ORIGINAL RESEARCH

Effectiveness of Family Meeting in Increasing Follow-up Rate, Quality of Life and Satisfaction to Services Received Among Elderly Patients at the Outpatient Clinic of Philippine General Hospital: A Randomized Controlled Trial*

Jena Angela T. Perano, MD and Eva Irene Yu-Maglonzo, MD, FPAFP

Background: Family support is vital and could affect the outcome of many chronic diseases; hence involvement of family members in every patient encounter is important especially among elderly population. Family meeting could help the physician identify the often unmet needs of the family member and to improve care of the elderly patient. Research on families and health demonstrates the influence of the family on health and illness and the benefits of family interventions, yet there are only a few well-constructed randomized control trials.

Objective: To determine the effectiveness of family meeting and standard geriatric care versus standard geriatric care alone on outpatient follow up rate, quality of life and satisfaction to the services received at the outpatient department of elderly patients.

Methodology: The study was an open labelled randomized controlled trial among elderly patients referred to the Family Health Unit of UP-PGH. Patients were randomized to either family meeting and comprehensive geriatric assessment or comprehensive geriatric assessment alone. Patients were advised to follow up at 2, 4 and 12 weeks. After the initial meeting, QOL and satisfaction were measured at baseline and done during subsequent follow up.

Results: A total of 110 elderly patients referred to the family health unit for comprehensive geriatric assessment were included in the study. The follow up rate at 2, 4 and 12 weeks after initial consultation was significantly higher among elderly who received family meeting and comprehensive geriatric assessment versus elderly patients who received the comprehensive geriatric assessment alone, p-value >0.05. Satisfaction to services received, at two weeks follow-up, was likewise significantly higher among elderly who received family meeting plus CGA. There was no significant difference in the quality of life on both groups.

Conclusion: Family meeting and comprehensive geriatric assessment are effective in promoting compliance to follow up and satisfaction to health service provision among elderly Filipinos referred to the Family Health Unit.

Key words: Family meeting, comprehensive geriatric assessment, elderly

* From the Department of Family and Community Medicine, Philippine General Hospital, University of the Philippines Manila

Introduction

Family is any group of people related either biologically, emotionally, or legally. This group of people that the patient defines as significant for his or her well-being.[1] The World Health Organization has characterized the family as the "primary social agent in the promotion of health and well-being".[2]

Close family ties is evident among Filipino households; consequently, illness is very much felt among its members. In a multispecialty study by Golics, et al. (2013), family members of patients felt the emotional impact of the illness and have a major influence on the quality of life. In fact, family members of patients can be more emotionally affected than the patients, which could impair the family's ability to support the patient. The study also demonstrated that the family's quality of life is a previously neglected critical area of health care that needs to be addressed by all health care professionals in order to provide appropriate support for both patients and family members.[3]

Family support could affect the outcome of many chronic diseases. Berkmaan and colleagues (1992) found that women suffering a myocardial infarction and who are isolated or have little family support have two to three times higher mortality rate compared to women with good family support.[4] Epidemiologic studies (Berkman 1992 and Berkman 1995) have demonstrated that social support particularly coming from the family is health promoting.[5] In another study involving elderly patients, result showed greater emotional and instrumental support received from family members and anticipated support was significantly associated with greater sense of older parents' psychological well-being.[6] Thanakwang suggested that filial piety and family solidarity should be considered when developing elderly care policy and interventions to promote psychological well-being.[7]

Many of elderly patients have an increased risk for chronic diseases due to their age-related physiologic decline. Most prevalent chronic diseases have a significant influence on the quality of life of the elderly individual. It was observed that the greater number of comorbidities reported by an individual, the more acute the negative effects are on the individual's health-related quality of life.[8]

Family involvement in every patient encounter is vital especially in elderly population. At certain times, a family intervention is needed. Operationally, an intervention becomes a family intervention when it includes at least two members of the family, usually the patient and one other family member.[9] The intervention could be in the form of family psycho-education or the traditional family therapy. Family psycho-education provides information, support, problem solving skills to help families cope with a chronic illness and looks to the impact of illness in the family. On the other hand, the focus of the traditional family therapy is on the family and not on the illness. There is no strict criteria when to bring the family of a patient together for a meeting. Family meeting should be routinely convened in the following situations: hospitalization, end of life care, institutionalization of an elderly patient and family conflict or dysfunction that interferes with patient care.[1]

Family meeting could help the physician identify the often unmet needs of the family members.[10] It could serve as therapeutic intervention that allows the patients and families a safe haven in which to process emotion and receive validation for concerns, feelings and personal efforts.[11]

Out-patient follow up is important especially among patients with chronic diseases. It ensures proper continuation of treatment, management of treatment failures and complications, and recognition of patient non-compliance to treatment. In the setting of chronic condition, non-adherence generally worsens the outcome of treatment, leading to increased risk of adverse medical events, more consultation with physicians, higher rates of hospitalization and increased health care cost.[13]

This study aimed to determine if actively involving the family thru family meeting will promote compliance to follow up, quality of life and satisfaction in terms of the care received by the elderly patients.

