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PSYCHOSOCIAL BARRIERS TO MEDICATION ADHERENCE AMONG OLDER ADULTS LIVING IN CARE HOMES.

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ABSTRACT

Medication adherence is important to achieve a better therapeutic outcome, especially in older adults. This study aims to assess medication adherence and its psychosocial barrier among older adults living in care homes. This study aims to identify psychosocial factors which affect the adherence level in older adults. The objectives of this study were to determine the level of medication adherence among older adults living in care homes and to identify the association of psychosocial factors with medication adherence among older adults living in care homes.

Methods: A study was conducted in 27 care homes in Klang Valley. A validated questionnaire was used and consisted of three parts: demographic, psychosocial factors and assessment of adherence level. The study only includes those aged 65 years and above, able to speak and hear clearly and taking at least one medication for chronic illness. The interview took 20 minutes per respondent. Data were analysed using the Chi-square and Pearson correlation test to determine the association and correlation between psychosocial factors and adherence level. The p-value is set to <0.05 to indicate the data are statistically significant.

Results: A total number of 258 older adults were interviewed and more than half (59.7%) of them were identified as having a low risk of medication non-adherence. There was a statistically significant correlation between receiving enough explanation about the medication (P=0.030) and trust in the physician (P=0.018) with medication adherence. Respondents who received more information on medication dispensed and had a higher trust in physicians were correlated with a lower risk of medication non-adherence.

Conclusion: Older adults who received more explanation about medication and had higher trust in their physician were more likely to become adherent to prescribed medicines than those who received little information and had low trust in their physician.

Keywords: medication adherence, psychosocial, barriers, care homes, older adults

INTRODUCTION

Care home residents are mainly older adults with multiple diseases and multiple medications. Good medication adherence is vital to achieving optimal therapeutic outcomes and the potential to reduce healthcare costs [1]. Although there is research to assess medication adherence among older adults in various developed countries, little is known about medication adherence among older adults in Malaysia, particularly those living in care homes. The primary objectives of this study were to determine the level of medication adherence among elderly people living in nursing homes and to identify the association of psychosocial factors with medication adherence among elderly people living in nursing homes. The information collected in this research will assist the healthcare provider in developing a strategy to improve the level of medication adherence in an older population in the future.

MATERIAL AND METHOD

A cross-sectional study was conducted at 27 government and non-governmental organisation care homes in Klang Valley, Malaysia. Residents 65 years of age and older, taking at least one prescribed medication and able to speak clearly and with no hearing difficulties were included. Those who do not understand English or Malay, or are diagnosed with dementia were excluded.

The questionnaire consists of demographic information, psychosocial factors and an assessment of adherence level. A pilot study was run to determine the reliability and validity of the instrument used in this research, and this data was not included in the final result. Cronbach's alpha was measured to determine the reliability and consistency of the instruments which 0.70 or higher is considered acceptable and a value of 0.60 or higher is marginally acceptable [2]. Cronbach's alpha for this study

was 0.736. Psychosocial factors were divided into two sections. Section one is three items on healthcare provider factors. The score was measured by a 3-point scale [3]. Section two covered the level of patient's trust in the physician. This scale consists of 11 items and the participant's responses ranged from 1(strongly disagree) to 5(strongly agree). Medication Safety Alert Tool for Elderly (MeSATE) is used to predict the adherence level. This tool is a validated and reliable instrument that predicts intentional non-adherence in older adults aged 65 years or more. The instrument consists of four domains with 17 items to determine non-adherence. The four domains include disease factors, socioeconomic factors, treatment factors, and psychosocial factors. The scoring depended on the total score obtained; a total score of 80% or above means the patient is at high risk of medication non-adherence. Scoring between 40% to 80% is considered moderate risk and 40% or below is considered low risk of non-adherence to medication [4].

All the collected data were entered into Excel and transferred to SPSS. Data were analysed using IBM SPSS statistical package version 25 using descriptive and inferential statistics. Descriptive statistics for each variable were calculated as the percentage and mean ± standard deviation. Pearson correlation and Chi-square test were used to determine the association and correlation between psychosocial factors and medication adherence. The level of medication adherence was determined by using the MeSATE tool and was characterised as the dependent variable and the participant's characteristics as an independent variable. A p-value of <0.05 indicates the data are statistically significant.

