

Commentary

Italian Voluntary Diabetes and Exercise Organizations: From Social Support to Nationwide Clinical Research

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ABSTRACT

ANIAD (Italian National Diabetic Athletes Association) is a voluntary organization lending support to diabetes mellitus (DM) and sports community in Italy within the frame of the International Diabetes Federation since 1991. During the last 25 years it struggled against prejudice and finally broke the barriers surrounding Italian diabetologists/health care providers by unrelentingly permeating diabetes related circles with the culture of wellness through safe exercise at all ages. Just recently ANIAD manage to start a nationwide media campaign in favor of diabetes and exercise

by showing a dedicated banner in many stadiums involved in different kinds of sports events. This was a clear example of diversity changing to equality in everyday life. We are here explaining the steps that made it possible through the years and how science came on top of that after a while to fill the gaps of everyday experience with sound explanations of the mechanisms behind it.

Keywords: Diabetes; Exercise; Sports; Training; Voluntary organizations; Social support

Diabetes mellitus (DM) and sports Italian community is characterized by some peculiarities as for voluntary support organizations¹. In 1991 the Italian National Diabetic Athletes Association (ANIAD ONLUS) was founded which, among the 220 IDF member organizations, is the only one that aims at both educating athletes and encouraging the practice of sports, as well as, promoting health through keep-fit exercise among people with DM². It was born in Naples as a voluntary regional initiative out of the enthusiasm of Prof. D'Agostino, a father of Italian Diabetes Association, but soon a larger and larger number of young people joined the project. They had been practicing different sporting disciplines at a high level since the '80s all over Italy, but they had most often done it secretly and therefore missed or even disregarded diabetes specialist help. In fact, most diabetologists were not ready to accept and support their efforts at that time, due to the high hypoglycemic risk encompassed by exercise.

During the following years ANIAD built up a large network of athletes with DM who interacted strongly with one another and thus contributed to spreading opinions and solutions found "on the ground" under strict expert surveillance and almost inadvertently generated a new culture on DM and sports. This explains how athletes with DM step by step projected an image of aware, careful, well-balanced patients standing out as examples of ambitious yet wise people continuously weighing risks against benefits.

During the last 25 years some ANIAD athletes ensured a successful communication, and thus broke the barriers surrounding Italian diabetologists/health care providers by unrelentingly permeating diabetes related circles with the culture of wellness through safe exercise. This is how in the

end they managed to drive specialists to investigate upon metabolic mechanisms involved in DM response to exercise and evaluate how to harness it as a major tool for patient education/empowerment and health maintenance.

ANIAD also gave a boost to a series of selective sports groups, including ADIQ, national basketball team, national soccer team, "Cycling with Diabetes", "Diabete No Limits", Sailing with Diabetes, Triathlon runners, "Scuba and Diabetes" and so on³⁻⁷.

ADIQ, which is an Italian acronym staying for Diabetic Climbers at a Height, is made of mountaineers getting even higher than 8000 meters in Asia, Africa and South America and showing a strong social commitment by organizing "DiabTrek" yearly, a trekking school camp at half a mountain for children with T1DM supervised by diabetologists and climbers. Such initiative represents an excellent communication/education model and shows that an athlete with DM may be a health promoter within his own community by involving all diabetes care team members and having them work with – rather than on – their patients outside the hospital walls.

The Italian national basketball and soccer teams were involved in international competitions quite often within the frame of IDF experience exchanges. Cycling represents a typically aerobic exercise played by hundreds of people: "Cycling with Diabetes" did not only improve the image of people with DM thought their active participation in public events on World Diabetes Days but also strongly contributed to the knowledge of metabolic mechanisms involved in DM, such as insulin requirements and sensitivity as well as Glut-4 expression during exercise. Something similar occurred with scuba diving, a kind of activity which had been prohibited for years to people with diabetes but

in the end became part of everyday life under the supervision of expert trainers and diabetologists⁸. This allows the group to empower single participants by letting them understand exercise pathophysiology, food intake management and insulin dosage adaptation “on the spot” first, as well as, during the debriefing and teaching sessions organized after almost all events.

Individual athletes have also to be cited here, who had to fight hard to break personal barriers to accept their own disease and social barriers to be able to go on sporting despite diabetes. This made them reach a high level of awareness, vitality and well-being which let them rub off on other people with diabetes by spreading a positive message. One of them is Giuseppe Di Blasi, a marathon runner who could not declare his diabetes for some 20 years before he got help from ANIAD and immediately founded its Lazio Region Chapter to provide help to other athletes. Another one is Monica Priore, the first woman to swim across the Strait of Messina. Still an outstanding and never forgotten figure of solitary athlete was Mauro Talini, who cycled thousands km through Europe up to North Cape and to Jerusalem before being killed by a truck in Mexico while crossing South America to spread Father Kolbe’s message and raise funds in favor of Brazilian children living in San Paulo’s favelas.

Due to its recognized social and scientific role in our society, in 2014 ANIAD signed a memorandum of understanding with the Italian National Olympic Committee (CONI) to enhance the engagement of people with DM in sports events, to educate sports administrators, trainers and athletes on DM, as well as, to enhance safe elderly participation in supervised training sessions within CONI structures after decades of sedentary lifestyle⁹. A National Committee was also raised for the organization of scientific meetings, major sports events and large media campaigns at the national and international level.

On 2015, one of these campaigns led to the deployment of a dedicated banner in many stadiums involved in the national soccer big league. The latter repeatedly reached Italian TV viewers during a certain period (Figure 1) and, after that, rugby, handball, volleyball, cycling, recreational fishing and scuba diving federation showed the banner during their competitions.

Fortunately enough, the big effort made by pioneers in the field is now bearing fruit so that nowadays, in addition to children and young T1DM subjects, middle-aged and old people with T2DM are more and more participating in exercise sessions and sports events¹⁰⁻¹².

In the early 2000s a public experience was also carried out in the Rome and Ancona seats of the Italian National Research and Care of Aging, respectively, to study and counteract sedentary lifestyle: obese diabetic sedentary people were progressively trained to get back to their active life by an “extended” diabetes care team including also a psychologist and a dedicated trainer^{13,14}.

The above mentioned approach was followed by Catania and Perugia Universities and by S. Andrea University Hospital in Rome. This originated the IDES project and yielded very interesting results concerning benefits of appropriate T2DM people training techniques¹⁵⁻¹⁷. The project was further implemented some years later in Rimini, where the “Lifestyle Gym” project started aimed at having supervised people train for a few months before being allowed to go on exercising on their own¹⁸.

Regular exercise and sports practice help people develop talents like loyalty, friendly attitude, ability to weigh risks against benefits and all this makes patients accept and overcome the bad aspects of a chronic disease, as well as, improve their own quality of life¹⁹⁻²⁴. This provides a clear example of diversity changing to equality in everyday life.



Figure 1. The banner “TUTTI IN CAMPO PER IL DIABETE” (“ALL OF US ON THE FIELD FOR DIABETES”) during a big league soccer match (2015).

All of the above was the result of a vision a few people initially had. Such vision became a stubborn dream prompting them to start sort of an “unrealistic” voluntary project. Science then came on top of that to the Italian diabetes community fill the gaps of everyday experience by providing scientifically validated solutions to practical problems, as well as, sound explanations of the mechanisms behind metabolic adaptation to exercise²⁵. We therefore feel like encouraging other countries to raise groups like ANIAD as we are convinced that the many scientifically and socially relevant results obtained in Italy during the last decade or so represent sort of a spillover of ANIAD’s activities carried out against the current for many years. Courage may be contagious when supported by a dream.

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