

THE IMPACT OF INFORMATION SEEKING BEHAVIOR ON THE PREVENTION AND MANAGEMENT OF SEXUALLY TRANSMITTED DISEASES: A REVIEW OF LITERATURE

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Abstract

The review of information-seeking behaviour in the prevention and management of sexually transmitted diseases (STDs) has highlighted key themes that significantly impact public health strategies. The review has explored various information sources, such as healthcare providers, online platforms, and educational materials, to shape effective STD prevention practices. Understanding how information-seeking influences behavioural changes, like promoting safer sex practices and timely testing, is pivotal in empowering individuals to make informed decisions about STD prevention and seek appropriate care. Addressing knowledge gaps and myths through information-seeking enhances comprehension and decision-making in STD prevention. Overcoming information access barriers ensures accurate dissemination of STD-related information, leading to improved health outcomes. Emphasizing digital health literacy is crucial, especially in navigating online STD resources in today's digital age. Behavioural interventions play a critical role in promoting safer sexual practices and treatment adherence. Clear and culturally sensitive health communication strategies are essential to mitigate STD transmission and promote healthy behaviours. By synthesizing research spanning from 2000 to June 2024, the central role of information-seeking behaviour in STD prevention and management is underscored. Insights gained can enhance public health interventions and guide future research in this crucial field. The themes identified in the analysis stress the multifaceted impact of information seeking on knowledge acquisition, empowerment, decision-making, addressing barriers, digital health literacy, behavioural interventions, and health communication strategies within STD prevention and management.

Keywords: Information-seeking behaviour; Sexually Transmitted Diseases; Prevention and Management

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Introduction

In the global landscape of public health, sexually transmitted diseases (STDs) emerge as a substantial concern affecting populations worldwide (WHO, 2024). Effective implementation of strategies for preventing and managing STDs is paramount in curtailing their transmission and ameliorating their impact on public health outcomes (Gökengin et al., 2023). Central to addressing this multifaceted challenge is the nuanced role of individuals' information-seeking behaviour (ISB), which profoundly influences their knowledge, attitudes, and behaviours concerning STD prevention and management (Johnson et al., 1995).

At the heart of the matter lies the intricate interplay between information acquisition processes and public health outcomes in the context of STDs. Understanding how individuals access, interpret, and apply information is crucial in shaping effective interventions and policies in STD prevention and management (Zizza et al., 2021). This systematic review embarks on a scholarly exploration, aiming to elucidate the nexus between ISB and the prevention and management of STDs.

By delving into the complexities of information-seeking processes within STDs, this review seeks to unveil how knowledge dissemination influences preventive practices and healthcare interventions. Through a rigorous analysis of existing literature and empirical evidence, we aspire to contribute to a refined understanding of how information behaviours drive advancements in STD prevention, early detection, and treatment modalities (Workowski et al., 2021). In doing so, we endeavour to provide valuable insights that can inform evidence-based public health strategies and pave the way for enhanced STD prevention and management practices in the future.

In the context of sexually transmitted diseases (STDs), the way individuals seek information can significantly affect their understanding and subsequent actions regarding prevention and management. For instance, consider a scenario where a young adult uses online resources to learn about safe sex practices and the importance of regular STD testing. This proactive information-seeking behaviour can increase awareness and a higher likelihood of adopting preventive measures.

Conversely, if misinformation or stigma surrounding STDs hinders information seeking, individuals may not seek timely medical advice or preventive services. For example, an individual who encounters biased information online may delay seeking testing or treatment, potentially leading to spreading infections.

Understanding these dynamics is crucial in developing targeted interventions. By analyzing how information sources, such as healthcare providers, online platforms, or educational materials, influence behaviour, healthcare professionals can tailor communication strategies to promote accurate information dissemination and empower individuals to make informed decisions regarding STD prevention and management. Additionally, exploring the role of information-seeking behaviour in facilitating early detection and treatment can help identify the gaps in current practices and guide the development of more effective public health initiatives.

The problem of the study

Some potential challenges that may arise when conducting a review on the prevention and management of STDs through ISB include publication bias, where studies with positive outcomes are more likely to be published, creating an incomplete picture of research findings. The heterogeneity of studies, stemming from design, population, and methodologies variations, can complicate data synthesis and hinder definitive conclusions. Moreover, discrepancies in the quality of included studies may affect the

overall reliability and validity of the review results. Incomplete reporting of methods, results, or statistical analyses in some studies could impede a thorough evaluation of the evidence. Additionally, time and resource constraints present practical challenges in terms of the extensive time, resources, and expertise needed for a comprehensive systematic review. Language and access limitations, such as restricting the review to certain languages or databases, may introduce biases and exclude pertinent research perspectives.

The significance of reviewing STD prevention and management through ISB lies in understanding how different information sources influence behaviours, facilitating behavioural changes, identifying knowledge gaps, addressing barriers to information access, enhancing early detection and treatment, exploring cultural and societal influences, evaluating technological advancements, and identifying future research directions.

The literature provided emphasizes how seeking information about STDs can help prevent and manage these infections effectively. People who actively look for information about safe sex practices and testing online are more likely to adopt healthier behaviours and protect themselves from STDs. Overcoming misinformation and stigma is crucial to encourage timely testing and treatment. Healthcare providers can use various channels to share accurate information, enabling individuals to make informed choices about their sexual health. Recognizing the role of ISB in early detection and treatment underscores the importance of acting promptly to manage STDs. Identifying gaps in current practices can lead to better public health strategies to reduce the impact of STDs on individuals and communities. By involving communities and encouraging shared responsibility for sexual health, we can enhance prevention and management efforts related to STDs (Agimas et al., 2024; Denison et al., 2017; Ebong & Makinde, 2021; Erku et al., 2023; Garcia-Cosavalente et al., 2010; Gökengin et al., 2023; Hutton-Nyameaye et al., 2024; Jayasundara, 2021; Jia et al., 2022; Li & Tang, 2023; Meyer-Weitz et al., 2000; Moreira et al., 2023; Okonofua et al., 2003; Shimie et al., 2022; Threats et al., 2021; UNAIDS, 2019; Workowski et al., 2021; Zizza et al., 2021). Based on the published literature, critical points on preventing and managing STDs through ISB are drawn in Figure 1. These points cover aspects such as behavioural impact, awareness and education, barriers to information, tailored interventions, early detection and treatment, and community engagement, all crucial in effectively addressing STDs.

