

Final Project Report

Implementation of OTC/Herbal Self Care Medication Service in Community Pharmacy Settings

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Abstract

The purpose of this project was to improve the communication between patients and pharmacists regarding OTC/herbal medication selection and to use, and to promote pharmacists' self care consultations as "valuable services" to patients. The primary goal of the project was to evaluate patients' utilization of OTC/herbal medications and pharmacists' advice regarding these products. The secondary goal of the project was to study the impact of a structured OTC/herbal consultation service on patients' willingness to pay for the services and utilize pharmacists' advice when purchasing OTC/herbal medications.

The methodology for the project involved the provision of a structured OTC/herbal consultation to patients at the OTC/herbal aisles of three pharmacies in the Washington, DC area. The three study pharmacy sites were comprised of an independent, chain, and mass merchant pharmacy. Patients were recruited within the pharmacy via display posters and at the point of purchase of OTC/herbal products. After the completion of the consultation, participants completed a post-consultation questionnaire similar to the pre-consultation survey in order to assess the impact of the consultation provided. Participants also completed a satisfaction questionnaire to assess the consultation service. The project included three study phases, conducted over two months each, totaling 6months of study period. However, vouchers with the estimated value of the consultation service were provided to patients in an effort to place a value on the service provided. Fees were not charged to patients in any of the three phases.

There were over 200 participants in all three phases and pharmacy sites. However, many more patients received the consultation without participating in the study. The result of the study showed that patients were willing to seek pharmacists' consultation on OTC/herbal product and pay for the services. The outcome of the study provides useful insight on the practicality for payment of OTC/herbal consultation services by patients in community pharmacy settings.

Brief Introduction

Survey results by the National Council on Patient Education (NCPIE) reported that only four in ten patients (43 percent) consult with community pharmacists when purchasing nonprescription medicines, and over half of the patients reported the concurrent use of nonprescription and prescription drugs simultaneously¹. In addition, the increasing use of prescription medications, over-the-counter (OTC), and herbal medications, as well as the fact that more than half (57%) of the 3.5 billion health problems treated annually are treated with OTC medications necessitates the importance of pharmacists' involvement in the self care medication selection by patients². Limited literature is available on the implementation of specialized OTC/herbal services in community pharmacies and on the impact of pharmacists' intervention in self-care medication advisement.

Pharmacists' consultation with patients regarding OTC medications may help to circumvent drug misadventures such as: drug-OTC/herbal interactions, overuse of OTC/herbal products, OTC/herbal-disease contraindications that may lead to adverse effects, or even death. Likewise, herbal supplements, such as garlic and ginkgo biloba are among the of top selling dietary supplements that are highly contraindicated in patients taking oral anticoagulants and could be fatal if taken without the consult of a pharmacist².

Objectives/Goals

The primary goal of the project was to evaluate patients' utilization of OTC/herbal medications and pharmacists' advice. The objectives were to assess the project participants' current utilization of OTC/herbal products and pharmacists' advisement with their purchases. The secondary goal of the project was to study the impact of a structured OTC/herbal consultation service on patients' use of pharmacists' advice. The objectives were to assess the impact of the intervention on: patients' perception of pharmacists as self care experts, patients' willingness to pay for consultation service, and patient's satisfaction of the service.

Methods

All Phases

The methodology for the project involved the provision of a structured OTC/herbal consultation to patients at the OTC/herbal aisles of three pharmacies per study phase. The project is designed as pre-post prospective study. The Howard University Institutional Review Board approved the project and informed consent prior to the initiation of the study phases. The project was completed over the span of three phases, at two months each and eight hours per week. A total of 5 pharmacies participated in the study; however, 2 of the pharmacies in phase 1 were dropped due to low patient enrollment. The follow characterizes the make up of the pharmacy types in the phases: Phase 1- Walmart Pharmacy, Comcare Pharmacy, Rite Aid pharmacy #1; Phase 2- Rite Aid Pharmacy #1, Rite Aid Pharmacy #2, Brookville Pharmacy; and Phase 3- Rite Aid Pharmacy #1, Rite Aid Pharmacy #2, Brookville Pharmacy. Visible signage and displays were

