Dermatological publications in the Gulf Cooperation Council countries

An analysis of 1966-2004 Medline papers

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ABSTRACT

Objective: To investigate the publications in dermatology cited in the Medline from 6 countries of the Gulf Cooperation Council (GCC) from 1966 to 2004.

Methods: Medline was searched with the aid of Internet provider Pubmed using the same strategy at a given time for all countries.

Results: At the time of search, the Medline listed biomedical research papers from the GCC countries totaled 12837. Of these, 140 were in Dermatology. The Kingdom of Saudi Arabia followed by Kuwait was by far the most prolific contributor, whereas almost none were noted from Bahrain. The publications were highest during the year 2002 (19) followed by 2003 (13), most of them being in the English language in the International

Journal of Dermatology (60 citations) and Pediatric Dermatology (13 citations).

Conclusion: Though the GCC countries have seen a relatively small period in the history of development of medical research, data show that they are trying to keep pace with the rest of the developed world. What remains to be exploited is their good economy that should be directed to provide better infrastructure and improve the quality of training programs. Professional societies within the region must play an active role in ensuring optimum and judicious use of funds.

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There are many analytical reports evaluating the nature of medical publications in Arab countries as a whole¹⁻³ and with reference to a particular region^{4,5} or country.^{6,7} No report however has confined it to a specialty. Our aim in this report is to focus the evaluation on publications in dermatology in the 6 Gulf Cooperation Council (GCC) countries. It might be of interest to point out that an earlier report⁶ had showed that, the first biomedical article, in the Medline, affiliated to GCC countries is a dermatological one.⁸

Methods. Medline⁹ was searched with the aid of internet provider Pubmed on March 2004 between 4-6 pm local time. It was carried out by inserting each of the 6 countries' names in the search box, selecting the limit to "affiliation" then the number of biomedical publications were obtained, and then the words "and dermatology" was added to the search box along with name of each country. The citations obtained for all countries were collected and examined for the year of publication, the number of authors and the name of the Journal.

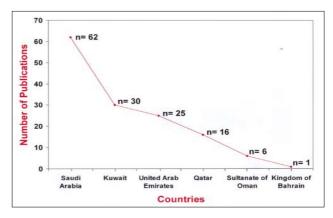
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Results. Our search revealed a total of 140 pubmed citations affiliated to dermatology and venereology in GCC countries out of 12837 biomedical citations. The distribution of these is seen in Figure 1. These papers were published in 26 local and international journals. The distributions of the publications among these journal is shown in Figure 2, and its annual distribution is shown in **Figure 3.** Almost all the publications were in the English language and 13 of 140 were by single author. The dermatology publications started in the year 1988. An article¹⁰ from dermatology department, Sieif Bin Gubash Hospital, United Arab Emirates was possibly the first from the region in our search method. Other search strategies specified below showed earlier ones. To evaluate precision of our method, independent complementary Medline search was carried out using as entries the names of some institutions (universities, major hospitals, ministries, etc.) of each of the GCC countries. These complementary Medline searches revealed many dermatology or dermatology-related citations from GCC countries not shown by our method. This was as 1. The address of the institute was not mentioned in the citation. 2. The Department or the section was not specified which would disable it from appearing in the search process 3. The word "dermatology" was not in the title though the institute specified was one that directed research to control and eradicate infectious dermatoses like Ibn Sina Hospital (a leprosy hospital in Jeddah, Kingdom of Saudi Arabia (KSA) and National Leishmaniasis Research Project (KACST) 4. Other specialties were involved or the affiliation of the first author in a multi-authored article was from departments other than dermatology, or residing or having a changed address in a non GCC country. 5. The patient who contracted the disease in a gulf state would have been seen elsewhere. 6. The publication was an editorial or a letter in which there was no address for the first author in the Pubmed citation. Despite these major pitfalls in searching the web, results of the complementary search strategies were not included in the study since they precluded a standard search method for all the Gulf states in the GCC.

Discussion. One way to assess work in a region in a specialty is to look into the quality of publications from scientific originating institutions. Dermatology in the GCC countries witnessed good progress since the start of the Arab Board training programs implemented by Arab Council for health specialties. It is a 4-year program with 2-part examinations, the first part being in basic sciences and the second in clinical sciences. Starting from 1998 and up till now 58 (42 from



Distribution of dermatology publications among Gulf Cooperation Council (GCC) countries.

