infections. This pattern strongly suggests carbapenemase production (e.g., KPC, NDM), which can horizontally transfer to other species via mobile genetic elements.

All isolates bore Document No. 4141, suggesting standardized surveillance protocol participation. The temporal distribution from 2023 to 2026 indicates ongoing circulation of resistant organisms, emphasizing need for sustained infection prevention efforts. These findings underscore that susceptibility testing must guide therapy rather than empirical regimens, and infection control measures including contact precautions and environmental cleaning are essential to prevent transmission.

Study limitations include small sample size, lack of clinical outcome data, and absence of molecular resistance mechanism characterization. Future studies should incorporate molecular typing to elucidate resistance genes and transmission dynamics.

Conclusion

Clinical isolates from Gomel Regional Center demonstrate concerning multidrug resistance patterns across three Gram-negative pathogens. The Acinetobacter baumannii isolate showed susceptibility only to polymyxin B and amikacin, with resistance to carbapenems, fluoroquinolones, and aminoglycosides, while the Enterobacter cloacae isolate exhibited the most limited therapeutic options with susceptibility only to polymyxin B and resistance to carbapenems and all tested beta-lactams. In contrast, the Proteus mirabilis isolate retained susceptibility to carbapenems and ceftazidime but demonstrated resistance to multiple other antibiotic classes. These species-specific resistance patterns highlight the critical importance of accurate susceptibility testing for guiding appropriate antibiotic therapy, and the limited therapeutic options underscore the urgent need for robust antimicrobial stewardship programs and continued surveillance of local resistance patterns.

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KNOWLEDGE AND AWARENESS OF LISTERIOSIS IN PREGNANCY: A CROSS-SECTIONAL STUDY

Introduction

Listeriosis is a serious foodborne infection caused by Listeria monocytogenes. In pregnancy, it can lead to miscarriage, stillbirth, preterm labor, and neonatal sepsis, with mortality rates of 20–50% [1]. Pregnant women are 10–100 times more susceptible due to immunological changes

[2]. Despite this, public awareness remains suboptimal. This study evaluates knowledge, awareness, and preventive practices regarding listeriosis among a sample of pregnant women.

Goal

To assess the knowledge and preventive practices related to listeriosis in pregnancy.

Material and methods of research

Design: Cross-sectional study using a structured questionnaire.

Participants: 60 respondents (32 Indian, 28 Arab).

Questionnaire: Nine questions covering transmission, high-risk foods, susceptibility in pregnancy, clinical presentation, complications, treatment, and prevention.

Analysis: Descriptive statistics in Microsoft Excel.

The results of the research and their discussion

The overall correct response rate was 69.9%. Detailed responses are summarized in Table 1 and Figure 1.

Table 1 – Knowledge and Awareness of Listeriosis Among Respondents

Question	Correct answer	Correct response (%)	Incorrect answer	Incorrect response (%)
Transmission route	Contaminated food	78.3	Sexual contact, airborne, mosquito bites	21.7
High-risk food	Unpasteurized soft cheese	88.3	Other foods (boiled eggs, pasteurized milk)	11.7
Increased risk in pregnancy	10–100 times more likely	60.0	Underestimated (2–3x, same risk, less likely)	40.0
Early-onset neonatal form	Early-onset neonatal listeriosis	66.7	Confused with other forms	33.3
Late-onset neonatal form	Meningitis	76.7	Pneumonia, diarrhea	23.3
Mortality rate	20–50%	68.3	<1%, 50–60%, >80%	31.7
Complications in pregnancy	All of the above	75.0	Only stillbirth, miscarriage, preterm labor	25.0
First-line antibiotic	Ampicillin + Gentamicin	63.3	Ceftriaxone, Azithromycin, Doxycycline	36.7
Foods to avoid	Deli meats unless reheated to steaming hot	53.3	Hard cheese, pasteurized milk	46.7

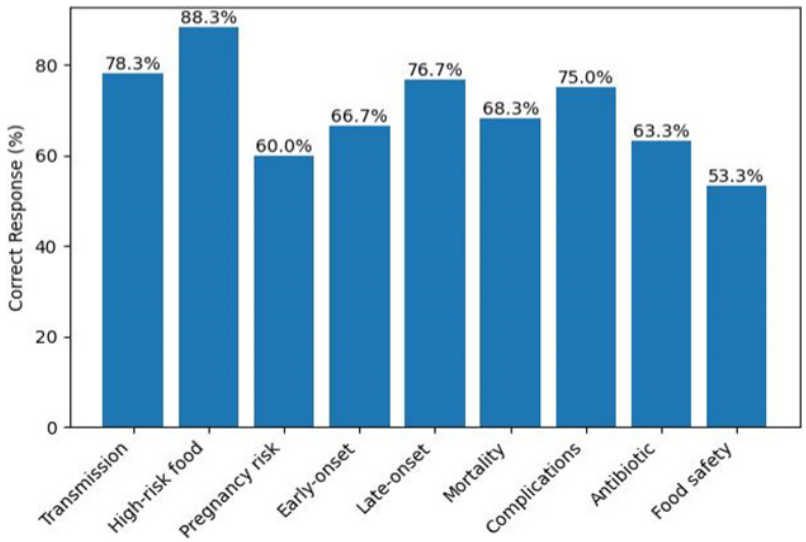

Figure 1 – Correct response

The table highlights key knowledge gaps and misconceptions. While awareness of listeriosis as a foodborne infection is high, critical preventive knowledge is weaker. Only 53.3% correctly identified safe food practices, and many underestimated susceptibility and mortality, which could reduce adherence to preventive behaviors. Antibiotic knowledge is also concerning; over one-third would select an ineffective treatment, risking maternal and neonatal outcomes. Cultural misconceptions, such as mosquito transmission, suggest region-specific education is necessary.

Conclusions

Although general awareness exists, significant gaps remain that threaten maternal and fetal health. Focused education during antenatal care should clearly emphasize: Increased susceptibility in pregnancy (10–100× higher risk), Safe food handling, including reheating deli meats, Correct first-line antibiotic therapy (Ampicillin + Gentamicin).

Targeted, culturally sensitive interventions can improve knowledge, preventive practices, and ultimately clinical outcomes.

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KNOWLEDGE OF EARLY SEPSIS RECOGNITION AMONG MEDICAL STUDENTS

Introduction

Sepsis is a life-threatening condition resulting in organ dysfunction caused by a dysregulated host response to infection and remains a leading cause of mortality worldwide [1].

Early recognition and on time management significantly improve patient outcomes, particularly in surgical and emergency settings [1].

Despite its clinical importance, studies show insufficient awareness and delayed identification of early sepsis signs among medical students.

Given that future physicians play a critical role in early diagnosis, assesing their knowledge is essential [2].

Goal

To examine the level of knowledge of early sepsis recognition among medical students.