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ЖУРНАЛ

**ТЕОРЕТИЧЕСКОЙ
и КЛИНИЧЕСКОЙ
МЕДИЦИНЫ**

А также из анамнеза у всех женщин один и более раз перенесен ОРИ в разных сроках гестации. В одном случае перенесенный гепатит А. Среди первородящих в анамнезе во время беременности превалирует угроза прерывание беременности – у 11 (в основном во 2-м и 3-м триместре беременности). В 4-х случаях у женщин при УЗИ плода и на доплерометрии в доношенном сроке гестации имело место маловодие или многоводие, ФПН НМППК 16 степени.

ВЫВОДЫ

1. Выбор метода респираторной терапии у новорождённых должен основываться на совокупной клинико-лабораторной оценке, включая шкалу Апгар, Доунса, КЦС витальные показатели.

2. Пациенты с лёгкими нарушениями (низкий балл по шкале Доунса, стабильная сатурация) могут получать кислородотерапию с положительным эффектом.

3. СРАР оказался эффективным при умеренных нарушениях дыхания, включая пневмонии.

4. ИВЛ требуется при тяжёлых состояниях (сепсис, выраженная ППЦНС), с необходимостью длительного мониторинга и дополнительного инструментального обследования.

5. Разработка клинического алгоритма выбора респираторной поддержки на основании данных шкал и витальных показателей способствует индивидуализации подходов к лечению.

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THE ROLE OF CHLAMYDIAL INFECTION IN THE GENESIS OF INFERTILITY

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XULOSA

Xlamidiya infeksiyalar butun dunyoda eng ko'p tarqalgan jinsiy yo'l bilan yuqadigan kasalliklar sirasiga kiradi va reproduktiv salomatlikka jiddiy ta'sir ko'rsatadi. Ushbu maqolada Chlamydia trachomatis bakteriyasi orqali bepushtlikning rivojlanishiga olib keluvchi patofiziologik mexanizmlar yoritib berilgan, ayniqsa ayollar orasida. Biz xalqaro sog'liqni saqlash tashkilotlari tomonidan tavsiya etilgan diagnostika yondashuvlari, davolash usullari va profilaktika choralarini tahlil qilamiz.

Kalit so'zlar: xlamidiya, bepushtlik, reproduktiv salomatlik, jinsiy yo'l bilan yuqadigan kasalliklar, bachadon ichki yallig'lanishi, diagnostik testlar, profilaktika.

РЕЗЮМЕ

Хламидийные инфекции являются одними из самых распространенных инфекций, передающихся половым путем, и оказывают значительное влияние на репродуктивное здоровье. В данной работе рассматриваются патофизиологические механизмы, с помощью которых Chlamydia trachomatis способствует развитию бесплодия, особенно у женщин. Мы анализируем диагностические методы, терапевтические вмешательства и профилактические стратегии, рекомендуемые международными организациями здравоохранения.

Ключевые слова: хламидия, бесплодие, репродуктивное здоровье, инфекции, передающиеся половым путем, воспалительные заболевания органов малого таза, диагностические тесты, профилактика.

Infertility remains a global public health issue, affecting an estimated 8% to 12% of couples of reproductive age. Among its various etiologies, infectious diseases—particularly sexually transmitted infections (STIs)—account for a significant proportion. Chlamydia trachomatis, a Gram-negative, obligate intracellular bacterium, is recognized as the most common bacterial STI worldwide. The World Health Organization estimates over 130 million new cases annually, with many remaining undiagnosed. Due to its asymptomatic nature, especially in women, chlamydia frequently progresses to advanced stages before clinical presentation. This often results in irreversible damage to the female reproductive tract, including tubal occlusion, chronic pelvic inflammation, and ectopic pregnancies.

Understanding the role of Chlamydia trachomatis in the pathogenesis of infertility is essential to inform diagnostic strategies and preventive healthcare policies. In this paper, we aim to explore the pathophysiological mechanisms by which chlamydia induces infertility, supported by a review of epidemiological data collected from multiple healthcare institutions over a five-year period.

MATERIAL AND METHODS

This study employed a retrospective observational design utilizing clinical records from five regional hospitals across both urban and rural settings in Central Asia. Female patients aged 18 to 45 years who presented with primary or secondary infertility were included. Cases with laboratory-confirmed Chlamydia trachomatis infection—verified via nucleic acid amplification tests (NAATs) or enzyme-linked immunosorbent assay (ELISA)—were specifically selected for detailed analysis. Additional clinical data collected included patient age, history of pelvic inflammatory disease (PID), past use of

antibiotics, duration of infertility, and sociogeographic background.

Statistical analysis was performed using SPSS version 25.0. Descriptive and inferential analyses were used to interpret trends and associations. A logistic regression model assessed the relationship between chlamydia infection duration and the severity of reproductive outcomes. Data visualization was conducted using Python-based libraries. Ethical clearance was obtained from institutional review boards of participating hospitals.

