What is research:

- ▶ Performing a methodical study in order to prove a hypothesis or answer a specific question. —
- ► Finding a definitive answer is the central goal of any experimental process.

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Applied nutritional investigation

Vitamin D supplementation and outcomes in coronavirus disease 2019 (COVID-19) patients from the outbreak area of Lombardy, Italy



Emanuele Cereda M.D., Ph.D. a.k., Laura Bogliolo M.D. b, Federica Lobascio M.D. a. Michela Barichella M.D. c,d, Anna Lena Zecchinelli M.D. e, Gianni Pezzoli M.D. d,e, Riccardo Caccialanza M.D. a

- * Clinical Nutrition and Dietetics Unit, Fondazione IRCCS Policlinica San Motteo, Pavia, Italy
- * Rheumatology Unit, Fondazione IRCCS Policlinico San Matteo, Pavia, Italy
- " UOS Chnical Nutritian, ASST "Gaetono Pini-CTO", Milan, Italy
- ^a Fandazione Grigiani per il Morba di Parkinsan, Milano, Italy
- * Parkinson Institute, ASST "Gaetana Pini-CTO", Milan, Italy

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Highlights 🔫

Vitamin D has antiinflammatory and immunoregulatory functions.

The involvement of vitamin D in the pathophysiology of coronavirus disease 2019 (COVID-19) is still not clear.



Recent literature has substantially raised interest in the immune-modulating properties of vitamin D against coronavirus disease 2019 (COVID-19). Although several viewpoints have been published, data supporting the hypothesized beneficial role are limited and controversial [1,2]. Consistent with a systematic review reporting the protective role of 25-hydroxyvitamin D (250HD) supplementation [3], in a recent survey conducted in individuals with Parkinson disease (PD), those with COVID-19 were more likely not to be taking supplements than participants who were unaffected [4]. The observation of lower mortality rates at lower degrees of latitude, along with other preliminary reports on the association between serum levels of 250HD and the risk of having the disease or a critical outcome, have suggested that vitamin D could modulate the risk and mitigate the severity of COVID-

Methods

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The study was approved by local institutional ethics committees, and writter informed consent was obtained from every participant.

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Discussion

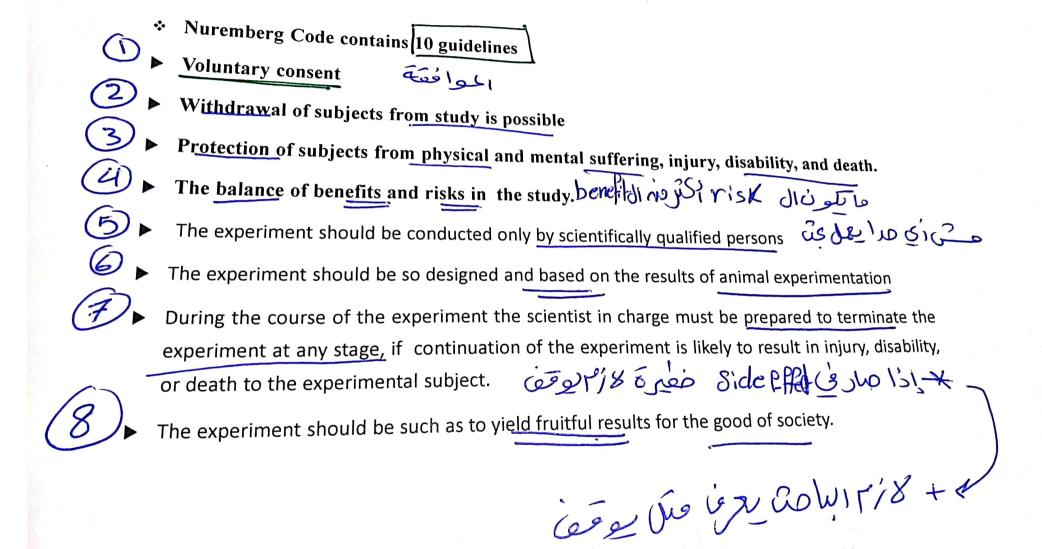
In our study, 250HD supplementation was not associated with the severity of COVID-19. On the other hand, a trend toward a fold higher mortality in users was found.

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In conclusion 250HD supplementation was not associated to be a risk factor for higher tal mortality in COVID-19. Further studies are needed to role of vitamin D supplementation and status in modes severity of COVID-19, as well as preventing it.

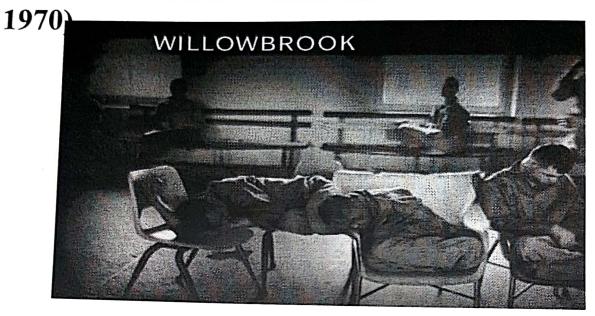
When scientists started get attention about ethics?:

- It started after the abuse of human lives during Holocaust. doing unhuman experiment
- ➤ Nuremberg Code is a set of research ethics principles for human experimentation set as a result of the subsequent Nuremberg trials at the end of the Second World War..
- Declaration of Helsinki (1964).



> School For Children

2. WILLOW-BROOK STUDY (1950-



19

- ► Research on <u>hepatitis</u> by <u>Dr. Krugman</u> at Willowbrook among mentally retarded children
- ► The researcher also wanted to determine the effectiveness of gamma globulin injections as protection against hepatitis.
- ► Early subjects were fed extracts of stool from infected individuals
- ► Later subjects received injections of purified virus
- ► Parents were forced to give permission for the child to be a subject.

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The researcher should be:

- ► Well qualified and highly specialized.
- Collect all available data regarding the point of research. المع من عن المعالمة عن المعالمة المعا
- Respect research groups.
- ▶ Do not plagiarize the work of other research.

Animals:

- Select the <u>suitable number</u> (not more not less to give significant statistical results).
- Suitable species.
- Do not perform more than one experiment on the same animal.
- Use the least harmful maneuver with animals. by using anesthesia
- ⑤▶ Use suitable food and care for the animals.
- If the experiment involves killing the animal, use non-painful technique.

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Human

- Perform the experiment on animals before start to be tested on human.
- Obtain written consent:
 - Written in clear, simple language and must be explained to the volunteer by the research.
 - Contains research title, aim, procedures or steps, any side effects, and benefits of the research.
- All the volunteer to withdraw from the research at any time without threats or punish.

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When to stop the research

- ► It is impossible to reach the main aim of the research.
- Endanger the life of the participants. e.g (sever hypertension)
- ► The risk of the research is much more than

6/10/2021

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PLAGIARISM CHECKER: soft

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