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TRANSGENDER AND GENDER DIVERSE HEALTH: SEXUAL RISK BEHAVIORS AND THE ROLE OF NURSING IN HOLISTIC CARE

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ABSTRACT

Transgender and gender diverse (TGD) individuals experience significant health disparities, particularly in relation to sexual risk behaviors and vulnerability to sexually transmitted infections (STIs), including human immunodeficiency virus (HIV). This review provides a comprehensive analysis of the determinants, patterns, and consequences of sexual risk behaviors among TGD populations, emphasizing the complex interplay of psychosocial, behavioral, and structural factors such as stigma, discrimination, mental health challenges, substance use, and limited access to gender-affirming healthcare. The review further explores the epidemiology of STIs and HIV in TGD individuals and highlights the critical role of culturally competent and gender-affirming nursing care in mitigating these risks. Key nursing strategies discussed include comprehensive risk assessment, inclusive communication, patient-centered counseling, health education, and the implementation of preventive interventions such as pre-exposure prophylaxis (PrEP), post-exposure prophylaxis (PEP), and routine screening. The importance of interprofessional collaboration, community engagement, and policy support in enhancing care delivery and reducing health disparities is also examined. Additionally, the review underscores the need for strengthening nursing education and training to equip healthcare professionals with the competencies required to deliver holistic and inclusive care. By integrating evidence-based practices with a gender-affirming approach, nursing professionals can play a pivotal role in improving sexual health outcomes, reducing risk behaviours, and promoting equity in healthcare for TGD populations. This review highlights the necessity of a holistic, multidisciplinary, and rights-based framework to address the unique healthcare needs

of transgender and gender diverse individuals.

KEYWORDS: - Transgender health; Sexual risk behaviours; Gender-affirming care; Nursing care.

INTRODUCTION

Transgender and gender diverse (TGD) individuals represent a heterogeneous and often underserved population whose health outcomes are shaped by complex interactions between biological, psychological, social, and structural determinants. Within this context, sexual health remains a critical yet frequently overlooked domain, particularly in relation to sexual risk behaviors that increase vulnerability to sexually transmitted infections (STIs), including human immunodeficiency virus (HIV). Sexual risk behaviors among TGD populations—such as condomless intercourse, multiple sexual partners, and engagement in transactional sex, and limited access to preventive services—are not merely individual choices but are deeply embedded in broader contexts of marginalization, stigma, discrimination, and economic instability. [1] Many TGD individuals face systemic barriers including lack of gender-affirming healthcare, social exclusion, unemployment, housing insecurity, and violence, which collectively contribute to increased reliance on survival strategies that may elevate sexual health risks. Furthermore, inadequate access to culturally competent healthcare services often results in delayed testing, poor uptake of preventive measures such as pre-exposure prophylaxis (PrEP), and suboptimal treatment adherence. The intersection of mental health challenges, including depression, anxiety, and gender dysphoria, further compounds risk by influencing coping behaviors, decision-making processes, and engagement with healthcare systems. Substance use is also frequently



reported as both a coping mechanism and a contributing factor to impaired judgment during sexual encounters, thereby increasing the likelihood of high-risk practices. From a public health perspective, the disproportionate burden of HIV and other STIs among TGD populations underscores the urgent need for targeted, evidence-based interventions that are inclusive, respectful, and responsive to their unique needs. [2] In this regard, nursing professionals play a pivotal role in bridging gaps in care through comprehensive assessment, early risk identification, and delivery of person-centered, gender-affirming interventions. Nurses are uniquely positioned to foster trust, promote health literacy, provide counseling, and advocate for equitable access to services, thereby addressing both immediate clinical needs and broader social determinants of health. Holistic nursing care, which integrates physical, psychological, social, and cultural dimensions, is essential in mitigating risk behaviors and improving overall well-being among TGD individuals. It also involves recognizing the importance of inclusive communication, respecting gender identity, and creating safe healthcare environments that reduce fear and discrimination. Despite growing awareness, significant gaps remain in research, education, and policy frameworks related to TGD health, highlighting the need for strengthened training, interdisciplinary collaboration, and systemic reforms. Therefore, understanding sexual risk behaviors within this population and integrating holistic nursing approaches is crucial for advancing health equity, reducing disparities, and promoting optimal sexual and reproductive health outcomes among transgender and gender diverse individuals.

