiality?"*, more than half of respondents (53.2%) stated that liability should exist, but only in cases with serious consequences. Another 42.4% took a stricter position, arguing that legal liability should apply in every instance of violation. Only 2.2% believed that doctors should not be held liable, while the same proportion expressed no clear opinion. The results show that the physician's duty of confidentiality is taken seriously in society, but people often support a case-by-case assessment approach. For example, disclosure of information may be accepted as an exception in cases of dangerous infections, criminal prosecution, or threats to the patient's life. Supporters of strict legal liability (42.4%) view confidentiality as a guarantee of personal rights, a position closely aligned with contemporary bioethical and legal approaches. In terms of national mentality, the majority of respondents (53.2%) supported the principle of proportionality, suggesting that although doctors may be held liable, they can also be held accountable. Although doctors must be held accountable, exceptions must be made when 'morally necessary'. Thus, the prevailing view is that doctors should be held accountable for breach of confidentiality, but most respondents favored applying this liability only in serious cases. Consequently, although confidentiality is considered a crucial principle in Uzbek society, its application is determined by moral exceptions and a strong emphasis on proportionality.

The principle of confidentiality turned out to be highly valued, with the majority of respondents (65.9%) supporting conditional disclosure, chiefly to family members. This echoes the historical analyses of Ferguson [3] and Reeder et al. [4], who emphasized that confidentiality has never been absolute but has evolved in response to societal pressures. Wadmann et al. [5] also noted how patient information circulates across various institutional contexts, complicating the ideal of absolute secrecy.

In Western bioethics, confidentiality is closely linked to patient autonomy and individual rights, as stated in documents such as the World Medical Association (WMA) Declaration of Geneva [6] and the American Medical Association Code of Ethics [8]. In contrast, in Uzbekistan, confidentiality is filtered through family and community structures, echoing Islamic moral traditions that emphasize responsibility, compassion, and collective duty [15]. This cultural adaptation emphasizes that patient trust is maintained not only through personal integrity but also through obligations to family and community.

Truth-telling

4. In response to the question, *"How is truth-telling perceived in the Uzbek national mentality?"*, the largest proportion of respondents (41.3%) stated that in certain situations the truth should be hidden. This tendency may correspond to widely recognized cultural norms of polite communication in Uzbekistan. Another 29.4% named truth as the highest value, indicating that in a significant part of society, truth-telling continues to be preserved as a traditional moral duty. About 12% expressed the opinion that the truth should not be spoken directly out of respect, which is associated with norms of politeness, respect for elders, and courtesy in the national culture. Meanwhile, 17.3% believe that the truth is often hidden due to collectivist values, reflecting the priority of the interests of society (e.g., the mahalla) over individual interests. In the Uzbek national mentality, honesty and truth are undoubtedly appreciated as values. However, maintaining social harmony and avoiding public humiliation are considered even more important. Therefore, in many cases, a preference may be given to softened or indirect disclosure. This phenomenon is also important for medical bioethics, as the question of how openly a physician should disclose the truth to a patient has long been a subject of debate in our cultural context.

5. The results regarding the question, *"Can concealing the truth be considered an act of compassion?"*, indicate a pluralistic and context-dependent perception of truth-telling among the surveyed population. A relative majority of respondents (34.6%) believe that concealing the truth in certain situations can be considered an act of compassion. This indicates the presence of a culturally ingrained ethical perspective in which emotional protection, compassion, and the prevention of psychological harm may take precedence over strict disclosure of the truth. At the same time, 22.1% of respondents strongly reject this view, considering concealing the truth tantamount to lying. This group reflects a more principled ethical position that emphasizes honesty and transparency as absolute moral obligations. A significant proportion of respondents (30.9%) stated that the acceptability of concealing the truth depends on the family situation. This response highlights the strong influence of family dynamics and relationship ethics, suggesting that ethical decisions are often made within a broader social and familial context rather than solely at an individual level. Finally, 12.5% of respondents expressed uncertainty, which may indicate ethical ambivalence or a lack of clear societal consensus on this issue. Overall, the results indicate that attitudes toward truth-telling are shaped by a balance between compassion, moral norms, and family values, rather than by any single dominant ethical system.

