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Application Coaching Support in Efforts to Regulate Diet and Fluid Restriction in Patients with Chronic Kidney Disease

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Abstract

Proper diet setting and fluid restriction are very important things to note because excessive fluid intake can worsen the patient's condition with kidney disease. Even though patients already understand that failure to limit fluids can be fatal, about 50% of people with chronic kidney disease (CKD) do not adhere to the recommended diet and fluid restrictions. The purpose of this community service is to increase patient knowledge about managing diet and fluid restrictions. The method of implementing community service is through providing coaching support, namely by providing health education in stages and continuously by paying attention to the problems experienced by sufferers of chronic kidney disease (CKD) so that awareness of the disease is achieved, and the result is an improvement in patient behaviour. Participants in this activity were all CKD patients who underwent routine checks at the Internal Medicine Polyclinic at Adi Husada Hospital, Surabaya, from April 2021 to June 2021. Meetings with participants were followed up at the participants' homes for intervention. Participants' behaviour was observed before and after the intervention was given. The results obtained before the intervention showed that most of the participants had unfavourable behaviours (55%); after being given coaching support, most of the 12 people (60%) had good behaviour in managing diets and fluid restrictions. Based on these data, it can be seen using the Wilcoxon Signed Rank Test statistical test that the behavioural value is obtained with a p-value of 0.001, so there is an effect of providing coaching support on dietary regulation behaviour and fluid restriction. One of the therapies for people with CKD that can help them maintain stable kidney function and improve their quality of life is coaching support
Keywords: Chronic Kidney Disease (CKD); Coaching Support; Dietary Management; Fluid Restriction.

Abstrak

Pengaturan pola makan yang tepat dan pembatasan cairan merupakan hal yang sangat penting untuk diperhatikan karena asupan cairan yang berlebihan dapat memperburuk kondisi pasien penyakit ginjal. Meskipun pasien sudah memahami bahwa kegagalan membatasi cairan bisa berakibat fatal, sekitar 50% penderita penyakit ginjal kronis (PGK) tidak mematuhi diet dan pembatasan cairan yang dianjurkan. Tujuan dari pengabdian masyarakat ini adalah untuk meningkatkan pengetahuan pasien tentang pengaturan diet dan pembatasan cairan. Metode pelaksanaan pengabdian kepada masyarakat melalui pemberian dukungan pembinaan yaitu dengan memberikan penyuluhan kesehatan secara bertahap dan berkesinambungan dengan memperhatikan masalah yang dialami oleh penderita penyakit ginjal kronik (PGK) sehingga tercapai kesadaran akan penyakit tersebut, dan hasilnya adalah perbaikan perilaku pasien. Peserta kegiatan ini adalah seluruh pasien PGK yang menjalani pemeriksaan rutin di Poliklinik Penyakit Dalam Rumah Sakit Adi Husada Surabaya mulai April 2021 hingga Juni 2021. Pertemuan dengan peserta ditindaklanjuti di rumah peserta untuk intervensi. Perilaku peserta diamati sebelum dan sesudah intervensi diberikan. Hasil yang diperoleh sebelum intervensi menunjukkan bahwa sebagian besar peserta memiliki perilaku yang kurang baik (55%); setelah diberikan pembinaan, sebagian besar dari 12 orang (60%) berperilaku baik dalam mengatur pola makan dan pembatasan cairan. Berdasarkan data tersebut dapat dilihat dengan menggunakan uji statistik Wilcoxon Signed Rank Test diperoleh nilai perilaku dengan p-value 0,001, maka ada pengaruh pemberian coaching support terhadap perilaku pengaturan diet dan pembatasan cairan. Salah satu terapi bagi penderita PGK yang dapat membantu menjaga kestabilan fungsi ginjal dan meningkatkan kualitas hidup adalah coaching support.
Keywords: Penyakit Ginjal Kronis (PGK); Dukungan Pembinaan; Manajemen Diet; Pembatasan Cairan

INTRODUCTION

Patients with chronic renal disease frequently exhibit noncompliance (CKD). It's crucial to remember that restricting fluid consumption can help you choose the correct diet since too much fluid intake might make renal disease patients' conditions worse. About 50% of patients with the chronic renal disease do not adhere to the advised adequate fluid limits, despite the fact that they already know that failing to limit fluids can be dangerous and unpredictable. (Ariyanti, 2016; Susanti & Bistara, 2021).

