

Dedication

**To my parents
my brothers
my Sisters**

**To every one struggle to
... Support me**

Acknowledgment

**Praise to Allah, the Almighty Who
Supported me and gave me Strength
.to complete this Work**

**I would like to express my
gratefulness to my Supervisor Dr.
Alnazier Osman Mohammed for his
.great efforts and support**

**Precious thanks to all engineers in
.hemodialysis centers**