Workshop on
Increasing Awareness on Predatory Academic Practices

Date: 22nd February, 2022, Tuesday
Time: 7.00 PM – 9.00 PM (GMT+6)

Muhammad Anisuzzaman Talukder, PhD
Professor, EEE, BUET
Director, RISE, BUET
Content of Speech

✓ General Introduction
  • About Scientific Journals
  • Publishing Process
  • Different types of publication
  • A survey on predatory academic practices

✓ Predatory Journals
  • About Predatory Journals
  • Signs of Predatory Journals
  • Indexed Journals
  • Some Renowned Publishers
  • Bangladesh in Predatory Practices

✓ Predatory Conferences

✓ Combating Predatory Practices
Scientific Journals

✓ Scientific journal is a **periodical publication** intended to the progress of science, usually by reporting new research.

✓ Articles in scientific journals are mostly written by active scientists such as students, researchers and professors.

✓ Scientific journals contain articles that have been **peer reviewed**, to ensure that articles meet the journal's **standards of quality**, and **scientific validity**.

**Scopes:**

• Can be used in **research** and **higher education**.

• Allow researchers to keep **up to date with the developments** of their field and direct their **own research**.

• An essential part of a scientific article is **citation of earlier work**. The impact of articles and journals is often assessed by counting citations.

**Classification:**

• **original articles** reporting completely new results

• **reviews** of current literature.
The authors submit the paper to the journal office.

Then the editor considers the paper for appropriateness, potential scientific impact and novelty.

If the journal's editor considers the paper appropriate, the paper is submitted to scholarly peer review. Depending on the field, journal and paper, the paper is sent to 1–3 reviewers for evaluation.

Reviewers are expected to check:
- the paper for soundness of its scientific argument,
- whether the author(s) are sufficiently acquainted with recent relevant research that bears on their study,
- whether the data was collected or considered appropriately and reproducibly,
- whether the data discussed supports the conclusion offered and the implications suggested.
- existing work must be appropriately considered and referenced, and new results improving on the state of the art presented.

If everything is fine then published otherwise sent to the author for revision or rejected.
Types of Publications

**Research notes** are short descriptions of current research findings that are considered less urgent or important than *Letters*.

**Letters** (also called *communications*) are short descriptions of important current research findings that are usually fast tracked for immediate publication.

**Articles** are complete descriptions of current original research findings.

**Supplemental articles** contain a large volume of tabular data, descriptions of routine procedures, derivations of equations, source code, non-essential data, spectra or other such miscellaneous information. Some journals now only publish this data electronically on the Internet.

**Review articles** accumulate the results of many different *articles*, provide information about the topic and also provide journal references to the original research. Reviews may be entirely narrative, or may provide quantitative summary estimates resulting from the application of meta-analytical methods.

**Data papers** dedicated to describe datasets, e.g. *Scientific Data* and *Earth System Science Data*.

**Video papers** recent addition of scientific publications. An online video demonstration of a new technique or protocol combined with a rigorous textual description
**Nature, 2019:**

“Predatory journals and publishers are entities that prioritize self-interest at the expense of scholarship and are characterized by:

1) false or misleading information
2) deviation from best editorial and publication practices
3) a lack of transparency, and/or the use of aggressive and indiscriminate solicitation practices.”

**Taylor & Francis, 2015:**

Predatory Journals damage the scholarly journal publishing value chain

Image source: https://www.slideshare.net/TaylorandFrancis_Africa/predatory-journals-and-the-impact-on-the-scholarly-publishing-community-final-presentation
Signs of Predatory Journals

✓ Promises **quickest** publication-guarantees publication in **24 hours**
✓ Produces “**garbage**” research
✓ Acceptance without peer-review or with poor editing and proof-reading

✓ **Unknown** publisher-claims to be in a country of Western origin.
✓ Aggressive/unprofessional sometimes “**flattering**” emails, often using gmail/yahoo account, requesting to submit manuscript or serve on editorial board.

✓ **FALSE claim** on Indexing, and memberships in COPE, DOAJ or International committees.
✓ **FAKE EDITORIAL BOARD !!!**
✓ **FAKE IMPACT FACTOR !!!**
  ✓ **Crappy** Website !!!
  ✓ **Misleading** information.
  ✓ Title says “**International**”, “**Global**”
**Signs of Predatory Journals: Fake Impact Factor**

**Fake Impact Factors**

- Authors publish articles mistakenly believing that their work is in an impact factor journal.
- Predatory journals advertise their bogus impact factors.
- Companies make up and sell impact factors to open-access journal publishers (love this!!)

Source: Dr. Charlie Irvin, University of Vermont
Results from a survey on Predatory Academic Practices

Over 90% think predatory practices should be combatted

- to preserve the integrity of, and public trust in, research
- to ensure that research informing policy is rigorous

Over 80% perceive that predatory practices are a serious problem or on the rise in their country of work.

