

PREVALENCE AND FACTORS ASSOCIATED WITH THE UTILIZATION OF CONTRACEPTIVES AMONG WOMEN OF REPRODUCTIVE AGE IN JALALABAD, KYRGYZSTAN

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Abstract

Globally, sexual and reproductive health remains a critical public health concern for women of reproductive age. The utilization of modern contraceptives is essential for managing fertility, reducing unintended pregnancies, abortions, and associated health complications. This study aimed to assess the prevalence and factors associated with contraceptive use among women aged 15–35 years in Jalalabad, Kyrgyzstan. A descriptive cross-sectional study was conducted using online Google Forms over three months (September to November 2024). A structured questionnaire was administered to 150 randomly selected women, and data were analyzed using SPSS version 22.0. Results revealed that 88.7% of respondents were married, 88.7% resided in rural areas, and 35.9% had more than two children, all of which were associated with higher contraceptive use. Conversely, women aged 15–25 years showed lower utilization. The majority of women demonstrated good knowledge of contraceptives, though some reported side effects such as vaginal discharge or irritation. These findings underscore the need to address socioeconomic, geographic, and cultural barriers to enhance contraceptive effectiveness and promote maternal and child health.

Keywords: Contraceptive utilization, reproductive health, socioeconomic factors, maternal health

РАСПРОСТРАНЕННОСТЬ И ФАКТОРЫ, СВЯЗАННЫЕ С ИСПОЛЬЗОВАНИЕМ КОНТРАЦЕПТИВОВ СРЕДИ ЖЕНЩИН РЕПРОДУКТИВНОГО ВОЗРАСТА В ДЖАЛАЛ-АБАДЕ, КЫРГЫЗСТАН

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Аннотация

Во всем мире сексуальное и репродуктивное здоровье остается важнейшей проблемой общественного здравоохранения для женщин репродуктивного возраста. Использование современных контрацептивов имеет решающее значение для контроля фертильности, снижения числа нежелательных беременностей, аборт и связанных с ними осложнений. Целью данного исследования была оценка распространенности и факторов, связанных с использованием контрацептивов среди женщин в возрасте 15–35 лет в Джалал-Абаде, Кыргызстан. Описательное поперечное исследование проводилось с использованием онлайн-форм Google в течение трёх месяцев (с сентября по ноябрь 2024 года). Структурированный опрос был разослан 150 случайно выбранным женщинам, а данные были проанализированы с помощью SPSS версии

22.0. Результаты показали, что 88,7% респондентов состоят в браке, 88,7% проживают в сельской местности, а 35,9% имеют более двух детей. Все эти факторы связаны с более частым использованием контрацептивов. Напротив, женщины в возрасте 15–25 лет используют контрацептивы реже. Большинство женщин продемонстрировали хорошие знания о контрацептивах, хотя некоторые сообщали о побочных эффектах, таких как выделения из влагалища или раздражение. Эти результаты подчёркивают необходимость устранения социально-экономических, географических и культурных барьеров для повышения эффективности контрацептивов и укрепления здоровья матери и ребёнка.

Ключевые слова: Использование контрацептивов, репродуктивное здоровье, социально-экономические факторы, здоровье матери

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Introduction

Rapid population growth poses a significant challenge in developing countries, threatening global health and sustainability [1]. Family planning services are not only critical for controlling population growth and improving maternal and child health but are also recognized as a fundamental human right [2]. Despite the availability of contraceptive methods, unintended pregnancies remain prevalent, with approximately 80 million women worldwide experiencing them annually, of which 45 million results in abortions [3]. These unintended pregnancies contribute to over half a million maternal deaths and 120 million disabilities each year [4].

The ability to adopt effective contraceptive methods is influenced by factors such as access to healthcare, community attitudes, cultural values, and personal beliefs [5]. Studies, particularly from the global north, highlight barriers such as limited understanding of reproductive cycles, overestimation of withdrawal method effectiveness, and cultural influences on contraceptive use [6]. For instance, research among Hispanic women in the United States revealed that economic constraints, healthcare access, and cultural values significantly impact contraceptive behaviors [6].

Modern contraceptive methods, including barrier methods (e.g., condoms, diaphragms), hormonal contraceptives (e.g., oral pills, injectables, implants), and intrauterine devices (IUDs), are designed to prevent pregnancy [7]. These methods offer non-contraceptive health benefits, such as reduced risks of endometrial and ovarian cancer, but also carry risks like increased cardiovascular disease with oral contraceptives or infection with IUDs in high-risk groups [4]. Globally, of the 1.9 billion women of reproductive age in 2021, 1.1 billion required family planning, with 874 million using modern contraceptives and 164 million facing an unmet need [3].

This study evaluates the prevalence and factors associated with modern contraceptive utilization among women of reproductive age in Jalalabad, Kyrgyzstan, using a national demographic and health survey framework. The findings aim to inform the design and implementation of interventions to enhance contraceptive use and reduce maternal and child morbidity and mortality.