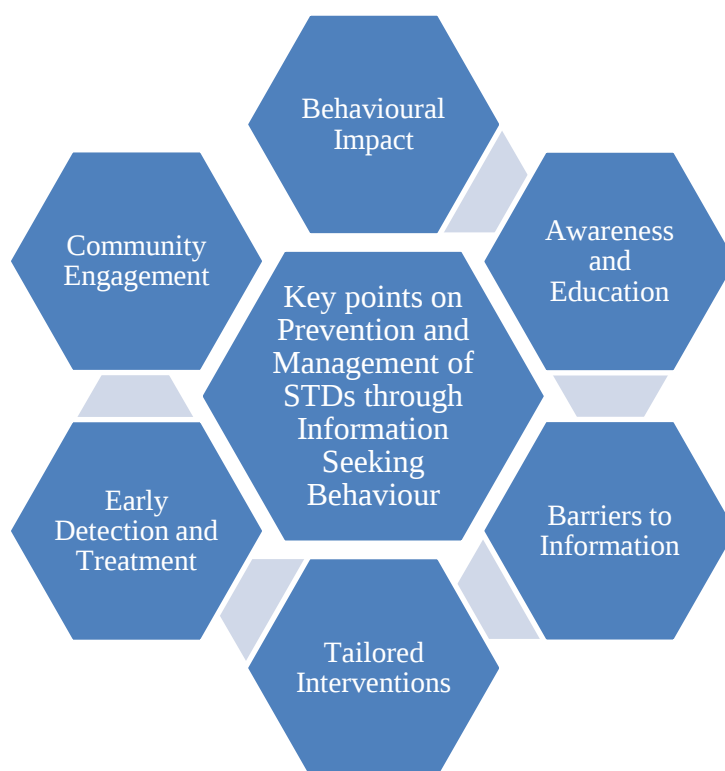


Figure 1: Key Points on Prevention and Management of STDs through Information Seeking Behavior

Source: Compiled by Authors based on the published literature

Proactive information seeking, such as learning about safe sex practices and regular testing through online resources, can increase awareness and promote preventive measures among individuals, fostering a culture of health-conscious behaviours (Moreira et al., 2023; Shimie et al., 2022; Jayasundara, 2021). Misinformation and stigma can hinder information seeking, leading to delays in seeking testing or treatment. Addressing these barriers is vital to ensure timely interventions and prevent the spread of infections (Denison et al., 2017). Understanding how different information sources influence behaviour allows for developing tailored interventions. Healthcare professionals can use varied platforms to disseminate accurate information, empowering individuals to make informed decisions about STD prevention and management (UNAIDS, 2019). Exploring the role of information-seeking behaviour in early detection and treatment highlights the importance of timely interventions in managing STDs. Identifying gaps in current practices can lead to developing more effective public health initiatives to curb the burden of STDs on individuals and communities (Threats et al., 2021). By involving communities and promoting collective responsibility for sexual health, better information sharing and support mechanisms can be established, enhancing overall prevention and management efforts related to STDs (Erku et al., 2023).

Objectives

1. To examine the relationship between information-seeking behaviour and STD prevention practices.
2. To assess the influence of information sources on individuals' knowledge about STDs.
3. To investigate the role of information-seeking behaviour in promoting early detection and treatment of STDs.
4. To identify gaps in current research and potential areas for future study in the field of STD prevention and management.

Methodology

Research protocol

A research protocol is vital for reviews because it helps researchers plan thoroughly, foresee possible issues, prevent repeating work, and improve teamwork (Tranfield et al., 2003; Moher et al., 2015). In conducting this review, the preferred reporting items for systematic reviews (PRISMA) guidelines adhered to ensure methodological rigour, aiding systematic reviewers in transparently reporting the review process (Moher et al., 2009). In line with the study's objectives, inclusion and exclusion criteria were established to guide the subsequent search process.

Eligibility criteria

For the review on the impact of information-seeking behaviour on the prevention and management of sexually transmitted diseases' the studies to be included must be peer-reviewed, written in English, and have objectives related to STD prevention and management. Studies solely focusing on technology use, third-party information seeking, evaluation of information quality, online treatment methods, and testing acceptability of online platforms for STD information were excluded. Articles that did not mention the Internet as a source were excluded to ensure relevance to current STD information-seeking behaviours without setting a specific time limitation post-2000 for study inclusion.

Searching Strategy and Databases

A skilled health sciences librarian developed a comprehensive search strategy to identify relevant publications for the systematic review of the impact of ISB on the prevention and management of sexually transmitted diseases. Four key electronic databases - PubMed, Scopus, ScienceDirect, and HINARI were searched for studies published from the inception of their databases up to June 30, 2024. The search terms included a mix of MeSH terms and the specific approach of "Information Seeking Behavior", AND "Prevention and Management" AND "Sexually Transmitted Diseases" entered into the search bar (See Annex A). This method was intended to retrieve articles, books, and scholarly literature addressing the relationship between ISB, prevention and management, and sexually transmitted diseases. For the review that explored the Impact of ISB on the Prevention and Management of Sexually Transmitted Diseases, stringent eligibility criteria guided the selection of relevant studies. Included studies were required to be peer-reviewed, written in English, and have explicit objectives addressing STD prevention and management. Studies focusing solely on technology use, third-party information seeking, information quality evaluation, online treatment methods, and the acceptability of online platforms for STD information were excluded. The study selection process involved meticulous screening of titles, abstracts, and full texts against predefined inclusion and exclusion criteria. Two reviewers independently assessed the studies, resolving any discrepancies through discussion to ensure consensus. The selection process maintained a high level of agreement to uphold the rigour and quality of the systematic review's findings. All records identified through the search strategy were imported by Mendeley Reference Management software, and duplicates were removed.

