GEORGIAN MEDICAL NEWS

ЕЖЕМЕСЯЧНЫЙ НАУЧНЫЙ ЖУРНАЛ

Медицинские новости Грузии

საქართველოს სამედიცინო სიახლენი

ROLE OF PRIMARY HEALTH CARE IN RE-HOSPITALIZATION

OF PATIENTS WITH HEART FAILURE

Verulava T., Jincharadze N., Jorbenadze R.

Ilia State University. G. Chapidze Emergency Cardiology Center, Tbilisi, Georgia

In Georgia, like in other countries, heart failure, a major cause of morbidity and mortality among the elderly, is a serious public health problem. According to the statistics, 69% of death comes from cardiovascular diseases [6].

Hospital readmission is one of the potential indicators of poor care or missed opportunities to better coordinate care [9] and was endorsed as a measure of hospital performance [15]. Heart failure is one of the most common principal discharge diagnoses [12]. Re-hospitalization rates are quite varying according to the diagnoses. According to some authors, re-hospitalization after coronary artery bypass grafting is 13.2% within 30 days of surgery

[11]. After hospitalization for heart failure, 15-day readmission rates have been estimated at 13% and 30-day readmission rates at approximately 25% [7,8].

Hospital readmission for Heart failure as well as other chronic diseases creates a huge impact on the healthcare system as well as on the patient [1]. Re-hospitalization increases medical expenses and it has negative impact on patients' health and financial situation of family [3,13].

Multiple patient risk factors, including age, sex, social and economic situation, lower median household income, low quality of

Table. Principal discharge diagnosis associated with readmissions of patients without Acute Myocardial Infarction (AMI), with Acute Myocardial Infarction (AMI), and with Repeat Revascularization

Principal diagnosis	Total (%) (n=103)	No AMI in Index (%) (n=74)	AMI in Index (%) (n=29)	Revascularization During Readmission (%) (n=24)
Chronic ischemic heart disease	32.4	33.2	32.2	89
Heart failure	15.2	11.3	10.8	1
Unstable angina	11.7	10.5	9.6	1
Myocardial infarction	8.2	7.3	6.8	5
Arrhythmia	6.3	6.1	5.9	0
Acute respiratory failure	6.2	6	5.6	0
Other	19	25.6	29.1	4

medical service were significant predictors of readmission [11]. Lack of a comprehensive approach to heart failure management involving careful inpatient education, discharge planning, and coordinated delivery of outpatient care has been cited as a major reason for the continued high rates of hospital readmissions for heart failure. [5].

Generally, it is impossible to eliminate re-hospitalization. In some cases, re-hospitalization is unavoidable, because of the nature of disease; that is why predicting re-hospitalization is impossible. In efforts to identify opportunities to improve quality of care, several interventions have been proven to lower readmission rates after Heart failure hospitalization, including improved hospital [2] and post discharge care, [13] pre-discharge planning, [14] home-based follow-up, [16] and increasing the level of patient's education.[4,10].

Our research objective was to study recent trends in 30-day all-cause readmission rates after Heart failure hospitalization in order to improve clinical understanding of the risk for re-hospitalization after Heart failure admission and to inform efforts of policy-makers as increased attention is focused on this measure of hospital quality.

Material and methods. Methodological basis of this research is Literature in the sphere of re-hospitalization. Our research included quantity and quality components. Within the Quantitative research, we have analyzed data of re-hospitalized patients during 2014 year from biggest cardiology hospital in Georgia. Within the qualitative study, in-depth survey of medical staff and patients conducted. Restriction of methodology was following factors: A little time for research, researching only one cardiology centre.

Results and their discussion. According to the research, Re-hospitalization rate during 30 days was 1.5% (47.6% female and 52.4% male patients). Re-hospitalization has the correlation with the patient's age, sex and disease. Compared with patients who were not readmitted, patients who were readmitted were older (age 71 years vs. 67 years) and more likely to be female (62% vs. 38%) (Table).

Research showed that re-hospitalization also depends on the disease. Compared with patients who were not readmitted, patients who were readmitted have diabetes (32% vs. 29%), heart failure (23% vs. 15%), renal failure (7.5% vs. 3.5%), and ischemic heart disease (23% vs. 13%) (Table).

Patients who readmitted were more likely to die within 30 days of discharge compared with patients who were not readmitted (5.2% vs. 1.3%). The 30-day readmission rate of patients who had an acute myocardial infarction (AMI) was higher than that of non-AMI patients (AMI 22.4%, non-AMI 9.4%) (Table).

The majority of 30-day re-hospitalization was associated with a chronic ischemic heart disease (32.4%), heart failure (15.2%), unstable angina (11.7%), myocardial infarction (8.2%) arrhythmia (6.3%), and acute respiratory failure (6.2%). These diseases are high-risk groups of re-hospitalization, which considered for discharging patient's surveillance (Table).

Among all readmissions, 23.3% of patients had an associated revascularization procedure (percutaneous coronary intervention 21.6%, coronary artery bypass grafting 2.1%). The majority (89%) of admissions with revascularization procedures were associated with chronic ischemic cardiac disease (Table).