The survey revealed ambivalent attitudes toward disclosure: while 30.4% supported complete transparency, the majority (41.3%) preferred selective disclosure for the emotional protection

of patients. This reflects the persistent tension between autonomy and beneficence. Historically, medical paternalism often justified the concealment of diagnoses [12], but in the late twentieth century there was a dramatic shift toward disclosure, as documented by Nowak et al. [13].

Cross-cultural studies confirm that truth-telling practices vary. In Japan, the concealment of cancer diagnoses persisted until the 1980s, driven by concerns about patient suffering and family harmony [14]. Similarly, our results indicate that in Uzbekistan, truth-telling is not rejected but carefully regulated to preserve dignity and emotional stability. This is consistent with Kantian ethics affirming the moral imperative of honesty [11], but also resonating with Islamic medical ethics, which combines honesty with compassion and tact [15]. Thus, the Uzbek case illustrates a hybrid approach: the truth is valued, but its presentation is shaped by cultural norms of politeness and public responsibility.

Informed consent

6. In response to the question, “*What information would you like to receive before starting treatment?*”, the majority of respondents (67.6%) stated that they primarily wanted detailed information about potential complications and risks. This suggests that caution and risk assessment are considered crucial when making medical decisions. For 64.8% of respondents, understanding the purpose and expected outcomes of treatment was the top priority, reflecting the need for clarity regarding the effectiveness and specific goals of therapy. Meanwhile, 58.1% emphasized the importance of information about the cost and duration of treatment, thereby emphasizing the role of economic factors in medical decision-making. Another 35.2% wanted to know about alternative treatment options, suggesting that for many, having a choice beyond a doctor’s recommendations is of great importance. A virtually negligible share (2.9%) expressed a complete lack of interest in receiving any information.

These results demonstrate that the value of informed consent is becoming increasingly important in society, as patients demand clear information about outcomes, risks, alternatives, and financial terms before agreeing to treatment. This reflects the alignment of informed consent with the principles of autonomy, truth-telling, and justice in contemporary bioethics. From a national perspective, patients often consult with their families before making medical decisions, which explains why cost and duration (58.1%) are particularly important.

7. To the question, “*If a patient over 18 years of age visits a doctor, should the parents be present?*”, the majority (64.0%) responded that parental participation is possible, but should depend on the patient’s wishes. This reflects a growing respect for personal autonomy in society. Another 28.2% considered parental participation commonplace, emphasizing the important role of family in a patient’s life within the national mentality. A smaller group (6.4%) was strongly opposed, insisting that only personal autonomy should prevail, while 1.4% remained indifferent.

These results demonstrate that family involvement in medical decision-making remains a strong tradition in Uzbek society, while the principles of informed consent and personal autonomy are also evolving; 64.0% of responses illustrate the coexistence of these two trends: parents may be involved, but the patient’s individual right to decision-making remains paramount. The 28.2% of respondents, who answered that “it is accepted in our society”,

confirm that family and collectivist traditions remain ingrained in the national culture.

8. To the question, “*Should a female patient make her own medical decisions, or should her relatives make decisions on her behalf?*”, the largest proportion (42.4%) supported a woman’s right to independent decision-making. This may indicate a growing acceptance of women’s autonomous decision-making in medical practice among respondents. Meanwhile, 36.3% believed that it depends on the situation, demonstrating the strong influence of traditional values, which sometimes presume family involvement in a woman’s decision-making. Another 18.2% stated that, according to national mentality, decisions should be made primarily by relatives, reflecting family and collectivist traditions in national culture. A small proportion (3.1%) expressed no definite opinion.

These results reveal two main trends in society. On one hand, shaped by modern bioethics and human rights discourse, support for autonomous decision-making among women is growing. On the other hand, guided by cultural norms and familial traditions, shared or delegated decision-making frameworks remain deeply embedded. This dynamic illustrates the bioethical tension between autonomy and collectivism.

The results show strong support for informed consent, with respondents prioritizing knowledge of risks (67.6%), outcomes (64.8%), and costs (58.1%). These expectations are consistent with the evolution of informed consent from the Nuremberg Code [16] through the Declaration of Helsinki [7] to the Oviedo Convention [17] and the UNESCO Universal Declaration on Bioethics and Human Rights [18]. The emphasis on risks and outcomes reflects research findings in other contexts where patients seek clarity before accepting prescribed medical treatment [20, 21].

