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AIMS AND SCOPE

Alpha Psychiatry is an international, scientific, open access periodical published in accordance with independent, unbiased, and double-blinded peer-review principles. It is an online-only journal owned by AVES and published biannually in January, March, May, July, September, and November. The publication language of the journal is English.

Alpha Psychiatry is a peer-reviewed general psychiatry journal. The aim of the journal is to contribute to science by publishing high quality publications of scientific and clinical significance. For this purpose, original research articles, invited reviews and letters to the editor are published in all fields of psychiatry and other areas related to mental health.

The scope of the journal includes but not limited to all areas of psychiatry, basic and clinical neuroscience and behavioral sciences.

The target audience of the journal includes psychiatrists, mental health workers, neuroscientists and researchers who are interested or working in all fields of medicine.

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An approval of research protocols by the Ethics Committee in accordance with international agreements (World Medical Association Declaration of Helsinki “Ethical Principles for Medical Research Involving Human Subjects,” amended in October 2013, www.wma.net) is required for experimental, clinical, and drug studies and for some case reports. If required, ethics committee reports or an equivalent official document will be requested from the authors. Submission which do not have ethical approval will be reviewed according to COPE’s Research, Audit and Service Evaluations guideline. Such manuscripts can be rejected after editorial review due to the lack of ethics committee approval.

For manuscripts concerning experimental research on humans, a statement should be included that written informed consent of patients and volunteers was obtained following a detailed explanation of the procedures that they may undergo. It is the authors’ responsibility to protect the patients’ anonymity carefully. For photographs that may reveal the identity of the patients, signed releases of the patient or their legal representative should be enclosed, and the publication approval must be provided in the Methods section.

For studies carried out on animals, an approval research protocols by the Ethics Committee in accordance with international agreements (Guide for the care and use of laboratory animals, 8th edition, 2011” and/or “International Guiding Principles for Biomedical Research Involving Animals, 2012”) is required. Also, the measures taken to prevent pain and suffering of the animals should be stated clearly in such studies.

Information on patient consent, the name of the ethics committee, and the ethics committee approval number and date...
should also be stated in the Methods section of the manuscript.

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Data Fabrication: It is the addition of data that never occurred during the gathering of data or the experiments. Results and their interpretation must be based on the complete data sets and reported accordingly.

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2. Drafting the work or revising it critically for important intellectual content; AND
3. Final approval of the version to be published; AND
4. Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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The manuscripts should be prepared in accordance with ICMJE-Recommendations for the Conduct, Reporting, Editing, and Publication of Scholarly Work in Medical Journals (updated in December 2019 - http://www.icmje.org/icmje-recommendations.pdf). Authors are required to prepare manuscripts in accordance with the CONSORT guidelines for randomized research studies, STROBE guidelines for observational original research studies, STARD guidelines for studies on diagnostic accuracy, PRISMA guidelines for systematic reviews and meta-analysis, ARRIVE guidelines for experimental animal studies, and TREND guidelines for non-randomized public behavior.

Manuscripts can only be submitted through the journal's online manuscript submission and evaluation system, available at https://alphapsy.manuscriptmanager.net/. Manuscripts submitted via any other medium and submissions by anyone other than one of the authors will not be evaluated.

Manuscripts submitted to the journal will first go through a technical evaluation process where the editorial office staff will ensure that the manuscript has been prepared and submitted in accordance with the journal’s guidelines. Submissions that do not conform to the journal’s guidelines will be returned to the submitting author with technical correction requests.

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- Copyright Agreement and Acknowledgement of Authorship Form, and
- ICMJE Potential Conflict of Interest Disclosure Form (should be filled in by all contributing authors) during the initial submission. These forms are available for download at www.alpha-psychiatry.com.
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Title Page: A separate title page should be submitted with all submissions and this page should include:

- The full title of the manuscript as well as a short title (running head) of no more than 50 characters,
- Name(s), affiliations, highest academic degree(s), and ORCID iDs of the author(s),
- Grant information and detailed information on the other sources of support,
- Name, address, telephone (including the mobile phone number), and email address of the corresponding author,
- Acknowledgment of the individuals who contributed to the preparation of the manuscript but who do not fulfill the authorship criteria.

Abstract: An abstract should be submitted with all submissions except for Letters to the Editor. The abstract of Original Articles should be structured with subheadings (Objective, Methods, Results and Conclusion). Please check Table 1 for word count specifications.

Keywords: Each submission must be accompanied by a minimum of three to a maximum of five keywords for subject indexing at the end of the abstract. The keywords should be listed in full without abbreviations. The keywords should be selected from the National Library of Medicine, Medical Subject Headings database (https://www.nlm.nih.gov/mesh/MBrowser.html).

