

STUDI CARA KERJA HEMODIALISA ELEKTRONIK DITINJAU DARI SUDUT PANDANG ASUHAN KEPERAWATAN

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Abstract: *Dialysis is a process used to remove fluid and waste products from the body when the kidneys are unable to perform the function (renal failure). Hemodialysis is a process that is used on the patient is acutely ill and require dialysis therapy short-term (a few days to a few weeks) or patients with terminal -stage kidney disease that requires long-term therapy or permanent therapy. A strand of synthetic semipermeable membrane replaces glomerulus and renal tubules and works as a filter for impaired kidney function. Artificial kidney systems: 1. Dispose of products of protein metabolism such as urea, creatinine, and uric acid. 2. Remove excess water by affecting blood pressure and appeals between the liquid portion, usually consisting of a positive pressure in the blood flow and negative pressure (vacuum) in the dialysate compartment (ultrafiltration process). 3. Maintain and restore the body's buffer system. 4. Maintain or restore the body's electrolyte levels. Hemodialysis goal is to take substances are toxic nitrogen from the blood and remove excess water. At hemodilisa, full blood flow with toxins and nitrogenous wastes diverted from the patient's body to the blood spot dialiter cleaned and then returned to the patient's body. Hopefully, the knowledge gained in this study the workings of standards operational procedures (SOP) hemodialysis devices from the viewpoint of nursing care.*

Keywords: *dialysis, hemodialyse, dialisate, artificial kidney, renal failure, nitrogen toxic*

A. Pengertian

Dialisis merupakan suatu proses yang digunakan untuk mengeluarkan cairan dan produk limbah dari dalam tubuh ketika ginjal tidak mampu melaksanakan fungsi tersebut. Pada dialisis, molekul solut berdifusi lewat membran semipermeabel dengan cara mengalir dari sisi cairan yang lebih pekat (konsentrasi solut lebih tinggi) ke cairan yang lebih encer (konsentrasi solut lebih rendah). Cairan mengalir lewat membran semipermeabel dengan cara osmosis atau ultrafiltrasi (aplikasi tekanan eksternal pada membran).