Total Participants 1872
Total Countries 112

Image source: https://www.interacademies.org/project/predatorypublishing
Indexed journals are considered to reflect high-quality content and peer-review standards than journals that are not. Popular Journal Indexing Agencies:

- Scopus
- PubMed
- DOAJ
- WoS/Clarivate M JL

Most non-indexed journals may have one or more predatory practices.
Some Renowned Publishers

Science and Engineering Disciplines

- APS (American Physical Society)
- ACS (American Chemical Society)
- OSA (The Optical Society)
- IOP (Institute of Physics)
- Taylor & Francis
- Wiley
- Springer
- Nature
- Elsevier
- Cambridge University Press
- Oxford University Press
- IEEE
17 journals from Bangladesh are indexed in the Scopus database.

<table>
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<th>Journal Name</th>
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<th>Quartile</th>
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<tr>
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<td>Journal of Health, Population and Nutrition</td>
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<td>02</td>
<td>Journal of Naval Architecture and Marine Engineering</td>
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<td>03</td>
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<td>04</td>
<td>Bangladesh Journal of Plant Taxonomy</td>
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<tr>
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<td>11</td>
<td>Journal of Mechanical Engineering Research and Developments</td>
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<td>Bangladesh Medical Research Council Bulletin Open Access</td>
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<tr>
<td>13</td>
<td>Chemical Engineering Research Bulletin Open Access</td>
<td>0.107</td>
<td>Q4</td>
</tr>
<tr>
<td>14</td>
<td>Journal of Medicine (Bangladesh)</td>
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<td>Q4</td>
</tr>
<tr>
<td>15</td>
<td>Bangladesh Journal of Obstetrics and Gynaecology</td>
<td>0.102</td>
<td>Q4</td>
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<tr>
<td>16</td>
<td>Journal of Islamic Economics, Banking and Finance</td>
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Source: Scientific Bangladesh, 2019
9 journals from Bangladesh are indexed in the Clarivate Master Journal List.

<table>
<thead>
<tr>
<th>SI No.</th>
<th>Journal Name</th>
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<tbody>
<tr>
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<td>BANGL J PHARMACOL</td>
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<td>3</td>
<td>BANGL J PLANT TAXON</td>
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<td>4</td>
<td>J HEALTH POPUL NUTR</td>
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<tr>
<td>1</td>
<td>BANGLADESH J MED SCI</td>
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<tr>
<td>2</td>
<td>BANGLADESH J OTORHIN</td>
</tr>
<tr>
<td>3</td>
<td>J ADV VET ANIM RES</td>
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<tr>
<td>4</td>
<td>J FISH</td>
</tr>
<tr>
<td>5</td>
<td>J NAV ARCHIT MAR ENG</td>
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</table>
Countries with the highest number of publications in Predatory and Fake Journals, with their number of publications!

- India: 2592
- Nigeria: 1216
- Turkey: 932
- China: 892
- Saudi Arabia: 888
- Indonesia: 872
- Iran: 816
- Egypt: 792
- Malaysia: 763
- Japan: 707
- Pakistan: 605
- Bangladesh: 603
- Brazil: 552
- Kenya: 471
- Morocco: 461
- UK: 405
- Ethiopia: 391
- Japan: 336
- South Korea: 328
- South Africa: 320

Increasing Awareness on Predatory Academic Practices (Dr. Muhammad Anisuzzaman Talukder)
Publication in Predatory Journals

Why Researchers publish in predatory journals?

✓ Researchers get their desired services
✓ Faster, easier or cheaper option
✓ No fear of rejection or thorough revision
✓ Lack of awareness
✓ Need to advance their career
✓ Sometimes encouraged by their peers

Why it is important to make awareness?

✓ to preserve the integrity of, and public trust in research
✓ to ensure that research informing policy is rigorous

If left unchallenged what will happen?

✓ It will fuel misinformation in public policy
✓ Will undermine the research enterprise
✓ Widen the research gap between high income and low income countries
Where NOT to Publish Your Research?

– Predatory Journals and Conferences (Dr. Mainul Hossain)

- Poor websites
- Dead links
- Use of unauthorized and unlicensed images
- Republish papers that are already published elsewhere
In 2005, 3 MIT graduate students developed “SCIgen,” a program that randomly generates nonsensical computer-science papers, complete with realistic-looking graphs, figures, and citations.

Their work was accepted as a non-reviewed paper to the World Multiconference on Systemics, Cybernetics and Informatics (WMSCI), a conference known for “being spammy and having loose standards.”