Conceptual Framework of Gender Diversity and Identity

The conceptual framework of gender diversity and identity is grounded in an evolving understanding that gender is a multidimensional construct encompassing biological, psychological, social, and cultural dimensions rather than a binary classification based solely on assigned sex at birth. Traditionally, gender was viewed within a rigid binary system of male and female; however, contemporary perspectives recognize gender as a spectrum that includes transgender, non-binary, genderqueer, gender-fluid, and other diverse identities. Gender identity refers to an individual's deeply felt

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internal sense of being male, female, a blend of both, neither, or another gender altogether, which may or may not align with the sex assigned at birth. Gender expression, on the other hand, involves the external manifestation of gender through appearance, behavior, clothing, and communication styles, influenced by societal norms and cultural expectations. The framework is further enriched by the distinction between sexual orientation and gender identity, emphasizing that they are independent constructs, although often conflated in healthcare settings, leading to misunderstanding and inadequate care. The minority stress model provides a critical theoretical lens for understanding the experiences of transgender and gender diverse (TGD) individuals, positing that chronic exposure to stigma, discrimination, and social exclusion generates heightened psychological stress, adversely affecting health outcomes. Additionally, intersectionality theory highlights how overlapping identities such as race, ethnicity, socioeconomic status, and disability interact with gender identity to shape unique lived experiences and health disparities. Social constructivist approaches further explain how societal norms, institutional practices, and cultural narratives influence the recognition and acceptance of diverse gender identities, often reinforcing marginalization [3]. From a healthcare perspective, the gender-affirming care model has emerged as a cornerstone framework, advocating for respect, validation, and support of an individual's self-identified gender without imposing pathologizing assumptions. This model emphasizes the importance of using inclusive language, acknowledging chosen names and pronouns, and tailoring clinical interventions to align with the patient's identity and needs. Developmentally, gender identity formation is understood as a dynamic and lifelong process influenced by personal experiences, family support, community acceptance, and access to affirming environments. For many TGD individuals, this journey may involve social, legal, and medical transitions, each associated with distinct psychosocial challenges and healthcare requirements. Importantly, the framework recognizes that gender diversity is not a disorder but a natural variation of human identity, and any distress experienced is often a result of external societal pressures rather than intrinsic pathology. [4] In nursing and healthcare practice, adopting this comprehensive conceptual framework is essential for delivering holistic, culturally competent, and patient-centered care. It enables healthcare professionals to move beyond binary assumptions, address implicit biases, and create inclusive clinical environments that promote dignity, respect, and equitable access to care. Ultimately, understanding gender diversity and identity through this multidimensional framework is fundamental to improving health outcomes, reducing disparities, and



fostering a more inclusive and responsive healthcare system for transgender and gender diverse populations.

Determinants and Contributing Factors to Sexual Risk Behaviors

Determinants and contributing factors to sexual risk behaviors among transgender and gender diverse (TGD) individuals are multifaceted and arise from a complex interplay of individual, interpersonal, community, and structural influences that collectively shape vulnerability and health outcomes. At the individual level, factors such as limited sexual health knowledge, low risk perception, and inadequate access to accurate, inclusive education significantly contribute to engagement in high-risk practices, including inconsistent condom use and multiple sexual partnerships. Psychological determinants, including depression, anxiety, gender dysphoria, and low self-esteem, further influence decision-making processes and may lead individuals to engage in risky sexual behaviors as coping mechanisms or means of seeking validation and acceptance. Substance use, including alcohol and recreational drugs, is another critical determinant, as it can impair judgment, reduce inhibitions, and increase the likelihood of unsafe sexual encounters.[5] Interpersonal dynamics also play a crucial role, particularly in the context of intimate relationships, where power imbalances, fear of rejection, and dependence on partners—emotionally or financially—may limit an individual's ability to negotiate safer sex practices. For many TGD individuals, experiences of rejection by family and social networks contribute to isolation, pushing them toward alternative support systems that may not always promote healthy behaviors. At the community and societal levels, stigma, discrimination, and social marginalization significantly elevate vulnerability to sexual risk behaviors. Structural determinants such as

unemployment, poverty, housing instability, and limited access to education often force individuals into survival strategies, including transactional sex or sex work, where negotiating condom use may be challenging. Healthcare-related factors also contribute substantially, as lack of gender-affirming and culturally competent services discourages routine health-seeking behavior, including regular STI screening and preventive care. Fear of mistreatment, misgendering, and confidentiality breaches often leads to delayed or avoided healthcare utilization, thereby increasing the risk of undiagnosed and untreated infections.[6] Additionally, inadequate policy support, legal recognition, and protection against discrimination further exacerbate health disparities and limit access to essential services. Cultural norms and societal attitudes toward gender nonconformity also influence behavior, often perpetuating internalized stigma and reducing self-efficacy in adopting protective health practices. Digital and social media environments, while offering community support, may also expose individuals to networks that normalize or facilitate risky behaviors without adequate safeguards. Importantly, these determinants rarely act in isolation but interact synergistically, creating a cumulative burden that disproportionately affects TGD populations. Understanding these contributing factors through a socioecological framework is essential for designing targeted, evidence-based interventions that address not only individual behaviors but also the broader social and structural conditions influencing risk. For nursing professionals, recognizing these determinants is critical for conducting comprehensive assessments, implementing tailored interventions, and advocating for systemic changes that promote safer behaviors and equitable access to healthcare services among transgender and gender diverse individuals.

