

## MO-21

### Development of an “app” to assist management of mushroom poisoning

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**Objective:** To develop a database-driven application (“app”) running on iOS to assist in provision of management advice for mushroom poisoning.

**Methods:** Data on the classification of mushroom poisoning, clinical features and treatment of mushroom poisoning, associated diagnostic algorithms and taxonomic identification were sourced from files previously developed within our department. An outline framework for key information classification into heading types was developed, allowing the development of an “app” using FileMakerPro database software, written to run on iOS on an iPadPro. Once the first version of the “app” was completed and tested as running as expected, the master version was populated with the existing data, sourced as above, to produce a fully functioning “app”.

**Results:** The current version of the “app” functions as planned. Layout 1 provides information on each of the current 21 groups and subgroups of mushroom poisoning, accessed through a series of 7 “tabs” (overview; mushrooms; toxins; clinical; treatment; diagnostic; literature), each providing immediate access to fields relevant to the “tab” heading, with scrolling through fields with large amounts of text. Dedicated function “buttons” at the top of the page allow immediate access to other sections of the “app”; these include the diagnostic algorithm, mushroom species records and mushroom poisoning literature. The diagnostic algorithm section allows easy progression through the algorithm, designed to assist in determining the most likely type of mushroom poisoning based on clinical features, for cases where the identity of the consumed mushrooms is uncertain. The mushroom species records can contain details of individual mushroom species, including diagrammatic keys to identification. The literature section allows incorporation of publishing details for papers, complete abstracts and notes on the publication and can also hold pdf copies of the entire publication, if desired. A separate section provides a system for recording mushrooms involved in cases of poisoning, with diagrammatic assistance in logging key taxonomic features, which can then be used to compare with existing species records. The iPadPro can take photos of mushrooms being logged and these are uploaded into the relevant record.

**Conclusion:** This “app” has been developed to assist the clinical toxinologists in our dept. when they are consulted on cases of mushroom poisoning, providing rapid and easy access to key information. The “app” will continue to be developed and progressively populated with mushroom identification data and relevant literature, with a view to making it available widely in the future.