

Healthcare Professionals Delivering Quality and Appropriate Services to Patients With HIV

Badria A Elfaki¹

¹Faculty of Nursing, Umm Al Qura University, Saudi Arabia; bafaki@uqu.edu.sa (Corresponding Author)

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ABSTRACT

Healthcare professionals (HCP) strive to deliver appropriate Human Immunodeficiency Virus (HIV) care practices that can enhance patient outcomes and quality practice. We conducted a comprehensive analysis of healthcare professionals' HIV care best practices published between 2012 and 2022. The review includes HPC practices that successfully reached the intended results depending on their objectives. Two themes emerged from the eight publications reviewed: (a) the significance of linking HCP services to newly diagnosed HIV-positive individuals and (b) the relevance of integrated and comprehensive service provision in enhancing patient outcomes. This review was hindered by inconsistent reporting and arbitrary usage of "Appropriate HIV care practices."

Keywords: appropriate healthcare practices; patient outcomes; HIV; comprehensive service

INTRODUCTION

Human Immunodeficiency Virus is a virus that attacks the human immune system which, if the condition gets worse, can cause various complications from other diseases that can trigger AIDS (Acquired Immune Deficiency Syndrome) (Herawati & Ritanti, 2021). HIV is an infection that affects the body's immune system, primarily the CD4 cells. HIV kills CD4 cells, reducing a person's immunity against opportunistic diseases such as tuberculosis and fungal infections, severe bacterial infections, and some malignancies (Balasubramaniam M et al., 2019). People with HIV/AIDS (PLWHA) will experience physical and psychosocial threats to life. Physical complaints are caused by changes in health conditions which often make PLWHA unable to carry out normal activities. Meanwhile, social problems such as anxiety, depression and stigma give rise to discrimination in society (Darmawan et al., 2023).

HIV remains a significant global public health concern, claiming 40.1 million [33.6–48.6 million] lives. In 2021, 650 000 [510 000–860 000] individuals perished from HIV-related causes, while 1.5 million [1.1–2.0 million] individuals contracted the virus. There is no treatment available for HIV infection (WHO, 2022). WHO recommends that all individuals at risk for HIV receive testing. People at elevated risk of contracting HIV should seek HIV prevention, testing, and treatment options that are comprehensive and effective (WHO, 2022). Self-tests and simple, affordable, fast diagnostic procedures can be used to diagnose HIV infection. HIV testing services must adhere to the 5Cs: informed consent, confidentiality, counseling, accurate results, and linkage to treatment and other resources (Conserve DF et al., 2019).

According to the review, "Appropriate practices" indicate success, have an effect, and can be duplicated in different settings. To find the best healthcare professionals' practices, research focuses on techniques that have been proven to produce results and serve as a model for others to learn from and duplicate. Best practices encourage innovative, effective, and sustainable approaches to a given practice (Ten Hem-Baloyi W et al., 2020).

Patient-Centered treatment is care that respects and responds to the individual patient's preferences, needs, and values and ensures that patient values govern all clinical choices (Ramaiah P et al., 2020). The profession of caring for patients (and their families) in ways that are meaningful and helpful to the individual patient. It involves listening to, educating, and incorporating patients into their care. As advocates, nurses provide empathetic care that respects patients' cultural beliefs and autonomy (Ramaiah P et al., 2020). Today, the World Health Organization (WHO) released updated guidelines for HIV prevention, testing, treatment, service delivery, and monitoring: recommendations for a public health strategy. This paper includes comprehensive, evidence-based guidelines and best practice statements within a public health, rights-based, and person-centered framework (Owczarzak J et al., 2018).

These recommendations provide the most up-to-date guidance on HIV testing methodologies - the starting point for HIV prevention and treatment - and extensive recommendations on a baby diagnosis (Covey J et al., 2016). Essential guidelines are provided on the prompt beginning of anti-retroviral therapy (ART) and the use of raltegravir. There are updated recommendations about scheduling anti-retroviral therapy (ART) for TB patients and using point-of-care devices for treatment monitoring (Dolcini MM et al., 2014). Differentiated approaches to HIV service delivery are stressed, and numerous recommendations are made to allow treatment to be initiated outside of the health institution and to lessen the frequency of interaction with health services for individuals responding favorably to treatment. These suggestions ensure that HIV-positive individuals can initiate and continue treatment throughout service disruptions caused by the COVID-19 epidemic (UNESCO, 2011).

