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Medical Decision Making

The impact of different modalities for activating patients in a community health center setting

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ABSTRACT

Objective: Decision aids are designed to assist patients in understanding their health care choices but lower SES populations are less activated and may not be prepared to benefit. Activating interventions may help prepare patients for using decision aids.
Methods: We evaluated the impact of a decision aid video (DA) and the Patient Activation Intervention (PAI) on patient's level of activation measured by the Patient Activation Measure (PAM) and their decision-making confidence measured by the decision self-efficacy (DSE) scale. Patients were randomized into control, PAI alone, DA alone, and DA + PAI groups.
Results: PAM and DSE scores increased significantly in all groups with repeated measures. Restricting analyses to those with pre-intervention PAM scores at stages 1 or 2, the change in PAM scores was significant only for the intervention groups. The change in DSE scores was significantly only in the DA group.
Conclusion: These findings provide support for the utility of the DA, the PAI, and the DA + PAI in activating lower SES individuals. The DA alone changed DSE scores in the least activated patients while the PAI and DA both changed PAM scores.
Practice implications: Interventions directed at increasing patient engagement in their care may be useful particularly for less activated patients from lower SES populations.

1. Introduction

Patient activation refers to a person's ability and inclination to manage their health and health care. Patient participation has been shown to be an important determinant of physician information provision in medical encounters [1]. Differences in physician communication style contribute to patient participation [2] as well as preventable health complications for patients with low socioeconomic status (SES) or members of racial/ethnic minority groups [3]. Patient participation is one aspect of patient activation. Improving patient participation can increase the quality of patient care [4] and may contribute to reducing the health inequalities seen between more and less advantaged populations [5].

Patient activation can be viewed on a continuum from not activated (passive) to fully activated. Highly activated patients take more responsibility and acquire knowledge and skills that promote self-management and better decision-making [6]. One mechanism to improve health care services may be fostering shared decision making (SDM) in which evidence-based treatment options are discussed with patients and choices are made on the basis of patients preferences. Successful engagement of patients in more activated roles using SDM requires significant improvement in clinician–patient communication.

The SDM strategy may benefit from the use of decision aids (DA) [7,8]. Decision aids can improve patient participation in health decisions [9] and help prepare patients to participate in decision making treatment options [10] and in getting the services and the level of care they need [10,11]. A DA can be specific, designed to assist with a particular treatment decision [12] or general, helping patients to understand the importance of a proactive approach to health problems [13]. Within the primary care setting, DAs that create a greater understanding of the role that patients need to assume to gain the most from their interactions with their care team may be of particular value.

Although there has been an effort to develop decision support tools that are effective among low literacy, low SES and minority populations [14–16], many patients from these groups are unprepared to pose questions, state preferences, and express concerns [17,18] in their interactions with their providers. Reasons

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include lack of knowledge and confidence, and a preference for a more passive role [19–21]. Such patients are less "activated" and therefore likely less prepared for SDM. The success of efforts to implement SDM in these populations may require employing additional strategies to aid them in becoming more activated [22].

Hibbard and colleagues developed the Patient Activation Measure (PAM) to efficiently assess patient knowledge, skills and confidence in managing their health [23,24]. The PAM measures the extent to which: (1) patients know how to manage their condition, (2) have the skills and behavioral repertoire to manage their condition, and (3) have the confidence that they can collaborate with their health providers, maintain functioning, and access appropriate and high quality care. Higher levels of activation have been associated with greater engagement in actions that promote SDM such as bringing health information and lists of questions to physician visits [6]. Activation levels have been shown to vary by population [25,26] and health status [27,28]. A nationally representative study found that younger, more educated, and higher income individuals were more activated and that activation was lower in Medicaid enrollees, the uninsured, and people whose self-rated health was poorer [23]. The PAM has also been used as part of a clinical intervention called Coaching for Activation®. After the patient activation level has been established through administering the instrument, the patient's responses to the PAM questions allow a dialogue to be opened about becoming more active in interactions with physicians [29].

To date there have been few interventions specifically directed at increasing patient activation. One study of chronic disease self-management in which patients were randomized to intervention or usual care recorded increases in PAM scores that were associated with positive changes in self-management [27].

