

## Scientific Progress and the Future of Reproductive Health in Europe

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### Editorial

In a book issued in 2010 on the occasion of his 90<sup>th</sup> birthday Egon Diczfalusy, one of the leading figures in reproductive endocrinology and the discoverer of the feto-placental unit, who for 25 years was Senior Consultant to the World Health Organization (WHO) Human Reproduction Program, presented a two face outlook of the future of humanity. On the one hand, a series of daunting challenges facing men and women of the 21<sup>st</sup> century; on the other, the prospect that we are moving to a more truly human world. Following this perspective, Diczfalusy believes that it is possible to improve the human condition through a judicious use of science. In other words, he and his co-Authors are convinced that *progress* (i.e. science and technology), not to be confused with historical and political *evolution*, will help create a more humane world [1].

Before progress can exercise its beneficial effects, however, there is an enormous challenge for the masses of the planet: the incredible acceleration of knowledge-generation that has taken place over the last 50 years is making increasingly difficult for the average person to “digest” new realities and adjust to change. Today, for the first time *Homo sapiens* is able of significantly changing the earth in which he dwells, although unfortunately not always in a positive manner. Indeed, since Alessandro Volta, just over two hundred years ago, made the mother of all discoveries, how to create electricity, progress has been exponential: Within thirty years, Morse proved that we could communicate at great distance and within a century humans were flying. It then took us only sixty years to reach the moon and, over the last twenty years, we saw mobile phones, internet, and all sorts of new gadgets, not to mention the progress of medical sciences.

Importantly, these advancements are occurring at the same time

as new social networking and knowledge management platforms such as Wikipedia, Facebook, Twitter and YouTube have begun shaping the way we live, interact and learn. These platforms are horizontal and dynamic in structure, replacing traditional hierarchical management models as the most effective way of doing business, share knowledge and making an impact on social issues [2-4]. It is sad, but possibly inevitable, that many confronted with a reality that considers “the sky” as the limit, take refuge in the stubborn refusal of any change. This inability is at the core of a phenomenon that, totally unexpectedly, has characterized and pervades the beginning of the third millennium: *fundamentalism* and its refusal of any rational approach!

For Europeans however, there is another phenomenon that will be even more fateful and should concern each and every one of them: the inevitable (banning a miracle) decline of the “old world”. Indeed, it is today well established that in Europe fertility is everywhere well below replacement level, causing a sharp ageing of the population and a need for an imported workforce. The problems created by these interrelated phenomena are not only daunting; they have not even been fully comprehended!

An ageing Europe is today besieged by hundreds of millions of people dreaming to cross its borders that look and sometimes physically are more and more defense walls against “herds of invaders”, the “illegal immigrants”. Indeed, the unexpected mass emigration from Africa and the Middle East that has taken place

over the last few years with no end in sight seems to have taken European Institutions by surprise.

When reflecting on this situation a number of considerations become mandatory; first and foremost, that the massive influx of migrants is more a consequence of war, political and economic turmoil and deteriorating living conditions in the developing world than love for the European lifestyle. Second, that xenophobic sentiment is rising even in the countries traditionally more open and hospitable, like Scandinavia and the Netherlands. Third, that “gut rejection” of immigrants is based more on cultural than on race differences. It is based on the sensation that some of the newcomers, not only refuse to integrate, but want to impose their “unacceptable” habits on to the local population. Those sentiments and tensions tend often to be exacerbated when discussed at the “political” rather than technical level, something that parallels what is occurring when reproductive health issues are debated in the media and public fora.

Obviously, comprehensive solutions are all but impossible, while, at the same time, compromise is inevitable. Many aspects of the present situation require social engineering and are therefore beyond the reach of the medical profession, while, at the same time, others aspects see modern medicine as the protagonist.

In the field of public health, what Europe needs is above all what the World Health Organization has named “Healthy ageing” [5], with an inevitable corollary: if healthy ageing is achieved, society must assign an active role to its millions of old and very old citizens. This requires a “quantum leap in the preservation of health in the elderly” [1]. In addition, it implies a true revolution in the market place, since today in every European country pension schemes are, at least in part, collapsing, while at the same time, Europeans seem to refuse a new reality: chronological age *per se* has little meaning; more important are biological age and working ability. The great turmoil created a few years ago in France by the will of the Government to raise the age of retirement to save the national pension system [6], bears witness of this inability by many to face the new situation. Intriguingly, when an emergency Government in 2012 raised, suddenly and steeply, retirement age, there was at first little reaction [7], however, over the years, opposition to the new situation has grown and today opposition parties are determined to set the clock back.

It is fair to say that the new reality opens-up an endless frontier of ethical issues, having already profoundly modified the “population pyramids” in every European country [8]. This phenomenon brings into the equation a major complicating factor: the already mentioned very low fertility of most European countries. When the proportion of people over 80 is higher than that of those below 14 years, an alarm bell should ring loudly [9].

