

In our hospital, upto now, out of 16 suspected H1N1 patients who were receiving fluvir from outside, only 2 turned out to be H1N1 swab positive and these children recovered rapidly with oxygen, IV fluids, and nebulization within 24 hours without any radiological evidence of pneumonia.

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## Reply

I write this based on information available as on 4<sup>th</sup> October 2009. H1N1 scenario, as also the management guidelines, is rapidly changing. Please keep track of the changes from time to time from official websites.

Dr Fadnis has raised a pertinent point in her letter; the point concerning the H1N1 guidelines to be followed while managing a case of suspected novel H1N1 infection. She has observed that many children with cough, cold, sore throat and fever with or without loose stools or vomiting [Influenza like illness (ILI)] are being treated with oseltamivir, (besides the other management modalities as are appropriate for the child's condition), and that many of these cases ultimately turn out to be negative for novel H1N1 infection on nasopharyngeal swab PCR making it seem unnecessary to treat every such patient with oseltamivir. However this situation is now even more intense in Maharashtra due to the revised guidelines followed in Maharashtra while managing suspected novel H1N1 infection which now recommends treating each and every person (including children and adults) with even mild ILI with oseltamivir within 48 hours of onset of illness(1). While one can understand starting oseltamivir in severe, hospitalized cases with ILI (classified as category A in revised Maharashtra guidelines), one kind of feels it too much to treat everyone (including children and adults) with even mild ILI with oseltamivir (classified as category B in revised Maharashtra guidelines). Theoretically this will ensure that every person with potential H1N1 is started on oseltamivir within the critical 48 hours of onset of symptoms (with maximum benefit in potentially reducing morbidity and mortality)(2).

However this approach also throws open a Pandora's Box!

- (1) The revised Maharashtra guidelines are in contrast to the guidelines from other reputed international bodies like WHO or CDC(2,3). For severe hospitalized patients, even revised WHO and CDC guidelines suggest treating all such patients with oseltamivir as soon as possible. However for mild ILI, WHO and CDC suggest starting oseltamivir only for those who are at high risk for complications and all children < 5 years (WHO) or < 2 years (CDC). Besides, the revised Maharashtra guidelines are entirely different from national guidelines dated 14<sup>th</sup> June 2009 available on the website of ministry of health and family welfare, Govt. of India(4). The available national guideline classifies suspected H1N1 in different A, B or C categories (in reverse order as compared to revised Maharashtra guidelines) and do not recommend oseltamivir in mild disease or severe non-hospitalized patients without the high risk factors (as is recommended by revised Maharashtra guidelines)(4). As such, the revised Maharashtra guidelines are not available on any governmental website.
- (2) There are various developed countries that are liberal in starting oseltamivir at "a drop of a hat" as is suggested in the revised Maharashtra guidelines. However these countries are small with limited population, are prepared with pre-conceived stock piling based on the population strength and have effective public distribution system to disperse the drug (at times delivered at home almost on a phone call request). In India none of these situations exist. We are populous country (1 billion plus), are ill-prepared in general and with the stocks of oseltamivir in particular and most important we do not have effective distribution system.
- (3) Oseltamivir syrup is generally available with great difficulty. Capsules are difficult to give in a child < 5 years (the age group maximally affected with ILI). It is estimated that up to 50% of the population is ultimately likely to be affected by the pandemic influenza virus(5). It would mean 500 million people getting the virus and the ILI in India

in the next 2-6 months or so. If we have to treat all of them as per the revised Maharashtra guidelines, we would need that much number of courses of oseltamivir (even WHO website states that it has stock piled only 5 million courses of oseltamivir!)(6). Many or most children get recurrent cough, cold and fever and as per the revised Maharashtra guidelines have to be treated with oseltamivir every time! This will further add to the number of courses of oseltamivir required in coming time. All this when most (and read MOST) will recover even without oseltamivir!

- (4) Such indiscriminate use of oseltamivir as per the revised Maharashtra guidelines is likely to lead to shortage of the drug in near future and may deprive the serious or hospitalized patients from getting the much required oseltamivir which will jeopardize their survival chances. WHO/ UNICEF suggest that 44 million episodes of clinical pneumonia (which would all would qualify to be classified as severe ILI) occur in children in India every year(7). At least all these children will certainly need oseltamivir when they would develop these episodes of pneumonia. Do we have enough stocks of drugs (especially syrups form)? If not, why waste the little precious stocks that we have in treating every 'cough-cold-fever' (ILI)?
- (5) Oseltamivir till late was distributed only through H1N1 centers identified by the public health authority which in any case are far few and distant making it difficult if not impossible for patients to access them to procure oseltamivir once prescribed, especially in private setup. Now the drug is made available through chemists with "schedule X" license, which are even fewer. The cost of the drug is exorbitant in open market making it difficult for many of the patients to afford (not all patients who visit practitioners outside the public health are affording). Hence without effective distribution system, it is making life difficult at least for the private practitioners and their patients!
- (6) Widespread use of oseltamivir has been known to lead to resistance and such 25 oseltamivir resistant strains of H1N1 are reported world

over(8). Revised Maharashtra guidelines are likely to expose a large population to oseltamivir which is most likely to lead to development of drug resistance soon. Whereas restricted use of drug in those who require it most is likely to delay development of such drug resistance.

- (7) Last but not the least is the problem of how to dissipate the often changing H1N1 guidelines to the entire medical fraternity? It is next to impossible to train the entire medical fraternity (including consultants and family physicians) in this revised H1N1 guidelines, especially in the given short time and in face of rapidly changing scenario as also the guidelines. It is practically not possible to expect the entire medical fraternity to access and follow these guidelines online. There is no communication to the medical fraternity in this regards from health authorities at local or national level like official infomercials in any form of media. The revised Maharashtra guidelines are not even available on any official government website! All this is making the entire medical fraternity highly vulnerable to health authorities on one side and media on the other side.

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## CORRESPONDENCE

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