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Provider Perspectives

Barriers and enablers in the implementation of a provider-based intervention to stimulate culturally appropriate hypertension education

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ABSTRACT

Objective: To identify barriers and enablers influencing the implementation of an intervention to stimulate culturally appropriate hypertension education (CAHE) among health care providers in primary care.

Methods: The intervention was piloted in three Dutch health centers. It consists of a toolkit for CAHE, training, and feedback meetings for hypertension educators. Data were collected from 16 hypertension educators (nurse practitioners and general practice assistants) during feedback meetings and analyzed using qualitative content analysis.

Results: Perceived barriers to the implementation of the intervention fell into three main categories: political context (health care system financing); organizational factors (ongoing organizational changes, work environment, time constraints and staffing) and care provider-related factors (routines, attitudes, computer and educational skills, and cultural background). Few barriers were specifically related to the delivery of CAHE (e.g. resistance to registering ethnicity). Enabling strategies addressing these barriers consisted of reorganizing practice procedures, team coordination, and providing reminders and additional instructions to hypertension educators.

Conclusion and practice implications: The adoption of a tool for CAHE by care providers can be accomplished if barriers are identified and addressed. The majority of these barriers are commonly associated with the implementation of health care innovations in general and do not indicate resistance to providing culturally appropriate care.

1. Introduction

In Western countries, ethnic minority populations of African descent are disproportionately affected by hypertension and hypertension-related cardiovascular morbidity and mortality [1–3]. This has also been observed among two major immigrant groups of African descent in the Netherlands: African-Surinamese from the former Dutch colony of Suriname (hereafter, Surinamese) and Ghanaians [4–6]. Insufficient adherence to antihypertensive medication and lifestyle changes [7–9] is one important explanation for the observed ethnic disparities in blood pressure control and negative hypertension outcomes. Enhancing adherence to prescribed antihypertensives and lifestyle changes in ethnic minorities is, therefore, an important challenge for health care providers [3,6,9–11].

In the Netherlands, general practitioners (GPs) play an important role in hypertension treatment. European and Dutch hypertension guidelines advise patient education as a means for improving adherence [12,13]. Patient beliefs have a major impact on adherence and these beliefs may, in turn, affect outcomes [14–16]. Therefore, hypertension guidelines recommend the use of patient-centered educational approaches and to explore the beliefs and needs of individual patients in order to find a common ground regarding treatment [12,13]. There is increasing evidence that patients' beliefs about hypertension and treatment may differ among ethnic groups [17–21]. This was also found in studies among Surinamese and Ghanaian hypertensive patients living in the Netherlands [22–24].

Even though there is increasing evidence that culturally appropriate patient education may positively influence medication use and lifestyle changes in ethnic minority patients [25,26], the literature provides few specific examples or evaluations of the uses of this method in hypertension care [11,27]. For that reason, we developed a provider intervention to facilitate the delivery of culturally appropriate hypertension education (CAHE) in primary care.

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Implementation researchers have reported extensively about common factors that may hamper or facilitate the adoption of innovations in medical practice. Such factors may be associated with political and cultural fit, available resources, the expertise required from the users, or how well the intervention fits into an organization's current practices [28–30]. Furthermore, the particular characteristics of the intervention itself may influence implementation. Thus, before the effect of a provider-based intervention on patient outcomes can be studied, one important but often overlooked question that should be addressed is whether they can be applied in practice [31].

For this reason we conducted a pilot study with the aim of identifying factors that might hamper or enable the adoption of a culturally appropriate approach to hypertension education in a primary care setting.

2. Methods

2.1. Setting

The intervention was piloted in three primary care health centers (PCHCs) in southeast Amsterdam between September 2006 and May 2008. All three PCHCs had participated in a previous study [22–24,32] and volunteered to pilot the intervention. It is estimated that 26% of the 24,094 registered at these centers are of African-Surinamese and Ghanaian origin (data are from 2007). All three centers used a similar protocol for hypertension care, based on the guidelines of the Dutch College of General Practitioners from 2006 [12]. In the three centers in question the task of providing hypertension education to patients with uncomplicated hypertension was assigned to nurse practitioners (NPs) and general practice assistants (GP assistants), working under the supervision of GPs. For GP assistants, hypertension education was typically a new task that had not been assigned to them in previous hypertension protocols. The intervention was targeted at all health care providers who provide hypertension education to patients with uncomplicated hypertension (K86): 7 NPs, 18 GP assistants and 22 supervising GPs.