Research showed that there is connection between re-hospitalization and healthcare financing system. Specifically, rate of re-hospitalization is higher when state programs financing patients (68%). Re-hospitalization rate in patients with private insurance is 32%.

Among re-hospitalized patients, 65 patient (63.1%) were re-hospitalized only once, 29 patients (28.2%) were re-hospitalized twice, 5 patient (4.9%) was re-hospitalized four time, 1 patient (1%) was re-hospitalized 5 times.

We have interweaved re-hospitalized patients and the results showed that main reason of re-hospitalization was not fulfilling necessary medical treatment, not fulfilling required medication or terminating medication, by patients' decisions. 33.3% of patient have bought required medications partially, 13.3% did not buy necessary medications at all. Therefore, these patients do not take necessary medications or they just take it partially. Main reason is poverty (caused by unemployment or small pension). 46.6% of respondents think that they cannot effort necessary medications because of financial difficulties. Majority of patients are unemployed or are pensioners (63%), that is why they cannot effort taking expensive medications for long time. Doctors also confirm this assumption. They mention that 60% of discharged patients cannot effort necessary medications. Patients have no financial opportunity to get doctor consultation again or to get preventive medical treatment. It is also interesting that patients usually systematically get consultations from doctors by phone,

Doctors think that is because of financial difficulties, State Health insurance system do not pay outpatient visits fully.

According to doctors, main reason of re-hospitalization is that, patients do not fulfill doctor's prescriptions after discharging from hospital. Research showed that 40% patients who had not fulfill doctor's prescriptions, were turned back to hospital.

Research showed that re-hospitalization mainly is a non-predictive process. Doctors' records confirm this opinion. At the time of discharging patients, doctors confirm improving health of patient; they also mention that predictions may be unfavorable. This happens in case if doctors cannot eradicate health problems of patients and hospitalization becomes necessary.

The role of continuous medical supervision from Family doctor is important for decrease Re-hospitalization rate. According to questionnaire results, 46.7% of patients have not family doctor, 13.3% of patients have family doctor but visits doctor very seldom, and 40% of patients have family doctors and visits them often. 60% of patients prefer to visit to cardiologist of hospital and they do not visit family doctors. 33.3% of patients have not chosen cardiologist for a long-term medical supervision. 20% of patients have their own doctor but visit them very seldom, 46.7% of patients have private doctors and visit them often. This date shows that institution of family doctor has to be developed. Patients mainly prefer hospital cardiologist then family doctors. Patients also have problem of self-care. Sometimes, by the doctor directions patient have to take 10-15 various drugs and very often patients do not fulfill this direction. This problem may be solved with home care service. Patients think that state healthcare system must fully cover dispensary visits of doctors and diagnostic analysis.

According to the hospital cardiologists, 57% of them have no any communication with primary healthcare doctors, which take care of patients after discharging them from hospital.

In this case is a very important deeply informing patient about self-care, fulfilling doctor's prescriptions at time of discharging. Research showed that important reasons of re-hospitalization are, not taking necessary preventive measures after discharging patient and lack of scheduled visits, this happens because of low level of primary health care system. Institution of family doctor is not popular among patients; they simply do not trust family doctors. Patients usually prefer to visit specialists with specific spheres.

Conclusion, Recommendations.
Heart failure patients account for one of the largest group of patients with frequent hospital readmissions.

Primary health care plays a significant role in the reduction of re-hospitalization rate. In this regard, it is important to increase the role, authority and prestige of the family doctor. Study recommended the creation of a monitoring group, which will include cardiologist, family doctor, and nurse to develop collaboration strategy for managing disease. Consistent and coordinated care after discharging patients from hospital decreases re-hospitalization rate. Study Suggested improving the discharge procedure of patients.

It is important to improve dispensary, continuous medical supervision on patients with chronic diseases, to put into practice systematic communication with patients, remind them about doctor visits.

Study recommended expanding outpatient services package in state healthcare programs, especially for patients with chronic diseases. Study suggested improving day care centers, in order to assess the appropriateness of inpatient treatment, which will reduce unnecessary hospitalization and re-hospitalization costs.

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SUMMARY

ROLE OF PRIMARY HEALTH CARE IN RE-HOSPITALIZATION OF PATIENTS WITH HEART FAILURE

Verulava T., Jincharadze N., Jorbenadze R.

Ilia State University. G. Chapidze Emergency Cardiology Center, Tbilisi, Georgia

Re-hospitalization of cardiac patients is a great financial burden not only for healthcare system, but also for patients. Main aim of the research is to identify features and reasons of re-hospitalization and to determine ways of reducing.

Within the Quantitative research, we have analyzed data of re-hospitalized patients during 30 days. Within the qualitative study, in-depth survey of medical staff and patient conducted.

Main reason of re-hospitalization is that patients do not fulfill doctor's prescriptions after discharging from hospital. This is because of financial difficulties and lack of developing family doctor institution in the country. Usually, after discharging patient from hospital, for medical supervision he/she addresses to family doctor very seldom. There is no coordination between family and hospital doctors.

