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## Placebo Prescribing Habits And Views In A University Hospital

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# Placebo Prescribing Habits And Views In A University Hospital

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## Abstract

**Background and Objective** There are no reports about Placebo Prescribing Habits among Saudi health care providers. This study aims addressing this question.

**Methods** This is a cross-sectional self administered survey-based study about frequency, views and indications, of placebo prescribing/dispensing practices and analyzing these in relation to demographic data.

**Results** Fifty-five surveys were completed by physicians and 27 by nurses. 67.9% have been in the profession for > 3 years. Only 27.8 % of the doctors said that they ever prescribed a placebo. Of the prescribers, only 2% of the doctors and 42% of the nurses told the patients that they are actually prescribed a placebo ( $p=0.07$ .)

83% of doctors and 62% of nurses thought that placebos are usually or sometimes effective ( $p=0.01$ ). Five times as many nurses (30%) as doctors (6.6%) believed that placebo prescription should always be prohibited ( $p=0.007$ ).

The majority of respondents believed that the mode of action of a placebo is through psychological mechanism.

The commonest indication for prescribing a placebo by doctors was as a "supplement to a medication" (86.1%) and for nurses was to "calm the patients" (43 %)

The responses by medical staff and medical residents were not significantly different

**Conclusions**

The frequency of the Saudi doctors prescribing a placebo is lower than reported elsewhere. Of the doctors who prescribed a placebo only 2% told the patients that it is actually placebos. Near to two-third of the respondents believed that the placebo mode of action is through a psychological mechanism and the vast majority felt that placebos are at least "sometimes effective" and very small percentage believed that placebo prescription should be prohibited

treatment whose impact is anticipated to come about by positive expectations on the part of the patient's and not from any known physiological mechanism of the treatment per se. (1)

The ethics of the use of placebos as treatment in clinical medicine is controversial. A major ethical objection frequently put forward by ethicists against its use is that it involves deception, and as such it goes contrary to the fundamental bioethical concepts of patients' autonomy and informed consent. On the other hand, another view expounded holds that since placebo treatment promotes positive expectations on the part of patients that this by itself is a justification to consider placebo use as ethically acceptable (2-6)

In a recent review article (7) it was reported that between 41% and 99% of doctors prescribe placebos. Up to 50% of physicians and nurses (range 16% to 50%) believed that placebo treatments are either always, often, or generally effective (7)

The indications invoked for placebo prescribing are many and include using it to relieve presumed "unreal pain" This was reported to be the indication by 84% (8), to reduce the as diagnostic tool and to appease a persistently demanding or complaining patient (9)

In a recent lecture at the annual Residents' Day celebration, in our institution, by a well known Saudi personality, he advocated that healthcare providers, should not tell the patient that there is no treatment for their condition: instead he suggested that even an inert substance should be given to them without their being told that it is inert. There is a general feeling among the Saudi public that this should be the case.

Therefore, this study was designed to find out if placebo prescribing by Saudi doctors reflect this societal view and to delineate and compare the prescribing practices and the views on placebo among Saudi doctors to those by expatriate nurses working in the same institution and to assess the factors affecting their prescribing habits.

## Methods

This is a cross-sectional self administered survey among physicians and nurses working at King Abdulaziz Medical City, The physicians were from 3 specialties- Medicine, Family & Community Medicine and Psychiatry. The nurses were sampled from an

## Introduction

Placebo treatment is defined as an active or inert

advanced cardiac center in the same institution. Besides questions on demography, questions were asked about the prescribing frequency, perceived mode of action and effect of placebos and indications for its use.

Descriptive statistics were used to examine the physicians' characteristics as well as frequencies of prescribing habits and attitudes; we used multivariate logistic regression to determine if any characteristics of the respondents were independently associated with regularly prescribing placebo treatments.

## Results

Fifty-five surveys were completed by physicians (34.0 % from medicine, 38.3 % from family and community medicine and 27.7 % from psychiatry) and by 27 by nurses. 59.6% of the respondents were males and 53.3 % were medical residents. The mean age was 29.1 years (4.5); 32.1% have been doctors or nurses for < 3 years and 67.9% for > 3 years.

Only 27.8 % of the doctors said that they ever prescribed a placebo. Of the doctors who prescribed a placebo, 70 % told the patients that it is an actual medication and 27.2% told them "nothing" and only 2% told the patients that it is actually a placebo. Among the nurses who dispensed or used placebos, the corresponding figures were 29%, 28.9% and 42% respectively ( $p=0.07$ )

Of all the nurses surveyed, 77.8% said they would never dispense a placebo. This compares to 72.2% of doctors. ( $p=0.86$ ) (Table 1). 83% of the doctors who prescribe placebos, thought that they are usually or sometimes effective. The corresponding figure for the nurses was 62% ( $p=0.01$ ) (table 1)

## Discussion

The frequency of Saudi doctors prescribing a placebo (27.8 %) is lower than reported elsewhere. This compares to 86 % among Danish general practitioners (10), 72% among Swiss general practitioners (11), and 45 % among academic doctors in the Chicago area (12). In a recent study among internists and rheumatologist in USA, half reported often recommending placebo treatments (13). This reported high prevalence rate of placebo use has not changed over the last 3 decades among hospital doctors (14) or general practitioners (15)