2.2. Intervention

The aim of the intervention was to enhance provider knowledge of the relationship between sociocultural factors and patient beliefs and behaviors with respect to hypertension management, and to equip providers with the tools and skills to manage these factors during patient education. Implementation strategies were developed in cooperation with three GPs and three NP/GP assistants from participating PCHCs. This approach was chosen to ensure that the intervention would fit the patient population and the regular working methods of the practices, which is considered important for the acceptance and success of innovations [33].

The intervention consisted of six tools to facilitate a culturally appropriate approach to hypertension education and counseling, including: (1) a topic list to explore the patient's ideas, concerns and expectations regarding hypertension and hypertension treatment (Box 1: Ad. 1); (2) a topic list to explore culturally specific inhibitors and enablers of adherence to hypertension treatment (Box 1: Ad. 2). The items on these lists were derived from the work of Kleinman [34,35], recent approaches to improving adherence [14,36,37], and our prior study [22–24]; (3) a topic list to facilitate the recognition of specific inhibitors to hypertension management in Surinamese and Ghanaian patients, based on our prior study [22–24]; (4) a list of specific items to register the results of hypertension counseling sessions; (5) information leaflets for Surinamese or Ghanaian patients with answers to frequently asked questions about hypertension. Leaflets were adapted to the language, customs, habits, norms and dietary cultures of the Surinamese and Ghanaian communities [22–24], and pre-tested in two focus groups with Surinamese and Ghanaian hypertensive patients; and (6) a referral list, including neighborhood facilities offering healthier lifestyle support, tailored to Surinamese and Ghanaian patients. These tools were supplemented to the standard hypertension protocol used in the practices. They were made available through pop up screens in the digital hypertension protocol that could be accessed on the intranet of the practices and also on paper.

To maximize the application of the toolkit and remove potential barriers to the adoption of the tools three implementation support strategies were used, which were informed by theories regarding the principles of effective change in medical care [28,29,38]:

- *Discussion meetings with GP teams.* In order to identify potential barriers to the implementation of the new tools in each health center and to reach a consensus about how these barriers could be overcome, information meetings (lasting 1 h) with the GP teams were held prior to the intervention. Eighteen GPs attended five meetings. Some of the topics upon which consensus was

Box 1. Topic list for eliciting immigrant patients' explanatory model of hypertension and hypertension management.

Communication
- Determine how a patient wants to be addressed (formally or informally).
- Determine the patient's preferred language for speaking and reading (Dutch or another language).
- Use this information in your interaction with the patient.

Introduction
- It is often difficult for us (care providers) to give advice about hypertension and how to manage it if we are not familiar with the views and experiences of our patients. For that reason I would like to ask you some questions to learn more about your own views on hypertension and its treatment.

Ad 1. Elicit personal views on hypertension and its treatment

Understanding
- What do you understand hypertension to mean?

Causes
- What do you think has caused your hypertension? Why did it occur now/when it did; why to you?

Meaning and symptoms
- What does it mean to you to have hypertension?
- Do you notice any symptoms of your hypertension? How do you react when you do?

Duration and consequences
- How do you think your hypertension will develop further? How severe is it?
- What consequences do you think your hypertension may have for you (physical, psychological, social)?

Treatment
- What types of treatment do you think would be useful?
- What does the prescribed therapeutic measurement(s) mean to you?

Ad 2. Elicit contextual influences on hypertension management

Social
- Do you speak with family/community members about your hypertension? How do they react?
- Do family/community members help you or make it difficult for you to manage hypertension? Please explain.

Culture/religion
- Are there any cultural issues/religious issues that may help you or make it difficult for you to manage hypertension? Please explain.

Migration
- Are there any issues related to your position as an immigrant that make it difficult to you to manage hypertension? Please explain.

Finance
- Are there any issues related to your financial situation that make it difficult for you to manage hypertension? Please explain.

Based on Kleinman's Explanatory Model format [34,35], and our previous study [22–24].