**Search String**

“(hyperlipemia\* OR hyperlipidemia OR hyperlipidaemia OR hypercholesterolemia OR hypercholesterolaemia OR "High Cholesterol Level\*" OR "Elevated Cholesterol\*" OR "Hypercholesteremia\*" OR dyslipidemia OR dyslipidaemia OR dyslipoproteinemia\* OR lipidemia\* OR lipemia\*) AND ("Medication Adherence" OR "Drug Adherence" OR "Medication Nonadherence” OR "Medication Nonadherence" OR "Medication Noncompliance" OR "Medication Non-Adherence” OR "Medication Non Adherence" OR "Medication Persistence" OR "Medication Compliance" OR "Medication Non-Compliance" OR "Medication Non Compliance" OR "Drug Compliance" OR "Patient Compliance" OR "Patient Adherence" OR "Treatment Compliance\*" OR "Therapeutic Compliance" OR "Patient Non-Compliance" OR "Patient Non Compliance" OR "Patient Noncompliance" OR "Patient Nonadherence" OR "Non-Adherent Patient\*" OR "Non Adherent Patient\*" OR "Patient Non Adherence" OR "Treatment Adherence" OR "Therapeutic Adherence" OR adhere\* OR compliance) AND (GCC OR "Arab gulf" OR gulf OR "Gulf Cooperation Council" OR "United Arab Emirates" OR UAE OR Kuwait\* OR Qatar\* OR Bahrain\* OR Oman\* OR "Saudi Arabia" OR KSA OR Emirati\* OR Saudi\* OR "Gulf state" OR "Arabian gulf")”

**Supplementary table 1.** Results of the AXIS tool for each study

|  |  |
| --- | --- |
| **Questions** | **Studies** |
| *Allaham et al., 2022* | *Alwhaibi et al., 2019* | *Al-Foraih & Somerset, 2017* | *Al Shammeri et al., 2014* | *Arafah et al., 2019* |
| *Introduction* |
| 1. Were the aims/objectives of the study clear?
 | Yes  | Yes | Yes | Yes | Yes |
| *Methods* |
| 1. Was the study design appropriate for the stated aim(s)?
 | Yes  | Yes | Yes | Yes | Yes |
| 1. Was the sample size justified?
 | Yes | No | Yes | No | No |
| 1. Was the target/reference population clearly defined? (Is it clear who the research was about?)
 | Yes | Yes | Yes | Yes | Yes |
| 1. Was the sample frame taken from an appropriate population base so that it closely represented the target/reference population under investigation?
 | Yes | Yes | Yes | Yes | Yes |
| 1. Was the selection process likely to select subjects/participants that were representative of the target/reference population under investigation?
 | No  | No | No | No | No |
| 1. Were measures undertaken to address and categorise non-responders?
 | No  | Not applicable | No | No | No |
| 1. Were the risk factor and outcome variables measured appropriate to the aims of the study?
 | Yes  | Yes | Yes | Yes | Yes |
| 1. Were the risk factor and outcome variables measured correctly using instruments/measurements that had been trialled, piloted, or published previously?
 | Yes | Yes | Yes | Yes | No |
| 1. Is it clear what was used to determine statistical significance and/or precision estimates? (e.g. p-values, confidence intervals)
 | Yes  | Yes | Yes | Yes | Yes |
| 1. Were the methods (including statistical methods) sufficiently described to enable them to be repeated?
 | Yes | Yes | Yes | Yes | No |
| *Results* |
| 1. Were the basic data adequately described?
 | Yes  | Yes | Yes | Yes | Yes |
| 1. Does the response rate raise concerns about non-response bias?
 | Not applicable | Not applicable | Yes | Yes | Not applicable |
| 1. If appropriate, was information about non-responders described?
 | No | Not applicable | No | No | No |
| 1. Were the results internally consistent?
 | Yes  | Yes | Yes | Yes | Yes |
| 1. Were the results presented for all the analyses described in the methods?
 | Yes  | Yes | Yes | Yes | Yes |
| *Discussion* |
| 1. Were the authors' discussions and conclusions justified by the results?
 | Yes  | Yes | Yes | Yes | Yes |
| 1. Were the limitations of the study discussed?
 | Yes  | Yes | No  | Yes | Yes |
| *Other* |
| 1. Were there any funding sources or conflicts of interest that may affect the authors’ interpretation of the results?
 | No | Yes | Don’t know (Not reported) | Don’t know (Not reported) | No |
| 1. Was ethical approval or consent of participants attained?
 | Yes  | Yes | Yes | Don’t know (Not reported) | Yes |
| **Score** | 84% | 82% | 70% | 65% | 63% |