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LETTER TO THE EDITOR

The Home Jail Haemodialysis: a simple way to save money and improve security

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Chronic kidney disease (CKD) is a substantial worldwide clinical and public health problem [1]. CKD is linked to high healthcare costs, poor quality of life and serious adverse health outcomes (including cardiovascular disease, infection, hospitalization and mortality) [2]. Moreover, renal replacement therapy with either dialysis (both haemodialysis and peritoneal dialysis) or kidney transplantation represents the economic burden of end-stage renal disease (ESRD), which continues to grow substantially. Future projections are for an increasing prevalence of ESRD globally. Worldwide, >2.5 million people were treated for ESRD in 2015, and this number is projected to more than double to close to 5 million people by 2030 [3].

In our Hospital Azienda Socio Sanitaria Territoriale (ASST) Santi Paolo and Carlo, in Milan, Italy, we have a Division of Penitentiary Medicine and we have served the four prisons in the Milan area with medical and surgical support, for several years. During the last decade, we were required to treat renal patients as well. In particular, we had ESRD patients on replacement treatment with haemodialysis thrice weekly. The Dialysis Unit received prisoner-patients and treated them under the security control of several penitentiary policemen. Among them, we had two high-surveillance prisoners who needed six policemen each for security.

After a long period of organization, we were able to start a new project called 'Home Jail Haemodialysis'. Since July 2018 until now, haemodialysis sessions have been performed in a prison for these two high-surveillance prisoners, on separate days, with only one policeman. The feasibility of carrying out these dialysis services, assimilating the penitentiary structure into a Dialysis Unit with decentralized assistance, was tested using the parameter of the numbers of adverse events reported. More importantly, as a quality indicator we used the reduction of costs. In 12 months of observation, there were no serious adverse events. Since the cost of the transportation from the Jail to the Hospital to receive renal replacement with haemodialysis for one high-surveillance prisoner-patient is close to $6500\,000$ per year, we can conclude that in 1 year for these patients, we saved close to $61000\,000$ per year. Thus, the 'Home Jail Haemodialysis' appears to be a simple way to save money and improve security.

CONFLICT OF INTEREST STATEMENT

None declared.

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