

SHORT REPORT

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Free clinic educational interventions for patients with chronic disease

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Abstract

The implementation of community-based programs tailored to underserved patients who do not have access to quality health care can impact future health outcomes. Addressing these chronic disease issues is critical to intervene in communities and develop effective management solutions pertinent to one's health status. Many public-health objectives have been suggested for further evaluation through national Healthy People 2020 goals. Free clinics are intended to provide quality health care to individuals who do not have the ability to pay for medical expenses because of socioeconomic disadvantages. Vulnerable patient populations located in medically underserved regions are affected to a greater degree than the average city-dwelling communities, and potential interventions to tackle pertinent factors influencing positive health outcomes could provide improvements. Tailored educational models in free clinic settings can impact health behaviors and management in susceptible patients with chronic disease. Empathy and compassion are essential criteria to being able to effectively serve free clinic populations. It is important to implement interventions where healthcare providers must look at their patients holistically: what are their needs and barriers to care?

Keywords: Community health services, Evidence-based medicine, Healthcare disparities, Health education, Medically underserved area, Medically uninsured, Patient care, Primary health care, Public health practice, Rural health

Background

Increasing access to quality health care, particularly in underserved communities that are persistently affected by various barriers, can prove beneficial overall. These barriers include low socioeconomic status, minority race and/or ethnicity, lack of transportation, and low literacy [1]. Addressing disease prevention, management of chronic disease, improving health services, increasing access to primary health care resources, identifying integral community partners, and allowing qualified health professionals to efficiently conduct their jobs can create successful results [2]. Task-based, as opposed to patient-centered care, involves attitudes lacking compassionate characteristics such as empathy, warmth, sensitivity, and kindness [3]. Patient-centered care should include understanding wants, needs, fears, concerns, and expectations of patients [3]. Literature suggests humanizing individuals is an initial direction to empathy, therefore determining what matters to a patient instead of

enforcing expectations is crucial [3]. Physician commitment to playing an advanced role in primary health care to influence promising health results stems from extended interactions with underserved patients, appreciation of social health disparities through long-distance community visits, comprehension of people's needs, ability to form successful future patient-physician relationships, and knowledge of available resources [4]. Patient-centered interventions can permit a chance to evaluate which factors most impact the poor health outcomes (e.g. diabetes, hypertension, cardiovascular disease, and hyperlipidemia) in underserved communities, and what barriers could be influencing poorer health statuses. Once these factors are established, formulation of health-related educational materials targeting uninsured patients who suffer from these conditions can be developed and appropriate behavioral changes can be promoted. Examples include healthy eating, exercise, annual preventative screening, immunizations, medication adherence, and the benefits of adhering to physician-recommended follow-up visitation schedules. These changes can modulate emergency room visits, specialist referrals, and mitigate overall increasing health care

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costs. Employing evidence-based, public health-centered programs for patients who do not have the ability to pay for health care services is important to control the burden of chronic disease. This paper studies the effectiveness of different interventions in free clinics, ultimately looking at what strategies could be implemented in communities that face various barriers to appropriate health care.

Healthy people 2020

Healthy People 2020 consists of various health-related objectives important to specific public-health areas. Target percentages are set and initiatives are implemented to influence changes in the current status of health care. Examples include reducing preventable diseases, eliminating health disparities, creating social and physical environments for successful health outcomes, and promoting healthy behaviors to obtain a better quality of life [5]. The importance of targeting chronic disease populations in underserved settings for implementing a community-based project reinforces many of Healthy People 2020 Leading Health Indicators (LHI) [5]. LHI objectives impact high-priority health issues and potential methods of determining what actions can be taken to address them. Although there have been improvements, significant health disparities still exist, access to quality health care is limited in some patient populations, clinical preventive services are lacking. It is crucial these LHI are further explored to facilitate collaboration across various health sectors to improve health outcomes in the US. Moreover, interventional educational materials developed as a result can be modified to reflect patient populations based on patient language (English, Spanish, etc.), illness presentation (chronic disease-specific), level of literacy, and age groups. Public health campaigns are important and should be transformed to reflect specific patient populations to eventually help eliminate health disparities and increase access to quality health care.

Underserved populations and physician shortage

Location and access to services are important for successful health outcomes, as vulnerable individuals residing in impoverished areas have a higher likelihood of facing many hurdles to health. It is essential to expand the health professional workforce in these areas and to develop programs to help retain physicians in these communities. Further assessments can help determine changes that need to be addressed at state, county, and community levels to eliminate poor outcomes. In addition, training sites in health professional shortage areas (HPSAs) provide an opportunity to determine the interventions that are most successful in recruiting health professionals, especially when addressing highest priorities and expansion in these regions. Moreover,

primary-care providers should understand the importance of mental health care to provide services for improved detection, diagnosis, and treatment of mental-health disorders. To help reduce the burden of increased health care costs and rising rates of chronic illnesses, it is imperative that all patients receive access to quality health care, especially for individuals who are at high risk for mortality. Effective health policy decision making is essential when generating new evidence and ideas to facilitate primary-care goals, including increased quality, improved outcomes, and reduced costs. Assessment of literature informs physicians and other health professionals about new health policies, valuable interventions, variations in primary-care workforce, health outcome optimization strategies, training practices, ways to increase the primary-care provider to patient ratio, and ways to successfully address these barriers to tackle current health care issues affecting communities across the nation. Increasing data demonstrates the importance of evidence-based practices that focus on patient-centered care incorporating the multitude of factors involved in an individual's health status such as literacy, socioeconomic status, race, genetic predispositions, access to available resources, and income [4, 6]. In addition, there are multifaceted factors responsible for health outcomes differences in rural versus urbanized locations. Crucial elements such as education, health perceptions and access to quality health care could influence how one effectively recovers from or copes with illness(es) [6]. Recognizing the significance of increasing health awareness in these regions can supplement future physician recruitment in areas lacking access to quality health care.