Advanced HIV infection remains a global challenge. These recommendations contain a new chapter devoted solely to this subject, a summary of the currently recommended WHO package of advanced HIV care, and the most recent WHO recommendations for TB preventive therapy. The guidelines include a new section on cervical cancer and unique advice on HIV and Buruli ulcer coinfection and HIV and visceral leishmaniasis coinfection. To optimize access to HIV care and to give programmatic direction to decision-makers and implementers, operational and service delivery guidance is included. The 2021 consolidated HIV recommendations are a significant step toward achieving the goals of universal access to ARV medications for the prevention and treatment of HIV and ending the HIV/AIDS epidemic by 2030.

METHOD

This review followed the Meta-analyses Of Observational Studies in Epidemiology (MOOSE) standards. We comprehensively searched Scopus, PubMed, and Web of Science English-language publications published until October 15, 2022. The quality of the retrieved studies was assessed using the approach of Gascon et al. The initial search yielded papers with citations, of which five papers were included in the final analysis. The following terms were utilized throughout our systematic search: HIV or AIDS, cross-referenced with fair practice, treatment, therapy, or intervention in the title or abstract of the articles. We restricted the search to only English-language articles published over the last ten years (2012–2022) and to works solely published in English.

RESULTS

The results of our searches generated 250 titles and abstracts that may be pertinent to our area of interest. After deleting duplicates, reviews, and commentaries, two independent reviewers examined the abstracts. A value of 0.88 was obtained, showing a reasonable inter-rater reliability. Twenty-five full-text articles that met the criteria for inclusion were considered. There were five papers included in the review. For us to evaluate the reports, they are required to describe all three components: (a) Healthcare professionals' appropriate practices, (b) processes, and (c) documented outcomes. To classify and organize the articles, we utilized an extraction technique. The variables analyzed were the article's purpose, the focus of best practices, what worked, the country, and the results.

Table 1. The Papers' Summaries

Paper Concept	Theme	Appropriate Practices	What worked	Results
Barriers and facilitators to HIV primary care linkage by Bauman et al. 2013	Test and Treat* strategy	Associating treatments of newly diagnosed patients of HIV.	The barriers to linkage fell into three categories: healthcare system factors (long wait for provider appointments; requirement of a positive confirmatory test prior to scheduling an appointment; system navigation; disrespectful of patients); (2) social factors (HIV stigma); and (3) characteristics of high-risk populations (e.g., mental illness, homelessness, substance use, immigrant).	Enrolled 85 percent of newly diagnosed PHAs within three months after diagnosis.
Qualitative study: Linking to HIV Care by Li, H., Wei, C., Tucker, J. et al. 2017.	HIV care from the standpoint of young HIV-infected males	Increasing the number of local CDC systems, designated hospitals, and community-based organizations (CBOs) that provide supportive services and increasing financial support for HIV/AIDS-related testing, medical examinations, and treatments.	Vital to increasing the quality of ongoing testing and counseling.	Perceived health status, limited health knowledge, and the stigma associated with HIV care constituted the hurdles.
The Relationship between Provider and Practice Variables and HIV ART Adherence by Meyers DJ et al. 2019.	Assessing the contribution of provider and practice factors to successful HIV ART adherence.	Providers and their practices might be primary intervention targets.	There is substantial heterogeneity in adherence to anti-retroviral therapy (ART) between doctors, practices, and provider specializations.	Provider and practice random effects together accounted for 6.8% of the variance in adherence, while patient differences accounted for 45.2%.
ESPACOMP Reporting Guidelines for Medication Adherence By De Geest S et al. 2018.	It is intended to augment existing recommendations for reporting health research and is based on four minimum reporting requirements and seventeen elements that reflect excellent reporting practices.	Medication adherence consensus-based procedure comprising a multidisciplinary group of worldwide specialists.	A guideline is generated from a literature analysis and a reactive Delphi study with 26 experts in medication adherence.	In conclusion, it is anticipated that the introduction of EMERGE will improve the reporting quality of medication adherence research by standardizing research techniques, minimizing research waste, expediting development in this and related domains, and eventually enhancing patient outcomes.
HIV Anti-retroviral Therapy. Kemnic TR et al. 2022	Explain the significance of enhancing care coordination across the interprofessional team to improve care delivery and outcomes for HIV patients.	With a collaborative, interprofessional team approach, ART has the highest probability of therapeutic effectiveness while minimizing undesirable effects.	According to abundant evidence, HAART can enhance survival and minimize the incidence of opportunistic infections.	Due to their efficacy and potential side effects, healthcare professionals must be familiar with these drugs.