Materials and Methods

A descriptive cross-sectional study was conducted from September to November 2024 in Jalalabad, Kyrgyzstan. Data were collected using a structured questionnaire administered via online Google Forms to 150 randomly selected women aged 15–35 years. The questionnaire captured socio-demographic characteristics, contraceptive knowledge, and utilization patterns. Data were analyzed using the Statistical Package for the Social Sciences (SPSS) version 22.0. Associations between dependent (contraceptive use) and independent variables (e.g., age, marital status, residence) were assessed using chi-square tests. Ethical approval was obtained, and informed consent was secured from all participants.

Results

Socio-Demographic Characteristics

Of the 150 respondents, 83.3% had completed university education, while 16.7% had only primary education. The majority (96.7%) were Muslim, with 3.3% identifying as Christian. Age distribution showed 42.0% (n=63) aged 30–35 years, 35.3% (n=53) aged 25–30 years, and 20.0% (n=30) aged 15–25 years. Regarding family income, 87.3% were from middle-income households, and 12.7% were from high-income households. Most respondents (88.7%) were married, while 11.3% were divorced. Employment status indicated 69.3% were employed, and 28.7% were housewives. Geographically, 88.7% resided in rural areas, and 11.3% lived in urban areas (Table.1).

• *Table 1: Factors associated with contraceptive utilization*

		No	Yes
Respondent's current age	15-20	4 (100)	00 (00)
	20-25	10 (33.33)	20 (66.66)
	25-30	30 (56.6)	23 (43.39)
	30-35	13 (20.63)	50 (70.36)
Religion	Muslim	66 (45.20)	80 (54.79)
	Hindu	1 (25)	3 (75)
Current marital status	Married	60 (45.11)	73 (54.88)
	Unmarried	9 (52.94)	8 (47.05)
knowledge of any contraceptive method		85 (56.66)	65 (43.34)

Factors Associated with Contraceptive Utilization

Contraceptive use was higher among married women (88.7%), those living in rural areas (88.7%), and those with more than two children (35.9%). Conversely, women aged 15–25 years exhibited lower contraceptive use. The majority of respondents demonstrated good knowledge of contraceptives, though some reported side effects, including vaginal discharge and irritation.

Discussion

The findings from this study indicate that marital status, rural residence, and parity (having more than two children) are significant predictors of higher contraceptive utilization among women of reproductive age in Jalalabad, Kyrgyzstan. Conversely, younger women (aged 15–25 years) showed lower rates of contraceptive use. These results align with broader national and regional trends in Kyrgyzstan, where the modern contraceptive prevalence rate (mCPR) among married women is estimated at approximately 23–25% [8]. This relatively low mCPR reflects ongoing challenges in family planning, including an increasing unmet need for contraception, which rose from 19.9% in 2006 to 22.5% in 2018 [9].

Comparatively, our observation that having more than two children promotes contraceptive use is consistent with other studies in Kyrgyzstan. For instance, a study found that men with three living children had significantly higher odds of using modern contraceptives (adjusted odds ratio [aOR] 3.534, 95% CI 1.221–10.229), suggesting a similar pattern among couples aiming to limit family size after achieving desired parity [10]. This parity-related factor is also echoed in Ethiopian studies, where the number of living children was associated with modern contraceptive utilization [11].

The association with marital status in our study, where married women had higher utilization (88.7%), corresponds to the focus of national surveys on married women, as unmarried women often face cultural barriers to accessing reproductive health services [12]. Rural residence promoting use in our sample (88.7%) contrasts with some findings; previous research identified area of residence as a factor in unmet need, potentially indicating that rural women in Jalalabad may have better access to certain methods like IUDs, which are prominent in Kyrgyzstan but declining in use nationally [9].

Lower use among younger women aligns with global patterns in low- and middle-income countries, where adolescents and young adults often have limited knowledge, face stigma, or lack youth-friendly services [3]. This is particularly relevant in Kyrgyzstan, where the unmet need is influenced by women's age [9].

While the majority of women in our study had good knowledge of contraceptives, side effects such as vaginal discharge and irritation were reported, highlighting the need for improved counseling [7]. These side effects may contribute to discontinuation, as seen in declining trends of reversible methods like pills, injections, and IUDs nationally [9]. Overall, our results underscore the importance of addressing socioeconomic (e.g., income, employment), geographic (rural-urban disparities), and cultural barriers to improve contraceptive uptake. Interventions should include comprehensive sexual health education for youth, strengthened supply chains for contraceptives, and training for healthcare providers [5].

Conclusion

This study highlights the critical role of modern contraceptives in reproductive health among women in Jalalabad, Kyrgyzstan. Factors such as marital status, rural residence, and parity significantly influence utilization, while younger age is associated with lower use. Despite good knowledge levels, side effects remain a concern. Interventions targeting socioeconomic, geographic, and cultural barriers are essential to improve contraceptive access and effectiveness, ultimately reducing maternal and child morbidity and mortality.

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