Methods

This study was an open labelled randomized controlled trial involving elderly patients referred to the Family Health Unit (FHU) for comprehensive geriatric assessment(CGA). The study population included were elderly patients aged 65 years to 80 years old, accompanied by at least 1 family member significant to the care of elderly. Excluded were: elderly patients with dysfunctional families as assessed using the family APGAR with a score of less than 7, elderlies need of critical care like hospital admission, elderlies with the following conditions such as dementia, conductive and sensory neural hearing loss and severe rheumatoid arthritis and elderlies unable to understand and speak Tagalog.

Randomization

Randomization was done using computer generated random numbers thru the use of Microsoft excel. Participants who gave informed consent were randomly assigned to either the treatment group (family meeting plus standard geriatric care) or the control group (standard geriatric care alone).

Concealed allocation to either of the interventions was done using white letter envelopes. Once randomized, the participants and primary investigator were not blinded to the group assignment.

Recruitment and Data Collection Plan

All elderly patients accompanied by at least one family member, referred to the FHU for CGA was asked to participate in the study. A case report form was used to gather the baseline demographic characteristic of the participants.

Intervention

Geriatric Care

All eligible elderly patients underwent medical history taking, physical examination, comprehensive geriatric assessment, medical and psychosocial management. The standard geriatric care was done at the FHU by the primary investigator. A CGA chart adopted from the Family Health Unit of Philippine General Hospital, Department of Family and Community Medicine was used. The clinical profile was summarized which included the following: current medical problem, result of diagnostics, medical intervention, medications, immunization and cancer screening done if any.

Comprehensive Geriatric Assessment (CGA)

Various tests were included as part of the CGA. Cognition was tested using Mini-Mental Status Exam (MMSE) in Filipino. It tests a broad range of cognitive functions, including orientation, recall, attention, calculation, language manipulation and constructional praxis.[14] Mood was tested using a self- reported Patient Health Questionnaire (PHQ-9) in Filipino. PHQ-9 is a validated quick depression assessment. Activities of daily living both basic and instrumental were assessed to see if patient is able to perform tasks without help, with some help or completely unable to perform tasks. Fall risk was assessed by asking a single question if the patient had an accidental fall in the past 6 months and using the get up and go test. An elderly who is unable to perform the test in less than 30 seconds was at risk of falls. Incontinence was tested using three questions: 1. "Do you ever lose urine when you don't want to?" 2. "Have you lost urine on at least 6 separate days?" and "Do you ever lose urine when coughing, exercising, lifting, screaming or laughing?" Any yes answered to these questions would mean a possibility of incontinence. For the evaluation of hearing, otoscopy was performed first. Whispered voiced test would follow. Vision was tested using a Snellen's eye chart. Two questions regarding vision was asked, i.e. problem with eye sight and last complete eye exam. For nutrition weight, height and BMI were recorded. General dentition exam was done. Nutrition assessment was done using Mini Nutritional Assessment (MNA). Caregiver was identified including family decision maker and financial provider.

Family Meeting

Family meeting was done among participants randomized to treatment group after the comprehensive geriatric assessment. It was held at the counselling room of the Family Health Unit. At least one family member significant to the care of the elderly was present. Family Meeting was done in 5 parts Section 1: "greeting the family member". This included greeting and acknowledging each member present and introduction of the primary investigator to the family. Section 2: "Clarify and set the goals". In this section, important goals for the meeting were set collectively by the patient, family, and the primary investigator. Section 3: "Discuss the problem or concerns". This section included asking the patient and family members to state what they know about the medical condition and what they think is the primary problem, emotional critical misperceptions, clarify and summarize concerns brought up. Section 4: "Identify resources". The fourth section is the identification of medical resources available to the patent and family. It also involved acknowledging family strengths and weakness as well as community resources and referrals. Section 5: "Establish a plan". In this section patient and family members together with the primary investigator establish the plan of management. Review of the plan and expectation was done. Family involvement was negotiated. The session was ended by asking the patient and family members if they have any additional questions and thanking them for participating in patient's care. Follow up schedule was given and written on the patient's blue card. The minutes of the meeting were recorded in the family meeting chart.[1]

Tools and Variables Measured

1. Follow up

The act of returning for a clinic visit after the initial patient-doctor-family encounter at the Family Health Unit on or within 7 days of the scheduled appointment date.

2. Quality of Life

The 5-item World Health Organization Well-Being Index (WHO-5) is a short and generic global rating scale measuring subjective well-being. This questionnaire was given to the elderly after the intervention on the initial consult and on subsequent follow ups at 2 weeks, 1 month and 3 months.

