



## CASE PRESENTATION

**Evaluation of a patient with several chronic diseases in primary care: a case report**

Evaluación de una paciente con varias enfermedades crónicas en la atención primaria: reporte de un caso

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**Received:** January 17, 2023

**Accepted:** August 08, 2023

**Published:** August 10, 2023

**Citar como:** Guerrero-Madroñero MY, Valbuena-Salazar GA, Oviedo-Miranda JD. Evaluación de una paciente con varias enfermedades crónicas en la atención primaria: reporte de un caso. Revista de Ciencias Médicas de Pinar del Río [Internet]. 2023 [citado Fecha de acceso]; 27(S1):e5893. Disponible en: <https://revcmpinar.sld.cu/index.php/publicaciones/article/view/5893>

**ABSTRACT**

**Introduction:** chronic non-communicable diseases combined with an increase in life expectancy, often result in patients with multiple chronic non-communicable diseases, which requires action and comprehensive assessment by health personnel to reduce the burden of care and improve the quality of life of the patient.

**Case presentation:** we present the case of a female patient, 65 years of age, illiterate, bedridden for two years due to obesity, sedentary. She has a history of arterial hypertension, chronic gastric ulcer and diabetes mellitus. A comprehensive evaluation of the patient was carried out by primary health care using different tools. Treatment readjustment is performed, and follow-up plans are established together with pending charts.

**Conclusions:** patients with chronic diseases constitute a challenge for the primary care physician, requiring strategic preventive planning focused on avoiding the complications of these diseases that lead to more personal stress for the family and more outflow of resources for the state. The follow-up plans together with the pending tables are a basic and indispensable tool to follow the chronology of what to do with the patient and his family, together with a general panorama of the patient's life and prognosis. The adaptation of programs and guidelines according to the patients and their diseases and the collaboration of the patients themselves helps the primary care physician to offer a better care to the patient.

**Keywords:** Primary Health Care; Chronic Disease; Noncommunicable Diseases; Quality of Life.

## RESUMEN

**Introducción:** las enfermedades crónicas no transmisibles emparejadas con un aumento de la esperanza de vida, en muchas ocasiones devienen en pacientes con múltiples enfermedades crónicas no transmisibles, lo que requiere la actuación y evaluación integral por el personal de salud, para disminuir la carga de cuidados, y mejorar la calidad de vida del enfermo.

**Presentación de caso:** se presenta el caso de una paciente femenina, de 65 años de edad, analfabeta, encamada desde hace dos años por obesidad, sedentaria. Presenta como antecedentes hipertensión arterial, úlcera gástrica crónica y diabetes mellitus. Se realiza desde la atención primaria de salud una evaluación integral de la paciente mediante el empleo de diferentes herramientas. Se realiza un reajuste del tratamiento, y se establece planes de seguimiento junto con las tablas de pendientes.

**Conclusiones:** los pacientes con enfermedades crónicas constituyen un reto para el médico de primer nivel de atención, necesitándose una planeación estratégico preventiva enfocada en evitar las complicaciones de dichas enfermedades que conlleven a más estrés personal familiar y más salida de recursos para el estado. Los planes de seguimiento junto con las tablas de pendientes son una herramienta básica e indispensable para seguir con la cronología del qué hacer con el paciente y sus familiares, junto con un panorama general de la vida y pronóstico del mismo. La adaptación de programas y guías según los pacientes y sus enfermedades y la colaboración de los mismos ayudas al médico de primer nivel de atención ofrecer un mejor cuidado al enfermo.

**Palabras clave:** Atención Primaria de Salud; Enfermedad Crónica; Enfermedades no Transmisibles; Calidad de Vida.

## INTRODUCTION

The arrival of an illness in a family member determines changes in the members and is considered as a difficulty that alters the functioning of the family nucleus. Adjustment to this new environment allows changes, which generate adaptations that lead the family to a new state of equilibrium and place the patient at risk with reference to their care.<sup>(1,2)</sup>

In the natural evolution of the disease, a high percentage of patients reach a satisfactory resolution; however, a small number may become chronically ill, requiring special care; others, on the contrary, reach the terminal phase and become dependent on palliative care.<sup>(3)</sup> In any of these cases, the care and treatment by the family physician is of great importance, since he/she is directly linked to the family and knows the data and actual situation of the patient.<sup>(4)</sup>

In general, the nature of chronic diseases makes health care providers and their staff get involved to placate and slow down the ailments, although they cannot be cured or reversed, primary care teams strive to improve the quality of life of patients.<sup>(5)</sup> In this aspect, the first level of care plays an indispensable role, responsible for ensuring coverage in the biological, psychological and social sphere of the patient and his or her family.<sup>(6)</sup>

In the treatment of chronic diseases, primary health care plays an indispensable role, as well as comprehensive networks for the continuous provision of services over time in all life cycles, with emphasis on multidisciplinary groups, patient care and research systems, all for the support and development of the population and patients.<sup>(7)</sup>

Given the complexity of chronic diseases, it is difficult to control them and to reduce their complications.<sup>(8)</sup> The family physician combines already established systems and adapts them for the benefit of individuals,<sup>(9)</sup> implements strategies at the level of care and improves the care of chronic patients through: self-management, mutual peer support, informal caregiver support, home visits and tele-care (telephone calls), all focused on the patient, in addition to self-care education that promotes adherence to treatments and timely arrest of complications.<sup>(10)</sup>

The case of a patient with several chronic diseases is presented, as well as the care provided by the primary health care physician and the planned follow-up.