The prevalence of chronic kidney disease (CKD) is increasing. The WHO estimates that for every 1 million people, there are 23–30 people experiencing CKD per year. CKD cases in Indonesia are relatively high, namely, nearly 50% of new cases per year, and as many as 82% undergo hemodialysis. In 2014, East Java ranked second with the most sufferers after West Java, namely 3621 people. The number of sufferers in Surabaya has increased from 277 people (2011) to 350 people (2012), and 398 people (January–May 2013) (PERNEFRI, 2014).

Kidney disease is often accompanied by other underlying diseases such as diabetes mellitus, hypertension, and dyslipidemia. Symptoms and complaints in the early stages of renal impairment tend to be mild, making it difficult to diagnose only by clinical examination. The progress of kidney function damage can also be seen from the levels of urea and creatinine (Susanti & Bistara, 2021). Creatinine is produced in equal amounts and excreted in the urine each day, with normal values for creatinine 1.5 mg/dl and urea 10–50 mg/dl. Urea is a nitrogen product excreted by the kidneys from a protein diet. When compared to creatinine, serum urea levels provide the best sign of the emergence of toxic urea in patients with kidney disease (Arici, 2014).

Kidney function can be maintained to prevent the progression of kidney damage. Controlling the risk of chronic kidney disease by controlling sugar levels and blood pressure Examination of kidney function in patients with CKD and hypertension is effective for detecting chronic kidney disease early. Management of chronic kidney disease by using safe drugs and dietary adjustments All the things mentioned above can be done by nurses by providing coaching support (Seidu et al., 2020).

One strategy to offer coaching assistance is to offer health education gradually and consistently while paying attention to the problems encountered by CKD patients. This will raise awareness of the condition and lead to an improvement in the patient's behaviour. (Mihardja et al., 2018).

GENERAL DESCRIPTION OF THE COMMUNITY, PROBLEMS AND TARGET SOLUTIONS

General description

This activity was carried out at the internal medicine polyclinic at Adi Husada Hospital, Surabaya. Twenty participants, ranging in age from 46 to 65 years, participated in this activity. This activity was followed up at each patient's home because during the activity there was still a COVID-19 pandemic, so to avoid crowds, coaching support was provided individually. Most patients with chronic kidney disease (CKD) who undergo routine checks at the internal medicine polyclinic are in a state of unstable kidney function. This can happen because, based on the results of interviews that have been conducted, most sufferers do not make proper diet and fluid restriction arrangements.

Problem

The general condition experienced by the patient at the time of examination is generally a weak and swollen condition in the lower extremities. The activity begins after taking a patient's history, followed by observing the results of kidney function tests, then setting a schedule for implementing interventions, namely providing scheduled and ongoing coaching support.

Target Solution

Based on these conditions, community service involving the use of coaching support applications to regulate diet and fluid restrictions in patients with chronic kidney disease is required, with the expectation that this activity will increase efforts to improve patient behavior to improve quality of life.

METHOD

The implementation method in the community service program focuses on community empowerment by providing training and guidance on the application of coaching support with the individual coach method. Participants in this activity are CKD sufferers who carry out routine checks at the internal medicine polyclinic

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at Adi Husada Hospital, Surabaya, from April to June 2021. The training is carried out individually or individually coached at each patient's home by implementing health protocols. The material presented is conceptually related to chronic kidney disease and the appropriate management of dietary arrangements and fluid restrictions. Participants in community service activities were given a guidebook to help them improve their ability to absorb information provided by resource people.

RESULTS AND DISCUSSION

From August to September 2021, civic engagement events were conducted. Field surveys were the first actions taken, followed by the creation of ideas for volunteer work in the community. The outcomes of the community service projects completed between August and September 2021 are "clean" results, as shown in this section. That is the outcome of commitment with indicators that were identified in the form of an open table..

Table 1. The Outcome Of Commitment With Indicators

No	Behavior of	Pre		Post	
		Frequency	Percentage	Frequency	Percentage
1.	Poor	11	55%	1	5%
2.	Fairly good	4	20%	7	35%
3.	Good	5	25%	12	60%
	Total	20	100%	20	100%
Wilcoxon Signed Statistical Test Rank Test				Result *P* Value = 0.001	

The table above shows that most CKD sufferers who carry out routine checks at the internal medicine polyclinic at Adi Husada Hospital in Surabaya have unfavorable behavior in managing diet and fluid restriction, namely 11 people (55%). After receiving coaching assistance training, CKD patients' healthy lifestyles in terms of food and fluid restriction underwent considerable modifications, and 12 of them (or 60%) displayed positive behavior. Based on the aforementioned table and the Wilcoxon Signed Rank Test statistical test, it can be concluded that coaching and support training have an impact on attempts to control dietary and hydration limitations in patients with chronic renal disease (p value = 0.001). (CKD).