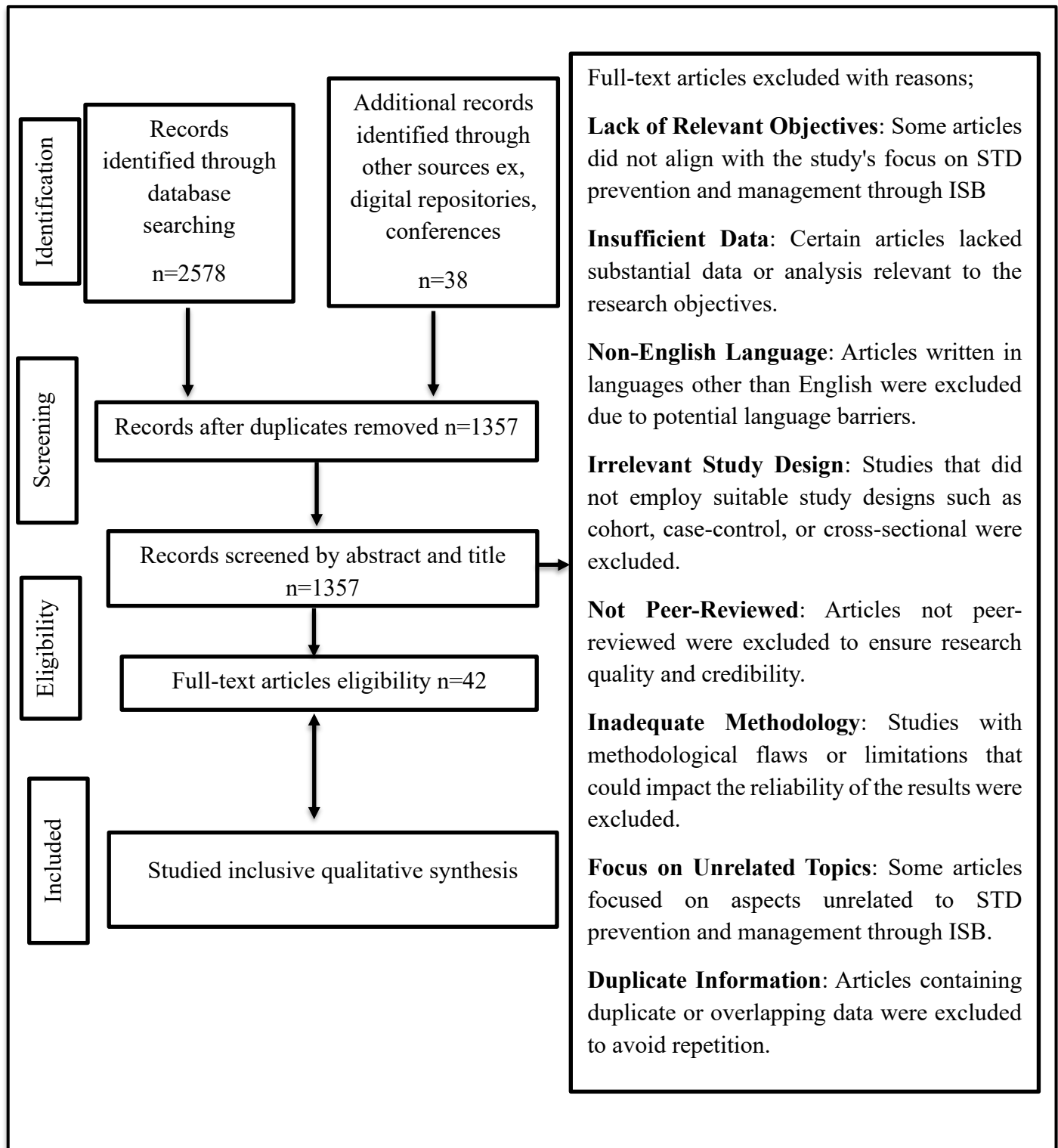


Figure 2. Process of identifying articles for review
Data Synthesis and Statistical Analysis:

Upon completing the review on the impact of ISB on the prevention and management of STDs, the gathered data underwent a thorough synthesis and statistical analysis. Relevant findings from the selected studies were synthesized to draw meaningful conclusions regarding the relationship between information-seeking behaviour, STD prevention, and management. Due to the constraints in the availability of text mining software such as NVivo and MATLAB, manual coding was performed on the extracted publications. Following the coding, the codes were classified into themes. The thematic analysis was carried out along with the author, publisher, and the article's publication date. The data synthesis process involved organizing, summarizing, and integrating critical insights from the included studies to identify patterns, discrepancies, and emerging themes. Throughout the data synthesis and statistical analysis, careful attention was paid to ensuring the validity and reliability of the results obtained, providing a comprehensive understanding of the role of ISB in STD prevention and management.

Results:

A total of 2578 records were obtained from the databases PubMed, Scopus, ScienceDirect, and HINARI. After deduplication, 1357 unique records were left for screening. Subsequently, 83 publications underwent a full-text review. After careful evaluation, 42 studies fulfilled the inclusion criteria and were incorporated into the review, which also underwent qualitative synthesis (Figure 3).

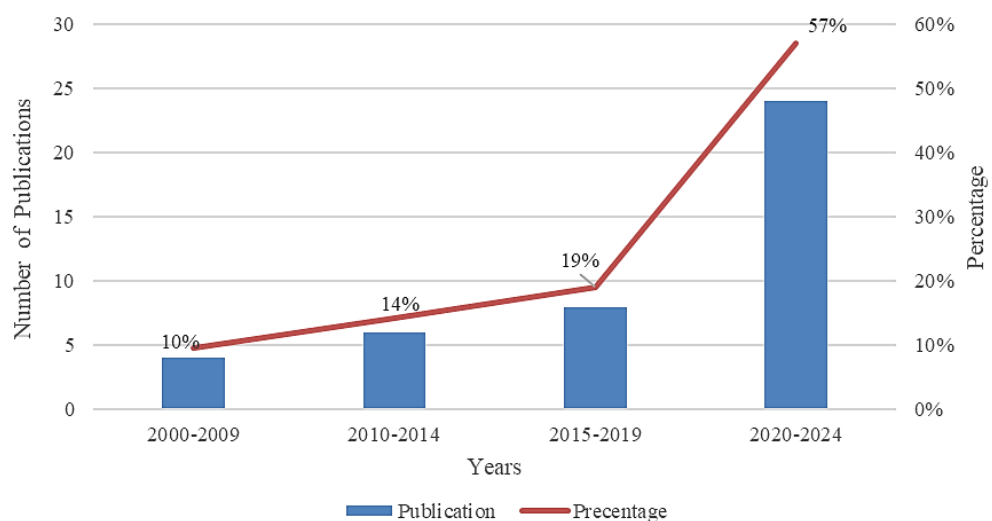


Figure 3: Yearly Publication Distribution

Table 1: Comprehensive Review of Published Literature on the Role of Information-Seeking Behavior in STD Prevention and Management by Theme

Themes	Codes	Sources
Effectiveness of Information Sources	Focus on comparing different sources, such as healthcare providers, online resources, educational materials, and peer networks. Analyze which sources were most effective in influencing STD prevention and management practices.	Agimas et al., 2024; Ashaolu et al., 2024; Denison et al., 2017; Ebong & Makinde, 2021; Erku et al., 2023; Garcia-Cosavalente et al., 2010; Gökengin et al., 2023; Hutton-Nyameaye et al., 2024; Jayasundara, 2021; Jia et al., 2022; Johnson et al., 1995; Li & Tang, 2023; Meyer-Weitz et al., 2000; Moreira et al., 2023; Nzoputam et al., 2022; Okonofua et al., 2003; Adekeye (2022) Ayobami Adekeye et al., 2022; Shewarega et al., 2022; Shimie et al., 2022; Threats et al., 2021; UNAIDS, 2019; Workowski et al., 2021; Xu et al., 2017; Zizza et al., 2021
Behavioural Changes	Explore how seeking information about STDs influences individuals' behaviours, such as safer sex practices, regular testing, and seeking treatment. Look into studies that show a clear link between information-seeking behaviour and behavioural changes.	Agimas et al., 2024; Denison et al., 2017; Ebong & Makinde, 2021; Erku et al., 2023; Garcia-Cosavalente et al., 2010; Gökengin et al., 2023; Jayasundara, 2021; Jia et al., 2022; Li & Tang, 2023; Meyer-Weitz et al., 2000; Moreira et al., 2023; Nwatu et al., 2017; Okonofua et al., 2003; Shimie et al., 2022; Threats et al., 2021; UNAIDS, 2019; Xu et al., 2017; Zizza et al., 2021
Knowledge Gaps and Misconceptions:	Investigate common misconceptions and gaps in knowledge related to STDs. Assessed how seeking information can help correct these misconceptions and fill the knowledge gaps.	Amu & Adegun, 2015; Ebong & Makinde, 2021; Jayasundara, 2021; Jia et al., 2022; Nwatu et al., 2017; Okonofua et al., 2003; Shimie et al., 2022; UNAIDS, 2019; Zizza et al., 2021