Table 1: Determinants of Sexual Risk Behaviors in TGD Individuals

Category	Determinant	Description	Impact on Risk Behavior	Example
Individual	Low health literacy	Limited knowledge of STI prevention	Inconsistent condom use	Lack of PrEP awareness
Psychological	Depression, anxiety	Emotional distress influences decisions	Risk-taking as coping	Unsafe sexual encounters
Behavioral	Substance use	Alcohol/drug-induced disinhibition	Increased unsafe practices	Chemsex
Interpersonal	Power imbalance	Dependence on partners	Reduced negotiation ability	Condom refusal
Structural	Poverty, unemployment	Economic instability	Engagement in survival sex	Transactional sex
Healthcare-related	Lack of gender-affirming care	Fear of discrimination	Avoidance of screening	Late diagnosis



Sexually Transmitted Infections (STIs) and HIV Risk Among TGD Individuals

Sexually transmitted infections (STIs) and human immunodeficiency virus (HIV) represent significant public health concerns among transgender and gender diverse (TGD) individuals, who experience a disproportionately higher burden of infection compared to the general population due to a convergence of behavioral, biological, and structural risk factors. Epidemiological evidence consistently demonstrates elevated HIV prevalence, particularly among transgender women, while emerging data also highlight increasing vulnerability among transgender men and non-binary individuals, often overlooked in traditional surveillance systems. High-risk sexual behaviors, including condomless receptive or insertive intercourse, multiple concurrent partners, and engagement in transactional sex, contribute substantially to transmission dynamics; however, these behaviors must be understood within the broader context of systemic marginalization, stigma, and limited access to preventive healthcare[7]. Biological factors such as the heightened susceptibility of rectal and vaginal mucosa to microtears during unprotected intercourse further increase the risk of HIV acquisition, particularly in the absence of protective measures. In addition, the use of gender-affirming hormone therapy, while essential for psychological well-being, may indirectly influence risk behaviors by affecting libido, body image, and partner dynamics, though it does not inherently increase biological susceptibility to infection. Structural determinants, including poverty, unemployment, housing instability, and lack of legal recognition, often compel TGD individuals to engage in survival sex work, where negotiation of safer sex practices may be compromised due to economic dependence or fear of violence. Access to preventive interventions such as pre-exposure prophylaxis (PrEP), post-exposure prophylaxis (PEP), regular STI screening, and vaccination (e.g., hepatitis B and human papillomavirus) remains suboptimal among TGD populations, largely due to barriers such as healthcare discrimination, lack of provider knowledge, and inadequate integration of gender-affirming services within sexual health programs. Furthermore, delayed diagnosis and treatment of STIs, including syphilis, gonorrhea, and chlamydia, can lead to complications and increase the likelihood of HIV transmission through biological synergy[8]. Psychosocial factors, including mental health disorders and substance use, further exacerbate vulnerability by impairing judgment and reducing adherence to preventive strategies. Importantly, misinformation and lack of targeted sexual health education tailored to TGD individuals contribute to gaps

in awareness and risk perception. From a nursing and healthcare perspective, addressing STI and HIV risk in TGD populations requires a comprehensive, nonjudgmental, and culturally competent approach that integrates routine screening, risk-reduction counseling, and linkage to appropriate prevention and treatment services. Nurses play a crucial role in promoting early detection, facilitating access to PrEP and PEP, ensuring adherence to treatment regimens, and creating safe, inclusive environments that encourage open communication about sexual health. Strengthening community-based outreach, enhancing provider training, and implementing inclusive public health strategies are essential for reducing the burden of STIs and HIV and improving overall health outcomes among transgender and gender diverse individuals.