In conjunction with collaborators from the Right Question Project [30] we developed a brief Patient Activation Intervention (PAI) that increased PAM scores in patients attending community health centers in New York City [31]. The objective of the intervention is to help individuals understand the importance of asking questions to inform potential medical decisions. The discussion that arises from the intervention focuses on non-medical decisions that individuals routinely make and then identifies questions that inform those routine decisions. It goes on to link the process of asking questions to decisions that are made during doctor visits and uses that preparation to assist with generating questions for their impending doctor visit. This intervention, described in detail previously [32], was successfully implemented in primary care waiting rooms and well received by patients.

For the current study we tested the effectiveness of a generally activating decision aid developed by the Foundation for Informed Decision Making [33] in changing levels of patient activation and decision self-efficacy, measured respectively by the PAM and the decision self-efficacy (DSE) scale [34]. We speculated that less advantaged patient populations might require additional preparation to make the best use of this DA. Using a randomized, controlled trial format, we compared the DA alone or combined with the PAI to the PAI alone or routine care (control). We hypothesized that the DA alone and the PAI alone would increase PAM and DSE scores compared to those who received neither intervention (hypothesis 1), and that participants who received both the PAI and the DA would have the greatest increase in PAM and DSE scores (hypothesis 2).

2. Methods

2.1. Procedure (study design and sampling)

Patients aged 18 and older attending the William F. Ryan Health Center in New York City were approached and invited to participate after receiving a detailed explanation of the study design and survey procedures. On the days our research assistant was there, all adult visitors to the health center over an approximate 6-month period were approached about participation. Patients included those with scheduled appointments as well as walk-in, and those seeing their continuity provider as well as those seeing a covering primary care clinician. Potential participants were offered a $20 prepaid electronic fare card as incentive. Individuals agreeing to participate provided informed consent and were then randomly assigned to one of 4 groups: no intervention (control = data collection and doctor visit), pre-visit exposure to a PAI, pre-visit exposure to the DA, and pre-visit exposure to both DA and the intervention (DA + PAI). The DA selected for this project, "Getting The Health Care that's Right for You", was developed by the Foundation for Informed Medical Decision Making [33], to impart general information to patients about their role in gaining information and care within a medical setting.

Pre and post-visit data were collected in the CHC waiting room prior to and following a physician visit. Data collection included socio-demographic and health-care related questions as well as the short-form of the Patient Activation Measure (PAM) [24] and the decision self-efficacy (DSE) measure [34]. The study protocol was reviewed and approved by the Committee on the Protection of Human Subjects at the City College of New York.

2.2. Measures

2.2.1. Socio-demographic and health-care related characteristics

Patients provided data regarding age (continuous), gender, race/ethnicity, educational attainment, and marital status. Race/ethnicity categories included: 'non-Hispanic white', 'African American/Black', 'Hispanic' and 'other'. Educational attainment level was categorized as: 'less than high school', 'high school graduate or equivalent', 'some college', and 'college graduate or above'.

2.3. Patient activation

The Patient Activation Measure (PAM) asks patients to indicate their level of agreement on a four-point likert scale (strongly disagree to strongly agree) with 13 questions. The scores range from 13 to 52 and using Hibbard et al.'s methodology [23,24] these are converted using a curvilinear transformation from raw scores into an activation score between 0 and 100. A higher score corresponds to a higher level of patient activation. To facilitate interpretation of activation scores the test developers identified four levels or stages of activation based on their PAM score: Patients at stage 1 lack the confidence to take an active role in their own health and are most likely passive recipients of care; patients at stage 2 lack an understanding of their own health or health care; patients at stage 3 have an understanding of the key facts associated with their health or health care and are beginning to take action over their health, but often lack confidence and skills to support their behaviors; patients at stage 4 are knowledgeable, skillful and confident when it comes to their health and healthcare, play a significant role in their health and health care, and have adopted new healthy behaviors, which may or may not be maintained during stressful or critical moments [27]. Stage 1 is defined as a raw score of 35.9 or less; stage 2 from 35.91 to 38.6 inclusive, stage 3 from 38.7 to 42.5, and stage 4 is defined as any score of 42.6 or greater.

2.4. Decision self-efficacy

The decision self-efficacy (DSE) scale is designed to reflect how confident respondents feel in making an informed medical choice on a 5-point scale ranging from "not at all confident" to "very