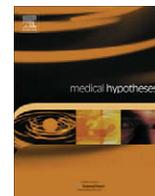




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Aids denialism at the ministry of health

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SUMMARY

We investigated epidemiological evidences regarding HIV infection and AIDS spread in Italy resorting only to official data published by the Italian National Institute of Health (Istituto Superiore di Sanità) and by the Italian Ministry of Health (Ministero del Lavoro, della Salute e delle Politiche Sociali). Based on the data and documents provided for by the Italian Health Authorities, we came to the conclusion (hypothesis) that the Italian Ministry of Health appears to be convinced that HIV is not the (sole) cause of AIDS. Consistent with this hypothesis, according to the Ministry, AIDS can be diagnosed in the absence of signs of HIV infection; there is legal prohibition to communicate new HIV infections to referring physicians and Health Authorities as if HIV spread were not a threat to public health; consistent with the previous point, no national registry of HIV infection is implemented; and AIDS is not classified among relevant infective diseases nor among infective diseases that are susceptible of control interventions; one fourth of paediatric AIDS cases is not imputable to mother–son transmission.

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Introduction

In the wake of the recent Nobel awards for Medicine, we wished to prepare an essay concerning the numbers of the AIDS epidemic in Italy and the efficacy of the Italian Ministry of Health's policies to contain and fight the disease. We also wondered whether the Nobel awards could put an end to the polemics concerning the viral origin of AIDS with particular reference to the theses (often referred to as "AIDS denialism") put forward by Prof. Duesberg et al. [1] and Bauer [2]. AIDS denialism refers to the views of a loosely connected group of individuals and organizations who deny that HIV is the cause of AIDS. To this end, a young student (MPG) preparing his bachelor's thesis began to search the official documents of the Italian Ministry of Health (<http://www.ministerosalute.it>) and, after a thorough search, we came to a rather paradoxical conclusion: policies, guidelines, definitions and data provided for by the Italian Ministry of Health are indeed consistent with the hypothesis that AIDS could be independent of HIV infection.

The hypothesis

The Italian Ministry of Health appears to be convinced that HIV is not the sole cause of AIDS in Italy. This hypothesis stems from accurate reading of documents from the Ministry available to the public, dealing with HIV and AIDS. According to this hypothesis

over the years the Ministry has produced data and documents that can be considered fully supportive of the views of the AIDS denialist community. In order to sustain this hypothesis, we shall present the official data published by the Italian Ministry of Health and by the Italian National Institute of Health (Istituto Superiore di Sanità, abbreviated in ISS). Whenever applicable we shall included in the text the updated (May, 2009) web pages of the Italian Ministry of Health that we used to gather information. Unfortunately these are only in Italian language; we try to translate them as literally as possible.

We are well aware of the fact that our hypothesis, stemming from interpretation of the documents of the Italian Ministry of Health (just like any other interpretation of data in science) could be wrong. Bearing this in mind, at the end of each paragraph, or wherever appropriate, we propose how the Ministry could refute, with official acts, our hypothesis.

Results

We started analyzing the legislative situation concerning AIDS in Italy, with particular emphasis on the criteria used for the diagnosis. We started with this approach because we believe that, more than twenty five years after the onset of the epidemic, legislation must be based on solid ground. Thus, we consider that the laws, the decrees and the official statements of the Italian Ministry of Health are based on solid scientific data and that they reflect the actual position of the Health Authorities. If this were not the case, the problems for Italian public health would be much greater than the dispute about the origins of AIDS.

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AIDS in the absence of HIV

According to the Italian Ministry of Health, AIDS can be diagnosed in the absence of signs of HIV infection [3]. In fact, if one of the diseases (mainly, but not uniquely, opportunistic infections) used to define AIDS is definitely diagnosed, the diagnosis of AIDS can be made in the absence of positive results concerning HIV infection. In other words, AIDS can be diagnosed in the absence of signs of HIV infection, (and in the absence of other known causes of immunodeficiency) if one of the diseases defining the syndrome is definitely diagnosed. From this official definition, it follows that in Italy, for example, a HIV-free patient with *Herpes simplex* mucosal infection lasting more than one month (according to the Ministry's definition) could be classified as an AIDS patient, with all the consequences.