Barriers to Information Access:	Identify barriers individuals face in accessing accurate information about STDs. Discussed strategies or interventions to help overcome these barriers to improve information dissemination.	Agimas et al., 2024; Ashaolu et al., 2024; Denison et al., 2017; Erku et al., 2023; Garcia-Cosavalente et al., 2010; Gökengin et al., 2023; Hutton-Nyameaye et al., 2024; Jayasundara, 2021; Li & Tang, 2023; Meyer-Weitz et al., 2000; Moreira et al., 2023; Nzoputam et al., 2022; Adekeye (2022) Ayobami Adekeye et al., 2022; Shewarega et al., 2022; Threats et al., 2021; Zizza et al., 2021
Impact on Early Detection and Treatment:	Examine the role of information-seeking behaviour in promoting early detection, diagnosis, and treatment of STDs. Highlight studies demonstrating how timely information access can lead to better health outcomes.	Agimas et al., 2024; Amu & Adegun, 2015; Ashaolu et al., 2024; Ayele et al., 2020; Denison et al., 2017; Ebong & Makinde, 2021; Erku et al., 2023; Garcia-Cosavalente et al., 2010; Gökengin et al., 2023; Hutton-Nyameaye et al., 2024; Jayasundara, 2021; Jia et al., 2022; Johnson et al., 1995; Juyani et al., 2022; Koschollek et al., 2020; Li & Tang, 2023; Mankelkl et al., 2024; Meyer-Weitz et al., 2000; Moreira et al., 2023; Nwatu et al., 2017; Nzoputam et al., 2022; Okonofua et al., 2003; Adekeye (2022) Ayobami Adekeye et al., 2022; Parve et al., 2020, 2023; Semwogerere et al., 2021; Shewarega et al., 2022; Shimie et al., 2022; Threats et al., 2021; UNAIDS, 2019; Workowski et al., 2021; Xu et al., 2017; Zizza et al., 2021
Cultural and Societal Influences:	Consider how cultural beliefs, social norms, and stigma impact information-seeking behaviours related to STDs and discuss how interventions can be tailored to address cultural and societal factors effectively.	Adebayo et al., 2020; Agimas et al., 2024; Amu & Adegun, 2015; Ashaolu et al., 2024; Ayele et al., 2020; Calou et al., 2014; Denison et al., 2017; Ebong & Makinde, 2021; Erku et al., 2023; Garcia-Cosavalente et al., 2010; Gökengin et al., 2023; Handebo, 2020; Henderson et al., 2020; Hutton-Nyameaye et al., 2024; Islam et al., 2014; Jayasundara, 2021; Jia et al., 2022; Johnson et al., 1995; Juyani et al., 2022; Koschollek et al., 2020; Li & Tang, 2023; Mankelkl et al., 2024; Meyer-Weitz et al., 2000; Moreira et al., 2023; Nwatu et al., 2017; Nzoputam et al., 2022; Okonofua et al., 2003; Adekeye (2022) Ayobami Adekeye et al., 2022; Ong et al., 2019; Parve et al., 2020, 2023; Semwogerere et al., 2021; Shewarega et al., 2022; Shimie et al., 2022; Threats et al., 2021; UNAIDS, 2019; Workowski et al., 2021; Xu et al., 2017; Zizza et al., 2021)
Technological Advancements:	Explore the influence of technology like telemedicine, apps, and social media in	(Adebayo et al., 2020; Agimas et al., 2024; Amu & Adegun, 2015; Ashaolu et al., 2024; Ayele et al., 2020; Calou et al., 2014; Denison et al., 2017; Ebong & Makinde, 2021;

	providing information about STD prevention and management. Evaluated the effectiveness of these tools in reaching diverse populations.	Erku et al., 2023; Garcia-Cosavalente et al., 2010; Gökengin et al., 2023; Handebo, 2020; Henderson et al., 2020; Hutton-Nyameaye et al., 2024; Islam et al., 2014; Jayasundara, 2021; Jia et al., 2022; Johnson et al., 1995; Jones et al., 2014, 2019; Juyani et al., 2022; Koschollek et al., 2020; Li & Tang, 2023; Mankelkl et al., 2024; Meyer-Weitz et al., 2000; Moreira et al., 2023; Nwatu et al., 2017; Nzoputam et al., 2022; Okonofua et al., 2003; Adekeye (2022) Ayobami Adekeye et al., 2022; Ong et al., 2019; Parve et al., 2020, 2023; Semwogerere et al., 2021; Shewarega et al., 2022; Shimie et al., 2022; Threats et al., 2021; UNAIDS, 2019; Workowski et al., 2021; Xu et al., 2017; Zizza et al., 2021
Future Directions and Research Gaps:	Reflect on the current research landscape and identify areas that require further investigation. Propose future research directions to enhance understanding of the role of information seeking in STD prevention and management.	Adebayo et al., 2020; Agimas et al., 2024; Alam et al., 2010; Amu & Adegun, 2015; Ashaolu et al., 2024; Ayele et al., 2020; Calou et al., 2014; Denison et al., 2017; Ebong & Makinde, 2021; Erku et al., 2023; Fonck et al., 2001, 2002; Garcia-Cosavalente et al., 2010; Gökengin et al., 2023; Handebo, 2020; Henderson et al., 2020; Hutton-Nyameaye et al., 2024; Islam et al., 2014; Jayasundara, 2021; Jia et al., 2022; Johnson et al., 1995; Jones et al., 2014, 2019; Juyani et al., 2022; Koschollek et al., 2020; Li & Tang, 2023; Mankelkl et al., 2024; Meyer-Weitz et al., 2000; Moreira et al., 2023; Nwatu et al., 2017; Nzoputam et al., 2022; Okonofua et al., 2003; Adekeye (2022) Ayobami Adekeye et al., 2022; Ong et al., 2019; Parve et al., 2020, 2023; Semwogerere et al., 2021; Shewarega et al., 2022; Shimie et al., 2022; Threats et al., 2021; UNAIDS, 2019; Wen et al., 2009; Workowski et al., 2021; Xu et al., 2017; Zizza et al., 2021

When examining the critical role of information-seeking behaviour in preventing and managing STDs, it was essential to delve into various vital themes. Firstly, the literature identified that studying the effectiveness of information sources, such as healthcare providers, online platforms, and educational materials, provided insights into which sources were most impactful in shaping STD prevention practices. Additionally, exploring how information-seeking influenced behavioural changes, such as promoting safer sex practices and timely testing, was crucial for understanding the practical implications of seeking information. Addressing knowledge gaps and misconceptions through information-seeking helped dispel myths and enhance STDs. Overcoming barriers to accessing information was also vital to ensure equitable dissemination of accurate STD-related information. Moreover, investigating how information-seeking contributed to early detection and treatment highlighted the significance of timely access to information in improving health outcomes. Understanding cultural and societal influences on information-seeking behaviour sheds light on tailoring interventions to specific populations. Technological advancements played a key role in providing accessible information, and exploring their impact on STD prevention was essential. Finally, identifying future research directions paved the way for further enhancing the role of information-seeking in STD prevention and management. Through a comprehensive review encompassing these themes and relevant studies, a deeper understanding of the criticality of information-seeking behaviour in STD prevention and management emerged, offering valuable insights for public health interventions and research endeavours in this field.

