Health Care and Pharmacy

"Pharmacist Clinical Practice – Essential"

Since my pharmacy student days at UCSF in 1960-65, my thinking, activities, and behaviors have been affected by the very large numbers of patients in drug therapy difficulty. The professional literature in the 1960's identified the following list of topics.

- Medication errors
- Adverse drug reactions (ADR)
- Prolonged hospitalization from ADRs
- Drug-drug interactions
- Drug-laboratory test interactions
- IV drug admixture incompatibilities
- Drug wastage
- Drug-induced diseases
- Drug-related causes for hospitalization
- Inefficient use of professional personnel
- Drug information needs of physicians

The PharmD education at UCSF at that time energized many of the students to look for and pursue a different level of professional practice that would utilize the teachings in the PharmD program. For me, along came my residency followed by the opportunity to design the 9<sup>th</sup> floor pharmacy services project. The planning started in September 1965 and went live for patient care services in September 1966. The initial pharmacist practice on the 9<sup>th</sup> floor included:

- Participation in patient care rounds
- Drug history at hospital admission
- Interpret prescribed drug orders
- Answer drug information requests of the physicians and nurses
- Prepare iv drug admixtures
- Provide and supervise a unit dose drug distribution system
- Member of code blue team (cardio resuscitation team)
- Monitor patient drug therapy

Significant contributions were made to several patients starting in the first week of service. These clinical contributions were known by the nurses and physician members of the surgery department and up to the Chair, Department of Surgery, Director of Pharmacy, Director of Nursing, hospital administration, administrative leaders of the School of Pharmacy. From that beginning to today, my thinking and professional work has focused on improving patients' drug therapy via the development of pharmacist clinical practice and services.

The completion of a comprehensive list of patient drug therapy problems or needs from the literature and professional experiences give this following list.

• Drug related hospitalization – 5% of all patients

- Drug related hospitalizations for the elderly 20% of elderly patients
- Adverse drug reactions and associated morbidity and mortality 50% are predictable and preventable
- Drug information needs of patients, physicians, and nurses
- Medication errors 18% of doses administered in hospitals
- Patient non-adherence to prescribed drug therapies 50% average
- Dispensing errors 10% of prescriptions filled
- Medication use systems very expensive, greater than 10% of hospital costs
- Drug prescribing errors acute care, community

Pharmacy claims to be "a drug expert." The profession's leadership has proposed the Vision 2015 for the profession where the pharmacist will assume the responsibility for drug therapy outcomes. Sorry, but I do not see the profession achieving that goal by 2015 or even by 2020.