FEATURE ARTICLE

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SCENARIOS AFTER ENHANCED COMMUNITY QUARANTINE FOR COVID 19 PANDEMIC IN THE PHILIPPINES… WHAT CAN WE DO AS FILIPINOS

To date, the Philippine lockdown has been successful. The country had a cumulative total of 9,223 cases, with 295 new ones, on May 3, 2020[1] while the U.S.A. had 1,133,069 cases and 30,000 new cases/day on May 1, 2020.[2] As the American lockdown was not uniformly done across the 50 states, the U.S. has done disproportionately much worse than the Philippines, considering that the former's population is only three times that of ours. Indeed, our 200-300 new cases per day, for a country of 110 million, is low; we cannot realistically achieve an actual figure of zero.

However, if this was a war, the lockdown was a unilateral cessation of hostilities declared by the government against an invisible vicious enemy, as our leaders realized that its soldiers and machinery were not prepared and equipped for a serious battle. In health care, the lockdown was a delaying tactic for an immunologically unequipped population. As the six-week respite dragged on, the number of confirmed COVID-19 cases on May 3, 2020 only comprised 0.008% of the country's total population. This means that a vast number of Filipinos will still not be immune to COVID-19 when they go out of their homes when the lockdown is lifted; people will still be at risk for infection. Put another way, the successful social distancing program, or lockdown, saved many people from illness and death, but has led to almost no immunity for the population.[3]

Indeed, the purpose for the government's extension of the lockdown to May 15, 2020, was mostly because the preparation of the local government units (LGUs), the capacity of hospitals and the health care system, and the knowledge of our people, were still far from adequate.

We need to continue to educate everyone that the COVID-19 virus has high infectivity, high pathogenicity, and high virulence, in a rarely-seen, propagative, pandemic setting, where the population has no pre-existing immunity. The feared polio virus, has high infectivity, but low pathogenicity & low virulence; only a small fraction of the infected develop paralytic disease.

On the other hand, like COVID-19, the measles virus has high infectivity, pathogenicity and virulence, but nearly twelve centuries of measles spread throughout the human population, in addition to an effective vaccine since 1963, have provided the world with herd immunity to measles long ago. No such herd immunity exists for COVID-19. It is estimated that two-thirds of the population have to become ill and recover, or be vaccinated, for herd immunity to be achieved, and for this pandemic to stop.[4]

What do we expect after May 15, when the enhanced community quarantine is lifted in Metro Manila? Take a look at what happens, if a small, urban city in the metropolis, has 20 infected & contagious people on that date, and these people go out of their homes without masks & do not practice physical distancing, with these scientific assumptions:[5] COVID-19's median incubation period is 6 days[6], reproduction number, the number of secondary cases arising from one index case is 2.5 people[6], and 80% of COVID-19 cases are asymptomatic or mildly ill and 20% will need hospitalization while 6.7% will die.[7]

Assuming this city has 20 people with active COVID-19 on May 15, how will this number grow over time? May 15: 20 cases; May 21: 20+50 = 70 cases; May 27: 70 + 125 = 195 cases; June 3: 195 + 313 = 508 cases; June 9: 508 + 783 = 1,291 cases; June 15: 1,291 + 1,958 = 3,249 cases; June 21: 3,249 + 4,895 = 8,144 cases; June 27: 8,144 + 12,238 = 20,382 cases; July 3: 20,382 + 30,595 = 50,977 cases.

If, of the 50,977 cases by July 3rd, 20% will need hospital care, this figure will be 10,195 between roughly May 21 to July 3, for a small urban city alone, and the deaths will total 3,415 by July 3. The above projection is based on the assumption that there will be no barriers (i.e., people do not wear masks, do not practice social distancing) for the spread of the highly infective virus in a community with no innate COVID-19 immunity. Since the country is made up of 7,000 islands, with rivers, straits, lakes, seas, hills, mountains, forests and homes, which are natural and physical barriers to spread, people in far-flung provinces like Batanes or Tawi-tawi, for example, are at less risk of COVID-19 today, just because of their physical distance away from Metro Manila. The virus has to travel, through infected people, by land, sea or air, to get from one point to the next. However, humans are not barriers because very few possess immunity, so that in urban areas like Cebu and Davao, where natural barriers are less, population density is high, and the ease of contagion is greater, spread will occur and will do so exponentially. This has happened in cluster outbreaks in Cebu and the penitentiaries.[7] When clusters are not contained, more sustained local spread will follow.

For the example above, no Philippine city has 10,000 beds to cater to such a demand over a span of six weeks. Even if the above projection is off by 90%, the hospital system will collapse. The National Capital Region (NCR) had a total bed (private and public) capacity of 29,723 in 2016; the total bed capacity of the whole country then was 101,688.[8] At present, the DOH counts that, with 95% of healthcare facilities reporting, the available COVID-dedicated beds in the Philippines are: 1,251 intensive care unit beds; 8,231 isolation beds; 2,587 ward beds and 1,825 mechanical ventilators. Community isolation facilities have a total of 12,413 beds.[9] With a total of 12,069 COVID-19-dedicated beds for the whole country, we have a bed capacity of 1.1 beds per 10,000 population.

