

# The Integration of Artificial Intelligence in Literature Review and Its Potentials to Revolutionise Scientific Knowledge Acquisition

Presented by

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Being a Seminar Paper Delivered During the Faculty Seminar Series, @ Faculty of Basic Medical Sciences, Lagos State University Complex, Ikeja on Tuesday 30<sup>th</sup> April, 2024.

# About me

- Registered Community Health Practitioner since 1996.
- Dignitary Member of International Academic and Research Consortium, Kenya.
- Fellow of the Institute of Management Specialist, London.
- Fellow of the Institute of Management Consultancy, Nigeria.
- Professional Member of QUVAE Research and Publications, India.
- An Examiner and Marker for Community Health Practitioners Registration Board of Nigeria (CHPRBN).
- Public Health researcher with special interest in maternal and child health, family planning, and adolescent health.
- Member of African Reproducibility Network.
- Member of African Community for Systematic Review and Meta-Analysis, Rwanda.



# Presentation Outline

1. Introduction.
2. Literature review process
3. How AI can enhance Literature Review.
4. The Benefits of AI in Literature Review.
5. Types of AI used in Literature Review.
6. The Future of AI in Literature Review.
8. Addendum: The use of Scholarcy AI in Literature Review.
9. Addendum: The use of SciSpace AI in Literature Review.
10. Conclusion

# Disclaimer

- This seminar cannot not cover all aspects of AI tools.
- By sharing some AI tools is not an endorsement.

# Introduction

- Artificial Intelligence (AI) is a branch of computer science that focuses on creating intelligent machines that can perform tasks that typically require human intelligence, such as **learning**, **problem-solving**, and **decision-making**.
- Literature review (LR) is a crucial component of the research process.
- LR involves examining and analysing previously published works related to a particular research topic or question.
- The aim of a LR is to **identify gaps in knowledge**, **establish the current state of research in a particular field**, and **provide a foundation for future research**.

## Introduction (Cont'd)

- Integrating AI in literature review can significantly enhance the process and potentially revolutionise scientific knowledge acquisition.
- AI can automate the search and analysis of literature, resulting in **improved efficiency**, **increased accuracy**, and **reduced bias**.
- The significance of integrating AI in literature review cannot be overstated as it has the potential to change the landscape of research and discovery.

# Literature Review Process

- The traditional LR process involves a manual search and analysis of relevant published works.
- It typically involves **selecting databases**, **identifying keywords**, and **manually reviewing search results** to identify relevant literature.
- The selected literature is then read and analysed to extract relevant information, which is then synthesised into a coherent narrative.
- The process is **time-consuming** and **subject to human bias**, resulting in incomplete searches and inadequate coverage of literature.
- The volume of literature available can make it difficult for researchers to keep up with the latest research findings.
- These challenges highlight the need for a more efficient and effective way of conducting literature reviews, which is where AI comes in.

# How AI can Enhance Literature Review

- AI can automate various aspects of the LR process, including **search**, **selection**, **analysis**, and **synthesis** of relevant literature.
- AI-powered tools can automatically **search and analyse vast amounts of literature in a matter of minutes**, **identifying relevant publications based on a given set of criteria**, such as keywords or specific journals.

# The Benefits of AI in Literature Review

- Increased efficiency and accuracy.
- Reduced human bias.
- Improved coverage of literature.
- With AI, researchers can conduct more comprehensive and up-to-date LRs, enabling them to identify gaps in knowledge and uncover new research questions.
- AI can help researchers to extract key information from articles and synthesise it into meaningful insights, facilitating the process of developing new hypotheses and theories.

# Types of AI used in Literature Review

- Cramly.ai: This is a rewriting AI tool.
- Quillbot: This is an AI tool for Paraphrasing. Copy, Paste and click Rephrase.
- Spinbot: This is just like Quillbot, i.e. a Paraphraser.
- GPT-minus 1: This is a tool for Paraphrasing. Copy, Paste and Paraphrase with Synonyms.
- ChatGPT: This is an assistive AI tool for academic work.
- Samwell.ai: This is an assistive AI tool for writing academic papers.

## Types of AI used in Literature Review (Cont'd)

- Explain paper: This is an AI tool for understanding literature. Highlight a particular word or phrase in the paper and it will explain it fully.
- Paper digest: This is an AI tool for LR. It summarises papers in few seconds. Click the DOI of the paper and click to Digest.
- Chatdoc.com: This tool is used for LR. Type in your question based on the paper uploaded and it does the rest for you.
- Humata.ai: Ask question based on your paper and the AI tool will summarise the paper for you.

## Types of AI used in Literature Review (Cont'd)

- Semantic scholar: This is an AI tool for understanding a paper at a glance. It extracts meaning and identifies connections from within papers.
- Connected papers: This is a unique, visual tool to support researchers find and explore papers relevant to their field of interest, for creating bibliography, discovering most relevant papers, and making sure an important paper is not missed.
- Research rabbit.ai: It works like Connected papers. It links papers.
- Dimensions ai: This is an AI tool that summarises paper.
- Chisquares.com: This is a powerful AI tool that effortlessly collects and analyses data. It could be used for collaborative researches.

## Types of AI used in Literature Review (Cont'd)

- Elicit.com: This is an AI tool for full LR because it summarises and has a lot of columns for reviewing papers.
- Scholarcy.com: This is an Article summariser and Flashcard generator.
- Scispace ai: This is used for Paraphrasing, LR, and Summarising paper.
- Scite.ai: This AI tool is used for summarising research papers, in-text citations, etc.
- Wordtune read.ai: This requires you to upload your pdf paper and it will do the summary.

## Types of AI used in Literature Review (Cont'd)

- Litmaps.com: This is an AI tool used for searching relevant papers for LR. It could be used to find research gaps in various papers.
- Open Knowledge maps.org: Get an **overview** of a research topic, **find** Open Access papers, **identify** relevant concepts, and **separate** the wheat from the chaff, using this AI tool.
- Citefast: This is an AI tool used for Citation and Referencing. Copy the title of the paper and paste it to search.
- MyBib: This AI tool is also used for referencing. Copy the title of the paper and paste to search, save and download.

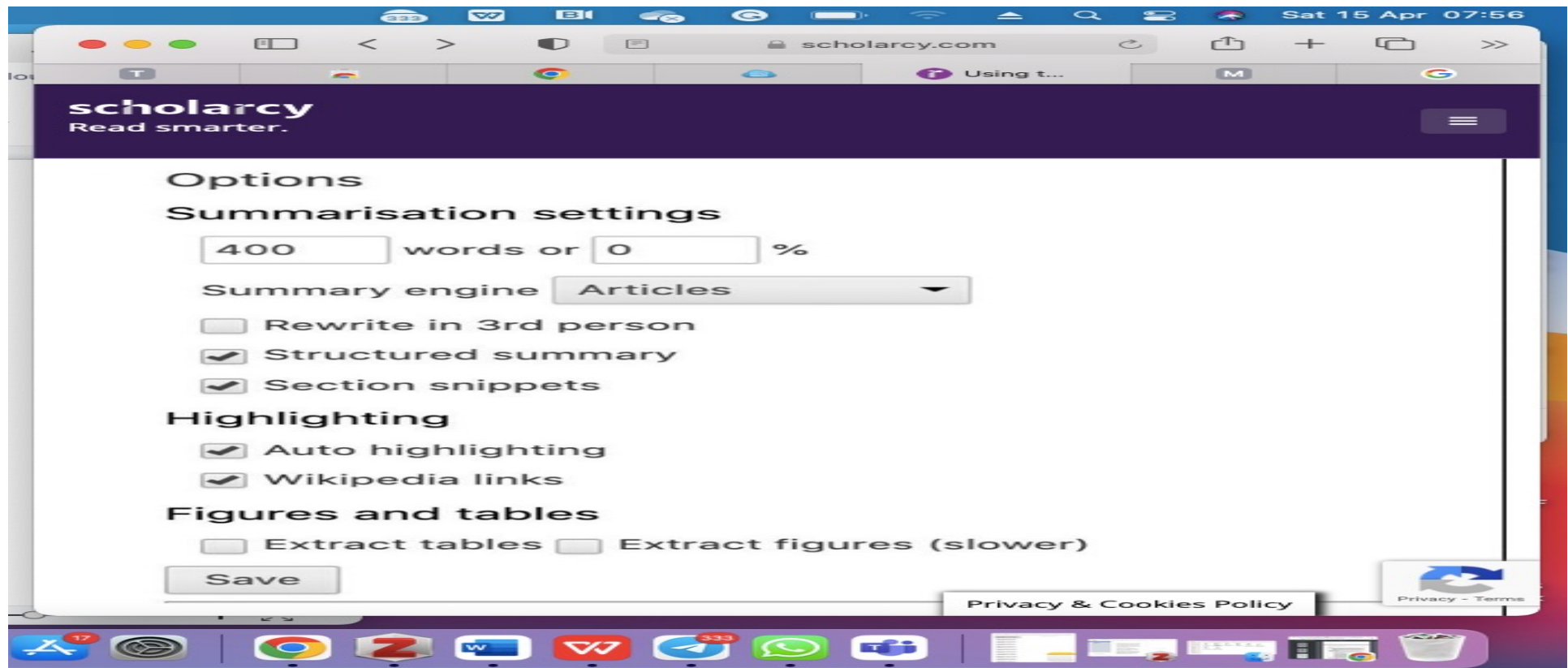
# Future of AI in Literature Review

- The future of AI in LR is promising, with several emerging trends that have the potential to transform the way researchers acquire knowledge.
- One such trend is the use of deep learning models for LR tasks, such as text classification and sentiment analysis.
- These models can extract meaning from text more accurately and efficiently than traditional methods, enabling researchers to conduct more comprehensive and precise LRs.