Thematic analysis output from published literature (2000 - 2024):

A thematic analysis of published literature from 2000 to June 2024 shows several key themes and patterns in Table 2. According to the table, the number of publications on Knowledge Acquisition [7 (16.7%)] and the theme of Digital Health Literacy [8 ((19.0%))] were the lowest during the period. The publications on Behavioral Interventions and Health Communication Strategies represent a more or less equal number of publications during the period, accounting for 27 (64.3%) and 28 (66.7%), respectively. However, the number of articles on Empowerment and Decision-Making was 16 (38.2%), and Barriers to Information Access was 12 (28.6%), indicating growing concern about the authors' interest.

Table 2. Themes derived from the analysis of published literature (2000 – 2024 June)

Theme	Sub Themes (Codes)	Author and Year	No. publication (%)
Knowledge Acquisition	• Enhancing knowledge acquisition • STD prevention strategies • Symptoms and treatment • Different cultural viewpoints on knowledge acquisition • Varied STD prevention strategies across regions • Diverse beliefs regarding symptoms and treatment	(Calou et al., 2014; Gökengin et al., 2023; Hutton-Nyameaye et al., 2024; Koschollek et al., 2020; Nzoputam et al., 2022; Okonofua et al., 2003; Zizza et al., 2021)	7 (16.7)
Empowerment and Decision-Making	• Decisions about STD prevention measures, testing, and seeking appropriate medical care • Evolution of knowledge acquisition approaches over time • Changes in STD prevention strategies from 2000 to June 2024 • Shifts in the understanding of symptoms and treatment across different years	(Agimas et al., 2024; Calou et al., 2014; Denison et al., 2017; Erku et al., 2023; Garcia-Cosavalente et al., 2010; Gökengin et al., 2023; Hutton-Nyameaye et al., 2024; Jayasundara, 2021; Johnson et al., 1995; Koschollek et al., 2020; Li & Tang, 2023; Nzoputam et al., 2022; Okonofua et al., 2003; Shewarega et al., 2022; Workowski et al., 2021; Zizza et al., 2021)	16 (38.2)
Barriers to Information Access	• Access to reliable information, stigmatization, and cultural beliefs • Affecting information-seeking behaviour and its impact on STD prevention and management	(Alam et al., 2010; Ebong & Makinde, 2021; Fonck et al., 2001, 2002; Jayasundara, 2021; Jia et al., 2022; Jones et al., 2014, 2019; Okonofua et al., 2003; Wen et al., 2009; Xu et al., 2017).	12 (28.6)

Digital Health Literacy	• Digital information sources • Importance of digital health literacy • Navigating online resources for STD-related information	(Calou et al., 2014; Fonck et al., 2001, 2002; Handebo, 2020; Islam et al., 2014; Jones et al., 2019; Ong et al., 2019; UNAIDS, 2019)	8 (19.0)
Behavioural Interventions	• Effectiveness of targeted information interventions • Promoting safer sexual practices • Early STD detection and adherence to treatment regimens	(Agimas et al., 2024; Alam et al., 2010; Calou et al., 2014; Denison et al., 2017; Ebong & Makinde, 2021; Erku et al., 2023; Fonck et al., 2001, 2002; Garcia-Cosavalente et al., 2010; Gökengin et al., 2023; Handebo, 2020; Hutton-Nyameaye et al., 2024; Islam et al., 2014; Jayasundara, 2021; Jia et al., 2022; Johnson et al., 1995; Jones et al., 2014, 2019; Li & Tang, 2023; Nzoputam et al., 2022; Okonofua et al., 2003; Ong et al., 2019; Shewarega et al., 2022; UNAIDS, 2019; Wen et al., 2009; Workowski et al., 2021; Xu et al., 2017; Zizza et al., 2021)	27 (64.3)
Health Communication Strategies	• Effectiveness of targeted information interventions • Promoting safer sexual practices • Early STD detection and adherence to treatment regimens • Effective health communication strategies emerge as a critical theme • Emphasizing the need for clear, culturally sensitive messaging to promote healthy behaviours and reduce STD transmission	(Agimas et al., 2024; Alam et al., 2010; Calou et al., 2014; Denison et al., 2017; Ebong & Makinde, 2021; Erku et al., 2023; Fonck et al., 2001, 2002; Garcia-Cosavalente et al., 2010; Gökengin et al., 2023; Handebo, 2020; Hutton-Nyameaye et al., 2024; Islam et al., 2014; Jayasundara, 2021; Jia et al., 2022; Johnson et al., 1995; Jones et al., 2014, 2019; Li & Tang, 2023; Nzoputam et al., 2022; Okonofua et al., 2003; Ong et al., 2019; Shewarega et al., 2022; UNAIDS, 2019; Wen et al., 2009; Workowski et al., 2021; Xu et al., 2017; Zizza et al., 2021)	28 (66.7)

In light of the comprehensive analysis of literature regarding information-seeking behaviour in the prevention and management of sexually transmitted diseases, it was evident that information-seeking plays a pivotal role in enhancing knowledge acquisition, empowering decision-making processes, addressing barriers to information access, improving digital health literacy, implementing effective behavioural interventions, and employing strategic health communication approaches. This underscores the fundamental importance of active information-seeking behaviour in shaping successful strategies for preventing and managing sexually transmitted diseases.

Discussion

The critical analysis of ISB in the context of preventing and managing sexually transmitted diseases (STDs) has illuminated several key themes that significantly impact public health strategies. By examining the effectiveness of diverse information sources such as healthcare providers, online platforms, and educational materials (Agimas et al., 2024; Alam et al., 2010; Amu & Adegun, 2015; Ashaolu et al., 2024; Garcia-Cosavalente et al., 2010), researchers have gained valuable insights into the most impactful avenues for shaping STD prevention practices.

Moreover, exploring how information-seeking influences behavioural changes, such as promoting safer sex practices and timely testing (Agimas et al., 2024; Alam et al., 2010; Amu & Adegun, 2015; Ashaolu et al., 2024; Ayele et al., 2020; Denison et al., 2017; Ebong & Makinde, 2021; Garcia-Cosavalente et al., 2010) has underscored its crucial role in empowering individuals to make informed decisions about STD prevention measures and seek appropriate medical care. Jayasundara's findings (2022) support this, highlighting the significance of information-seeking in empowering individuals and guiding decision-making processes.

Addressing knowledge gaps and misconceptions through information seeking is pivotal in dispelling myths and enhancing understanding of STDs, as demonstrated in the works of (Calou et al., 2014) (2014) and (Meyer-Weitz et al., 2000). Overcoming barriers to accessing information is crucial for ensuring accurate dissemination of STD-related information (Xu et al., 2017), thereby improving health outcomes through early detection and treatment.

The literature also emphasizes the importance of digital health literacy in navigating online resources for STD-related information (Calou et al., 2014; Erku et al., 2023; Garcia-Cosavalente et al., 2010), which has become increasingly relevant in today's digital age. Behavioural interventions, as highlighted by Adebayo et al. (2020) and Agimas et al. (2024), play a vital role in promoting safer sexual practices, early STD detection, and treatment adherence.