## CASE REPORT

Female patient, 65 years old, resident of the city of Manta, Catholic, married with children, illiterate, economically dependent on her children. She has been bedridden for two years due to obesity, which makes it difficult for her to walk. She has a history of arterial hypertension (diagnosed in 2015 and treated with losartan 50 mg per day), chronic gastric ulcer (diagnosed in 2018 and treated with omeprazole 40mg every 24 hours) and diabetes mellitus (diagnosed in 2019 and treated with metformin 500mg every 12 hours).

The son attends the patient's scheduled medical appointment, requesting continued medication. He refers the impossibility for the patient to go to the doctor's office due to transportation difficulties. The health team decides to make a home visit to evaluate the case.

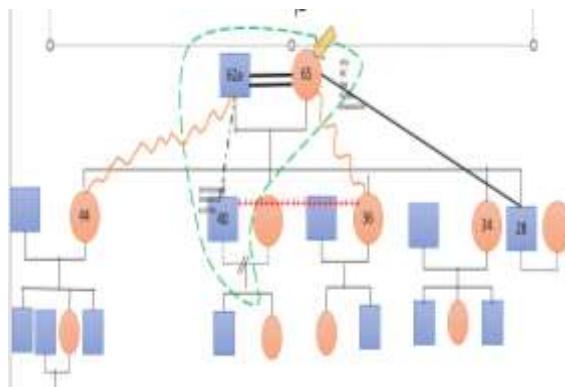
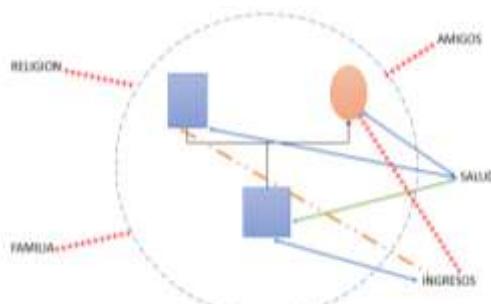
The socioeconomic survey shows that the patient is a housewife, unemployed, who depends financially on a solidarity voucher. She owns her own home, has access to drinking water and public sewage system along with daily garbage collection and electricity.

As toxic habits, the patient has a history of alcohol consumption, without smoking or consumption of illicit substances. On interrogation, the patient reports consumption of three full meals a day, little hydration of one liter a day, daily catharsis, diuresis once or twice a day, with sleep of approximately five to six hours a night. Her bathing is daily, with help.

On interrogation she reports heartburn, occasional postprandial epigastralgia, occasional constipation.

On physical examination there is erythema on the face of three days of evolution, which is caused by the application of alcohol. On the face there were stigmata of scratching and erythematous areas, neck with the presence of acanthosis in areas of folds. Pupillary reflexes were diminished in the eyes. In the mouth there were incomplete dental pieces in the lower jaw and absence of dental pieces in the upper jaw, she commented to have prosthesis that is only placed at the time of feeding. In the cardiovascular system blood pressure was 120/80 mmHg and heart rate 80 bpm. In the lower limbs there was evidence of a grade A-1 ulcer on the sole of the foot according to the Texas classification.

Ecomap (figure 1) and familiogram (figure 2) were performed, determining nuclear family, adult, with close relatives, traditional, urban marginal, with permeable limits.

**Fig. 1** Family chart**Fig. 2** Ecomap

The individual analysis shows a mature adult, within the stage of integrity versus despair according to Erikson, where she admits her mortality and fears death due to the helplessness of her partner. She also presents low therapeutic adherence. We proceeded to establish the list of problems (table 1)

**Tabla 1.** Lista de problemas.

No	Problem	Type of problem	Active	Passive
1	Hipoacusia	Biological	X	
2	HBP	Biological	X	
3	DM	Biological	X	
4	Gastritis	Biological		X
5	Obesity	Biological	X	
6	Sleep disturbance	Biological	X	
7	Polyhospitalizations	Biological		X
8	Allergic dermatitis	Biological	X	

Treatment was readjusted, indicating losartan in tablets 50 mg orally every 12 hours, metformin in tablets at a dose of 500 mg every 12 hours and pramoxine acetate plus zinc for topical application on the face.

