Antihypertensive Drug Procurement Trends from 1995 to 2004: Transition over a Decade

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Objective: To evaluate antihypertensive procurement trends in Bahrain from 1995 to 2004.

Setting: Pharmacology and Therapeutics, Arabian Gulf University/Directorate of Material Management, Ministry of Health.

Design: A retrospective audit study based on the data from the Directorate of Material Management, Ministry of Health (MOH), Bahrain.

Method: A review of the annual antihypertensive drug procurement data from 1995 to 2004 was performed.

Result: The procurement rate of angiotensin converting enzyme inhibitors (ACEIs), diuretics and alpha-blockers, significantly increased while the rate of calcium channel blockers (CCBs), methyldopa and hydralazine declined during this decade. Beta-blockers were the top-ranked agents in both 1995 and 2004. Significant interclass changes were evident: increase in procurement of long-acting ACEIs, CCBs and indapamide associated with a decline in short-acting ACEIs, CCBs and thiazide and thiazide-like diuretics in 2004. Angiotensin-II receptor blocker (ARB) – valsartan was introduced in 1999.

The procurement of fixed-dose combinations (FDCs) increased from 0.9% in 1995 to 3.4% in 2004, associated with a significant decline in Moduretic and Brinerdin and by introduction of Co-Diovan, Preterax and Bi-Preterax. High cost due to renin-angiotensin-aldosterone inhibitors (ACEIs and ARBs) accounted for approximately half of the total antihypertensive drugs budget. According to Ministry of Health budget, the annual drug budget for antihypertensive drugs increased from 6.7% in 1995 to 14.1% in 2004. During that decade, there was a rapid annual growth rate for diuretics, CCBs and FDCs.

Conclusion: The antihypertensive procurement strategy has qualitatively improved; there is a shift towards selection of more rational long-acting antihypertensives and FDC products. Analysis of drug procurement trend should be a critical component of national drug policy.

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