RESULTS AND DISCUSSION

Table 2 demonstrates the association between psychosocial factors with the risk of medication non-adherence. Most of the respondents (79.9%, n=188) were satisfied with the counselling conducted by the healthcare provider. Besides, the majority of the respondents (79.1%, n=204) had a good relationship with their healthcare provider. Most respondents agreed that they received enough explanation about the medication taken (87.2%, n=225). In addition, more than two-thirds (67.8%, n=175) had moderate trust towards their physician.

More than half of respondents (89.0%, n=137) had a low risk of medication non-adherence when they received enough explanation about the medication (p=0.030). Respondents had a greater trust in their physician (6.0%, n=9) was correlated with a lower risk of getting non-adherent to the medication (p=0.018).

Pearson's correlation was calculated to determine the correlation between two variables. Results indicated that an increase in information about medication dispensed (r=-0.094, p=0.030) and increased trust in the physician (r=-0.103, p=0.018) were statistically significant but weakly correlated with a decreased risk of medication non-adherence.

TABLE, IMAGE AND FIGURE

Table 2: The association between psychosocial factors with the risk of medication non-adherence (n=258).

Variables	Total participants (n, %)	Non-adherence level (n, %)			χ^2, P
		Low risk	Moderate risk	High risk	
Satisfaction with patient counselling					
Dissatisfied	3 (1.2)	1 (0.7)	2 (1.9)	0	1.392
Neutral	67 (26.0)	38 (25.2)	29 (27.4)	0	[a],
Satisfied	188 (72.9)	115 (74.7)	72 (69.9)	1 (100)	0.846
Patient-pharmacist relationship and communication	3 (1.2)	2 (1.3)	1 (0.9)	0	

		Non-adherence level (n, %)			
Poor Neutral Good	51 (19.8) 204 (79.1)	27 (17.9) 125 (81.2)	24 (22.6) 78 (75.7)	0 1 (100)	1.209 [a], 0.877

Variables	Total participants (n, %)	Non-adherence level (n, %)			r, P
		Low risk	Moderate risk	High risk	
Explanation of medication None A little Enough	0 33 (12.8) 225 (87.2)	0 17 (11.3) 137 (89.0)	0 16 (15.1) 87 (84.5)	0 0 1 (100)	- 0.094 [b], 0.030
Trust in physician 11-40 (Low) 41-45 (Moderately low) 46-52 (Moderately high) 53-55 (High)	71 (27.5) 113 (43.8) 62 (24.0) 12 (4.7)	41 (27.2) 66 (43.7) 38 (24.7) 9 (6.0)	29 (27.4) 47 (44.3) 24 (23.3) 3 (2.8)	1 (100) 0 0 0	- 0.103 [b], 0.018

[a] Chi-square test [b] Pearson correlation

Based on our study, the majority of the respondents demonstrated a low risk of becoming non-adherent to the medication. In our study, an elderly patient who received enough explanation about the medication they were taking and had a greater trust in the physician was significantly correlated with a better adherence level. Similarly, in the previous study by Jin et al [3], stated that a better explanation about medication is associated with a better adherence level. Similarly, a study reported that patient with higher trust in their physician had better adherence to the medication they were taking [5]. Identically, in the previous study, residents with greater trust in their healthcare provider were more likely to become more adherent to medication regimen compared to those with low trust in their physicians [6].

Previous studies demonstrated that proper counselling between patients and healthcare providers and having a good relationship and good communication between patients and healthcare providers resulted in good medication adherence [7]. Similarly, better medication adherence can be achieved if patients have a strong belief of their medications and good understanding of their disease [8]. Therefore, receiving a proper explanation about medication and having greater trust in the physician may lead to better adherence levels in elderly people.

CONCLUSION

Older adults who received more explanation about their medication and had higher trust in their physician were more likely to become adherent to prescribed medicines than those who received little information and had low trust in their physician.

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