

Implementation of the Framingham Score in Primary Care for the management of hypertensive and diabetic patients

Implantação do Escore de Framingham na Atenção Primária para manejo de pacientes hipertensos e diabéticos

Implementación de la puntuación de riesgo de Framingham en la atención primaria de salud para el manejo de pacientes hipertensos y diabéticos

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RESUMO

Objetivo: Descrever a experiência de implantação do escore de risco de Framingham, na Atenção Primária, para manejo de pacientes hipertensos e diabéticos. **Método:** Trata-se de um relato de experiência, sobre a implantação do escore de Framingham, nas unidades da Atenção Primária à Saúde do município de Feira de Santana, Bahia, visando estimar o risco do desenvolvimento de doenças coronarianas. A amostra foi composta de profissionais de 89 Unidades de Saúde da Família, incluindo médicos, enfermeiros e apoiadores institucionais. Os profissionais foram divididos em grupos de 14 participantes por encontro. A ação foi realizada na Secretaria Municipal de Saúde, de janeiro a junho de 2018. Os materiais didáticos foram confeccionados, incluindo um folder informativo sobre o escore de Framingham e um formato de instrumento a ser aplicado nas unidades. **Resultados:** Participaram 06 apoiadoras e 187 profissionais, sendo 109 enfermeiros e 78 médicos. As oficinas aconteceram em 14 encontros, com duração de 4h, sendo a atividade dividida em teórica e prática, com discussão de casos clínicos e aplicação do escore apresentado. **Conclusão:** A implantação dessa ferramenta permite a identificação de estratégias mais adequadas para o manejo de pacientes hipertensos e diabéticos, de acordo com o risco, auxiliando na definição de condutas multidisciplinares.

Descritores: Atenção Primária à Saúde; Fatores de risco; Hipertensão Arterial; Diabetes Mellitus.

ABSTRACT

Objective: To describe the experience of implementing the Framingham risk score in Primary Care for the management of hypertensive and diabetic patients. **Method:** This is an experience report on the implementation of the Framingham score in Primary Health Care units in Feira de Santana-Bahia city, order to estimate the risk of developing coronary heart disease. The sample consisted of professionals from 89 Family Health Units, including doctors, nurses and institutional supporters. The professionals were divided into groups of 14 participants per meeting. The action was carried out at the Municipal Health Department, from January to June 2018. The teaching materials were made, including an information folder on the Framingham score and an instrument format to be applied in the units. **Results:** 06 supporters and 187 professionals participated, being 109 nurses and 78 doctors. The workshops took place in 14 meetings, lasting 4 hours, the activity being divided into theoretical and practical, with discussion of clinical cases and application of the score presented. **Conclusion:** The implementation of this tool allows the identification of more appropriate strategies for the management of hypertensive and diabetic patients, according to the risk, helping to define multidisciplinary approaches.

Descriptors: Primary Health Care; Risk factors, Hypertension; Diabetes Mellitus.

RESUMEN

Objetivo: Describir la experiencia de implementación de la puntuación de riesgo de Framingham en la atención primaria de salud para el manejo de pacientes hipertensos y diabéticos. **Método:** Este es un reporte de experiencia sobre la implementación de la puntuación de Framingham en unidades de atención primaria de salud en el municipio de Feira de Santana, Bahia, Brasil, para estimar el riesgo de desarrollar enfermedades coronarias. La muestra fue compuesta por profesionales de 89 Unidades de Salud de la Familia, incluidos médicos, enfermeras y colaboradores institucionales. Los profesionales fueron alocados en grupos de 14 participantes por reunión. La acción tuvo lugar en el Departamento de Salud Municipal de enero a junio de 2018. Se prepararon materiales didáticos, incluida una carpeta informativa sobre la puntuación de riesgo de Framingham y un formato de instrumento para aplicar en las unidades de salud. **Resultados:** Un total de 6 asistentes y 187 profesionales participaron en el estudio, de los cuales 109 eran enfermeras y 78 eran médicos. Los talleres fueron divididos en 14 reuniones, de 4 horas de duración cada una, con actividades teóricas y prácticas, discusión de casos clínicos y aplicación de la puntuación de Framingham. **Conclusión:** La implementación de esta herramienta permitió la identificación de estrategias más apropiadas para el manejo de pacientes hipertensos y diabéticos, según la clasificación de riesgo, contribuyendo a un enfoque multidisciplinario.

Descritores: Atención primaria de salud; Factores de riesgo; Hipertensión; Diabetes mellitus.