This point incidentally supports the conclusions of the second paradox (or discrepancy) put forward by Duesberg et al. [1] that states: "Since HIV is "the sole cause of AIDS", there is no AIDS in HIV-free people. But, the AIDS literature has described at least 4621 HIV-free AIDS cases according to one survey, irrespective of, or in agreement with allowances made by the CDC (Centers for Disease Control) for HIV-free AIDS cases".

The Italian Ministry of Health admits that AIDS can occur in HIV-free patients, thus accepting (in its official definition!) that HIV is not the sole cause of AIDS. This could imply that the Ministry envisages at least two forms of AIDS: one associated with HIV infection and another that does not necessarily need to be associated with HIV. The distinction between these two putative forms of AIDS (HIV-associated, and non-HIV-associated), however, is never mentioned in any document of the Ministry. If this interpretation of ours is wrong, then the Ministry should rapidly and clearly state in official documents with legal value that no diagnosis of AIDS can be made in the absence of confirmed HIV infection (we underline the word "confirmed", because this adjective will be further discussed later). Or, alternatively, it should clearly state that immunodeficiency in the absence of confirmed HIV infection cannot be labeled as "AIDS".

In fact, looking further into the details of the Ministry of Health's definition, we read that (in the absence of other known causes of immunodeficiency) AIDS can be diagnosed, even in the absence of signs of HIV infection, if a patient presents a disease suggestive of immunosuppression, such as cerebral toxoplasmosis, *Pneumocystis Carinii* pneumonia or esophageal candidiasis [3]. In these cases the diagnosis of AIDS seems to be justified by the fact that these conditions identify a patient as immunodeficient, and this literal interpretation of the acronym AIDS appears to be logic and justifiable. However, since the Ministry itself affirms that HIV is the cause of AIDS [4], an evident contradiction here arises.

As far as the "other known causes of immunodeficiency" are concerned, the Italian Ministry of Health is well aware that immunosuppression is caused by a variety of known factors, and it lists a number of conditions that justify *per se* immunosuppression and that do not allow the diagnosis of AIDS in the absence of signs of HIV infection. Among these, high-dosage steroid therapy, Hodgkin's disease, multiple myeloma, and lymphocytic leukemia. Consistent with this logic approach, if a (HIV-negative) patient on high-dosage steroid regimen shows signs of immunosuppression with the onset of an opportunistic infection (including one of those used to define AIDS), the patient's condition cannot be labeled as AIDS. The same reasoning, however, does not hold true, if a HIV-negative patient has diabetes, sarcoidosis, other causes of immunodeficiency, or if she is pregnant. This rather paradoxical conclusion comes from the paragraph where the Ministry of Health lists the immunosuppressive conditions that still justify the diagnosis of AIDS in the absence of signs of HIV infection (given the presence of an opportunistic infection) [3]. Thus, if a HIV-negative

patient with a known immunosuppressive condition (diabetes, sarcoidosis, or pregnancy) develops an opportunistic infection she/he has AIDS. The paradox is conspicuous: the cause of immunosuppression is clearly recognized in the definition ("other causes of immunodeficiency"), there is no evidence for HIV ("in the absence of seropositivity"), and the diagnosis of AIDS is still allowed.

We envisage two possible interpretations (hypotheses) for these evident discrepancies: (1) The Italian Ministry of Health is convinced that HIV is not the sole cause of AIDS and there can be AIDS in the absence of HIV (all the definitions point to this conclusion). (2) Alternatively, the Ministry of Health's documents lack of internal logic and define with the single word (acronym) "AIDS" different pathologic entities. We cannot say which option is preferable for public health.

Another ambiguity in the AIDS definition with possible nefarious consequences, is the possibility to diagnose AIDS (in this case, in the presence of HIV infection) without the need to confirm the diagnosis of some of the diseases that define the syndrome [3]. In other words, when just the symptoms of one of the following diseases are present in a HIV-positive person, the diagnosis of AIDS is allowed without the need to confirm the diagnosis of the disease causing the symptoms. The list of the diseases that do not require confirmation encompasses: esophagitis by *Candida albicans*, Kaposi's sarcoma, diffuse mycobacteriosis, pneumonia by *Pneumocystis Carinii*, cytomegalovirus retinitis, extrapulmonary tuberculosis, and recurrent pneumonia ("recurrent", here indicating two episodes in the past two months). Therefore, if a HIV-positive subject, otherwise healthy, develops, for example, two episodes with symptoms suggestive of pneumonia (i.e. cough and fever) in January and in February, the diagnosis of AIDS is possible, without the need to assess or confirm the cause of pneumonia.

