




Fanzines for a Local Celebration of the World Stroke Day 2023

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Graphic Medicine Review is proud to collaborate with and publish selected content from the Graphic Medicine International Collective Annual Conference, July 16-18, 2024, held at the Technological University of Shannon, Athlone, Ireland. We thank those participants who contributed to these proceedings.

Received: September 23, 2024 **Accepted:** February 5, 2025 **Published:** February 10, 2025

Competing Interests: The author declares that they have no competing interests.

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ABSTRACT

Stroke is a neurological deficit attributed to an acute focal injury of the central nervous system, due to an arterial occlusion (ischemic stroke) or an arterial rupture (hemorrhagic stroke) (Institut Català de la Salut de Barcelona Generalitat de Catalunya, 2022). It provokes the loss of function in the brain areas affected. It is one of the most common neurological acquired diseases, being the first cause of disability in the world (Sociedad Española de Neurología, 2020). A large majority of strokes can be prevented through lifestyle changes, so primary prevention education of the population is essential. Regarding the secondary prevention (after an event happens), it differs depending on the subtype of stroke but preventing cardiovascular disorders with actions such as avoiding sedentarism, taking care of our diet, and quitting toxic habits are common points in the etiology of acquired neurological vascular disease (Pla Director de la Malaltia Vascular Cerebral, 2022).

Beyond oral counseling, paper flyers are commonly used in consultation to give health advice to patients and to the general population. Graphic Medicine makes possible the use of visual formats to teach healthy habits to people. An example of a visual medium are fanzines, a “do it yourself” possibility to spread your health messages and to explore visual possibilities of communication.

This fanzine aims to frame the changes in a patient’s life after suffering from stroke and how to prevent new events and complications. It is directed towards patients, family, and general population concern.

INTRODUCTION

What is supposed to be done after a stroke? How does life change after a neurovascular event? The acute onset of stroke does not let time to digest the milestone that supposes in patients and their families.

Ischemic stroke represents around 80% of total strokes and it is due to a stopping in blood brain circulation (Institut Català de la Salut de Barcelona Generalitat de Catalunya, 2022). This interruption in blood flow can be originated by a heart thrombus or even an arterial thrombosis secondary to atheroma plaques in their walls.

When suffering from an ischemic event, brain arteries need to be checked out. It could happen that arterial walls thicken due to cholesterol and this plaque breaks so the small fragments migrate to distal vessels of the brain, stopping blood flow and damaging brain areas. This is called atherothrombotic stroke and some risk factors are high cholesterol levels, diabetes, high blood pressure, smoking, obesity or sedentary lifestyle. Secondary prevention includes taking antiplatelet pills, controlling blood pressure lower than 140/80 mmHg and cholesterol LDL < 55 mg/dL (Institut Català de la Salut, 2022). Also avoiding smoking, doing physical activity, and avoiding emotional distress.

A cardiologic study directed to the detection of arrhythmias such as atrial fibrillation should be performed. In this case, thrombus are originated in the heart and migrate to the brain circulation. People suffering from arrhythmias, ischemic heart disease or with a mechanical heart-valve have increased risk of cardioembolic stroke. Secondary prevention includes taking the anticoagulant medication and controlling blood pressure lower than 140/80 mmHg and cholesterol lower than 70 mg/dL, as doing physical activity and avoiding emotional distress (Institut Català de la Salut, 2022).

Another etiology of ischemic events is the lacunar stroke, due to a focal stop in brain microcirculation which is damaged by high blood pressure, cholesterol, high sugar levels, or a cardioembolic source.

Hemorrhagic stroke supposes 20% of strokes and it is often generated by an acute increase in blood pressure (Institut Català de la Salut, 2022). Patients who suffer from Amyloid disease have a higher risk of suffering from hemorrhagic lobar strokes.

Page 2 represents an algorithm of secondary prevention depending on the type of stroke. Pay attention to the fact that the common idea is the control of cardiovascular risk factors, with special attention in blood pressure in hemorrhagic strokes.

Apart from the importance of studying the etiology of stroke so we could prevent it, it is essential to develop rehabilitation to restore previous functions and recover autonomy. The main key points that must be trained are swallowing, speech, mobility, and daily life activities (Pla Director de la Malaltia Vascular Cerebral, 2022). It starts at the hospital and continues at discharge, so there is an improvement during the first 3-4 months in mild strokes and until six months in moderate strokes, starting an adaptation after that time (Institut Català de la Salut, 2022).

