INTRODUCTION AND AIMS: Introduction: Studying current state of hemodialysis prescription and outcome is mandatory for assessing current performance and future health planning in developing countries. This study aimed to assess the current practice and hemodialysis prescription in all over Egypt as a part of a nationwide project that was initiated and managed by the nephrology department in Ain shams University.

METHODS: This study was conducted between October 2012 and April 2015 by direct interview of the patients and collecting the data from the medical record in a specialized data collection sheet.

RESULTS: The study involved 241 hemodialysis centers from 19 Egyptian governorates, 16820 patients were assessed by 49 field investigators. Only 0.8% of the hemodialysis centers were not isolating HBV patients while 18.35% of the centers were not isolating HCV patients. Males were 60.8% of the studied patients with hypertension as the most common cause for ESRD (33.4%). Only 21.2% of the studied population were still working, 38.1% were dependent on others with 24.4% of them were wheelchair bound. 94% of the patients were dialyzing thrice weekly, and 81.33% were having 4hrs od dialysis session duration and 92.7% of the patients were dialyzing via AVF. Mean Hb was 9.63 ± 1.73 mg/dl, and only 15.7% were not receiving any ESA. Mean calcium was 8.56 ± 1.06 mg/dl and mean phosphorus was 5.30 ± 1.43 mg/dl. Hyperparathyroidism was prevalent with mean PTH level 514.62 ± 512.17pg/ml with only 1% of the patients were receiving calcimimetics. 44.2% of the patients were tested positive for HCV and only 2.2% were tested positive for HBV. Low flux dialyzers was used in 92.3% of the patients. Polysulfone material was used in 83.1% of the dialyzers with 1.3m² as the most common surface area used (63.96%) and 58.6% of the dialyzers were sterilized by steam. Bicarbonate buffer was used in 71.5% of the patients with variable sodium concentrations. High calcium dialysate (1.75mmol/l) was used in 46.4% of the patients while low magnesium dialysate (0.5mmol/l) was used in 75.6% of the patients. Unfractionated heparin was used in 77.67% of the patients. Mean Kt/V was 1.09 ± 0.18, while mean URR was 59.99 ± 8.54.

CONCLUSIONS: This study documents the current status of hemodialysis prescription and outcome among Egyptian patients, these practice and outcomes are comparable to many different international guidelines.