Almost two-thirds of the respondents in our survey believed that the placebo mode of action is through a psychological mechanism. However, fewer

psychiatrists than that thought so. This could be explained on the basis that psychiatrists are expected to know more about placebo actions and as such would be aware that studies have shown that there might be other elements involved besides the purely psychological effect (16). Another studies reported that 75% of doctors believed that the placebo mode of action is through a psychological mechanism also (17) Of the doctors in our survey who prescribed a placebo, 55.5 % told the patients that it is an actual medication and 22.2% told them "nothing" and only 2% told the patients that it is actually a placebo. The nurses were more truthful and fewer of them claimed that the placebo is a medication. Our findings among , however, are similar to other reports which showed that 68% of the doctors prescribing a placebo, tell the patients that he or she is receiving a real medicine, and 17% say nothing at all and only 4% told the patients they are actually prescribing placebo (17). Among Swiss primary care physicals, 64 % those prescribing a placebo told the patient that it was a drug or a therapy (11)

Only 21.5% of all the doctors we surveyed believed that placebos are effective. This belief drops with duration of being a doctor. However of those who prescribed placebos 84% thought it was effective or somewhat effective. These findings are similar reported previously (17)

Five times as many nurses (30%) as doctors (6.6%) believed that placebo prescription should always be prohibited. Much of the call for the prohibition of placebo prescribing is based on the belief that this is unethical practice invading the patients' autonomy and is loaded with deception (4). 73% of nurses surveyed thought that it is deceptive to use placebo as treatment (6). This might related to the fact that Saudi doctors have a tendency towards paternalism whereas expatriate nurses in general have a tendency towards more respect for patients' autonomy.

Nurses and doctors also differ significantly with regards to what they thought was the main indication for placebo prescribing. The commonest indication for prescribing a placebo by doctors was as a "supplement to a medication" (86.1%) and for nurses was to "calm the patients" (43 %) ( $p=0.01$ )

60% of nurses and 31.1% of doctors intimated that placebos should be permitted if research or experience support its efficacy

## Conclusion(s)

The frequency of the Saudi doctors prescribing a placebo is lower than reported elsewhere. Of the

doctors who prescribed a placebo only 2% told the patients that it is actually placebo. Near to two-third of the respondents believed that the placebo mode of action is through a psychological mechanism and the vast majority felt that placebos are at least "sometimes effective" and very small percentage believed that placebo prescription should be prohibited

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## Illustrations

### Illustration 1

#### Tables

**Table 1 Responses by doctors and nurses**

		Doctors (n=55)	Nurses (n=27)	p
Would never dispense/prescribe a placebo		72.2%	77.8%	0.86
Mode of action of placebos	Psychological	72%	62%	0.07
	I don't know	12%	30%	
Placebo prescription should be banned		30%	6.6%	0.007
Comments indication for the use of a placebo		Supplement to a medication (86.1%)	Calming the patient (43%)	0.01
What do you tell the patient when giving a placebo?	It is a placebo	70%	29%	0.07
	I say nothing	2%	42%	
	It is a medication	28%	29%	
Placebos are usually or sometimes effective.		84%	63%	0.01

The responses by medical staff and medical residents were not significantly different (Table 2)

**Table 2 Responses by Medical Staff Versus Medical Residents**

	<b>Resident Staff</b>	<b>Medical Staff</b>	<b>p</b>
<b>Never prescribed a placebo</b>	<b>63.6</b>	<b>72.00</b>	<b>0.73</b>
<b>I tell the patient "it is a medication"</b>	<b>35.20</b>	<b>60.00</b>	<b>0.38</b>
<b>Placebos never effective</b>	<b>20.00</b>	<b>13.6</b>	<b>0.152</b>
<b>More effective in female patients</b>	<b>43.5</b>	<b>33.30</b>	<b>0.3</b>
<b>Main indication is as "Diagnostic Tool"</b>	<b>84.00</b>	<b>72.7</b>	<b>0.26</b>
<b>Mode of action is psychological</b>	<b>84.00</b>	<b>68.2</b>	<b>0.59</b>
<b>Research is required before its common use</b>	<b>47.9</b>	<b>42.9</b>	<b>0.51</b>

The responses by the 3 medical specialties of the doctors surveyed (Family and Community Medicine, Medicine and Psychiatry) were similar except that fewer psychiatrist (53.8%) than physicians (87.5%) or family physicians (83.5 %) believed that the mode of action of placebos was psychological (p=0.05)

The responses of doctors who practiced for more or less than 5 years were not significantly different except that fewer longer practicing doctors believed that women are more likely to respond to placebos (29.2 % and 42.8% respectively ( p=0.029)( **Table 3**)

**Table 3 Responses according to Duration as a Doctor**

	< 5 years as a doctor	> 5 years as a doctor	p
Never prescribed a placebo	73.0	50.00	0.17
I tell the patient "it is a medication"	19.00	27.80	0.18
Placebos never effective	21.50	5.6	0.53
More effective in female patients	42.80	29.2	0.029
The main indication is as "Diagnostic Tool"	47.3	66.7	0.64
Mode of action is psychological	88.10	52.8	0.065
Research is required before its common use	30.5	38.9	0.33

Disturbingly, however, of the doctors who prescribed a placebo, 55.5 % told the patients that it is an actual medication and 22.2% told them "nothing" and only 2% told the patients that it is actually placebos. The nurses were more truthful and fewer of them claimed that the placebo is a medication.

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