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## Editorial:

# THE FLU: A MULTIDISCIPLINARY CHALLENGE TO WELFARE

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### Spanish version

From the Electronic Journal of Biomedicine we have received the invitation to comment on some aspects on the Flu, as models of transverse pathology that interests professionals of different health areas. The reality of our environment is formed in the current moment in 18 systems of health (corresponding to each of the Autonomous Communities and to that of the city of Melilla). The flu is an infectious disease which supported current importance does not need to be unclasped. The motive of the present contribution is to expose some points of reflection, which constitute a multidisciplinary challenge in the genuine sense of his meaning for the different systems of health and that be affect to the professionals of the health, anyone that is your territorial area of exercise in the set of our country.

In the first term the area of the etiology the virus of the human influenza and pertaining to birds they concern to the family *Orthomyxoviridae*, constituted by a wide group of virus with ARN segmented of negative polarity and spiral symmetry, covered by a lipidic membrane in that they arrange projections of glicoproteins nature. His guests are human and animal vertebrates and up to where we know his tropism it agrees upon us as for that the existence of cellular recipients for the same ones seems to be increasingly extended

among the different species <sup>1, 2</sup>. The family *Orthomyxoviridae* includes five genres and of them the genres Influenzavirus A and Influenzavirus B is the most important in human virology for his epidemiological and clinical aspects. The genre Influenzavirus C includes the virus C, with structural and biological different characteristics and of very much minor importance that the previous ones in human pathology, though his presence must not ignore<sup>3</sup>.

The Influenzavirus A genre includes all the human and animal subtypes of the virus of the Flu A and the multiple minor variants derived from them. In this genre subtypes exist antigens in reason to the possible combinations of two of his principal antigens; the Hemagglutinina (H) and the Neuraminidase (N). Only three subtypes have established stable lineages in human beings (H3N2, H2N2 and H1N1), of which only they circulate nowadays minor variants of the subtypes H3N2 and H1N1 (from 1968 and 1977 respectively). The importance of the virus A resides in the pandemic phenomena that they have caused, the antigenic variation that experiment and the recent episodes of animal(rude) and pertaining to birds flu in human beings <sup>4, 5</sup>. The virus of the flu B are responsible for seasonal epidemics of flu every two years in the last decade, but not of pandemics and his antigenic drift is minor; not existing animal subtypes. The virus C do not possess pandemic risk not epidemic seasonally, his antigenic drift is minimal and his clinical notably lower importance than others.

Exactly in the field of the virological diagnostics there exists availability of technologies that include the whole conceptual range. In what concerns the direct rapid diagnosis that it allows to document, from samples of nasal swabs, the existence of Influenzavirus A our group has praised his implantation in the community assistance so much in the area of the attention to paediatric patients <sup>6</sup> as like adults<sup>7</sup>. ). The advances experienced on the last decade on the methods of molecular detection make possible the documentation of the viral circulating lineages and extend the possibilities of conventional diagnosis. Your incorporation to the clinical practice must be considers depending on the welfare context <sup>8</sup>and the level of service of the Laboratory of Microbiology<sup>9</sup>.

Very joined the exposed area it is necessary to indicate secondly the opportunity to support systems of epidemiological alertness<sup>10</sup>. In our country many Autonomus Communities they have stimulated the functioning network of medical sentries, connected to the services of epidemiology and with the support of centers of virological diagnosis<sup>8</sup>. All they bring together activities that integrate the clinical valuation with the epidemiological one and etiological and provide an accessible information in the network and that in turn are included in supranational systems of notification.

In third instance, and though it turns out to be surprising for many professionals who practise with solvency in the clinical practice, it is not easy to adopt homogeneous criteria that offer good conformity with the systems of specific virological detection<sup>8</sup>. An attainable challenge is to try to adopt a system of signs and symptoms evaluation that minimizes the variability in the anamnesis and clinical exploration. Scientific societies that professionals agglutinate with responsibilities and competitions in the approximation to affected patients of flu can develop a very important work.

A fourth aspect to outline is the need to adopt joint strategies of response not only before the possible pandemic but before the epidemic annual outbreaks that in a constant way cause morbidity every autumn - winter in our systems of health <sup>11</sup>. The current configuration of the Society, who possesses major sanitary resources that long ago; for his complexity it is more sensitive to the serious epidemics of flu that they can paralyze or upset of important form his functioning. Before it they can be efficient the joint alertness of the human and animal flu and the development and implementation of the lines designed in the plans of action opposite to a pandemic of Flu. It seems to be opportune to have a confirmed, trustworthy, attainable information and in real time and to early prepare the suitable necessary means.

The achievements obtained in vaccination and in specific therapy must not be ignored. The current availability and vaccines of last generation with great immune capacity assure the efficiency of this measure in wide sectors of the population <sup>12</sup>. There makes to itself desirable the extension of the criteria of vaccination rate to segments exchequers still not included in our country (13,14). In therapy the modern inhibiting ones of the neuraminidase, since zanamivir and oseltamivir suppose an efficient help to the control of the clinical cases and in the chemoprophylaxis of contacts.

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