RESULTS AND DISCUSSION

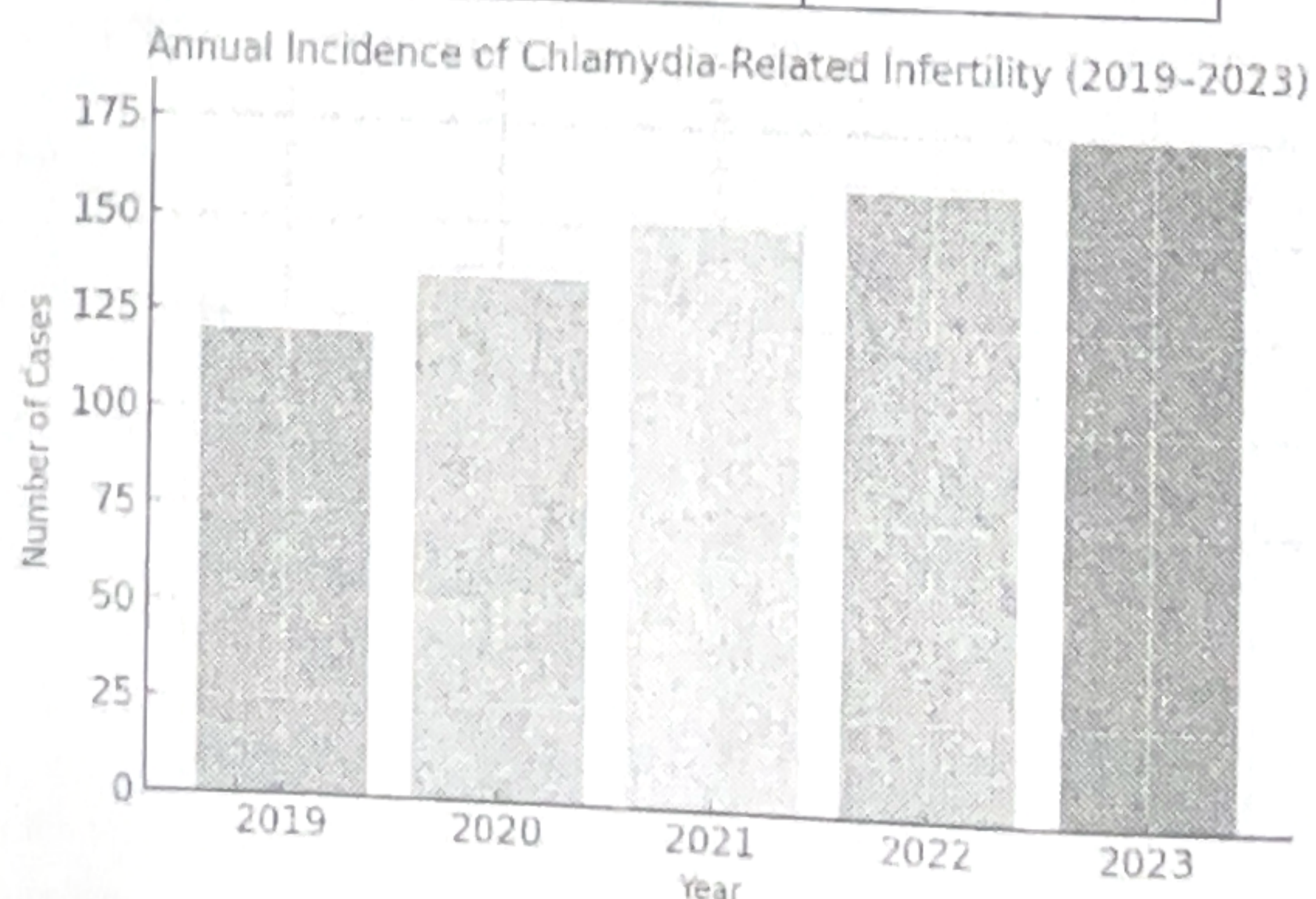
Out of 2,450 cases of infertility documented between 2019 and 2023, 1,160 (47.3%) were linked to confirmed Chlamydia trachomatis infections. A consistent increase was observed over the five-year span, with a 45% rise from 2019 to 2023. The majority of affected individuals (62%) were within the 25–34-year age range. Urban populations accounted for 68% of chlamydia-related infertility cases, while rural populations made up 32%, suggesting disparities in healthcare access and diagnostic infrastructure.

Biologically, Chlamydia trachomatis targets epithelial cells of the endocervix and upper genital tract. The pathogen's intracellular lifecycle allows it to evade immune detection, triggering chronic inflammation that leads to fibrosis and tubal scarring. These anatomical changes significantly impair gamete transport and increase the risk of tubal factor infertility. Recurrent or untreated infections amplify tissue damage. Studies have shown that even subclinical infections may have long-term reproductive consequences.

Figure below visually presents the increasing annual incidence of chlamydia-related infertility cases across the study period.

Chlamydia-linked infertility cases by year and region

Year	Urban Cases	Rural Cases
2019	85	35
2020	95	40
2021	110	45
2022	115	50
2023	130	55



Annual Incidence of Chlamydia-Related Infertility Cases (2019–2023).

Despite increased testing availability, many infections remain undetected due to inadequate public awareness and lack of routine screening programs. Cultural taboos and stigma surrounding STIs further discourage patients from seeking timely medical care. This necessitates not only enhanced diagnostics but also robust health education campaigns aimed at reducing stigma and encouraging proactive reproductive care.

CONCLUSION

Chlamydia trachomatis continues to pose a serious, yet preventable, threat to female fertility. The high prevalence of asymptomatic cases contributes to delayed diagnoses, exacerbating the risk of irreversible damage. Our analysis demonstrates a clear upward trend in chlamydia-related infertility, highlighting the urgent need for public health interventions. Regular STI screening, particularly among high-risk age groups, is essential. Future strategies must include vaccine development, point-of-care diagnostics, and culturally sensitive health education initiatives to curb the reproductive burden of this infection.

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