However, informed consent in Uzbekistan is not purely individualistic. Family involvement was widely accepted (65.2%), reflecting collectivist orientations and the centrality of kinship structures. Similar patterns have been noted in cross-cultural studies of confidentiality and decision-making [22]. This suggests that while international frameworks emphasize personal autonomy, their local implementation must take into account cultural expectations of shared responsibility. Women’s autonomy, supported by 43% of respondents, illustrates the ongoing process of reconciliation between global human rights norms and traditional gender roles.

Broader Implications

Overall, the results highlight the tension between universalism and cultural particularism in bioethics. Beauchamp and Childress [26] viewed principlism as a globally relevant ethical framework, but practical application often requires cultural translation. In Uzbekistan, confidentiality, truth-telling, and informed consent are not rejected but reinterpreted through the lens of family, community, and Islamic morality.

These findings have important implications. First, bioethics education and policy in Uzbekistan should emphasize the universality of patient rights while acknowledging cultural realities. Second, physicians need training in culturally sensitive communication strategies that enable them to uphold ethical standards without alienating patients or their families. Finally, international bioethical frameworks should avoid rigid imposition and instead promote dialogue that respects diversity and protects human dignity.

Practical implications

The findings of this study have several important implications for clinical practice, health policy, and medical education in Uzbekistan and comparable sociocultural contexts, as follows:

(1) Physicians should be trained to balance honesty and compassion, recognizing that in Uzbekistan, truth-telling is often achieved through politeness, respect, and protection of a patient's emotions. Individually tailored communication strategies can ensure adequate patient information without causing unnecessary psychological harm;

(2) Because family involvement remains a normative expectation, informed consent procedures should be adapted to include both the patient and their family while protecting patient autonomy. Structured family consultations can help reconcile international standards with local traditions of collective responsibility;

(3) While confidentiality is highly valued, conditional disclosure of information is culturally acceptable. Clearer professional guidelines are needed to define permissible exceptions (e.g., reporting infectious diseases) and prevent unnecessary breaches of confidentiality. At the same time, robust digital data protection mechanisms should be implemented to mitigate the risks of cyber security breaches and unauthorized sharing of the medical history;

(4) Medical students and healthcare professionals should receive systematic bioethics training, emphasizing how universal principles interact with national legislation and cultural norms. Case-based training (using local scenarios of confidentiality, disclosure, and consent) will prepare practitioners for the ethical complexities of everyday practice;

(5) Health authorities should refine national regulations to better align them with international frameworks such as the Oviedo Convention and the UNESCO Universal Declaration on Bioethics and Human Rights, while ensuring cultural adaptability. This dual compliance will enhance legal clarity and public trust in the healthcare system;

(6) Public health initiatives should promote awareness of patient rights, encouraging active participation in medical decision-making. Educational campaigns can clarify the scope of confidentiality, the importance of honest disclosure, and the role of informed consent in protecting dignity and autonomy.

By translating abstract ethical norms into culturally acceptable practices, these measures can strengthen trust in doctor-patient relationships and improve the quality of healthcare in Uzbekistan.

This study shows that the three core principles of bioethics (confidentiality, truthfulness, and informed consent) are widely recognized in Uzbekistan, but their practical application is determined by national traditions, religious norms, and collective mentality.

Confidentiality is recognized as an ethical and legal duty; however, in many cases, it is applied conditionally, particularly when disclosure is deemed necessary for family members or in the interests of public health. This reflects the coexistence of personal privacy and public responsibility.

Truth-telling is valued as a moral duty, but its practice is mediated by cultural customs and emotional sensitivity. To preserve the patient's dignity and protect their psychological well-being, honesty is often exercised with caution and tact. This maintains a balance between honesty and compassion.

Informed consent receives strong support, with respondents demanding comprehensive information about risks, outcomes,

and costs. However, decision-making often involves family participation, reflecting the persistence of collectivist orientations in the national mentality. In particular, regarding women's autonomy, there is an ongoing dialogue between global human rights norms and traditional cultural values.

Taken together, our findings demonstrate that bioethical rules in Uzbekistan are not rejected as alien standards, but are reinterpreted and integrated in harmony with national cultural and moral traditions. Therefore, bioethics education and policy must emphasize universal international norms while also respecting local cultures and societal values.