An educational talk was given, explaining the need for daily cleansing, adequate nutrition and the beginning of physical activity routines. A schedule of visits is made, anticipatory guidelines for falls establish guided appointments in consultation and a table of pending first visit is established (table 2).

**Tabla No. 2** Pendientes primera visita.

No	Pending	Aim	Deadline
1	Family APGAR	Analyze intrafamily relationships	Medium term
2	Survival scales	Refer patient to programs	Short term
3	Frailty and dependency scales	Helps analyze risks and type of supervision required by patient	Short term
4	Caregiver scale	Determine support required by primary caregiver	Medium term
5	Depression scale	For caregiver and patient	Medium term
6	Elaborate follow-up plan	Assesses basic activities of daily living	Mixed terms
7	Katz Index	Assesses basic activities of daily living	Short term
8	Lawton and Brody Scale	Assesses basic activities of daily living	Short term

A follow-up plan was prepared, which included the following actions:

- Confrontation of health team
- Classification of patient to the most appropriate plan
- Follow-up through home visits
- Coordinate medication delivery
- Education - self-education - peer education
- Treatment education
- Orientation to healthy eating
- Coordination of referrals
- Coordination of consultations with primary caregiver
- Coordination with family members

## DISCUSSION

In order to guarantee excellence in health services, as well as to make proposals and modifications to the current regulations, it is necessary to study the processes of care. In the case of chronic noncommunicable diseases, the analysis of the provision of services in primary health care is a necessity, given their impact on individual health and population dynamics.

Rosero Acosta et al.<sup>(11)</sup> made a case report on the presence of chronic diseases in an older adult patient. They reported the onset of arterial hypertension (AHT) at the age of 60 years, and later, due to sedentary behaviors and unhealthy habits and lifestyles, she developed diabetes mellitus (DM). Similar data were found in the present case report.

In Ecuador, different studies have analyzed the prevalence of HT in various populations. Álvarez Marín et al.<sup>(12)</sup> studied the prevalence of HT in the administrative staff of an institution in Machala-Ecuador; they found a predominance of women (59,3 %) and over 30 years of age with the presence of this entity. Mejía Navarro et al.<sup>(13)</sup> carried out a study to estimate the frequency of arterial hypertension in adults in the Mexico neighborhood, Pastaza, Ecuador, where they found a prevalence of 8,96 %, with a predominance of women and a mean age of  $64,5 \pm 13,2$  years,

Regarding diabetes mellitus, Núñez-González et al.<sup>(14)</sup> analyzed trends and spatiotemporal analysis of mortality due to diabetes mellitus in Ecuador, 2001-2016. They recorded 57 788 deaths due to diabetes mellitus in Ecuador in the period. A significant rise in DM mortality was reported in women (1,50 %;  $p<0,001$ ).

Aging, together with situations such as overweight, obesity and sedentary lifestyle are risk factors for developing diabetes mellitus. If to this is added the previous existence of HT, the risk increases considerably.<sup>(15)</sup> Therefore, the presence of both diseases (HT and DM) in the patient is not a rare occurrence.

Chronic diseases are characterized by their slow and prolonged evolution, progressiveness and complications in the short, medium and long term. Living with a chronically ill patient in the family is a dynamic, contextual process that is affected by the patient's state of health. Although it may take years before a significant deterioration in the patient's health is required, this limits to some extent the family dynamics, generating costs of medical care and medication, adaptation of food and the replacement of roles within the home.<sup>(16)</sup>

One of the greatest repercussions for the family, according to the authors, is when there is a limitation in the activities of daily living, as well as when it is necessary to fulfill the role of formal caregiver or not. In the present case, the patient shows a limitation for mobilization and activities such as bathing, hence to some extent the family functioning may be affected.

One of the main functions of the primary health care physician should be to prevent the existence of disease in his or her patients. Once they have an established disease, they must achieve a therapy capable of reducing the impact of the disease on their health, as well as preventing its possible complications. This requires strategic action planning, similar to that carried out in the present study.

At present, chronic diseases constitute a challenge for health systems; their impact can be considered pandemic, and surpasses infectious and contagious diseases. Policies should be drawn up for health prevention as a tool for better medical care.

## CONCLUSIONS

Patients with chronic diseases are a challenge for the primary care physician, requiring strategic preventive planning focused on avoiding the complications of these diseases that lead to more personal and family stress and more outflow of resources for the state. The follow-up plans together with the pending tables are a basic and indispensable tool to follow the chronology of what to do with the patient and his family, together with a general panorama of the patient's life and prognosis. The adaptation of programs and guidelines according to the patients and their diseases and the collaboration of the patients themselves helps the primary care physician to offer a better care to the patient.

### Conflict of interest

The authors declare that there is no conflict of interest.

### Authors' Contribution

All authors participated in the conceptualization, formal analysis, project management, writing - original draft, writing - revision, editing and approval of the final manuscript.

### Funding

The authors did not receive funding for the development of this research.

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