DISCUSSION

The reviewed shows were subjected to thematic analyses to determine their commonalities. The review revealed two themes of best practices: (a) linking newly diagnosed PHAs to care and (b) offering integrated and comprehensive service delivery. Linking newly diagnosed PHAs with care meant that patients received prompt treatment. This strategy acknowledged that HIV infection is a significant destabilizing event and that PHAs may deal with stigma, trauma, and rejection (TRAN BX et al., 2019) Linking PHAs to necessary care promptly is a strategy to provide care, support, and stability for them to engage in treatment and persist. The evaluated programs related newly diagnosed PHAs to social care, including housing, finances, job, food, and medical care (Nesengani T et al., 2021).

Programs utilized a variety of approaches to facilitate testing-to-care connections and evaluate the efficacy of their interventions. In two phases, Bauman et al. (2013) established effective practices for linking HIV clients. They engaged 24 key informants working in linkage agencies in in-depth dialogues about the challenges and facilitators of linking newly diagnosed PHAs to care during a phase. The interviews were thematically examined to find the barriers and facilitators that provide a seamless connection between PHAs and care. In the second phase, case studies were done on the 24 organizations from which the 24 key informants were recruited. The linkage-to-care rate for these groups was 69.9% in three months and 84.3% in twelve months. Having patient navigators and care coordinators, taking a team approach to care, developing and nurturing trusting relationships with PHAs, monitoring linkages and follow-up services, staff training and stigma reduction, reducing wait times, and accessing mental health services were identified as central to an association to care (Bauman et al.).

The program implementation of Crow et al. (2010) was based on a randomized controlled trial for the Anti-retroviral Treatment Access Study (ARTAS 1), which compared a brief strength-based case management intervention with routine care by connecting newly diagnosed PHAs to care. In the strength management arm of the study, individuals were instructed to identify and utilize their strengths while setting goals and searching for the necessary resources to achieve these goals. 78% of clients in this arm were successfully linked to care, compared to 60% of clients receiving regular support. The implementation of phase 2 of the linkage, known as ARTAS II, was based on the ARTAS I trial's identification of eight best practices (El-Bassel N et al., 2022).

Before receiving an HIV confirmation test, Project Inform linked newly diagnosed clients. This project's employees also provided adherence counseling, follow-up, support services, and financial incentives for PHAs to connect with care. Significant biological advances in HIV prevention and therapy have prompted ambitious initiatives to end the HIV pandemic. Nonetheless, this objective will not be met without addressing the severe mental health and drug abuse issues among people living with HIV (PLWH) and those at risk of getting HIV. These issues compound the numerous social and economic obstacles to receiving sufficient and maintained healthcare and are among the most formidable barriers to ending the HIV epidemic. Mental health issues are more prevalent among HIV-vulnerable individuals and PLWH than the general population. Throughout the HIV care continuum, mental health impairments raise the risk for HIV acquisition and worse health outcomes among PLWH. We have the essential screening tools and effective therapies to treat mental health issues in HIV-positive and HIV-at-risk individuals. To solve the current mental health screening and treatment gaps, however, we must prioritize mental health treatment with the necessary resources. Incorporating mental health screening and treatment into all HIV testing and treatment settings will not only improve HIV prevention and care results but also increase global access to mental healthcare (Remien RH et al., 2019).

The South African workplace HIV program developed by Charalambous et al. (2007) included testing, counseling, and care through a subsidiary health agency contracted to offer HIV care to its employees. This HIV program consisted of numerous elements, including patient education and counseling, medication and data administration, staff training, and monitoring and evaluation. Ninety-eight percent of HIV-positive patients received therapy. Over one year, the program retained 78% of clients in treatment and reduced HIV mortality by 2.3%. Their success was built on the seamless coordination of testing and care services. Dillard et al. (2010) described integrated HIV care services for hard-to-reach PHAs that incorporated health services and other social services under one roof. This included PHAs with mental health and substance abuse issues, homelessness, or financial needs. As a result of the services, PHAs reported decreased wait times, increased program efficiency, and improved adherence to HIV care. In addition, as a result of the program, 69% of newly diagnosed PHA continued therapy for at least six months, and 49% remained in the program for one year. 50% of drug-using clients abstained from substance usage for at least 30 days, while 37% were substance-free for six months. Additionally, 44% of customers raised their income, and 60% of formerly unemployed clients found jobs within six months.

