Background; Health information system is the process collecting, analyzing, processing reporting and using the information got for policy making and conducting research. Health Information Systems tackles areas such as socio-economic, environmental, behavioral and genetic factors. Inputs such as human resource, equipment, health infrastructure and cost are also included to the health information system.

Problem statement; In south Sudan, the lack of reliable health information has led to an unsuccessful planning and implementation of the health service delivery in the country. HMIS objectives are to use the data collected from the health facilities for monitoring and evaluation of activities which are then be forwarded to the state ministry of health for compilation and implementation of activities. Yet this is system is still lacking in South Sudan.

Objective; The general aim of the study was to review the strength and weakness of the health management information system (HMIS) in Juba County, South Sudan with a view of coming up with recommendations given the results.

Methods; A descriptive cross sectional design was used for the study. The data was gathered using Quantitative and qualitative methods. The study population included the county Health Department (CHD) officers, health managers and staffs who are concerned with the collection, analysis utilization and dissemination of health information. Juba County was purposely sampled based on the existence of a functioning HMIS and because most of the administrative works were done there. Simple random sampling technique was used to select the facilities. Face to face interviews, key informant interviews, and document reviews were used to collect the data. Structured questionnaire, Key informant interviews were used for collecting the initial data.

Results; Health Management Information System in Juba County was only 39% efficient. About 7.1% (33) of the respondents admitted there is county board put in charge of HIS coordination in their respective facilities. On availability of HMIS manuscripts, fifty four point percent of the respondents denied its availability, 42.4% (14) of the respondents acknowledged the availability of computers, 40.0% (28) of the respondents agreed a county recording system for public and private health units with sole identifying numbers is in place. Fifty six point seven percent (17)
of the respondents admitted they fully make use of censuses in Juba County and the nation in their HMIS. Half of the respondents 15 (50.0%) agreed they fully utilize civil registration in Juba County

although the other half disagreed with it. On fully utilizing population surveys in the county, 43.3% (13) of the respondents agreed with it. About 46.7 (14) of the respondents fully utilized individuals records of people in Juba county in their HMIS although on service records, only 9 (30.0%) admitted not fully utilizing them. The factors that had salient influences on the efficiency of the HMIS in Juba County were the number of years the respondent had worked at a particular facility (p=0.007), existence of an official policy to carry out regular meetings at health care units and health managers, to review the HIS (p=0.013), existence of a county recording system of public and private health units with unique identifying figures (p = 0.035), performance of data analysis by health facility (p=0.038).

Conclusion; Generally the results show that the HMIS in Juba County has a low HMIS efficiency given its outputs (39%), implying that the ministry of health has to make more interventions to improve on this efficiency.

Recommendations; County offices should support the health facilities with stationery. Provide counter books, monthly summary tally sheet form for data collection. The county offices should set up record/resource centers at all health units. Ministry of Health should also provide more computers and other sophisticated information technology equipment at the county level and train personnel for data processing.