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Climate Change – It's Impact on our Behavior and why we need to Change it now

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Abstract- Our days today begin with news either of the varying statistics of the COVID-19 cases, tragedies of prejudicial discrimination, follies of policy-makers, horrifying terrorist attacks and more dreary information that are not only grave but also petrifying. Amongst these, the global concern that touches all living creatures is the news of our weary planet. COP26 or the UN Climate Summit 2021 is going to take place for 2 weeks from the 31st of October to the 12th of November in Glasgow and it has been the matter of the moment for the past few weeks. The cause is unsurprising and is frankly long overdue. Climate change is an upsetting phenomenon, both for our planet and its inhabitants. Our persistent activities of pleasure for personal gain at the expense of Mother Earth can no longer be put up with. Not by our planet, not by the future generations. Their survival and ours solely depends on us fixing our current ways. While the prospect is daunting, fear cannot be our barrier. Our present psychological mindsets need a jolt. It is now essential that we step past the fear of change to make the change possible for we are hanging by a thread at the end of the rope with a fire beneath. The consequences are cataclysmic, and we are our only hope.

Keywords: *climate change, earth matters, climate anxiety.*

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I. INTRODUCTION

Where do you picture yourself in the next five years? Safe and sound at home sans qualms about virulent air-borne strains? Awaiting the next Taylor Swift concert at a stadium amongst sweaty youngsters screaming their hearts out? Or do you simply look forward to a stroll in the park enjoying nature amongst neighbors and their fluffy pets? If the past year has taught us anything, it is that the future packs uncertainty aplenty. And it is not limited to human beings. All creatures of our planet are subject to this verdict, as is our beloved planet. I believe every life form that currently graces this place owes its existence to our Earth. Paraphrasing The Police, we should be grateful to earth for every breath, every step and every move we make. All the same, our actions, well intentioned or not, have generated devastating consequences over the course of time. And our poor planet has taken the toll. For earth, in the next five years, it could be warmer than 1.5 degrees than the pre-industrial era and getting that hot would not be particularly beneficial for all creatures involved^[1].

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Climate change is a global phenomenon that has been known to have begun with the advent of the steam engine^[2]. The steam engine, our culprit, was what instigated the industrial revolution leading to a burst in production of carbon dioxide. Since then, in addition to industrial expansion, population explosion has contributed to the rise of carbon dioxide emissions, which have been exponential with a doubling time of about 30 years since the 1800s^[2, 3]. According to the Intergovernmental Panel for Climate Change (IPCC), the temperature rise has surpassed 1.5 degrees in some places. In that, the speed of the rise is not constant across the landscapes. At such rises, the earth gets exposed to the following disastrous outcomes—scorching heat waves, floods, droughts, loss of species, extreme weather, increased acidity in the atmosphere, increased mortality due to illnesses, all of which could have an economic impact, which is what primarily concerns most people^[4].

The last few years have already witnessed these catastrophes and the build-up since is only anticipatory. Our set ways ascertain a bleaker outlook yet people disregard the gravity of the situation. In Australia, the carbon emissions per person are still amongst the highest in the world and they are not keen on even attending the Climate Summit in Glasgow this year. Their coal industry forms a major chunk of their economy and that feels threatened with objectives of achieving a greener lifestyle^[5]. 20-year-old climate activist, Clover Hogan says that generally, people worry about the short-term consequences than the long term ones which are the effects of climate crisis^[6]. Thus, it's only understandable that they would be more worried about providing food for the children today rather than having a well-fed generation for generations. But that doesn't negate the fact that climate crisis is to be set on the back burner. We have run out of time.

II. WHAT IS CLIMATE CHANGE?

In the simplest words - The change in earth's climate is climate change. Climate itself is the weather that is usual to a place. Earth's climate has been a dynamic force since the beginning of time and Earth has seen warmer and cooler climates than the one we are currently experiencing. But the reason the current change is causing quite the stir is because of scientific findings that demonstrate an alarming growth in the planet's temperature^[7].

The UN chief, Antonio Guterres, labeled the most recent IPCC report 'Code Red for Humanity'. And why is that report important? It is their reports that the world's governments rely upon when making decisions about their legislations pertaining to the environment^[8]. This report primarily blamed human activities for the increase in global temperature. As a result, the heat waves have only gotten hotter and longer while the periods of cold have reduced. These events have already caused the afore-mentioned catastrophes (heat waves, floods, droughts etc.) and will further lead to an escalation in the same. Humans cannot and will not be able to turn away from them anymore. The reverberations will be devastating and IPCC has laid it out in plain black and white for the entire world to see^[8]. So what are we doing about it? Not enough. We are drowned in sheaves of scientific papers outlining proof of the same and we are still stuck to our ways.