Finally, effective health communication strategies (Meyer-Weitz et al., 2000; Shimie et al., 2022) have emerged as a critical theme, emphasizing the need for clear, culturally sensitive messaging to reduce STD transmission and promote healthy behaviours. In conclusion, the synthesis of research from Agimas et al. 2024; Hutton-Nyameaye et al., 2024; Jayasundara, 2021; Nwatu et al., 2017; Nzoputam et al., 2022; Zizza et al., 2021, highlights the central role of ISB in STD prevention and management, offering valuable insights for public health interventions and guiding future research endeavours.

Conclusion

In exploring the critical role of ISB in preventing and managing STDs, various key themes have surfaced from the extensive literature review. Firstly, by examining the effectiveness of information sources like healthcare providers, online platforms, and educational materials, valuable insights have been obtained on how these sources influence STD prevention practices significantly. Furthermore, delving into how information seeking impacts behavioural changes, such as encouraging safer sex

practices and timely testing, has proven crucial in understanding the practical implications of seeking information in the realm of STD prevention and management. Addressing knowledge gaps and misconceptions through information seeking has aided in dispelling myths and enhancing comprehension about STDs, contributing to more informed decision-making by individuals. Overcoming barriers to accessing information has been identified as vital to ensuring the equitable dissemination of accurate information related to STDs, thus paving the way for improved health outcomes through timely access to crucial information. Understanding how cultural and societal factors influence information-seeking behaviour sheds light on the necessity of tailoring interventions to cater to specific populations effectively. Moreover, technological advancements have played a pivotal role in providing accessible information, particularly emphasizing the impact of digital health literacy in navigating online resources for STD-related information. The effectiveness of targeted information interventions in promoting safer sexual practices, early STD detection, and treatment adherence has been highlighted as a key aspect of the successful prevention and management of STDs.

In conclusion, the synthesis of literature spanning from 2000 to June 2024 underscores the criticality of ISB in STD prevention and management, offering valuable insights that can enhance public health interventions and guide future research in this crucial field. The themes identified in the thematic analysis emphasize the multifaceted impact of information seeking on knowledge acquisition, empowerment, decision-making, addressing barriers, digital health literacy, behavioural interventions, and health communication strategies in the context of STD prevention and management.

References

- Adebayo, O. W., Anderson, J. C., & Wardecker, B. M. (2020). College students' preferences for information on self-initiated sexually transmitted infection testing. *Health Education Journal*, 80(2), 160–172. <https://doi.org/10.1177/0017896920959690>
- Agimas, M. C., Solomon, M., Shewaye, D. A., Abebaw Angaw, D., & Derseh, N. M. (2024). Prevalence of delayed treatment for sexually transmitted infections and its determinants in sub-Saharan Africa. A systematic review and meta-analysis. *PLOS ONE*, 19(3), e0299629. <https://doi.org/10.1371/journal.pone.0299629>
- Alam, N., Chamot, E., Vermund, S. H., Streatfield, K., & Kristensen, S. (2010). Partner notification for sexually transmitted infections in developing countries: a systematic review. *BMC Public Health*, 10, 19. <https://doi.org/10.1186/1471-2458-10-19>
- Amu, E. O., & Adegun, P. T. (2015). Awareness and Knowledge of Sexually Transmitted Infections among Secondary School Adolescents in Ado Ekiti, South Western Nigeria. *Journal of Sexually Transmitted Diseases*, 2015. <https://doi.org/10.1155/2015/260126>
- Ashaolu, J., Ashaolu, K., & Ogunbola, S. (2024). *Knowledge, Attitudes, And Practices Towards Sexually Transmitted Infections Among GOPD Patients in Ekiti State, Nigeria*. *Research Square*; 2024. DOI: 10.21203/rs.3.rs-4496587/v1.
- Ayele, Y. T., Asemahagn, M. A., & Awoke, T. (2020). Prevention of Sexually Transmitted Infections and Associated Factors Among Night School Students in Bahir Dar City, Ethiopia. *Infectious Diseases*, 13, 1178633720927374. <https://doi.org/10.1177/1178633720927374>
- Calou, C. G. P., Wasidi, C. F., Figueiredo, M. de F. E. R. de, Nicolau, A. I. O., Pinheiro, A. K. B., Castro, R. C. M. B., & Aquino, P. de S. (2014). Knowledge of Female Prisoners in a City of Ceara, Brazil, about Sexually Transmitted Diseases. *Open Journal of Nursing*, 04(09), 630–636. <https://doi.org/10.4236/ojn.2014.49066>
- Denison, H. J., Bromhead, C., Grainger, R., Dennison, E. M., & Jutel, A. (2017). Barriers to sexually transmitted infection testing in New Zealand: a qualitative study. *Australian and New Zealand Journal of Public Health*, 41(4), 432–437. <https://doi.org/10.1111/1753-6405.12680>
- Ebong, U. S., & Makinde, O. A. (2021). Determinants of treatment-seeking behaviour for sexually transmitted infections in Nigeria. *African Journal of Reproductive Health*, 25(3), 105–112. <https://doi.org/10.29063/ajrh2021/v25i3.12>
- Erku, D., Khatri, R., Endalamaw, A., Woticha, E., Nigatu, F., Helelo, A., & Assefa, Y. (2023).