No national surveillance system of new HIV infections

If the Italian Ministry of Health were convinced indeed that HIV is not (or it is not the sole) cause of AIDS, then a national surveillance system (registry) of new HIV infections would be useless. And this is precisely the case: thus, as of today (May, 2009) looking at the official web site of the Ministry of Health, we can read the following words: (in Italian...*non è disponibile un sistema di sorveglianza nazionale delle nuove diagnosi di infezione da HIV...*) "it is not available any national surveillance system of new HIV infection diagnoses" [5]. The very same words could be also read in another page of the same web site (in Italian...*non esiste ancora un sistema di sorveglianza nazionale...*) "a national surveillance system does not yet exist" [6].

There are some independent local initiatives on a voluntary basis; some regions and provinces have implemented surveillance programs, but the data gathered this way are heterogeneous, cannot be compared, and they are useless on a national level. Italy and Spain are the only Western European countries without such a national registry of new HIV infections [7,8]. In addition, in Italy, there is no obligation to communicate a newly diagnosed HIV infection to any Health Authority (National Sanitary Service, or Local Sanitary Unit) or referring physician. Or, to be more precise, there is the legal prohibition to communicate any newly diagnosed HIV infection in such a manner that the HIV-positive person could be identified [9]. In other words, any citizen (Italian or not), with or without medical prescription, is entitled to have HIV blood test performed, but the results of the HIV test can be communicated strictly and uniquely to the subject who then is free to consider or disregard the information and potentially spread the infection. Quite obviously, immediate notification of any newly discovered HIV infection could help contain the epidemics; the fact that the law prohibits such a communication seems to be consistent with the hypothesis that the Ministry is convinced that AIDS is not

caused by HIV and, consequently, there is no need to inform the referring physician or any Health Authority.

It is germane to notice that in Italy, according to the official communications, the attention is not posed on the number of AIDS patients, up to date less than 30,000 (totaling about 58,400 from the beginning of the epidemic), but on the number of HIV infected people (140,000–180,000) (for updated epidemiological data see Ref. [5]); however, such a number is nothing but an estimate. By the way, it is also worth noticing that different web pages of the Ministry of Health quote different numbers concerning AIDS cases in Italy; e.g. in one case the reported number of AIDS cases, from the beginning of the epidemic until December 2007, is 59,500 [6], instead of 58,400 as reported in the section “epidemiological data” at the same web site [5].

In this matter, lack of internal consistency or sloppiness could be dangerous.

Quite obviously, implementation of a national registry of new HIV infections could help understanding the real proportions of the epidemic. We can envisage two hypotheses for the lack of a national registry of HIV infections: (1) The Ministry of Health is truly convinced that HIV is not the sole cause of AIDS and, consistently, such a registry would be useless. (2) In more than twenty five years, the Italian Ministry of Health has not been able to implement such a national registry, a task that has been successfully achieved by almost all European countries. And this notwithstanding all the millions of Euros spent on this purpose [10,11]. Once again, we cannot say which explanation is preferable for public health.

This interpretation of ours is easily refutable: the Ministry implement a national registry!

AIDS is not a relevant infective disease in Italy

If the Italian Ministry of Health were convinced that HIV is not (or it is not the sole) cause of AIDS, then AIDS (or at least some cases of AIDS) would not be a transmissible disease and, as such, it would not be relevant or interesting among infective diseases. Coherently with this hypothesis, the Ministry of Health classifies AIDS (not HIV infection) among the diseases for which only particular documentation is required and it does not label it either as a relevant and particularly interesting infective disease or as highly frequent, or even susceptible of control interventions (!). These intriguing but clear statements are extracted from the Italian Ministry of Health’s Decree of 15th December 1990 [12]. In the introduction, the Decree remembers that: “there is the obligation for the physician to notify to the competent Health Authority any infective or diffusive disease, or suspected to be such, of which she/he had notice during the exercise of her/his profession”. Then it proceeds to classify infectious diseases in five classes, in order of importance for the threat to public health. Thus, the first class is defined as “diseases for which immediate notification is required either because under international health rule or because they are of particular interest”. In this class there are 13 diseases including cholera, botulism, tetanus, influenza and rabies. The second class is defined as “diseases that are relevant because at high frequency and/or susceptible of control interventions”. In this class there are 25 diseases including hepatitis, measles, mumps, scarlet fever and whooping cough. AIDS is not in this class, but in the third one. Here we have no explanation as to why the Ministry of Health considers AIDS less relevant than mumps. Although we do not believe in conspiracy theories, one hypothesis, totally speculative, could come from the following point: AIDS in Italy is confined to two categories of people not particularly liked by the Italian pervasive moral regime. This hypothesis is consistent with some of the political aspects of the AIDS denialism movement in the United States: in this regard, Steven Epstein wrote in “Impure Science” that “... the appeal of Duesberg’s views to conservatives – certainly

