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The nurse as a key educator after a cardiac event:

a bridge between diabetes and rehabilitation

In Spain, an increasing number of people with type 2 diabetes mellitus experience major cardiovascular events such as myocardial infarction. Scientific evidence has demonstrated that diabetes and coronary heart disease are closely interconnected, sharing multiple risk factors and reinforcing each other (1). In this context, cardiac rehabilitation (CR) units have become an effective and safe strategy to improve outcomes for affected individuals, enabling not only physical recovery but also empowerment through structured therapeutic education programs (2). But who leads this learning process? The nurse educator has become central to this transformative journey, accompanying patients during one of the most vulnerable times of their lives.

AN INESCAPABLE EPIDEMIOLOGICAL LINK: DIABETES AND THE HEART

The relationship between cardiovascular disease and diabetes is undeniable. Both conditions share common risk factors—hypertension, dyslipidemia, and sedentary lifestyle—and exacerbate one another. People with diabetes are between 2 and 4 times more likely to experience coronary events and, after a myocardial infarction, they tend to have worse clinical outcomes and higher hospital readmission rates (1).

In CR programs, about 30% of participants have type 2 diabetes mellitus, and a significant additional proportion show prediabetes or insulin resistance. This makes altered glucose metabolism highly prevalent in these units, requiring specific and integrated management throughout the rehabilitation process (2). Despite this, structured diabetes education is still not systematically incorporated into many programs—an important opportunity for improvement in post-infarction care.

CARDIAC REHABILITATION: MORE THAN PHYSICAL EXERCISE

CR units offer a comprehensive approach to secondary prevention, aimed at avoiding recurrence of cardiac events and reducing the risk of new complications. These programs involve multidisciplinary teams providing supervised exercise sessions, educational workshops, medical evaluations, and emotional support. However, beyond protocols, what truly changes the patient's prognosis is the ability to transform habits and beliefs—and here, the nurse plays a leading role.

The nurse not only assesses and monitors the patient but also educates—helping the person with diabetes understand their treatment, recognize warning signs, plan meals, overcome fear of physical activity, and regain confidence in their ability to resume normal life.

Moreover, nurses address often-overlooked aspects such as sexual health, sleep, anxiety, and the emotional impact of living with a chronic condition (3).

DIABETES EDUCATION IN THE CONTEXT OF CARDIAC REHABILITATION

The period following a myocardial infarction is particularly receptive to lifestyle changes. In clinical practice, this stage is ideal for teaching patients how to adjust insulin or hypoglycemic medication during exercise, understand the effect of stress on blood glu- »

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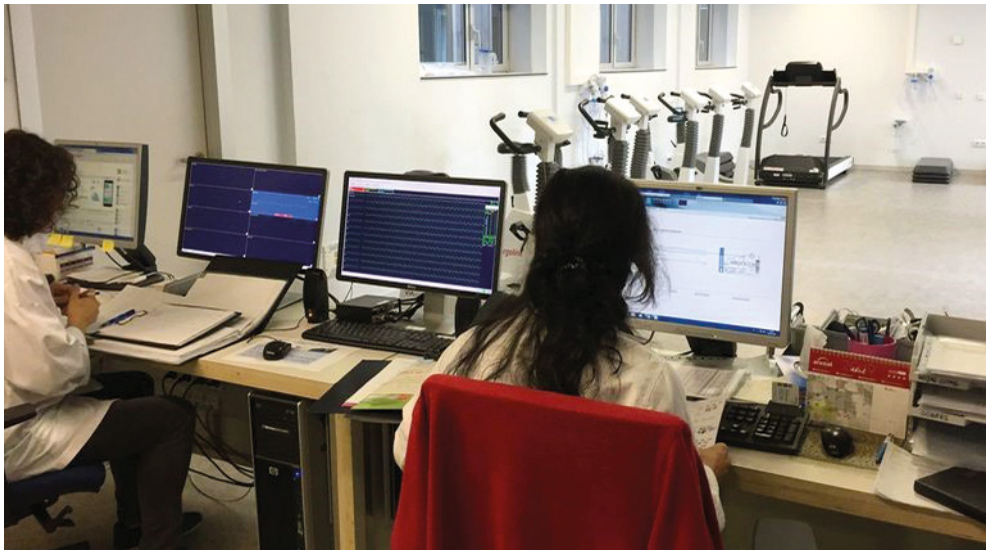

Cardiac Rehabilitation Unit, Lucus Augusti University Hospital of Lugo. Photo: Own creation.

» cose, improve food choices, and encourage active monitoring. In a qualitative study with coronary patients enrolled in a CR program at Hospital Universitario Lucus Augusti (Lugo, Galicia, Spain), participants highlighted that the nurse was the first professional who helped them "understand what was happening" and "learn how to take care of themselves." This research, conducted through focus groups, revealed real behavioral changes after the educational intervention—improvements in diet, cooking habits, weight control, and attitudes toward self-care (4).

This process goes beyond technical knowledge: it involves building a trusting relationship that fosters treatment adherence and shared decision-making. The emotional component is crucial, especially for people with diabetes who have experienced a disruptive life event such as a heart attack.

OBSERVED OUTCOMES: BETTER QUALITY OF LIFE, IMPROVED CONTROL, FEWER RELAPSES

The structured implementation of therapeutic education within CR programs leads to measurable outcomes. In a longitudinal study of 181 patients at Hospital Universitario Lucus Augusti (Lugo, Galicia, Spain), significant improvement was observed across all quality-of-life domains (physical function, mental health, vitality, and social functioning) after one year of follow-up.

This improvement was especially notable among participants with low educational levels or anxiety/stress symptoms (5).

Sustained improvements were also recorded in dietary habits: patients reduced their intake of red meat and processed »

» pastries, increased vegetable consumption, learned to plan healthy breakfasts, and stopped drinking sugary beverages regularly. Medication adherence reached 98%, accompanied by reductions in blood pressure, body weight, and blood glucose levels (5).

STRENGTHENING WHAT WORKS: THE VALUE OF NURSING CARE

Despite its proven benefits, cardiac rehabilitation remains underutilized in Spain—fewer than 5% of eligible patients participate, according to a national implementation analysis (6).

Moreover, female participation is particularly low, representing only about 20–22% of attendees (7,8). This underrepresentation is partly due to structural barriers such as traditional caregiving roles, limited social support, and underrecognition of cardiovascular risk in women.

Expanding CR programs, integrating diabetes education, and strengthening the nurse's role as both educational and emotional guide are not only useful strategies—they are essential. Because education is not an extra—it is an integral part of treatment.

Facing a heart attack in the context of diabetes is not only a clinical challenge but also a life challenge. Turning that crisis into an opportunity for change requires time, commitment, and continuous support. D

CONCLUSIONS

The cardiac rehabilitation nurse is not only a caregiver or instructor but a strategic ally for cardiovascular and metabolic health. Through therapeutic education, nurses empower people with diabetes to take control of their health during one of the most vulnerable periods of their lives.

Strengthening their role and ensuring access to these programs is, without doubt, one of the best public health investments we can make today. Improvements in life expectancy after a coronary event are not solely due to pharmacological advances. While technological progress—such as hemodynamics and coronary revascularization—has been decisive, no intervention can replace the human connection that ensures that a longer life is also a life of meaning, quality, and self-care.

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