- Community engagement initiatives in primary Health care to achieve universal health coverage: A realist synthesis of a scoping review. *PloS One*, 18. <https://doi.org/10.1371/journal.pone.0285222>
- Fonck, K., Mwai, C., Ndinya-Achola, J., Bwayo, J. O. B., & Temmerman, M. (2002). Health-Seeking and Sexual Behaviours Among Primary Healthcare Patients in Nairobi, Kenya. *Sexually Transmitted Diseases*, 29(2), 106–111. <https://pubmed.ncbi.nlm.nih.gov/11818896/>
- Fonck, K., Mwai, C., Rakwar, J., Kirui, P., Ndinya-Achola, J. O., & Temmerman, M. (2001). Healthcare-seeking behaviour and sexual behaviour of patients with sexually transmitted diseases in Nairobi, Kenya. *Sexually Transmitted Diseases*, 28(7), 367–371. <https://doi.org/10.1097/00007435-200107000-00002>
- Garcia-Cosavalente, H. P., Wood, L. E., & Obregon, R. (2010). Health information seeking behaviour among rural and urban Peruvians: variations in information resource access and preferences. *Information Development*, 26(1), 37–45. <https://doi.org/10.1177/0266666909358640>
- Gökengin, D., Noori, T., Alemany, A., Bienkowski, C., Liegon, G., İnkaya, A. Ç., Carrillo, J., Sary, G., Knapp, K., Mitja, O., & Molina, J.-M. (2023). Prevention strategies for sexually transmitted infections, HIV, and viral hepatitis in Europe. *The Lancet Regional Health. Europe*, 34, 100738. <https://doi.org/10.1016/j.lanepe.2023.100738>
- Handebo, S. (2020). Sexually transmitted infections related care-seeking behaviour and associated factors among reproductive age women in Ethiopia: further analysis of the 2016 demographic and health survey. *BMC Women's Health*, 20(1), 274. <https://doi.org/10.1186/s12905-020-01145-9>
- Henderson, J. T., Senger, C. A., Henninger, M., Bean, S. I., Redmond, N., & O'Connor, E. A. (2020). Behavioural Counseling Interventions to Prevent Sexually Transmitted Infections: Updated Evidence Report and Systematic Review for the US Preventive Services Task Force. *JAMA*, 324(7), 682–699. <https://doi.org/10.1001/jama.2020.10371>
- Hutton-Nyameaye, A. A., Asiamah, M., Asafo-Adjei, K., Benneh, C. K., Kwakye, A. O., Mensah, K. B., Duedu, K. O., & Buabeng, K. O. (2024). Knowledge and prevalence of common sexually transmitted infections among patients seeking care at selected health facilities in Southern Ghana. *PLOS Global Public Health*, 4(7), e0003422. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC11216559/pdf/pgph.0003422.pdf>
- Islam, K. M., High, R., Minhas, V., & Margalit, R. (2014). Sexually Transmitted Infections among African-American Population of the Midwest United States. *Advances in Infectious Diseases*, 04(1), 49–57. <https://doi.org/10.4236/aid.2014.41009>
- Jayasundara, C. C. (2021). Sexual health information seeking behaviour of adolescents and their satisfaction with the information outcome: An application of the theory of motivated information management. *The Journal of Academic Librarianship*, 47(5), 102383. <https://doi.org/10.1016/j.acalib.2021.102383>
- Jia, R. M., Du, J. T., & Zhao, Y. C. (2022). Characteristics of the health information seeking behaviour of LGBTQ+ individuals: a systematic review on information types, information sources and influencing factors. *Journal of Documentation*, 78(2), 361–388. <https://doi.org/10.1108/JD-03-2021-0069>
- Johnson, J., Donohue, W., Atkin, C., & Johnson, S. (1995). A Comprehensive Model of Information Seeking. *Science Communication - SCI COMMUN*, 16, 274–303. <https://doi.org/10.1177/1075547095016003003>
- Jones, K., Eathington, P., Baldwin, K., & Sipsma, H. (2014). The Impact of Health Education Transmitted Via Social Media or Text Messaging on Adolescent and Young Adult Risky Sexual Behaviour. *Sexually Transmitted Diseases*, 41(7), 413–419.
- Jones, K., Williams, J., Sipsma, H., & Patil, C. (2019). Adolescent and emerging adults' evaluation of a Facebook site providing sexual health education. *Public Health Nursing*, 36(1), 11–17. <https://doi.org/https://doi.org/10.1111/phn.12555>
- Juyani, A. K., Zarei, F., Niknami, S., Haydarni, A., & Maasoumi, R. (2022). Educational interventions to improve women's preventive behaviour of sexually transmitted infections (STIs): study protocol for a randomized controlled trial. *Trials*, 23(1), 724. <https://doi.org/10.1186/s13063-022-06663-5>
- Koschollek, C., Kuehne, A., Müllerschön, J., Amoah, S., Batemona-Abeke, H., Dela Bursi, T., Mayamba, P., Thorlie, A., Mputu Tshibadi, C., Wangare Greiner, V., Bremer, V., & Santos-

- Hövenner, C. (2020). Knowledge, information needs and behaviour regarding HIV and sexually transmitted infections among migrants from sub-Saharan Africa living in Germany: Results of a participatory health research survey. *PLOS ONE*, 15(1), e0227178. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6984683/>
- Li, X., & Tang, K. (2023). The Effects of Online Health Information--Seeking Behaviour on Sexually Transmitted Disease in China: Infodemiology Study of the Internet Search Queries. *J Med Internet Res*, 25, e43046. <https://doi.org/10.2196/43046>
- Mankelkl, G., Abdu, S. M., Asefa, E. M., Kassaw, A. B., Abebe, G., Belete, M., Tareke, A. A., Gedefie, A., & Kinfie, B. (2024). Individual and community level factors associated with sexually transmitted infections among men in Tanzania: insights from the Tanzania demographic and health survey 2022. *BMC Infectious Diseases*, 24(1), 580. <https://doi.org/10.1186/s12879-024-09470-2>
- Meyer-Weitz, A., Reddy, P., Van den Borne, H. W., Kok, G., & Pietersen, J. (2000). Health care seeking behaviour of patients with sexually transmitted diseases: determinants of delay behaviour. *Patient Education and Counseling*, 41(3), 263–274. [https://doi.org/https://doi.org/10.1016/S0738-3991\(99\)00103-2](https://doi.org/10.1016/S0738-3991(99)00103-2)
- Moher, D., Liberati, A., Tetzlaff, J., Altman, D.G. and Group, P. (2009). "Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement", *PLoS Medicine*, 6(7). e1000097. DOI: 10.1371/journal.pmed.1000097
- Moher, D., Shamseer, L., Clarke, M., Ghersi, D., Liberati, A., Petticrew, M., Shekelle, P. and Stewart, L.A. (2015). "Preferred reporting items for systematic review and meta-analysis protocols(PRISMA-P) 2015 statement", *Systematic Reviews*, 4(1), 1-9.
- Moreira, M. T., Rocha, E., Lima, A., Pereira, L., Rodrigues, S., & Fernandes, C. S. (2023). Knowledge about Sex Education in Adolescence: A Cross-Sectional Study. *Adolescents* , 3(3), 431–445. <https://doi.org/10.3390/adolescents3030030>
- Nwatu, C., Young, E., Adikaibe, irinus E., Okafor, C., & Onwuekwe, I. (2017). HIV and Sexually Transmitted Infections knowledge and practices: a survey of female secondary school students in Enugu, South East Nigeria. *The Journal of Medical Research*, 3(2), 66–70. <https://doi.org/10.31254/jmr.2017.3208>
- Nzopotam, C., Adam, V. Y., & Nzopotam, O. (2022). Knowledge, Prevalence and Factors Associated with Sexually Transmitted Diseases among Female Students of a Federal University in Southern Nigeria. *Venereology*, 1(1), 81–97. <https://doi.org/10.3390/venereology1010006>
- Okonofua, F. E., Coplan, P., Collins, S., Oronsaye, F., Ogunsakina, D., Ogonor, J. T., Kaufman, J. A., & Heggenhougen, K. (2003). Impact of an intervention to improve treatment-seeking behaviour and prevent sexually transmitted diseases among Nigerian youths. *International Journal of Infectious Diseases*, 7(1), 61–73. [https://doi.org/10.1016/S1201-9712\(03\)90044-0](https://doi.org/10.1016/S1201-9712(03)90044-0)
- Adekeye, O.A., Ayobami, N.L., & Adiel, T. (2022). Knowledge, understanding, and healthcare-seeking behaviour of adolescent schoolgirls on sexually transmitted infections in Jalingo Taraba State. *GSC Biological and Pharmaceutical Sciences*, 20(2), 164–179. <https://doi.org/10.30574/gscbps.2022.20.2.0234>.
- Ong, J. J., Baggaley, R. C., Wi, T. E., Tucker, J. D., Fu, H., Smith, M. K., Rafael, S., Anglade, V., Falconer, J., Ofori-Asenso, R., Terris-Prestholt, F., Hodges-Mameletzis, I., & Mayaud, P. (2019). Global Epidemiologic Characteristics of Sexually Transmitted Infections Among Individuals Using Preexposure Prophylaxis for the Prevention of HIV Infection: A Systematic Review and Meta-analysis. *JAMA Network Open*, 2(12), e1917134. <https://doi.org/10.1001/jamanetworkopen.2019.17134>
- Parve, S., Acharya, S., & Chide, P. (2020). A study of health-seeking behaviour about sexually transmitted infection in women with high-risk behaviour in an urban slum. *International Journal of Research in Medical Sciences*, 8(4), 1532–1536. <https://doi.org/10.18203/2320-6012.ijrms20201355>
- Parve, S., Acharya, S., Rawat, S., & Kulkarni, R. (2023). A study of sexually transmitted infections and reproductive tract infections among the bar girls in Mumbai, India. *Journal of Family Medicine and Primary Care*, 12(1), 10–14. https://doi.org/10.4103/jfmpc.jfmpc_216_21
- Semwogerere, M., Dear, N., Tunnage, J., Reed, D., Kibuuka, H., Kiweewa, F., Iroezindu, M., Bahemana, E., Maswai, J., Owuoth, J., Crowell, T. A., Ake, J. A., Polyak, C. S., & Esber, A.

