Review of all publication (2010 – 2014) from Saudi Arabia in the field of obstetrics and gynecology and related subjects

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Abstract: Background: In the last five years, many universities, medical schools, hospital and medical centres have involved in medical research. The number of scientific publication is limited. The aims to evaluate the number and the quality of the publication in obstetrics and gynecology and related subjects published from the kingdom of Saudi Arabia. (2010 -2014). Settings and Design: A retrospective study conducted at obstetrics and gynaecology Department, College of Medicine, King Abdulaziz University Jeddah, Saudi Arabia. Material and methods; PubMed is a free search database provides quality control publication of (ISI) Institute for Scientific Information. PubMed used to determine the number of obstetrical and gynaecological publication and data collected for five years from January 2010 until December 2014. All abstracts that appeared in the PubMed database analysed meticulously for the type and the subject of publication, year of publication, Institute and the region where the study conducted. The inclusion and exclusion criteria clearly defined before the study. The number of publication per year from 2010 to 2014, region and the name of the university identified. Results; A total number of medical publication in obstetrics and gynecology found in PubMed ISI were 230 in five years from 2010 until 2014. There was a steady increase from (2010 – 2014). The majority of study 21.5% were retrospective studies, and only 9 were randomized clinical trial and three meta-analyses. Most of the medical research in obstetrics and gynecology published from the universities or King Faisal Specialists Hospital. Central and western region contribute to 65.1% of publication. The subspecialty in 51.2% of the research was obstetrics. Conclusion The obstetrics and gynecology research in Kingdom of Saudi Arabia is limited, and it is mainly in obstetrics and either retrospective studies or case report, and case series and the quality of research has to be improved.

Keywords Research, Kingdom Saudi Arabia, obstetrics and gynecology

Running title; Ob-Gyn research in Saudi Arabia.

Introduction

Scientific medical research becomes a significant step in education and training in the field of obstetrics and gynecology, help the candidate to learn skills and increase the academic, clinical and multidisciplinary approaches 1.

In Kingdom of Saudi Arabia, there are 25 Universities, King Saud University was the first started in 1957. Since then universities and colleges initiated in different geographic regions of Saudi Arabia. All these are linked with the Ministry of Education with considerable autonomy in administrative and academic spheres. 2.

In the last five years, many universities, medical schools hospital and medical centres have involved in medical research. The number of scientific publication is limited. The aim is to evaluate the number and the quality of the publication in obstetrics and
gynaecology and related subjects published from the kingdom of Saudi Arabia's medical institutions.

Material And Methods

This is a retrospective study conducted at Obstetrics and Gynaecology Department, College of Medicine, King Abdulaziz University Jeddah, Saudi Arabia.

The PubMed is a free search database provides quality control publication of (ISI) Institute for Scientific Information. PubMed used to determine the number of obstetrical and gynaecological publication and data collected for five years from January 2010 until December 2014.

All abstracts that appeared in the PubMed database analysed meticulously for the type and the subject of publication, year of publication, institute and the region where the study conducted.

The inclusion and exclusion criteria clearly defined before the study. The inclusion criteria were studies that were ISI, carried out in and or published from (the Kingdom of Saudi all Arabia) in the field of obstetrics and gynaecology or related subject. The exclusion criteria were all studies were not ISI or were neither conducted nor published from Kingdom of Saudi Arabia.

The number of publication per year from 2010 to 2014, region and the name of the university identified. The studies classified into either original research articles that included retrospective and prospective study, Case-Control, Case Reports, Case Series, Cohort study, Experimental, Randomized control trials or Review articles, and meta-analysis.

After reviewing the abstracts of all researchers, the subject identified as for obstetrics, gynaecology, basic, medical education, endocrinology, oncology, and urogynaecology and percentage calculated.

Statistical Analysis

SPSS statistical software version 22 used to analyze all data after collection revised and coded. (Numbers and percentages).

Disclosure. All authors admitted that have no conflict of interests, and the work, not supported or funded by any drug company.

Results

A total number of medical publication in obstetrics and gynecology found in PubMed ISI were 230 in five years from 2010 until 2014. There was a steady increase from 28 articles in 2010 to 77 in 2014. Figure 1.

The majority of study 21.5% were retrospective studies, and only 9 were randomized clinical trial and only three meta-analyses. Table 1 and Figure 2.

Most of the medical research in obstetrics and gynecology published from the universities or King Faisal Specialists Hospital. 49.6% of studies were released from either King Saud University or King Abdulaziz University only 6.4% from King Faisal Specialists Hospital. Figure 3.