Speaking at the 3-day Youth4 Climate summit in Milan, the awe-inspiring Greta Thunberg lashed at world leaders, calling out their 'Blah-Blah-Blahs', their empty promises. She blamed them for the lack of concern since the evidence of rising emissions has been blatantly staring them in the face for far too long. She also went on to say that while the world leaders might say 'We can do it', they certainly do not mean it but the youth does - "...we do", said the climate activist^[9]. It is the youth that has been forced to take action for the sake of their survival. And most policy-makers, belonging to an older generation harbor misconceptions of their motives causing them to dismiss the young because they believe 'youth' is synonymous with 'naïveté'. Some also believe that climate change or activism is the current generation's "Save the World Movement" - and is simply a reason for them to crowd the streets and stand for something^[10]. But are the policy-makers, world leaders and scientists doing enough that they require no push back from the future generation? Is their angst not justified? Why are they still brewing their tea while hot lava threatens to destroy landscapes in seconds?

III. THE CONSEQUENCE

Dealt with this horrifying news, it is only natural to be terrified^[6]. People are afraid and unaware of this fear. Psychotherapists call this eco-anxiety. Will your choice of turning vegan make a difference? Should you have children who'll only add to the carbon footprint? It is the feeling of being caught in a dilemma. The American Psychological Association explains it as the 'chronic fear of environmental doom'. This fear could possibly take many forms ranging from depression and grief to even suicide. People could even indulge in maladaptive behavior as well like substance abuse to alleviate from feeling the dread^[11, 12]. This anxiety arises from the knowledge that all of it isn't in our control^[10].

Jillian Ambrose, an energy correspondent for The Guardian, associates it to the fact that the human psyche naturally extricates itself from problems that are formidable or enormous to contemplate. This manifests when an individual feels ineffectual to constitute a meaningful change^[13].

Psychologists believe that this growing fear of climate crisis poses a threat to change^[13]. Climate anxiety – this sense of dread or doom – builds up inevitably and needs therapeutic intervention for a mind that refuses to acknowledge the crisis slips into a state of 'defeated eco-nihilism' – they are aware of the climate crisis yet continue their behaviors that exacerbate it. Ambrose says that people have allowed themselves to be hijacked by their own anxiety or urgency in such a way that it makes them aloof to the human dimension of the story, where we all want to be a part of the solution but all we see right now is the impact.^[13]

The other part of the problem while dealing with climate crisis is the denial – the flagrant denial of humans in the face of glaring evidence. The IPCC report has ample evidence of climate change, yet people choose to not make a difference in their lifestyle. They live in denial – science denial^[14]. Science denial is when one actively chooses to ignore scientific evidence and puts faith in other reasons (political, economical or social) as explanation^[15]. Psychologists Dr. Barbara Hofer and Dr. Gale Sinatra researched about the same and authored the book – "Science Denial: Why it Happens and What to Do About it". In the current scenario, Dr. Hofer believes – "science denial is amplified by social media". Dr. Sinatra says that we tend to have information bubbles and if these bubbles are filled with misinformation fostered by social media, we aren't listening to multiple view points as they did in the past while talking to peers or neighbors who would probably offer a pushback to the train of thought. Social media utilizes algorithms based on the 'liked' content and that increases the likelihood of the misinformation being magnified^[14]. In addition to social media, there are multiple causative factors that aid in denial. Dodds has 4 hypotheses for this denial.^[11]

Firstly, we have our very own cognitive bias^[11]. We seldom use all resources to arrive at a conclusion and biases are what constitute this. Confirmation bias, for example, is when one actively looks for facts and figures to confirm what they already believe in^[16]. In such cases, it is advised to be scared or anxious so that it propels us into making the necessary changes in behavior towards a better planet because the lack of evaluation of the risk only leads to worsening behaviors.

Secondly, there is the social dilemma^[11]. Sticking to what one's group believes in to make sure that one always stays in favor of the group's notions rather than going against them^[14]. The anxiety here arises not depending upon the costs of individual decisions rather on the prediction of others' behavior. It

is the dilemma of self versus the collective interest and can be tackled by promoting cooperative behavior. Social trust and playing one's part is also essential to overcome this hurdle.

Thirdly, Dodds talks of the distance we keep from nature. Eco-psychology emerged in the 80s to embody a more holistic approach to deal with environmental problems but the truth remains that for most people, modern lives are so cut off from the essences of nature, that it is hard to form a real connection. Eco-psychologists encourage people to feel the pain and grief surrounding the collapsing ecosystems so that we can feel motivated to take action towards saving them^[11].

Lastly, Freudian psychoanalysis provides the defense of defenses. Here, the mind – to protect the ego – employs defenses against the growing problem by viewing it as a large one^[11]. And to avoid it, the mind simply exhibits anger and hostility towards it. In such a case, to magnify the fear could have a backlash and result in further denial. Anxiety here is but a painful response to the climate change and 'ignorance is bliss' is the phrase of preference.

Eco or climate anxiety along with denial is a rigid mind-set problem that requires a change in the little behaviors that have been instilled since birth – a transformation of cultivated habits. Such processes take time and effort to displace. It is not a change that will happen overnight but at the same time we are up against a ticking time bomb. We cannot afford to lose any more time. How do we tackle the consequences timely and effectively?