Free clinics

Free clinics in the US are health care facilities that provide health care services to individuals who are not able to afford health insurance despite the Affordable Care Act (ACA), and do not qualify for Medicaid or Medicare benefits. Free clinics operate with an underlying enthusiasm for compassion. Compassion is defined as a health professional's duty which involves understanding another person's suffering, combined with a willingness to help and to promote the wellbeing of that person, in order to find a solution to their situation [7]. Most of these clinics manage patients who present with chronic diseases such as hypertension, diabetes, hypercholesterolemia, etc., and studies have shown poor health and high dysfunctional levels in patients who attend free clinics when compared to those who do not [6, 8, 9]. In addition, many patients who utilize free clinics require services that are not disease-specific [10]. This necessitates educational interventions which focus not only on chronic disease management, but also ways to achieve

overall optimal health in general. As an example, in individuals with diabetes, educational programs should be incorporated to emphasize empowerment, treatment, and management. In addition, family members should receive health-related education as they might need some assistance for their own health or additional family member's medical issues [8].

Studies have suggested the incorporation of interprofessional collaboration (i.e., academic health center, community-based organizations, health professionals) into a potential practice model that includes multiple community partners involved in the care of patients [11]. Research also indicates that free primary-care clinics reduce hospital costs associated with inpatient care and nonurgent emergency room visits [12]. Despite various unmodifiable patient factors such as being a foreign-born (non-American) English speaker, Spanish speaker, and/or an older adult, along with factors which prevent free clinics from promoting ACA insurance enrollment, they still have the ability to provide educational programs and resources to patients [13]. They might be able to offer educational programs for vulnerable patients (e.g., non-US-born English speakers, Spanish speakers, and older adults) who require literacy assistance to comprehend health insurance options [13].

Various efficient and cost-effective interventions have been implemented to provide access to uninsured or underinsured patients. Examples include free-standing clinics, mobile units, and expansion of primary-care services provided in established settings, such as schools or churches [12]. Funds for these interventions come from federal, state, and local governments; faith-based organizations; nonprofit groups; businesses; hospitals; and individual donations [12]. Clinics run by medical students act as primary-care providers for patients of low socioeconomic status. Prompts for preventive screening may be more successful in a clinic run by medical students where education and clinical service resource constraints may allow increased concentration on more acute priorities [14]. Studies have found student-run free clinics have successful attainment in intermediate clinical outcomes for patients with chronic disease [15]. In addition, free clinic standards outperform published standards for chronic diseases, such as diabetes [16]. Free clinics can offer high-quality chronic disease management for patients who lack access to essential resources for positive health control.

Benefits of interventional health educational programs

When designing an intervention, it is important to consider tailoring specific to sociodemographic characteristics of the patient population targeted to effectively carry out programs and limit barriers affecting the desired health outcomes. Various programs have been

tested to create opportunities for patients to better understand their conditions, use of medications, as well as increase awareness about disease and associated complications [17]. Expectations of the patients have a large impact on the treatment received from a provider [9]. Educational interventions have the potential to modify perceptions to ultimately improve medication adherence and poor lifestyle factors and limit progression of disease as well as associated chronic conditions [17, 18]. Self-management programs are used to educate patients on certain lifestyle choices, risk-factor modifications, and active involvement in one's chronic condition(s), which rely on information and communication practices [19, 20]. Improving self-care is a uniform positive outcome of interventions, especially in chronic disease self-management. Short-term outcomes include improvements in patient satisfaction, coping skills, and perceptions of social support [21, 22]. Despite limited treatment adherence outcomes, long-term care interventions include multiple combinations of effective interventions, including more suitable care, information, reminders, self-monitoring, reinforcement, counseling, family therapy, psychological therapy, crisis intervention, manual telephone follow-up, and supportive care. [20, 23–25] Studies suggest additional research should look at independent effects of interventions on clinical and self-reported outcomes to better identify successful measures [26]. Management of chronic health conditions is dependent on a variety of factors, and it is important to develop methods to tailor programs that are both evidence-based and patient-centered.

Models and interventions

Evidence-based projects that investigate chronic-disease patient-centered interventions, such as self-management health coaching, educational disease-specific workshops, community-based programs, and national database interpretations have the potential to help understand the effects of implementation of various interventions. Health disparities should be explored in further detail to determine the patient-centered interventions that might be effective in reducing the burden of chronic comorbidities. In addition, training programs and effectiveness of teaching sites across the US should be further measured for health professional retention, primary-care physician practices, and workforce establishments. The development and implementation of models can help address Healthy People 2020 objectives (clinical preventive services, access to quality health care, social determinants) by evidence-based preventive services and education to reduce complications of chronic diseases, manage health conditions, and improve quality of life through behavioral modifications.

Conclusions

Public-health initiatives for underserved patient populations should consider incorporating Healthy People 2020 objective goals and free clinic educational interventions that have previously shown successful health outcomes in patients with chronic disease.

Abbreviations

ACA: Affordable Care Act; HPSAs: Health Professional Shortage Areas; LHI: Leading Health Indicators

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