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Utilizing Hospital Formulary System in Nepal

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ABSTRACT

Since the early 1950s, for medication management, the hospital formulary system subsisted as a list of drugs into the supply chain management process in hospitals. With the advent of pharmacy practice services, the system now is more oriented towards the rational use of drugs taking into account the safety of therapy, cost-effectiveness, and uninterrupted availability of drugs to improve and reflect upon the clinical judgment of healthcare professionals. Though very few hospitals in Nepal have adopted hospital formulary system, the perfect practice is still skimpy. The formation of drug and therapeutic committee along with the establishment of hospital pharmacy services is a growing trend with the arrival of hospital pharmacy guidelines 2072, thus, a positive spill-over of the hospital formulary system to each hospital in Nepal would be valuable in promoting rational drug therapy.

Keywords: Cost-effectiveness; hospital formulary system, rational drug therapy.

INTRODUCTION

Hospital formulary, a continually revised list of medicines with ancillary information, represents clinical judgment of healthcare professionals. Originated in the 1950s as a list of medicines,¹ it has now evolved into a comprehensive drug therapy management system, a step towards evidence-based drug therapy approaches.

Many people in Nepal, a low-income country, cannot bear out-of-pocket expenses for regular use of medicines. Hospital formulary system (HFS) ensures uninterrupted cost-effective medication services. Currently, many hospitals in Nepal have their own pharmacies with pharmacists as mandated by hospital pharmacy guidelines 2072,² which will ensure DTC formation, thus HFS implementation.

HOSPITAL FORMULARY DEVELOPMENT AND STATUS

DTC is a therapeutic decision-making committee in any hospital, playing a pivotal role in preparing a hospital formulary by establishing a formulary sub-committee, primarily coordinated by the member secretary after careful assessment and evaluation of the availability of selected drugs required for routine patient care.³ The sub-committee prepares a formulary in coordination with all the clinical departments.

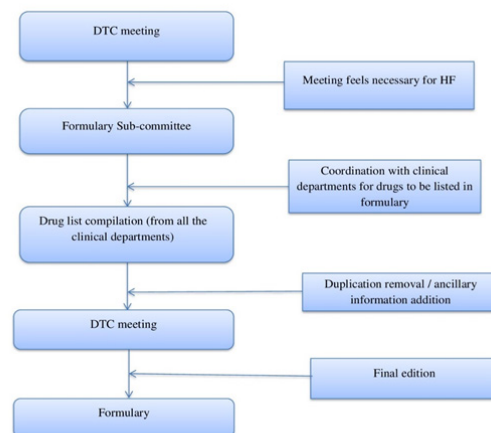


Figure 1. Flow chart for the preparation of hospital formulary.

With the increase in disease burden coupled with advances in clinical drug development leading to more complex therapeutic regimens, it's high time that every institution must have their own HFS to provide a systematic approach to review and practice evidence-based real-time clinical protocols to ensure safe and cost-effective utilization of drugs. The inclusion of a limited number of preferably generic therapeutic agents, in line with the standard treatment guidelines (STGs), not only refines the clinical decision-making ability but also promotes inter- and intra-professional collaborative pharmacotherapy practices that assures rational

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prescribing, dispensing and administration of medicines with minimum adverse drug reactions and medication errors. An apt and efficient HFS including prescribing codes, drug information of educational value, and a tinge of continuing medical education coupled with a feedback system is definitely beneficial for healthcare professional, and particularly provides an opportunity for pharmacists to assume professional and ethical responsibilities in drug selection sans any influence of biased advertisements and unscientific drug literature. HFS also helps in better inventory management, brand surfeit of similar generics, and possibly reflects a uniform policy of the institutions regarding drug therapy.^{4,5}

Very few tertiary care hospitals in Nepal such as Patan Hospital, Shree Birendra Hospital, Norvic International Hospital, Manipal Teaching Hospital, and Bharatpur Hospital have practiced their own HFS, however, the use of non-formulary drugs, multiple brands of the same generic drugs, negligence about the existence of HFS, and lack of adequate uniform STGs in many hospitals muster qualms with regards to its implementation and adherence.

Till date, most of the low-and middle-income countries have not been able to adapt the medical insurance system to its fullest. In this context, the HFS has great applicability in the provision of healthcare facilities to the masses at cost affordable to them.

There could be apprehensions that a HFS might impact the physician's prerogative to prescribe by inordinately confining to a limited number of drugs,¹ to procure inferior quality drugs that lead to an increase in the overall cost of therapy,⁶ or the system become insufficient to provide non-formulary, though essential drugs, in case of emergency or health crisis. However, the utilization of appropriate drugs listed in the formulary prepared by DTC after comprehensive consultations with related healthcare members is an apt justification against these arguments, minimizing the chances of inclusion of substandard drugs, yet still permit the use of non-formulary drugs with set processes whenever required.

PROFICIENT CLINICAL PRACTICES

The purpose of HFS is to discourage the use of marginally effective drugs and treatments. The utilization of HFS is an ongoing dynamic process that methodically and periodically evaluates medications for inclusion or exclusion in close immediacy of established and acceptable guidelines that ensure appropriate use of medication by developing policies/protocols for prescribing, dispensing, and administering medications in hospitals.¹ The prime responsibility of the formulary committee is to maintain the list of formulary drugs by

initiating periodic checks for substandard, spurious, irrational, and banned drugs or drugs that have failed to get renewal from regulatory authority.⁶ HFS holds the key to an effective medication utilization evaluation process that has a direct impact on good quality patient care. Additional key components of effective drug therapy that HFS must consider include comparing clinicians' and patients' responses regarding drug efficacy, supply chain management, and patient compliance. Nevertheless, another daunting task is to expedite the procurement of non-formulary drugs in case of an emergency, thus, a stringent balance in the official process and patients' needs should be maintained.

CONCLUSIONS

The HFS has a direct impact on rational drug therapy co-influenced by several inter-linked processes such as acquisition, storage, prescribing, distribution, and counselling to administration of a therapeutic drug to the patients. The policy should be made for the mandatory requirement and appropriate utilization of HFS in every hospital for quality patient care. HFS with the precise list of essential drugs and drugs that the medical insurance system covers in the case insurance system are available, along with the drugs that are made freely available by the government in public sector hospitals will definitely flourish the healthcare system in Nepal. In fact, the continuous redressal of policies, protocols, and STGs to have a more pragmatic HFS would have a worthwhile impact on clinical practice. As the processes from preparation to the maintenance of a formulary play a very pivotal role in optimizing the therapeutic outcome, pharmacists along with other healthcare professionals, as a collaborative team, can utilize the HFS in an appropriate way, thereby providing safe and cost-effective medicines to the patients - a quality benchmark of any health care system.

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