Thus, with our limited hospital bed capacity, the only way that the above scenario can be avoided is if we, as a people, have the discipline and

determination, over months and years to come, to decrease the virus' spread when the lockdown is lifted. Meanwhile, administrators of government and private hospitals will have to make their best efforts to prepare, brace, equip, and boost the capabilities and capacities of our healthcare system, especially critical care capacity.[3] A new segment in this healthcare system is the quarantine facilities in each town and city, that will serve as hospital extenders.

To prepare our healthcare system, this is the healthcare bundle that each LGU ideally should have. These measures have been found to be effective in China.[10] The first seven are W.H.O. recommendations.[11, 12]

1. Every person who has COVID symptoms should be tested.[7] The Philippines has 20 laboratories doing over 5,000 tests per day. Will this be adequate for the whole country, considering that the total number of people tested since the pandemic started has been 126,124 as of May 3, or only 1.3% of the Philippine population?

2. Multiple COVID-19 tracking teams should account for all suspect, probable and confirmed COVID-19 patients, and their contacts. The W.H.O. prescribes the quarantining of COVID-19 contacts, but asymptomatic and mildly ill COVID-19 patients can also be placed in quarantine facilities to isolate them, if these individuals do not need hospital care.

3. Quarantine facilities have to be in place in each town. These sites are invaluable in stopping the propagation of cases in the community, especially by asymptomatic and mildly ill COVID-19-positive people and their contacts, should they otherwise decide to leave their homes because they do not feel ill.[13] At a point when there is large-scale community transmission, quarantining may no longer be practical and necessary, according to the W.H.O.,[14] but these facilities can be of use as spill-out units for hospitals at full capacity.

4. The LGU should identify and help beef up, with healthcare staff, equipment, medications and personal protective equipment (PPE), the government and private hospitals that will be taking in the very sick COVID-19 patients. Only the moderately and severely ill suspected, probable & confirmed COVID-19 patients should be admitted to these designated hospitals.

5. The government should help protect healthcare workers (HCWs) with provision of PPEs. Of the total confirmed COVID-19 people locally, 1,649 (19.7%) are HCWs, indicating that they are at high risk.[7] HCW's perception of inadequate support may increase the risk of their refusal to work, adding on to the current problem of a diminishing healthcare workforce brought about by forced quarantine from inadvertent COVID-19 exposure in the workplace.

6. The Department of Health should have an active surveillance system to monitor cases, clusters and spread, in coordination with the COVID-19 tracking teams.

7. The health care system should adjust and continue to provide medical care to people with non-COVID-19 illnesses.

8. The quarantine facilities are to be supported by LGU-private sector cooperation.

9. The government should support private hospitals; 53% of beds are in private hospitals.[8] With the lockdown, elective admissions and surgeries were put on hold, while people have been afraid to go to hospitals for non-COVID-19 illnesses. These have placed private hospitals' financial viability at great risk.

10. Hospitals should review and enhance their infection prevention and control practices, to decrease COVID-19 nosocomial transmission risk to HCWs and patients.[14]

11. The government should conduct a longitudinal surveillance of COVID-19 immunity, the knowledge of which may influence future policy-making, including the need for future lock-downs.[3]

Realistically, our healthcare system will be hard-pressed to come up with all the necessary preparations, but we have to do our best. Even

countries with advanced healthcare systems like the U.S., China, Spain and Italy have buckled in the face of the COVID-19 pandemic. For all Filipinos, after the lockdown is lifted, our mindset should be that: our home is our fortress - this is where we are in control and are safest; the new paradigm that should guide our everyday actions is - when I leave my home, I will cover my nose, mouth and eyes with a mask and eye shield as these three mucosal surfaces are the likely sites of viral entry. I will minimize the use of my hands, or glove them, or decontaminate them with alcohol, when I touch door knobs and other objects in my surroundings; and I will use my feet well by consciously keeping a safe distance from everyone else; anyone I encounter outside of my home may have asymptomatic COVID illness; in the Philippines, 12% of confirmed COVID-19 cases were asymptomatic.[7]; if I feel sick, I will not leave my home, I will promptly inform my workplace, and seek medical help for proper evaluation and treatment.

If we are not disciplined and our healthcare system is not properly set up when the lockdown is lifted, this is one probable scenario: infection rates will rise sharply after 4-6 weeks, hospitals and quarantine facilities will be unable to cope, people will die in large numbers, and the government will be forced to impose another lockdown. Intermittent lockdowns may be necessary when critical care capacity is threatened or exceeded.[3] This open-close lockdown can go on over 3-4 cycles, until a vaccine is, hopefully, available in 1 to 1.5 years, or an effective, oral, affordable anti-viral treatment is discovered.

We are Asians. Let us be as disciplined and educated about this like the Taiwanese and South Koreans are. As we do not have a healthcare system that these two countries possess, much of our ability to control the spread of COVID-19 will depend on our collective discipline as a people. Each person, each town, each city, and each province should regard the others beside him/it as a collection of links; each link is dependent on the next. The only way for us to survive this crisis is if we all work as one big family of Filipinos.

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