Central and western region of Saudi Arabia contribute to 65.1% of publication…. Figure 4.

The subspecialty in 51.2% of the research was obstetrics. Table 2.

Discussion

Why doing medical researchers? The aim of medical research is to improve ourknowledge of human body, to find the new method of cure and prevent disease, to reduce injury and disability improves health and well-being of people.3Research play an important role in medicine, to improve the quality of medical care, analysis of what is done has to be analyzed to continue expanding our knowledge and changing our practice 4. Saudi Arabia's medical research performance has steadily increased from the year2006 to 2012, improved its ranking globally to be graded as 45 in the world.5-Saudi Arabia is divided geographically, into Five major regions, Central region,(The heart of the Kingdom) Western region, (The Red Sea coast), Southern region,(Yemen border area), Eastern region, (Gulf border), and finally Northern region,(North border). It is important to note that the Kingdom divided into thirteen Administrative Regions.2. Although the number, of obstetrics and gynecology publication, is limited there is anincreased trend in the last five years, which mean that there, increase awareness ofresearch and encourage researchers by their institutions and universities. It seems that the central region of Saudi Arabia produced more publication thananother area and the reason could that the central region has more health careinstitution than others and King Saud University the oldest university in Saudi Arabia and has more researchers than young, newer university that should encourage theirresearchers to do more. In our study only nine randomized clinical trial done in five years, and we shouldencourage our researchers to do more especially that randomised controlled trials, represent the gold standard in evaluating health care intervention with appropriatelydesigned, conducted, and reported 6. It is one of the simplest study and more powerful methods in research 7. In our study, case reports represent about 15.7% of all publication despite the limitation of case reports, can be useful to generate a database, a new hypothesis for future scale for clinical trials.8A Meta-analysis is a study used to examine a number of publications on the subject and the results combine with mathematics and statistically accepted method to report it as if it were one large
Our study showed only 3 meta-analyses. The majority of the researchers were in the field of obstetrics due to the fact most of the obstetrics and gynaecological patients are pregnant women.

**Limitation**

Limitation of the study is it is a retrospective study and data analysis only from PubMed.

**Conclusion**

The obstetrics and gynecology research in Kingdom of Saudi Arabia is limited and its mainly in obstetrics and either retrospective studies or case report and case series, and the quality of research has to be improved.

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**Figure 1**

Number of publication each year (2010-2014)

**Figure 2**

Percentage of the type of the study published

retro = Retrospective study  
rep = report  
prosp = Prospective study  
sec = sectional  
con = control  
exp = Experimental  
rct = randomize clinical trial
King Saud
King Abdulaziz
King Fahad
King Feisal specialty hospital
Qassim
Umulqra
Taibah
Kink Khalid
Taif

cent = central
west = western
east = eastern
sout = south
nort = north
Table 1. Number and percentage of the type of the study published

<table>
<thead>
<tr>
<th>Type</th>
<th>Number</th>
<th>Percentage</th>
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<tr>
<td>Retrospective study</td>
<td>50</td>
<td>21.5</td>
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<tr>
<td>Case report</td>
<td>37</td>
<td>15.7</td>
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<tr>
<td>Prospective study</td>
<td>37</td>
<td>15.7</td>
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<tr>
<td>Cross sectional</td>
<td>35</td>
<td>15</td>
</tr>
<tr>
<td>Case control</td>
<td>19</td>
<td>8.2</td>
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<tr>
<td>Cohort</td>
<td>13</td>
<td>5.6</td>
</tr>
<tr>
<td>Experimental</td>
<td>13</td>
<td>5.6</td>
</tr>
<tr>
<td>Review</td>
<td>13</td>
<td>5.6</td>
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<tr>
<td>RCT</td>
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<td>3.9</td>
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<tr>
<td>Meta analysis</td>
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<td>0.9</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>230</strong></td>
<td><strong>100</strong></td>
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Table 2. Percentage of subject of research

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<th>Subject</th>
<th>Frequency</th>
<th>Percentage %</th>
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<tr>
<td>Obstetrics</td>
<td>117</td>
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<tr>
<td>Gynecology</td>
<td>35</td>
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<tr>
<td>Medical education</td>
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<td>8.7</td>
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<tr>
<td>Basic research</td>
<td>18</td>
<td>7.8</td>
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<tr>
<td>Endocrinology</td>
<td>17</td>
<td>7.4</td>
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<tr>
<td>Oncology</td>
<td>12</td>
<td>5.2</td>
</tr>
<tr>
<td>Urogynecology</td>
<td>11</td>
<td>4.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>230</strong></td>
<td><strong>100</strong></td>
</tr>
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