Advance planning and its effectiveness in primary care

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Abstract

Introduction: Advance care planning is associated with improved patient care and quality of life.

Objective: to determine the feasibility of randomization, recruitment and retention in the intervention of group visits in primary care.

Methods: A two-arm randomized clinical trial was conducted in 28 primary care practices.

Results: Willingness to sign documents was observed for a medical decision maker (adjusted odds ratio (OR9 = 1.43; 95% CI = 1.06 -1.94).

Conclusions: This analysis shows that a group visit organized around individual-centered PAA values and experiences increased PAA documentation in primary care.

Keywords: advance care planning, primary care, physician visits, medical decision makers. Source: DeCS

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Resumen

Introducción: la planificación anticipada de la atención se asocia con una mayor atención y una mejor calidad de vida del paciente.

Objetivo: determinar la viabilidad de la aleatorización, el reclutamiento y la retención en la intervención de visitas grupales en atención primaria.

Método: Se realizó un ensayo clínico aleatorizado de dos brazos en 28 prácticas de atención primaria.

Resultados: Se observó la disposición para firmar documentos para un tomador de decisiones médicas (odds ratio (OR9 ajustado = 1,43; IC del 95% = 1,06 –1,94).

Conclusiones: Este análisis muestra que una visita en grupo organizada alrededor de los valores y vivencias de PAA centrados en el individuo incrementó la documentación de PAA en atención primaria.

Palabras clave: planificación anticipada de la atención, atención primaria, visitas médicas, decisores médicos.

Fuente: DeCS

Introduction

Advance care planning (ACP) conversations and documenting treatment preferences are associated with greater goal-aligned care, reduced healthcare implementation, improved patient quality of life, and superior family experiences[1]. Yet, despite these benefits, many older adults do not participate in ACP. Barriers to effective ACP in primary care settings include lack of time, patients' expectations that healthcare professionals will initiate conversations, and reluctance to discuss end-of-

life care[2]. An innovative model called group visiting intervention (GVI) was developed to address some of these barriers in 2016[3]. Strengths of group visits include patient-centered education, high patient and physician satisfaction, and increased patient behavior change[4].

IVG group visits promote group dynamics, peer learning and goal setting around PAA participation. Groups aim to bring together 8 to 12 patients in two 2-hour sessions, one month apart. IVG group visits integrate PAA Engagement Theory, Collaborative Learning Theory, and the strengths of group visits[5,6]. PAA Engagement Theory defines PAA behaviors that relate to (1) involving decision-makers, (2) considering the acceptable quality of life, (3) considering flexibility for decision-makers, and (4) asking physicians questions about PAA. Collaborative Learning Theory states that learning is a social experience, learners are diverse in experiences and learning styles, and learning includes individual experiences and medical knowledge[7].

The present study was conducted to assess whether the IVG group visitation intervention improves PAA documentation and preparation in older adults compared with a control arm of mailed PAA materials. It is presumed that PAA documents and PAA participation would be higher in the IVG group visitation group compared with the control at 6-month follow-up.

Method

A two-arm randomized clinical trial was conducted in 28 primary care practices in the city of Latacunga to determine the feasibility of randomization, recruitment and retention in the IVG group visit intervention and the effectiveness on patient-centered PAA outcomes after randomization to IVG group visits versus mailed PAA materials.

Primary care patients were enrolled from August 2018 through September 2019. Patients aged 60 years or older were identified (1945 patients through the electronic health record (RES) and 14 through self-referral) and assessed for eligibility according to RES screening for key exclusion criteria: diagnosis of cognitive impairment or dementia on the problem list; diagnosis of deafness on the problem list; non-local residence; or prior participation in previous PAA group visit quality improvement sessions. This study was approved by the Universidad Regional Autónoma de Los Andes (UNIANDES).

Recognizing that PAA is a process in which patients' wishes may change over time based on their personal or clinical context and that PAA involves several different actions, including discussions and documentation, potential participants were not excluded if they already had a PAA document in the EHR. Potentially eligible patients were assessed by their primary care physician as appropriate for group intervention.

Medical decision-maker documentation in the RES was based on the presence of an orally designated medical decision-maker or a durable medical power of attorney form. PAA readiness is measured at baseline and at six months using the validated four-item PAA Engagement Survey[8,21]. The four questions assess readiness to discuss and document PAA preferences (five-point Likert scale). The four items were averaged to create the total PAA engagement score, with higher scores indicating greater readiness.

Descriptive statistics were calculated for age, sex, race, insurance type, marital status, education, and whether the patient was a caregiver. Chi-square tests compared patient characteristics between the two intervention arms. The primary outcomes were the presence of advance directives and medical decision-maker documentation in the RES at 6 months compared with baseline. Database and statistical processing of the data were performed and analyzed in SPSS 26 statistical software (SPSS Inc., Chicago, IL, USA), and the descriptive statistics were used for the collection, presentation and interpretation of the results.

Results

A total of 1,959 patients were assessed for eligibility. After excluding patients ineligible by RES, 1344 were reviewed by their primary care physician to determine their ability to participate in a group intervention. Of 835 eligible and approved individuals invited to participate, 31 did not meet inclusion criteria, 203 could not be contacted, 491 declined to participate, and 110 (13 %) patients were enrolled and randomized to the IVG group visit intervention or control (55 per arm).