PROCESS

The fanzine was designed for a local celebration of *World Stroke Day* in a third-level hospital in Catalonia (Spain). Information for the comic script was collected from the weekly post-stroke webinars content, from the guide provided to patients at discharge and from conversations with the multidisciplinary stroke team (rehabilitation, nursing, and neurologists). Images and visual metaphors were shared through the story, keeping in mind the structure of eight-page fanzines. Manually inking was used to create the panels, and digital methods made the coloring. The multidisciplinary stroke team followed the creative process so they could contribute with ideas and revision.

An eight-page color fanzine was created, including an inner A3 illustration summarizing the “FAST” acronym (F means face, A identifies arm, S stands for speech, and T means time is of the essence), which in catalan is known as “RÀPID” (*R riure, A aixecar els braços, P parlar, I ctus, D de pressa!*). It was printed in color and shared with patients, families, and health professionals in the local celebration of the *World Stroke Day* at Germans Trias i Pujol Hospital.

CONCLUSION

The creative process of a health-related fanzine is challenging as it requires summarizing ideas in a clear and concise message. The purpose of the inner page is to work as a poster which could be shared and hung up in public common spaces, stimulating patients to be part of the health education chain as leading voices of the illness experience.

One of the future goals of the fanzine may be to generate a primary prevention public health dynamic, so it could bring together patients’ experiences and society.

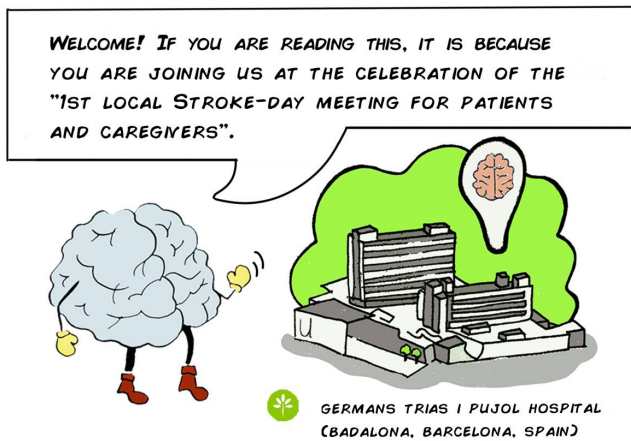
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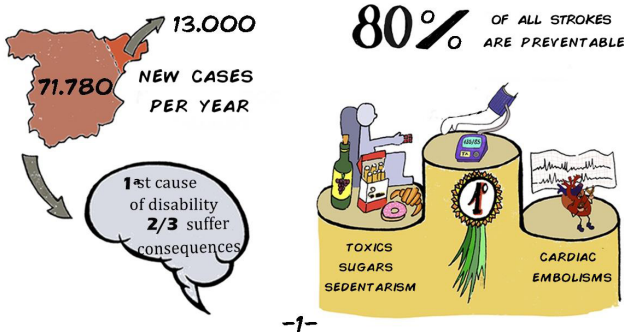
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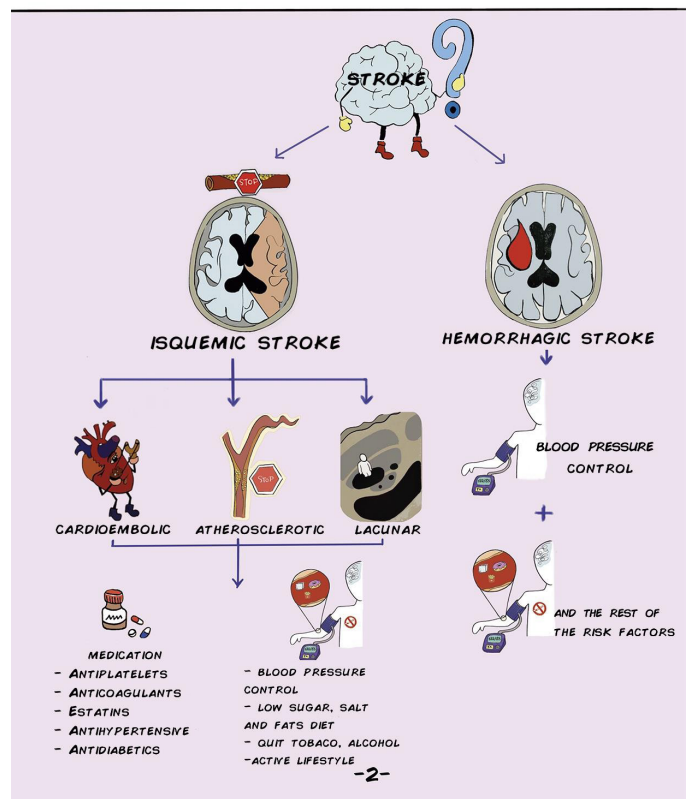
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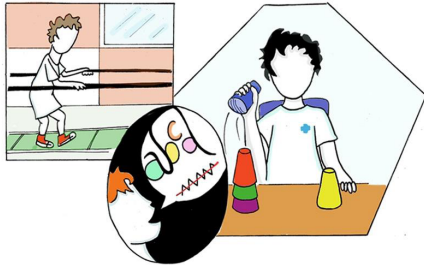
AS YOU KNOW, YOU ARE NOT ALONE. STROKE IS A VERY COMMON ACQUIRED NEUROLOGICAL DISEASE THAT CAN BE PREVENTED...