Introduction

Primary Health Care (PHC) is considered the “gateway” to the Unified Health System (SUS), being the place responsible for organizing the health care of the population. In this context, the PHC organizational structure makes it possible to solve problems, through cognitive and intellectual actions to solve public health problems in the population; communication, based on the reference and counter-reference of people, products and information generated by the various components of the network; and accountability, the link with the assigned population, based on territorial organization, health and financial management and responsibility. However, even with the strengthening of PHC, hospitalizations for illnesses, which could be controlled in Primary Care, continue to occur, such as Diabetes Mellitus and Arterial Hypertension.¹

Chronic diseases, such as Diabetes Mellitus (DM) and Systemic Arterial Hypertension (SAH), are the main causes of mortality and hospitalizations in the Unified Health System (SUS), this happens because their acute and chronic complications produce high morbidity and mortality, causing high costs to the health system.²

The understanding of the risk factors (RF) and the multiplier effect that they have, when associated, highlights the need for a careful evaluation of the people under our care to establish the absolute risks of developing a coronary event. In this sense, several strategies have been adopted to estimate this risk with greater precision. One of the oldest and simplest is to seek data from anamnesis and physical examination that represent a risk profile, such as gender, age, being a smoker or not, having a family history of premature coronary artery disease (CAD), among others.

Regarding this, there are instruments that help to obtain this risk estimate with greater precision, such as the Framingham Score, considered an instrument used to estimate the risk of developing coronary heart disease, and it is possible to predict the occurrence of Cardiovascular Disease (CVD) in 10 years in an individual, using information such as age, sex, LDL, HDL, smoking, high blood pressure and diabetes mellitus.³

Some studies^{4,5,6} have shown great weakness in the management of hypertensive patients by the Family Health Teams, so the use of this score means an innovative approach with the potential to increase adherence to treatment, based on the information of risk factors to patients assisted, enabling more effective results.

In this sense, the objective of this article was to describe the experience of implementing the Framingham risk score in Primary Care in the municipality of Feira de Santana - BA, for the management of hypertensive and diabetic patients.

Method

This is a descriptive study, an experience report on the implementation of the Framingham score in Primary Health Care Units (PHC) in the municipality of Feira de Santana, Bahia, with the objective of estimating the risk of developing coronary heart disease and predict its occurrence, in an individual, in 10 years, with application during consultations in the units from the survey of age, sex, LDL, HDL, smoking, arterial hypertension and diabetes mellitus, according to the specific instrument recommended. In this context, the Framingham score has proved to be a practical method for assessing cardiovascular risk in different populations.⁷

The study participants consisted of professionals from the 89 Family Health Units (FHU) in the city, including doctors, nurses and institutional supporters. The professionals were summoned by profession and divided into groups of up to 14 participants, following a previous planning of the scale of the professionals in the services, to avoid everyone leaving, at the same time, from the units. In total, 14 meetings took place.

The activities were carried out in the auditorium Dr. João Batista de Cerqueira at the Municipal Health Secretariat of the municipality, from January to June 2018, being conducted by the institutional supporters of the PHC. The didactic materials used in the workshops were previously prepared, and an informative folder on the Framingham Score was distributed, clinical cases were prepared for discussion, in addition to copies of the instrument to be applied in the units.

The activity consisted of a theoretical moment, with an exposition on the themes of arterial hypertension, diabetes, epidemiological situation of cardiovascular diseases and guidance on the screening score recommended by the Ministry of Health (MS), using computer and data show; and a practical moment, with discussion of clinical cases and analysis of the instrument. At the end of the shift, the group discussions were socialized and the participants were exposed to the evaluation of the activity.

Results

The action of implementing the Framingham risk score in PHC health units in the municipality of Feira de Santana, counted on the participation of 06 institutional supporters, who conducted the 14 meetings as facilitators and 187 professionals, 109 nurses and 78 doctors.

The location of choice for the workshops was the auditorium of the Municipal Health Secretariat of the municipality, being chosen because it is the location of the majority of the network's workshops and training, having air conditioning, infrastructure for audio, video and projection, in addition to central location.

The participants were divided into groups of 14 people, so that the theoretical-practical applicability of the score among the participants was possible, in order to get to know the instrument and to be able to answer questions during training and discussion of clinical case studies.

Each workshop was divided into two moments: a theoretical approach with information on the main chronic diseases (arterial hypertension and diabetes mellitus); epidemiological situation of cardiovascular diseases and

guidance on the control of factors related to lifestyle, understood as diet and physical activity, fundamental in the prevention of cardiovascular events. A second practical moment with demonstration and distribution of the Framingham Score instrument (for men and women) among the groups, in order to be applied among the participants and during the resolution of clinical cases.

For the implantation of the instrument in the units, the professionals were instructed on the need that in the first contact with the patients, laboratory tests, prerequisites (complete blood count, total cholesterol and fractions) were requested and evaluated to apply the Framingham score. hypertensive and diabetic patients in their area of coverage. From the result of the calculated risk, the individual would be classified as low, medium or high risk for the onset of coronary artery disease.

