



Short Communication

# Beyond Menace: Unveiling the Landscape of Predatory Journals in Sudan's Pediatric Academic Community

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I had the chance to read a review article entitled “The Menace of Predatory Journals” by Agarwal *et al.*, published in the *Sudan Journal of Medical Sciences* [1]. To the best of my knowledge, this was the first (and likely the only) article reviewing the dilemma of predatory journals to be published in a Sudanese journal. The word “dilemma” is not an exaggeration; Sudan is probably the African sub-Saharan country most caught in the trap of predatory journals, second only to Nigeria [2].

The referenced article used “menace” to indicate how predatory publishing had become the most serious global threat to scientific integrity and reliability [3]. In light of the intense competition for academic career advancement, which is primarily achieved through scientific publishing, and the absence of regulating frameworks, resorting to predatory journals becomes an easy way out. The negative effects of this issue can manifest in many forms and at various levels. The following are examples:

1. The generation of scientific data that are not refereed (i.e., not peer-reviewed). At best, the credibility of studies published in these predatory journals, thus, cannot be trusted; at worst, and more frequently, they can quickly be challenged using basic critical appraisal principles. The resultant fake (pseudo-) science may be quoted in propaganda health information [4] or, more detrimentally, potentially cited for drawing up local health policies or guiding clinical practices.
2. A waste of significant financial and human resources in an already scarce-resource setting. Predator journals always charge authors a negotiable amount of money for publishing their work; this is the essence of their business.
3. Promotions in academic positions without due merits. This may result in generating an academic stratum with mediocre scientific abilities at the forefront of the educational process.

## 1. The Study

As a reflex to the referenced article, we wanted to gain some understanding of the local context of predatory publishing in Sudan. We aimed to achieve two main goals; (1) to study the awareness, practices, and perspectives of Sudanese pediatricians regarding predatory publishing and (2) to explore whether promotion policies in Sudanese Universities are permissive of predatory publishing.

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A web-based survey questionnaire addressing predatory publishing was sent to 55 pediatricians in academic positions. In addition, it was also sent to a WhatsApp group containing the largest cohort of Sudanese pediatricians in faculty positions ( $n = 561$ ). Additional data were collected on policies of accepted journal standards for faculty promotion in the 12 highest-ranked Sudanese universities (Webometrics 2022). We added the two top Saudi universities for comparison. These data were sought from publicly available official online websites. Consent was taken from participants, and anonymity and confidentiality were ensured.

## 2. Results

Ninety-three pediatricians in academic positions responded by filling out the questionnaire. Of these, 28 (30%) have never published any scientific work and were excluded, including three associate professors. Of the remaining 65 participants, 40% ( $n = 26$ ) had no knowledge of predatory journals (did not hear of it, heard but did not know it, or had a vague understanding of its meaning). The knowledge was significantly higher in those with more publication numbers ( $P = 0.008$ ). The knowledge did not significantly differ by gender ( $P = 0.311$ ), academic position rank ( $P = 0.375$ ), or years of experience ( $P = 0.740$ ). Sudanese pediatricians

working abroad had higher knowledge than those in Sudanese universities ( $P = 0.042$ ); however, the difference was insignificant when adjusted for the publication numbers in a multiple regression model ( $P = 0.138$ ; Table 1).

Over half (53%;  $n = 24$  and 51%;  $n = 23$ ) of the 45 participants who answered the remaining questions stated they had no or little skill to identify a predatory journal and verify a trustworthy (legitimate) journal, respectively. Nearly a third (29%;  $n = 13$ ) admitted having at least one article published in predatory journals. The vast majority thought that publishing in predatory journals should be combated (78%) and that terms of faculty promotion regulations should discourage predatory publishing (73%). Only three participants (7%) thought the opposite, while the rest (16% and 20%) were unsure.

Moreover, 51% ( $n = 23$ ) stated that their university's promotion regulations include clauses precluding predatory publishing, and only one out of five (20%) Sudanese universities have regulation terms that explicitly discourage predatory journal publishing, quoting the statement: "journals with an approved impact factor." The remaining institutions either used subjective loose expressions ( $n = 4$ ) (e.g., refereed/peer-reviewed, quality, etc.) or did not show any promotion regulations on the web ( $n = 7$ ; Table 2).

TABLE 1: Characteristics of participants in relation to awareness about predatory publishing.\*

Characteristic	Knowledge of predatory journals**			P-value (Fisher's exact)	Comment
	Yes 39 (60%)	No 26 (40%)	Total 65 (100%)		
<b>Gender</b>				0.311	
Female	18 (46.15)	16 (61.54)	34 (52.31)		
Male	21 (53.85)	10 (38.46)	31 (47.69)		
<b>Place of work</b>				<b>0.042</b>	$P = 0.138$ when adjusting for the publication numbers in a multiple regression model

TABLE 1: Continued.