placed at the pharmacy area for easy patient viewing. Patients were recruited at the point of OTC/herbal purchase along the OTC/herbal aisles in the pharmacy and/or the pharmacy register. All interested patients 18 years or older were eligible to participate in the project. The project participants initially signed an informed consent and release form for permission to participate in the project. Patients were then asked for permission to release their information to his/her healthcare provider; and to use the acquired information for research purposes. Upon consent from the participants, demographical and pharmaceutical care information were then gathered. The pharmaceutical care information requested from patients included: symptoms, medication history, disease condition, pregnancy/lactating status, allergies, etc. The form served as the clinical documentation of the pharmacists' self care treatment intervention. The pattern of OTC/herbal medication use and the demographic information of the participants were assessed. Participants completed a pre-consultation questionnaire regarding their perception of pharmacists as self-care experts, their use of pharmacists' expertise when purchasing OTC/herbal products, and their willingness to pay for the service. Patients were given a voucher that corresponded to the value of the consultation, based on the content and duration of the service rendered on the average pharmacy hourly wage of \$40 per hour in the Washington, DC metropolitan area. Upon the completion of the questionnaire, the consultation was held at the OTC/herbal aisles with each patient. After which, project pharmacists referred patients to: 1) their physician, 2) self care treatment along with instruction, or 3) no self care treatment in accordance with the assessment of patient interview and presented symptoms. Upon completion of the consultation, patients complete post-consultation questionnaire similar to the pre-consultation form. The completion of the questionnaires was conducted in a semi-private area at the pharmacy adjacent to the prescription area for confidentiality and practicability reasons.

Phase 1 (March - April 2005)

All patients in the phase completed the initial project questionnaires and were compensated \$5 each for their participation in the project.

Phase 2 (May – June 2005)

All patients in the phase completed modified project questionnaires that were shortened in length to increase patient enrollment. Personal information such as name, phone number was considered optional in order to decrease the apprehension experienced by some patients in the completion of the forms. Also, the incentive amount of \$5 was increased to \$10 to increase patient enrollment.

Phase 3 (July – August 2005)

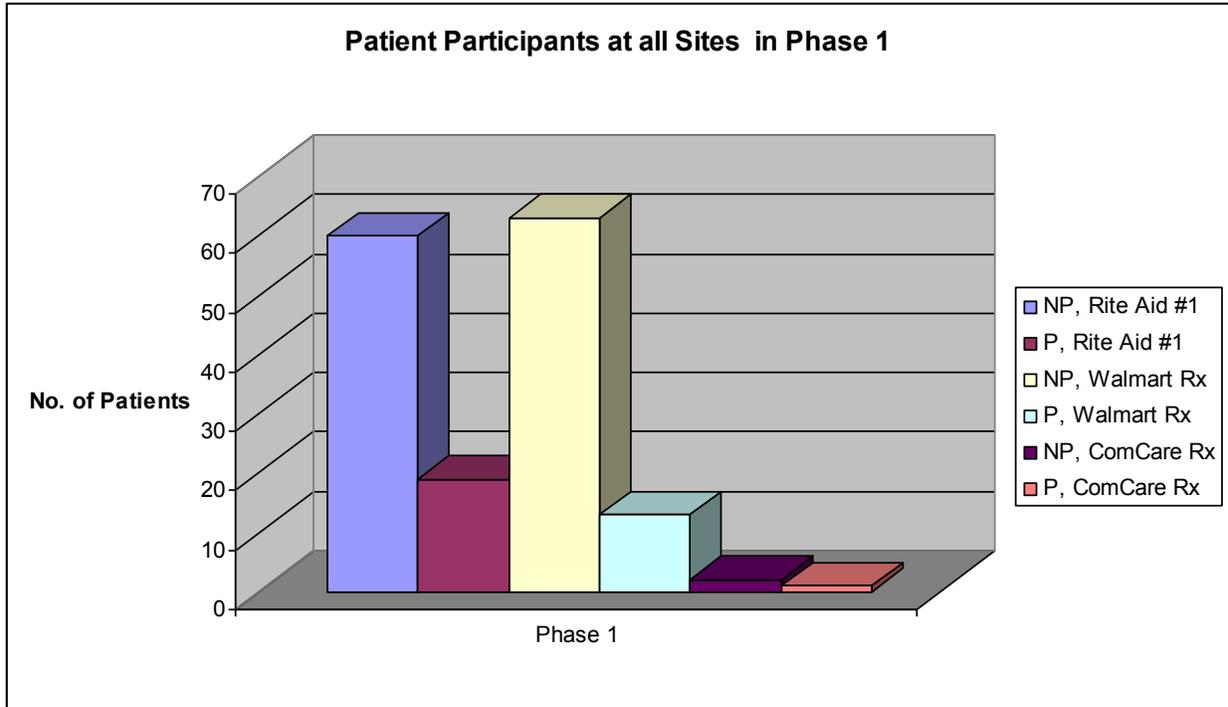
All patients in the phase completed modified project questionnaires that were shortened in length to increase patient enrollment. Personal information such as name, phone number was considered optional in order to decrease the apprehension experienced by some patients in the completion of the forms. Patients were not compensated in this phase in an effort to attribute a value to the consultation service and to assess their appraisal of the pharmacist's consultation.