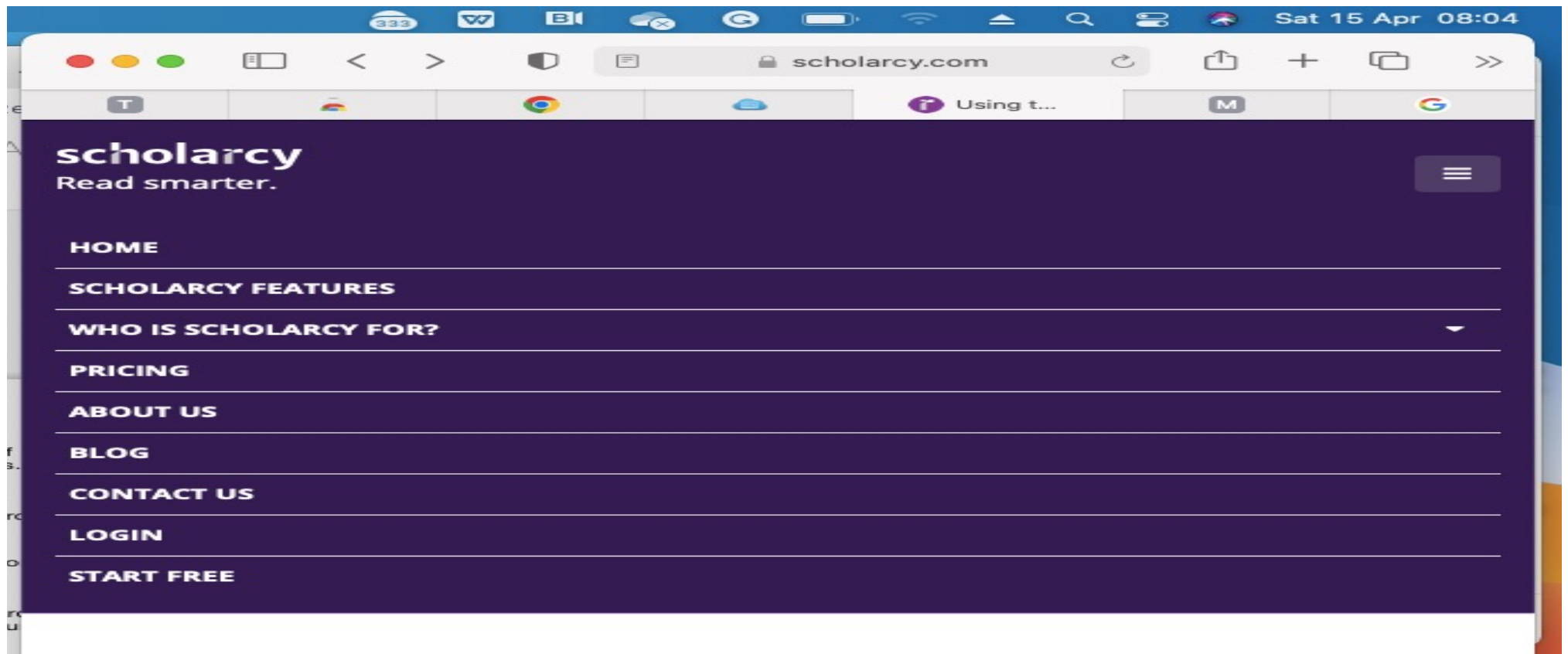
## Future of AI in Literature Review (Cont'd)

- Another emerging trend is the use of knowledge graphs, which are structured representations of knowledge that enable researchers to explore relationships between concepts and identify new research opportunities.
- Knowledge graphs are particularly useful for LR tasks that require researchers to synthesise information from multiple sources and identify patterns in the data.
- While AI has the potential to significantly enhance the LR process, it is unlikely to replace traditional review processes entirely.
- Rather, AI is more likely to be used in conjunction with human expertise, with researchers using AI tools to automate routine tasks and free up time for more complex analysis and synthesis.

# Addendum: Scholarcy - Read Smarter



# Accessing Scholarcy



# Scholarcy Research Paper Summariser

## Features

- **Summarisation settings:** This sets the length of the Scholarcy summary section of the flashcard. You can choose to have a summary with a fixed word limit set by the words option, or as a fraction of the original document set by the % option.
- **Summary engine:** This can be set to articles, which gives a good result for a broad range of documents, or books/chapters, which tends to work better for book chapters and longer texts.
- **Rewrite in 3rd person:** This rewrites the Scholarcy summary section into a neutral third person (for example 'The authors' results suggest ...') to make it easier to quote from and reference sections of the paper.

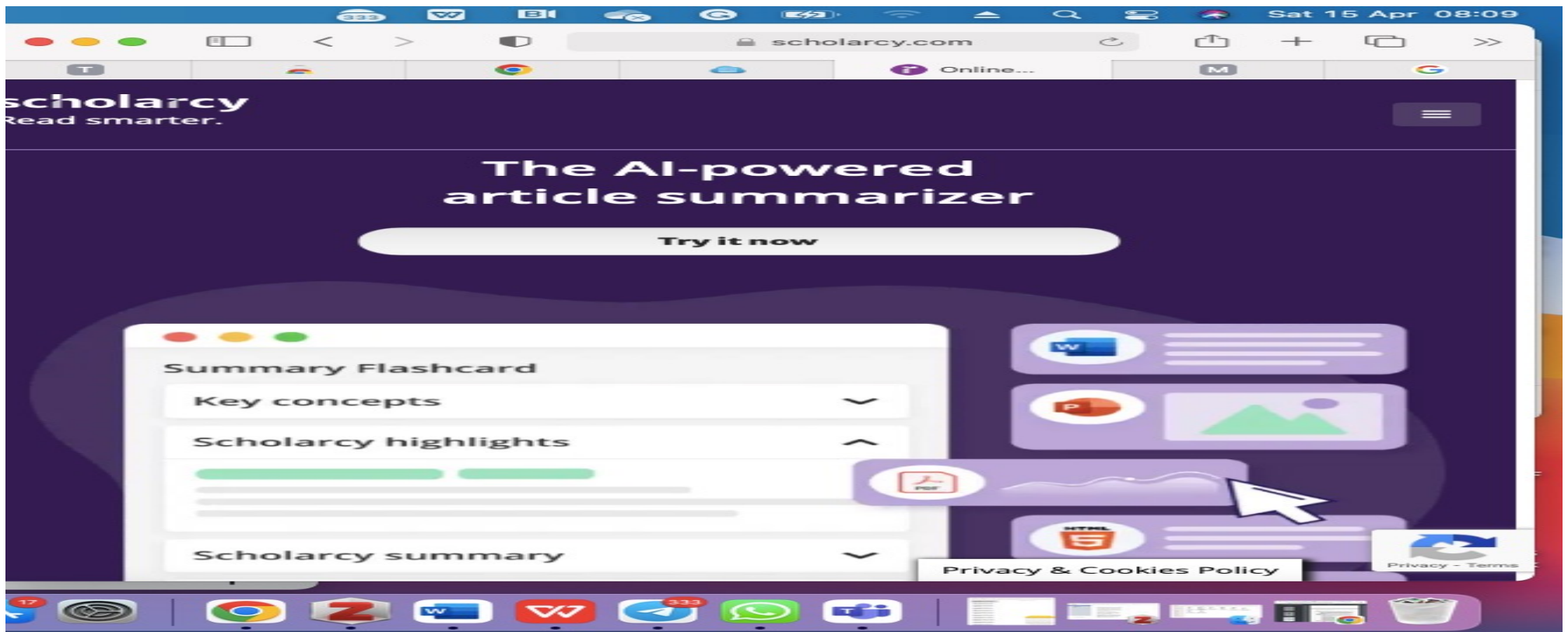
# Scholarcy Research Paper Summariser Features (Cont'd)

- **Structured summary:** When checked, the AI will aim to structure the summary according to the structure of the source document, for example Introduction, Objectives, Methods, Results, Conclusion.
- **Section snippets:** When checked, snippets from each section will be shown in the flashcard, and the AI will sample from these snippets when Structured summary is also enabled. When unchecked, the full content of each section will be shown and used as the input to the summary engine.
- **Auto highlighting:** Facts (blue) and claims (beige) within the article are automatically highlighted for you, but you can uncheck this here to turn this feature off.