The mean age of the participants was 77 years, and the majority were white and female. Patients

with self-reported memory problems were similar in both arms. At baseline, the percentage of patients with PAA documents in the RES was not different (44 % in the intervention and 40 % in control; *P* = 0.7), although the rates were higher than the averages reported in the PAA studies of 36 %.

At six months, 71% of IVG participants had a PAA document in the RES compared to 45% of participants in the control group (p < 0.001), representing a difference of 26%.

Based on the four-item PAA engagement composite score, IVG participants reported a greater willingness to engage in PAA compared to the control (4.56 vs. 4.13) at six months, although this was not statistically significant (Table 1). For IVG intervention participants, the PAA participation score increased significantly from baseline to 6-month follow-up, with a 22.5% increase in the score (p = 0.02). Control participants also reported a positive change in PAA participation score over time, although the magnitude of change was smaller (7.5% increase in the score; *P* = 0.05). In the IVG arm, effect sizes were small (0.20-0.49) for two items (willingness to talk to the physician and willingness to sign health care documents) and effect sizes for change in readiness over time for each PAA readiness item in the control arm were insignificant (Table 1). Effect sizes representing the increase in preparedness over time were significantly different between the two groups (p = 0.0056).

Table 1. PAA commitment at baseline and six months after IVG group or control visits.

	Baseline (n = 110)			6 months (n = 100)			Baseline at 6-month follow-up (n = 100)	
Variable	Control, mean (SD)	Intervention, mean (SD)	p-value	Control, mean (SD)	Intervention, mean (SD)	p-value	Control effect size	Intervention effect size
PAA commitment score (composed of four elements)	4,00 (0,4)	4,21 (0,5)	.54	4,13 (0,4)	4,56 (0,4)	0,16	0.075	0.225
Signing official documents appointing a medical decision-maker	4.25 (1.2)	4,49 (0,9)	.25	4.39 (1.0)	4,80 (0,7)	.015	0.06	0.19
Talk with your health care decision-maker	4.25 (1.1)	4,65 (0,8)	.03	4.28 (1.2)	4,74 (0,8)	.03	0.014	0.053
Talk to your doctor	3.47 (1.3)	3.47 (1.1)	1	3.59 (1.3)	3.99 (1.2)	0,16	0.046	0.20

about your medical care.								
Signing official health care documents.	4.04 (1.1)	4.24 (1.0)	.31	4.26 (1.1)	4,69 (0,9)	.03	0.11	0.24

Source: statistical analysis, p ≤ 0.05, Abbreviations: PAA, planning; IVG, Group Visit Interventions, SD, standard deviation. Clinically significant effect sizes were calculated from changes from baseline (i.e., mean IVG scores minus mean control scores, divided by combined baseline SDs) and are based on standardized criteria (i.e., 0.20-0.49, small; 0.50-0.79, medium; and ≥0.80, large).

After adjusting for age, sex, and prior PAA documents, IVG participants reported greater willingness for individual PAA actions that was significantly greater than control participants, including willingness to sign documents for a medical decision maker (adjusted odds ratio (OR9 = 1.43; 95% CI = 1.06 -1.94), willingness to talk to a decision maker (OR = 1.6; 95 % CI = 1.17-2.23), and willingness to sign medical wishes documents (OR = 1.37; 95 % CI = 1.03-1.82). There were no significant differences in willingness to talk to the physician about medical care.

Discussion

This study demonstrates that an innovative primary care-based PAA group visitation model, the IVG group visitation intervention, increased PAA documentation in the RES and some measures of PAA participation among community-dwelling older adults. A key strength of the IVG group visiting intervention is integration with the patient's medical care, as evidenced by high rates of PAA documentation in the RES and over 90% documentation rates of the patient's preferred medical decision-maker[9,10].

Patients randomized to the IVG group visit intervention reported higher readiness levels for three of the four PAA readiness questions. However, there was no difference in readiness to talk to their physician about future medical care. This may be because PAA resources for the intervention and control arms focus on values clarification and communication with a physician decision-maker rather than the health professional[11,12]. Future studies might consider tailoring PAA interventions to the level of readiness for a variety of PAA behaviors[13,14]. It is also likely that other meaningful outcomes of the IVG group visit intervention, including the value of group dynamics/peer support or influence on future decision-making and goal-aligned care, have not been measured. [22]

This study compares an in-person group visit focusing on patient engagement and values clarification with a control group of mailed materials, where patients did not have a scheduled appointment with a healthcare professional. Therefore, it is impossible to say which components of the IVG group visits resulted in increased documentation of PAA[15,16].

Although this intention-to-treat analysis showed that participants randomized to IVG had higher rates of PAA outcomes, from a feasibility and potential sustainability perspective, specific processes for pragmatic outreach, recruitment, and even flexible delivery options (i.e., evenings, weekends, and telehealth) are still needed for PAA interventions at clinics[17]. The high referral rate of PAA documentation and documentation of medical decision making may be related to the high levels of education and socioeconomic status of participants, suggesting selection bias. Future effectiveness and implementation studies should focus on increasing generalization to real-world settings[18,19]. Overall, future work is needed to further test the effectiveness and implementation of IVG group visits in a variety of real-world primary care settings[20].

Conclusions

This analysis shows that a group visit organized around individual-centered PAA values and experiences increased PAA documentation, medical decision-maker documentation, and readiness for certain PAA action steps in primary care.

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