Integrating universal bioethics with national specificities should not be seen as a compromise, but rather as a path to more humane, contextually informed, and effective medical practice. This approach protects patient rights, ensures respect for human dignity, and simultaneously recognizes the central role of family and society in medical decision-making.

Conclusion

This study represents one of the first empirical examinations of how the core principles of bioethics (confidentiality, truth-telling, and informed consent) are interpreted in the sociocultural context of Uzbekistan. The key scientific contribution of the study is its demonstration that the practical application of these principles creates a distinct ethical model in which universal bioethical norms coexist with culturally determined expectations of shared responsibility and decision-making. Our findings complement existing bioethical research by offering new empirical data from the Central Asian context and highlighting the need for culturally sensitive approaches in ethical regulation, communication, and medical education. These findings should be read as exploratory, context-specific patterns of ethical perception in a non-probability online sample, not as population-level estimates for Uzbekistan as a whole.

Limitations

Several limitations of this study should be noted. First, the study design was intentionally descriptive and exploratory, aiming to identify prevailing patterns and culturally significant trends in attitudes toward confidentiality, truth-telling, and informed consent, rather than testing specific hypotheses or establishing statistically significant differences between groups. Therefore, the analysis relied primarily on descriptive statistics, and no inferential statistical methods were used to examine differences between sociodemographic groups.

Although the sample size was relatively large and included respondents of different age groups and education levels, the lack of statistical inference limits the ability to draw conclusions about statistically significant differences between demographic categories. Because no between-group comparisons were performed, the study does not report subgroup differences; the descriptive patterns presented refer to the sample as a whole and cannot be interpreted as confirmed associations between demographic characteristics and ethical attitudes. Future research using probability sampling and inferential statistical methods (e.g., chi-squared tests or multivariate models) would be useful to validate and expand on the trends identified in this study.

Also, the use of convenience sampling through social media platforms may have introduced selection bias, potentially overrepresenting younger, more digitally literate, and urban

respondents. As a result, the findings may not be fully generalizable to the entire population of Uzbekistan, particularly to individuals with limited internet access or low social media activity.

Self-reported attitudes may be subject to social desirability bias and may not correspond to actual behaviour in clinical settings.

Finally, although the questionnaire was adapted to the local cultural context through expert review, self-reported attitudes toward ethically sensitive topics may be influenced by social desirability bias and culturally normative response patterns. Despite these limitations, the study provides important preliminary information on culturally determined perceptions of core bioethical principles and lays the foundation for future hypothesis-driven research.

STROBE limitations

An important limitation is its noncompliance with STROBE reporting standards. Due to the use of convenience sampling and the intentional lack of inferential statistical methods, the study does not meet key STROBE criteria, particularly item 12c (statistical methods). This limits the generalizability of the results beyond the study sample and precludes formal statistical comparisons between subgroups. Therefore, the results should be interpreted as context-specific patterns of ethical perceptions rather than population-level estimates or statistically confirmed associations.

Conflict of interest

The authors declare no conflicts of interest.