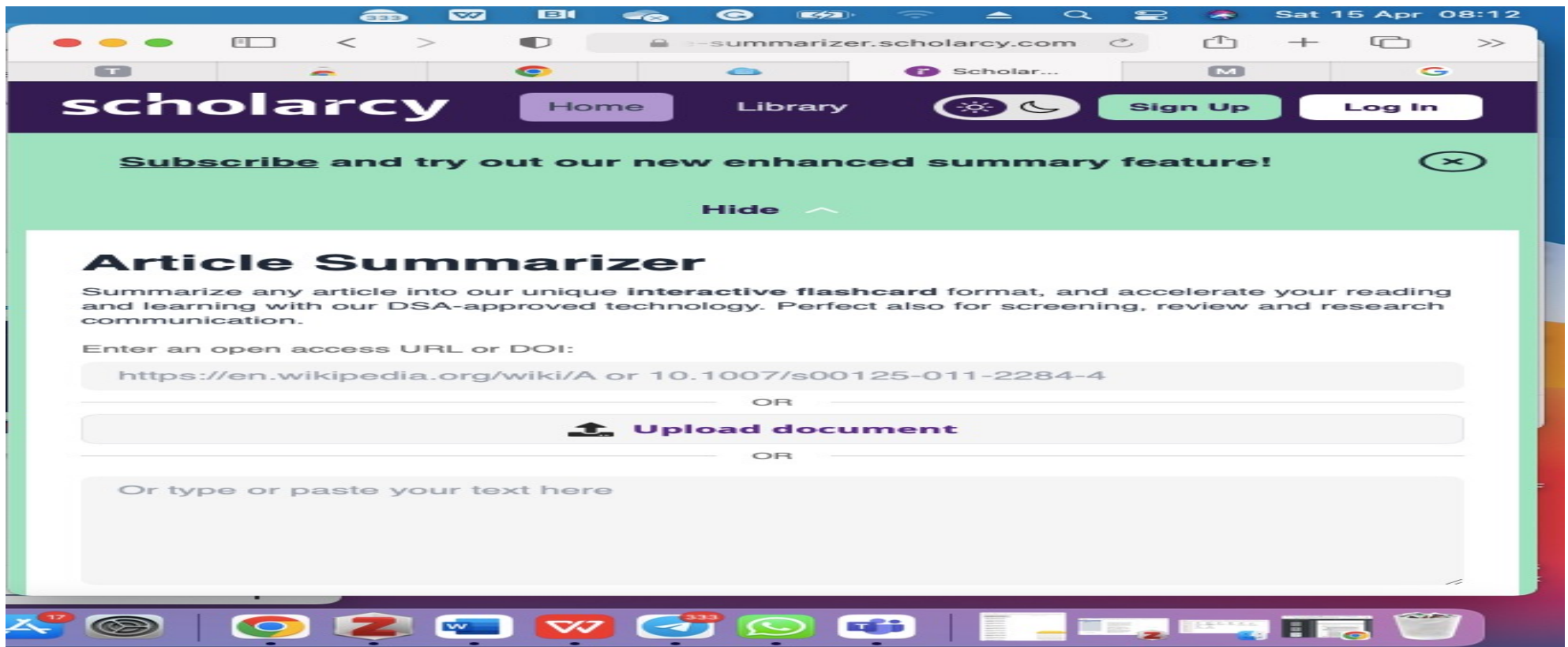
# Scholarcy Research Paper Summariser Features (Cont'd)

- **Wikipedia links:** This automatically link key terms throughout the text to their Wikipedia articles, but if this is getting in the way, you can switch this off.
- **Extract tables:** This identifies tabular data and their captions, showing the captions in a Tables section along with a download button to save the tables to an Excel file on your computer.
- **Extract figures:** This extracts figures and their captions into a Figures section. You can then click on each figure to show a larger version in a new browser tab. Each Figure will be linked to callouts in the text. Figure extraction is very CPU intensive and, for large documents with high-resolution images, may not always be successful, so it is disabled by default.

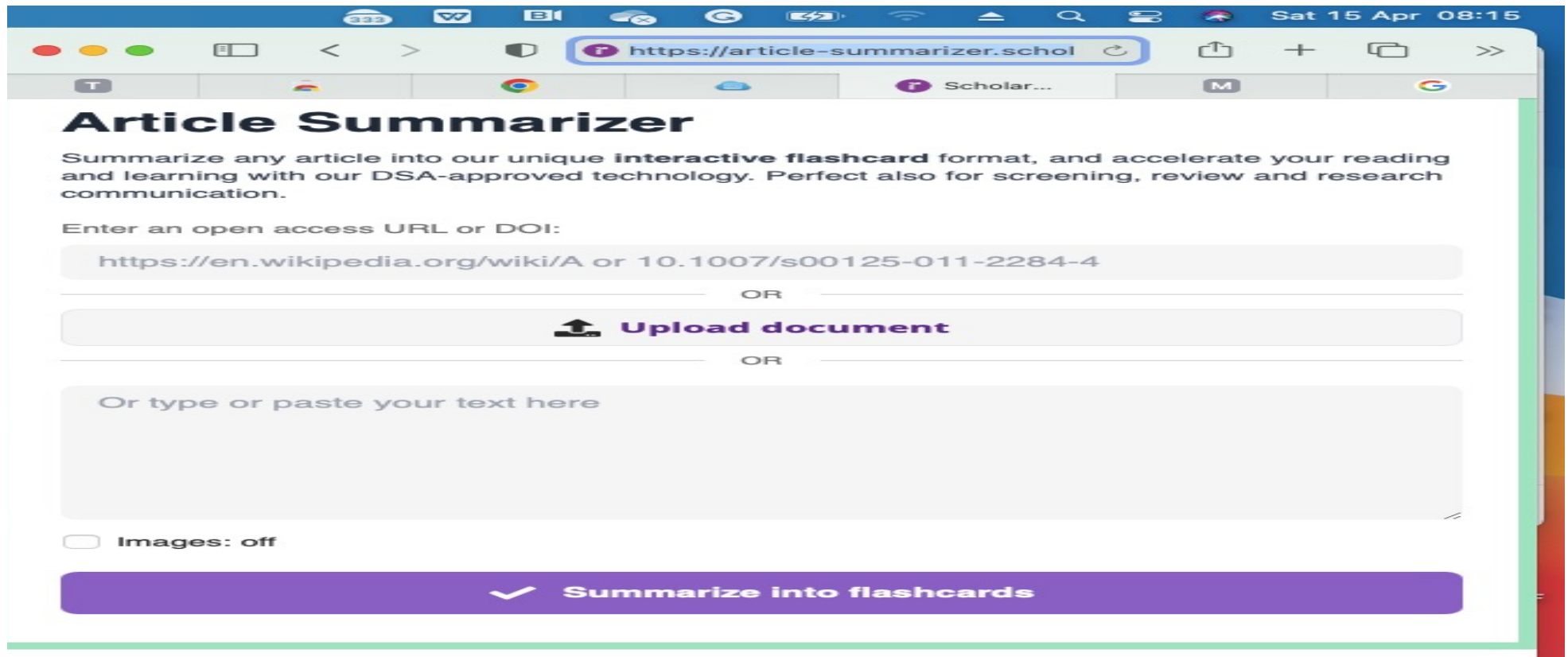
# Using Scholarcy (<https://www.scholarcy.com>)



Using Scholarcy (<https://article-summarizer.scholarcy.com>)



Using Scholarcy (<https://article-summarizer.scholarcy.com>)



The image shows a browser window with the Scholarcy Article Summarizer interface. The browser's address bar displays the URL <https://article-summarizer.schol>. The page title is "Article Summarizer". Below the title, there is a descriptive paragraph: "Summarize any article into our unique **interactive flashcard** format, and accelerate your reading and learning with our DSA-approved technology. Perfect also for screening, review and research communication." Below this, there is a prompt: "Enter an open access URL or DOI:". A text input field contains the example URL: "https://en.wikipedia.org/wiki/A or 10.1007/s00125-011-2284-4". Below the input field, there is a horizontal line with "OR" in the center. Below that, there is a button with an upload icon and the text "Upload document". Below the button, there is another horizontal line with "OR" in the center. Below that, there is a large text area with the placeholder text "Or type or paste your text here". Below the text area, there is a checkbox labeled "Images: off". At the bottom of the form, there is a large purple button with a checkmark icon and the text "Summarize into flashcards".