Mental Health and Its Association with Sexual Risk Behaviors

Mental health plays a critical and multifaceted role in shaping sexual risk behaviors among transgender and gender diverse (TGD) individuals, with a strong body of evidence indicating that psychological distress significantly influences vulnerability to unsafe sexual practices. TGD populations experience disproportionately high rates of mental health challenges, including depression, anxiety, post-traumatic stress disorder, suicidal ideation, and gender dysphoria, largely driven by chronic exposure to stigma, discrimination, social exclusion, and violence. These psychological stressors are effectively explained by the minority stress model, which posits that persistent societal prejudice and internalized stigma create a cumulative burden of stress that adversely affects coping mechanisms and decision-making processes. As a result, individuals experiencing poor mental health may engage in sexual risk behaviors such as condomless intercourse, multiple sexual partnerships, or transactional sex as maladaptive coping strategies to manage emotional distress, loneliness, or the need for affirmation and acceptance.[9] Low self-esteem and internalized transphobia can further reduce an individual's ability to negotiate safer sex practices, particularly in relationships characterized by power imbalances or fear of rejection. Additionally, experiences of trauma, including physical or sexual abuse, are more prevalent among TGD individuals and are closely linked to both mental health disorders and increased engagement in high-risk sexual behaviors. Substance use often co-occurs with mental health issues, serving as both a coping mechanism and a contributing factor that impairs judgment, lowers inhibitions, and increases susceptibility to unsafe sexual encounters. The bidirectional relationship between mental health and sexual risk behaviors is also



evident, as engaging in high-risk activities can lead to feelings of guilt, shame, or further psychological distress, thereby perpetuating a cycle of vulnerability. Structural barriers to accessing mental health services, including lack of gender-affirming care, financial constraints, and fear of discrimination within healthcare settings, exacerbate these challenges and limit opportunities for early intervention and support. Furthermore, inadequate integration of mental health and sexual health services results in fragmented care that fails to address the interconnected nature of these issues. [10] From a nursing perspective, understanding the association between mental health and sexual risk behaviors is essential for delivering holistic, patient-centered care that addresses both psychological well-being and sexual health needs. Nurses are uniquely positioned to conduct comprehensive assessments that include mental health screening, identify risk factors, provide empathetic counseling, and facilitate referrals to appropriate mental health services. Incorporating trauma-informed and gender-affirming approaches into clinical practice can enhance trust, improve patient engagement, and promote healthier coping strategies. Ultimately, addressing mental health as a central determinant of sexual risk behaviors is crucial for reducing health disparities, improving quality of life, and achieving better sexual and reproductive health outcomes among transgender and gender diverse individuals.

Substance Use and High-Risk Sexual Practices

Substance use is a significant and well-documented determinant of high-risk sexual practices among transgender and gender diverse (TGD) individuals, contributing to increased vulnerability to sexually transmitted infections (STIs), including human immunodeficiency virus (HIV). The relationship between substance use and sexual risk behaviors is complex and bidirectional, influenced by psychological distress, social marginalization, and structural inequities. Many TGD individuals experience chronic stress due to stigma, discrimination, rejection, and violence, which can lead to the use of alcohol, tobacco, and illicit substances such as methamphetamines, cocaine, and opioids as coping mechanisms. While these substances may provide temporary relief from emotional distress or facilitate social interaction, they significantly impair cognitive judgment, reduce inhibitions, and increase impulsivity, thereby elevating the likelihood of engaging in unsafe sexual behaviors such as condomless intercourse, multiple sexual partnerships, and participation in transactional sex [11]. Certain substances, particularly stimulants like methamphetamine, are strongly associated with prolonged sexual activity, increased libido, and decreased perception

of risk, further amplifying exposure to infections. Additionally, the use of substances in sexualized contexts, often referred to as “chemsex,” has been increasingly reported within some TGD communities, where drugs are intentionally used to enhance sexual experiences, prolong encounters, or cope with body image concerns and gender dysphoria. These practices often occur in environments where negotiation of safer sex is limited, and peer norms may normalize or even encourage risk-taking behaviors. Structural determinants, including poverty, unemployment, and housing instability, may also intersect with substance use, as individuals engaged in survival sex or sex work may use substances to manage physical and emotional demands or to cope with unsafe working conditions. Moreover, co-occurring mental health disorders such as depression, anxiety, and trauma-related conditions further compound the risk, creating a syndemic effect in which multiple health challenges interact and reinforce each other. Barriers to accessing substance use treatment services, including lack of gender-affirming care, fear of discrimination, and inadequate provider knowledge, often prevent TGD individuals from seeking help, leading to untreated or poorly managed substance use disorders. From a nursing and healthcare perspective, addressing substance use in the context of sexual health requires a comprehensive, nonjudgmental, and culturally sensitive approach that integrates screening, brief interventions, and referral to treatment within routine care. Nurses play a crucial role in identifying patterns of substance use, assessing associated sexual risk behaviors, providing harm reduction education, and supporting behavior change through motivational interviewing and counseling. Integrating substance use services with sexual and reproductive health programs, along with community-based outreach and peer support, is essential for reducing high-risk behaviors and improving overall health outcomes among transgender and gender diverse populations.