A Better Place (ABP) initiative (Fitzgerald S et al., 2016) evaluated the transitional readiness of homeless PHAs for independent life. In addition, they supplied PHAs with clinical and social services. The author concluded that because homeless PHAs had access to complete resources, they were eventually stable enough to increase treatment adherence.

They could also study and develop the essential life skills for independent living. 80% of clients identified for independent living by the ABP program-maintained housing for at least one year.

The Iranian triangular model of the World Health Organization (2004), which featured an HIV clinic, an addictions unit, and an STI unit, attracted and retained the most difficult-to-reach HIV-infected or HIV-risk individuals. By merging preventive and care, services became more patient- and client-centered and holistically fulfilled clients' requirements. As a result of these therapies, the authors observed alterations in their patients' behavior. Additionally, the clients welcomed harm-reduction therapies.

Brink and Pienaar (2007) reported an HIV program that utilized a commercial model to care for its mining personnel. To meet the company's health objectives, benchmarking targets, robust monitoring, and evaluation processes, and comprehensive HIV care for families and the local South African community were utilized. As a result of the program's adoption, HIV testing jumped from 10% in 2003 to 63% in 2005. 70% of HIV patients who need anti-retroviral (ARV) therapy was linked to care by 2006, and 94% of PHAs stayed employed with the company. It requires coordination, appropriate linkages, and the provision of comprehensive services, including clinical, psychosocial, and mental health care, as well as housing support, addiction treatment, and financial support (Ayres et al., 2006; Gallant et al., 2011; Kumarasamy et al., 2005; Merkel et al., 2013; Weeks & Alcamo, 2010). HIV testing and connection to care, engagement, retention, access to medicine and adherence support, medical case management, and social support are essential to HIV service delivery and interdisciplinary care (Gallant et al., 2011).

Linkage to care and comprehensive care services are crucial to the post-HIV diagnosis experiences of PHAs, as discussed in this review. Care continuity from testing through treatment emphasizing patient-centered care was a vital aspect of the studied programs. HIV testing is the initial step in the HIV treatment cascade, including HIV testing and diagnosis, referral to appropriate care, and treatment support (Wilton & Broeckaert, 2013). Enrolling PHAs in care as soon as possible ensures they are evaluated for eligibility for ARVs, enhancing longevity and decreasing HIV transmission (WHO, 2013; Wilton & Broeckaert, 2015). As HIV diagnosis is disruptive, linkage, advice, and direction for PHAs at the time of diagnosis are necessary. According to studies, poor connections between therapy and care reduce the effectiveness of the test-to-treat technique (Gardner, McLees, Steiner, del Rio, & Burman, 2011). Linking PHAs to care as a recommended practice for HIV care resulted in the urgency to connect PHAs to manage, reducing the loss of follow-up. Without transition support, retention in care may be suboptimal; studies indicate that over 50 percent of newly diagnosed HIV-positive individuals are not linked to maintenance within six months of diagnosis (Philbin et al., 2013). Both their immediate and long-term worries were addressed by connecting PHAs to care.

Even though HIV is now considered a chronic disease, its timely management and strict adherence to HIV treatment regimens remain significant challenges (Rathbun, Lockhart, & Stephens, 2006). Given that ARV medicine is the cornerstone of an effective HIV program (Gallant et al., 2011), ensuring that PHAs get prompt access to lifesaving ARV treatment improves their quality of life and prevents potential consequences (Beer et al., 2012). In addition to satisfying other requirements, such as socioeconomic and psychological needs, this strategy involves the following: (UNAIDS, 2011). UNAIDS (2011), recognizing the need for a holistic approach to HIV care, pushes for a multifaceted approach to HIV care titled "positive health, dignity, and prevention of HIV," in which the medical and social requirements of PHAs are essential to successful HIV care (Rotheram MG et al., 2019).

This article reminds us that although HIV is considered a chronic illness, it is still an exceptional disease. It requires focus and investment to reduce HIV transmission, morbidity, and mortality. Concerted and coordinated initiatives are needed to enable PHAs to live and engage entirely in the community. Issues such as stigma, inadequate access, poverty, mental health, and addictions might impact the adherence of PHAs to care (Doll M et al., 2018).