Project Site Pictures



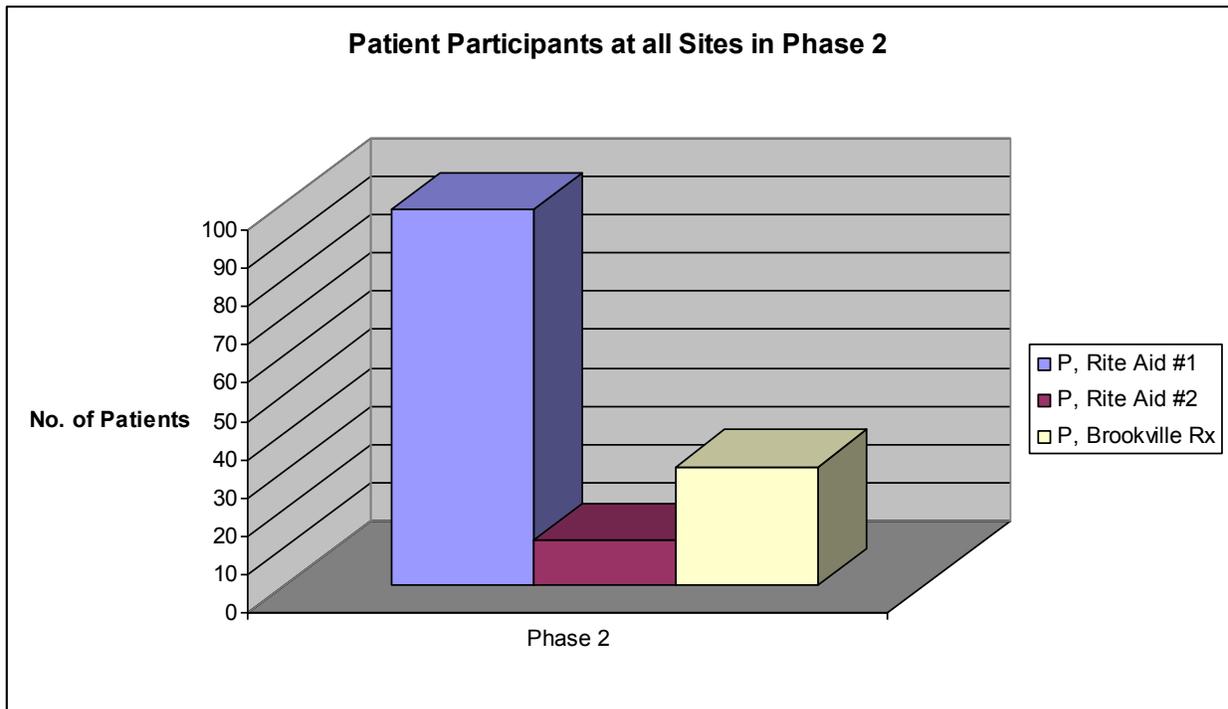
Preliminary Results

Phase 1



Graph 1: NP- represents patients that received consultation in the project, but refused to participate in the study via completion of consent form and other questionnaires. P- represents patients that participated in the study and completed all study forms. **ComCare Rx**-is an independent pharmacy