Main Points: All submissions except letters to the editor should be accompanied by 3 to 5 “main points” which should emphasize the most noteworthy results of the study and underline the principal message that is addressed to the reader. This section should be structured as itemized to give a general overview of the article. Since “Main Points” targeting the experts and specialists of the field, each item should be written as plain and straightforward as possible.

Manuscript Types

Original Article: This is the most important type of article since it provides new information based on original research. Acceptance of original papers will be based upon the originality and importance of the investigation. The main text of original articles should be structured with Introduction, Methods, Results, and Discussion subheadings. Please check Table 1 for the limitations for Original Articles. In a study that requires ethical reporting, the information about the ethics committee approval and financial disclosure should be included in the text.

Clinical Trials

Alpha Psychiatry adopts the ICMJE’s clinical trial registration policy, which requires that clinical trials must be registered in a publicly accessible registry that is a primary register of the WHO International Trials Registry Platform (ICTRP) or in ClinicalTrials.gov.

Instructions for the clinical trials are listed below.

- Clinical trial registry is only required for the prospective research projects that study the relationship between a health-related intervention and an outcome by assigning people.
- To have their manuscript evaluated in the journal, author should register their research to a public registry at or before the time of first patient enrollment.
- Based on most up to date ICMJE recommendations, Alpha Psychiatry accepts public registries that include minimum acceptable 24-item trial registration dataset.
- Authors are required to state a data sharing plan for the clinical trial registration. Please see details under “Data Sharing” section.
- For further details, please check ICMJE Clinical Trial Policy at www.icmje.org

Data Sharing

As of 1 January 2019, a data sharing statement is required for the registration of clinical trials. Authors are required to provide a data sharing statement for the articles that reports the results of a clinical trial. The data sharing statement should indicate the items below according to the ICMJE data sharing policy:

- Whether individual deidentified participant data will be shared
- What data in particular will be shared
- Whether additional, related documents will be available
- When the data will be available and for how long
- By what access criteria will be shared

Table 1. Limitations for each manuscript type

<table>
<thead>
<tr>
<th>Type of manuscript</th>
<th>Word limit</th>
<th>Abstract word limit</th>
<th>Reference limit</th>
<th>Table limit</th>
<th>Figure limit</th>
</tr>
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<tbody>
<tr>
<td>Original Article</td>
<td>4000</td>
<td>350 (Structured)</td>
<td>30</td>
<td>6</td>
<td>5 or total of 10 images</td>
</tr>
<tr>
<td>Invited Review Article</td>
<td>5000</td>
<td>350</td>
<td>75</td>
<td>6</td>
<td>10 or total of 15 images</td>
</tr>
<tr>
<td>Letter to the Editor</td>
<td>400</td>
<td>No abstract</td>
<td>5</td>
<td>No tables</td>
<td>No media</td>
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</tbody>
</table>
Authors are recommended to check the ICMJE data sharing examples at http://www.icmje.org/recommendations/browse/publishing-and-editorial-issues/clinical-trial-registration.html

While submitting a clinical trial to Alpha Psychiatry,

• Authors are required to make registration to a publicly accessible registry according to ICMJE recommendations and the instructions above.
• The name of the registry and the registration number should be provided in the Title Page during the initial submission.
• Data sharing statement should also be stated in the Title Page even the authors do not plan to share it.

Clinical trial and data sharing policy of the journal will be valid for the articles submitted from 1 January 2021.

Reporting Statistical Analysis
Statistical analysis to support conclusions is usually necessary. Statistical analyses must be conducted in accordance with international statistical reporting standards (Altman DG, Gore SM, Gardner MJ, Pocock SJ. Statistical guidelines for contributors to medical journals. Br Med J 1983; 7; 1489-93). Information on statistical analyses should be provided with a separate subheading under the Materials and Methods section and the statistical software that was used during the process must be specified. For further information on presenting statistical analysis, please see AMA Manual of Style section 19.0.

Units should be prepared in accordance with the International System of Units (SI).

Invited Review Article: Authors who have extensive knowledge on a particular field and whose scientific background has been translated into a high volume of publications with a high citation potential are invited by the journal to prepare an invited review on a specific topic in psychiatry. All invited review articles will also undergo peer review before acceptance. Invited reviews should describe, discuss, and evaluate the current knowledge of a topic in clinical practice and guide future studies. The subheadings of the review articles should be planned by the authors. However, each review article should include an “Introduction” and a “Conclusion” section. Please note that unsolicited review submissions will not be evaluated. Please check Table 1 for the limitations for Invited Review Articles.

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Tables should be included in the main document, presented after the reference list, and they should be numbered consecutively in the order they are referred to within the main text. A descriptive title must be placed above the tables. Abbreviations used in the tables should be defined below the tables by footnotes (even if they are defined within the main text). Tables should be created using the “insert table” command of the word processing software and they should be arranged clearly to provide easy reading. Data presented in the tables should not be a repetition of the data presented within the main text but should be supporting the main text.

