

## ABSTRACT

To find successful interventions to improve GPP compliance, especially in registered pharmacies, is a pressing need in low income countries. The objectives of this study were to determine the knowledge on Good Pharmacy Practices of pharmacists, to assess current Good Pharmacy Practices, and to determine the effectiveness of an educational intervention to improve GPP compliance in public and private sector pharmacies.

The study comprised two components; component I involved the development of a check list to determine GPP compliance by pharmacies and the development of other data collection tools to assess knowledge of pharmacists in the public and private sectors in the Kurunegala and Kalutara districts of Sri Lanka. Component II comprised a quasi experimental study with a pre-test post-test design having a control group to determine the effectiveness of an educational intervention to improve compliance to GPP.

The check list and the questionnaires were developed with assistance from experts in the field. All registered private community pharmacies and OPD pharmacies of the public sector having a pharmacist and the pharmacists comprised the study population. A baseline survey to determine knowledge, self assessed competencies and compliance on GPP was carried out in pharmacies in the Kurunegala district (intervention area) and the Kalutara district (control area). The pharmacists of the intervention area were exposed to an educational intervention package consisting of a training workshop, distribution of an educational booklet on Good Pharmacy Practice and an interactive session. In developing the education materials steps were taken to make it simple and user friendly and to include subjects of practical importance in routine duties keeping the production cost at a minimum without affecting the quality of the educational materials. Six months after the intervention, a post-intervention assessment on GPP compliance using Good Pharmacy Practice Standards Compliance Check List (GPPSCCL) was carried out in both districts. Improvement of rating of the Good Pharmacy Practice standards compliance check list (GPPSCCL) developed in component I of the study was the principal outcome measure in the quasi-experimental study.

Baseline knowledge was 'poor' in the majority of pharmacists in both groups (mean scores; intervention group 42.0 and control group 39.4). Over 80% of pharmacists rated themselves as being 'competent' in carrying out tasks related to Good Pharmacy Practice. However, compliance on GPP showed that in the majority of pharmacies the compliance was 'poor'. Poor compliance was reflected even in areas such as the display of licence (intervention area - 45.5 % and control area - 65.9%) which is a mandatory requirement to operate a pharmacy. At the post-intervention assessment, most of GPP compliance areas in the intervention area showed a statistically significant improvement as compared to the pre-intervention assessment. There was a significant difference in compliance of most GPP areas between intervention and control groups post-intervention.

It can be concluded that the education intervention significantly improved compliance to some GPP areas. The intervention used in the present study was simple, low cost and carried out with easily with minimal interference to the routine duties of the pharmacists. Hence, as a developing country with pharmacists scattered throughout the island, due consideration should be given to shift from traditional institutional based training at the central level to providing continuing education at the local setting using feasible, cost effective methods such as seminars workshops and distance education modules.