- (2021). Factors associated with sexually transmitted infections among care-seeking adults in the African Cohort Study. *BMC Public Health*, 21(1), 738. <https://doi.org/10.1186/s12889-021-10762-4>
- Shewarega, E. S., Fentie, E. A., Asmamaw, D. B., Negash, W. D., Fetene, S. M., Teklu, R. E., Aragaw, F. M., Alemu, T. G., Eshetu, H. B., & Belay, D. G. (2022). Sexually transmitted infections related care-seeking behaviour and associated factors among reproductive age women in East Africa: a multilevel analysis of demographic and health surveys. *BMC Public Health*, 22(1), 1714. <https://doi.org/10.1186/s12889-022-14120-w>
- Shimie, A. W., Gashu, K. D., Shiferaw, A. M., & Mengiste, S. A. (2022). Information-seeking behaviour on sexually transmitted infections and its associated factors among university students in Ethiopia: a cross-sectional study. *Reproductive Health*, 19(1), 25. <https://doi.org/10.1186/s12978-022-01340-x>
- Threats, M., Brawner, B. M., Montgomery, T. M., Abrams, J., Jemmott, L. S., Crouch, P.-C., Freeborn, K., Kamitani, E., & Enah, C. (2021). A Review of Recent HIV Prevention Interventions and Future Considerations for Nursing Science. *The Journal of the Association of Nurses in AIDS Care*, 32(3), 373–391. <https://doi.org/10.1097/JNC.0000000000000246>
- UNAIDS. (2019). The effectiveness of behavioural interventions to prevent HIV. A compendium of evidence. Geneva: Global HIV Prevention Coalition; 2017, updated 2019. *Global HIV Prevention Coalition*. https://hivpreventioncoalition.unaids.org/sites/default/files/attachments/The-effectiveness-of-behavioural-interventions-to-prevent-HIV.-A-compendium-of-evidence_final.pdf
- Wen, Y., Guan, J., Wu, Z., Li, L., Rotheram-Borus, M. J., Lin, C., & Detels, R. (2009). Pharmacy workers' sexually transmitted diseases/human immunodeficiency virus knowledge in Fuzhou, China: implications for human immunodeficiency virus testing, treatment, and prevention strategies. *Sexually Transmitted Diseases*, 36(4), 221–226. <https://doi.org/10.1097/OLQ.0b013e3181901ca2>
- Workowski, K. A., Bachmann, L. H., Chan, P. A., Johnston, C. M., Muzny, C. A., Park, I., Reno, H., Zenilman, J. M., & Bolan, G. A. (2021). Sexually Transmitted Infections Treatment Guidelines, 2021. *MMWR. Recommendations and Reports: Morbidity and Mortality Weekly Report. Recommendations and Reports*, 70(4), 1–187. <https://doi.org/10.15585/mmwr.r7004a1>
- Xu, J. J., Yu, Y. Q., Hu, Q. H., Yan, H. J., Wang, Z., Lu, L., Zhuang, M. H., Chen, X., Fu, J. H., Tang, W. M., Geng, W. Q., Jiang, Y. J., & Shang, H. (2017). Treatment-seeking behaviour and barriers to service access for sexually transmitted diseases among men who have sex with men in China: A multicentre cross-sectional survey. *Infectious Diseases of Poverty*, 6(1), 1–10. <https://doi.org/10.1186/s40249-016-0219-5>
- Zizza, A., Guido, M., Recchia, V., Grima, P., Banchelli, F., & Tinelli, A. (2021). Knowledge, Information Needs and Risk Perception about HIV and Sexually Transmitted Diseases after an Education Intervention on Italian High School and University Students. In *International Journal of Environmental Research and Public Health*, 18(1). <https://doi.org/10.3390/ijerph18042069>
- World Health Organization. (2024 August 14), *Sexually transmitted infections (STIs)*, WHO <https://www.who.int/news-room/fact-sheets/detail/sexually-transmitted-infections>

Annexes A

PUBMED Searching STRATEGY:

((Information Seeking Behaviour) AND (Prevention and Management)) AND (Sexually Transmitted Diseases)

("information seeking behaviour"[MeSH Terms] OR ("information"[All Fields] AND "seeking"[All Fields] AND "behaviour"[All Fields]) OR "information seeking behaviour"[All Fields]) AND (("prevent"[All Fields] OR "preventability"[All Fields] OR "preventable"[All Fields] OR "preventative"[All Fields] OR "preventatively"[All Fields] OR "preventatives"[All Fields] OR "prevented"[All Fields] OR "preventing"[All Fields] OR "prevention and control"[MeSH Subheading] OR ("prevention"[All Fields] AND "control"[All Fields]) OR "prevention and control"[All Fields] OR "prevention"[All Fields] OR "prevention s"[All Fields] OR "preventions"[All Fields] OR "preventive"[All Fields] OR "preventively"[All Fields] OR "preventives"[All Fields] OR "prevents"[All Fields]) AND ("manage"[All Fields] OR "managed"[All Fields] OR "management

s"[All Fields] OR "managements"[All Fields] OR "manager"[All Fields] OR "manager s"[All Fields] OR "managers"[All Fields] OR "manages"[All Fields] OR "managing"[All Fields] OR "managment"[All Fields] OR "organization and administration"[MeSH Terms] OR ("organization"[All Fields] AND "administration"[All Fields]) OR "organization and administration"[All Fields] OR "management"[All Fields] OR "disease management"[MeSH Terms] OR ("disease"[All Fields] AND "management"[All Fields]) OR "disease management"[All Fields])) AND ("sexually transmitted diseases"[MeSH Terms] OR ("sexually"[All Fields] AND "transmitted"[All Fields] AND "diseases"[All Fields]) OR "sexually transmitted diseases"[All Fields])

Google Scholar:

"Information Seeking Behaviour AND Prevention and Management AND Sexually Transmitted Diseases"

.HINARI Database:

"Information Seeking Behaviour AND Prevention and Management AND Sexually Transmitted Diseases"