3. Satisfaction to Health Services Rendered

After the WHO-5 questionnaire, a 3-item, 4 points Likert scale satisfaction survey to health services rendered was administered to the elderly. This was administered by the primary investigator, which took 3 to 7 minutes to be accomplished. The satisfaction survey questions were developed by the primary investigator and have not been validated. A repeat satisfaction survey was administered by the primary investigator during the follow up consult.

Follow-up Consultations

Medical management and referral were done on a case to case basis by the primary investigator. All elderly patients were asked to follow up at the FHU two weeks after the initial consult. A scheduled date was given and written in the elderly's blue card. However, earlier follow up was scheduled for patients with more pressing medical concerns. If patient was unable to follow up after 7 days of scheduled appointment date, an SMS was sent for rescheduling. The cause of inability to follow-up, was also explored by the primary investigator. Only patients who followed up within 7 days of the rescheduled appointment date were considered as successful/ compliant follow up.

Subsequent follow ups with the primary investigator were done after 2 weeks, 4 weeks and 12 weeks from the initial consultation. After follow up at the third month, patients were then referred back to their primary physician and given recommendation based on the result of the standard geriatric care.

Data Analysis Plan and Ethical Considerations

All gathered data were encoded in Microsoft Excel. Numeric variables (age, weight, height, household income, WHO-5 quality of life, and satisfaction survey score) were summarized using descriptive statistics such as mean, median and standard deviation. Nominal data which include sex, civil status, highest educational attainment, presence or absence of pertinent illness, pension and senior citizen group were analyzed using frequencies, proportions and cross tabulations. Student's t-test was used to determine between the treatment and control groups, in terms of follow-up rate, WHO-5 quality of life and satisfaction survey score.

The research proposal underwent ethnical review by the Research Committee of the Department of Family and Community Medicine and subsequently was approved by the Ethical Review Board of the University of the Philippines Manila. Participants data shall be kept confidential and not available to other interested parties.

Results

A total of 110 elderly patients referred to FHU for CGA were included in the study. The demographic characteristics of elderlies randomized to family meeting and comprehensive geriatric assessment versus comprehensive geriatric assessment alone were similar at baseline (Table 1). However, significantly more elderlies in the control group are without financial support thru pension compared to elderlies receiving family meeting plus comprehensive geriatric assessment. Nevertheless, the average income was similar for both groups. Reasons for elderly patients unable to come for follow-up visits includes: financial constraints, better condition and hospital admission.

Table 1. Baseline demographic characteristics of Filipino elderly patients referred to the Family Health Unit (FHU) randomized to received family meeting and comprehensive geriatric assessment (CGA) versus CGA alone.

Variables	Treatment (CGA and Family Meeting) (N=55)	Control (CGA alone) (N=55)	p value
Age, Mean (SD), years	69.71 (SD±4.417)	68.64 (SD±4.411)	0.123
Sex,%			
Males	18 (32.7%)	20 (36.4%)	0.841
Females	37 (97.3%)	35 (63.6%)	
Presence of partner,%			
With Partner	26 (47.3%)	29 (52.7%)	0.703
Without Partner	29 (52.7%)	26 (47.3%)	
Birthplace,%			
NCR and Luzon	38 (69.1%)	40 (72.7%)	0.834
Visayas and Mindanao	17 (30.9%)	15 (27.3%)	
Location,%			
Manila Area	12 (22.6%)	15 (28.8%)	0.509
Outside Manila	41 (77.4%)	37 (71.2%)	
Number of Elderly,%			
With Senior Citizen Club	39 (70.9%)	32 (58.2%)	0.232
Without Senior Citizen Club	16 (29.1 %)	23 (41.8%)	
Number of Elderly,%			
With Pension	26 (47.3%)	14 (25.5%)	0.029
Without Pension	29 (52.7%)	41 (74.5%)	
Household Income, Mean (SD), Php	5385 (SD±5265)	6060 (SD±2780)	0.402

*computed using students t-test, p value significant at <0.05

The follow up rates at 2, 4 and 12 weeks after initial consultation were significantly higher among elderlies who received family meeting and comprehensive geriatric assessment versus elderly patients who received the comprehensive geriatric assessment alone, p-value >0.05 (Table 2). While there was also a decreasing trend in follow-up in the treatment group, follow-up rates were still significantly higher compared to follow-up rates in the control group.

There was a non-significant reported better quality of life scores among elderlies in the control group at baseline, on follow-up at 2 and 4 weeks. However, the trend of increasing scores for QOL was noted with the increasing number of elderlies lost to follow-up (Table 3).

Table 2. Follow-up rates after two, four and 12 weeks of Filipino elderly who had family meeting and comprehensive geriatric assessment compared to comprehensive geriatric assessment alone.