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Figures, graphics, and photographs should be submitted as separate files (in TIFF or JPEG format) through the submission system. The files should not be embedded in a Word document or the main document. When there are figure subunits, the subunits should not be merged to form a single image. Each subunit should be submitted separately through the submission system. Images should not be labeled (a, b, c, etc.) to indicate figure subunits. Thick and thin arrows, arrowheads, stars, asterisks, and similar marks can be used on the images to support figure legends. Like the rest of the submission, the figures too should be blind. Any information within the images that may indicate an individual or institution should be blinded. The minimum resolution of each submitted figure should be 300 DPI. To prevent delays in the evaluation process, all submitted figures should be clear in resolution and large in size (minimum dimensions: 100 × 100 mm). Figure legends should be listed at the end of the main document.

All acronyms and abbreviations used in the manuscript should be defined at first use, both in the abstract and in the main text. The abbreviation should be provided in parentheses following the definition.

When a drug, product, hardware, or software program is mentioned within the main text, product information, including the name of the product, the producer of the product, and city and the country of the company (including the state if in USA), should be provided in parentheses in the following format: “Discovery St PET/CT scanner (General Electric, Milwaukee, WI, USA)”
All references, tables, and figures should be referred to within the main text, and they should be numbered consecutively in the order they are referred to within the main text.

Limitations, drawbacks, and the shortcomings of original articles should be mentioned in the Discussion section before the conclusion paragraph.

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Both in-text citations and the references must be prepared according to the AMA Manual of style.

While citing publications, preference should be given to the latest, most up-to-date publications. Authors are responsible for the accuracy of references. If an ahead-of-print publication is cited, the DOI number should be provided. Journal titles should be abbreviated in accordance with the journal abbreviations in Index Medicus/MEDLINE/PubMed. When there are six or fewer authors, all authors should be listed. If there are seven or more authors, the first three authors should be listed followed by “et al.” In the main text of the manuscript, references should be cited in superscript after punctuation. The reference styles for different types of publications are presented in the following examples.


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When submitting a revised version of a paper, the author must submit a detailed “Response to the reviewers” that states point by point how each issue raised by the reviewers has been covered and where it can be found (each reviewer’s comment, followed by the author’s reply and line numbers where the changes have been made) as well as an annotated copy of the main document. Revised manuscripts must be submitted within 30 days from the date of the decision letter. If the revised version of the manuscript is not submitted within the allocated time, the revision option may be canceled. If the submitting author(s) believe that additional time is required, they should request this extension before the initial 30-day period is over.

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EDITORIAL

Artificial Intelligence as a Psychiatric Diagnostic Tool Instead of DSM

In the present era, a lack of laboratory tests or neuroimaging methods for the diagnosis of psychiatric disorders remains a pressing issue. For this purpose, rapid developments in technology usher success in several branches of medicine and accelerate diagnostic processes. Recent advances in Artificial Intelligence (AI) have widened the distance between psychiatry and other medical branches in terms of diagnosis. Highly successful applications of AI have been reported in medical fields such as dermatology, radiology, and pathology, owing to a substantial amount of accumulated data and the ease of its inclusion in machine learning processes.\(^1\),\(^2\)

Hence, the question arises: can we use AI for the diagnosis of psychiatric disorders? Conduction of psychiatric diagnosis is based on the data obtained during interviews with individuals with psychiatric disorders. These data are revealed by anamnesis, psychiatric history, and mental state examination. The diagnosis is performed by combining information on the symptoms and the findings obtained after conduction of the interview and by comparing them with the diagnostic criteria such as Diagnostic And Statistical Manual Of Mental Disorders (DSM) or International Statistical Classification of Diseases and Related Health Problems (ICD). Thus, AI exhibits potential applicability in psychiatric disorder diagnosis. AI can help reveal symptoms and signs associated with psychiatric disorders more successfully than experiments conducted by humans in certain areas. This observation may seem incompatible with our current findings. To understand an individual, it is imperative to establish a therapeutic relationship with them. As a matter of fact, thus far, machines have not demonstrated the establishment of such a relationship compared to that successfully established by humans. Furthermore, a question arises: can machines collect data on symptoms and signs of psychiatric disorders with the same efficiency as that exhibited by humans? For a long time now, sensors and tools such as smartphones and watches have been used to collect data not only for our psychiatric evaluation but also for the acquisition of physiological and behavioral information. These data provide an important resource for AI applications and help establish a process known as digital phenotyping.