**Article Summarizer**

Summarize any article into our unique **interactive flashcard** format, and accelerate your reading and learning with our DSA-approved technology. Perfect also for screening, review and research communication.

Enter an open access URL or DOI:

OR

OR

Images: off

# Scholarcy Summary Flashcard Features

- Compact summary
- Expanded summary
- Key concepts
- Abstract
- Synopsis
- Scholarcy highlights
- Scholarcy summary
- Comparative analysis

# Key Concepts

The screenshot displays the Scholarcy website interface. At the top, there is a navigation bar with the Scholarcy logo, 'Home' and 'Library' buttons, and 'Sign Up' and 'Log In' buttons. A green banner below the navigation bar reads 'NEW Subscribe and try out our new enhanced summary feature!'. The main content area is split into two columns. The left column contains the 'Article Summarizer' section, which includes a warning about a free daily limit, a description of the summarizer, a text input field with a URL, a file upload button for '[The\_effect...].pdf (0.40 MB)', and a text area for pasting text. The right column displays a summary for the article 'The effect of female genital mutilation on couple sexual function'. It features a summary paragraph, a 'Summary Flashcard' section with buttons for 'Compact', 'Expanded', 'Key concepts', 'Abstract', 'Synopsis', 'Scholarcy highlights', and 'Scholarcy summary', and a 'Key concepts' section with a list of tags: 'sexual satisfaction', 'Mutilation', 'Female Genital Mutilation', 'sexual function', 'female genital cutting', 'sexual dysfunction', 'genital mutilation', 'Psychology', 'sexual life', 'female circumcision', and 'unicef'.

**scholarcy** Home Library Sign Up Log In

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Enter an open access URL or DOI:

<https://en.wikipedia.org/wiki/A> or 10.1007/s00125-011-

OR

[The\_effect...].pdf (0.40 MB)

OR

Or type or paste your text here

Images: off

## The effect of female genital mutilation on couple sexual function

**Female Genital Mutilation** is still practiced in Egypt and it resulted in many physical, psychological, and social complications; it had a negative impact on the couple's **sexual life**

### Summary Flashcard

**Export** **Save To Library**

**Compact** **Expanded** **Key concepts** **Abstract** **Synopsis** **Scholarcy highlights** **Scholarcy summary**

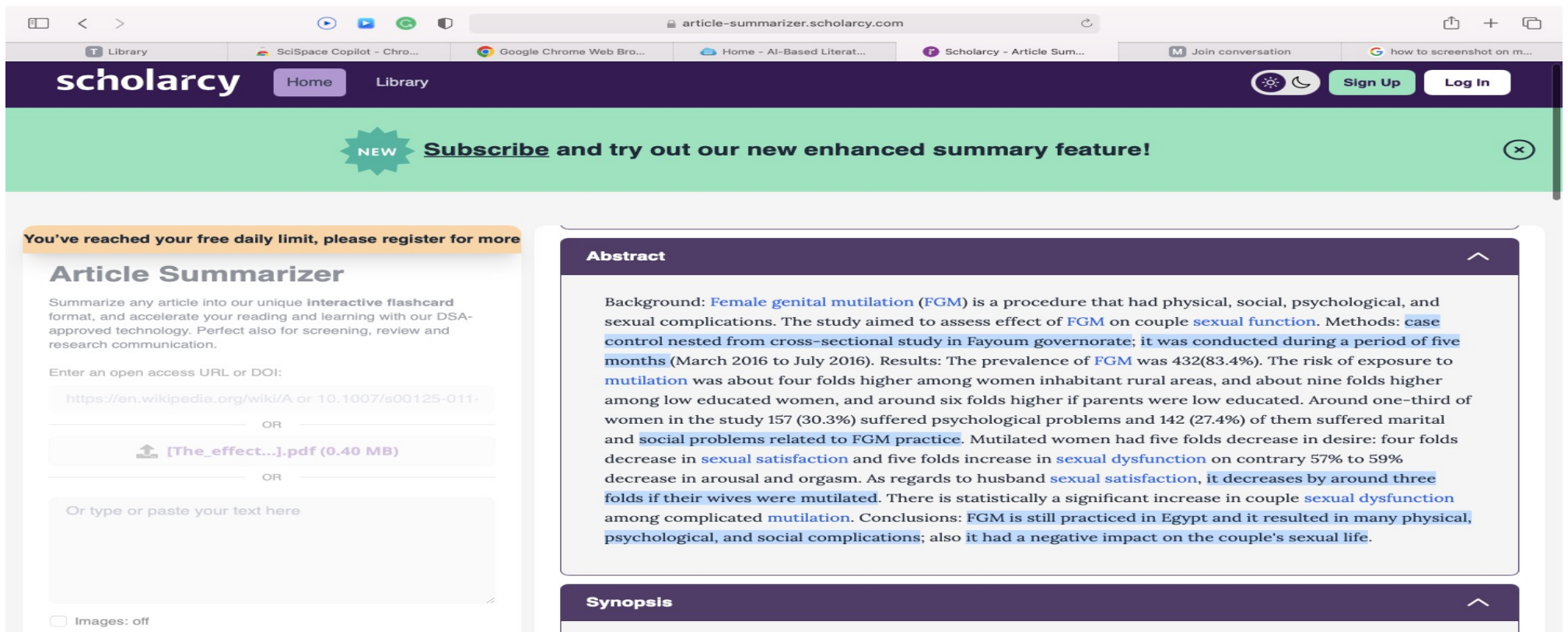
**Comparative analysis**

#### Key concepts

sexual satisfaction Mutilation Female Genital Mutilation sexual function female genital cutting

sexual dysfunction genital mutilation Psychology sexual life female circumcision unicef

# Abstract



The screenshot shows the Scholarcy website interface. At the top, there is a navigation bar with the Scholarcy logo, 'Home' and 'Library' buttons, and 'Sign Up' and 'Log In' buttons. A green banner below the navigation bar reads 'NEW Subscribe and try out our new enhanced summary feature!'. Below this, a yellow warning box states 'You've reached your free daily limit, please register for more'. The main content area is divided into two columns. The left column is the 'Article Summarizer' form, which includes a text input field containing a Wikipedia URL, a file upload button for '[The\_effect...].pdf (0.40 MB)', and a text area for pasting text. The right column displays the generated 'Abstract' for the uploaded document. The abstract text is as follows:

**Abstract**

Background: **Female genital mutilation (FGM)** is a procedure that had physical, social, psychological, and sexual complications. The study aimed to assess effect of **FGM** on couple **sexual function**. Methods: **case control nested from cross-sectional study in Fayoum governorate; it was conducted during a period of five months (March 2016 to July 2016)**. Results: The prevalence of **FGM** was 432(83.4%). The risk of exposure to **mutilation** was about four folds higher among women inhabitant rural areas, and about nine folds higher among low educated women, and around six folds higher if parents were low educated. Around one-third of women in the study 157 (30.3%) suffered psychological problems and 142 (27.4%) of them suffered marital and **social problems related to FGM practice**. Mutilated women had five folds decrease in desire: four folds decrease in **sexual satisfaction** and five folds increase in **sexual dysfunction** on contrary 57% to 59% decrease in arousal and orgasm. As regards to husband **sexual satisfaction, it decreases by around three folds if their wives were mutilated**. There is statistically a significant increase in couple **sexual dysfunction** among complicated **mutilation**. Conclusions: **FGM is still practiced in Egypt and it resulted in many physical, psychological, and social complications; also it had a negative impact on the couple's sexual life.**

**Synopsis**

# Synopsis

The screenshot shows the Scholarcy website interface. At the top, there is a navigation bar with the Scholarcy logo, 'Home', and 'Library' buttons. A green banner below the navigation bar reads 'NEW Subscribe and try out our new enhanced summary feature!'. Below the banner, a message states 'You've reached your free daily limit, please register for more'. The main content area is divided into two columns. The left column contains the 'Article Summarizer' section, which includes a description of the service, a text input field with a URL, a file upload button for '[The\_effect...].pdf (0.40 MB)', and a text area for pasting text. The right column displays the generated 'Synopsis' for the article 'Effect of female genital mutilation on couple sexual function: a cross-sectional study in Fayoum governorate'. The synopsis includes a paragraph of text and a citation: '[No author] (2018). The effect of female genital mutilation on couple sexual function.' Below the synopsis is a 'Scholarcy highlights' section with a bullet point: 'Female Genital Mutilation (FGM) is one of those traditional practices whose origin can be traced to antiquity'.

