Preparation for a Medical Mission to Jamaica – Pharmacy’s Perspective

ABSTRACT

Objective: To describe preparation of a medical mission from a pharmacy team’s perspective.

Methods: Essential components of the medication planning process include the development of a separate medication budget, a medication formulary (based on needs assessment and availability) and acquisition of medications and medical supplies.

Results: For the medical mission to Jamaica, medications are often purchased or donated from various locations, including retail pharmacies, drug wholesalers, medication drives, pharmaceutical companies, and medication assistance programmes specific to medical missions. It is essential to understand the policy associated with the importation of medications which can be found in the Approval Process for Food, Drugs, Cosmetics, Medical devices, Precursor Chemicals and Narcotics, a paper developed by the Ministry of Health, Jamaica.

Conclusions: Elevated levels of planning and preparation are required for the medical mission to Jamaica to be a success; assistance and cooperation is necessary from all members of the interdisciplinary medical mission team. It is imperative to plan ahead, be organized and equipped to handle unexpected situations so that quality care can be delivered to the patients to be served.

Key words: Medical mission, medication donation, pharmacy

Preparación Para una Misión Médica en Jamaica – Perspectiva Farmacéutica

RESUMEN

Objetivo: Describir la preparación de una misión médica desde la perspectiva de un team de farmacia.

Métodos: Componentes esenciales del proceso de planificación de la medicación incluyen el desarrollo de un presupuesto separado de medicamentos, un formulario de medicamentos (basado en la evaluación de las necesidades y la disponibilidad) y la adquisición de medicamentos y suministros médicos.

Resultados: Para la misión médica a Jamaica, se obtienen medicamentos a menudo comprados o donados desde varias localidades, incluyendo farmacias minoristas, mayoristas de medicamentos, campañas de venta de medicamentos, compañías farmacéuticas y programas de asistencia de medicamentos específicos para misiones médicas. Es esencial comprender la política asociada con la importación de medicamentos que se pueden hallar en el Proceso de Aprobación para Alimentos, Medicamentos, Cosméticos, Equipos Médicos, Precursor Químicos y Narcóticos – un documento elaborado por Ministerio de Salud, Jamaica.

Conclusiones: Se requieren niveles elevados de planificación y preparación para que la misión médica a Jamaica sea un éxito. Hace falta la asistencia y cooperación de todos
Background
In an effort to provide healthcare services to the indigent populations of Jamaica, the Student National Medical Association (SNMA) at Nova Southeastern University (NSU) developed a medical mission programme to Jamaica (1). The process of planning a medical mission is quite daunting, but experiencing the rewards of hard efforts makes it worthwhile and fulfilling. The medical mission trip offered by NSU is a yearly collaborative effort involving students and faculty from the Colleges of Osteopathic Medicine, Pharmacy, Dental Medicine, Optometry and Allied Health (NSU) developed a medical mission programme to Jamaica (1).

With a population of approximately 2.7 million, Jamaica is the recipient of many medical missions annually due to a lack of access to care for many individuals on the island (2). The teams typically see chronic diseases such as hypertension and diabetes mellitus, but also address health issues related to malnutrition, skin and soft tissue infections and sexually transmitted diseases (1). However, it is important to plan for any disease outbreaks that the team might encounter during the trip. This article highlights the processes of planning and preparation for an interdisciplinary medical mission from a pharmacy perspective.

Essential components of the medication planning process include the development of a separate medication budget, a medication formulary and acquisition of medications and medical supplies. In addition, background research must occur to address legal issues regarding the importation of medications. Considerations must also be made to address the ethical concerns of dispensing, counselling, quality of care and continuity of care once the mission trip is over.

Initially, the perceived needs of the interdisciplinary medical mission must be identified for inclusion during budget development. The budget should include the cost of airfare, transportation on the ground, food and housing. A major portion of funds will be needed for the purchase of medication and medical supplies to be used during the mission. Factors to consider when developing a budget include: duration of stay, medical services provided and medications needed that cannot be acquired by donation.

For the medical mission to Jamaica, medications are often purchased or donated from various locations, including retail pharmacies, drug wholesalers, medication drives, pharmaceutical companies and medication assistance programmes specific to medical missions (3). There are a number of organizations within the United States of America that assist with medication donations for the sole purpose of medical missions. Three organizations that we rely on include Medical Assistance Programs (MAP) International, AmeriCares and Heart to Heart (4, 5, 6). Medical donations are not limited to these organizations. There are additional organizations that assist with acquisition of medications for short term medical mission trips [eg, Blessings International, Kingsway Charities, Interchurch Medical Assistance] (7).

Unfortunately, a majority of the most necessary medications are also very costly or may not be included in medical mission medication packages. This creates a unique challenge for the pharmacy team and becomes a very delicate balance within the medication budget. High need items that must be purchased, despite their cost, may limit the ability to purchase larger quantities of other medications that may serve more people during the mission. In Jamaica, we worked with the generic supplier Apotex to obtain prescription items not available in medical mission medication packages for the medical mission at a reduced cost (8).

