**Assessing the Rational use of Medicines (RUM) in community pharmacies in Ghana**

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**ABSTRACT**

**Introduction**: Rational use of medicines (RUM) for all medical conditions is an essential element in achieving quality of health and medical care for patients. Yet more than 50% of all medicines worldwide are prescribed, dispensed or sold inappropriately. Ensuring the availability, affordability and rational use of quality medicines is an issue of concern in developing countries. Irrational drug use affects quality of health care and has implications on efficacy of medicines. Community Pharmacies serve as a vital source of information on drug use to members of the community and should promote the safe use of drugs.

**Objectives:** The study sought to assess rational use of quality and accessible medicines in community pharmacies in the Ledzokuku-Krowor Municipality in Accra. , using the WHO level II facility core based indicators.

**Methods:** A descriptive cross-sectional design employing the quantitative method was employed to take prospective data from 6 community pharmacies and 180 clients. The study adopted the WHO level II facility core based indicators for measuring rational use of medicines mainly access to medicines, availability of medicines, medicine pricing, affordability and patient care. Various scores were generated for each of the five domains as stipulated in the guidelines.

**Results:** Majority (53.3%) of the patients for whom medicines were intended for were females whilst those aged 30- 59 years were in the majority (46.7%). About 98.8 % of clients travelled to the community pharmacy in < 1hour and at a cost 0.42 times the daily wage of the lowest paid salaried government worker. Availability of key essential medicines was high (92.2%) and no expired medicine was found in any of the dispensaries. These medicines were conserved under conditions that scored 80%. The Median Price Ratio (MPR) of all the surveyed medicines ranged from 0.13 to 26.11 implying that medicines were being sold at a range 0.13 times lower and 26.11 times higher than the international reference price. As much as 60.83% of prescription medicines were bought without prescriptions. Labelling of medicines in the municipality was low -58.9% although 88.2% of them had adequate knowledge on how to take their medicines. The average cost of medicines bought was 0.73 times the daily wage of the lowest paid salaried government worker.

**Conclusion:** The level of the rational use of medicines in community pharmacies was found to be good, although there were some major sub optimal performance regarding some patient care practices.

**Key words:** Rational use of medicines, community pharmacies, access, availability, medicine price, affordability, patient care