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### Article Summarizer

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Enter an open access URL or DOI:

OR

[The\_effect...].pdf (0.40 MB)

OR

Images: off

### Synopsis

#### Effect of female genital mutilation on couple sexual function: a cross-sectional study in Fayoum governorate.

Female Genital Mutilation (FGM) is one of those traditional practices whose origin can be traced to antiquity. It is practiced worldwide, but common in Africa, Asia, and the Middle East. Egypt is the fourth country in the high prevalence after Somalia, Guinea, and Djibouti. FGM is considered as a violation of the human rights of women and girls. UNICEF estimated that 200 million women in 30 countries, 27 African countries, and 3 Asian countries are suffering from Female circumcision. The current study reported that mutilation had adverse effect on female sexual function as desire, arousal, orgasm, and sexual satisfaction.

[No author] (2018). The effect of female genital mutilation on couple sexual function.

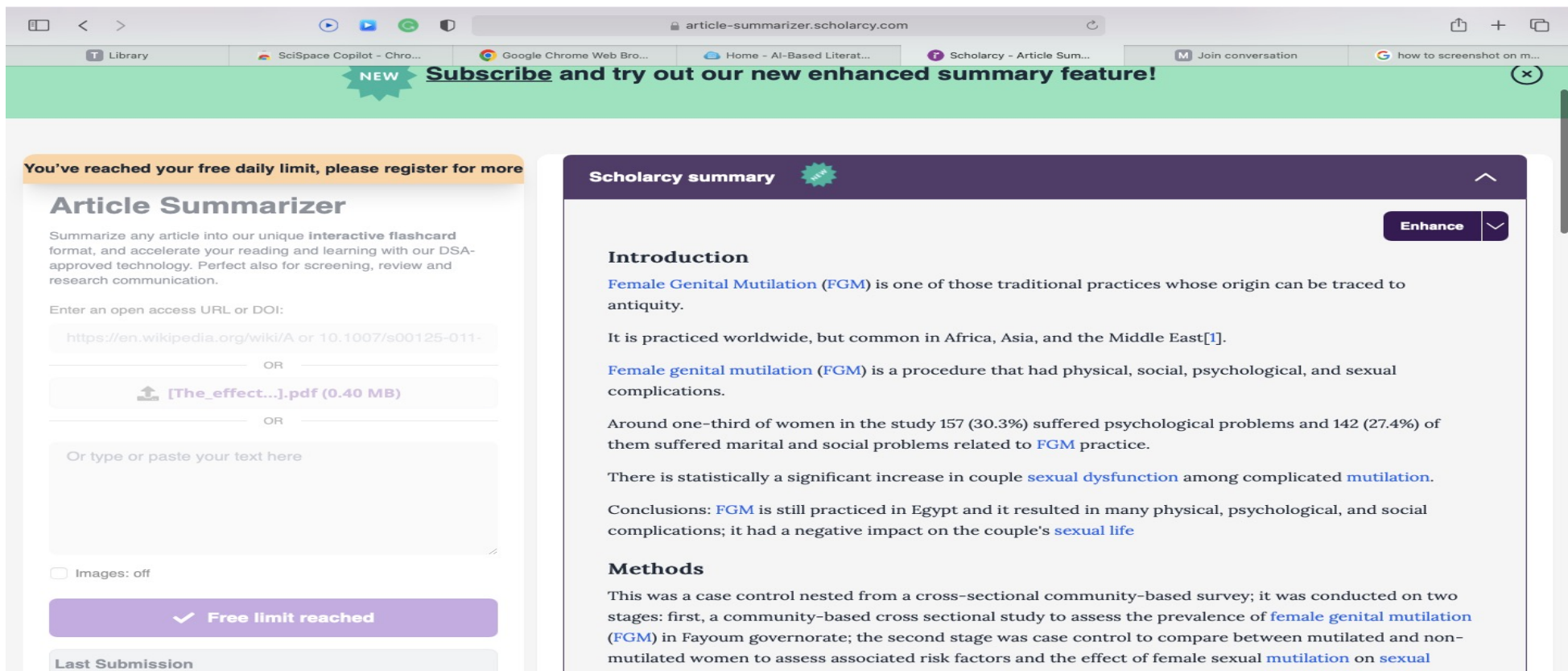
### Scholarcy highlights

- Female Genital Mutilation (FGM) is one of those traditional practices whose origin can be traced to antiquity

# Scholarcy Highlights

The screenshot shows the Scholarcy website interface. At the top, there is a navigation bar with the Scholarcy logo, 'Home' and 'Library' buttons, and 'Sign Up' and 'Log In' buttons. A green banner below the navigation bar reads 'NEW Subscribe and try out our new enhanced summary feature!'. Below the banner, a message states 'You've reached your free daily limit, please register for more'. The main content area is divided into two sections. On the left is the 'Article Summarizer' section, which includes a description of the tool, a text input field for an open access URL or DOI, and a file upload button for PDFs. On the right is the 'Scholarcy highlights' section, which displays a list of highlights from a research article. A tooltip is visible over the article title in the highlights section, providing citation information: 'International Journal of Community Medicine and Public Health Raheem TAA et al. Int J Community Med Public Health. 2018 Mar;5(3):905-911 http://www.ijcmph.com pISSN 2394-6032 | eISSN 2394-6040'. The highlights list includes: 'Female Genital Mutilation (FGM) is one of those traditional practices whose origin can be traced to antiquity', 'According to the UNICEF reports, in 2016 the UNICEF estimated that 200 million women in 30 countries, 27 African countries, and 3 Asian countries as Iraqi Kurdistan, Indonesia and Yemen are suffering from Female circumcision.[2]', 'female genital mutilation (FGM) on couples' sexual function. functional community-based survey; it was conducted on two study to assess the prevalence of female genital mutilation was case control to compare between mutilated and non-mutilated women to assess associated risk factors and the effect of female sexual mutilation on sexual function of both women and their husbands', and 'The current study reported that mutilation had adverse effect on female sexual function as desire, arousal, orgasm, and sexual satisfaction; it clarified the high percentage of sexual dysfunction among mutilated women that is in agreement with results of a study conducted in Gambia, review study, African countries Knipscheer et al, Egypt, Alexandria, Ibrahim et al, El Defrawi et al and Ibrahim et al illustrated the negative impact of mutilation on couples sexual function, psychological condition, and social life.'

# Scholarcy Summary



The screenshot displays the Scholarcy Summary website interface. At the top, a green banner with a star icon reads "NEW Subscribe and try out our new enhanced summary feature!". Below this, a purple header bar contains the text "Scholarcy summary" and an "Enhance" button with a dropdown arrow. The main content area is split into two columns. The left column, titled "Article Summarizer", includes a message: "You've reached your free daily limit, please register for more". It describes the tool as an "interactive flashcard" format and provides instructions to enter an open access URL or DOI, or to upload a PDF file. A purple button at the bottom of this column says "Free limit reached". The right column displays a summary of an article on Female Genital Mutilation (FGM). The summary is organized into sections: "Introduction", "Methods", and "Conclusions". The "Introduction" section states that FGM is a traditional practice with origins in antiquity, practiced worldwide but common in Africa, Asia, and the Middle East. It notes that FGM is a procedure with physical, social, psychological, and sexual complications. The "Methods" section describes a case control study nested within a cross-sectional community-based survey, conducted in two stages: a community-based cross-sectional study to assess the prevalence of FGM in Fayoum governorate, and a case control study to compare mutilated and non-mutilated women. The "Conclusions" section states that FGM is still practiced in Egypt, resulting in physical, psychological, and social complications, and having a negative impact on the couple's sexual life.

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Enter an open access URL or DOI:

<https://en.wikipedia.org/wiki/A> or [10.1007/s00125-011-](https://doi.org/10.1007/s00125-011-)

OR

 [\[The\\_effect...\].pdf \(0.40 MB\)](#)

OR

Or type or paste your text here

Images: off

**Free limit reached**

Last Submission

## Scholarcy summary

**Enhance**

### Introduction

**Female Genital Mutilation (FGM)** is one of those traditional practices whose origin can be traced to antiquity.

It is practiced worldwide, but common in Africa, Asia, and the Middle East[1].

**Female genital mutilation (FGM)** is a procedure that had physical, social, psychological, and sexual complications.

Around one-third of women in the study 157 (30.3%) suffered psychological problems and 142 (27.4%) of them suffered marital and social problems related to **FGM** practice.

There is statistically a significant increase in couple **sexual dysfunction** among complicated **mutilation**.

