

62. **THE PREVALENCE OF HYPOMAGNESEMIA IN CRITICALLY III PATIENTS ADMITTED IN MEDICALLY INTENSIVE CARE UNIT.**

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**INTRODUCTION:** Magnesium is the fourth most abundant cation in the human body. Hypomagnesemia can result from decreased intake, redistribution of magnesium from the extracellular to the intracellular space, or increased renal or gastrointestinal loss. Hypomagnesemia can cause severe outcomes in ill patients. So, we conducted this study to determine the frequency of hypomagnesemia in critically ill medical patients. **METHODS:** This is a Descriptive cross-sectional study involving 120 patients admitted in the medical intensive care unit (MICU) of the Holy Family Hospital, Rawalpindi, Pakistan. The study was conducted from July 2020 to September 2021. About 1 ml sample of blood was taken from each patient included and sent to the hospital laboratory for evaluation of serum magnesium levels. All the collected data was entered and analyzed on SPSS v. 23. A p-value of  $\leq 0.05$  was taken significant. **RESULTS:** In our study, the mean age of the patients was  $42.76 \pm 12.77$  years, and the male-to-female ratio of the patients was 1:1. The mean value of the APACHE II score of the patients was  $29.68 \pm 2.571$ . Hypomagnesemia was found in 28 (23.33%) patients. **CONCLUSION:** According to our study, the frequency of hypomagnesemia in critically ill medical patients was 23.33% (28 patients).

**Table.** Descriptive statistics of age, APACHE II score and Magnesium Levels at Day 1 & 14 (n=120).

Variables	Mean	SD	Minimum	Maximum
Age in years	42.76	12.77	17	67
APACHE II score	29.68	2.571	25	34
Serum Magnesium Level At Day 1	2.10	0.51	1.2	3.0
Serum Magnesium Level At Day 14	2.05	0.43	1.3	2.9

**Key words:** Critical Illness; Hypomagnesemia; Intensive Care Unit; Patients.