DEPENDING ON THE SUBTYPE OF STROKE, THE SECONDARY PREVENTION TREATMENT DIFFERS. THE COMMON POINT IS THE CONTROL OF CARDIOVASCULAR RISK FACTORS.



REHABILITATION IS ESSENTIAL TO IMPROVE QUALITY OF LIFE AFTER STROKE. ITS MAIN GOALS ARE TO RESTORE FUNCTIONS TO THE MAXIMUM RECOVERY, TO ADAPT TO THE DISABILITY AND TO IMPROVE COMMUNICATION AND SWALLOWING.



THE KEYPOINTS THAT MUST BE TRAINED IN REHAB AT DISCHARGE:

HOW LONG SHOULD I UNDERGO REHABILITATION?

MOBILITY

SWALLOWING

SENSIBILITY

ACTIVITIES OF DAILY LIVING (ADLs)

SPEECH

HOSPITAL ADAPTATION

IT STARTS DURING HOSPITALIZATION AND CONTINUES AT DISCHARGE
 DEPENDING ON THE TYPE OF STROKE, THERE IS A NOTABLE IMPROVEMENT IN THE FIRST 3-4 MONTHS (MILD CASES) OR 6 MONTHS (SEVERE CASES). THERE IS AN ADAPTATION FROM THEN ON.

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FOLLOWING A MEDITERRANEAN DIET IS KEY TO PREVENTING CARDIOVASCULAR RISK FACTORS.

5 PIECES OF FRUIT

2-3 TIMES A WEEK

3 TIMES A WEEK

AFTER A STROKE, DIFFICULTY SWALLOWING MAY APPEAR, (DYSPHAGIA) WHICH PREVENTS PROPER NUTRITION.

- YOU WILL FOLLOW SPEECH THERAPY.
 - YOU WILL ADAPT TEXTURES.
 - POSTURAL CARE.

DUE TO THE ILLNESS AND THE LOSS OF INDEPENDENCE, EMOTIONAL DISORDERS MAY APPEAR, WHICH GENERATE FEAR AND INSECURITY IN PATIENTS AND FAMILY MEMBERS.

POST-STROKE COGNITIVE IMPAIRMENT MAY AFFECT MEMORY, LEARNING ABILITY, LANGUAGE AND INITIATIVE.

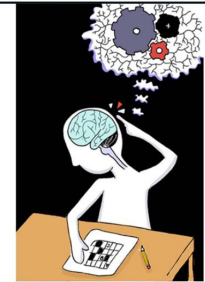
FRAGILITY

IRRITABILITY

REJECTION

ANXIETY

FATIGUE

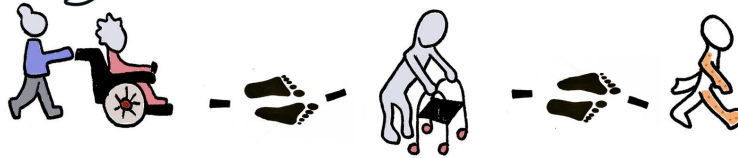


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*** WHAT WOULD YOU ADVISE TO A PERSON WHO HAS HAD A STROKE AND THEIR FAMILY?**

PATIENCE

"IT IS A SLOW PROCESS. EVERY DAY THINGS HAPPEN. IT HAS A LOT OF INTERNAL WORK DAY TO DAY. YOU HAVE TO HAVE CONFIDENCE THAT YOU CAN IMPROVE".



"ASK FOR PSYCHOLOGICAL HELP AND FROM HEALTH PROFESSIONALS WHEN YOU NEED IT. LOOK FOR ACTIVITIES THAT MOTIVATE YOU".

ACCOMPANIMENT



*** HOW DID IT CHANGE YOUR LIFE?**

SELFCARE

"I HAVE LEARNED TO TAKE CARE OF MYSELF MORE. NOW I NEED HELP FOR SOME ACTIVITIES BUT I HAVE LEARNED TO ACCEPT HELP FROM OTHERS".



-5-

-6-

FAST!

F FACE

A ARM

S SPEECH

T TIME! ⚡ ☎

CALL 112 AS SOON AS POSSIBLE
IF SYMPTOMS SUGGESTIVE OF
STROKE APPEAR
(ALSO SUDDEN LOSS OF VISION)