Nursing Assessment and Risk Identification Strategies

Nursing assessment and risk identification strategies are fundamental components of delivering comprehensive and patient-centered care to transgender and gender diverse (TGD) individuals, particularly in the context of sexual health and prevention of high-risk behaviors. Effective assessment begins with the creation of a safe, respectful, and inclusive clinical environment where patients feel comfortable disclosing sensitive information related to their gender identity, sexual practices, and psychosocial experiences. Nurses must adopt a gender-affirming approach by using correct names and pronouns, avoiding assumptions about anatomy or sexual orientation, and demonstrating cultural



competence throughout the interaction. A thorough assessment involves obtaining a detailed sexual history that includes the number and type of sexual partners, sexual practices, condom use, history of sexually transmitted infections (STIs), and use of preventive measures such as pre-exposure prophylaxis (PrEP) or post-exposure prophylaxis (PEP).[12] It is equally important to assess substance use patterns, as alcohol and drug use are closely linked to impaired decision-making and increased sexual risk behaviors. Mental health screening should be integrated into routine assessment, with attention to symptoms of depression, anxiety, trauma, and gender dysphoria, all of which can influence risk-taking behaviors and engagement with care. Nurses should also evaluate social determinants of health, including housing stability, employment status, access to healthcare, and experiences of stigma or discrimination, as these factors significantly shape vulnerability and health outcomes. Risk identification requires the use of validated screening tools and evidence-based frameworks that help categorize patients according to their level of risk and guide appropriate interventions. Physical assessment and laboratory investigations, including routine screening for HIV, syphilis, gonorrhea, chlamydia, and other relevant infections, should be conducted in accordance with current clinical guidelines and tailored to the individual's anatomy and exposure history.[13] Importantly, nurses must recognize that TGD individuals may have unique healthcare needs related to gender-affirming treatments, such as hormone therapy or surgical interventions, which may influence risk profiles and require specialized assessment. Communication plays a critical role in risk identification, and nurses should employ open-ended, nonjudgmental questioning techniques to encourage honest disclosure and build therapeutic rapport. Confidentiality and privacy must be strictly maintained to foster trust and ensure ethical practice. Additionally, ongoing assessment is essential, as risk behaviors and life circumstances may change over time, necessitating continuous monitoring and adjustment of care plans. From a preventive perspective, nurses are instrumental in identifying opportunities for early intervention, providing education on safer sex practices, facilitating access to preventive services, and linking patients to appropriate support systems. By integrating clinical, behavioral, and social assessments, nurses can develop a holistic understanding of each individual's risk profile and implement targeted strategies that promote safer behaviors, reduce health disparities, and improve overall well-being among transgender and gender diverse populations.

Culturally Competent and Gender-Affirming Nursing

Care

Culturally competent and gender-affirming nursing care is essential for addressing the unique health needs of transgender and gender diverse (TGD) individuals and for reducing disparities in sexual and overall health outcomes. This approach is grounded in respect for each individual's gender identity, expression, and lived experiences, and it requires nurses to move beyond traditional binary frameworks to deliver inclusive, person-centered care. Cultural competence involves developing awareness of one's own biases, acquiring knowledge about diverse gender identities, and cultivating skills to interact effectively with patients from varied backgrounds. In the context of TGD care, this includes understanding appropriate terminology, using correct names and pronouns, and recognizing the diversity within TGD populations, including differences in cultural, social, and socioeconomic contexts. Gender-affirming care extends this concept by actively validating and supporting an individual's gender identity in all aspects of healthcare delivery, thereby promoting psychological well-being, trust, and engagement with services. Nurses play a critical role in creating safe and welcoming healthcare environments by ensuring privacy, maintaining confidentiality, and advocating for inclusive policies such as gender-neutral documentation and facilities[14]. Effective communication is a cornerstone of culturally competent care, requiring the use of open-ended, nonjudgmental language that encourages patients to share sensitive information related to their sexual health, behaviors, and concerns without fear of discrimination or stigma. Additionally, nurses must tailor clinical assessments and interventions to align with the patient's anatomy, hormone use, and surgical history rather than making assumptions based on gender identity alone. Incorporating trauma-informed care principles is also vital, as many TGD individuals have experienced discrimination, violence, or healthcare-related mistreatment, which can impact their willingness to seek care. Education and counseling should be delivered in a manner that is relevant, accessible, and respectful of the patient's cultural and personal context, including discussions on safer sex practices, STI prevention, and mental health support. Furthermore, nurses should facilitate access to gender-affirming treatments, including hormone therapy and referrals for surgical care when appropriate, while also coordinating with multidisciplinary teams to ensure comprehensive care. Continuous professional development and training in TGD health are necessary to address knowledge gaps and improve the quality of care provided. At a broader level, nurses serve as advocates for health equity by challenging discriminatory practices, supporting policy changes, and



promoting inclusive healthcare systems. By integrating cultural competence with gender-affirming principles, nursing care can effectively address both the clinical and psychosocial needs of TGD individuals, fostering a therapeutic relationship built on trust, respect, and dignity.