**Conclusions:** **FGM** is still practiced in Egypt and it resulted in many physical, psychological, and social complications; it had a negative impact on the couple's **sexual life**

### Methods

This was a case control nested from a cross-sectional community-based survey; it was conducted on two stages: first, a community-based cross sectional study to assess the prevalence of **female genital mutilation (FGM)** in Fayoum governorate; the second stage was case control to compare between mutilated and non-mutilated women to assess associated risk factors and the effect of female sexual **mutilation** on **sexual**

# Comparative Analysis

The screenshot displays the 'Article Summarizer' interface on a web browser. The browser's address bar shows 'article-summarizer.scholarcy.com'. The page is divided into two main sections: a left sidebar for article input and a right main content area for the comparative analysis.

**Article Summarizer (Left Sidebar):**

- Header: **Article Summarizer**
- Description: Summarize any article into our unique **interactive flashcard** format, and accelerate your reading and learning with our DSA-approved technology. Perfect also for screening, review and research communication.
- Input: Enter an open access URL or DOI:  OR
- Text Area: Or type or paste your text here
- Options:  Images: off
- Buttons:
- Last Submission: file: The\_effect\_of\_female\_genital\_mutilation\_on\_couple\_(1).pdf

**Comparative analysis (Right Main Content Area):**

### Confirmation of earlier findings

Discussion: Egypt is the fourth country in the high prevalence after Somalia, Guinea, and Djibouti.[14]. A current study demonstrated that the prevalence of FGM was 83.4%, comparable with other studies the prevalence in Iranian was 55.7%; in Ethiopia the study was 78.5%; in the Somali region prevalence of 97% was reported; in Malaysia it was 62%; some other studies were conducted in other countries like Mauritania 77%, Sierra Leone 81.2%, and Gambia 75.6%, which had almost similar findings. [15,16,17,18,19,20,21]

### Confirmation of earlier findings

Discussion: Results of the current study illustrated that mutilation was highly prevalent among women who were older in age, younger at the time of marriage, had a longer duration of the marriage, inhabitant rural area, and with low educational level for themselves and their parents, with a mean age of FGM (12±2.3) years old. These results were similar to results of Bogale et al, Ibrahim et al and Ibrahim et al Egyptian studies which illustrated that circumcised women were younger at the time of marriage and were mostly from rural areas.[16,22,23] Also, they were found to have a lower level of education with a mean age of FGM at (7.89±4.56), (10.5±1.3), and (9.7±2.1) years old respectively

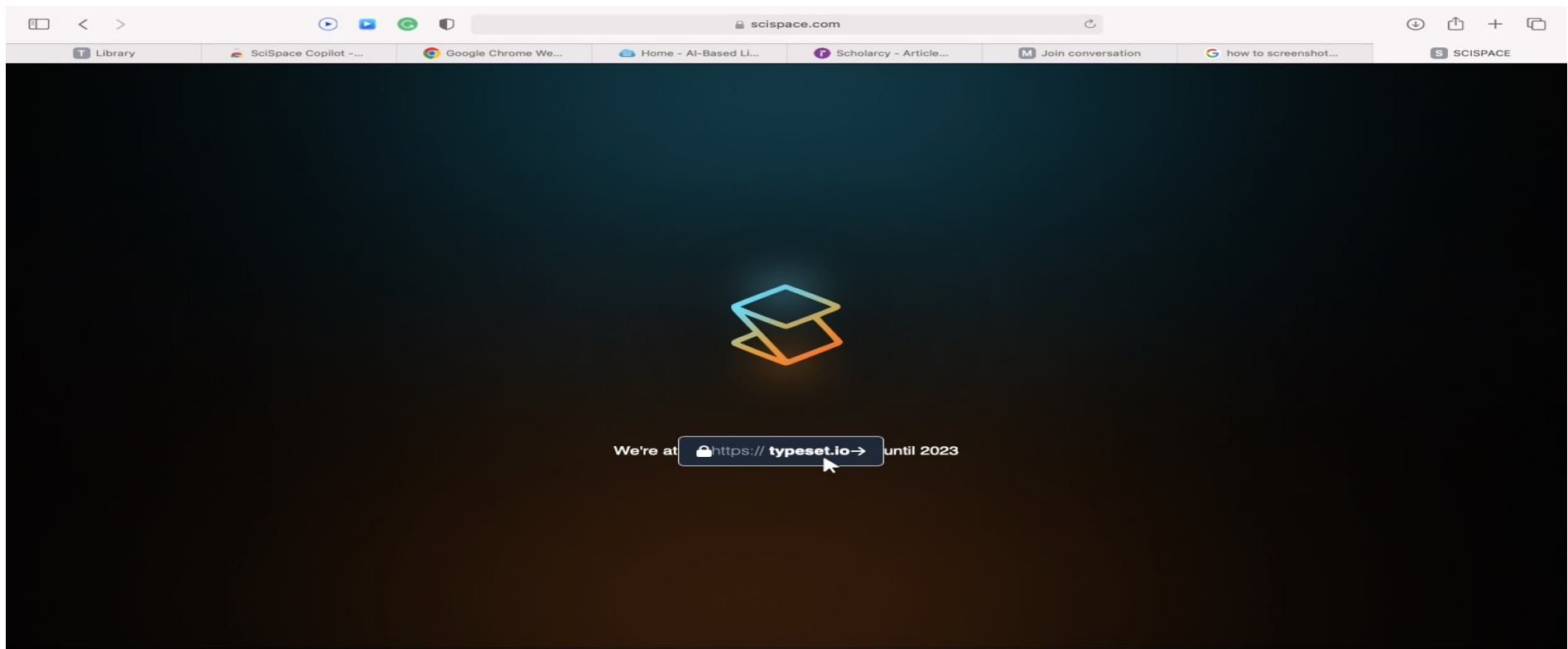
### Builds on previous research

Discussion: Our results illustrated that the main cause of FGM was to follow culture and traditions 75.5%, and 10% to decrease sexual desire. In contrast, report the main causes were to get married 78.7%, and to get social

# Saving Your Documents on Scholarcy: Export (Word/PPT) or Save to Library

The screenshot displays the Scholarcy Article Summarizer interface. On the left, the 'Article Summarizer' section includes a text input field with a URL, a file upload button for '[The\_effect...].pdf (0.40 MB)', and a 'Free limit reached' notification. The main content area shows a summary flashcard for the article 'The effect of female genital mutilation on couple sexual function'. The flashcard includes a snippet of text: 'Female Genital Mutilation is still practiced in Egypt and it results in psychological, and social complications; it had a negative impact on sexual life'. Below the flashcard, there are navigation tabs for 'Compact', 'Expanded', 'Key concepts', 'Abstract', 'Synopsis', 'Scholarcy highlights', and 'Scholarcy summary'. The 'Key concepts' section lists terms like 'sexual satisfaction', 'Mutilation', 'Female Genital Mutilation', 'sexual function', 'female genital cutting', 'sexual dysfunction', 'genital mutilation', 'Psychology', 'sexual life', 'female circumcision', and 'unicef'. The 'Abstract' section begins with 'Background: Female genital mutilation (FGM) is a procedure that had physical, social, psychological, and...'. An 'Export Flashcard' menu is open, showing options for 'Format: Word', 'Content: Detailed', and a 'Download' button. Other buttons for 'Export' and 'Save To Library' are also visible.

# Addendum: The Use of SciSpace AI in Literature Review (<https://scispace.com>)



# Hopmepage of SciSpace (https://scispace.com)

Library SciSpace Copilot -... Google Chrome We... Home - AI-Based Li... Scholarcy - Article... Join conversation how to screenshot... Discover, Create, a...

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	An Image is Worth 16x16 Words: Transformers for Image Recognition at Scale
	Deformable DETR: Deformable Transformers for End-to-End Object Detection
	How Good is Your Tokenizer? On the Monolingual Performance

Help? Exploring the Limits of Transfer Learning with a Unified Text-to-Text

# Features of SciSpace AI

- Search for papers.
- Upload PDF for review.
- Create Library for your papers.
- Review Literature in less than 60 seconds without stress of reading.
- Plagiarism-free Literature review.