IV. THE SOLUTION

We know climate anxiety is not groundless. Ellie Lumsden, a geography graduate, conducts a podcast called 'Having a Climate Breakdown'. In the one titled 'Climate Anxiety' she said we need to learn to balance the anxiety and not let it overwhelm us because given the choice, there is no right one^[10]. To illustrate, she put forth the following conundrum – when offered a choice between a wool sweater and a Patagonia jumper, there is a crisis that evolves where weighing pros and cons only nudges the mind further into that abyss of confusion. The wool sweater has enormous labor and man-hours going into its production while the jumper leaves behind plastic trails with every wash. How does one decide? There truly is no right answer, which leads us right back to more anxiety.

Ambrose advises ruthless compassion – for everyone, ourselves included. We need to accept our discomfort and at the same time take responsibility of our actions^[13]. It isn't delusional to feel anxious about the climate crisis. Rather, acknowledging it can help dismantle the defenses stimulate change. It could give rise to 'radical hope' – a meaningful action can make a

difference. People need to realize and navigate these feelings and increase their emotional resilience. It is imperative that we talk about the problem and acknowledge it^[13].

For the deniers, we need to encourage people to listen with open minds^[14]. Skepticism must be stimulated in the public about everything^[14]. They should be curious about all that the huge organizations are promoting, be it cigarettes or fuel for the vehicles. In addition to this, the scientific society must also do their part of imparting clear and concise knowledge^[14]. This could be achieved by promoting a scientific attitude amongst the general public. It would mean for them to be open to evidence and cultivate the will to be open to change their mind based on the evidence. Psychologists can also step in here and employ the tried and tested strategies of empathy and understanding while communicating to the lay people^[14].

People of power must also contribute to the solution. Power of 'persuasion' is a handy tool^[14]. In-group people, people that belong to one's group – the epistemic authority – must take the opportunity to educate the novices to take the right action. Fortunately, we are witnessing this spectacle. Pope Francis recently took a stand and set it in motion vitalizing other religious leaders all across the world to come forward and support world leaders at Glasgow to commit to the net zero emissions for the purpose of reducing the rate of rise in the global temperature. They have acknowledged the seriousness, the limited time available to make the change and are urging the people to halt the damage^[17].

Principally, though, systems transformation begins with self-transformation – a transformation in one's own mindset to make the difference^[6]. Being afraid is only a barrier. This crisis is not individual. It is about humanity and not just that one person who is struggling to get past the burning woods or the drowning flood. Only by lifting everyone up do we all have a chance at a better future. There is immense power amongst every single one of us and we need to realize that. Hogan believes, we are capable of more and have the ability to tackle this challenge collectively^[6]. Furthermore, we need to embrace the optimism in the despair to carry us forward. Valuing that despair could help in finding the optimism to carry us out of its depths^[10].

Besides these, we have already seen that the youth are taking charge. Young people aren't given enough credit for the depth of knowledge they seem to possess^[6]. Educating them further could help them navigate through this crisis safely. According to Dr. Sinatra, educational standards require a reform from traditional textbooks^[14]. Students need to be taught the importance of the scientific process; they need exposure to the significance of scientific assumptions rather than certainty at the learning level. Empowering all

– from the youth to the older generations is our sole hope of survival.

V. THE GOOD NEWS

While the outlook thus far seems bleak, there are alterations taking place currently – like enforcing the most logical solution – trees. We need forests. With the amount of carbon dioxide around, primarily from emissions, forests are our best bet to actively combat the negative effects of these emissions. One billion hectares of new forests have the capability to remove a quarter of the carbon dioxide from the atmosphere. Currently, people are formulating various strategies enforcing reforestation with trimming the existing roots, preventing deforestation and increasing the density of the green forests among others. There's also the plan for the great green wall – a pan-African initiative for a nine mile wide and over 4750 miles long forest predicted to create 10 million jobs. Reforestation, now seen as the prime solution is predicted to give rise to 10 million jobs. China also plans a similar wall, which could be completed by 2050. Germany has incorporated reforestation into its law and currently has 31% of forested land^[18]. Additionally, in the US, the emissions have stayed the same in 2021 and there has been an increase in clean energy utilization^[19]. Also, the amount of people investing in electric cars is raising and these vehicles are only getting greener. Carbon dioxide emissions can be reduced by 43% when one uses electric vehicles. Further, green energy sources like hydroelectric power, solar power or even wind power can be used to charge these vehicles^[20].

VI. CONCLUSION

Waiting for earth to self-repair, like it has been graciously doing for eons, could very well be the way to go. 'Letting nature take it's course' as most wise people say. However, with our nosy interference, we have jostled earth a little past it's comfort zone and to return from this push requires Herculean effort and is a Brobdingnagian request to put forth. Not only is the earth affected but we are too. With our mind literally boggling all over the place with fear, we scarcely possess skills to address the planet. Nevertheless, we must. Recently, Giorgio Parisi, one of the recipients of the Nobel Prize in physics for their work on prediction of climate change, recognized the urgency of the matter. He urged that we take a strong position and move at a strong pace for the sake of the future generations^[21].

Our future hinges on the survival of our beloved planet. And the same future lies in our hands. One doesn't have to have superpowers to constitute this change. Simple actions like switching the lights off or turning the tap off can be a start. Every action counts, every person matters. Each of us can contribute towards

that future lest we shame the same future and ourselves. We shame our planet, our creator, our mother.

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