Characteristic	Knowledge of predatory journals**			P-value (Fisher's exact)	Comment
Sudanese university	30 (76.92)	25 (96.15)	55 (84.62)		
Non-Sudanese university	9 (23.08)	1 (3.85)	10 (15.38)		
<b>Job position</b>				0.375	
Lecturer	2 (5.13)	1 (3.85)	3 (4.62)		
Assistant professor	17 (43.59)	15 (57.69)	32 (49.23)		
Associate professor	12 (30.77)	7 (26.92)	19 (29.23)		
Professor	7 (17.95)	1 (3.85)	8 (12.31)		
Other	1 (2.56)	2 (7.69)	3 (4.62)		
<b>Number of (co)authored published articles</b>	NA	NA	65 (100)	<b>0.008</b> (simple logistic regression)	<i>P</i> = <b>0.022</b> when adjusted for the place of work
<b>Years of experience as faculty</b>				0.740	
<3	4 (10.26)	4 (15.38)	8 (12.31)		
3–5	4 (10.26)	3 (11.54)	7 (10.77)		
6–9	8 (20.51)	5 (19.23)	13 (20.00)		
10–14	10 (25.64)	5 (19.23)	15 (23.08)		
15–19	6 (15.38)	7 (26.92)	13 (20.00)		
≥20	7 (17.95)	2 (7.69)	9 (13.85)		

\*Those who did not publish any scientific work were excluded.

\*\*Those who “never heard of it, heard it but know nothing about it, or “had a vague understanding of its meaning” were categorized as “no knowledge” in this table.

TABLE 2: Promotion regulations in top Sudanese universities and predatory publishing.

Character	University Country			P-value (Fisher's exact)
	Sudan 12 (85.71%)	Saudi Arabia 2 (14.29%)	Total 14 (100.00%)	
<b>Publicly available promotion regulations on university website</b>				
Yes	5 (41.67)	2 (100.00)	7 (50.00)	
No*	7 (58.33)	0 (0.00)	7 (50.00)*	
<b>Year of regulation issuing</b>				
2012	0 (0.00)	1 (50.00)	1 (14.29)	
2014	1 (20.00)	0 (0.00)	1 (14.29)	
2017	2 (40.00)	0 (0.00)	2 (28.57)	
2018	0 (0.00)	1 (50.00)	1 (14.29)	
2019	1 (20.00)	0 (0.00)	1 (14.29)	
2021	1 (20.00)	0 (0.00)	1 (14.29)	
<b>Sector</b>				
0: Private	2 (40.00)	0 (0.00)	2 (28.57)	
1: Public	3 (60.00)	2 (100.00)	5 (71.43)	

TABLE 2: Continued.

Character	University Country			P-value (Fisher's exact)
	Sudan 12 (85.71%)	Saudi Arabia 2 (14.29%)	Total 14 (100.00%)	
<b>Reference to specific/objective terms to verify the legitimacy/trustworthiness of the journal or address predatory publishing</b>				
Indexing/Listing in WoS, Scopus, or PubMed	0 (0.00)	2 (100.00)	2 (28.57)	<b>0.048</b>
Indexing/Listing in any other journal-ranking databases	0 (0.00)	0 (0.00)	0 (0.00)	NA
Reference to "predatory journals/publishing" in name	0 (0.00)	0 (0.00)	0 (0.00)	NA
Reference to Impact Factor, Scimago Journal Rank, or any other metrics	1 (20.00)	0 (0.00)	1 (14.29)	1.000
Reference to institution-specific blacklists/whitelists	1 (20.00)	1 (50.00)	2 (28.57)	1.000
Reference to other black/white lists (e.g., Beal's list)	0 (0.00)	0 (0.00)	0 (0.00)	NA
Reference to specific/objective terms to verify the legitimacy/trustworthiness of the journal or address predatory publishing**	1 (20.00)	2 (100.00)	3 (42.86)	0.143

\*Universities with no publicly available online regulations were excluded from subsequent analysis.

\*\*The clause must be mandatory, not one of many options.

### 3. Conclusion and Recommendations

There is poor awareness and practices, yet favorable attitudes of Sudanese pediatricians in academic positions toward predatory publishing. We support the referenced article's recommendation that creating sufficient awareness around predatory publishing is pivotal. However, we believe a more efficient and decisive approach is mandating a national framework for faculty promotion regulations that explicitly prohibit publishing in predatory journals. We recommend this as the first and foremost measure in rolling back predatory publishing. Further full-scale studies are needed to confirm our findings.

#### Declarations

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#### Ethical Considerations

Ethical approval for the study was obtained from the Standing Committee of Bioethics Research at Prince Sattam Bin Abdulaziz University.

#### Competing Interests

None.

#### Availability of Data and Material

Available upon reasonable request from the author.

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## Abbreviations and Symbols

None.

## References

- [1] Agarwal, P., & Bhandari, B. The menace of predatory journals. *Sudan Journal of Medical Sciences*, 17(2), 279–283. <https://knepublishing.com/index.php/SJMS/article/view/11461> <https://doi.org/10.18502/sjms.v17i2.11461>
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