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INTRODUCTION:

- Vitamin D insufficiency/ deficiency queried as contributor to increased susceptibility /mortality from COVID 19
- Especially important in mental illness with impact on mood & cognition; more frequently deficient in this population
- Propelled NWBH trust (now under Merseycare) to form new Vitamin D prescribing guidelines (NICE guidance based) in August 2020 to improve assessment & supplementation of Vitamin D

AIM

To ascertain extent of vitamin D deficiency/insufficiency in acute mental health ward patients under North West Boroughs Health Care as part of Enhanced Physical Health Team aimed at countering COVID 19

METHODOLOGY

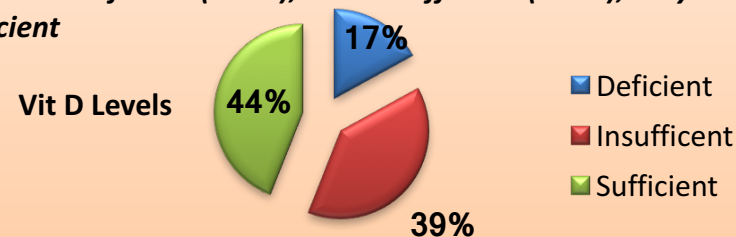
- Retrospective, cross sectional Trust wide study involving inpatient wards in NWBH from 1/8/2020 to 30/9/2020 using consecutive sampling (N=170)
- Electronic database (RiO & Sunquest ICE) records used to gain data regarding blood results and medications; Simple descriptive statistics used to derive inferences

REFERENCES:

Zhang, Y., Fang, F., Tang, J., Jia, L., Feng, Y., Xu, P. and Faramand, A., 2019. Association between vitamin D supplementation and mortality: systematic review and meta-analysis. *Bmj*, 366.
 Penckofer, S., Kouba, J., Byrn, M. and Estwing Ferrans, C., 2010. Vitamin D and depression: where is all the sunshine?. *Issues in mental health nursing*, 31(6), pp.385-393.
 Maghbooli, Z., Ebrahimi, M., Shirvani, A., Nasiri, M., Pazoki, M., Kafan, S., Tabrizi, H.M., Hadadi, A., Montazeri, M., Sahraian, M.A. and Holick, M.F., 2020. Vitamin D sufficiency reduced risk for morbidity and mortality in COVID-19 patients. Available at SSRN 3616008.

RESULTS

- 122 patients (71.7%) had their Vit D levels assessed during admission; 21 patients refused blood tests (12.4%)
- **17% Vit D deficient (N=21), 39% insufficient (N=47), only 44% (N=54) sufficient**



- **84% received correct supplementation (N=92), 4% received incorrect dose (N=5), 12% were not supplemented (N=15)**
- Schizophrenia was most common diagnosis (23.5%), followed by EUPD (12.8%), Bipolar disorder (10%), depression & anxiety (9.4%), schizoaffective disorder (8.8%) etc.

DISCUSSION

- High levels of Vitamin D deficit is an indirect result of mental illness itself
- We need to detect and correct this deficit to improve overall health of this neglected population
- Would indirectly aid in helping them persevere against something so unpredictable like the COVID pandemic
- Herein also lies importance of having an **Enhanced Physical Health Team model**: to integrate physical and mental health in our patient population at community and inpatient levels