✓ Definition: scam for profit conferences that exploit an academic’s need for recognition or an audience

✓ In 2017, predatory conferences outnumbered legitimate ones

✓ Conferences are BIG BUSINESS—advertising fake agendas and high prices

✓ Follow no editorial standards
Predatory Conferences: An Example

Increasing Awareness on Predatory Academic Practices (Dr. Muhammad Anisuzzaman Talukder)

2017 >80 WASET Conferences Acceptance letter says peer reviewed
2020 > 120 WASET Conferences

Predatory Conferences
- May or may not exist
  - Pay to present: registration; presentation
- If do exist
  - Dizzying array of topics
  - Not accredited
  - Skimp or skip peer review
  - May also scam for the hotel

Source: Dr. Noni McDonald, Department of Pediatrics, Dalhousie University and IWK Health Center
Predatory Conferences: A Quick Checklish

1. Conference title seems overly ambitious—“global”, “international”
2. Technical program very broad esp when your area expertise is in different area
3. Language on conference website—grammar, spelling, how written
4. Renowned organization sponsoring a low profile conference ....check out sponsor page carefully
5. Missing contact details or these are vague or peculiar
   www.cardiology.conferences.com
6. Name /organization mimic of much better known conference or professional society
7. Check if sponsor is also predatory journal publisher – Omics has ++++ fake/dubious conferences
8. What fees being charged ? Is registration very high – more than would expect ?
9. Too many conferences in short time period ......5 full “peads society” conf in one year !
10. Contact for meeting does not come from a professional society but via email

Source: Dr. Noni McDonald, Department of Pediatrics, Dalhousie University and IWK Health Center
Perils of Predatory Publishing

- Mislead scientists-corrupting the scientific culture of peer-review
- Longer term reputation and career prospects sacrificed for immediate gains
- Permanent stain on your academic reputation
- Waste of money and effort- work disregarded by the academic community
- Medical science is most vulnerable with potential risks to human lives
- It provides easy pathway for promotions and accolades for incompetent and unethical academic denying opportunities to better qualified and well deserved researchers

If peer review is no longer the standard.
- Reproducibility of results can be questioned.
- How can you judge scientific quality.
- We'll lose confidence in scientific integrity.

If integrity of science comes into question.
- Fake News => Accepted News
- Fake Science => Accepted Science
- -> Societal consequences of both

Confidence in science is in jeopardy
Fight Against the Predatory: What we need to do

The Ottawa Hospital

Researchers need to be educated on how to identify predatory journals and avoid submitting work to these unscrupulous outlets.

Research institutions need to provide incentives for their researchers to publish in legitimate journals.

Funding agencies need to audit where research they are funding is being published and disincentivize further submissions to predatory journals.

Stakeholders must apply pressure to ensure that the studies are published in the best possible outlets; they can also help identify publications in predatory journals that support ‘fake’ science.

The Price for ‘Predatory’ Publishing? $50 Million

The Federal Trade Commission accused Omics International, a publisher in India, of operating hundreds of questionable scientific journals. A federal judge agreed.

The FTC Is Cracking Down on Predatory Science Journals

The FTC is suing predatory journal publishing company, OMICS Group, for tricking fees and deceiving researchers. It’s a first for the largely unregulated industry.

Increasing Awareness on Predatory Academic Practices (Dr. Muhammad Anisuzzaman Talukder)
## Fight Against the Predatory: Some Selected Database

<table>
<thead>
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<td>Chemistry</td>
<td>Subscription</td>
<td>Bibliographic information and abstracts</td>
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<td>Multidisciplinary</td>
<td>Free</td>
<td>Indexing, full text</td>
</tr>
<tr>
<td>Google Scholar</td>
<td>Google</td>
<td>Multidisciplinary</td>
<td>Free</td>
<td>Ranking, full text</td>
</tr>
<tr>
<td>IEEE Xplore</td>
<td>IEEE</td>
<td>CSE, Engineering</td>
<td>Subscription</td>
<td>Indexing and abstract</td>
</tr>
<tr>
<td>JSTOR: Journal Storage</td>
<td>JSTOR</td>
<td>Multidisciplinary</td>
<td>Free &amp; subscription</td>
<td>Indexing, abstracts, full text</td>
</tr>
<tr>
<td>PubMed</td>
<td>National Institutes of Health &amp; the U.S. National Library of Medicine</td>
<td>Biomedical</td>
<td>Free</td>
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Fight Against the Predatory: Journal Metric

- **Journal Impact Factor**

- **CiteScore**

- **Source Normalized Impact Per Paper (SNIP)**

- **Scimago Journal Rank (SJR)**

- **Eigen Factor (EF)**

- **Article Influence Score (AIF)**

**Impact factor** = \( \frac{\text{number of citations in last two (02) years}}{\text{number of publications in the last year}} \)

**CiteScore** = \( \frac{\text{number of citations in last four (04) years}}{\text{number of publications in the last 04 year}} \)

**SNIP** = \( \frac{\text{citation count per paper}}{\text{citation potential in the subject field}} \)

**SJR** = \( \frac{\text{citations to journal}}{\text{number of documents published}} \)

- **Similar to SJR, calculated over 05 years period**

- **Similar to IF, but calculated using ES**
Impactful Research is more important than Journal Impact Factor and Quality over Quantity

Thank You