Acta Neurologica Indonesia
Department of Neurology, Faculty of Medicine Universitas Indonesia
ISSN 3032-6303

Policy brief

Balancing Act: Exploring the Complexities of Drug Restriction Policies

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Introduction

Since the implementation of Indonesia's national health insurance so-called Badan Penyelenggara Jaminan Sosial (BPJS) in 2013, the national formulary stipulated in the Decree of the Minister of Health HK.01.07/MENKES/2197/2023 has become an important basis for drug usage regulation in Indonesia. This formulary was a list of medications determined by the government as guidelines for drug services for BPJS participants that should be provided at both primary and advanced healthcare facilities.[1,2] The drug procurement process for BPJS began with the preparation of the national formulary which will be the basis for determining healthcare facilities' e-catalog references. Drug prices in the e-catalog were determined through an open national auction (or negotiation if there were only three or fewer pharmaceutical drug provider companies) following self-estimated pricing and drug demand projections established by the Ministry of Health. Issues may emerge at any stage of the drug procurement process.[3] The national formulary underwent annual revisions that were conducted every two years. However, proposals for amendments may be made earlier under certain considerations, such as attempts to align with current research recommendations and improvement of the national formulary content to ameliorate patients' access to drug usage and services. Several parties involved in the establishment of the national formulary were regional/provincial/regency/city health offices, primary and advanced healthcare facilities, governmental/private hospitals, medical professional associations, the Ministry of Health, and the National Population and Family Planning Agency. Amendments to the national formulary could bring about the issue of additions, reductions, or changes to drugs, dosage forms,

restrictions, health facility provisions, maximum prescribing, and referral programs.[2] Nonetheless, guidelines provided in the national formulary and evidence-based medicine (EBM) were used extensively in clinical practice as primary sources for determining the most appropriate treatment strategy for patients.

The medication cost was a component of healthcare services covered by the Indonesian Case Based Groups (INA-CBGs) payment scheme. To assist healthcare providers in selecting appropriate medications, the national formulary was established early on in the implementation of national health coverage (Jaminan Kesehatan Nasional/JKN).[2] Healthcare providers are required to adhere to the national formulary when prescribing medications for the BPJS patients. Sometimes, medication rationing will be implemented if the prescribed medications are unavailable or their cost exceeds the INA-CBGs limit. Nevertheless, some studies indicate that rationing is occasionally perceived as unjust due to its suboptimal patient benefits.

The national formulary contains recommendations for medication usage based on cost, efficacy, and safety profile. Thus, recommendations on drugs listed in the national formulary were typically based on pragmatic issues and public policies pertaining to drug availability, costs, and population references.[1,2] On the other hand, clinical decisions made by EBM were based on the latest evidence drawn from clinical trial research and meta-analysis. Focusing on the relative benefits, safety, and efficacy of various treatment options, the EBM emphasizes the usage of strong scientific evidence to support therapeutic judgments.

It was critical to comprehend that differences between the national formulary and EBM might affect clinicians' treatment decisions in clinical practice. Aspects that were important to consider were whether the availability and restrictions on drug use are still relevant or diminished in significance along with the advancement of science and technology. This article will discuss some of the differences between the policies outlined in the national formulary and recent scientific advancements based on EBM, as well as how it can be amended to meet patients' needs. It is, therefore, hoped that the national formulary amendments could resemble EBM recommendations as closely as feasible.

Discussion

Some drugs that are often used by neurological patients include clopidogrel, atorvastatin and gabapentin. In the USA, gabapentin is frequently prescribed off-label for all types of pain and co-administered with opioids in a variety of health-care settings. From August 2016 to July 2018, three states controlled the use of gabapentin, while nine states introduced regulations for gabapentin under prescription drug monitoring programs (PDMPs). Between 2013 and 2018, there was a significant surge in gabapentin prescriptions, rising from 44 million annually to 67 million, positioning gabapentin as the sixth most frequently prescribed medication in the United States by 2018. Gabapentinoids are commonly prescribed for conditions like neuropathic pain, fibromyalgia, alcohol withdrawal, insomnia, migraine, mania, and bipolar disorder, even though these uses are not officially approved.[4] In addition, gabapentinoids are increasingly used in combination with or as an alternative to opioids for all pain types. While in Indonesia, there is no prescription data for gabapentin. Based on Indonesia national formulary, gabapentin is only prescribed for patients with post-herpetic neuralgia or diabetic neuropathy pain and is only available at advanced healthcare facilities[1]. Many diseases can cause complaints of pain with a neuropathic component besides diabetic and post-herpes. In the case of chronic pain e.g. cancer pain, therapy can be tailored according to WHO stepladder, where gabapentin is used as an adjuvant to NSAIDs or opioids.[5]