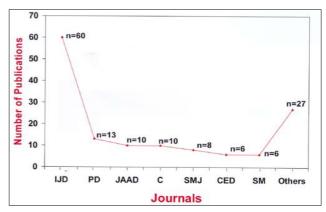
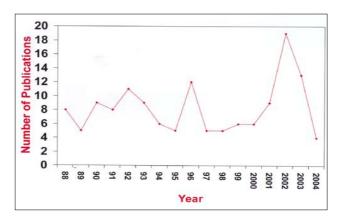


Figure 2 - Distribution of dermatology publications from Gulf Cooperation Council countries in the different journals. IJD - International Journal of Dermatology, PD - Pediatric Dermatology, JAAD - Journal of American Academy of Dermatology, C - Cutis, SMJ - Saudi Medical Journal, CED - Clinical and Experimental Dermatology, SM - SkinMed and Others - the remaining 19 journals, each contains less than 5 citations.



The annual distribution of the dermatology publications from Gulf Cooperation Council countries. Note that the Figure 3 number cited for 2004 is only up to March only.

KSA, 6 from Qatar, 4 from Sultanate of Oman, 3 from Kuwait and 3 from United Arab Emirates (UAE) have specialized in dermatology from gulf countries.¹¹ They are in addition to those specializing elsewhere. This is in addition to the formation of national dermatology societies: Saudi Dermatology and Venereology established in 1989 (name was later changed to Saudi Society of Dermatology and Dermatological **Emirates** Medical Surgery), Association Dermatology Society in UAE, and regional speciality society namely the League Dermatologists in the GCC states. These societies organize clinical meetings and conferences within their domain. This paved the way for publication of journals. One of them is, Journal of Saudi Society of Dermatology and Venereology (later changed to Journal of Saudi Society of Dermatology and Dermatological Surgery) the first available issue of it in the web is July 1994 till the current one in January 2002.12 The other one is the Gulf Journal of Dermatology (later changed its name to Gulf of Dermatology and Venereology), published biannually from Doha (Qatar) by the League of dermatologists in GCC states; the first one appeared in February 1994 and the latest is October 2001.¹³ The fine quality of printing and paper used in these publications can vie with the international ones, but their regularity, frequency of publication, circulation and not being cited in the Medline render them poor competitors. We limited this study to those cited in the Medline acknowledging the fact that some publications in local journals carry valuable scientific information. Publications in a journal cited in the Medline are generally peer reviewed and so have a better impact on readers. Further, it is easier to conduct a Medline search than look into local journals, some of which difficult to locate if not impossible. Consequently our data may not truly reflect the total number of publications emanating from the states of the GCC. It is worth to mention that, our study is not normalized. Normalization, by a country's population and gross domestic product (GDP), is essential to comprehend outcomes 1. For example Kuwait with a population of 2,000,000 leads in the highest number of publications, compared to KSA with a population 10 times more than Kuwait. We have not discussed the qualitative aspect of the publications nor their impact on the practices and beliefs of the medical fraternity. Most of the publications from the GCC states were in the International Journal of Dermatology and Pediatric Dermatology, both of which are published in the United States of America and do not enjoy a high impact factor in dermatology.14 They simply give an idea of level of academic activity in the region. The publications were highest during the year 200219 followed by 2003.13 Using other search strategies

like putting the name of the country and dermatology, many earlier reports were revealed. Solutions for these shortcomings in databases have to be addressed if we want to progress efficiently in medical informatics research. Many of the reports were multi-authored. Though difficult to prove, it may reflect the inability of some authors to independently author a paper or the lack of comprehending the criteria for authorship biomedical researches.¹⁵ Gulf countries with a good economy should invest more on research, 0.5% of the GNP (Gross Net Production) should be enhanced to 2%.3 Expenditure on scientific activity in Arab countries was <0.5% when compared to 1.3% for Cuba and 2.9% for Japan in 1995. Investment in research and development was <14% of the world average. In Morocco for example, 300 million dollars were devoted for research in science and technology in 2003, third in position after South Africa and Egypt. This is equal to 0.8% of the GNP, increasing from 0.3% in 1998. The UNESCO recommends that countries dedicate at least 2% of their GDP to research and development. United States of America and Japan dedicated 2.8% and Canada 1.5% at the beginning of the 1990s. 16 A fact that needs to be mentioned is that publications from universities like Umm Al-Qura, Makkah, KSA and Gulf University, Manama, Kingdom of Bahrain are conspicuous by their absence. In KSA there are currently 9 medical colleges. The first one for males was started in Riyadh University in 1970 (now called King Saud University); 4 years later one for females was started. Major steps need to be taken to improve the quality of research in universities for the new faculty members, simplifying research application processes, establishing efficient and adequate infrastructures, and providing protected research time.17 Researchers in the Gulf need to utilize the facilities provided by important scientific establishments in the area like King Abdul-Aziz City for Science and Technology, Riyadh, KSA,18 Kuwait Foundation for Advancement of Science, Kuwait,19 and Sheikh Hamdan Bin Rashid Al-Maktoum Award for Medical Sciences, Dubai, UAE,²⁰ and make good use of their grants.²¹ As pointed before²² different search strategies must be employed to get complete information. To set right our deficiencies in improving publications in the specialty, we would like to point out some misconceptions in our perception. Firstly, writing should not only be relegated to the academics as something worthy of only those people working in universities or attached to institutions. Honest observation and routine documentation is a form of continuing medical education in which everyone should participate whether working in government or private institutions, or hospitals. This would also urge the administrators to improve the investigative services in their hospitals. Training on the use of