Much has been said about this typically European phenomenon. Chesnais [10] has pointed out that we have witnessed a true “gender revolution”: women’s increased autonomy, education, participation in the labor force and the instability of unions are, in his view, the main reason for fertility decline. This is unconvincing, since the only Western country with a fertility rate above replacement is the United States, a champion of the gender revolution. Obviously, there are other determinants, such

as urbanization, social atomization and contraception. The latter, however, is nothing more than a powerful tool to achieve what couples have already decided and, for this reason can hardly be the engine behind low fertility in Europe. More convincing are economic reasons: raising children in a modern urban context and caring for and educating them are costly and unless strong infrastructures are created, it is hard for women to have multiple pregnancies.

At the same time, it cannot be denied that modern contraception brought to Europe and to most of the Western world, a true social revolution and irrespective of the sometimes conflicting moral judgments that have been passed on these technological advances, they have had a profound social impact; even more so, since changes have been so rapid as to confuse many [11].

In this connection, it must be stressed that public opinion is by its very nature conservative and acceptance by the majority of many of the discoveries that revolutionized our knowledge has always lagged behind by decennia, if not centuries. It is therefore not surprising that humanity has yet to come to terms with what science has achieved in medicine and other fields and it is not a foregone conclusion that public opinion will – so to speak – “follow”. This conflict seems particularly acute when dealing with human sexuality; this is why, negative reactions should have been anticipated and an effort at coping with them should have been made. Indeed, biology and sociology need to establish a constructive dialogue with the public on a number of fundamental questions, such as marriage and the structure of families, the true meaning of human sexuality, individual freedom to reproduce *versus* social responsibility for the children to be born, just to quote a few.

Perhaps, we are too close to the beginning of this reproductive revolution to see how the situation will stabilize, or even begin to reverse itself in a not too distant future. Therefore, doomsday is not the inevitable future of Europe, especially because – as the United States have shown – we cannot and must not underestimate the strong natural desire to have children and the fact that unchecked capitalism, far from being the “ultimate social structure”, may end-up in the wastebasket of history [1]. At the same time, with Diczfalusy, we hope that progress will free humans from fanaticism, obscurantism and senseless violence and we agree that science may constitute the right ingredient to improve the human condition. Science alone however, will not suffice since the history of progress has been that of scientific advancement as much as it has been that of new ideas and new principles, the only engines that can guide it.

It is within this context that religion comes into the equation, with either positive or negative effects, depending on how it is interpreted, practiced or imposed. To quote Albert Einstein: *“The highest principles for our aspirations and judgments are given to us in the Jewish-Christian religion’s tradition; science can only be created by those who are thoroughly imbued with the aspiration towards truth and understanding. This source of feeling, however, springs from the sphere of religion. To this, there also belongs the faith in the possibility that the regulations valid for the world of existence are rational, that is, comprehensible to reason. I cannot conceive of a genuine scientist without that profound faith. The*

*situation may be expressed by an image: science without religion is lame, religion without science is blind*" [12].

For Europeans, the role of religion has special significance, because – although secularized – Europe is still in its majority a Christian continent, with growing problems in dealing with its Islamic minorities. For those involved in making sexual and reproductive health a reality for all in the European continent, the position of the most important Christian denomination in the Continent, the Roman Catholic Church, opposed to modern contraceptive methods and to induced abortion, is often seen as a major negative force. The challenge however, is to find ways to collaborate, not to fight one another. In this regard, dialogue should be based on mutual recognition; in other words, on the one hand, those wishing to practice only certain methods (i.e. "natural family planning") should not only be free to do so, but should be given full and easy access to healthcare services offering them; on the other, those utilizing modern contraceptive modalities, should not be considered "outcast", but more simply persons with a different outlook on reproduction.

There is one issue where dialogue is deemed absolutely impossible, that of induced abortion. In theory a form of dialog should be possible, since there is general agreement that every effort should be made to decrease the number of abortions in Europe and elsewhere. In reality, the so-called Pro-choice group contends that access to induced abortion is a human right and, as such should be totally unrestricted and – to use a popular expression – "deregulated". On the contrary, the so-called Pro-life camp insists that abortion is akin to "homicide". Given these starting points, is there a way to work towards the common goal of reducing the number of abortion? The only chance is for both

sides to open discussions without the precondition of requiring either side to compromise its position.

One stumbling block is the controversial Resolution passed in 2008 by the Parliamentary Assembly of the Organization for Cooperation and Security in Europe (OCSE) [13] calling for steps to "*guarantee women's effective exercise of their right to abortion*", a statement violently rejected by the Pro-life movement. There is however one common point in this document: "*the parliamentary Assembly reaffirms that ... abortion must, as far as possible be avoided. All possible means compatible with women's rights must be used to reduce the number of both unwanted pregnancies and abortions*".

It is precisely starting from this seemingly contradictory view that the Pro-choice and the Pro-life philosophies may in theory work together: if everyone agrees that recourse to induced abortion should be reduced as much as possible, then the two camps might agree on setting-up Government programs aimed at primary and secondary prevention of voluntary pregnancy termination; obviously, within their respective philosophies.

Is this simply naïve "wishful thinking"? One may be tempted to respond with a resounding "Yes" in the light of the daily exchanges found in all communication media. In addition, such a position risks alienating both camps, since it stresses what might unite rather than divide and therefore may be accused of being "relativistic". The truth, however, is that no one, when engaging in dialogue should be requested to renounce beforehand any part or shade of its position. Rather, dialogue should go beyond individual positions in the hope of finding common ground, however limited it might be.

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