# Reviewing Paper on SciSpace AI

The screenshot displays the SciSpace AI web interface. The browser's address bar shows 'typeset.io'. The SciSpace logo and search bar are at the top left. The main content area shows a paper titled 'Self-Medication with Antibiotics among Medical Students in Karachi : A Cross-Sectional Institution Based Study' by Tafazzul Hyder Zaidi, Hunain Asif, and Kiran Mehtab, published on 01 Sep 2020. The paper has 2 citations and 17 references. Below the paper details are buttons for 'Contributions', 'Explain Abstract', 'Limitations', 'Practical Implications', 'Dataset used', 'Related Papers', and 'Literature survey'. A 'Citations' section is visible below, with a search bar and filters for PDF, Open Access, Year, Type, Authors, and Institutions. A 'Copilot' chat window is open on the right, showing a conversation about the paper's contributions and practical implications. The chat messages are as follows:

- Find Related Papers (Monday)
- No Related Papers could be found for this search term (Monday)
- Follow up (Monday)
- What are the contributions of this paper (Monday)
- This paper contributes to the understanding of the prevalence and factors associated with self-medication with antibiotics among medical students in Karachi, Pakistan. It highlights the need for interventions to address this issue and pro... (Monday)
- Follow up (Monday)
- Explain the practical implications of this (Monday)
- Explain Abstract of this paper in 2 lines +12 more (Monday)
- Write your question... (Monday)

# The Reviewing Page of SciSpace AI

The screenshot shows the SciSpace AI interface. The main content area displays a journal article titled "Self-Medication with Antibiotics among Medical Students in Karachi : A Cross-Sectional Institution Based Study" by Tafazzul Hyder Zaidi, Hunain Asif, and Kiran Mehtab, published on 01 Sep 2020. The article has received 2 citations. Below the article, there are buttons for "Contributions", "Explain Abstract", "Limitations", "Practical Implications", "Dataset used", "Related Papers", and "Literature survey".

The "Citations" section shows a search bar and a dropdown menu for "Sort by: Citation Count". It lists two citation results, including "Self-medication Patterns among Undergraduate Medical Students: A Cross Sectional Institution Based Study" by Tahira Assad, Nasim Karim, Ishrat Younus, and Zeeshan Feroz, published on 11 Nov 2017.

On the right side, the "Copilot" panel is active, showing a search for "Find Related Papers" which returned no results. Below this, there are "Suggestions (12 results)" and a "Brainstorm Questions" section with a text input field.

The browser's address bar shows "typeset.io" and the page title is "typeset.io". The browser tabs include "Library", "SciSpace Copilot", "Google Chrome We...", "Home - AI-Based Li...", "Scholarcy - Article...", "Join conversation", "how to screenshot...", and "Self-Medication wit...".

# Features of SciSpace AI: Results

The screenshot displays the SciSpace AI interface. The main content area shows the overview of a journal article titled "Self-Medication with Antibiotics among Medical Students in Karachi : A Cross-Sectional Institution Based Study" by Tafazzul Hyder Zaidi, Hunain Asif, and Kiran Mehtab, published on 01 Sep 2020. The article has received 2 citations. Below the article title, there are several interactive buttons: Results, Methods used, Literature survey, Explain Abstract, Future works, Practical Implications, and Limitations. A Citations section is also visible, with a search bar and filters for PDF, Open Access, Year, Type, Authors, and Institutions. A Copilot chat window is open on the right side, showing a response to a query about the results of the paper. The chat window includes a "Follow up" button and a "Write your question..." input field.

Home / Papers / Self-Medication with Antibiotics among Medical...

Overview Citations (2) References (17) Related Papers (5)

Journal Article • DOI • [Trace](#) [Bookmark](#) [Quote](#) [Share](#)

### Self-Medication with Antibiotics among Medical Students in Karachi : A Cross-Sectional Institution Based Study

Tafazzul Hyder Zaidi, Hunain Asif, Kiran Mehtab

01 Sep 2020 - Vol. 18, Iss: 9, pp 24-33

**About:** The article was published on 2020-09-01. It has received 2 citation(s) till now.

[Results](#) [Methods used](#) [Literature survey](#) [Explain Abstract](#) [Future works](#) [Practical Implications](#) [Limitations](#)

#### Citations

Search papers

Sort by: Citation Count

PDF  Open Access [Year](#) [Type](#) [Authors](#) [Institutions](#) [More filters](#)

Showing all 2 results

Journal Article • DOI • [Help?](#)

### Self-medication Patterns among Undergraduate Medical Students: A Cross Sectional Institution Based Study

...

The Copilot chat window shows a response to a query about the results of the paper. The response text is: "The results of the paper showed that self-medication with antibiotics was prevalent among medical students in Karachi, with a majority of the participants reporting having self-medicated with antibiotics in the past. The most commonly reported reasons for self-medication were previous experience with the same illness and easy availability of antibiotics without a prescription. The study also found that students who had received formal education on antibiotics were less likely to self-medicate. These findings highlight the need for interventions to promote responsible use of antibiotics and to raise awareness about the risks associated with self-medication." The chat window also includes a "Follow up" button and a "Write your question..." input field.

Copilot English

Follow up

Results of the paper 9:22 am

The results of the paper showed that self-medication with antibiotics was prevalent among medical students in Karachi, with a majority of the participants reporting having self-medicated with antibiotics in the past. The most commonly reported reasons for self-medication were previous experience with the same illness and easy availability of antibiotics without a prescription. The study also found that students who had received formal education on antibiotics were less likely to self-medicate. These findings highlight the need for interventions to promote responsible use of antibiotics and to raise awareness about the risks associated with self-medication.

Follow up

Explain Abstract of this paper in 2 lines +12 more

Write your question...

# Features of SciSpace AI: Methods Used

The screenshot displays the SciSpace AI web interface. The browser's address bar shows 'typeset.io'. The SciSpace logo and search bar are at the top left. The main content area shows a paper titled 'Self-Medication with Antibiotics among Medical Students in Karachi : A Cross-Sectional Institution Based Study' by Tafazzul Hyder Zaidi, Hunain Asif, and Kiran Mehtab, published on 01 Sep 2020. The paper's abstract and various sections like 'Results', 'Methods used', 'Literature survey', 'Explain Abstract', 'Future works', 'Practical Implications', and 'Limitations' are visible. A 'Citations' section is also present. On the right, a Copilot chat window is open, showing a user's question about the methods used in the paper and the AI's response. The AI response states: 'The methods used in this paper were a cross-sectional survey-based study design. The study was conducted among medical students in Karachi, Pakistan, using a self-administered questionnaire. The questionnaire was designed to collect information on the prevalence of self-medication with antibiotics, the reasons for self-medication, and the sources of antibiotics. The study also collected data on the demographic characteristics of the participants, their educational background, and their knowledge and attitudes towards antibiotics. The data collected were analyzed using descriptive statistics and logistic regression analysis.'

# Features of SciSpace AI: Literature Survey

The screenshot displays the SciSpace AI web interface. The browser address bar shows 'typeset.io'. The page title is 'Self-Medication with Antibiotics among Medical Students in Karachi : A Cross-Sectional Institution Based Study' by Tafazzul Hyder Zaidi, Hunain Asif, and Kiran Mehtab, published in 2020. The interface includes a search bar, navigation tabs (Overview, Citations, References, Related Papers), and a sidebar with a home icon and a 'Help?' button. A 'Copilot' chat window is open on the right, showing a message from the user: 'Literature survey of this paper' and a response from the AI: 'The literature survey of this paper includes a review of previous studies on self-medication with antibiotics among medical students and the general population. The authors cited several studies that have reported high rates of self-medication with antibiotics in various countries, including Pakistan. They also discussed the potential risks associated with self-medication, such as the development of antibiotic resistance and adverse drug reactions. The authors highlighted the need for interventions to promote responsible use of antibiotics and to raise awareness about the risks associated with self-medication.' Below the chat window, there is a text input field for a question and a '+12 more' link.

# Features of SciSpace AI: Explain Abstract

The screenshot displays the SciSpace AI interface. The main page shows a paper titled "Self-Medication with Antibiotics among Medical Students in Karachi : A Cross-Sectional Institution Based Study" by Tafazzul Hyder Zaidi, Hunain Asif, and Kiran Mehtab, published on 01 Sep 2020. The paper has 2 citations and 17 references. The interface includes a search bar, navigation tabs (Overview, Citations, References, Related Papers), and a sidebar with a home icon, a library icon, and a help icon. The Copilot chat window on the right shows a conversation where the user asks for an explanation of the abstract in 2 lines. The Copilot responds with a summary of the abstract's content.

Home / Papers / Self-Medication with Antibiotics among Medical...

Overview Citations (2) References (17) Related Papers (5)

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## Self-Medication with Antibiotics among Medical Students in Karachi : A Cross-Sectional Institution Based Study

Tafazzul Hyder Zaidi, Hunain Asif, Kiran Mehtab

01 Sep 2020 • Vol. 18, Iss: 9, pp 24-33

**About:** The article was published on 2020-09-01. It has received 2 citation(s) till now.

[Results](#) [Methods used](#) [Literature survey](#) [Explain Abstract](#) [Future works](#) [Practical Implications](#)

[Limitations](#)

### Citations

Search papers Sort by: Citation Count

PDF  Open Access Year Type Authors Institutions [More filters](#)

Showing all 2 results

Journal Article • DOI • [Help?](#)

### Self-medication Patterns among Undergraduate Medical Students: A Cross Sectional Institution Based Study

...