computer for reading articles published in medical journals and doing research work should be given. Seminars, symposia and workshops on helping candidates to write well should be organized.23 Libraries at medical institutions and general hospitals should be provided with sufficient funds to carry out these activities. Special sessions during conferences on good medical writing, preparation of manuscript and adopting proper methodology must be given to presenters so that they publish their work. This would rectify simple omissions like failing to write the section or division where the work was carried out, or not mentioning the name of the institution. Short of proliferation, local journals must try to concentrate on few good and regular publications in the specialty. They should also try to get the work cited in Medline so that dermatologists are not only persuaded to subscribe to them, but also to send their best articles for publication. All this demands cuts on unnecessary expenditure in luxurious venues.²³ Money must be kept aside to give grants to important research projects or stipends to deserving postgraduates. Habit of reading should be inculcated keeping in mind the observation that those who do not read are no better than those who cannot. Similar analysis by other specialties would throw more light on the deficiencies prevalent in the GCC states.

References

- 1. Shaban SF, Abu-Zidan FM. A quantitative analysis of medical publications from Arab countries. Saudi Med J 2003; 24: 294-296.
- Salem S. Bibliometric aspects of medical information in Arab countries. *Bull Med Libr Assoc* 1990; 78: 339-344.
- 3. Yaqub BA. Research in the WHO Eastern Mediterranean Region, where we stand. Saudi Med J 2004; 25: S2-S5.
- 4. Deleu D, Northway MG, Hanssens Y. Geographical distribution of biomedical publications from Gulf Cooperation Council Countries. Saudi Med J 2001; 22:

- 5. Lammers WJEP, Tahir A. Profile of medical research publications from GCC countries,1990-1994. Ann Saudi **Med** 1996; 16: 666-669.
- 6. Tadmouri GO, Tadmouri NB. Biomedical research in the kingdom of Saudi Arabia (1982-2000). Saudi Med J 2002; 23: 20-24.
- 7. Lammers WJEP, Gaffar MS. National and International medical publications from United Arab Emirates (1989-1998). *Emirates Medical Journal* 2000;
- 8. Pareek SS unusual location of syphilitic alopecia: a case report. Sex Transm Dis 1982: 9: 43-44.
- 9. Available at: http://www.ncbi.nlm.nih.gov/pubmed/
- 10. Darouti E, Rubaie A. Psoriasis treatment with RePUVA in the united Arab Emirates. Int J Dermatol 1988; 27: 593-595.
- 11. Available from: http://www.cabms.org/result.php (accessed on 19 March 2004)
- 12. Available from: http://www.ssdds.org/journal/volume.asp (accessed on 19 March 2004)
- 13. Available: http://geocities.com/Hotsprings/Spa/8355/gulf_jr html. (accessed on 19 March 2004)
- 14. Jellinek NJ, Desousa RA, Bernhard JD. The Clinical influence of the JAAD. J Am Acad Dermatol 2004; 50:
- 15. Updated uniform requirements for manuscripts submitted to biomedical journals (November 2003), Writing and editing biomedical publication. Available http://www.icmje.org.also published in Saudi Med J 2004; 25: 583-594.
- 16. Abbood SA. Medical research in developing countries still in Cinderella status. Saudi Med J 2004; 25: \$74-\$75.
- 17. Al-Gindan YM, Al-Sulaiman AA, Al-Muhanna FA, Abumadini MS. Research and research activities in a University in Eastern Saudi Arabia. Saudi Med J 2004; 25: S67-S69.
- 18. Available from: http://www.kacst.edu.sa/
- 19. Available from: http://kfas.org/dindex.htm
- 20. Available from: http://hmawrd.org.ae
- 21. Alabdulaaly AI. Experience of King Abdul-Aziz City for Science and Technology in funding medical research in Saudi Arabia. Saudi Med J 2004; 25: S8-S12.
- 22. Tadmouri GO, Bisar-Tadmouri N. A major pitfall in the search strategy on Pubmed. Saudi Med J 2004; 25: 7-10.
- 23. Jawaid SA. Problems faced by editors of peer reviewed medical journals. Saudi Med J 2004; 25: S21-S25.