In addition, after estimating the individual's cardiovascular risk, the multidisciplinary team must establish goals in relation to blood pressure levels, lipid profile, among others, to be achieved to reduce the risk of patient morbidity and mortality recommended by the MS and taking into account the subject's participation in the process, to define the treatment plan together.

As the hyperdia consultation only happens once a week, strategies were created to apply the instrument to users' territory, such as: carrying out visits to hypertensive and diabetic users by the micro area of the Community Health Agent (CHA); conducting an active search for those who missed Hiperdia consultations; intensification of health education actions in work groups (groups of hypertensive and diabetic, group of elderly, group of pregnant women), emphasizing that one of the requirements for applying the score is the presentation of recent laboratory tests.

This joint action to carry out risk stratification in the unit and also in the territory of users, especially those who are absent and bedridden, would allow a more significant approach with this group, identifying and minimizing the risks of complications associated with chronic diseases, through appropriate intervention. and timely, considering its biopsychosocial context.

In practice, to determine cardiovascular risk (CVR) in individuals over the next 10 years, the investigation of the presence of RF in patients should be taken into account, such as: age, sex, smoking, presence of diabetes, systolic blood pressure and diastolic, treatment for SAH, total cholesterol and decreased HDL cholesterol, which classifies them through the score, in the following degrees of cardiovascular risk: low risk has a probability of less than 10% of cardiovascular events in ten years; medium risk, 10% to 20% and high risk, more than 20% according to the Ministry of Health.⁸

Thus, after the application of the Risk Score among the participants, the results were socialized and discussed, classifying them according to the low, medium and high risk scores, in addition to having served as a health indicator also for the professionals who had health problems. assisting in the definition of behaviors of the multidisciplinary team present.

Discussion

The recommendation of implantation of the Framingham risk score by MS by PHC professionals makes it possible to know the prognosis and guide multidisciplinary approaches and appropriate management in the approach of hypertensive and diabetic patients, as well as the search for disease control, avoiding their cardiovascular complications.⁸

Studies^{9,10} point out that about 80% of hypertensive patients have comorbidities such as dyslipidemia, diabetes, smoking or family history of atheromatosis and that the simultaneity of cardiovascular risk factors is common in a study¹⁰ carried out in the southeastern region of Brazil, being important that the This group's approach should take into account the characteristics of each individual, such as the coexistence of other RF and target organ injuries.¹¹

In this sense, the multidisciplinary team needs to know the main RFs for the onset of coronary artery disease, which include modifiable habits related to lifestyle, such as inappropriate eating habits, dyslipidemia, smoking, physical inactivity, obesity, diabetes and excessive use of alcohol and psychoemotional stress control, in addition to non-modifiable characteristics, such as sex, age and family history.^{7,12}

Thus, the use of strategies for the identification and control of cardiovascular risks deserve to be implemented in PHC so that it is possible to avoid and at the same time reduce the number of hospitalizations due to damage caused by the diseases mentioned.

In clinical practice is observed that individuals are evaluated timely and treated according to their isolated clinical or laboratory findings and not by means of individual and global risk assessment of developing CVD, however, the reality of several studies^{8,10,11}, shows the relationship with which many factors are interrelated, requiring that these practices be reviewed and goals be proposed during multidisciplinary care.

The study⁴ reveals that the potential of PE can identify individuals at high risk and who benefit from more rigorous therapy and that the stratification of hypertensive patients implies a way of adopting more appropriate management strategies, taking into account the projected risk for the appearance of an adverse event, for example, the use of drugs that can reduce this risk and based on the level of stratification.

However, studies^{13,14} state that the use of this score has limitations when used in a small number of individuals studied and also because it does not take into account emerging cardiovascular risk factors, such as CVD, family history, abdominal obesity, physical inactivity, ethnicity and serum triacylglycerol, needing to be included as additional factors in the assessment of these groups.

Other studies highlight¹² the important role of the use of PE in PHC, which is to promote self-care and shared responsibility for the management of SAH, representing a challenge to the FHS, considered fundamental protagonists for the success of integrated prevention of CV risk factors. Thus, in addition to primary prevention, health promotion has represented a theoretical and practical alternative for globally addressing the wide range of factors that represent the current epidemiological panorama of CVD.

Conclusion

The existence of the application of an instrument aimed at assisting hypertensive and diabetic people in PHC, with the aim of obtaining an estimate of the risk of developing coronary heart disease in a systematic and non-opportunistic way, favors an adequate management in the care of patients with theoretical support and an adequate work process, based on the intervention of the multidisciplinary team with a view to preventing them and encouraging the change of inappropriate lifestyle habits. The implementation of the Framingham risk score by the FHS brings the challenge of motivating training and continuing education strategies for PHC professionals to detect and reduce the risk factors of the assisted population.

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