References

1. The Hippocratic Oath. Russian. https://www.bsmu.by/upload/docs/kafedri/k_obsch_zdorov/v1.pdf.
2. Medical ethics or, a code of institutes and precepts adapted to the professional conduct of physicians and surgeons. Manchester: S Russell for J Johnson. 1803; 246 p. <https://www.jameslindlibrary.org/percival-t-1803>.
3. Ferguson AH. The evolution of confidentiality in the United Kingdom and the West. *Virtual Mentor* 2012; 14(9): 738-742. <https://doi.org/10.1001/virtualmentor.2012.14.9.mhst1-1209>.
4. Rieder P, Louis-Courvoisier M, Huber P. The end of medical confidentiality? Patients, physicians and the state in history. *Med Humanit* 2016; 42(3): 149-154. <https://doi.org/10.1136/medhum-2015-010773>.
5. Wadmann S, Hartlev M, Hoeyer K. The life and death of confidentiality: a historical analysis of the flows of patient information. *Biosocieties* 2023; 18(2): 282-307. <https://doi.org/10.1057/s41292-021-00269-x>.
6. World Medical Association. Declaration of Geneva. <https://www.wma.net/policies-post/wma-declaration-of-geneva>.
7. National Research Ethics Committees. Declaration of Helsinki. <https://www.forskningsetikk.no/en/resources/the-research-ethics-library/legal-statutes-and-guidelines/declaration-of-helsinki>.
8. AMA Code of Medical Ethics' Opinions on Confidentiality of Patient Information. *Virtual Mentor* 2012; 14(9): 705-707. <https://doi.org/10.1001/virtualmentor.2012.14.9.coet1-1209>.
9. Republic of Uzbekistan (n.d.) Law on Protection of Citizens' Health. Available at: <https://www.lex.uz/acts/26013>.
10. Law on Personal Data. Republic of Uzbekistan. 2019. Uzbek. <https://lex.uz/docs/4396419>.
11. Kant I. Groundwork of the Metaphysics of Morals. Cambridge: Cambridge University Press. 1997; xxxvi, 77 p. <https://cpb-us-w2.wpmucdn.com/blog.nus.edu.sg/dist/c/1868/files/2012/12/Kant-Groundwork-ng0pby.pdf>.
12. Gillon R. Paternalism and medical ethics. *Br Med J (Clin Res Ed)* 1985; 290(6486): 1971-1972. <https://doi.org/10.1136/bmj.290.6486.1971>.
13. Novack DH, Plumer R, Smith RL, Ochitill H, Morrow GR, Bennett JM. Changes in physicians' attitudes toward telling the cancer patient. *JAMA* 1979; 241(9): 897-900. <https://pubmed.ncbi.nlm.nih.gov/762865>.
14. Truth-telling in medicine: cultural dimension. St. Joseph's University. <https://www.sju.edu/centers/icb/blog/truth-telling-in-medicine-cultural-dimension>.
15. Tibi S. Al-Razi and Islamic medicine in the 9th century. *J R Soc Med* 2006; 99(4): 206-207. <https://doi.org/10.1177/014107680609900425>.
16. The Nuremberg Code. Russian. <https://european-court-help.ru/wp-content/uploads/2021/07/njurnbergskij-kodeks.pdf>.
17. Convention for the Protection of Human Rights and Dignity of the Human Being with regard to the Application of Biology and Medicine (Oviedo Convention). European Treaty Series – No. 164. Council of Europe 1997. <https://rm.coe.int/168007cf98>.
18. Universal Declaration on Bioethics and Human Rights. UNESCO 2005. <https://www.unesco.org/en/legal-affairs/universal-declaration-bioethics-and-human-rights>.
19. Fons-Martinez J, Murciano-Gamborino C, Diez-Domingo J. Evolution of informed consent in research: From the Hippocratic Oath to the tailored consent. *Open Res Eur* 2024; 4: 72. <https://doi.org/10.12688/openreseurope.17311.1>.
20. Hanssen I. An intercultural nursing perspective on autonomy. *Nurs Ethics* 2004; 11(1): 28-41. <https://doi.org/10.1191/0969733004ne6640a>.
21. Ruiz-Casares M. Research ethics in global mental health: advancing culturally responsive mental health research. *Transcult Psychiatry* 2014; 51(6): 790-805. <https://doi.org/10.1177/1363461514527491>.
22. Chittem M, Butow P. Responding to family requests for nondisclosure: the impact of oncologists' cultural background. *J Cancer Res Ther* 2015; 11(1): 174-180. <https://doi.org/10.4103/0973-1482.140836>.
23. 2018 SingHealth data breach. Wikipedia. https://en.wikipedia.org/wiki/2018_SingHealth_data_breach.
24. Fadiłpašić S. MRI scans, X-rays and more leaked online in major breach – over a million healthcare devices affected. TechRadar 2025. <https://www.techradar.com/pro/security/mri-scans-x-rays-and-more-leaked-online-in-major-breach-over-a-million-healthcare-devices-affected-heres-what-we-know>.
25. Chochinov HM, Wilson KG, Enns M, Lander S. Depression, Hopelessness, and suicidal ideation in the terminally ill. *Psychosomatics* 1998; 39(4): 366-370. [https://doi.org/10.1016/s0033-3182\(98\)71325-8](https://doi.org/10.1016/s0033-3182(98)71325-8).
26. Beauchamp T, Childress J. Principles of Biomedical Ethics: Marking Its Fortieth Anniversary. *Am J Bioeth* 2019; 19(11): 9-12. <https://doi.org/10.1080/15265161.2019.1665402>.

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