Phase 2

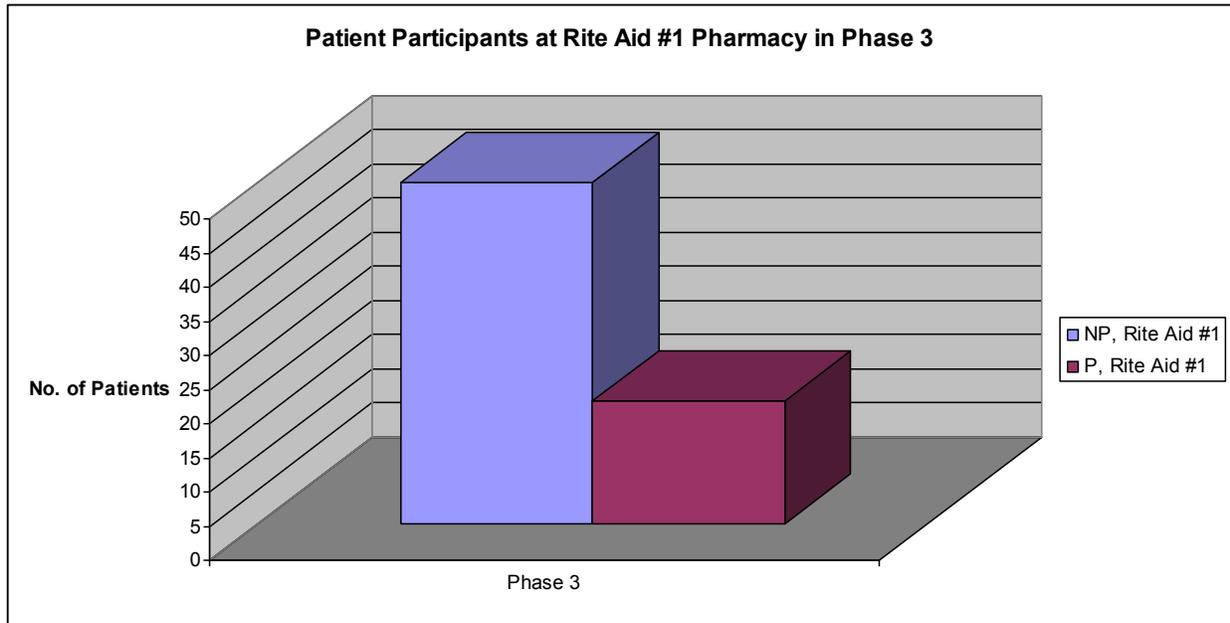


Graph 2: P-represents patients that participated in the study and completed all study forms.

Brookville Rx- is an independent pharmacy.

Phase 3

The results and analysis for phase 3 is pending.



Graph 3: **NP**- represents patients that received consultation in the project, but refused to participate in the study via completion of consent form and other questionnaires. **P**- represents patients that participated in the study and completed all study forms.

The following is a general description of the ethnic background and socioeconomic level of the study participants across all sites:

Phase 1	Phase 2	Phase 3
Rite Aid #1- mostly African-American, middle class	Rite Aid #1- mostly African-American, middle class	Rite Aid #1- mostly African-American, middle class
Walmart Rx- mostly Caucasian, middle class	Rite Aid #2- mostly Caucasian, middle class	Rite Aid #2- mostly Caucasian, middle class
ComCare Rx- mostly African-American, middle class	Brookville Rx- mostly Caucasian, upper class	Brookville Rx – mostly Caucasian, upper class

Key Preliminary Findings:

- Phase 1: Patients were statistically more willing to seek pharmacists' consultation after the intervention (study consultation) compared to pre-intervention assessment.
- Phase 2: Patients were statistically more willing to allow insurance to be billed for a pharmacist's OTC/herbal consultation service after the study consultation
- Phase 2: Patients were statistically more willing to pay money for the services after the study consultation
- Phase 3: Patients were statistically more willing to spend time and money for the services after the study consultation

Discussion

Although the data analysis is still in progress, the preliminary results show a positive tendency towards patients' willingness to spend time and money for the pharmacist's consultation. There were several limitations in the study that were identified such as: length of patient time required to complete forms; patients' concerns regarding confidentiality via releasing of personal information; patients' literacy and English language skills.

Conclusion

There was a high level of interest regarding pharmacist consultation OTC/herbal products. However, patients were less willing to participate in the study component due to privacy concerns and time to participate. Nevertheless, patients were statistically more willing to seek pharmacists' consultation; more willing to spend time and money for the services after the study consultation was provided. It is therefore suitable to state that pharmacists have unique opportunity in the community pharmacy settings to optimize patients' use of OTC/herbal medications.

References:

1. Uses and attitudes about taking over-the-counter medicines: Findings of a 2003 National Opinion Survey Conducted for the National Council on Patient Information and Education. Available at: www.bemedwise.org. Accessed 11/30/2005.
2. Dietary supplement fact & figures (Statistics). Consumer Healthcare Products Association Website, Available at: www.chpa-info.org. Accessed 11/30/2005.