At the time before being given coaching support training, participants, namely people with CKD, tended to experience a decrease in kidney function after carrying out a routine examination of kidney function. This is because sufferers do not carry out health management properly, especially in regulating their diet and limiting fluids. Most of the coaching support training participants are in the age range of 55–65 years. Indicators of poor health behavior can also be affected by age. Someone at a young age is at risk of bad behavior because, when experiencing chronic pain, that person will experience conflict with his personality. Meanwhile, someone with advanced age is more responsible, more orderly, and thorough, and they follow the recommendations of health workers in managing the health of the disease they are experiencing to prevent kidney damage.

Kidney damage can also be reduced in CKD patients by following the right diet, which includes a potassium-rich diet. One of the functions of the kidney is to regulate electrolyte balance, so dietary adjustments to foods containing potassium must be limited. The goal of limiting foods that contain potassium is to ensure that potassium levels in the blood do not increase. Increased levels of potassium in the blood can be fatal because they affect the heart rate. Food sources that are high in potassium are found in fruits and green vegetables (Clarke et al., 2016;Seidu et al., 2020). Nutritional intake for people with CKD in vegetables and fruits can be fulfilled by processing them properly, namely by soaking and boiling them first so that potassium levels decrease (Baraz et al., 2010). This is in line with research conducted by Mersal et al., (2016), which said

education by providing dietary procedures and fluid restriction is an effective nursing intervention to prevent further complications in patients with chronic kidney disease undergoing hemodialysis.

Good control behavior regarding dietary regulation and limiting fluid intake can be influenced by providing education or counseling on diet and fluids (Hadiyanti, 2017). Treatment therapy can run optimally if patient education in the management of CKD is given effectively. In addition, changes in behavior in the self-management of people with CKD will increase with proper education (Clarke et al., 2016). The results of this education can increase knowledge and change attitudes but do not change negative perceptions about CKD, so non-compliance can appear at any time and can worsen the patient's condition (Clarke et al., 2016).

Coaching support is an advanced method to help individuals manage their illnesses, especially chronic ones (Susanti & Bistara, 2021). In addition, it can help people with CKD change their lifestyle and take responsibility for their health by identifying issues, beliefs, and concerns that can hinder or support successful therapy (Arici, 2014). Providing coaching support can influence the behavior of CKD sufferers to manage CKD in accordance with the things that have been suggested by the coach (Susanti & Bistara, 2021).

Patients with CKD might get direct or indirect education by having family members participate. More CKD patients will follow food and hydration restrictions the more significant the involvement of the family is. (Thom et al., 2013). Appropriate changes in healthy living behavior in people with CKD are carried out in the process of implementing coaching support by committing to changing their perspective to be positive (Mihardja et al., 2018). The success of coaching support interventions cannot be separated from the active roles of sufferers, families, and time availability. The role of researchers is very important in coordinating group participants and becoming a role model to improve the quality of life of people with CKD (Stacey et al., 2013).

CONCLUSIONS AND SUGGESTIONS

Implementation of community service activities has been running smoothly. Interventions have been carried out by providing coaching and support training using lecture methods, demonstrations, and questions and answers related to existing health problems, namely efforts to regulate proper diet and fluid restrictions in patients with chronic kidney disease (CKD). Providing coaching support has proven effective in managing diet and fluid restriction in patients with CKD. This is evidenced by the value of the frequency distribution, which shows that before the intervention was given, 11 people (55%) had poor behavior in their own health management, and after the intervention, the patients with bad behavior decreased, and there was only 1 patient with bad behavior in management. personal health, specifically efforts to control diet and fluid intake

Hopefully, this activity can be carried out by students and developed in accordance with existing technological advances so that it can benefit the wider community. For training, the number of participants should be increased so that information can be conveyed to all CKD sufferers as a whole and they can carry out these activities on a regular basis so that they can reach a higher level of public health, particularly in people with CKD, and further implementation is required.

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