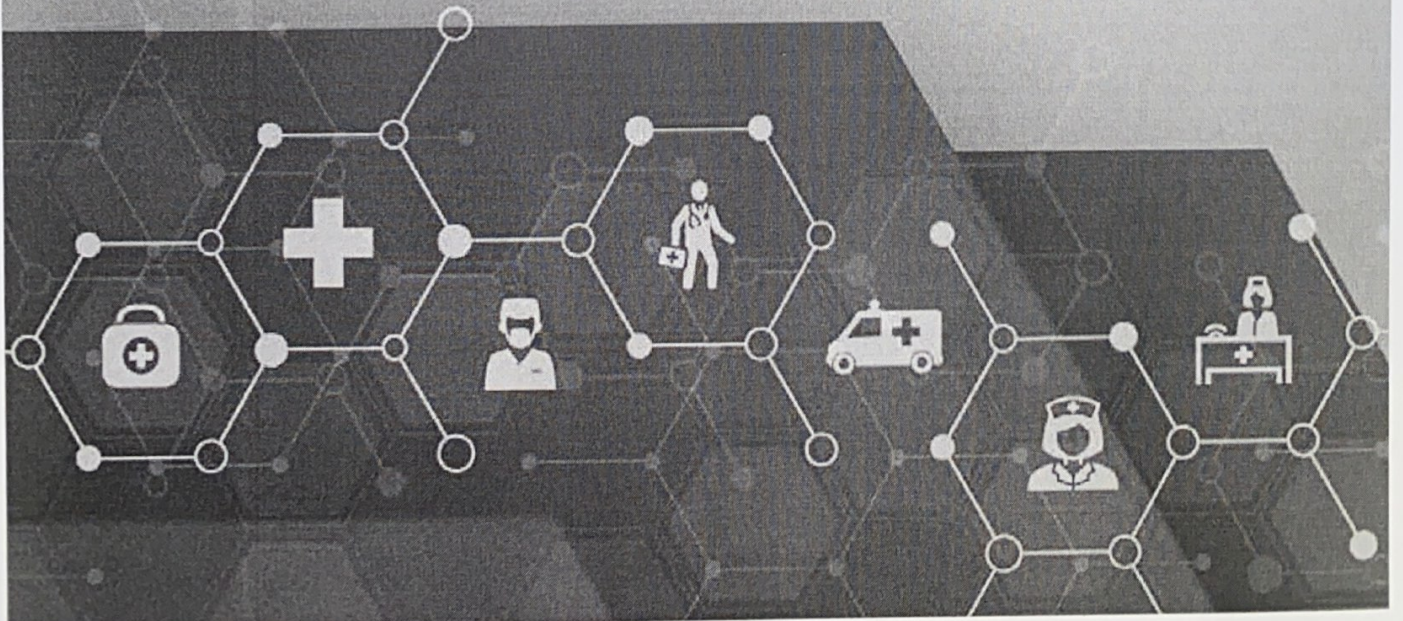


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Methods

A clinic based retrospective cohort study was conducted among patients initiated on ART at the NSACP till December 2019. WHO definition of an ADR was adopted. The data were gathered by the documented ADRs in the adverse drug reactions register from 2015- 2019. Causality, severity and preventability of each registered ADR was appraised using Naranjo's algorithm, modified Hartwig and Seigel scale, Shumock and Thorntom criteria, respectively. A structured data extraction format was used to collect data on socio demographic characteristics and management strategies.

Results

The cohort included 1028 patients of whom, 90(8.7%) developed ADRs. Notably, 68% of the patients who experienced ADRs were categorized as WHO 1A at commencement of treatment. Predominant ADR was hypersensitivity reactions (32%). Majority of ADRs were mild 59(65%) and 7% were severe. Only 2% of ADR were preventable. Most (58.8%), including all the severe ADRs occurred within 6 months of starting ART. From patients exposed to the corresponding drug, occurrence of ADRs were highest with Atazanavir (32.5%) followed by Raltegravir (9%) and Efavirenz(5.9%). Out of patients who developed ADR to Raltegravir, 75% had severe reactions requiring the drug to be stopped or substituted.

Conclusions

Findings indicate that there is a reasonable level of ADRs among PLHIV on ART. ADRs were observed more among asymptomatic PLHIV. There should be intensive monitoring for ADRs especially during the first 6 months of ART initiation.

PP 163

Prevalence and associations of polypharmacy among Sri Lankans: A hospital-based study

Mettananda KCD¹, Fernando RKR¹, Peiris HHI¹, Arangala DMP¹

¹Department of Pharmacology, Faculty of Medicine, University of Kelaniya

Introduction and Objectives

Polypharmacy is a global health problem but the prevalence in Sri Lanka is not known. Therefore, we studied the prevalence and associations of polypharmacy in Sri Lanka.

Methods

We conducted a cross-sectional study of all medical clinics of Colombo North Teaching Hospital from 15 August 2020 to 15 February 2021. 50 patients of each clinic were randomly selected. Data were collected using an interviewer-administered questionnaire by interviewing patients and perusing medical recodes. Polypharmacy was defined as being on five or more medications regularly for one month before enrolment. Data were analyzed using SPSS-22.