Primary health care plays a significant role in the reduction of re-hospitalization rate. In this regard, it is important to increase the role of the family doctor, to improve procedure of discharging patients, continuous medical supervision on patients, to expand outpatient services package in state healthcare programs, to improve day care centers.

Keywords: primary care, re-hospitalization, family doctor, heart failure.

РЕЗЮМЕ

РОЛЬ ПЕРВИЧНОЙ МЕДИКО-САНИТАРНОЙ ПОМОЩИ В ПОВТОРНОЙ ГОСПИТАЛИЗАЦИИ БОЛЬНЫХ С СЕРДЕЧНОЙ НЕДОСТАТОЧНОСТЬЮ

Верулава Т.Н., Джинчарадзе Н.Н., Джорбенадзе Р.А.

Государственный университет Ильи; Центр неотложной кардиологии им. Г. Чапидзе, Тбилиси, Грузия

Повторная госпитализация кардиологических больных является большим финансовым бременем не только для системы здравоохранения, но и для пациентов. Основной целью исследования является выявление особенностей и причин повторной госпитализации и определить пути сокращения.

В рамках количественного исследования, мы проанализировали данные пациентов повторно госпитализированы в течение 30 дней. В рамках качественного исследования проводилось углубленное собеседование медицинского персонала и пациента.

Основная причина повторной госпитализации в том, что пациенты не выполняют предписания врача после выписки из больницы. Это из-за финансовых трудностей и недоразвития института семейного врача в стране. Как правило, после выгрузки пациента из больницы, он/она для медицинского наблюдения к семейному врачу обращается очень редко, и нет координации между семейного врача и врачей больницы.

Первичная медико-санитарная играет существенную роль в снижении повторной госпитализации. В связи с этим важно повысить роль семейного врача, чтобы улучшить непрерывного медицинского наблюдения на пациентах..

რეზიუმე

პირველადი ჯანდაცვის როლი კარდიოლოგიური პაციენტების რეჰოსპიტალიზაციაში

თ. ვერულავა, ნ. ჯინჭარაძე, რ. ჯორბენაძე

ილიას სახელმწიფო უნივერსიტეტი; აკად. გ. ჩაფიძის სახ. გადაუდებელი კარდიოლოგიის ცენტრი, თბილისი, საქართველო

კარდიოლოგიურ ავადმყოფთა რეჰოსპიტალიზაცია დიდო ფინანსური ტვირთია როგორც ჯანდაცვის სისტემისათვის, ასევე პაციენტებისათვის. კვლევის მიზანია კარდიოლოგიურ პაციენტებში რეჰოსპიტალიზაციის თავისებურებების, მისი გამომწვევი მიზეზების შესწავლა და შემცირების გზების ღონისძიებათა შემუშავება.

თვისებრივი კვლევის ფარგლებში ჩატარდა სამედიცინო პერსონალის ჩაღრმავებული ინტერვიუ. რაოდენობრივი კვლევის ფარგლებში ჩატარდა ექიმების და პაციენტების გამოკითხვა წინასწარ სტრუქტურირებული კითხვარების მეშვეობით, რეჰოსპიტალიზებულ პაციენტთა ავადმყოფობის ისტორიების შესწავლა.

რეჰოსპიტალიზაციის ძირითად მიზეზს წარმოადგენს პაციენტთა მიერ საჭირო სამკურნალო ღონისძიებების არჩატარება. მისი გამომწვევი მიზეზებია ფინანსური სიძნელეები, ასევე, პირველადი ჯანდაცვის სისტემის, კერძოდ, ოჯახის ექიმის ინსტიტუტის ნაკლები განვითარება,რომლის მთავარი ფუნქციაა პაციენტის საავადმყოფოდან გაწერის შემდეგ მასზე უწყვეტი სამედიცინო მეთვალყურეობა. პაციენტი სტაციონარიდან გაწერის შემდეგ იშვიათად,ან საერთოდ არ მიმართავს ოჯახის ექიმს; არ არის კოორდინირება ოჯახის ექიმსა და საავადმყოფოს მკურნალ ექიმს შორის.

განმეორებითი ჰოსპიტალიზაციის სიხშირის შემცირებაში დიდი მნიშვნელობა ენიჭება პირველადი ჯან-

დაცვის ეფექტური სისტემის არსებობას. ამ მხრივ, უცილებელია, ქვეყანაში ოჯახის ექიმის ინსტიტუტის შემდგომი განვითარების ხელშეწყობა; კოორდინაციის არსებობა კლინიკასა, პაციენტსა და პირველად ჯანდაცვის სისტემას შორის; ბინაზე გაწერისას პაციენტთა ინფორმირებულობის დონის ამაღლება, მათზე საგან- მანათლებლო ღონისძიებების ჩატარება დაავადების მკურნალობისა და პროფილაქტიკის საკითხებზე; ჯან- დაცვის სახელმწიფო პროგრამებში ამბულატორიული მომსახურების პაკეტის გაფართოება.