Ultimately, such an approach not only enhances patient satisfaction and adherence to care but also contributes to improved health outcomes and a more equitable healthcare environment for transgender and gender diverse populations.



Figure 1: Culturally Competent and Gender-Affirming Nursing Care

Health Education, Counseling, and Preventive Strategies

Health education, counseling, and preventive strategies are central to reducing sexual risk behaviors and



improving overall health outcomes among transgender and gender diverse (TGD) individuals, requiring a comprehensive, inclusive, and person-centered approach that addresses both individual behaviors and broader social determinants of health. Effective health education must go beyond generic messages and provide accurate, culturally relevant, and gender-affirming information tailored to the specific needs of TGD populations, including anatomy-specific guidance on safer sex practices, consistent condom and barrier use, and awareness of sexually transmitted infections (STIs) and human immunodeficiency virus (HIV) transmission routes. Education should also emphasize the importance of routine screening, vaccination for preventable infections such as hepatitis B and human papillomavirus, and the appropriate use of preventive biomedical interventions such as pre-exposure prophylaxis (PrEP) and post-exposure prophylaxis (PEP)[1,15]. Counseling plays a pivotal role in facilitating behavior change by addressing underlying psychosocial factors such as stigma, low self-esteem, relationship dynamics, and mental health challenges that may influence sexual decision-making. Nurses and healthcare providers should employ patient-centered communication techniques, including motivational interviewing and shared decision-making, to empower individuals to adopt safer behaviors while respecting their autonomy and lived experiences. Counseling sessions should create a nonjudgmental and confidential space where patients can openly discuss sensitive topics such as sexual practices, substance use, and concerns related to gender identity, thereby enhancing trust and engagement with care. Preventive strategies must also incorporate harm reduction principles, recognizing that behavior change is often gradual and influenced by complex life circumstances; therefore, interventions should focus on reducing risk rather than imposing unrealistic expectations. Community-based outreach and peer-led education programs are particularly effective in reaching TGD individuals who may be disengaged from formal healthcare systems, providing culturally resonant messaging and fostering a sense of belonging and support. Digital health platforms and social media can further enhance access to information and services, especially for individuals in underserved or rural areas, though care must be taken to ensure accuracy and confidentiality.[16] Importantly, preventive strategies should address structural barriers by advocating for accessible, affordable, and gender-affirming healthcare services, including integrated sexual and mental health care. Nurses play a critical role in coordinating these efforts by identifying individual risk factors, delivering tailored education, facilitating access to preventive tools, and linking patients to community resources and support

networks. Continuous evaluation of educational interventions and incorporation of feedback from TGD communities are essential to ensure relevance and effectiveness. Ultimately, a holistic approach that integrates education, counseling, and prevention within a supportive and inclusive framework is vital for empowering transgender and gender diverse individuals to make informed health decisions, reduce sexual risk behaviors, and achieve improved sexual and reproductive health outcomes.

Policy, Legal, and Ethical Considerations in TGD Healthcare

Policy, legal, and ethical considerations play a pivotal role in shaping the accessibility, quality, and equity of healthcare services for transgender and gender diverse (TGD) individuals, particularly in relation to sexual and reproductive health. At the policy level, the presence or absence of inclusive healthcare frameworks significantly influences the extent to which TGD individuals can access gender-affirming, respectful, and non-discriminatory services. Policies that recognize gender diversity, ensure insurance coverage for gender-affirming treatments, and mandate anti-discrimination protections in healthcare settings are essential for reducing barriers and improving health outcomes. However, in many regions, gaps in policy implementation, lack of standardized guidelines, and limited enforcement mechanisms continue to hinder equitable access to care. Legal considerations are closely intertwined with policy, as laws governing gender identity recognition, documentation changes, and protection against discrimination directly impact healthcare utilization. Legal barriers, such as restrictive identification requirements or criminalization of gender nonconformity, can discourage TGD individuals from seeking care due to fear of exposure, harassment, or denial of services.[17] Conversely, progressive legal frameworks that allow self-identification and protect patient rights can enhance trust in healthcare systems and facilitate engagement with preventive and therapeutic services. Ethical considerations are fundamental in guiding nursing and healthcare practice, emphasizing principles such as autonomy, beneficence, non-maleficence, and justice. Respecting patient autonomy involves acknowledging and affirming an individual's self-identified gender, ensuring informed consent for all medical interventions, and supporting shared decision-making processes. Beneficence and non-maleficence require healthcare providers to deliver care that promotes well-being while avoiding harm, which includes eliminating discriminatory practices, preventing misgendering, and addressing implicit biases that may compromise care quality[18]. The