Medications and Medical Supplies
Another key component in preparing for a medical mission is developing a medication formulary. This can be determined by the major disease states that will be encountered. In addition to medications for the chronic diseases mentioned previously, over-the-counter medications such as vitamins for malnutrition, pain medications, antacids/stomach aids, anti-fungal creams, triple antibiotic ointments, and allergy/sinus relief, are also necessary. Since there are other practitioners such as dentists, it is important to add antibiotics to the list, as their needs for anti-infectives may differ from other practitioners within the interdisciplinary team.

After the formulary has been developed, and the medications have been received, the medications are sorted based on drug class and a drug reference guide is written (1, 3). This reference guide is imperative because it provides the physicians and medical students with a source of medications that will be available on the trip (3). In addition to this, a list of the inventory must be constructed to report the medication brand/generic names, strength, indications, expiration date, and cost which will be submitted to Jamaica’s Ministry of Health one month prior to arrival (3, 9).

Upon arrival, all the medications have to be packaged as unit doses to increase ease of dispensing (10). This type of repetition becomes useful as space becomes limited during transportation to the clinic sites. Other supplies that are needed include: sandwich bags, storage totes, prescription vials, prescription labels, counting trays, dispensing record (used to document medications used), tape, scissors, pill cutters, mortars and pestles and trash bags (3).
Legal Issues Surrounding Importation of Medications
When developing the plan for any medical mission, it is essential to understand the policy associated with the importation of medications to your target area. The source of this information for Jamaica is listed in the Approval Process for Food, Drugs, Cosmetics, Medical devices, Precursor Chemicals and Narcotics, a paper developed by the Ministry of Health, Jamaica (9). It states that all medications to be imported must be written on a Blue Form (Figure) and the following information needs to be noted:
* All drugs imported should have valid registration with the Ministry of Health; therefore, drugs withdrawn from the market are not allowed.

* The trade and/or generic names along with their strengths and pack size should be clearly stated.
* The manufacturer and source country should be the same as in the official registration records.
* All drugs being imported should have expiration dates of not less than twelve to eighteen months.

Ethical and Quality of Care Issues
Short term, non-permanent medical mission interventions with a focus in diagnostics and acute care interventions lend themselves to challenges in the continuity of care. It is especially important to consider this when many of the diseases are chronic in nature, although they might have an

![Figure](image-url)

**MINISTRY OF HEALTH**
STANDARDS AND REGULATION BRANCH
PHARMACEUTICAL AND REGULATORY AFFAIRS UNIT
FOOD AND DRUGS ACT 1964
PERMIT APPLICATION FOR FOOD AND DRUGS
FORMS SHOULD BE TYPE WRITTEN OR COMPLETED IN BLOCK CAPITALS

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M.H.F.D. 19.

Figure: Form required for importation of medications. Adapted from the Standards and Regulation Division Ministry of Health. Volume 5, Section 5, Appendix 3.
acute presentation when seen by the medical mission team. These patients often lack access to healthcare. As a result, continuity of care and provider follow-up are rare. For this reason, selecting medications and the quantity to add to the formulary are critical to avoid discontinuation of treatment and serious adverse events (eg beta-blockers have serious cardiovascular implications if discontinued abruptly). Planning for multiple months of medication therapy, or to provide sufficient medication until the patient is able to see a local physician improves the efforts to provide quality care in the interim.

It is important to note that the same principles by which practitioners provide care in the United States of America should govern care in a target country. One way to achieve this is to provide patient education materials and appropriate patient counselling to improve understanding of therapeutic goals. The influence of a native culture greatly impacts the interventions by the medical team, as well as adherence to medications. Familiarity and sensitivity to the patient’s culture may improve decision-making and patient outcomes by increasing a patient’s trust in the healthcare team recommendations. Prior to departure on the medical mission, it would be beneficial to meet with practitioners who attended prior trips to discuss common cultural beliefs and health behaviours. Many of the attending practitioners grew up in Jamaica or were descendants of immigrants and are able to discuss ways to connect with the patients and how to address issues such as exercise, nutrition, use of alternative medicine and adherence to newly prescribed medications.

Post-trip assessment
Following the medical mission, it is imperative to assess which drugs were utilized most frequently, identify unused medications and those that will expire prior to the next mission. If you plan to return to the same location, this can help gauge medication formulary and budget for future trips. Careful documentation of medications that would have been beneficial to patient care, serve as a “wish list” for ordering medications (eg albuterol inhalers) and creating a budget for the following year. Identifying items that are in greater need at various sites (eg if different sites may have a more specialized population such as only children) also helps to determine how to allot for medication use on a daily basis or between sites. Having sufficient quantities of the medications to serve patients at the clinic sites is essential; nothing is worse than limiting or shifting quantities of medications from one site, only to find out the next site did not share the same level of need.

CONCLUSION
Careful planning and preparation are required for the medical mission to Jamaica to be a success; assistance and cooperation is necessary from all members of the interdisciplinary medical mission team. Identifying the treatment needs, as well as the equipment and supplies necessary to provide care must also be taken into consideration for budgeting, planning and transportation. Background research and identification of the major conditions or disease states in the areas of service are important for the development of the medication formulary. Proper documentation facilitates importation of the supplies by allowing for a smooth transition through customs. It is imperative to plan ahead, be organized and still be prepared to handle unexpected situations so that high quality care can be given and effective treatment accessed by the patients to be served.

REFERENCES