A Response to Massimo Bonucci’s Editorial: COVID-19 Outbreak: How to Use Current Knowledge to Better Treat Positive Patients

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Important Message from Massimo Bonucci

COVID-19 attacks multiple systems after it enters and activates the cells, triggering off the release of cytokines, extensive inflammatory responses that produce divergent symptoms of fever, cough, dyspnea, arthralgia and vascular thrombosis. Now that there is yet absence of reliable direction of treatment, in order to better control the abnormal responses to the viral invasion, the use of multiple drugs based on the experience of medical experts is justified. The therapies have not been supported by prior clinical studies and trials, but the results could be assuring.

The example of using hydroxychloroquine, together with antibiotic azithromycin and heparin is quoted. Hydroxychloroquine is expected to maintain the oxygen transport of the red blood cell. Together with the antibiotic, the inflammatory processes are kept under control. Heparin in addition, helps to maintain a better circulatory state.

Reflections from Advocates of Traditional Chinese Medicine (TCM)

Mixed therapy is a common practice in TCM. Herbal therapy in TCM is never aiming at specific targets. It is designed for the relief of multiple symptoms: in the Viral Respiratory Infection, the symptoms of fever, cough, dyspnea, arthralgia and other inflammatory reactions.

In the present pandemic, when China is severely affected, the TCM type of mixed therapy has been widely used for the same purpose of symptom control and the results have been satisfactory. There are divergent recommendations from different institutes and different levels of clinical studies using a variety of herbal mixtures have been arranged. None of which has gone through stringent clinical trials as are required in the pharmaceutical industry.

What TCM in China is doing in the COVID-19 pandemic is an immense scale of mixed therapy for symptom control and facilitation of recovery via the prevention of deterioration.

The immense scale of mixed therapy could be revealed through factual reports available since January 2020.

i) In February 2020, the National Bureau of Traditional Chinese Medicine and the Committee on Public Health and Hygiene endorsed the use of TCM for mixed treatment at various stages of management and listed out one specially recommended herbal formula derived from old classics.

ii) 630 hospitals serving COVID-19 patients in China were using TCM inclusively with other treatment. Over 90% of all recorded treatment programs involved TCM.
iii) One early analysis was reported in March 2020 on all available informations across China about different treatment programs with TCM, under varying clinical circumstances: from very mild, mild, moderate to severe situations. The popular herbs and formulae used were collected. The report gave clear messages that the mixed treatment using herbal formulations was particularly suitable for the mild cases or even before definite symptoms appeared, i.e. more for preventive use than treatment after deterioration.[7]

iv) This view is well supported by other reports. One came from a TCM hospital within the epicenter of Wuhan. 98 hospitalized patients suffering from COVID-19 infection were classified as mild 55.1%, Moderate 33.7% and severe 11.2%. They were treated with standard mixed herbal formulae while their progress was assessed with symptom control (fever, cough, and weakness) and blood tests for inflammation markers like C-reactive protein. The following conclusions were made: the overall improvements in the first 3 days reached 84.2% (21% totally recovered and 30% improved). In the following 3 days 31% totally recovered and 30% significantly improved. At the end of 9 days, all recovered. In this report, no reference was given whether TCM was the sole treatment. But since only 17 cases were labelled “severe”, the moderate and mild cases could be relying on TCM alone.[8-10]

**Outlook on Mixed Therapy**

M. Bonucci reported that “since the introduction of the mixed therapy, deaths have drastically reduced, patients have had marked improvement in symptoms, and those who were asymptomatic have not had pathological progression”. The disease has not evolved to the most severe forms.

With regard to TCM, in the past decades many of the herbs and their combinations have been closely studied on bioactivity platforms and shown to be anti-inflammatory and immunologically boosting.[11, 12] Clinical trials with different levels of reliability have also been done, resulting in reasonable degrees of evidence of efficacy. One plausible conclusion is that their preventive value overwhelms their treatment effects: from before getting infected, to limiting downward progression.[13]

Quoting M. Bonucci once more: “Medicine is based on the experience of many colleagues who merge specific knowledge that becomes everyone’s assets”. While we are still under the dense clouds of the global pandemic, rather than solely relying on proper, pharmaceutically certified therapeutic items, or fervently waiting for the vaccine as the saviour, we could be more open in the search for symptom alleviating mixtures and more importantly, preventive modulators.[14] For Symptom Control we need past experience and logical deductions. For Preventive measures, the emphasis should be on the pursue of general innate immunity modulation, with which offending agents are barred from entry and refrained from replication.

As long as safety is assured, mixed therapy is helpful. Preventive supplements would offer additional support and research opportunities.[13]

**Disclosures**

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**Conflict of Interest:** None declared.

**References**