principle of justice underscores the importance of equitable access to healthcare resources, advocating for the fair distribution of services regardless of gender identity or socioeconomic status. Confidentiality and privacy are particularly critical ethical concerns in TGD healthcare, as unauthorized disclosure of gender identity or sexual health information can lead to stigma, discrimination, and psychosocial harm. Nurses must adhere to strict confidentiality standards while creating a safe environment that encourages open communication. Additionally, ethical dilemmas may arise in areas such as access to gender-affirming treatments for minors, balancing parental involvement with the patient's rights and best interests, and navigating cultural or institutional constraints. From a professional standpoint, nurses have a responsibility to advocate for inclusive policies, participate in the development of guidelines, and engage in continuous education to enhance their competence in TGD healthcare. Integrating policy, legal, and ethical frameworks into clinical practice is essential for ensuring that care is not only clinically effective but also respectful, rights-based, and socially just. Ultimately, addressing these considerations is crucial for reducing health disparities, promoting dignity and human rights, and advancing equitable healthcare systems for transgender and gender diverse populations.

Interprofessional Collaboration in Care Delivery

Interprofessional collaboration in care delivery is a cornerstone of effective and holistic healthcare for transgender and gender diverse (TGD) individuals, particularly in addressing complex and interrelated needs associated with sexual health, mental well-being, and social determinants of health. Given the multifaceted challenges faced by TGD populations—including increased vulnerability to sexually transmitted infections (STIs), mental health disorders, substance use, and barriers to healthcare access—a coordinated, team-based approach is essential to ensure comprehensive and continuous care. Interprofessional collaboration involves the integration of diverse healthcare professionals, including nurses, physicians, mental health specialists, endocrinologists, social workers, pharmacists, public health practitioners, and community outreach workers, each contributing their expertise to develop individualized care plans that are responsive to the unique needs of TGD individuals.[19] Nurses play a central role within this collaborative framework, often acting as care coordinators who facilitate communication among team members, advocate for patient needs, and ensure continuity of care across different services and settings. Effective collaboration requires clear communication, mutual respect, and a shared commitment to delivering gender-

affirming and culturally competent care, which includes the consistent use of appropriate terminology, respect for patient identity, and avoidance of discriminatory practices. Integration of services is particularly important, as TGD individuals often require concurrent access to sexual health services, hormone therapy, mental health support, and social assistance; fragmented care can lead to missed opportunities for intervention and poorer health outcomes.

Interprofessional teams can also enhance preventive care by jointly implementing strategies such as routine STI screening, risk-reduction counseling, substance use interventions, and mental health support, thereby addressing multiple risk factors simultaneously. Community-based organizations and peer support networks are vital partners in this collaborative model, providing culturally relevant outreach, education, and linkage to care, especially for individuals who may be disengaged from formal healthcare systems. Technology-enabled collaboration, including electronic health records and telehealth platforms, further facilitates coordination and improves access to specialized services, particularly in underserved or rural areas.[20] However, challenges such as role ambiguity, lack of standardized training in TGD health, and institutional barriers can hinder effective teamwork and must be addressed through targeted education, policy support, and organizational commitment. Continuous professional development and interprofessional education are essential to build competencies, reduce biases, and promote a shared understanding of TGD health issues across disciplines. Ultimately, interprofessional collaboration enhances the quality, safety, and inclusivity of care by ensuring that all aspects of an individual's health are addressed in a coordinated and patient-centered manner, thereby improving clinical outcomes, fostering trust in healthcare systems, and advancing health equity for transgender and gender diverse populations.

Challenges and Barriers in Nursing Practice

Challenges and barriers in nursing practice related to the care of transgender and gender diverse (TGD) individuals are multifactorial and span individual, institutional, and systemic levels, significantly impacting the quality, accessibility, and effectiveness of healthcare delivery. One of the primary challenges is the lack of adequate education and training among nurses regarding TGD health issues, including limited understanding of gender diversity, appropriate communication practices, and the specific clinical needs associated with gender-affirming care. This knowledge gap often leads to discomfort, unintentional bias, or reliance on binary assumptions, which can result in misgendering,



