INTRODUCTION
World Health Organization (WHO) estimates that there are 36.9 million people living with HIV in 2017 and Malaysia has about 72399 people living with HIV in 2017. 1,2 Pre-exposure prophylaxis is one of the effective methods of prevention of HIV and has been included as one of the preventive methods of HIV in National Strategic Plan of Ending AIDS 2016-2030. 3 Pre-exposure prophylaxis (PrEP) in HIV is defined as giving an antiretroviral (ART) drug to uninfected individual to prevent the acquisition of HIV in a healthy individual. 4 The antiretroviral that is used in PrEP is 300 mg of Tenofovir disoproxil fumarate (TDF) and 200 mg of Emtricitabine (FTC) taken daily also known as Truvada, and it has been added into the Malaysian Consensus Guidelines on Antiretroviral Therapy 2017. 4 Pre-exposure prophylaxis (PrEP) is one of the effective methods of preventing HIV which involves taking an antiretroviral medication daily by an uninfected individual. Pharmacists play an important role in implementing PrEP in Malaysia. However knowledge and perception among pharmacists in Malaysia on PrEP is still unknown. Hence it is important to assess the level of knowledge and perception of pharmacists towards PrEP.

OBJECTIVES
1. To assess the level of knowledge and perception of pharmacists towards PrEP
2. To assess the relationship between demographic data with knowledge level and perception level of pharmacists towards PrEP
3. To assess the relationship between knowledge and perception towards PrEP among pharmacists
4. To identify preferred training methods and preferred source of information on PrEP among pharmacists

METHOD
Cross-sectional, validated, self-administered 34-item questionnaire was carried out among 104 pharmacists from January 2020 until February 2020.

Phase 1: Questionnaire Development
The questionnaire was developed and consists of 4 sections with a total of 34 items, namely socio-demographic data (8 items), knowledge on PrEP (13 items), perception of pharmacists towards PrEP (10 items) and preferred training method and source of information on PrEP (3 items). A pilot study involving 30 pharmacists working in government hospitals in Selangor were done.

Phase 2: Data collection
A hard copy of the questionnaire was given to the pharmacist and collected by the investigator upon completion.

Phase 3: Data Analysis
Analysis done using IBM Statistical Package for Social Sciences (SPSS) version 24.0. Descriptive statistics were used to show the distribution of demographic characteristics, percentage score of PrEP knowledge and perception and preferred training method and source of information. Bloom’s cut-off were used to categorize knowledge and perception into good, fair and poor. Chi-square analysis was used to show the relationship and association between the variables (demographic, level of knowledge & perception, current HIV training). Correlation analysis was used to check the relationship between knowledge and perception among the pharmacists towards pre-exposure prophylaxis. Significance level is defined as p < 0.05.

For this study, an ethical approval (NMRR-19-3091-51222) was obtained from Medical Research Ethics Committee (MREC) and Clinical Research Centre (CRC).

RESULTS AND DISCUSSION
One hundred four (104) pharmacists responded with a majority were females (84.6%) and have experience in dealing with HIV patients (67.3%).

Overall, 46.2% of the respondent had low level of knowledge, and 15.4% had high level of knowledge. High level of knowledge was associated with pharmacists working in ward and those who had completed HIV related course in the past 2 years (62.6%, n = 34). While low level of knowledge was associated with pharmacists who had less than 1 year working experience (75.0%, n = 79) and those without experience with HIV patients.

The preferred training methods source of information on HIV PrEP and updates were through attending courses/workshop (56.7%) and through guidelines (66.3%). (Figure 1 and 2)

CONCLUSION
Pharmacists working in the hospital generally had a low level of knowledge towards PrEP in HIV with a fair level of perception and provided with appropriate training and resources they may improve their knowledge about PrEP and reduce their misconceptions towards PrEP.