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tion on hospital care was only collected for one season. More individualised estimates of hospitalisation costs may be obtained with patient characteristics such as gestational age and presence of BPD.

# PIN 2 2

## PHARMACOECONOMIC EVALUATION OF STREPTOMYCIN VERSUS ETHAMBUTOL AS PRIMARY ANTITUBERCULAR DRUGS IN LAGOS UNIVERSITY TEACHING HOSPITAL Suleiman IA, Tayo F

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Available resources are very for this research is limited, hence the need to be cost conscious. OBJECTIVES: The purpose of the research was to know which of the two antitubercular drugs (both of which are still actively used in Nigeria) is more cost effective in phase I treatment of tuberculosis and to influence decision making. METHOD: Cost Effectiveness Analysis was the applied tool for these methods, and the prescribed/dispensed antitubercular drugs between 1997 and 1999 were reviewed retrospectively. Relevant information such as diagnosis, prescribed/dispensed drugs, dosage, duration of therapy, physician's remarks, and cost were obtained from patient case notes and dispensed prescriptions. These were used in conjunction with time and motion studies and standard cost accounting technique. The cost per defined daily dosage (DDD) was calculated, and the costs of drug/ disposables acquisition and overhead costs were included in the analysis. The literature was reviewed for positive and negative consequences of the considered options. Outcome measure of effectiveness was improved in signs and symptoms of tuberculosis/eradication of Mycobacterium. A decision table was used to arrive at the effectiveness rating, which was compared using chi sqaure analysis. **RESULTS:** The analysis showed that ethambutol tab is more cost effective than streptomycin inj, which is still widely in use. The cost/DDD of ethambutol was N4.00/unit effectiveness while that of Streptomycin was N65.00/unit of effectiveness. The decision did not change when some variables were altered in favour of streptomycin inj. (the less cost effective option). Increasing the cost of ethambutol by several folds, increased the effectiveness rating of streptomycin to that of ethambutol etc., which did not change the conclusion. CONCLUSION: Streptomycin inj. should no longer be considered as a primary drug in the treatment of tuberculosis, which is still very common in Nigeria. However, the various contraindications/side effects of ethambutol such as optic neuritis need to be monitored for in patient. Economic evaluation of therapy is necessary to avoid trading-off of more cost effective therapeutic options.

### Abstracts

#### **PIN23**

# PHARMACOECONOMIC EVALUATION OF ANTIBACTERIALS UTILIZATION IN PRIMARY, SECONDARY AND TERTIARY HOSPITALS IN DEVELOPING ECONOMY

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The use of economic analysis is increasingly advocated by funding agencies to acheive efficient cost containment strategy. OBJECTIVES: To inform the use of antibacterials in chosen hospitals and to propose inclusion of economic evaluation of drug therapy in policy formulation and decision-making. METHODS: Cost Minimisation Analysis; the most applicable tool for generic equivalent drugs was used. This was compared in three health institutions. These include a tertiary, Lagos University Teaching Hospital (LUTH); a secondary, General Hospital Lagos (GHL); and a primary, Health Centre Harvey Road, Yaba (HCHR), as well as a community pharmacy outlet for prescriptions of GHL. Relevant information such as diagnosis, cost of drugs, dosage, duration of therapy among others were obtained from patient case notes for which antibacterials are the mainstay of therapy and dispensed prescriptions. The mean cost per defined daily dosage (DDD) of generic and branded for each antibacterial was computed for the various hospitals. These were compared using student 't' test. The outcome measure was erradication of bacterial in question by the respective antibacterials. RESULTS: The use of more expensive branded drugs is very rampant even when the generic equivalence is available. The difference in their cost/DDD is very significant (P < 0.05; n = 1,576 in LUTH, n = 1,200 in GHL, n = 900 in HCHR, n = 750 in the community pharmacy). For example, in LUTH, the cost/DDD of ciprofloxacin was N310 for branded product and N160 for generic. Also observed were some irrational combinations especially in the primary health centre. CONCLUSION: A form of economic evaluation of drug therapy is necessary for health policy and decision makers to be more informed on cost implication of their choices and trade-offs. Systematic appraisal of available options needs to be well understood in view of limited resources. Appropriate and timely intervention for sustainable improvement is mandatory for costs to be greatly minimised.

PIN24

# IMPACT OF INFLUENZA VACCINATION ON WORK PRODUCTIVITY IN A COLOMBIAN COMPANY: COSTS AND BENEFITS FOR THE EMPLOYER

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**OBJECTIVES:** To evaluate the impact of an influenza vaccination campaign: decrease of attack rates of