To decipher whether machines can collect data on symptoms and signs of psychiatric disorders with the same efficiency as that collected by humans, it would be useful to mention the sub-branches of AI. Machine learning is one of the most commonly known branches of AI. It can be defined as learning by experience, especially with the help of substantial amounts of data. Machine vision is defined as the field of perception, which involves the visualization of data in formats such as images or videos or by direct visualization in the real world. Examples such as the recognition of emotions or recognition of hand gestures can be used to describe machine learning. Natural language processing, in contrast, is defined as the branch of artificial intelligence involved in the understanding of natural language. For example, symptoms such as autonomic hyperactivity, anxiety, increased heart rate, respiratory rate, or facial flushing can be determined remotely without establishing contact using machine vision techniques and AI. Furthermore, hand and arm movements, the harmony or dissonance of these movements, and the frequency and speed of the movements can be determined and compared with the previous data obtained for the individual. The use of natural language processing can help provide valuable information about speech. Patterns that may be associated with psychiatric disorders can be identified by evaluating both the content of speech and physical processes related to speech. As a result, AI can be used to evaluate the basic data involving speech characteristics and images of those with psychiatric disorders. Using AI, a comparison between previous
records of patients and their current data can be deduced rapidly. For example, findings such as an increase or a decrease in the speech rate of the patient compared to the data obtained in the previous interview or an increase or decrease in emotions based on a certain direction in his gestures can be determined rapidly. Therefore, evaluation of patients with mood disorders using AI may be faster and more accurate than an evaluation performed by a psychiatrist. Furthermore, prediction of the occurrence of a manic or psychotic attack or a suicide attempt can only be determined by using AI.\(^5\)

Along with mood disorder symptoms, a few other symptoms and findings as per DSM criteria can also be easily determined by using AI applications, for example, disorganized speech, disorganized behavior, and stereotypic behavior involved in psychotic disorders or autonomic hyperactivity observed in patients with anxiety disorders.

Currently, there are two main approaches of AI applications in psychiatric disorder diagnosis. The first approach relies on the collection of speech, image, or video data of several patients diagnosed with certain psychiatric disorders, with subsequent labeling of the patients with a diagnosis of the disorder and comparison with healthy individuals without that disorder.\(^5\) In this approach, machine learning applications can help identify patterns that cannot be identified by doctors and can aid subsequent diagnosis using the data obtained as a result of learning. This approach is referred to as supervised learning. In other words, it is defined as machine learning enabled by disorder diagnosis information. In the unsupervised learning type, no labeling is performed using any patient diagnosis. Thus, the application of machine learning techniques will aid the clustering or grouping of those with psychiatric disorders with the help of the patterns noted. The most important advantage of this approach is that psychiatric disorders artificially grouped in the DSM system thus far can be grouped in a more rational manner.

The second diagnostic approach, as mentioned above, relies on the automation of the diagnostic work performed based on the traditional DSM criteria with AI applications. As all criteria in DSM cannot be evaluated by machines, they should be considered as supportive to the diagnosis initially. A marked limitation of this approach is that an important part of the DSM criteria is evaluated by question-answer, subjective assessment, or cognitive assessment, and this involves common sense. Nonetheless, AI applications can be performed using inputs such as laboratory findings, neuroimaging, or hospital records and can help enrich diagnostic processes by performing pattern analysis.\(^5\)

Furthermore, AI-based applications, which are increasingly being used in the field of psychiatry, offer another important advantage in psychiatric diagnosis and patient follow-up. Examination or psychiatric evaluation need not be performed in a hospital or a doctor’s office. The cameras, microphones, or other types of sensors that patients place in their homes or workplaces can be used to evaluate their condition 24 hours a day, 7 days a week. This approach facilitates the follow-up of patients who have been diagnosed, who have been prescribed with medication, and who are under follow-up. Using this approach, day-to-day sleep problems, sleep times, speech and movement rates, behavioral patterns, anxiety periods, panic attacks, and mood changes can be monitored almost on a minute-by-minute basis and continuous comparison can be performed with the previous data. Additionally, the problems associated with the treatment and the hours of medication usage can be monitored. Using this approach, conditions such as the onset of a manic episode, worsening mood, or insomnia can be determined in advance. These systems can provide information to the patient, the psychiatrist, and the relatives of the patients via text messages or e-mails. This information is sent to the patient’s psychiatrist and relatives, as limiting these applications only to those with psychiatric disorders is not correct. Detection of sudden or negative changes in the mental state will also be advantageous in emergency and critical situations.
As AI applications are gradually being boosted the field of psychiatry, further research is warranted to solve the ethical problems we may encounter in the future. One major problem is that the machines will gain the ability to diagnose independently of doctors and the diagnosis will be performed irrespective of the location or the timing. Another problem is associated with the authorization of the individual to access these data. Hence, a question arises: will data be accessible to government agencies, insurance companies, or employers?

As a result, AI-based applications have been initiated to aid psychiatric diagnosis. One must ask: are we ready for an objective diagnosis of psychiatric disorders by machines in the future? The aim is to develop fully automatic psychiatric diagnostic applications and research in this direction has already commenced.

References

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