Clopidogrel is a medication primarily used to prevent blood clots in people with cardiovascular diseases or those who have had a recent heart attack or stroke. It is an antiplatelet agent which works by inhibiting the ability of platelets to form clots by blocking the P2Y12 adenosine diphosphate (ADP) receptor on platelets. Thus, it reduces the risk of heart attacks, strokes, and other cardiovascular events. Clopidogrel is commonly prescribed for individuals who have had a heart attack, stroke, or peripheral arterial disease to prevent future cardiovascular events. In relation to neurology, clopidogrel is used mainly in ischemic stroke where it is used in treatment during the acute phase and further prescribed to stroke patients as a prevention from further recurrent stroke, myocardial infarct, and vascular death either by itself or in combination with aspirin. There are many studies which have demonstrated the superiority of single dose clopidogrel in 75

mg compared to aspirin in this regard. Clopidogrel consumption along with aspirin is also beneficial if given in 21 days to three months for TIA or mild stroke patients to prevent further stroke attacks.[6] Indonesian national formulary unfortunately restricts the usage of this drug only for cardiovascular patients with planned PTCA with further single dose treatment for a full year. The rationale for this was the high cost of clopidogrel production, even though currently it is available at a cheaper price than when the formulary was instituted.[1]

Atorvastatin has long been used as a medication primarily used to lower cholesterol levels in people at risk of cardiovascular disease. It belongs to a class of drugs called statins, which work by inhibiting an enzyme in the liver involved in producing cholesterol. By lowering cholesterol levels, atorvastatin helps reduce the risk of heart attacks, strokes, and other complications related to heart disease. Atorvastatin primarily lowers LDL cholesterol while conversely it increases the level of HDL cholesterol. It is commonly prescribed for individuals with a history of heart disease or at high risk for developing it. It's also used to reduce the risk of stroke, heart attack, and other cardiovascular events. Indonesian national formulary is known to restrict the usage and consumption of this drug in hopes that simvastatin will be able to achieve the desired therapeutic results before moving on to atorvastatin.[1] It has been long known through many studies that atorvastatin is superior compared to simvastatin, such as the research by Farnier et.al. which shows that In primary hypercholesterolemia, atorvastatin 10 mg was more effective and non-equivalent to simvastatin 20 mg and significantly more effective than simvastatin 10 mg for reducing LDL cholesterol levels.[7] In specific relation to neurology, a research by Lampl et.al. shows that early outcome measured by NIHSS and mRS was better in acute stroke patients treated with atorvastatin than in those treated with simvastatin which may reflect a neuroprotective effect unique to atorvastatin.[8]

Pyridostigmine constitutes a fundamental component of the initial therapeutic regimen for the majority of patients diagnosed with myasthenia gravis (MG). Dosage adjustments should be made in accordance with individual symptomatology. Acetylcholinesterase inhibitors afford transient relief from muscle weakness symptoms. Pyridostigmine's inability to penetrate the blood-brain barrier minimizes

the risk of central nervous system toxicity, rendering it potentially efficacious in both ocular and generalized forms of MG. A typical initial dose is 60 mg administered every 6 hours during waking hours. Dosage escalation up to 60 to 120 mg every 3 hours may be undertaken with the goal of symptom mitigation; however, higher doses heighten the likelihood of adverse effects. Onset of clinical efficacy occurs within 15 to 30 minutes, with a duration of action spanning approximately 3 to 4 hours. For patients experiencing debilitating weakness upon awakening, a 180-mg extended-release formulation of pyridostigmine may be ingested prior to bedtime.[9,10] Based on the data above, the dosage from the national formulary itself, which only provides 30 tablets 60 mg per month, is not in accordance with management according to the guidelines.[1]

Policies recommendation

Evidence-based medicine should provide a solid foundation for developing, implementing, and evaluating drug restriction policies that are effective, safe, and tailored to the needs of individuals and communities. By integrating scientific evidence into policy making processes, governments can improve public health outcomes and enhance the well-being of society. Therefore, we recommend several measures regarding this issue, as follows:

1. Organizing clear responsibilities and collaboration by formation of specialized expert teams which help to conduct periodic evaluations related to the national formulary and developments in guidelines and current research, including discussions with pharmacoeconomic experts. In every professional organization, agency, hospital, regional official and related party there is a special team for discussing and evaluating national forums, especially in relation to the latest scientific updates.
2. Focusing on transparency and accountability in the decision-making process by making the criteria and evidence used to classify drugs publicly available. Socialization regarding the timeline of activities and the timing for proposing changes or evaluating changes or submitting drugs for the national formulary is also recommended.
3. Making a discussion forum through the comment’s column on the national

formulary website which can be categorized based on drug class or subclass, making it easier to provide criticism and suggestions to become more transparent.

4. Changes or recommendations related to drugs are divided by category and simplify the mechanism for criticism from the national forum.
5. Assembling international collaboration and data sharing initiatives to enhance the global understanding of drug-related issues and improve evidence-based drug restriction policies. By sharing research findings, best practices, and experiences across borders, countries can learn from each other and strengthen their collective response to drug-related challenges.

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