Copilot English

The literature survey of this paper includes a review of previous studies on self-medication with antibiotics among medical students and the general population. The authors cited several studies that have reported high rates of self-medication...Read more

9:24 am

Follow up

Explain Abstract of this paper in 2 lines

9:25 am

The abstract of this paper states that self-medication with antibiotics is a common practice among medical students in Karachi, Pakistan. The study highlights the need for interventions to promote responsible use of antibiotics and to raise awareness about the risks associated with self-medication.

9:25 am

Follow up

Explain Abstract of this paper in 2 lines [+12 more](#)

Write your question... [➤](#)

# Features of SciSpace AI: Future Works

The screenshot displays the SciSpace AI interface. The main content area shows a paper titled "Self-Medication with Antibiotics among Medical Students in Karachi : A Cross-Sectional Institution Based Study" by Tafazzul Hyder Zaidi, Hunain Asif, and Kiran Mehtab, published on 01 Sep 2020. The paper has received 2 citations. Below the abstract, there are several interactive buttons: Results, Methods used, Literature survey, Explain Abstract, Future works, Practical Implications, and Limitations. A Citations section is also visible, with a search bar and filters for PDF, Open Access, Year, Type, Authors, and Institutions. A Copilot chat window is open on the right side, showing a conversation about the paper's future works. The chat includes a message from the user asking for future works suggested in the paper, and a response from the AI suggesting that future studies should focus on evaluating the effectiveness of interventions aimed at promoting responsible use of antibiotics and reducing self-medication. The chat also includes a button to "Explain Abstract of this paper in 2 lines" and a text input field for a question.

Home / Papers / Self-Medication with Antibiotics among Medical...

Overview Citations (2) References (17) Related Papers (5)

Journal Article • DOI • [Trace](#) [Share](#)

## Self-Medication with Antibiotics among Medical Students in Karachi : A Cross-Sectional Institution Based Study

Tafazzul Hyder Zaidi, Hunain Asif, Kiran Mehtab

01 Sep 2020 • Vol. 18, Iss: 9, pp 24-33

**About:** The article was published on 2020-09-01. It has received 2 citation(s) till now.

[Results](#) [Methods used](#) [Literature survey](#) [Explain Abstract](#) [Future works](#) [Practical Implications](#) [Limitations](#)

### Citations

Search papers Sort by: Citation Count

PDF  Open Access Year Type Authors Institutions [More filters](#)

Showing all 2 results

Journal Article • DOI • [Help?](#)

## Self-medication Patterns among Undergraduate Medical Students: A Cross Sectional Institution Based Study

...

# Features of SciSpace AI: Practical Implications

The screenshot displays the SciSpace AI web interface. The browser address bar shows 'typeset.io'. The SciSpace logo is in the top left, with a search bar containing 'Search papers, authors, topics and more'. The page title is 'Home / Papers / Self-Medication with Antibiotics among Medical...'. The main content area shows a paper titled 'Self-Medication with Antibiotics among Medical Students in Karachi : A Cross-Sectional Institution Based Study' by Tafazzul Hyder Zaidi, Hunain Asif, and Kiran Mehtab, published on 01 Sep 2020. Below the title are several interactive buttons: Results, Methods used, Literature survey, Explain Abstract, Future works, Practical Implications, and Limitations. A 'Citations' section is visible below, with a search bar and filters for PDF, Open Access, Year, Type, Authors, and Institutions. A Copilot chat window is open on the right, showing a user prompt: 'Explain the practical implications of this paper'. The Copilot response states: 'The practical implications of this paper are that self-medication with antibiotics is a common practice among medical students in Karachi, Pakistan, which highlights the need for interventions to promote responsible use of antibiotics and to raise awareness about the risks associated with self-medication. The findings of this study can be used to develop educational interventions aimed at promoting responsible use of antibiotics among medical students and the general population. Additionally, policymakers can use the results of this study to develop regulations to prevent the over-the-counter sale of antibiotics without a prescription.' The chat window also includes a 'Follow up' button and a text input field for further questions.

# Features of SciSpace AI: Limitations

The screenshot displays the SciSpace AI interface in a browser window. The main content area shows the details of a journal article titled "Self-Medication with Antibiotics among Medical Students in Karachi : A Cross-Sectional Institution Based Study" by Tafazzul Hyder Zaidi, Hunain Asif, and Kiran Mehtab, published on 01 Sep 2020. The article has received 2 citations. Below the article details, there are several AI-generated insights and tools:

- Navigation:** Home / Papers / Self-Medication with Antibiotics among Medical... Overview Citations (2) References (17) Related Papers (5)
- Article Info:** Journal Article • DOI • Trace
- AI Tools:** Results, Methods used, Literature survey, Explain Abstract, Future works, Practical Implications, Limitations
- Citations:** Search papers, Sort by: Citation Count, PDF, Open Access, Year, Type, Authors, Institutions, More filters
- Related Paper:** Self-medication Patterns among Undergraduate Medical Students: A Cross Sectional Institution Based Study

On the right side, a Copilot chat window is open, showing two AI-generated insights:

- Insight 1 (9:27 am):** among medical students in Karachi, Pakistan, which highlights the need for interventions to promote responsible use of antibiotics and to raise awareness...
- Insight 2 (9:28 am):** The limitations of this paper include the fact that the study was conducted at a single institution in Karachi, which may limit the generalizability of the findings to other populations. Additionally, the study relied on self-reported data, which may be subject to recall bias and social desirability bias. Finally, the study did not assess the reasons why medical students engage in self-medication with antibiotics, which could be an important area for future research.

The interface also includes a search bar at the top, a Chrome Extension button, and a My Library section.

# Referencing on SciSpace AI

The screenshot displays the SciSpace AI web interface. The browser's address bar shows 'typeset.io'. The SciSpace logo and search bar are at the top left. The main content area shows a paper titled 'Self-Medication with Antibiotics among Medical Students in Karachi : A Cross-Sectional Institution Based Study' by Tafazzul Hyder Zaidi, Hunain Asif, and Kiran Mehtab, published on 01 Sep 2020. The paper has 2 citations and 17 references. Below the paper details are buttons for 'Conclusions', 'Dataset used', 'Results', 'Practical Implications', 'Future works', 'Related Papers', and 'Contributions'. A 'Citations' section is visible with a search bar and filters for PDF, Open Access, Year, Type, Authors, and Institutions. A Copilot chat window is open on the right, showing a conversation about the paper's abstract and future works. The chat messages are as follows:

- User: Explain Abstract of this paper in 2 lines (9:25 am)
- Copilot: The abstract of this paper states that self-medication with antibiotics is a common practice among medical students in Karachi, Pakistan. The study highlights the need for interventions to promote responsible use of antibiotics and to raise awareness al ...Read more (9:25 am)
- User: Follow up (9:26 am)
- User: Future works suggested in this paper (9:26 am)
- Copilot: The paper suggests that future studies should focus on evaluating the effectiveness of interventions aimed at promoting responsible use of antibiotics and reducing self-medication. The authors also recommend that medical schools should in ...Read more (9:26 am)
- User: Explain Abstract of this paper in 2 lines (+12 more)
- User: Write your question...

# Referencing on SciSpace AI

The screenshot displays the SciSpace AI web interface. At the top, there is a search bar with the text "Search papers, authors, topics and more" and a "Chrome Extension" button. The main content area shows a paper titled "Self-Medication with Antibiotics among Medical..." with tabs for "Overview", "Citations (2)", "References (17)", and "Related Papers (5)". A modal window titled "Citing options" is open, listing various citation styles: APA (selected), MLA, Chicago, Harvard, Vancouver, BibTeX, EndNote, and RIS. The selected APA style is shown in a preview box: "Tafazzul, Hyder, Zaidi., Hunain, Asif., Kiran, Mehtab. (2020). Self-Medication with Antibiotics among Medical Students in Karachi : A Cross-Sectional Institution Based Study. 18(9):24-33. doi: 10.5742/MEWFM.2020.93866". A "Copy text" button is located at the bottom right of the modal. The background interface includes a sidebar with navigation icons, a "Copilot" chat window on the right, and a filter section at the bottom with options for PDF, Open Access, Year, Type, Authors, and Institutions.

# Conclusion

- AI has the potential to revolutionise scientific knowledge acquisition by enabling researchers to conduct more efficient, comprehensive, and accurate LRs.
- The benefits of AI in LR include increased efficiency, accuracy, and coverage of literature, while the challenges include issues related to bias and quality control.
- Despite these challenges, by automating routine tasks and enabling researchers to synthesise information more efficiently, AI can help accelerate scientific discovery and facilitate the development of new hypotheses and theories.
- By combining the power of AI with human expertise, we can unlock new insights and accelerate scientific progress in a wide range of fields.

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# THANKS FOR LISTENING

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# QUESTIONS AND ANSWERS