Consequently, they require assistance linked to treatment and access to complete (medical and social) services to remain on a path to wellness and to be active community members. Although the benefits of best practices to improve HIV care were evident in the programs, their ability to influence practice and policy may be limited by the absence of standardized processes for developing and reporting best practices. Therefore, authors are not instructed on what information to include in their publications, which would allow for an objective evaluation of their programs. For instance, we rejected the majority of publications that claimed to offer best practices but lacked a verifiable success metric. Health Program Guide is an attempt by the WHO (2008) to provide a tool to evaluate best practices. Still, the items it proposes are not measurable: program effectiveness, relevance, ethical soundness, sustainability, the possibility of duplication, partnership, community involvement, and political commitment.

Second, it wasn't easy to understand the verified outcomes claimed as best practices. For example, a growth in the number of clients or the achievement of benchmarks were used to demonstrate success. Since these numbers were not submitted to inferential statistics, we could not evaluate whether the aforementioned "success" was statistically or clinically significant. Craw and colleagues' adoption of the approach was based on the results of a randomized controlled

experiment. Regarding linking newly diagnosed PHAs to care, the treatment arm outperformed the control by 18% (Springer et al., 2022). The authors did not mention whether the difference between the treatment and control groups was statistically significant. From a qualitative standpoint, the programs that claimed best practices had no inputs or perspectives from PHAs as care beneficiaries to investigate their views on care. In addition, the absence of an objective standard that a researcher or practitioner might use to evaluate a program meant that it was up to the individual author or program manager to determine what constituted best practice.

Thirdly, most of the programs included in this analysis were done in the United States, where it is possible to invest vast sums of money and resources to implement and assess such programs. In addition, additional programs examined in this report were financed by multinational corporations (Swendeman D et al., 2019). We question how such programs could be duplicated in resource-constrained environments. In addition, most of these programs were implemented in context-specific settings, supporting clients with sociodemographic characteristics such as homelessness or health problems, including mental illness and substance abuse. We question whether the best practices developed in such situations would be helpful in pandemic settings.

The arbitrary use of the word "best practice" in the literature presented the most significant difficulty; frequently, authors had no intention of transmitting a new technique or ideal model. When there is a potential lack of verifiable outcomes, it becomes difficult to evaluate practitioners' opinions or experiences dealing with HIV-positive or HIV-at-risk individuals as best practice. Our restricted search of the gray literature may not have uncovered all relevant research on HIV care best practices. In addition, the lack of methodological rigor in several best practice papers was a significant obstacle to our review. Finally, searching English-language articles may have overlooked pertinent items published in other languages.

Best practices are valuable instruments for communicating the innovations of HIV treatment and care practitioners and researchers. However, due to variances in the interpretation, production, and reporting of best practices, the scientific value of presenting recommendations to communicate results is often questioned. Moreover, given the multiple obstacles highlighted during the analysis on identity, authentication, and the potential for implementing best practices in different contexts, our review may have several limits. The evaluation was further complicated by the absence of a scientifically valid instrument for evaluating best practices, a uniform vocabulary for identifying best practices, and discrepancies in the reporting of the contents of the best practices. This reduced the attractiveness of utilizing best practices as feasible instruments for communicating innovation and adaptability in different settings. To make HIV care best practices helpful in promoting innovation, change, and the dissemination of what works in a range of situations, we propose the following: (a) the establishment of a scientifically sound methodology to guide the reporting and evaluation of best practices, and (b) the formulation of a standardized and agreed-upon definition of what comprises best practices and how they are generated and reported.

CONCLUSION

Best practices are valuable instruments for communicating the innovations of HIV treatment and care practitioners and researchers. However, due to variances in the interpretation, production, and reporting of best practices, the scientific value of presenting recommendations to communicate results is often questioned. Moreover, given the multiple obstacles highlighted during the analysis of identity, authentication, and the potential for implementing best practices in different contexts, our review may have several limits. The evaluation was further complicated by the absence of a scientifically valid instrument for evaluating best practices, a uniform vocabulary for identifying best practices, and discrepancies in the reporting of the contents of the best practices. This reduced the attractiveness of utilizing best practices as feasible instruments for communicating innovation and adaptability in different settings. To make HIV care best practices helpful in promoting innovation, change, and the dissemination of what works in a range of situations, we propose the following: (a) the establishment of a scientifically sound methodology to guide the reporting and evaluation of best practices, and (b) the formulation of a standardized and agreed-upon definition of what comprises best practices and how they are generated and reported.

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