inappropriate questioning, or inadequate assessment of sexual and reproductive health risks. Institutional barriers further compound these challenges, as many healthcare settings lack inclusive policies, standardized protocols, and gender-affirming infrastructure such as gender-neutral restrooms, inclusive documentation systems, and electronic health records that accurately capture gender identity and preferred pronouns. Time constraints and heavy workloads in clinical settings may also limit nurses' ability to engage in comprehensive, patient-centered assessments and counseling, particularly when addressing sensitive topics such as sexual behaviors, mental health, and substance use. [21] Additionally, stigma and discrimination—both perceived and experienced—create significant barriers to effective care, as TGD individuals may be reluctant to disclose relevant health information due to fear of judgment, breach of confidentiality, or previous negative healthcare experiences. Communication challenges can arise when nurses lack confidence or skills in discussing gender identity and sexual health in a respectful and nonjudgmental manner, further hindering trust and therapeutic relationships. Structural issues such as limited access to specialized services, inadequate referral systems, and financial constraints also affect the continuity and comprehensiveness of care, particularly in resource-limited settings. Legal and policy-related barriers, including lack of clear guidelines or protections for TGD individuals, may create uncertainty among healthcare providers and restrict the scope of practice in delivering gender-affirming interventions. Cultural and societal norms that stigmatize gender diversity can influence both patient behavior and provider attitudes, reinforcing disparities and limiting the effectiveness of nursing interventions [22]. Furthermore, emotional and ethical challenges may arise for nurses when navigating complex cases involving mental health issues, trauma, or social vulnerability, especially in the absence of adequate support systems or interdisciplinary collaboration. Addressing these barriers requires a multifaceted approach, including the integration of TGD health topics into nursing education curricula, ongoing professional development, and the implementation of institutional policies that promote inclusivity and equity. Nurses must also engage in self-reflection to identify and mitigate personal biases, while healthcare organizations should foster supportive environments that encourage culturally competent practice. Strengthening community partnerships, improving access to resources, and advocating for policy reforms are essential steps in overcoming these challenges. Ultimately, reducing barriers in nursing practice is critical for enhancing patient trust, improving care quality, and ensuring

equitable health outcomes for transgender and gender diverse populations.

CONCLUSION

Transgender and gender diverse (TGD) health represents a critical and evolving domain within contemporary healthcare, requiring a comprehensive, inclusive, and evidence-based approach to address the complex interplay between sexual risk behaviors and overall well-being. The heightened vulnerability of TGD individuals to sexually transmitted infections (STIs), including human immunodeficiency virus (HIV), is not merely a consequence of individual behaviors but is deeply rooted in broader psychosocial, structural, and systemic determinants such as stigma, discrimination, socioeconomic marginalization, and limited access to gender-affirming healthcare services. These interconnected factors create a landscape in which sexual risk behaviors are often shaped by survival strategies, mental health challenges, substance use, and barriers to preventive and therapeutic care. Understanding these dynamics through multidimensional frameworks, including the minority stress model and socioecological perspectives, is essential for developing targeted and effective interventions that move beyond individual-level risk reduction to address underlying inequities. Within this context, nursing professionals play a pivotal role in bridging gaps in care and promoting health equity through holistic, patient-centered, and gender-affirming practices. Nurses are uniquely positioned to conduct comprehensive assessments that integrate sexual health, mental health, substance use, and social determinants, enabling early identification of risk and timely intervention. The provision of culturally competent and gender-affirming care fosters trust, enhances patient engagement, and improves adherence to preventive strategies such as routine screening, vaccination, and the use of biomedical interventions including pre-exposure prophylaxis (PrEP) and post-exposure prophylaxis (PEP). Moreover, health education and counseling delivered in a nonjudgmental and inclusive manner empower TGD individuals to make informed decisions about their sexual health, while harm reduction approaches acknowledge the realities of patients' lived experiences and promote achievable behavior change. Interprofessional collaboration further strengthens care delivery by integrating the expertise of diverse healthcare providers, ensuring that the multifaceted needs of TGD individuals are addressed in a coordinated and continuous manner. Despite these opportunities, significant challenges remain, including gaps in nursing education and training, institutional barriers, and persistent stigma within healthcare systems, all of which can compromise the quality and accessibility



of care. Addressing these challenges requires sustained efforts to integrate TGD health into nursing curricula, promote ongoing professional development, and implement inclusive policies and practices that support equitable care. At the policy and systems level, legal protections, anti-discrimination frameworks, and investment in gender-affirming services are essential to create enabling environments that facilitate healthcare access and utilization. Community engagement and peer-led interventions also play a vital role in extending the reach of healthcare services and fostering supportive networks that enhance resilience and well-being. Importantly, future research must continue to explore the diverse experiences of TGD populations, including underrepresented groups such as transgender men and non-binary individuals, to inform more inclusive and

effective interventions. Ultimately, optimizing health outcomes for TGD individuals requires a paradigm shift toward holistic care that integrates clinical excellence with social justice, cultural humility, and patient empowerment. By embracing evidence-based practices, strengthening education and training, and advocating for inclusive policies, nursing professionals can significantly contribute to reducing sexual risk behaviors, improving health outcomes, and advancing equity in healthcare. The commitment to delivering compassionate, respectful, and affirming care is not only a professional responsibility but also a fundamental step toward ensuring dignity, inclusion, and improved quality of life for transgender and gender diverse individuals across the continuum of care.

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