including those with little sympathy for the gay movement – cannot be denied.” [13].

In Italy, there is no spread of AIDS in the general population

In fact, more than twenty five years after its onset, AIDS is still confined to intravenous drug (mainly heroin) users and male homosexuals. Thus, according to the official data, in the years 2006–2007, AIDS incidence in general (heterosexual) population was 1/100,000, in homosexuals, almost 5-fold higher, and in intravenous drug users, about 100-fold higher (compared with general population) [14–16].

Furthermore, estimates from data provided for by the Region of Lazio (that includes Rome) demonstrate that AIDS in Italy still shows a preference for male patients. At the beginning of the “epidemic”, the number of males with AIDS was 4-fold higher than that of females, but since then, the ratio changed very little: during the first years, the ratio male/female grew to 5/1, then it decreased, fluctuating around 2.5–3/1 between 1995 and 2006, just to rise again, in 2007, to more than 3.5/1 [17]. The decrease in 1995 can be explained with the fact that in 1994 the list of conditions that are used for the diagnosis of AIDS was modified, and invasive cervix cancer was added to the list: adding a women-only disease forced the female patient count to go up [3].

One fourth of paediatric AIDS cases in Italy is not due to vertical transmission

Paediatric AIDS cases in Italy are about 1.3% of total AIDS cases since the beginning of the epidemic [14]. In the year 2007 there was only one paediatric case of AIDS in Italy [14]. It is interesting to notice that, according to the data from the ISS, in certain years (for example in the four two-year periods from 1998/1999 to 2004/2005) only about 75% of paediatric AIDS cases was imputable to mother–son transmission. No paediatric AIDS cases were reported as associated with haemophilia or blood transfusions. However, about one fourth of cases (25%) was due to “other causes/not determined” [14]. No explanation is given for these apparently “non-transmissible” or “non viral” AIDS cases. We hope that they are not due to nosocomial infection or hospital accidents because the numbers of malpractice would then be impressive. In fact, according to the ISS there have been 27 cases of paediatric AIDS of unknown origin in the years extending from 1994 to 2007 in Italy [14]. Considering that the average risk of HIV infection after percutaneous exposure to HIV-infected blood is very low (0.3%) [18], the number of accident exposures involving newborns would have been very high. If the explanation, however, has to be found in poor data collection and analysis, the conclusions for public health would be only slightly better. We interpret these data as further demonstration that the Ministry is convinced that AIDS (or a significant percentage of AIDS cases) is not an infective disease. Also this interpretation of ours is easily refutable: the ISS should clearly state how these newborns were infected by HIV and developed AIDS.

Conclusions

At the end of what we thought would have been a routine essay, we were left with more questions and doubts than we expected: if the data and the definitions provided for by the Italian Ministry of Health are accurate and consistent, and assuming that the Ministry always uses the acronym “AIDS” to indicate the same pathologic entity (in this life/death matter, sloppiness and/or confusion would not be tolerable), then we are forced to conclude that the Ministry is convinced that HIV is not the sole cause of AIDS in Italy. This hypothesis of ours is easily refutable by the Ministry by implementing the following points:

1. Clearly state in an official document with legal value, that no diagnosis of AIDS can be made without confirmed HIV infection, and withdraw the definitions listed in the circular No. 9 of 29th April, 1994 [3].
2. Enforce obligation of notification of new HIV infections to referring physicians and Health Authorities.
3. Establish a coherent national registry of new HIV infection.
4. Classify AIDS among relevant infective diseases that are susceptible of control interventions.
5. Give an explanation for those paediatric AIDS cases not imputable to mother–son transmission.

Until these measures are not implemented, logics force us to include the Italian Ministry of Health within the AIDS denialist community.

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