Results

504 patients; 215(42.7%) males, mean age 59.7±14.3 years were studied from 4 general-medical and 8 speciality clinics. 352(69.8%) were on polypharmacy. 159(46%) were on allopathic and complementary medicines. Polypharmacy prevalence was not different between general-medical (71.3%) and speciality clinics (69.2%), $p=0.67$. Prevalence was more in patients above 60 years (77.3%), $p<0.0001$. Polypharmacy was associated with diabetes (OR 3.3, $p<0.0001$), hypertension (OR 2.5, $p<0.001$), chronic kidney disease (OR 3.9, $p<0.0001$) and ischaemic heart disease (OR 3.3, $p<0.002$) but was not associated with gender (OR 1.1, $p=0.776$), dyslipidemia (OR 1.2, $p=0.407$) or stroke (OR 1.2, $p<0.521$).

Of patients on polypharmacy, 68(47.7%) were not complaining while others were worried due to different reasons; kidney/liver damage (46(13.1%)), high-cost (21(6.0%)), side effects (22(6.3%)), frustration (16(4.5%)). 72((20.5%) had more than one worry.

Conclusion

Polypharmacy is a common problem in this hospital-based urban/ semi-urban cohort of Sri Lankans and is more with old age, diabetes mellitus, hypertension, kidney disease and ischemic heart disease.

PP 164

Evaluation of α -amylase and α -glucosidase inhibitory potential in aqueous fruit extract of *Aegle marmelos* L. encapsulated alginate nanoformulation

De Silva WND¹, Attanayake AP¹, Arawwawala LDAM¹, Karunaratne DN¹ and Pamunuwa KMGK¹

¹Department of Biochemistry, Faculty of Medicine, University of Ruhuna, Sri Lanka

²Industrial Technology Institute, Sri Lanka

³Department of Chemistry, Faculty of Science, University of Peradeniya, Sri Lanka

⁴Department of Horticulture and Landscape Gardening, Faculty of Agriculture and Plantation Management, Wayamba University of Sri Lanka, Sri Lanka

Introduction and objectives

Development of phytotherapeutics using nanoencapsulation is a timely approach to enhance the antidiabetic activity. *Aegle marmelos* L. (Bael, Family: Rutaceae) has been used in complementary medicine with proven antidiabetic activity. A previous study confirmed that the 1 mg/mL concentration of *A. marmelos* showed the optimum encapsulation. The aim of this study was to determine the antidiabetic activity of aqueous fruit extract of *A. marmelos* encapsulated alginate nanoformulation in terms of α - amylase and α - glucosidase inhibitory potential in order to develop a phytotherapeutic agent with improved efficacy.

Methods

Dried fruit of *A. marmelos* was extracted with distilled water using ultrasonication (40°C, 30 min, 40 kHz) followed by refluxing (100°C, 2 ½ h). Ionic gelation method was used to design the nanoformulation. Nanoformulation was subjected to α - amylase and α - glucosidase inhibitory assays and compared with the reference compound acarbose.

Results

Encapsulated alginate nanoformulation showed IC₅₀ values of 5.87 ± 1.69 mg/mL and 0.60 ± 0.09 mg/mL for α - amylase and α - glucosidase assays respectively. The improvement in α - amylase and α - glucosidase activity was 55.37 % and 96.38 % with respect to the crude extract of *A. marmelos*.

Conclusions

These results indicate that encapsulation of *A. marmelos* aqueous fruit extract in alginate nanoformulation improves the antidiabetic activity in terms of α - amylase and α - glucosidase inhibitory potential which may be a good candidate for the development of phytotherapeutic agent targeting the management of diabetes mellitus.

PP 165

Association of depression, anxiety and stress among outpatients with rheumatoid arthritis at a tertiary care hospital in Sri Lanka< A cross-sectional study

Wijewardena T¹, Wijewantha S², Wijethunga N³, de Silva NL⁴, Fernando D¹

¹Faculty of Medicine, University of Colombo, Sri Lanka

²Faculty of Medicine, General Sir John Kotelawala Defence University, Ratmalana, Sri Lanka

Introduction and Objectives

Depression, anxiety, stress and their associated factors, in patients with rheumatoid arthritis show regional changes. Sri Lankan studies assessing the prevalence and associations of these factors are lacking. This study aims to find the prevalence of depression, anxiety and stress and associated factors.

Methods

A cross-sectional study was carried out at three rheumatology clinics at the National Hospital of Sri Lanka. A total of 118 participants were included in the study. Sociodemographic and clinical data including the Clinical Disease Activity Index (CDAI) was recorded using an interviewer-administered questionnaire. The validated Depression, Anxiety, Stress Scale-21 (DASS-21) tool was used. Analysis was done using descriptive analysis and chi-square.

Results

The prevalence of depression anxiety and stress was 50.93%, 95% CI (0.4183, 0.5987), 57.41%, 95% CI (0.4873, 0.6654) and 47.17%, 95% CI (0.3845, 0.5647) respectively. Most patients were in the moderate (39%) and high disease activity groups (36%). Increased prevalence of all three was observed with reduced functional status. Depression was observed among those > 60 years (p=0.035) and with CDAI >22.1 (p=0.004). Anxiety was observed with increased CDAI >22.1 (p=0.023). Stress was associated with unemployment (p=0.009) and morning stiffness > 60 minutes (p=0.001). Diabetes (p=0.016), ischemic heart disease (p= 0.042) and dyslipidemia (p=0.005) were adversely associated with depression. Anxiety was