Follow up rate, %	Treatment (CGA and Family Meeting) (N=55)	Control (CGA alone) (N=55)	p value
2 weeks	45 (81.8%)	23 (41.8 %)	0.000
4 weeks	38 (69.1%)	9 (16.4 %)	0.000
12 weeks	26 (47.3 %)	5 (9.1 %)	0.000

*computed using students t-test, p value significant at <0.05

Table 3. Quality of life index and satisfaction to health provision among Filipino elderly randomized to family meeting and comprehensive geriatric assessment and comprehensive geriatric assessment alone.

Follow up rate, %	Treatment (CGA and Family Meeting) (N=55)	Control (CGA alone) (N=55)	p value
WHO quality of life index			
Baseline, X (SD)	65.45 (SD±18.497)	70.11 (SD±17.518)	0.178
Good QOL, %	44 (80%)	44 (87.3%)	
Poor QOL, %	11 (20.1%)	7 (12.7%)	
2 weeks, X (SD)	74.24 (SD±17.667)	75.2 (SD±19.047)	0.863
Good QOL, %	40 (72.7%)	21 (38.2%)	
Poor QOL, %	5 (9.1%)	4 (7.3%)	
4 weeks, X (SD)	80.42 (SD±18.571)	77.78 (SD±17.333)	0.700
Good QOL, %	36 (65.5%)	8 (14.5%)	
Poor QOL, %	2 (3.6 %)	1 (1.8%)	
12 weeks, X (SD)	83.64 (SD±17.021)	89.60 (SD±11.524)	0.548
Satisfaction Survey			
Baseline, X (SD)	10.22 (SD±1.685)	9.89 (SD±1.524)	0.752
Follow-up, X (SD)			
2 weeks	10.53 (SD±1.325)	10.16 (SD±1.344)	0.000
4 weeks	11.21 (SD±1.189)	10.67 (SD±1.581)	0.253
12 weeks	11.50 (SD±1.068)	12.00 (SD±0.000)	0.310

*computed using students t-test, p value significant at <0.05

On the other hand, there was a significantly higher satisfaction scores among elderlies who received family meeting and CGA at 2 weeks (Table 3). Satisfaction scores on subsequent follow-up were similar both for treatment and control groups at 4 and 12 weeks, $p > 0.05$.

Discussion

Family meeting is effective in increasing follow up rate among elderlies referred at the Family Health Unit for Comprehensive Geriatric Assessment compared to elderlies who received CGA alone. On the other hand, the reported Quality of Life scores were similar for elderly patients randomized to treatment and control groups.

Satisfaction to health service provision was also increased after two weeks among elderlies receiving family meeting in the treatment group compared to the CGA alone. However, the measured satisfaction scores in the subsequent follow-ups were mostly affected by increased number of elderlies who did not come for follow-up consults in the control group.

In this study, family meeting was assessed and found to be a crucial strategy for ensuring follow-up among elderly patients in the Family Health Unit. As the elderly population is usually dependent on family members availability and social support, ensuring that the family is involved in the care of the elderlies will provide better therapeutic outcomes through regular clinic follow-up.

The quality of life scores reported by all elderly respondents in the study were similar for both groups which suggest that family meeting did not improve the quality of life of elderlies enrolled in the study. However, the scores on quality of life may have been affected by the greater number of elderly patients who eventually did not come for follow-up, as these patients may have lower quality of life compared to the elderlies who had regular follow-up at FHU. Likewise, the CGA intervention alone can be beneficial in improving quality of life as shown in the study done by Rueben, et al. (1999), which involved a single outpatient comprehensive geriatric assessment, and results showed it prevented functional and health-related quality of life decline among elderly patients.[15]

Family meeting is beneficial to the family. It can help in recognizing the needs of the elderly and possibly redistribute duties while nurturing healthy family coping strategies, thus promoting satisfaction to the elderly. The study by Hannon, et al. (2012) confirms the value of planned family meetings.[10] The majority of patients found the family meeting to be helpful.

Research on families and health demonstrates the influence of the family on health and illness and the benefits of family interventions. It supports the importance of a family-oriented approach to clinical practice. Yet there are only a few well-constructed randomized controlled trials available in the literature. Interventional family meeting strategies should also measure family variables before and after the interventions but no specific variables were mentioned or suggested.[12]

The results of the study reaffirms the importance of a family-oriented approach because the involvement of the family members in the care of the elderly would increase compliance to follow up. Likewise, patient satisfaction is associated with improved patient compliance with therapy.

This study recommends incorporating family meeting to comprehensive geriatric assessment, to ensure adequate follow up.

Conclusion

Family meeting and comprehensive geriatric assessment are effective in increasing follow up rate and satisfaction to health service provision among elderly Filipinos referred to the Family Health Unit.

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